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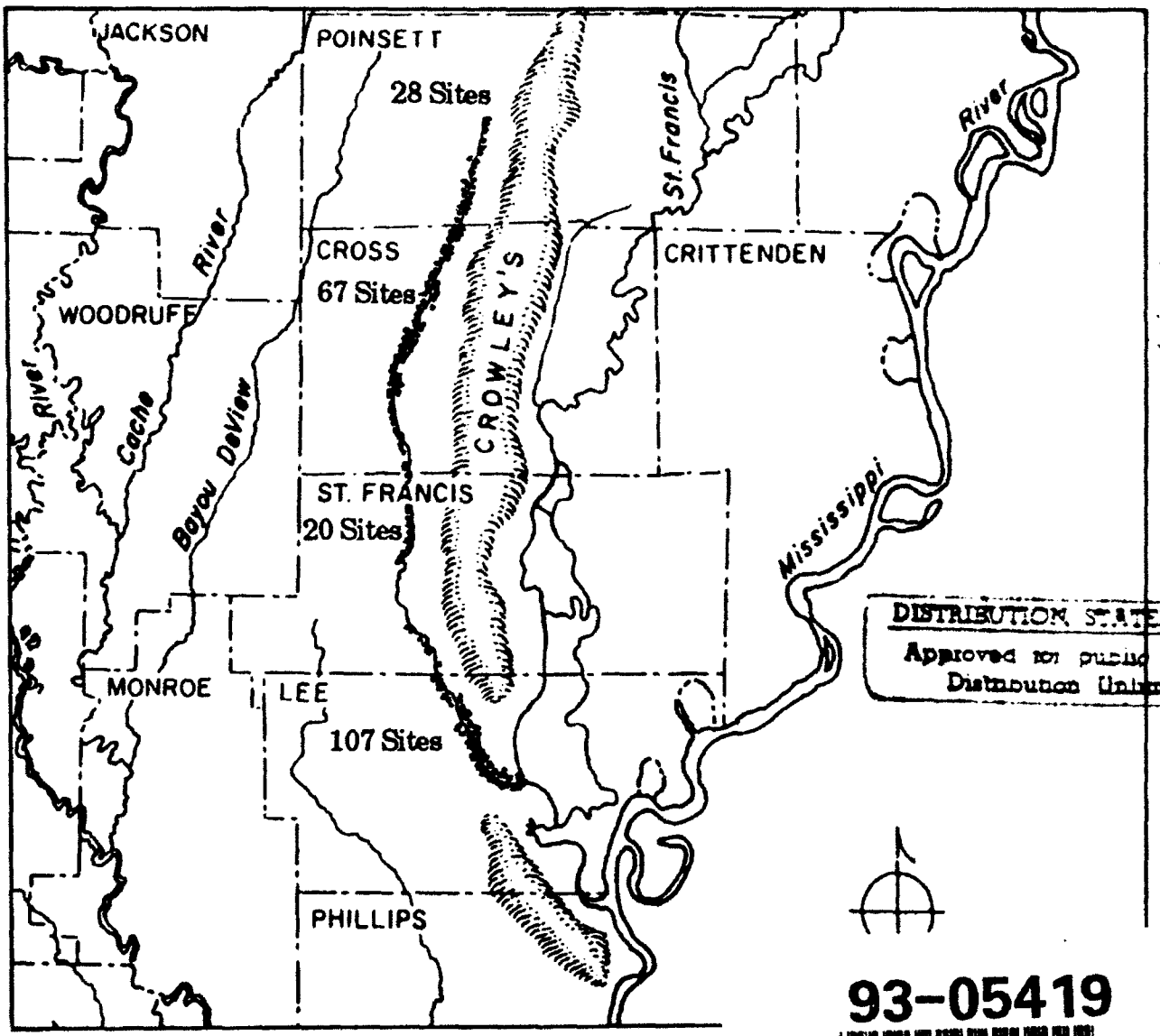
CULTURAL RESOURCE INVESTIGATIONS IN THE L'ANGUILLE RIVER BASIN

LEE, ST. FRANCIS, CROSS, AND POINSETT COUNTIES, ARKANSAS

David G. Anderson, Hazel R. Delcourt, Paul A. Delcourt,
John E. Foss, and Phyllis A. Morse

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An intensive archeaological investigation was conducted. A total of 222 archaeological sites were documented. Also, an 11,250 year pollen sequence was obtained from Hood Lake in the northern part of the basin, and soil columns were sampled and documented at a number of locations along the project right-of-way.

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CULTURAL RESOURCE INVESTIGATIONS IN THE L'ANGUILLE RIVER BASIN LEE, ST. FRANCIS, CROSS, AND POINSETT COUNTIES, ARKANSAS

ABSTRACT

Intensive archaeological investigations conducted in July and August 1987 over all accessible terrain within 300 feet (100 m) of the L'Anguille River, along channel miles 0 through 90 of that drainage, are summarized. A total of 222 archaeological sites were documented during these investigations, 137 within the 300 foot corridor, and the remainder in close proximity to that boundary. A massive assemblage was recovered, encompassing almost 40,000 prehistoric and 20,000 historic artifacts, including hundreds of diagnostics. The collected data set, derived from sites along both sides of the drainage and along virtually its entire length, documents the nature of human occupation along the L'Anguille River margin over 11,000 years of prehistory and history. An 11,250 year pollen sequence was obtained from Hood Lake in the northern part of the basin, and soil columns were sampled and documented at a number of locations along the channel margin. The artifactual and environmental data obtained from the basin are summarized, complementing the primary data in the curated collections, comprehensive analysis inventory/catalog, state site forms, and other project records that were produced during the investigations. A review of local environmental conditions, previous cultural resources investigations, historic settlement and land use, the prehistoric and historic cultural sequence, and relevant research topics is presented, to provide a framework for interpreting the significance of sites found in the survey area, together with recommendations for dealing with these cultural resources.

CULTURAL RESOURCE INVESTIGATIONS IN THE L'ANGUILLE RIVER BASIN LEE, ST. FRANCIS, CROSS, AND POINSETT COUNTIES, ARKANSAS

MANAGEMENT SUMMARY

INTRODUCTION

This Management Summary describes cultural resource investigations undertaken in 1987 on the L'Anguille River Channel Cleanout project in Lee, St. Francis, Cross, and Poinsett counties, Arkansas. Recommendations are advanced to guide subsequent cultural resource activity on this project. Generalized locational information and brief, summary information on all of the archaeological sites encountered during the project has been included in this document. Precise site locational data and boundaries are provided in the map sheets accompanying the project site forms, and have been illustrated on blue line aerial project maps submitted to the Memphis District, U.S. Army Corps of Engineers.

For the sites in the first 16 project miles that were located in the right-of-way, where limited testing (i.e., the excavation of a 1 m test unit) was undertaken, evaluations of site significance in terms of National Register Eligibility criteria have been made where sufficient data was at hand to make effective judgement. Where such data was not available, recommendations as to the appropriate level of effort needed to determine significance have been advanced. For sites located in the project right-of-way between channel miles 16 and 90, initial testing (i.e., excavation of a 1 m test unit) is necessary. Archaeological sites located outside of the right-of-way require no further investigation. These have been marked on project maps, and should be avoided during construction.

PROJECT RESULTS

A total of 222 sites were located and documented in the L'Anguille River Channel Cleanout survey area, 137 in the immediate 300 foot right-of-way, and another 85 immediately adjacent to, but outside of this corridor. Along channel miles 0 to 16, 56 sites were found within the right-of-way (Table MS-1), while from channel miles 16 to 90, 81 sites were found in the project right-of-way (Table MS-2). Along channel miles 0 to 16 another 44 sites were found immediately adjacent to, but outside of, the project right-of-way. An additional 41 sites were found immediately adjacent to the right-of way from channel miles 16 to 90 (see Chapter IX for summary data on sites outside the project right-of-way.

L'ANGUILLE RIVER PROJECT: SITES IN RIGHT-OF-WAY, CHANNEL MILES 0 TO 16

STATE SITE #	PROJECT SITE #	Miles 0-16	WITHIN R-O-W	COUNTY	C.O.E. MAP #	U.S.G.S. QUAD	FIELDWORK C	G	ST	TP	Further Work at this site?	Recommended Fieldwork 2m units (#)	stripping	backhoe	Commentary
3LE141	1	1	Yes	Lee	3	Marianna	1			1	Yes	3	Yes		Early historic site...subplowzone features possible.
3LE142	2	1	Yes	Lee	3	Marianna	1			1	No				Shallow, badly eroded
3LE143	3	1	Yes	Lee	3	Marianna	1			1	No				Shallow, badly eroded
3LE144	4	1	Yes	Lee	3	Marianna	1			1	Yes	3	Yes		No artifacts below plowzone; features possible.
3LE145	5	1	Yes	Lee	3	Marianna		1		1	No				Minimal materials
3LE149	9	1	Yes	Lee	2	Marianna	1			1	Yes	5	Yes		Dense scatter, features possible
3LE150	10	1	Yes	Lee	2	Marianna		1		1	No				Minimal materials
3LE151	11	1	Yes	Lee	2	Marianna		1		•	No				Recent historic scatter
3LE152	12	1	Yes	Lee	2	Marianna		1		1	No				Recent tenant site, house pushed onto river bank
3LE153	13	1	Yes	Lee	2	Marianna	1			1	No				Minimal scatter
3LE154	14	1	Yes	Lee	2	Marianna	1			1	No				Recent tenant site; house pushed onto river bank
3LE155	15	1	Yes	Lee	2	Marianna	1			1	Yes	3			Fairly deep deposits; historic artifacts to 30cm
3LE156	16	1	Yes	Lee	2	Marianna	1			1	No				No artifacts in unit
3LE157	17	1	Yes	Lee	2	Marianna		1		1	Yes	5	Yes	Yes	Shallow deposits, scatter rich, features possible.
3LE158	18	1	Yes	Lee	1	Soudan	1			1	Yes	5	Yes	Yes	Mississippian hamlet?
3LE159	19	1	Yes	Lee	1	Soudan	1			1	Yes	3	Yes	Yes	Features possible, dense scatter
3LE160	20	1	Yes	Lee	1	Soudan	1			•	No				Recent historic scatter
3LE161	21	1	Yes	Lee	1, 2	Soudan	1			1	Yes	3	Yes		Possible features below plowzone?
3LE162	22	1	Yes	Lee	1, 2	Marianna	1			1	Yes	3	Yes		Mississippian hamlet?
3LE163	23	1	Yes	Lee	1, 2	Marianna	1			1	No				Extensive historic scatter, but recent
3LE164	24	1	Yes	Lee	1, 2	Marianna	1			1	Yes	3	Yes		Dense scatter; Mississippian hamlet?
3LE165	25	1	Yes	Lee	2	Marianna	1			•	No				Recent historic scatter
3LE166	26	1	Yes	Lee	2	Marianna	1			1	Yes	3			Dense prehistoric and historic scatter.
3LE167	27	1	Yes	Lee	2	Marianna		1		•	No				Modern debris from dump at bridge
3LE175	35	1	Yes	Lee	2, 3	Marianna	1			1	Yes	5		Yes	Intact subplowzone Baytown midden
3LE176	36	1	Yes	Lee	2	Marianna	1			1	Yes	3		Yes	Possible feature, Baytown sherd scatter
3LE177	37	1	Yes	Lee	2	Marianna	1			1	No				Minimal materials
3LE179	39	1	Yes	Lee	2, 3	Marianna		1		1	No				Minimal materials
3LE180	40	1	Yes	Lee	2, 3	Marianna	1			1	No				Minimal materials
3LE183	43	1	Yes	Lee	2, 3	Marianna	1			1	Yes	5		Yes	Artifacts below disk zone
3LE184	44	1	Yes	Lee	3	Marianna	1			1	Yes	3		Yes	Artifacts to 40cm in test unit
3LE186	46	1	Yes	Lee	2	Marianna		1		•	No				Recent historic scatter
3LE188	48	1	Yes	Lee	1, 2	Marianna		1		•	No				Highly disturbed by heavy equipment
3LE190	50	1	Yes	Lee	3	Marianna		1		1	No				Minimal materials
3LE192	52	1	Yes	Lee	4	Marianna	1			1	No				Badly eroded
3LE193	53	1	Yes	Lee	4	Marianna	1			1	No				Shallow deposits, steatite/LA materials?
3LE195	56	1	Yes	Lee	1	Soudan	1			1	No				Minimal materials
3LE197	58	1	Yes	Lee	1	Soudan		1		1	No				Minimal materials
3LE198	59	1	Yes	Lee	1	Soudan		1		1	No				Minimal materials
3LE199	60	1	Yes	Lee	2	Marianna		1		•	No				Highly disturbed by heavy equipment
3LE201	62	1	Yes	Lee	1	Soudan		1		1	Yes	3		Yes	Dense scatter

Table MS-1. L'Anguille River Channel Cleanout Project: Sites in Right-of-Way, Channel Miles 0 to16, 1987 Field Survey.

L'ANGUILLE RIVER PROJECT: SITES IN RIGHT-OF-WAY, CHANNEL MILES 0 TO 16 (Continued)

STATE SITE #	PROJECT SITE #	Miles 0-16	WITHIN R-O-W	COUNTY	C.O.E. MAP #	U.S.G.S. QUAD	FIELDWORK C	G	ST	TP	Further Work at this site?	Recommended Fieldwork 2m units (#)	stripping	backhoe	Commentary
3LE202	63	1	Yes	Lee	1	Soudan		1		1	No				Minimal materials
3LE203	64	1	Yes	Lee	1	Soudan		1		1	No				Minimal materials
3LE205	66	1	Yes	Lee	3	Marianna		1		1	Yes	3		Yes	Possibly deeply buried deposits
3LE206	69	1	Yes	Lee	1	Soudan		1		1	Yes	3		Yes	Possibly deeply buried deposits
3LE207	71	1	Yes	Lee	1	Soudan	1			1	No				Minimal materials
3LE208	72	1	Yes	Lee	1	Soudan	1			1	No				Minimal materials
3LE209	73	1	Yes	Lee	1	Soudan		1		*	No				Recent historic scatter
3LE210	74	1	Yes	Lee	3	Marianna		1		1	No				Minimal materials
3LE211	75	1	Yes	Lee	1	Soudan		1		1	No				Minimal materials
3LE221	183	1	Yes	Lee	3	Marianna			1	1	Yes	3			Possible single component, unplowed
3LE222	184	1	Yes	Lee	3	Marianna		1	1	1	Yes	3			Possible single component, unplowed
3LE223	185	1	Yes	Lee	3	Marianna				1	No				Shallow, eroded
3LE226	188	1	Yes	Lee	4	Marianna			1	1	Yes	3		Yes	Tchula? Artifacts to 70 cm in test pit
3LE229	191	1	Yes	Lee	4	Marianna			1	1	Yes	3		Yes	Dense historic site, prehistoric below surface
3LE243	216/IF6	1	Yes	Lee	2	Marianna		1			No				Isolated hammerstone, no other material associated
	TOTALS:	56	Sites				29	23	4	47	21 sites	76			

C = controlled surface collection, stratified systematic unaligned sampling frame
G = controlled surface collection, 100% timed collection
ST = shovel testing
TP = 1 m test unit excavated to sterile
* = modern or heavily disturbed scatter, not tested

Table MS-2. L'Anguille River Channel Cleanout Project: Sites in Right-of-Way, Channel Miles 16 to 90, 1987 Field Survey.

L'ANGUILLE RIVER PROJECT: SITES IN RIGHT OF WAY, CHANNEL MILES 16 TO 90

STATE SITE #	PROJECT SITE #	Miles 16-90	WITHIN R-OF-W	COUNTY	C.O.E. MAP #	U.S.G.S. QUAD	FIELDWORK C	G	ST	TP	Further Work at this site?	Commentary
3LE213	82	1	Yes	Lee	5	Haynes		1			1m test unit	
3LE214	83	1	Yes	Lee	5	Haynes		1			1m test unit	
3LE215	84	1	Yes	Lee	5	Haynes		1			1m test unit	
3LE216	85	1	Yes	Lee	5	Haynes		1			1m test unit	
3LE217	86	1	Yes	Lee	5	Haynes		1			1m test unit	
3LE218	87	1	Yes	Lee	5	Haynes		1			1m test unit	
3CS012	181	1	Yes	Cross	17, 18	Vanndale		1			1m test unit	
3CS017	122	1	Yes	Cross	16	Central		1			1m test unit	
3CS018	129	1	Yes	Cross	20	C.V. West		1			1m test unit	
3CS022	154	1	Yes	Cross	17	Central	1				1m test unit	
3CS046	131	1	Yes	Cross	20	C.V. West	1	1			1m test unit	
3CS048	111	1	Yes	Cross	21	C.V. West		1			1m test unit	
3CS049	123	1	Yes	Cross	16	Central		1			1m test unit	
3CS080	92	1	Yes	Cross	13, 14	Hamlin		1			1m test unit	
3CS081	91	1	Yes	Cross	13, 14	Hamlin		1			1m test unit	
3CS093	174	1	Yes	Cross	17	Vanndale		1			1m test unit	
3CS121	147	1	Yes	Cross	16	Central	1				1m test unit	
3CS176	96	1	Yes	Cross	18	Vanndale		1			1m test unit	
3CS176	176	1	Yes	Cross	17	Vanndale		1			1m test unit	
3CS177	97	1	Yes	Cross	18	Vanndale		1			1m test unit	
3CS179	98	1	Yes	Cross	18	Vanndale		1			1m test unit	
3CS180	99	1	Yes	Cross	18	Vanndale		1			1m test unit	
3CS181	100	1	Yes	Cross	18	Vanndale		1			1m test unit	
3CS183	101	1	Yes	Cross	18	Vanndale		1			1m test unit	
3CS184	175	1	Yes	Cross	17	Vanndale		1			1m test unit	
3CS188	179	1	Yes	Cross	17, 18	Vanndale		1			1m test unit	
3CS189	180	1	Yes	Cross	17, 18	Vanndale		1			1m test unit	
3CS190	209	1	Yes	Cross	17	Vanndale		1			1m test unit	
3CS193	103	1	Yes	Cross	20, 21	C.V. West		1			1m test unit	
3CS194	104	1	Yes	Cross	20, 21	C.V. West		1			1m test unit	
3CS195	105	1	Yes	Cross	21	C.V. West		1			1m test unit	
3CS196	106	1	Yes	Cross	21	C.V. West		1			1m test unit	
3CS197	107	1	Yes	Cross	21	C.V. West		1			1m test unit	
3CS198	108	1	Yes	Cross	21	C.V. West		1			1m test unit	
3CS199	109	1	Yes	Cross	21	C.V. West		1			1m test unit	
3CS200	110	1	Yes	Cross	21	C.V. West		1			1m test unit	
3CS201	127	1	Yes	Cross	20	C.V. West		1			1m test unit	
3CS202	128	1	Yes	Cross	20	C.V. West	1	1			1m test unit	

C = controlled surface collection, stratified systematic unaligned sample
G = controlled surface collection, 100%, timed collection
ST = shovel testing
TP = 1 m test unit excavated to sterile

Table MS-2. L'Anguille River Channel Cleanout Project: Sites in Right-of-Way, Channel Miles 16 to 90, 1987 Field Survey. (cont)

L'ANGUILLE RIVER PROJECT: SITES IN RIGHT OF WAY, CHANNEL MILES 16 TO 90

STATE SITE #	PROJECT SITE #	Miles 16-90	WITHIN R-OF-W	COUNTY	C.O.E. MAP #	U.S.G.S. QUAD	FIELDWORK C	G	ST	TP	Further Work at this site?	Commentary
3CS203	132	1	Yes	Cross	21	C.V.West		1			1m test unit	
3CS205	121	1	Yes	Cross	16	Central	1				1m test unit	
3CS207	148	1	Yes	Cross	16	Central	1				1m test unit	
3CS208	149	1	Yes	Cross	16	Central		1			1m test unit	
3CS210	151	1	Yes	Cross	16	Central		1			1m test unit	
3CS211	152	1	Yes	Cross	16	Central		1			1m test unit	
3CS212	153	1	Yes	Cross	17	Central		1			1m test unit	
3CS218	93	1	Yes	Cross	13, 14	Hamlin		1			1m test unit	
3CS219	94	1	Yes	Cross	14	Hamlin		1			1m test unit	
3CS220	95	1	Yes	Cross	14	Hamlin		1			1m test unit	
3CS221	160	1	Yes	St. Fran.	12, 13	Hamlin		1			1m test unit	
3CS222	165	1	Yes	Cross	14, 15	Hamlin		1			1m test unit	
3CS223	166	1	Yes	Cross	15	Hamlin		1			1m test unit	
3CS226	169	1	Yes	Cross	15	Hamlin		1			1m test unit	
3SF257	68	1	Yes	St. Fran.	10	Hawk/FC		1			1m test unit	
3SF260	70	1	Yes	St. Fran.	11	Hawkins		1			1m test unit	
3SF261	88	1	Yes	St. Fran.	9	Hawkins					1m test unit	
3SF263	203	1	Yes	St. Fran.	10	Hawkins		1	1		1m test unit	
3SF264	204	1	Yes	St. Fran.	10	Hawkins		1			1m test unit	
3SF265	205	1	Yes	St. Fran.	10	Hawkins		1			1m test unit	
3SF266	159	1	Yes	St. Fran.	12, 13	Hamlin		1			1m test unit	
3SF267	162	1	Yes	St. Fran.	12	Hamlin		1			1m test unit	
3SF268	81	1	Yes	St. Fran.	6	Haynes		1			1m test unit	
3SF269	202	1	Yes	St. Fran.	5	Haynes		1			1m test unit	
3SF269	207	1	Yes	St. Fran.	10	Forrest C		1			1m test unit	
3SF270	77	1	Yes	St. Fran.	8	Palestine	1				1m test unit	
3SF271	78	1	Yes	St. Fran.	6, 7	Palestine	1				1m test unit	
3SF272	79	1	Yes	St. Fran.	6, 7	Palestine	1				1m test unit	
3SF273	80	1	Yes	St. Fran.	6, 7	Palestine	1				1m test unit	
3PO020	133	1	Yes	Poinsett	21	C.V. West		1			1m test unit	
3PO157	119	1	Yes	Poinsett	25	Powers S	1	1			1m test unit	
3PO201	172	1	Yes	Poinset	23	Powers S		1			1m test unit	
3PO202	208	1	Yes	Poinsett	23	Powers S		1			1m test unit	
3PO204	146	1	Yes	Poinsett	23	Powers S			1		1m test unit	
3PO520	120	1	Yes	Poinsett	25	Powers S		1			1m test unit	
3PO522	138	1	Yes	Poinsett	26	Powers S.	1				1m test unit	
3PO523	139	1	Yes	Poinsett	26	Powers S		1			1m test unit	
3PO524	140	1	Yes	Poinsett	26	Powers S		1			1m test unit	

C = controlled surface collection, stratified systematic unaligned sample
G = controlled surface collection, 100%, timed collection
ST = shovel testing
TP = 1 m test unit excavated to sterile

Table MS-2. L'Anguille River Channel Cleanout Project: Sites in Right-of-Way, Channel Miles 16 to 90, 1987 Field Survey. (cont)

L'ANGUILLE RIVER PROJECT: SITES IN RIGHT OF WAY, CHANNEL MILES 16 TO 90

STATE SITE #	PROJECT SITE #	Miles 16-90	WITHIN R-OF-W	COUNTY	C.O.E. MAP #	U.S.G.S. QUAD	FIELDWORK C	G	ST	TP	Further Work at this site?	Commentary
3PO525	141	1	Yes	Poinsett	26	Powers S	1	1			1m test unit	
3PO526	142	1	Yes	Poinsett	26	Powers S		1			1m test unit	
3PO527	143	1	Yes	Poinsett	26	Powers S		1			1m test unit	
3PO531	113	1	Yes	Poinsett	21, 22	C.V. West		1			1m test unit	
3PO533	134	1	Yes	Poinsett	21	C.V. West		1			1m test unit	
	TOTALS:	81	Sites				13	70	2	0		

C = controlled surface collection, stratified systematic unaligned sample
G = controlled surface collection, 100%, timed collection
ST = shovel testing
TP = 1 m test unit excavated to sterile

The number of sites located by county is as follows: Lee County (107 sites), St. Francis County (20 sites), Cross County (67) sites, and Poinsett County (28 sites). The full extent of all sites found in and adjacent to the project direct impact zone have been carefully plotted on COE project aerials, county soils maps, and U.S.G.S. quadrangles. They can be readily relocated on the ground, a matter of considerable importance to both COE planners and archaeological researchers. The survey work at this point is essentially complete, although it should be noted that a small number of new sites may be found in the recommended deep site testing program (see below).

The content and boundaries of all project sites were determined through controlled surface collection procedures. Collections using a stratified systematic unaligned collection procedure were made at 42 of the 137 sites found in the right of way, with every artifact plotted in to within 10 meters. This procedure was employed at every site where surface conditions (i.e., uniform visibility) permitted its successful application. At sites where portions of the ground surface were overgrown, badly eroded, or disturbed, these specific controlled procedures could not be employed. Their use in such conditions would result in maps showing high artifact concentrations in deflated site areas (where large numbers of artifacts tend to occur), or low densities in partially overgrown areas. At sites such as these, 100 percent controlled collections were made. The boundaries of the scatter were carefully determined on the ground and on project aerials, and *every* visible artifact was collected. The amount of collection time in person hours was recorded, to ensure comparability of the samples. This procedure was employed at 93 of the 137 sites found in the right of way (Tables MS-1, MS-2).

At sites found in overgrown areas, systematic shovel testing was employed to define site extent. When positive shovel tests occurred, shovel tests were opened at 10 m intervals in each of the four cardinal directions until at least two sterile tests occurred. All positive shovel tests were flagged and labeled using surveyors' tape. These collection procedures were employed at 6 of the 137 sites found in the right of way (Tables MS-1, MS-2). At sites extending from cleared areas into woods, both controlled surface and shovel test collection procedures were employed to define site extent.

FIELDWORK AND RECOMMENDATIONS: CHANNEL MILES 0 TO 16

Fieldwork. Along channel miles 0 to 16, 56 sites were found in the project right-of-way (Table MS-1). Another 44 sites were found immediately adjacent to, but outside of, the project right-of-way. One meter test units were excavated at 47 of the 56 sites located in the immediate right-of-way. This included all nondestroyed, nonmodern sites, where the possibility for intact subsurface materials was expected.

Recommendations. The results of the field survey and testing operations at the 56 sites in the right-of-way in channel miles 0 to 16 are summarized in Table MS-1. At 34 of the sites, no evidence for intact, subplowzone artifact or feature assemblages was found. These sites are: 3LE142, 3LE143, 3LE145, 3LE150, 3LE151, 3LE152, 3LE153, 3LE154, 3LE156, 3LE160, 3LE163, 3LE165, 3LE167, 3LE177, 3LE179, 3LE180, 3LE186, 3LE188, 3LE190, 3LE192, 3LE193, 3LE195, 3LE197, 3LE198, 3LE199, 3LE202, 3LE203, 3LE207, 3LE208, 3LE209, 3LE210, 3LE211, 3LE223, and 3LE243. These sites are not considered to meet National Register significance criteria, and no further investigations at these locations are recommended. In Table MS-1, "No" is recorded in the column headed "Further Work Required at this Site?" The level of information collected to date from these sites provides comprehensive documentation about the nature and extent of these resources.

No sites were found in the project area that could be unequivocally considered eligible for the National Register of Historic Places. Twenty-two sites require further investigation before National Register Eligibility can be adequately determined. Artifacts or features were found in apparently undisturbed context below the cultivation or humus zone at 16 sites during the testing program, at 3LE149, 3LE155, 3LE158, 3LE159, 3LE161, 3LE162, 3LE164, 3LE166, 3LE175, 3LE176, 3LE183, 3LE184, 3LE221, 3LE222, 3LE226, and 3LE229. At six other locations (sites 3LE141, 3LE144, 3LE157, 3LE201, 3LE205, and 3LE206), all in plowed fields, no subplowzone artifacts were found in the excavated test units. The possibility for undisturbed features at these sites was thought to be good, however, given the density of the surface artifact scatter. Additional investigations at these 22 sites will be necessary to determine their significance in terms of National Register eligibility criteria.

Field testing activity recommended at these 22 sites is summarized in Table MS-1. A minimum of three 2 m units should be opened at each of the 22 sites where subsurface deposits or features are either present or highly likely. Excavation of five 2 m units is recommended at the five largest sites, to ensure adequate coverage. These units should be opened to a minimum of one sterile 10 cm level below the base of the plowzone, with a 1 m (one-quarter) subsection carried to at least 40 cm below that, again using 10 cm levels. All fill should be screened through 1/4 inch mesh. Given the high silt content of the deposits, water screening is highly recommended to speed the field effort. Excavation of these test units will document the age and context of the subsurface assemblages at these sites. In all, excavation of a total of 76 2 x 2 m units is recommended at the 22 sites in project channel miles 0 to 16.

Limited transect stripping, using a motor grader or comparable machinery, is recommended at nine sites, to determine whether or not features are present at the base of the plowzone. Given the large size of these sites, transect stripping would be an efficient, cost-effective feature discovery procedure. Transects would be opened to the base of the plowzone (or lower, if warranted by the test pitting), with encountered features mapped and sampled for content. The transect would then be backfilled. Detailed examination of site feature assemblages would not be warranted at the evaluation stage, unless they could be completely removed

within allotted time and budgetary constraints.

Based on the results of the fieldwork to date, particularly the results of preliminary geomorphological and soils analyses, a number of locations in the first 16 channel miles have been identified that show potential for yielding deeply buried cultural deposits. These should be examined prior to clearance of these areas. Areas where deep site testing should occur in Channel Miles 0 to 16 are indicated in Table MS-1, in the "Backhoe" column under Recommended Fieldwork. In some cases (i.e., those areas listed in Table MS-1), the locations where deep site testing is recommended occur on or adjacent to known sites. Precise locations of these areas, and other selected locations that away from known sites, have been delimited on project aerials submitted to the Memphis District. Deep site testing procedures should consist of the excavation and partial screening of fill from several small backhoe trenches. These should be no more than three to five meters long, and at least three meters in depth. Excavation of deeper units, if warranted by conditions in the first three meters, should be stepped for safety.

FIELDWORK AND RECOMMENDATIONS CHANNEL MILES 16 TO 90

Fieldwork. Along channel miles 16 to 90, 81 sites were found in the project right-of-way (Table MS-2). Another 41 sites were found immediately adjacent to, but outside of, the project right-of-way. Site content, extent, and boundaries were determined following the same procedures employed at sites in Channel Miles 0 to 16, with the exception that one meter test units were not opened at these sites.

Recommendations. The results of the field survey operations at the 81 sites in the right-of-way in channel miles 16 to 90 are summarized in Table MS-2. Significance evaluations have been deferred until one m test units can be opened at these sites, following the procedures employed at the sites along channel miles 0 to 16. None of these sites are badly disturbed, precluding further examination. At these 81 sites in the project right-of-way along channel miles 16 to 90, one m test units should be excavated.

Based on the results of the fieldwork to date, particularly the results of preliminary geomorphological and soils analyses, a number of locations in channel miles 16 to 90 have been identified that show potential for yielding deeply buried cultural deposits. These should be examined prior to clearance of these areas. Areas where deep site testing near known sites should occur in Channel Miles 16 to 90 are indicated in Table MS-2, under the "Backhoe" column under Recommended Fieldwork. Precise locations of these areas, and other selected locations that away from known sites, have been delimited on project aerials submitted to the Memphis District. Deep site testing procedures should consist of the excavation and partial screening of fill from several small backhoe trenches. These should be no more than three to five meters long, and at least three meters in depth.

PALEOENVIRONMENTAL RESEARCH RECOMMENDATIONS

Geomorphological/Soils Research. Fine grained geomorphological and soils investigations will need to accompany the proposed deep site testing program proposed above, to ensure accurate interpretation of the profiles and assemblages recovered. Minimally, a soil scientist and preferably a geoarchaeologist should be present during the deep site testing operations, to document the operations, and obtain the necessary samples. Where warranted by preservational conditions, pollen and macrovegetation samples should also be collected from these columns, particularly from archaeological horizons, and should be submitted to the relevant paleoenvironmental specialists for examination. Funding should be provided for laboratory analysis of representative samples of this information.

Monitoring Operations: Baldcypress. The planned Corps of Engineers channel cleanout should be monitored for exposure of subfossil baldcypress (*Taxodium distichum*) logs and canoes which are extremely valuable for paleoclimatology and archaeology in the Lower Mississippi Valley. Baldcypress trees are known to reach ages greater than 1,000 years and are sensitive to growing season drought. Moreover, cypress wood can be preserved in river channels, swamp and lake beds, and in buried sedimentary contexts for thousands of years. At present, living baldcypress grow along the L'Anguille River and subfossil cypress logs have been observed buried in the floodplain and channel sediments.

Baldcypress chronologies 1000 to 5000 years long compiled from living trees and subfossil materials such as may be found in the L'Anguille River can be used to reconstruct growing season precipitation, streamflow, and drought indices for each year over the past millennia. In addition, these very long chronologies could be used to date wooden artifacts recovered from prehistoric archaeological sites in the lower Mississippi Valley. Subfossil logs in submerged and buried deposits offer the only hope for long extensions of the tree-ring record further into prehistory. Vegetation removal, snagging, and dredging associated with the L'Anguille channel cleanout, accordingly, should include monitoring and documentation of baldcypress paleoenvironmental records. Funding for specialist monitoring and laboratory analysis of representative samples of this information should be provided.

CULTURAL RESOURCE INVESTIGATIONS IN THE L'ANGUILLE RIVER BASIN LEE, ST. FRANCIS, CROSS, AND POINSETT COUNTIES, ARKANSAS

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CULTURAL RESOURCE INVESTIGATIONS IN THE L'ANGUILLE RIVER BASIN LEE, ST. FRANCIS, CROSS, AND POINSETT COUNTIES, ARKANSAS

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I. INTRODUCTION

In June and July 1987 an intensive archeological survey was conducted along the channel margins of much of the L'Anguille River in northeast Arkansas. The fieldwork for this project was conducted under terms of a contract (DACW66-87-C-0046) between Garrow & Associates, Inc. and the Memphis District office of the U.S. Army Corps of Engineers. The purpose of the survey was to provide cultural resource management recommendations to the Memphis District, who have proposed a program of limited vegetation and channel clearing along the L'Anguille River. Formally described as the *Cultural Resources Survey and Geomorphic Examination of the L'Anguille River Channel Cleanout, Poinsett, Cross, St. Francis, and Lee Counties, Arkansas,* the survey is hereafter referred to as the L'Anguille River survey project, or the 1987 survey.

The 1987 survey was directed to areas within 300 ft (ca. 100 m) of the present channel banks, along the first 90 miles of the channel north from its confluence with the St. Francis River. The portion of the basin examined, proceeding from south to north, encompassed portions of Lee, St. Francis, Cross, and Poinsett Counties (Figures 1, 2). A description of past and present environmental conditions and land use in the survey area is provided in Chapters II and III. A review of previous cultural resource investigations in northeast Arkansas/southeast Missouri in general and in the L'Anguille basin in particular is provided in Chapter IV. Chapters V and VI detail the record of local prehistoric and historic occupation, providing a research framework and context for interpreting the 1987 survey assemblages.

A total of 222 sites were examined during the fieldwork, 137 in the right-of-way and 85 immediately adjacent to the corridor (Table 1). The fieldwork included intensive survey along the channel margin from miles 0 to 90, coupled with the excavation of 1 m test units at 47 sites located within the first 16 miles, where eventual project construction activity will be initiated. Controlled surface collections were made at 217 sites, while 9 sites were systematically shovel tested (several sites saw both shovel testing and surface collection). Surface collection took two forms, intensive sampling using dispersed collection circles, and timed 100% collections. Completed Arkansas Archeological Survey (AAS) site forms were prepared and submitted for these sites, using a computerized form developed by Garrow & Associates, Inc., and final state site numbers are employed in this report. Site form preparation and artifact processing and analysis associated with the project were conducted following AAS guidelines, and incorporating the advice of the Survey Registrar and the station archaeologists at Arkansas State University and the University of Arkansas-Pine Bluff, where the materials were to be curated. A description of project field and analysis methods is provided in Chapter VII.

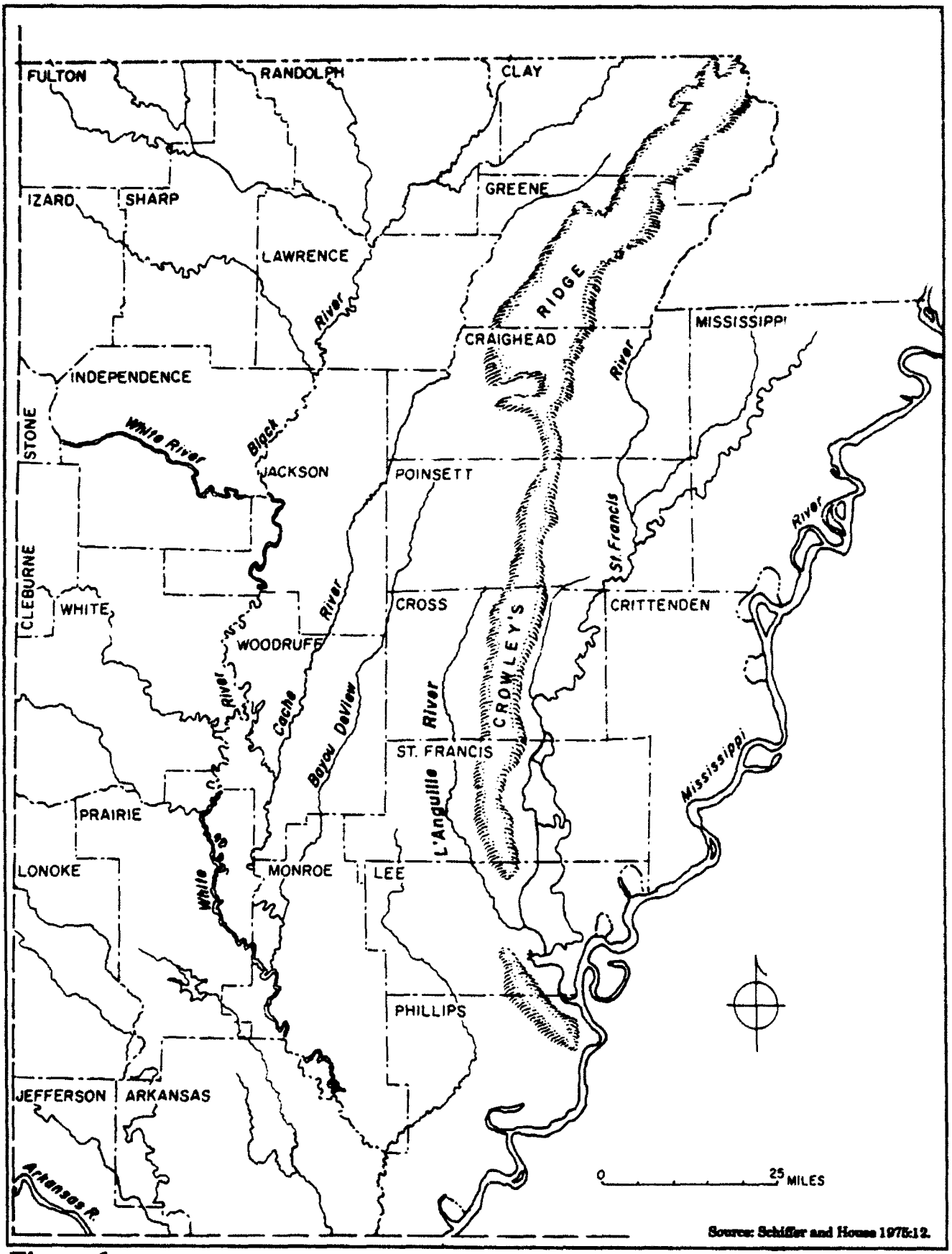


Figure 1.
The L'Anguille River Area, Poinsett, Cross, St. Francis, and Lee Counties, Arkansas.

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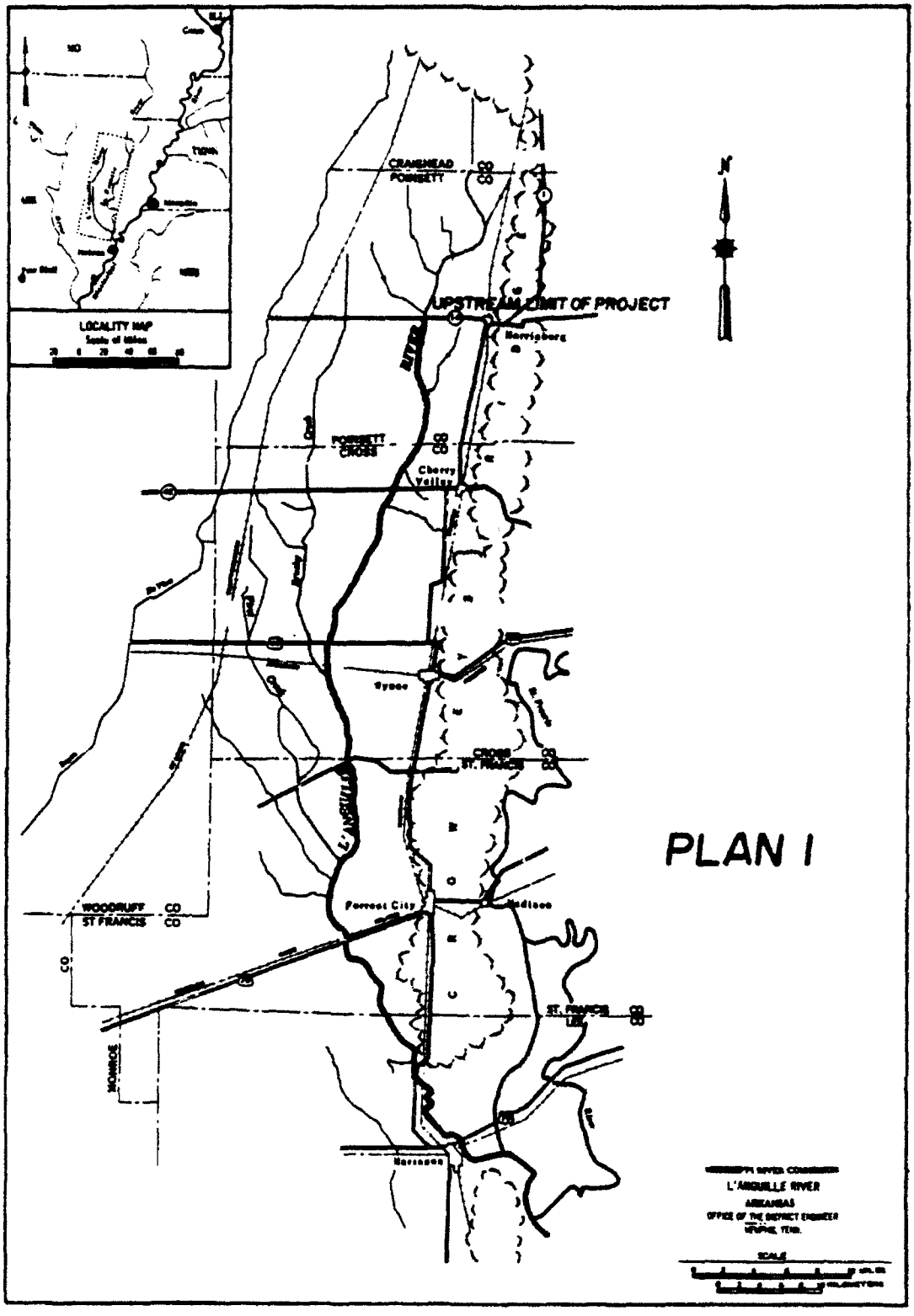
Table 1. L'Anguille River Channel Cleanout Survey: Sites Located in 1987 by County and Type of Fieldwork.

COUNTY	# OF SITES	WITHIN RIGHT-OF-WAY YES	WITHIN RIGHT-OF-WAY NO	TYPE OF FIELD WORK: Controlled Surface Collection	TYPE OF FIELD WORK: General Surface Collection	TYPE OF FIELD WORK: Systematic Shovel Testing	TYPE OF FIELD WORK: 1 Meter Test Unit
LEE	107 Sites	62	45	30	70	7	47
ST. FRANCIS	20 Sites	16	4	4	16	1	0
CROSS	67 Sites	45	22	6	63	0	0
POINSETT	28 Sites	14	14	5	23	1	0
Grand Totals	222 Sites	137	85	45	172	9	47

Descriptive summaries of all sites located in the project right-of-way are provided in Appendix I, and copies of the catalog/analysis forms, and summary assemblage measures for all 222 project sites, are given in Appendix II. Project specific geomorphic/paleoenvironmental data are presented in Appendices III and IV. Examples of the computer-generated site form are given in Appendix V, while Appendix VI provides general locational information and a listing of the field procedures employed at all 222 sites found during the 1987 survey, by state site and project numbers. The project Scope of Work is presented in Appendix VII, while the soil profiles from all of the test units opened on the project sites are given in Appendix VIII.

The results of the cataloging and analysis of the materials from the 222 project sites have been combined into a comprehensive *Final Data Appendix and Catalog* (encompassing ca. 800 pages), which has been prepared as a separate, limited distribution volume (Anderson 1988). Copies of this data appendix/catalog have been curated with the Arkansas Archeological Survey, at the Memphis District office of the Corps of Engineers, at Garrow & Associates, Inc. headquarters in Atlanta, Georgia, and with the project Principal Investigator. Copies of the computerized databases used to prepare the data appendix/catalog volume, and the project site forms, are maintained at Garrow & Associates, Inc. headquarters in Atlanta, Georgia, and by the project Principal Investigator.

A program of paleoenvironmental and preliminary geomorphological investigation was conducted as part of the 1987 survey. A major triumph of this program was the recovery of a continuous pollen/plant-macrofossil core from a lake in the northern part of the project area documenting paleovegetation and paleoenvironmental conditions over the past 11,250 years. This work, by Hazel R.



Source: U.S. Army Corps of Engineers 1985: Plate 3.

Figure 2.
L'Anguille River Channel Cleanout Project Area, Northeast Arkansas.

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Delcourt and Paul A. Delcourt, is described in Chapter III, and the primary analytical data produced during this study are presented in Appendix III. A comprehensive deep site testing program and geomorphic examination, originally planned for the initial survey phase, was deferred until the results of the 1987 field program could be used to more effectively guide such effort. Soil columns were taken and analyzed from twelve project sites, however, using a 3 inch bucket auger, documenting local depositional conditions (Chapter VII, Appendix IV), and project terrain as well as maps were examined to delimit areas conducive to buried site preservation. A number of locations were identified and have been recommended for deep testing in subsequent phases of the project.

Technical observations about past human settlement and use of the L'Anguille channel margin are provided in Chapter VIII. Given the sample of 222 sites distributed along much of the length of the basin, and the fact that controlled collection procedures were employed, the project assemblage offered a superb opportunity to initiate descriptive and comparative analyses. These results are, of course, preliminary, and will bear refinement as additional data is collected in subsequent phases of the project. The 1987 survey data does, however, offer an initial archaeological perspective on past use of the L'Anguille channel margin.

Cultural resource management recommendations, both for specific sites located during the 1987 survey, and to guide subsequent phases of the research, are detailed in the Management Summary at the beginning of this report, and in Chapter IX. Recommendations are provided for all sites found in the project right-of-way. In brief, additional testing was recommended at 22 of the 56 sites found along channel miles 0 to 16, while the excavation of 1 m test pits was advocated at the 81 sites located along channel miles 16 to 90. Additionally, a geomorphic/paleoenvironmental deep site testing program was recommended, including the collection and analysis of bald cypress tree ring samples for use in paleoclimatic reconstruction.

A total of 222 sites are located and documented in the L'Anguille River Channel Cleanout survey area in 1987, 137 in the immediate 300 foot right-of-way, and another 85 immediately adjacent to, but outside of this corridor. Along channel miles 0 to 16, 56 sites were found within the right-of-way, while from channel miles 16 to 90, 81 sites were found in the project right-of-way. Along channel miles 0 to 16 another 44 sites were found immediately adjacent to, but outside of, the project right-of-way. An additional 41 sites were found immediately adjacent to the right-of way from channel miles 16 to 90. Sites found (or previously recorded) at the margins of the corridor were recorded and documented as a matter of course throughout the project, primarily to determine whether they extended into the corridor. Previously recorded site locations in the immediate project area were routinely revisited. Two unusual previously recorded sites, Greer Mound (3LE024) and Lace Place (3PO17) located outside the corridor were revisited and have been included with the project assemblage. Further work at such sites in the context of the L'Anguille Channel Cleanout project, beyond avoidance during construction, is unnecessary. Detailed locational data on all of these sites have been submitted to the Memphis District, Corps of Engineers.

II. ENVIRONMENTAL OVERVIEW

INTRODUCTION

The L'Anguille River Basin occupies portions of Craighead, Poinsett, Cross, Woodruff, St. Francis, and Lee counties in northeast Arkansas (Figures 1, 2). A number of environmental summaries of the general area from an anthropological perspective exist (i.e., Fehon 1975; Stewart-Abernathy 1982; Morse and Morse 1983:1-15; Wogaman 1986; Cochran 1986). In addition, the Memphis District office of the U.S. Army Corps of Engineers (U.S. Army Corps of Engineers 1985) prepared a detailed environmental summary of the L'Anguille River basin as part of an environmental impact statement prepared for the channel cleanout project. Much of what follows was derived from that report, and from Stewart-Abernathy's (1982) summary of environmental conditions in the basin.

The L'Anguille basin generally trends from north to south and is bounded on the west by the low divides of Bayou DeView and Big Creek, tributaries of the White River, and on the east by Crowley's Ridge. Crowley's Ridge separates the L'Anguille River Basin from the St. Francis Basin, except in the vicinity of the confluence of the two streams, where the L'Anguille veers to the east and flows through the Marianna Gap into the St. Francis. The river originates in the Crowley's Ridge escarpment in Craighead County, Arkansas, near the modern town of Jonesboro. The main channel extends for approximately 112 miles. The basin occupies an area of 937.5 square miles, or approximately 608,000 acres. Major tributaries, from north to south, are Brushy Creek, First Creek, Second Creek, and Larkin Creek, all of which enter the river from the west (U.S. Army Corps of Engineers 1985:EIS-45). Archaeological survey activity during the 1987 L'Anguille River Channel Cleanout survey encompassed much of the main channel, extending over the lower 90 channel miles, from central Poinsett County in the north southward through through Cross and St. Francis Counties, into Lee County and the river's modern confluence with the St. Francis River. At its confluence with the St. Francis the L'Anguille comes to within ca. 20 miles of the modern course of the Mississippi River.

L'ANGUILLE BASIN GEOMORPHOLOGY AND PALEOENVIRONMENTAL HISTORY

Physiographically, northeast Arkansas is characterized by three major regions, the Eastern and Western Lowlands, areas of relict Late Quaternary braided stream terraces, separated by Crowley's Ridge, a remnant landform that survived the extensive erosion associated with the Pleistocene movement of the Ohio/Mississippi river systems (see Figure 1; Fehon 1975:17; Stewart-Abernathy

1982:2). Quaternary braided stream deposits in the Western Lowlands are illustrated in Figure 3; geomorphological events in the Western Lowlands have been summarized by Fehon (1975:17):

> The Western Lowlands is an area of alluvial deposits bordered by the Ozark Escarpment on the west and Crowley's Ridge on the east. Near the Arkansas-Missouri state line the Western Lowlands are about 20 to 25 miles wide. They widen to about 30 miles near Jonesboro and reach a maximum width of about 70 miles near the latitude of Little Rock. The Arkansas and Mississippi Rivers form its south and southeastern boundaries, respectively.
>
> Some two-thirds of the land surface of the Western Lowlands consists of braided stream terraces which were formed when the Mississippi River flowed west of Crowley's Ridge ...The braided stream sublevels in the Western Lowlands are designated Qtb1, Qtb2, Qtb3, and Qtb4 in order of their formation, with Qtb1 being the highest and oldest and Qtb5 being the lowest and most recent (Fehon 1975:17).

The L'Anguille River project area is characterized by comparatively recent alluvial deposits along the floodplains and considerably older, Late Pleistocene Qbt2 surficial deposits away from the channel (Figure 3). The upland terraces adjoining the floodplain have remained comparatively stable throughout the period of human occupation, at least in relation to conditions within the alluvial floodplain. Evidence for prehistoric occupation is thus more readily preserved in these areas.

Late Pleistocene-Holocene Geomorphological Conditions

Paleoenvironment conditions in the L'Anguille River Basin have been closely linked to geomorphological events. A detailed overview of geomorphological processes in the L'Anguille River basin was prepared by Saucier (1982:25-31), and has been summarized by Stewart-Abernathy (1982:4-7):

> ...50,000 years ago, the waning Wisconsin glaciation produced glacial outwash that was carried southward just west of Crowley's Ridge by a braided ancestral Mississippi River. This created a floodplain several miles in width across an older Pleistocene terrace. This particular Mississippi River system then flowed east through the Marianna Gap of Crowley's Ridge to eventually join with the ancestral Ohio River.
>
> By about 35,000 years ago, the Mississippi River was periodically shifting westward, further eroding the Pleistocene terrace deposit with multiple channels while creating a floodplain of broad sandy plains in the form of low terraces with many pronounced recently abandoned channels. This created an environment of mixed deciduous hardwood forests on the lower terraces and a deciduous

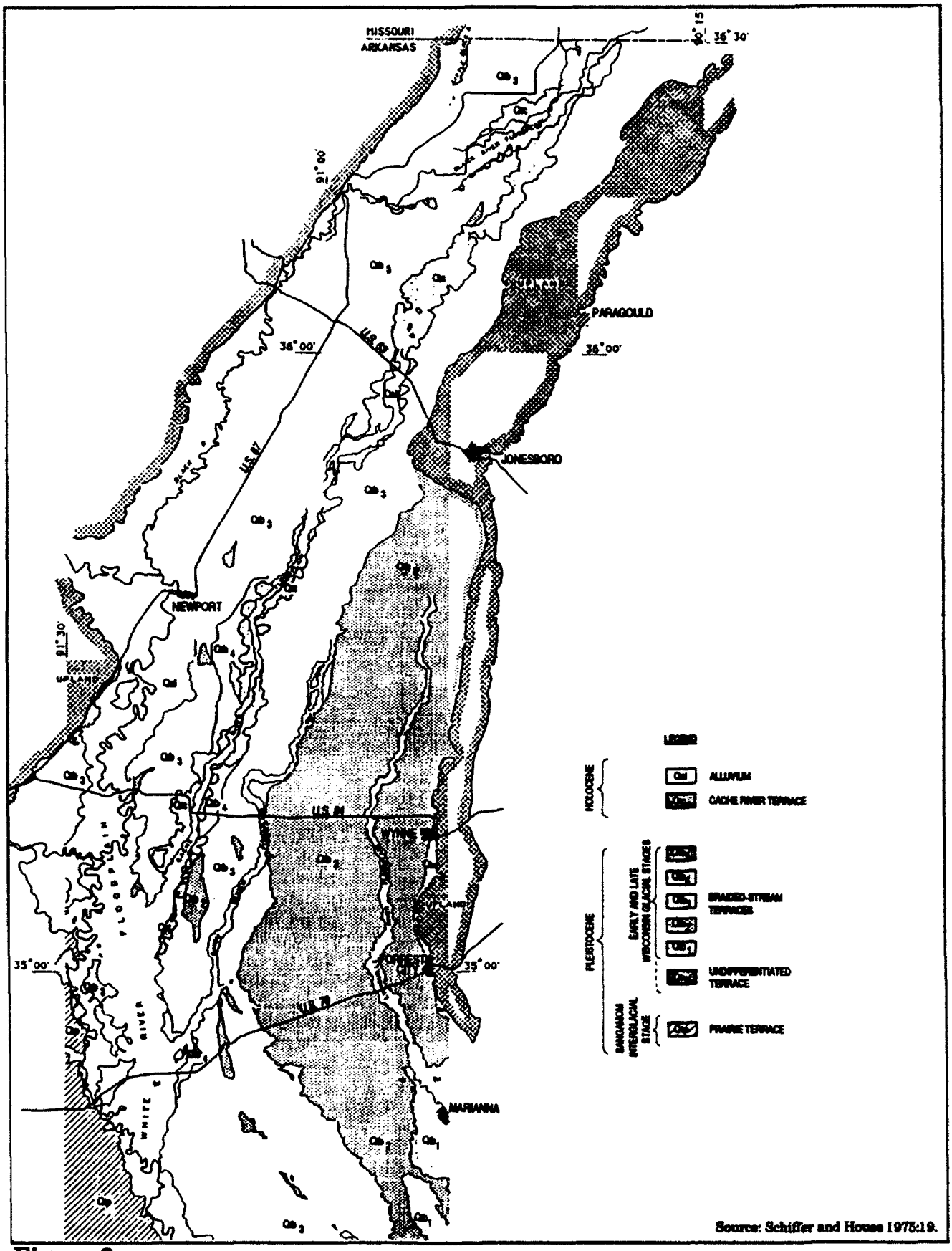


Figure 3.
Quaternary Surficial Deposits in the Western Lowlands of Northeast Arkansas.

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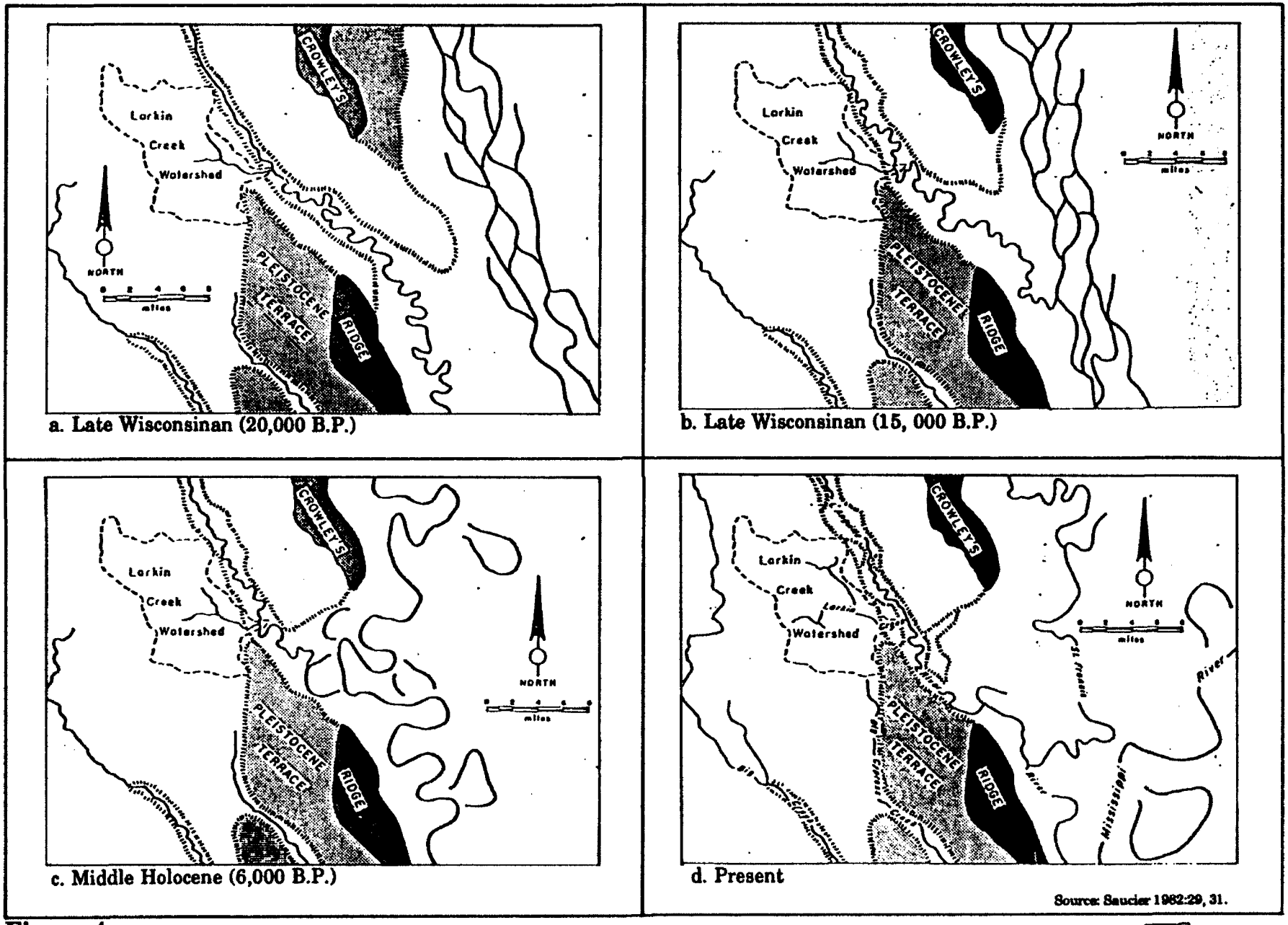
swamp forest of cypress and gum in the lower active floodplain areas, relict channels, and depressions.

During the late Wisconsin glaciation, from ca. 23,000 to 20,000 years ago, the physiography, vegetation, and climate of the region changed. Increased meltwater caused the ancestral Mississippi River and Ohio River to become braided and local drainage networks began to form and entrench somewhat into the braided stream terraces [see Figure 4a]. These localized drainage networks gradually developed into dendritic drainages. This period was the most active deposition of loess in the Lower Mississippi Valley as winds seasonally blew clouds of silt eastward and southward, thus deflating the Mississippi and Ohio River braided channels (Saucier 1974).

By about 15,000 years ago, the Mississippi River had shifted entirely to the east of Crowley's Ridge [see Figure 4b]. There, it joined with the Ohio River and carried glacial outwash and meltwater southward causing rapid aggradation of the alluvial valley. As a result of this combined flow, tributaries of the Mississippi River, such as the L'Anguille River, and its tributaries as well, became sluggish to seasonally impounded streams on broad, flat floodplains. Ecologically, these areas were probably dense, swampy forest areas. The Mississippi River floodplain was a broad plain with extensive sandbars and flats with scattered forested stands of spruce and larch and broad, shallow, active and abandoned channels.

Between 15,000 and 10,000 years before the present (B.P.), the Mississippi River developed into a meandering river beginning at the Gulf and gradually working northward. The environment was one of an established main channel bounded by forested natural levees and cutoffs. The spruce and larch were superceded by mixed deciduous hardwoods.

...As recently as 12,000 years [B.P.]... the fluvial terrace along the L'Anguille River, while still an active floodplain, was an inhabitable surface (Saucier 1982). For the next 12,000 years, changes occurred in the landscape as the L'Anguille River drainage responded to aggradation and degradation by the Mississippi River. In the northern and western portions of the project area, the Holocene was generally characterized by a reduction in topographic relief as the higher ridges slowly but steadily eroded and these eroding sediments were redeposited in adjacent channels and depressions. In some tributary watersheds to the L'Anguille River, such as the geomorphologically young Larkin Creek watershed, active downcutting and extension of headwaters has occurred so that the relief in some parts of this watershed is actually increasing as sediments are carried elsewhere (Saucier 1982).



Source: Saucier 1982:29, 31.

Figure 4.
Late Pleistocence and Holocene Landscapes
in the lower L'Anguille River area, Northeast Arkansas.

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> ...About 6,000 years ago, during the Hypsithermal, the climate became drier. Grasslands replaced some hardwood forests in better drained areas and some of the swamp forests contained grasses and herbaceous species of bottomland hardwoods. By this time, the Mississippi River flowed in a meander belt just east of Crowley's Ridge [see Figure 4c]. The L'Anguille River was still a direct tributary of the Mississippi River and therefore backwater flooding continued to occur.
>
> After 6,000 years ago, geomorphic changes began which resulted in the present drainage pattern [see Figure 4d]. The Mississippi River meander belt moved eastward to its present system. The former Mississippi River meander became the St. Francis River, which entered the Mississippi further to the south. The L'Anguille River now emptied into the St. Francis rather than the Mississippi, which reduced backwater flooding and allowed the L'Anguille River to form a low fluvial terrace on its floodplain. The environment on this terrace changed from swamp forest to mixed deciduous hardwoods more typical of higher terraces (taken from Stewart-Abernathy 1982:4, 6-7).

As noted, the St. Francis and the White Rivers and their major tributaries constitute the major drainage systems of northeast Arkansas (see Figure 1). These channels are oriented roughly parallel to one another, and trend from north to south. The White River and its tributaries drain much of the Western Lowlands, while the St. Francis and its tributaries drain the Eastern Lowlands. The L'Anguille River is the only major stream originating in the Western Lowlands flowing into the St. Francis River Basin (Stewart-Abernathy 1982:4). As seen by the preceding review, these drainage conditions have existed throughout the period of human occupation. Given this, it might be expected that prehistoric occupations along the L'Anguille, particularly those in the lower portions of the drainage, might be expected to more closely resemble contemporary occupations in the Lower St. Francis than those in the lower White River system.

The Hood Lake Pollen Core

One highly successful outcome of the 1987 investigations along the L'Anguille was the collection of a 330 cm sediment core obtained in July, 1987 from Hood Lake, Poinsett County, Arkansas, in the vicinity of the northern L'Anguille River basin. Palynological, plant-macrofossil, and geomorphological analyses of the core's contents, by Hazel R. Delcourt and Paul A. Delcourt, document vegetational and climatic changes in the immediate study area from the initial Holocene to the present (see Chapter III). Ten radiocarbon dates processed on organic materials obtained from the core provide secure chronological control for this column. The dates were all in close agreement and were, for the most part, in a logical superposition within the column. The results of the analysis indicate that significant changes in the composition and proportions of trees, upland herbs,

and aquatic plants have occurred in the vicinity of the L'Anguille basin over the past 10,500 years. These data complement, and augment, the geomorphological investigations conducted in the region, and provide an environmental baseline against which human occupation in the L'Anguille basin may be viewed.

CLIMATE

Climate within the basin is mild and temperate:

> The L'Anguille River Basin experiences climatic conditions typical of the southeastern part of the United States. Average monthly temperatures range from 40 degrees Fahrenheit in January to 81 degrees Fahrenheit in July. Normal annual rainfall for the basin is approximately 50 inches with normal monthly rainfall ranging from three to five inches. The growing season has a length of approximately seven months from April to November (U.S. Army Corps of Engineers 1985:6).

MODERN BIOTIC COMMUNITIES

The L'Anguille River drainage area consists of approximately 608,000 acres (U.S. Army Corps of Engineers 1985:6). Of the total, about 504,000 acres are bottomlands and 104,000 acres are uplands. The predominant habitat types include cultivated farmland, bottomland hardwoods, and upland hardwoods. Most of the basin (ca. 438,000 acres) is in farmland, although much of the land along the channel itself remains wooded, particularly in lower, undrained areas.

> There are currently approximately 40,356 acres of woodlands in the L'Anguille Basin floodplain. These woodlands are characterized by hardwood species that are tolerant of saturated soil conditions. The dominant species are overcup oak, water hickory and sweetgum, and the subdominate species are American elm, willow and water oaks, and pumpkin ash. These hardwoods are interspersed with wooded and shrub swamps composed of bald cypress or tupelo, buttonbush, and swamp privet. Other hardwood species found within the area include water locust, red maple, water elm, deciduous holly, persimmon, slippery elm, swamp chestnut oak. shagbark hickory, swamp dogwood, and shellbark hickory.
>
> Wildlife within the L'Anguille River Basin includes big and small game, fur bearing animals, waterfowl, and nongame species. Waterfowl are considered the basin's among the most important wildlife resources and the area serves as valuable wintering grounds for waterfowl using the Mississippi River Flyway. The croplands, bottomland hardwoods, and other wetlands along the L'Anguille and

its tributaries are periodically inundated, providing ideal feeding and resting habitat for migrating and wintering waterfowl. Other important species include white-tailed deer, turkey, grey and fox squirrels, and rabbits (U.S. Army Corps of Engineers 1985:7).

The L'Anguille basin is characterized by extensive permanently to seasonally inundated backwater areas, producing a diversity of aquatic habitats highly conducive to a wide range of fauna. Twentieth century drainage projects have markedly altered the pre-European contact landscape, which was characterized by extensive hardwood swamps throughout much of the later Holocene (see below, and Chapters III, VI). Modern aquatic habitats range from narrow channelized stream courses primarily in the upper portion of the drainage to wide swamplands in the lower part of the basin. Oxbows and other cut-off channels, which formerly characterized much of the drainage prior to modern channelization, act as a nursery and growth area for many fish species; these populations replenish the main stream during periods of flooding, and would have been excellent fishing grounds for prehistoric populations (U.S. Army Corps of Engineers 1985:EIS-48, 49; see also Smith 1975:52-64). A total of 29 species of fish was collected during a fishery survey conducted by the Memphis District Corps of Engineers, the U.S. Fish and Wildlife Service, and the Arkansas Game and Fish Commission in September, 1982 (U.S. Army Corps of Engineers 1985:EIS-49). Crappie, bluegill, and largemouth bass were the dominant game fish while the non-game fish included gizzard shad, river carpsucker, and buffalo. Catfish are common in the drainage and are commercially exploited along its length, although with greater success in the more extensive waterways of the lower reaches of the drainage.

MODERN LAND USE

Large-scale agriculture has been the major factor altering natural conditions in the L'Anguille River Basin, as in other portions of the Mississippi Alluvial Valley. In the L'Anguille Basin in particular, extensive land leveling to facilitate rice cultivation and other forms of agriculture has occurred (Medford 1972). This activity has altered the physical appearance of the area and has significantly changed vegetation and wildlife patterns. Extensive land clearing has stripped most of the basin of its hardwood vegetation, and severely impacted local archeological resources. As the woodlands have diminished, so have wildlife forms. Also, as new habitats have been created intrusive animal and plant forms have appeared.

In addition to land modification caused by modern agricultural practices, flood control projects have modified natural drainage systems and changed local topography, particularly in stream floodplains. Since the turn of the century, a complex array of drainage channels have been constructed throughout the region. While many of these follow former stream channels, they have altered the natural drainage patterns, water table, and flooding patterns:

> There are approximately 193 channel miles of rivers and streams within the L'Anguille River Basin comprising 2,100 flooded surface acres. The L'Anguille River is the principle(sic) water body in the basin. Its upper reaches (from Mile 85.5 to Mile 113) were channelized prior to 1945 and are characterized by relatively long, straight stretches having moderate to fast currents. Downstream of the Cross-Poinsett County line, the L'Anguille River remains a natural meandering channel with slow to moderate current (U.S. Army Corps of Engineers 1985:EIS-46).

The main channel and its tributaries are still subject to periodic flooding, usually in the winter and spring, on an almost annual basis. Thick alluvial deposits characterize the stream margins.

In spite of the extensive twentieth century clearing and drainage efforts, an appreciable portion of the L'Anguille basin, including much of the area comprising the L'Anguille Channel Cleanout project area, is subject to periodic flooding. This can be seen from modern land use descriptions:

> Of the 608,000 acres in the L'Anguille River Basin, more than 72 percent is prime farmland based on the U.S. Department of Agriculture, Soil Conservation Service soil classifications. This farmland is currently used for intensive farming operations. Over 40 percent of the basin is in the SPF [Standard Project Flood Floodplain, or floodprone bottoms] floodplain. There are approximately 192,215 acres of cleared lands and 55,170 acres of woodlands in the SPF floodplain. Of the woodlands 18,747 acres are seasonal wetlands and 3717 acres are permanent wetlands. There are 2100 acres of open water in the basin. **Virtually all of the open water and wetlands in the basin are contiguous to the L'A guille River and its major tributaries.** More than 72 percent of the woodlands in the SPF floodplain are in the 3-year floodplain. The remaining woodlands are on Crowley's Ridge and in isolated tracts in the alluvial bottomlands.
>
> Agricultural lands in the basin are primarily cropland and pasture. The major crops grown in the floodplain are rice, milo, wheat, and soybeans. Some corn and cotton is also grown in the basin (U.S. Army Corps of Engineers 1985:6-7, emphasis added).

The low incidence of archaeological sites discovered during the 1987 survey in some portions of the drainage was directly related to the continued presence of large areas of open water and wetlands adjacent to the main channel. Well over half the area within 100 m of the main channel (the focus for the 1987 field effort), particularly large portions of the area from northern Lee County through St. Francis County and into southern Cross County, was flooded and inaccessible.

There are four urban centers in the basin with a population of 1000 or more. From south to north these are Marianna, Forrest City, Wynne, and Harrisburg

(Figure 2; U.S. Army Corps of Engineers 1985:9). A number of smaller communities are located in the basin, including (again from south to north) Colt, Palestine, and Vanndale, and Cherry Valley.

> The economy of the area is based primarily on agriculture. The major industries are processing plants for cotton, cottonseed, soybeans, and alfalfa. Other industrial developments include sawmills, manufacturing plants, bottling works, leather goods, and apparel companies. In addition, an increasing number of resident and non-resident sportsmen find recreation within the basin. Fishing and hunting, therefore, contribute significantly to the basin economy (U.S. Army Corps of Engineers 1985:10).

CONCLUSIONS

The project area for the proposed L'Anguille River Channel Cleanout consists of approximately 80 percent alluvial bottomlands and 20 percent uplands (U.S. Army Corps of Engineers 1985:5). Paralleling Crowley's Ridge, which provides a visually impressive backdrop, the L'Anguille River flows an average of five miles from the western slopes of the ridge. Although evidence for early historic period settlement was comparatively sparse, a rich prehistoric archaeological record was found along the channel margin, indicating early inhabitants of the region were attracted to the extensive bottomland/swamp resources that characterize this area.

III. FINAL REPORT OF PALYNOLOGICAL AND PLANT-MACROFOSSIL ANALYSIS, HOOD LAKE, POINSETT COUNTY, ARKANSAS

Hazel R. Delcourt and Paul D. Delcourt[1]

INTRODUCTION

This report summarizes the results of palynological and plant-macrofossil analysis of sediment cores obtained in July, 1987, from Hood Lake, Poinsett County, Arkansas (35°42'N, 90°55'W, Sect. 6, T. 12 N, R 2 E, Weiner, Ark., 1959 U.S.G.S. topographic quadrangle). Hood Lake is a basin of permanently standing water (800 m long x 150 m wide) on the braided-stream terrace level 3 as mapped by Smith and Saucier (1971), an alluvial terrace underlain by sediments of full glacial to late-glacial age (Royall 1988). Hood Lake is fed both by overflow water on the terrace 3 surface and by seepage from springs along the 3 to 4 meter-high scarp of the higher, older braided-stream terrace level 2 (probably late Altonian to Farmdalian age [Smith and Saucier 1971]) situated 2.2 km southeast of Hood Lake.

Plat maps dating from the General Land Office Surveys of the early A.D. 1800's show that the natural vegetation surrounding Hood Lake was a mosaic of bottomland hardwoods forest and prairie openings. The local vegetation at the margin of Hood Lake today includes a swamp fringe of mature tupelogums (*Nyssa aquatica*) and an understory thicket of buttonbush (*Cephalanthus occidentalis*). The water mark on the tupelogum trees indicates the winter-spring flood level is about 60 cm higher than summer level. Although the open water of the lake is extensive, maximum water depth of 93 cm occurs in the relatively deep portion of the lake (which the property owner, Mr. Paul Pickel, confirmed is not known to dry out during drought years), restricted to about a 50 m diameter area in the geographic center, at the widest part of the basin. Wood snags and buttonbush shrubs extend out from the swamp edge to the margin of the deepest basin.

LITHOLOGY AND RADIOCARBON DATING

Two sets of sediment cores were taken by our field crew using a modified Livingstone piston coring device. The sediment cores were described in terms of Munsell color and sediment texture in the field, then transported to the Center for Quaternary Studies of the Southeastern United States, University of Tennessee, Knoxville, stored in a laboratory cold room at 4°C, and sampled for pollen and

[1] We thank Paul Pickel, of Jonesboro, Arkansas, for permission to core sediments from Hood Lake. Dan Royall, Joanne Juncniewicz, Preston Miracle, and David Anderson provided invaluable assistance in the field work and successful core recovery. David Anderson, Dan and Phyllis Morse, Jim and Cynthia Price, and Roger Saucier graciously offered insightful suggestions and advice throughout the project.

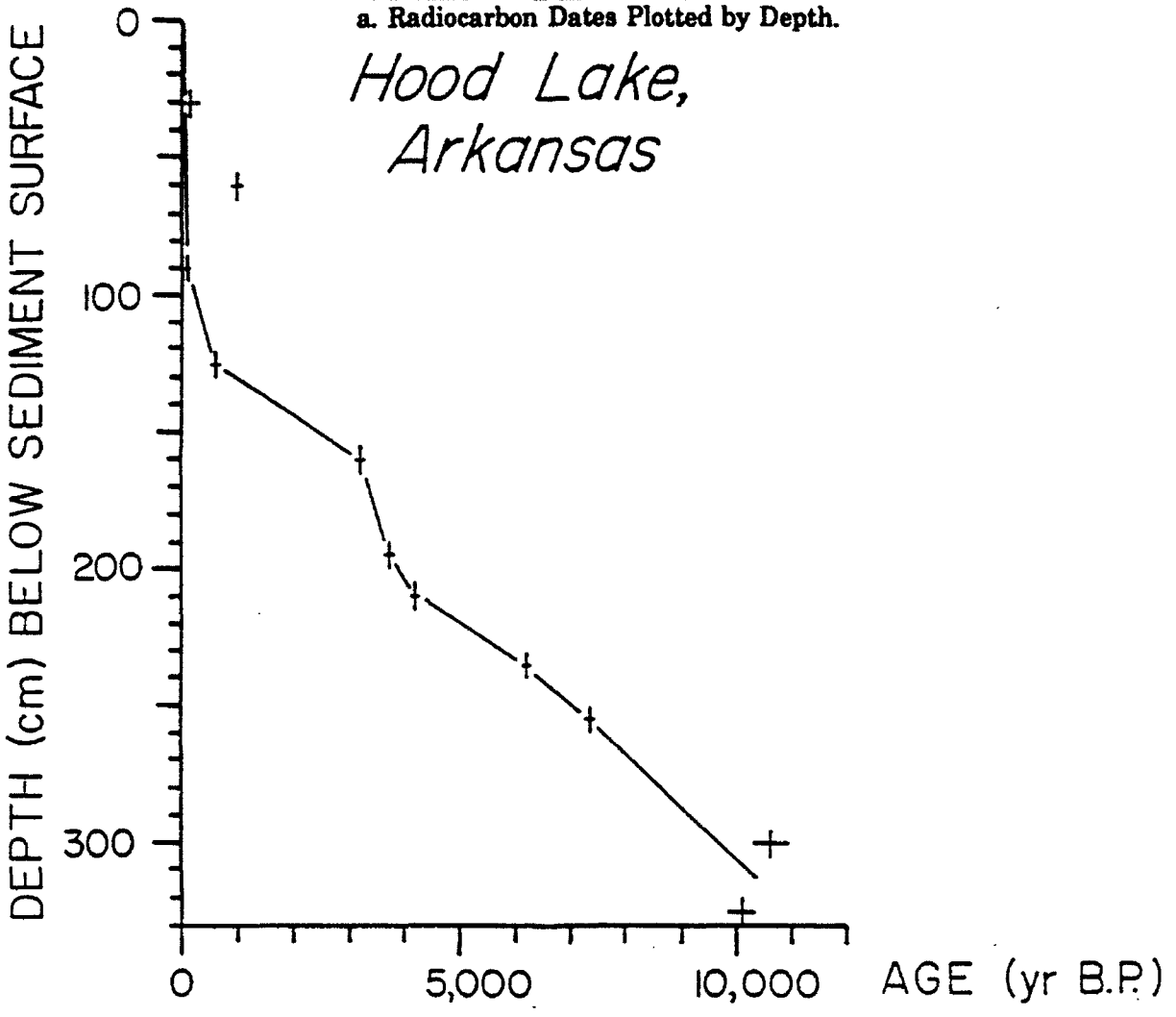
plant-macrofossil analysis and for radiocarbon dating. The generalized lithistratigraphy of the Hood Lake sediment sequence is as follows:

Depth below water-sediment interface (cm)	Sediment Description
0 to 5	Organic-rich, clayey algal gyttja, dark olive gray (Munsell Sediment Color 5Y 3/2)
5 to 91	Clay, olive gray (5Y 4/2)
91 to 148	Organic-rich, slightly silty clay, dark gray (5Y 4/1)
148 to 160	Clay, dark gray (5Y 4/1)
160 to 254	Fibrous peaty clay, very dark gray (5Y 3/1)
254 to 260	Clayey silt, very dark gray (5Y 3/1)
260 to 276	Slightly clayey, fine-grained sandy silt with common organic fragments dispersed throughout, dark gray (5Y 4/1)
276 to 309	Organic-rich, clayey, medium-grained quartz sand, olive gray (5Y 4/2)
309 to 330	Clayey, fine-grained sand, dark gray (5Y 4/1)
330	Base of core sequence.

This sequence reflects a progressive shift in particle size (from top to bottom) from sand, then silt, through fibrous peat, to organic-rich clay and gelatinous algal mud (gyttja). The dark gray and olive colors indicate permanently standing water throughout the entire time interval over which these sediments were deposited; the absence of color mottling (particularly the absence of yellow or orange colors in the sediment) indicates that no substantial oxidation or loss of organic material has occurred that might be associated with times of lowered water levels in Hood Lake.

Based upon preliminary pollen analysis of twelve sediment samples that were evenly spaced throughout the 330-cm sediment sequence, we selected eleven core segments for radiocarbon dating (Figure 5). The results indicate that sedimentation in this site has been continuous since approximately 11,250 radiocarbon years Before Present (yr B.P.). The rate of sediment accumulation

a. Radiocarbon Dates Plotted by Depth.



b. Radiocarbon Dates: Primary Determinations.

OUR LAB NUMBER	YOUR SAMPLE NUMBER	C-14 AGE YEARS B.P. ± 1σ	C13/C12	C13 adjusted age
Beta-22648	HLA 87A 25 to 35 cm	240 +/- 190 BP	-29.7 0/00	160 +/- 190 BP
Beta-22649	HLA 87A 55 to 65 cm	990 +/- 90 BP	-26.9 0/00	960 +/- 90 BP
Beta-22650	HLA 87A 85 to 95 cm	102.9 +/- 1.0 % modern	-28.1 0/00	103.6 +/- 1.0 % modern
Beta-22651	HLA 87A 120 to 130 cm	610 +/- 70 BP	-25.1 0/00	610 +/- 70 BP
Beta-22652	HLA 87A 155 to 165 cm	3260 +/- 90 BP	-28.2 0/00	3200 +/- 90 BP
Beta-22653	HLA 87A 180 to 190 cm	3780 +/- 70 BP	-27.9 0/00	3740 +/- 70 BP
Beta-22654	HLA 87A 205 to 215 cm	4290 +/- 70 BP	-28.8 0/00	4230 +/- 70 BP
Beta-22655	HLA 87A 230 to 240 cm	6250 +/- 80 BP	-27.9 0/00	6200 +/- 80 BP
Beta-22656	HLA 87A 250 to 260 cm	7440 +/- 100 BP	-28.9 0/00	7370 +/- 100 BP
Beta-22657	HLA 87A 295 to 305 cm	10630 +/- 320 BP	-25.9 0/00	10620 +/- 320 BP
Beta-22658	HLA 87A 320 to 330 cm	10090 +/- 230 BP	-26.0 0/00	10080 +/- 230 BP

Source: Hazel R. Delcourt and Paul A. Delcourt, 1988.

Figure 5.
Radiocarbon Dates from the Hood Lake Pollen Core, Poinsett County, Arkansas.

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over this time span has not been constant, however. A dramatic increase in sediment accumulation rate in the upper 90 cm, and a change in sediment type to olive gray clay and highly organic, gelatinous algal mud, corresponds with Historic land clearance and ditching in the Western Lowlands in the early A.D. 1900's.

METHODS AND RESULTS OF POLLEN AND PLANT-MACROFOSSIL ANALYSIS

Laboratory Procedures

Based upon the sedimentation rates calculated from each series of radiocarbon dates, we obtained a series of 1-cubic centimeter samples for pollen analysis through the extent of the sequence. Known concentrations of exotic pollen were added to each sample in order to estimate pollen concentration and pollen accumulation rates. In the preparation of sediment samples for pollen analysis, we followed the standard procedure of our Quaternary Palynology Laboratory (Faegri and Iversen 1975; Cwynar et al. 1979; Delcourt and Delcourt n.d.), including: (1) heating in 10% potassium hydroxide to break down humates; (2) heating in 10% hydrochloric acid to remove carbonates (if present); (3) disaggregation of clays in 5% sodium pyrophosphate; (4) sieving through 250-μm mesh to remove large particles of sand or organic matter; (5) dehydration in glacial acetic acid; (6) heating in concentrated hydrofluoric acid to remove silicate minerals; (7) heating in concentrated hydrochloric acid to remove silicofluoride gel; (8) acetolysis (9:1 acetic anhydride:sulfuric acid) to clear intracellular contents of the pollen grains and spores; (9) neutralizing in water and potassium hydroxide; (10) staining in safranin O; (11) dehydrating in tertiary-butyl alcohol; (12) and storage in silicone oil for slide preparation. Counts were made of pollen grains (both native and exotic) and spores of vascular plants occurring in the palynological samples using systematic transects across microscope slides.

Pollen samples were selected at depth intervals for a resolution of approximately 250 year intervals from 11,250 yr B.P. to 250 yr B.P., then at about 25-year intervals to the present. Completed counts of pollen grains and spores from the pollen samples are tabulated in Appendix III and plotted in the percentage diagram in Figures 6 and 7. The pollen samples are plotted on the pollen diagram on a radiocarbon-age time scale, rather than a sediment-depth scale. Because of the high representation of pollen from herbs, including both members of the aster family (Compositae) and grasses (Gramineae), in much of the sequence, the pollen sum used at each sample level includes either a minimum count of 300 arboreal pollen grains (AP) or a total of 500 AP plus nonarboreal pollen grains and spores (NAP) (Figures 6 and 7)

Plant macro-fossil samples each consisted of a 5-cm long cylinder of sediment core (100 cc of sediment) and were selected at depth intervals representing approximately 500 to 1000-year intervals. Plant macrofossils were sieved using

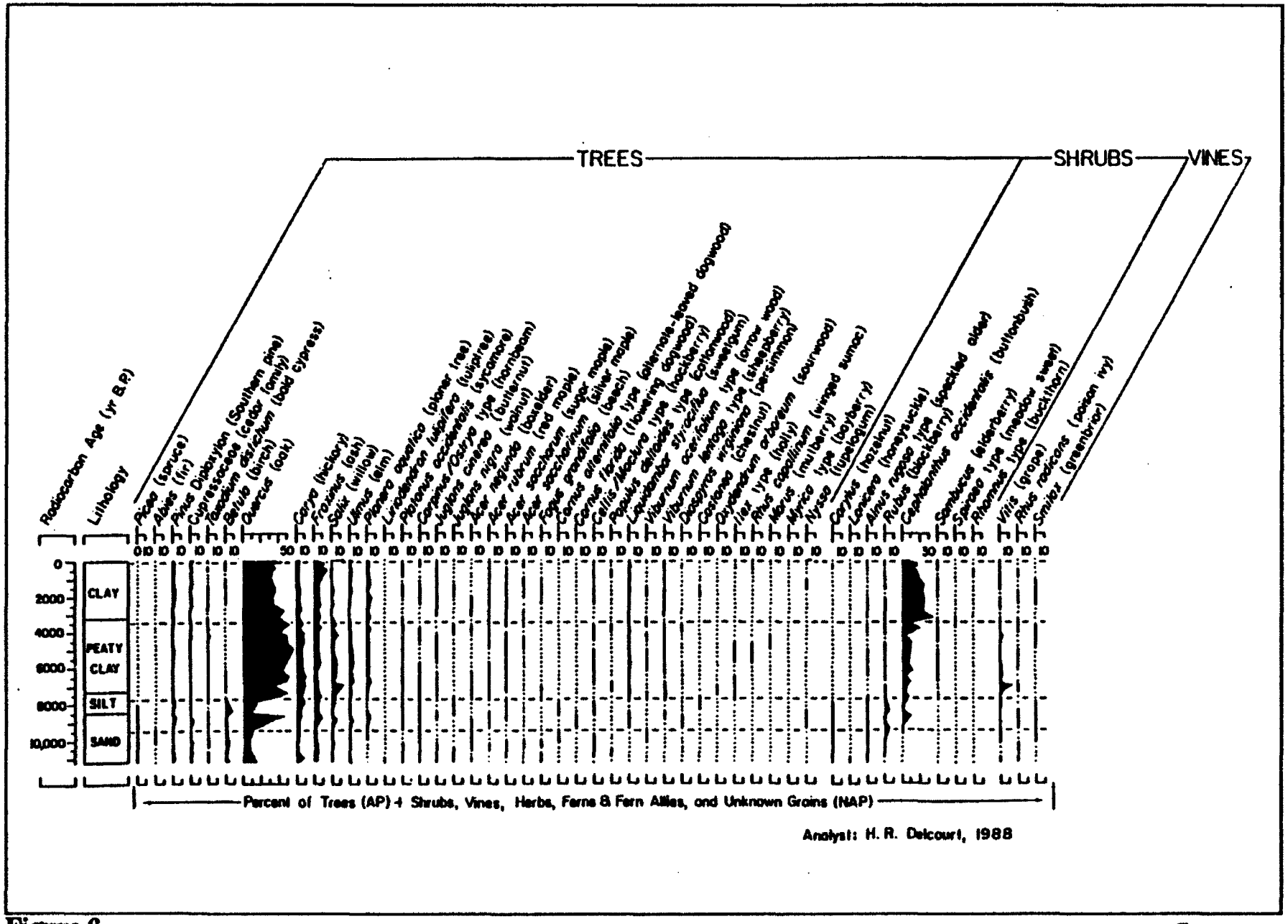
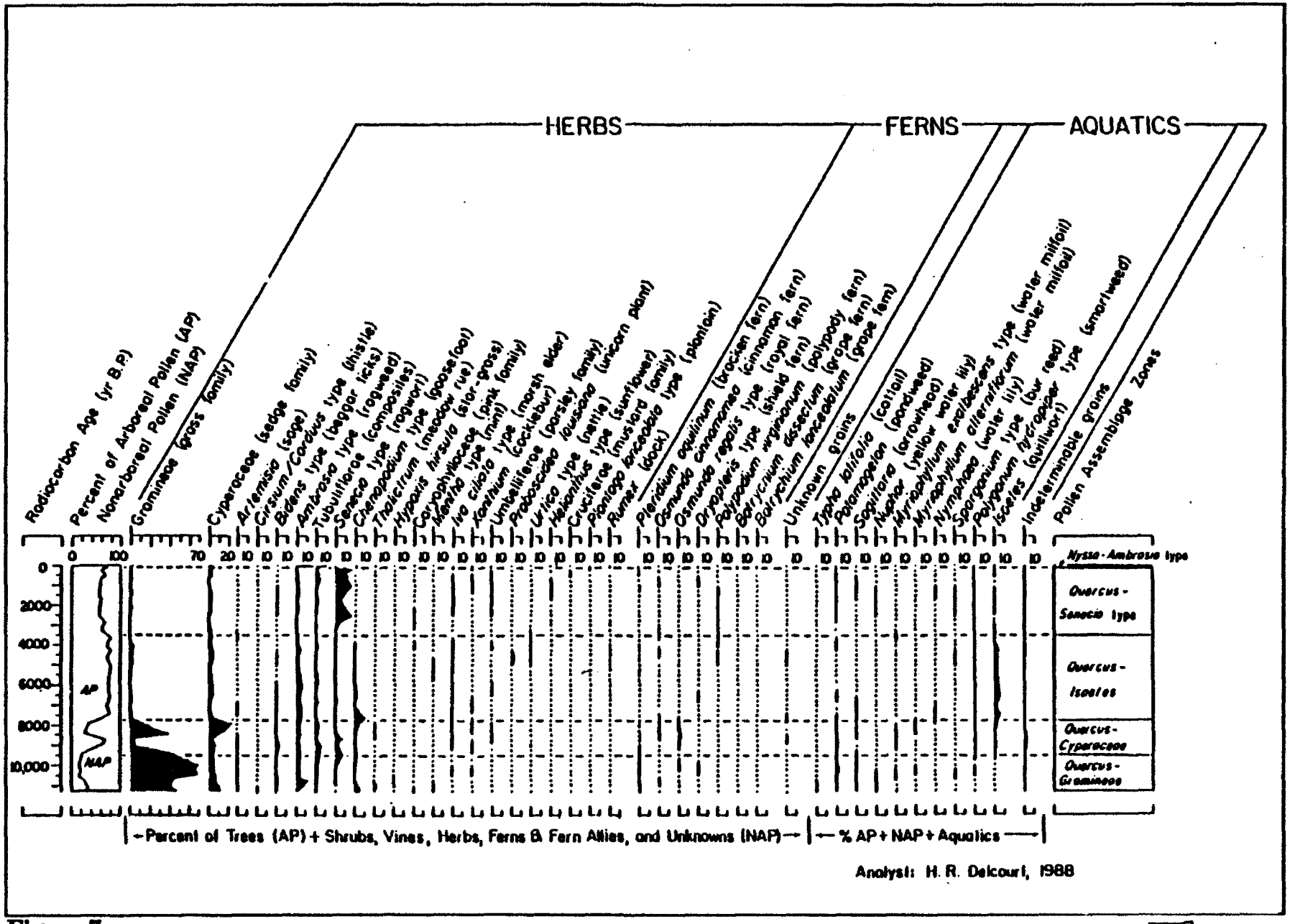


Figure 6.
Terminal Pleistocene/Holocene Paleovegetational Record
Hood Lake, Poinsett County, Arkansas.
Pollen Diagram: Trees, Shrubs, and Vines.

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HERBS
FERNS
AQUATICS
Radiocarbon Age (yr B.P.)
Percent of Arboreal Pollen (AP)
Nonarboreal Pollen (NAP)
Gramineae (grass family)
Cyperaceae (sedge family)
Artemisia (sage)
Cirsium/Cardus type (thistle)
Bidens type (beggar ticks)
Ambrosia type (ragweed)
Tubuliflorae (composites)
Senecio type (ragwort)
Chenopodium type (goosefoot)
Thalictrum type (meadow rue)
Hypoxis hirsuta (star-grass)
Caryophyllaceae (pink family)
Mentha type (mint)
Ilex cilicia type (holly)
Xanthium (cocklebur)
Umbelliferae (parsley family)
Proboscidea louisiana (unicorn plant)
Urtica type (nettle)
Helianthus type (sunflower)
Cruciferae (mustard family)
Plantago lanceolata type (plantain)
Rumex (dock)
Pteridium aquilinum (bracken fern)
Osmunda cinnamomea (cinnamon fern)
Osmunda regalis type (royal fern)
Dryopteris type (shield fern)
Polypodium virginianum (polypody fern)
Botrychium dissectum (grape fern)
Botrychium lanceolatum (grape fern)
Unknown grains
Typha latifolia (cattail)
Potamogeton (pondweed)
Sagittaria (arrowhead)
Nuphar (yellow water lily)
Myriophyllum exalbescens type (water milfoil)
Myriophyllum alterniflorum (water milfoil)
Nymphaea (water lily)
Sparganium type (bur reed)
Polygonum type (smartweed)
Typha/Sparganium (cattail/bur reed)
Isoetes (quillwort)
Indeterminable grains
Pollen Assemblage Zones
Nyssa-Ambrosia type
Quercus-Senecio type
Quercus-Isoetes
Quercus-Cyperaceae
Quercus-Gramineae
0
2000
4000
6000
8000
10,000
AP
NAP
0 100
70 20 10 10 10

212-, 150-, and 90-μm Standard Sieves, picked, and stored in a preservative consisting of 50% glycerine, 35% water, and 15% formaldehyde. Identification was made to the lowest possible taxonomic level using our extensive modern reference collection as well as literature cited in Delcourt et al. (1979). Complete counts of plant macrofossils are given in Appendix III and are plotted in the plant-macrofossil diagram (Figure 8).

BIOSTRATIGRAPHY

The percentage pollen diagram (Figures 6 and 7) for Hood Lake has been subdivided into five informal pollen assemblage zones for convenience in characterizing the long-term changes in both the local and regional vegetation. Each plant-fossil zone represents a unique portion of time and span of the sediment core recovered from Hood Lake. Each pollen assemblage zone contains a diagnostic microfossil suite of plant species reflecting past changes in the structure and composition of nearby vegetation. The name of each fossil zone is designated by the scientific names of the tree genus and the herbaceous plant genus or family that are key dominants for the zone. The plant-macrofossil diagram (Figure 8) also has been subdivided to correspond with the five pollen assemblage zones. Ecologic information concerning the habitat preferences and climatic tolerances of plants are based upon data in Steyermark (1963) and Fowells (1965).

Quercus-Gramineae Pollen Assemblage Zone (age 11,250 to 9500 yr B.P.; core depth 330 to 297 cm)

For this oldest and stratigraphically lowest zone, pollen grains produced by native species of wild grass (plant family Gramineae) were the predominant pollen type, with values ranging between 41 and 70% as calculated on the sum of AP + NAP (Figure 7). In this early-Holocene zone, other nonwoody plants with substantial percentages of microfossils included sedges (family Cyperaceae, from 5 up to 11%), goosefoot (*Chenopodium* pollen type, 1 to 5%), and several members of the family Compositae (ragweed [*Ambrosia* type], 1 to 15%; begger ticks [*Bidens* type], 1 to 2%). Low percentages of pollen grains were recorded for a number of plants that today grow only in permanent lakes or streams or in seasonally-flooded marshes, including pondweeds (with both subgenera *Coleogeton* and *Eupotamogeton* of the genus *Potamogeton*), water milfoil (*Myriophyllum alterniflorum* and *Myriophyllum exalbescens* type), yellow water lily (*Nuphar*), arrowhead (*Sagittaria*), smartweed (*Polygonum hydropiper* type), bur reed (*Sparganium* type), and cattail (*Typha latifolia*).

Pollen grains produced by woody tree species constituted only a minor component of the total pollen assemblage of this zone. The total arboreal pollen (AP) comprised between 15 to 33% of the total count of pollen spores produced by upland plants (Figure 6). With values of 6 to 15% of the upland pollen-spore sum, oak

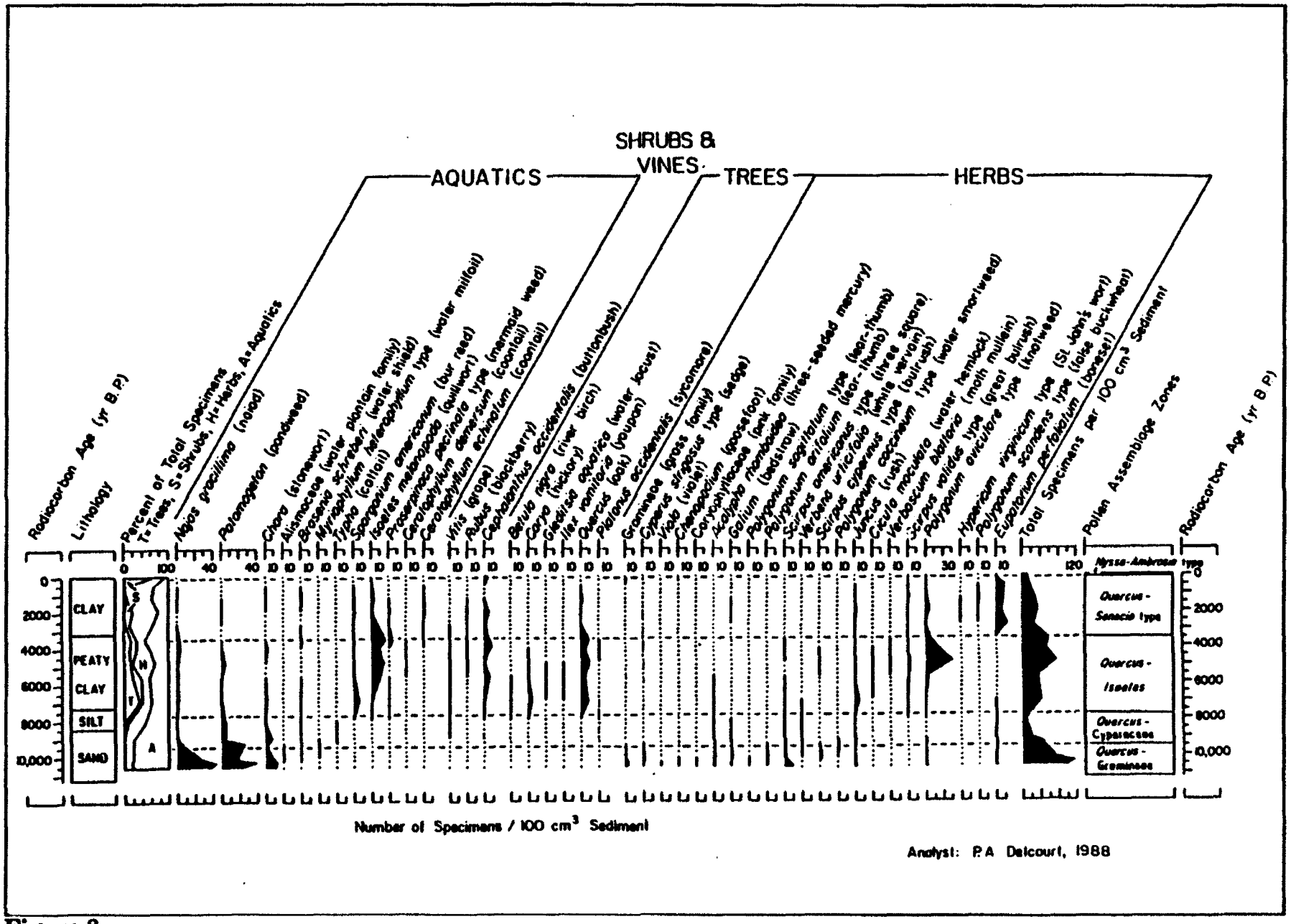


Figure 8.
Terminal Pleistocene/Holocene Paleovegetational Record
Hood Lake, Poinsett County, Arkansas.
Plant-Microfossil Diagram.

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(*Quercus*) was the major arboreal contributor to these early-Holocene pollen spectra. Additional trees represented in this zone included hickory (*Carya*, 1 to 9%), ash (*Fraxinus*, 2 to 5%), elm (*Ulmus*, up to 2%), and birch (*Betula*, 1 to 4%). Temperate climate swamp trees were present within the watershed as documented by low pollen percentages (usually <1%) for bald cypress (*Taxodium disticum*), sycamore (*Platanus occidentalis*), willow (*Salix*), boxelder (*Acer negundo*), red maple (*Acer rubrum*), silver maple (*Acer saccharinum*), and hackberry (*Celtis/Maclura* type). Moisture-loving, or mesic, trees occurring in the Western Lowlands included sugar maple (*Acer saccharum*), beech (*Fagus grandifolia*), hornbeam (*Carpinus/Ostrya*), tuliptree (*Liriodendron tulipifera*), butternut (*Juglans cinerea*), and black walnut (*Juglans nigra*). Trace percentages of pollen grains of boreal species included pollen grains of both spruce (*Picea*) and fir (*Abies*).

Plant macrofossils are relatively large fragments (part of individual plants) that can readily be identified. They may be fruits, seeds, or leaves of plants that grew in the nearby vicinity of Hood Lake. The plant-macrofossil assemblage recovered from sediments of this zone (Figure 8) consisted primarily of plants found today growing exclusively within aquatic environments. The number of macrofossil specimens recovered was relatively high, ranging from 77 to 118 fossils per 100 cc of sediment. Between 76 and 84% of the plant macrofossils represented plant species today found only in habitats with permanently standing or flowing water. For the remainder of the plant-macrofossil assemblage, the plants preserved as fossils are species that occupy modern environments such as lake-shore marshes, alluvial wet meadows that are seasonally flooded, and the margins of streams such as Bayou De View. The macrofossil assemblage was comprised primarily of four groups of strictly aquatic plants: naiads (*Najas gracillima*), pondweed (*Potamogeton*), stonewort (*Chara*), and water shield (*Brasenia schreberi*). Fossil seeds and fruits were identified as marsh herbs such as grasses (family Gramineae), sedges (*Cyperus strigosus* type), goosefoot (*Chenopodium*), several bulrushes (*Scirpus americanus* type and *Scirpus cyperinus* type), tear thumb (*Polgonum sagittatum type*) and rush (*Juncus*). Two fossil seeds of three-seeded mercury (*Acalypha rhomoidea*) were found consistently in each 100 cubic cm sample of sediment in this zone; although widely distributed across eastern North America, within the Lower Mississippi this plant is characteristically found growing in prairies. on moist alluvial soils and gravel bars along streams, and in open wet-to-dry woodlands (Steyermark 1963). No macroscopic remains of tree or shrub species were recovered from this sedimentary interval of the core.

Quercus-Cyperaceae Pollen Assemblage Zone (age 9500 to 7750 yr B.P.; core depth 297 to 263 cm)

Both arboreal pollen (AP) and nonarboreal pollen and spores (NAP) shared dominance in this pollen assemblage zone of early-Holocene age. The AP total for trees increased to the range of from 22 to 70% of the upland pollen-spore sum (Figure 6). The overall values of oak varied from 12 to 46%. Other subdominents

in the suite of trees included hickory (3 to 10%), ash (2 to 9%), birch (generally 2 to 8%), willow (1 to 5%), elm (1 to 4%), and the cedar family (Cupressaceae, 1 to 4%). Since intact pollen grains of bald cypress occur in the zone, the undifferentiated pollen of Cupressaceae may either represent broken *Taxodium* grains or possibly pollen of juniper (*Juniperus*). Significant first occurrences of fossil pollen grains were detected for planer tree (*Planera aquatica*, up to 4%), chestnut (*Castanea*, 1%), flowering dogwood (*Cornus florida*, 1%), sheepberry (*Viburnum styraciflua*, 1%), and tupelo gum (Nyssa, 1%). Scattered grains of spruce persisted until the middle portion of this zone.

The nonarboreal pollen assemblage (Figure 7) consisted of herbs and shrubs, as well as low percentages of vines (lianas), ferns, and fern allies. Among the herbs, sedge pollen rose from 5% to a peak of 25%, and the former zone dominant, grass, dropped from its previous level of 70% down to a much lower range of 4 to 40%. The composites generally increased in both number of taxa and their abundance (for example, ragwort [Senecio], up to 9%; ragweed, 5%; begger ticks, 3%; marsh elder [*Iva ciliata* type], 1%; and cocklebur [*Xanthium*], 1%). The chief shrubs were blackberry (*Rubus*, up to 6%) and buttonbush (*Cephalanthus occidentalis*, from 1 to 11%), with minor pollen values for speckled alder (*Alnus rugosa* type, 1%), hazelnut (*Corylus*), and honeysuckle (*Lonicera*). Continuous pollen curves with consistently low percentages are illustrated (Figure 7) for poison ivy (*Rhus radicans*), greenbriar (*Smilax*), and grape (*Vitis*).

The total number of macrofossils per 100 cc of sediment decreased from 48 to 10 specimens throughout this zone, considerably fewer than the peak of 118 specimens per sample obtained in the lowest *Quercus*-Gramineae zone (Figure 8). The relative proportion of aquatic plants decreased from 79 to 50% of the assemblage, and both the groups of herbs and of vines (lianas) increased (herbs, from 21 to 40%; vines, from 0 to 10%). Grape vines are indicated by the presence of fossil *Vitis* seeds. No macrofossil specimens of shrubs or trees were recovered from this zone.

Aquatic plants were represented by more species but a substantially lower number of plant-macrofossil specimens than in the previous pollen assemblage zone. The numbers of specimens per 100 cc of sediment declined to levels of about 2 seeds of naiads, 7 fruits of pondweeds, and 9 oogonia of stoneworts, respectively. Water shield, water milfoil (*Myriophyllum heterophyllum* type) and cattail (*Typha*) were each present at 1 specimen per sample. This assemblage of herbs consisted of plants that today typically grow around lake margins and in open alluvial marshes, including three-seeded mercury, boneset (*Eupatorium perfoliatum*), bedstraw (*Galium*), various smartweeds (tear thumb, *Polygonum arifolium*; knotweed, *P. aviculare* type; and water smartweed, *P. coccineum*), and three square bulrush (*Scirpus americanus* type). White vervain (*Verbena urticifolia*) was found only in this zone. It is diagnostic of frequently disturbed habitats such as alluvial thickets along streams (Steyermark 1963).

Quercus-Isoetes Pollen Assemblage Zone
(age 7750 to 3500 yr B.P.; core depth 297 to 177 cm)

The total tree pollen comprised approximately 70 to 81% of the upland pollen-spore sum in this zone (Figure 6). Oak achieved its highest values for the past 11,250 years in this zone, ranging from about 42 to 57% of the upland assemblage. Relative peak values in this zone were also reached by hickory (typically 8 to 11%), willow (about 5 to 14%), and elm (generally 3 to 5%). Sustained pollen values persisted for several trees, including ash (4 to 9%), planer tree (2 to 5%), and sweetgum (1 to 2%). Pollen curves of trace amounts were continuous or nearly so for bald cypress, sycamore, hornbeam, butternut, red and sugar maple, hackberry, sheepberry, and holly (*Ilex* type). Sporadic occurrences of pollen were noted for trees characteristic of bottomland swamp forests: arrow wood (*Viburnum acerifolium* type), boxelder, cottonwood (*Populus deltoides* type), persimmon, mulberry (*Morus*), silver maple, and winged sumac (*Rhus copallinum*).

The nonwoody complement of plants contained moderate abundances of shrubs, vines, herbs, and ferns (Figure 7). The life-form group of shrubs included substantial percentages for pollen of buttonbush (4 to 21%), but low values for blackberry, elderberry (*Sambucus*), meadow sweet (*Spiraea* type), and speckled alder. The vines of poison ivy and greenbriar were present, and grape reached its maximum value of 15% in this zone.

Pollen grains of herbaceous plants were consistently present, although in minor amounts, throughout this middle-Holocene interval. Those with continuous pollen curves included goosefoot (1 to 12%), grass (1 to 5%), marsh elder, ragweed (1 to 7%), ragwort (about 1%), and sedge (1 to 5%). Only unicorn plant (*Proboscidea louisiana*, 4%) and nettle (*Urtica*, 1%) were restricted exclusively in their microfossil occurrence to this zone at Hood Lake. Unicorn plant grows today across the eastern United States on naturally disturbed sand-and-gravel bars of streams and on cultivated land and pastures. Nettle is also widely distributed "in low alluvial bottoms of river valley and flood plain, bordering streams, and in cultivated and waste ground" (Steyermark 1963).

The microfossil evidence for obligate aquatic plants in this zone reflects the peak percentages for microspores of quillwort (*Isoetes*, generally 4 to 8%), a continuous pollen curve for smartweed (*Polygonum hydropiper* type, 1%), and trace abundances for fossil pollen of arrowhead, bur reed (*Sparganium* type), pondweed, and water milfoil.

The plant-macrofossil assemblage increased to overall levels of 35 to 61 specimens per sample (Figure 8). The composition of fossil fruits and seeds was a diverse combination of tree species (13 to 35%), shrubs and vines (3 to 17%), herbs (16 to 52%), and aquatic plants (31 to 54%). Macrofossils of trees occurred first within this zone. Oak acorns were found in every sample (5 to 10 fragments of acorn nuts and caps). Additional fossils were recovered for hickory, as well as for the swamp-bottomland trees of river birch (*Betula nigra*), sycamore, water locust (*Gleditsia aquatica*), and yaupon (*Ilex vomitoria*). Shrubs included buttonbush

(1 to 8 seeds) and blackberry (1 seed per sample), and vines were represented by grape (1 seed at each of three depth levels). Macrofossils of herbs common in alluvial marshes included knotweed (*Polygonum aviculare* type, up to 32 specimens per sample), several bulrushes (*Scirpus americanus* type, *S. cyperinus* type, and *S. validus* type), moth mullein (*Verbascum blattaria*), rush (*Juncus*), three-seeded mercury, and water hemlock (*Cicuta maculata*).

Megaspores of quillwort (*Isoetes melanopoda*, typically 10 to 18 specimens per sample) were most numerous among the macrofossils of aquatic plants (taxonomic identification of this species is based upon morphologic criteria cited in Broom 1979). Plant populations of *Isoetes melanopoda* live today in wet swales and on wet open ground; it is distributed within the lower Mississippi Alluvial Valley of Missouri, Arkansas (Steyermark 1963) and Louisiana, and it has been collected from temporary shallow ponds north to Minnesota, east to New Jersey, and west to South Dakota, Oklahoma, and Texas (Gleason and Cronquist 1963).

Other aquatic macrophytes were represented by specimens of bur reed (*Sparganium americanum*), two species of coontail (*Ceratophyllum demersum* and *Ceratophyllum echinatum*), mermaid weed (*Proserpinaca pectinata* type), naiad, pondweed, stonewort, and water shield.

Quercus-Senecio type Pollen Assemblage Zone (age 3500 to 100 yr B.P.; core depth 177 to 90 cm)

Total tree pollen constituted 55 to 69% of this pollen assemblage, with subdominance of shrubs (typically 20 to 36% of the upland pollen-spore sum) and lower values for herbs. Oak remained the chief dominant, with percentages of 32 to 47%. Continuous pollen curves are illustrated on Figure 6 for ash (5 to 15%), hickory (3 to 6%), planer tree (1 to 6%), sweetgum (1 to 4%), elm (1 to 4%), the cedar family (1 to 4%), willow (1 to 2%), sneepberry (1 to 2%), sugar maple (1 to 2%), red maple (1%), and butternut (1%).

For the shrubs, buttonbush pollen achieved values of 12 to 35%, greater than in any other zone. Minor contributions to the pollen rain were produced by other shrubs such as blackberry, buckthorn (*Rhamnus* type), elderberry, hazelnut, and speckled alder. Grape, greenbriar, and poison ivy were represented as discontinuous occurrences by their fossil pollen grains.

In the life-form grouping of herbs, members of the Compositae plant family were conspicuous elements of this pollen assemblage zone (Figure 7). Ragwort (*Senecio* type) expanded markedly from 1% up to 18% at the top of the *Quercus-Senecio* type assemblage zone. Both the undifferentiated subfamily of Tubuliflorae and ragweed oscillated in abundance, between 0 and 5% and between 1 and 3%, respectively. Trace values are reported for the other composites: sunflower (*Helianthus* type), beggar ticks, cocklebur, and marsh elder. The sunflower pollen grains occurred at 130 and 135 cm depth in the core, with interpolated ages of 980 and 1350 yr B.P. Grass and sedge maintained low levels of

about 2%. The aquatic flora exhibited 1% values for arrowhead, bur reed, pondweed, quillwort, smartweed, yellow water lily, and water lily.

Total plant macrofossils decreased to approximately 30 specimens per sample in this zone (Figure 8). The relative proportion of trees was reduced to generally 4 to 7% of the total specimens recovered per level. Macrofossil remains of trees were absent in two of the four samples analyzed. Totals for shrubs dropped from 8% at the base of this zone to none in younger-age sediments. Macrofossils of aquatic plants were in the range of 22 to 37% of the total assemblage. The relative contribution of herbs (54 to 67%) increased prominently at the expense of the trees, shrubs, and aquatic plants.

The herb group was composed of primarily seeds of boneset (8 to 14 specimens of *Eupatorium perfoliatum*) and knotweed (up to 6 seeds of *Polygonum aviculare* type), and secondary numbers of bedstraw, false buckwheat (*Polygonum scandens* type), great bulrush (*Scirpus validus* type), rush, and St. John's wort (*Hypericum virginicum*). The aquatic macrophytes included quillwort (up to 9 megaspores), bur reed, coontail (*Ceratophyllum echinatum*), ditch witch (*Ruppia maritima*, 4 fruits), mermaid weed, naiad, pondweed, stonewort, and water shield.

Macrofossils of trees and shrubs consisted of oak (up to 2 acorn fragments), buttonbush (up to 6 seeds), and blackberry (1 seed).

Nyssa-Ambrosia type Pollen Assemblage Zone (age 100 yr B.P. to present; core depth 90 to 0 cm)

In the uppermost four pollen samples (depths of 5, 30, 60, and 90 cm) that comprise this zone, the total AP increased to the level of 59 to 79% of the upland pollen-spore sum (Figure 6). Tupelogum (*Nyssa*) pollen increased from 0 to 6%, as the tupelogum stand surrounding Hood Lake grew in only the last 100 years. Oak pollen fluctuated between 24 and 44%, and hickory varied from 1 to 5%. Willow rose from 1% in early-historic time to its present 14%. Ash dropped from an initial value of 8% to currently 5%. Historic percentages have remained stable for the bottomland forest species of bald cypress (1%), birch (1%), elm (3%), hackberry (1%), planer tree (about 2%), sheepberry (1%), sycamore (1%), and sweetgum (1%). The low values of about 2% for southern pine (Diploxylon *Pinus*) reflect wind dispersal of pollen from uplands beyond the Lower Mississippi Alluvial Valley; a minimum of 12.5% pine pollen is necessary to identify local pine populations in the vicinity of the lake site (Delcourt et al. 1983). Southern pines do not live today (and have not lived at any time during the past 11,250 years) in the immediate vicinity of Hood Lake.

In the last 100 years of EuroAmerican settlement, the percentages for buttonbush pollen have declined from initial values of 18% down to 5%. Corresponding levels for other shrubs, blackberry, elderberry, and speckled alder, have fallen from 1% to their absence in modern lake sediments. A diagnostic suite of disturbance-favored, weedy herbs has responded to historic changes in the landscape. Pollen

percentages have risen for ragweed (from an initial 1% up to 16%), undifferentiated grains of Tubuliflorae (from 1% up to 10%), goosefoot (from 0 up to 2%), and grass (from 1% up to 4%). Exotic plants introduced by EuroAmerican pioneers show an historic invasion and successful colonization by plants of plantain (*Plantago lanceolata*) and dock (*Rumex*).

The microfossil record of aquatic plants (Figure 8) reflects the substantial reduction and even local extinction of formerly common species. Only isolated grains are recorded in surficial modern sediments of Hood Lake for arrowhead, quillwort, quillwort, smartweed, and yellow water lily. Historic extirpations are documented for bur reed, pondweed, and water lily.

The one sample for the modern suite of macroscopic fruits and seed contains 9 specimens per 100 cc of sediment: 1 megaspore of quillwort, 6 seeds of buttonbush, 1 seed of knotweed and 1 grass seed. No large plant remains were recovered from the lake sediment.

PALEOECOLOGICAL INTERPRETATIONS

The percentage pollen diagram (Figures 6 and 7) and the plant-macrofossil diagram (Figure 8) illustrate that the plant-fossil record from Hood Lake is rich in plant taxa, and that significant changes in the composition and proportions of trees, upland herbs, and aquatic plants have occurred over the past 11,250 years of the Holocene. The early Holocene time interval includes the lowermost two pollen zones from Hood Lake: the *Quercus*-Gramineae pollen assemblage zone and the *Quercus*-Cyperaceae pollen assemblage zone. The middle Holocene time interval is represented at Hood Lake by the *Quercus-Isoetes* pollen assemblage zone. The late Holocene time interval includes the prehistoric *Quercus-Senecio* type pollen assemblage zone and the historic *Nyssa-Ambrosia* type pollen assemblage zone.

By 11,250 yr B.P., the beginning of the Hood Lake pollen record, the forests in the Central Mississippi Alluvial Valley were predominantly warm-temperate and deciduous. However, boreal conifers persisted in the Western Lowlands until at least 9500 yr B.P., as evidenced by the traces of spruce and fir pollen in basal sediments of Hood Lake. Diminishment of cool-temperate and boreal elements by 9500 yr B.P. at Hood Lake is consistent with other paleoecological sites at comparable latitudes east of the Mississippi River (e.g., Anderson Pond in Middle Tennessee; Delcourt 1979). The abundance of plant macrofossils of submersed aquatic plants, such as naiads and pondweeds, indicates that between 11,250 and 9500 yr B.P., the central basin of Hood Lake represented a permanent lake of at least 3 meters water depth, subject to seasonal waterflow through the watershed. We interpret the high representation of grass pollen in early Holocene sediments of Hood Lake as local marsh grasses growing at the margins of Hood Lake. Beyond the marsh, bottomland swamp forests with bald cypress, planer tree, and other temperate hardwoods were established. Upland xeric forests were primarily oak and hickory, and, in addition, on mesic slopes, the forests included

sugar maple, beech, hornbeam, and walnut.

By 9500 yr B.P., changes in the assemblages of obligate aquatic plants and marsh herbs reflect an environmental change toward an overall decrease in water depth and an increase in seasonal stream flow through Hood Lake. This environmental change triggered a decrease in the lake-pool size and a corresponding expansion of alluvial marsh habitats, dominated by sedges, along the lake margin. This environmental change may have resulted from the early Holocene climatic change toward increased seasonality of precipitation and temperature extremes that culminated between 10,000 and 9000 yr B.P. (Kutzbach 1987). Alternatively, this local environmental change may have resulted from a hydrologic change. Because of headward growth of the stream drainage system, streams in the Western Lowlands may have increased their effective competence for transporting sediment and generated both downstream incision of their floodplains and a local drop in groundwater table (Dr. R. Saucier: personal communication).

During the early Holocene interval, the substrates of both pool and marsh habitats were represented in the sedimentary record by mineral-rich sands and silts. At approximately 254 cm depth (about 7300 yr B.P.), the lithologic changeover from silt to fibrous, peaty clays represented a change in depositional environment that followed a regional climatic and vegetational shift dated at Hood Lake at 7750 yr B.P. The continued drop in the level of the local water table through the early and middle Holocene reached an extreme low between 7750 and 3500 yr B.P. Within the Western Lowlands, the hydrologic regime of streams changed from one of permanently flowing water to one of ephemeral, intermittent flow with pools of water becoming isolated and persisting throughout the year only in remnant basins such as at Hood Lake.

Our data from Hood Lake indicate that maximum expansion of oak-hickory forest occurred between 7750 yr B.P. and 3500 yr B.P., and that during that time interval the representation of bottomland trees such as river birch, sycamore, planer tree, elm, willow, and ash increased. Although Compositae were represented consistently throughout the interval, grasses were not important, and we interpret the local vegetation surrounding Hood Lake as closed swamp forest, establishing into areas previously occupied by marsh. Peaks in goosefoot pollen, buttonbush seeds, and quillwort megaspores and microspores indicate that hood Lake was shallow, with seasonally fluctuating water levels that would have exposed the lake margins for colonization by these plants.

In the Upper Midwest region of Minnesota and Wisconsin, the classic time interval for the eastward expansion of the prairie/forest border, and consequently, for interpretation of a warm/dry middle Holocene "Hypsithermal Interval", is from about 8500 to 4500 yr B.P. (Wright 1968). On the Ozark Plateau of southeastern Missouri, closed forest was replaced by open oak savanna between 9000 and 4000 yr B.P. (Delcourt et al. 1986). Along the Ozark Border in the northeast sector of the Western Lowlands in southeastern Missouri, the pollen sequence from Powers Fort Swale (Royall 1988) documented increased percentages of oak, grass, goosefoot, and ragweed between 9500 and 4500 yr B.P.

In the Advance Lowlands east of Crowley's ridge, the Old Field site (King and Allen 1977) records development of an extensive marsh vegetation dominated by grass during the middle Holocene interval. At Big Lake and Pemiscot Bayou in the St. Francis Basin in northeastern Arkansas, increased pollen percentages of sweetgum and oak and microspores of quillwort indicate vegetation response to a lowering of water table and expansion of bottomland forests between 6500 and 3500 yr B.P. (Scott and Aasen 1987). In the Western Lowlands of eastern Arkansas, at Hood Lake middle Holocene warming and drying was reflected in the change from lake and marsh to extensive bottomland forest. The diversity of vegetational responses to middle Holocene climatic change and regionally lowered water tables reflects the differences of paleoecological sites with respect to topographic setting along the regional environmental gradient from Ozark uplands to Mississippi Alluvial Valley.

About 3500 yr B.P., a regional change in climate resulted in an increase in effective precipitation which lasted throughout the late Holocene. The transition from middle to late Holocene represented a shift from zonal to meridional climatic regime (Delcourt and Delcourt 1984). As a result of this climatic change, water tables rose in the Mississippi Alluvial Valley as well as the nearby Ozark Plateaus and Interior Low Plateaus (Delcourt et al. 1986). Within the western Lowlands, the sedimentary record from Hood Lake records a 300-year time lag for the subsequent change in depositional environment (the transition from fibrous, peaty clay to massive clay at 160 cm depth, dated about 3200 yr B.P.).

In the prehistoric, late Holocene *Quercus-Senecio* type pollen assemblage zone, from 3500 to 100 yr B.P., expansion of populations of herbs indicative of alluvial marshes and swamps, as well as of buttonbush, occurred in response to reestablishment of flowing water in fluvial habitats subject to seasonal flooding. The diagnostic types of composites, represented by *Senecio* type pollen grains and by *Eupatorium perfoliatum* seeds, occur today characteristically within moist swamp woods, and at the margins of sloughs and ponds (Steyermark 1963). Pollen of sunflower occurred between 1350 and 980 yr B.P., possibly reflecting local aboriginal cultivation in Woodland and Mississippian cultural periods.

The *Nyssa-Ambrosia* type pollen assemblage zone, representing the last 100 years, is preserved within clay and algal mud that have accumulated at extremely high rates (Figure 5). These rates of accumulation are a result of accelerated soil erosion from the uplands into Hood Lake following ditching, clearance of bottomland forests, and conversion of the landscape to agriculture in the last century. Historic landscape modification is reflected by increases in pollen of weedy plants such as ragweed, dock, and plantain. The algae-rich muds are the result of increased nutrient transport to the lake and its increased productivity. Tupelogum, now forming a conspicuous vegetation zone of swamp forest locally around the margin of Hood Lake, has invaded only in Historic times, as the hydroperiod of flooding was changed with construction of drainage ditches and as Hood Lake filled in with sediment eroded from surrounding agricultural land.

IV. PREVIOUS ARCHAEOLOGICAL RESEARCH IN THE PROJECT AREA

INTRODUCTION

There has been a long history of archaeological field work in the Eastern and Western Lowlands of northeast Arkansas, both by professional and amateur archaeologists (Morse and Morse 1983:17-49; Klinger et al. 1983:36-50). A recent listing of major projects in the vicinity of northeast Arkansas, prepared by Lafferty and Watkins (1987:42-45), is reproduced in Table 2. As can be seen by the number of listings, particularly from recent years, a great deal of prior work has been accomplished in the general area of northeast Arkansas. This has led to the development of detailed cultural sequences, particularly for the later portions of the prehistoric era (i.e., during the Woodland and Mississippian periods), and ever-increasing knowledge of the record of prehistoric and historic occupation (Figure 9).

Excellent histories of archaeological investigations in northeast Arkansas are already in existence, as cited above and summarized in Table 2, and their repetition here is thus not necessary or warranted. The present chapter details previous cultural resource investigations undertaken within the L'Anguille River basin proper. During the planning stages for the L'Anguille River Channel Cleanout project a review of previous cultural resource investigations in the immediate L'Anguille Basin area was prepared by Stewart-Abernathy (1982). This was accomplished as part of a background and literature review document produced for the Memphis District, U.S. Army Corps of Engineers. The discussion that follows is drawn, in part, from this earlier summary. In addition, as part of the preparatory work associated with the 1987 survey, a records check was conducted with the Arkansas Archeological Survey Registrar's office. Original site forms and locational data were obtained for all previously recorded sites located within 1000 m of the main channel of the L'Anguille in the project area. These primary records yielded additional insight into the nature of prior archaeological research in the L'Anguille River basin, which is recounted below.

PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS IN THE L'ANGUILLE RIVER BASIN: 1882 TO 1960

In the 1880s archaeologists from the Mound Division of the Bureau of Ethnology examined a number of sites in northeast Arkansas (Thomas 1891, 1894). Many of the site descriptions that were produced during this work are invaluable in light of the subsequent destruction that has occurred. During the explorations of the

Table 2. Previous Archaeological Investigations in Northeast Arkansas and Southeast Missouri (adapted from Lafferty and Watkins 1987:42-45).

Author/Investigator	Location and Contribution
Potter 1880	Archaeological Investigations in Southeast Missouri
Evers 1880	Study of pottery of southeast Missouri
Thomas 1894	Synthetic report on the mound explorations of the Bureau of Ethnology's Mound Division in southeast Missouri and northeast Arkansas
Fowke 1910	Mound excavation in the Morehouse Lowlands.
Moore 1910, 1911	Excavation of large sites along the Mississippi, St. Francis, White, and Black Rivers.
Adams and Walker 1942	Survey of New Madrid County
Walker and Adams 1946	Excavation of houses and palisades at the Mathews site
Phillips, Ford, & Griffin 1951, 1970	Mapped and sampled selected sites in southeast Missouri and Phillips northeast Arkansas as part of Lower Mississippi Valley Survey; proposed ceramic chronology.
S. Williams 1954	Survey and excavation at several major sites in southeast Missouri, original definition of several Woodland and Mississippian phases
Chapman and Anderson 1955	Excavation at the Campbell site, a large Late Mississippian village in southeast Missouri
Moselage 1962	Excavation at the Lawhorn site, a large Middle Mississippian village in southeast Missouri
J. Williams 1964	Synthesis of fortified Indian villages in southeast Missouri
Marshall 1965	Survey along I-55 route, located and tested many sites
Morse 1968	Initial testing of Zebree and Buckeye Landing sites
J. Williams 1968	Salvage of sites in connection with land leveling, Little River Lowlands
Perino 1965	Cherry Valley Mounds excavations
Redfield 1971	Summary of Ford-Redfield Dalton survey in Arkansas and Missouri
Goodyear 1974	Brand site Dalton excavations, Poinsett County, Arkansas
Schiffer and House 1975	Cache River Archaeological Project survey and report
Morse 1975a	Preliminary report on the Sloan site excavations, Poinsett County, Arkansas (Dalton cemetery)
Price et al. 1975	Little Black River survey
Price and Krakker 1975	Dalton occupations along the Ozark border, southeast Missouri
Morse and Morse 1976	Preliminary report on 1975 Zebree excavations

Table 2. Previous Archaeological Investigations in Northeast Arkansas and Southeast Missouri (adapted from Lafferty and Watkins 1987:42-45). (continued)

Author/Investigator	Location and Contribution
Chapman et al. 1977	Investigations at Lilbourn, Sikeston Ridge
Harris 1977	Survey Along Dich 19, Dunklin County, Missouri
Klinger and Mathis 1978	St. Francis II cultural resource survey, Craighead and Poinsett Counties, Arkansas
LeeDecker 1978	Cultural resources survey, Wappallo to Crowleys Ridge
Padgett 1978	Initial cultural resources survey of the AP&L transmission line from Keo to Dell, Arkansas
Iroquois Research Inst. 1978	Cultural resources survey and testing, Castor River enlargement project
Dekin et al. 1978	Cultural resources overview and predictive model, St. Francis basin
LeeDecker 1979	Cultural resource survey, Ditch 29, Dunklin County, Missouri
P. Morse 1979	Cultural resources overview, Big Lake National Wildlife Refuge
J. Price 1979	Survey of Missouri and Arkansas Power Corporation power line, Dunklin County, Missouri
Price and Griffin 1979	Report on excavations at the Snodgrass site of the Powers Phase
LeeDecker 1980a	Cultural resources survey, Ditch 81 control structure repairs
LeeDecker 1980b	Cultural resources survey, upper Buffalo Creek Ditch, Dunklin County, Missouri, and Mississippi County, Arkansas
Morse and Morse 1980	Final report on the Zebree project
J. Price 1980a	Archaeological investigations at 23DU244, a limited activity Barnes site, Dunklin County, Missouri
J. Price 1980b	Cultural resource survey, Dunklin County, Missouri
Price and Price 1980	Predictive model of archaeological site frequency, transmission line, Dunklin County, Missouri
Lafferty 1981	Cultural resources survey of route changes in the Keo-Dell transmission lines
Bennett 1982	Larkin Creek Watershed, Lee and St, Francis Counties, Arkansas survey
Stewart-Abernathy 1982	Background and Literature Study for the L'Anguille Channel project
C. Price 1982	Cultural resource survey, runway extension, Kennett Airport, Dunklin County, Missouri
Klinger 1982	Mitigation of Mangrum site
Santeford 1982	Testing of 3CG713
Bennett and Higginbottom 1983	Mitigation at 23DU227, Late Archaic through Mississippian site

Table 2. Previous Archaeological Investigations in Northeast Arkansas and Southeast Missouri (adapted from Lafferty and Watkins 1987:42-45). (continued)

Author/Investigator	Location and Contribution
Klinger et al. 1983	Mitigation at 3CT98, Crittenden County, Arkansas (Brougham Lake)
Keller 1983	Cultural resources survey and literature review of Belle Fountain Ditch and tributaries
J. Price 1983	Phase II testing of Roo sites, Kennett Airport, Dunklin County, Missouri
J. & C. Price 1984	Testing Shell Lake site, Lake Wappallo
Chapman 1975, 1980	Synthesis of Archaeology of Missouri
Morse and Morse 1983	Synthesis of archaeology of Central Mississippi Valley
Lafferty et al. 1984, 1985a	Cultural resources survey and predictive model, Tyronza Watershed, Mississippi County, Arkansas
Dicks and Weed 1986	Archaeological investigations at 3CT50, Little Cypress Bayou site, Crittenden County, Arkansas
Anderson 1988	L'Anguille River Channel margin survey, channel miles 0 to 90.

Mound Division, Dr. Edward Palmer briefly visited the towns of Marianna and Harrisburg in the L'Anguille River basin. He was impressed with neither the inhabitants nor the archaeology, describing both in somewhat insulting terms, and departed before examing local sites (Marvin Jeter: personal communication 1987).

Someone from the Bureau of Ethnology apparently spent some time in the lower L'Anguille River basin in Lee County during the period of explorations of the mound division, for Thomas (1984:231) indicated that:

> A careful examination was made of the bluffs and valleys both of the L'Anguille and St. Francis rivers above their confluence for a distance of fully 20 miles, from which it was found that scarcely a terrace or hillock was without evidences of ancient occupancy, such as brick red fire-beds, charcoal, ashes, etc., indicating camps or dwellings.

If this description indeed refers to the lower L'Anguille, it is evident from the results of the 1987 survey that the intervening century of agriculture has removed many of the more dramatic "evidences of ancient occupancy" such as charcoal, ashes, and so on.

Table 2. Outline of northeast Arkansas archeological sequence

Period	Time	Named Phases To Date
	A.D. 1860	
Pioneer		Davidsonville
	A.D. 1800	
Fur Trade-Exploration		Quapaw
	A.D. 1682	
Protohistoric		Armorel
	A.D. 1500	
Late Mississippian		Nodena, Parkin, Greenbrier, Walls, Kent
	A.D. 1350	
Middle Mississippian		Cherry Valley, Lawhorn, Wilson, Powers, Pemiscot
	A.D. 1100	
Early Mississippian, Coles Creek		Big Lake, Adams, Hayti, Hyneman
	A.D. 700	
Baytown		Baytown, Dunklin, Hoecake (?)
	A.D. 400	
Markeville		Helena
	0	
Tchula		Burkett (?)
	500 B.C.	
Poverty Point		O'Bryan Ridge (?)
	1500 B.C.	
"Archaic"		Frierson
	3500 B.C.	
"Archaic"		"Cache"
	7000 B.C.	
Dalton		L'Anguille
	8000 B.C.	
"Fluted Point"		Patteson
	9500 B.C.	

Temporal Scale	Cultural Stages	Other Cultural Terms	Some Associated Artifacts and Other General Traits
A.D. 1541	Historic (post DeSoto)	American European Historic Indian	Imported and regionally produced items. Spanish, French and English products. Glass beads & brass & other metal trade goods.
A.D. 1000	Mississippi	Phases: Nodena, Parkin, Cherry Valley, Lawhorn, Big Lake	Large complex towns with palisade walls and temple mounds; satellite villages and farmsteads, intensive agriculture, shell-tempered pottery; small arrow points.
A.D. 0 B.C. 500 B.C.	Woodland	Baytown, Barnes Hopewell, Tchula	Generally small autonomous villages, first use of agriculture; first making of pottery (sand and/or clay-tempered); medium size projectile points.
8000 B.C.	Archaic	Late Archaic Early Archaic (Dalton)	Base camps and seasonal hunting, fishing, and gathering stations; large stemmed points used as hafted knives; variety of stone tools used for bone and woodworking.
10000 B.C. +?	Paleo-Indian		Occasional finds of fluted points along old river channels.

Source: House 1975:31; Morse 1981:11.

Figure 9.
A Cultural Sequence for Northeast Arkansas: Major Periods, Phases, and Cultural Developments.

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The only site located and described in detail in the L'Anguille Basin as a result of the exploits of the Mound Division was Greer's Mound (3LE24), for which the following description was recorded:

> This is a very rectangular, oblong truncated or flat-topped mound, situated upon the point of a second or upper terrace of the L'Anguille river 2 miles above its confluence with the St. Francis. It is rectangular, measuring on the top 87 feet in length and 51 feet in wideth and is 30 feet high; the slope of the sides is very steep, being about 45°.
>
> A shaft sunk in it near one end some years ago revealed, as it is stated by the parties who made the exploration [i.e., presumably Thomas's informants, of whom records may be maintained in the Smithsonian collections], the stump of a small tree and a stake 4 or 5 feet long near the botom, the former growing in the natural soil. Layers of swamp mud and fire beds were found at irregular distances through the whole depth.
>
> Permission to make further exploration was not obtained (Thomas 1894:231).

As we shall see, this site has been intermittently visited since by amateurs and professionals alike.

During 1909 and 1910, Clarence B. Moore, during his wanderings throughout the southeast, visited northeast Arkansas and examined a number of sites (Moore 1910, 1911). Although he conducted extensive excavations along the St. Francis, no mention was made of work along the L'Anguille. Stewart-Abernathy (1982:10) concluded that:

> ...it is doubtful that Moore entered the L'Anguille much beyond its confluence with the St. Francis, if he entered it at all, since it was only navigable to Marianna.

No professional archaeological investigations were conducted (or at least recorded) in the L'Anguille basin following Moore's work in the general region until the Lower Mississippi Alluvial Valley survey, when the area was again briefly visited.

Stewart-Abernathy has described this project, which stands to this date as one of the most ambitious, geographically extensive formal research projects undertaken in American archaeology:

> The first large scale effort to establish a culture historical synthesis in the Lower Mississippi Alluvial Valley began in 1939 as a joint project by Harvard University, the American Museum of Natural History, and the University of Michigan (Phillips et al. 1951).

> Running from 1939 to 1947, this survey was designed to investigate the origin and development of middle Mississippian culture and to create a data base for the area. From this work came a system of ceramic seriation and typology still used today as a basic reference for work in the region. Phillips, Ford and Griffin recorded over 350 large village and mound sites along the Mississippi River and its tributaries, and attempted to correlate drainage patterns and site location using Fisk's (1944) work on relict channels of the lower valley of the Mississippi River (Phillips et al. 1951:11). In northeast Arkansas, work concentrated on the Eastern Lowlands and the southern extent of the Western Lowlands west of Helena to the White River (Stewart-Abernathy 1982:11).

During the Lower Mississippi Valley survey the Greer Mound (3LE24) was again visited, this time by James A. Ford and James B. Griffin on March 19, 1940. The site was described as having "thin village site indication" an apparent reference to a low artifact density around the site. A small collection was made from the vicinity of the main mound and from a knoll to the northwest. This collection, numbering 60 sherds, was recorded in the final report of the survey (Phillips et al. 1951:49; Figure 20). The vast majority of the pottery was Baytown Plain, with minor amounts of other wares, and occupation fairly early in the local Mississippian sequence was indicated by the seriation.

The Greer Mound, while outside the current project area, was revisited by the L'Anguille project survey crew on June 18, 1987, some forty seven years and three months following the visit by Griffin and Ford. While the site had been visited in the intirim by a local amateur, in 1970, who thoughtfully filed a state archaeological site form, no collections or other visits beyond that by Griffin and Ford had been recorded. During the 1987 visit four person-hours were spent in a 100% general surface collection of the area around the mound. Only 71 artifacts were found, however, of which 30 were sherds. As during previous work in 1940, little evidence for a village midden was evident, raising questions as to the nature of site use.

THE 1961-1962 FORD-REDFIELD DALTON PROJECT

The most intensive program of archaeological survey in the L'Anguille River basin prior to the 1987 channel margin survey, the Ford-Redfield Dalton Project, was accomplished in 1961 and 1962 under the sponsorship of the National Science Foundation and the American Museum of Natural History. This project, conducted by James A. Ford and Alden Redfield, was an intensive survey for preceramic sites that ranged through portions of the lower Mississippi Alluvial Valley in Louisiana, Arkansas, and Missouri. The survey method employed was essentially opportunistic, as described by Redfield (1971:20):

> When Ford began this project, he described his method of surveying as resembling the selling of Bibles from door to door. We basically followed each road and stopped at each occupied house, asking about past discoveries of Indian relics. Answers ranged from the most helpful to such blunt statements as: "We don't want to subscribe to another newspaper!" In many cases, of course, sites must have been missed if the land was not being farmed or if no residents could be found. In some cases other surveys reported farmers bragging about how they mislead or misdirected us (Morse, personal communication). Other farmers may not have accurately known what was in the area.... Despite lack of informants, unhelpful informants, and mis-informed informants, about 400 sites were visited. A few, like Poverty Point, were easily found; some had been reported earlier and were on the Lower Mississippi Valley Survey maps already (Phillips et al. 1951). The majority of our sites, however, were shown to us by local collectors (Redfield 1971).

A vast amount of data was collected, and a preliminary report on the projects findings was released by Redfield (1971), after Ford's death in 1968.

Ford and Redfield's survey Areas IV and V incorporated most of the current project area in the L'Anguille River Basin (Figures 10 and 11). A dense concentration of prehistoric sites, many with Dalton points associated, was found in the central portion of the basin and along adjoining portions of Bayou DeView, between Forrest City and Harrisburg, and a second, lesser concentration was reported near Helena. Comparable site concentrations were observed in several other areas of the Central Mississippi Valley. These have since been interpreted as the nuclei, or central foraging areas, of Dalton period social groups (Morse 1975a, 1975b, 1977; see Chapter V, Figure 15). During the 1987 survey 20 Dalton points were found along the L'Anguille. Slight concentrations of the points were noted in Lee and Cross counties, in the southern and central portions of the basin, that may correspond to the concentrations observed during the 1961-1962 survey. A number of the Ford-Redfield sites were in the L'Anguille River Channel Cleanout right-of-way, and were revisited during the current project (Table 3; see also Chapter VII). Site descriptions in Table 3 are taken from the original forms.

MAJOR EXCAVATION PROJECTS IN THE L'ANGUILLE BASIN

A number of prehistoric sites in northeast Arkansas were excavated from the 1960s to the early 1980s (e.g., Table 2). Sites which have been subject to excavations that have ranged from limited testing or salvage work to full scale field excavation included the Lace Place (Redfield and Moselage 1970), Hazel (Davis 1973; Morse 1973; Morse and Smith 1973), Parkin (Davis 1966; Klinger 1977; Morse 1981), DeRossitt (Scholtz 1965; Spears 1978), Banks Mound # 3, the Cherry Valley Mounds (Perino 1967); Brand (Goodyear 1974), Sloan (Morse 1975a), Zebree

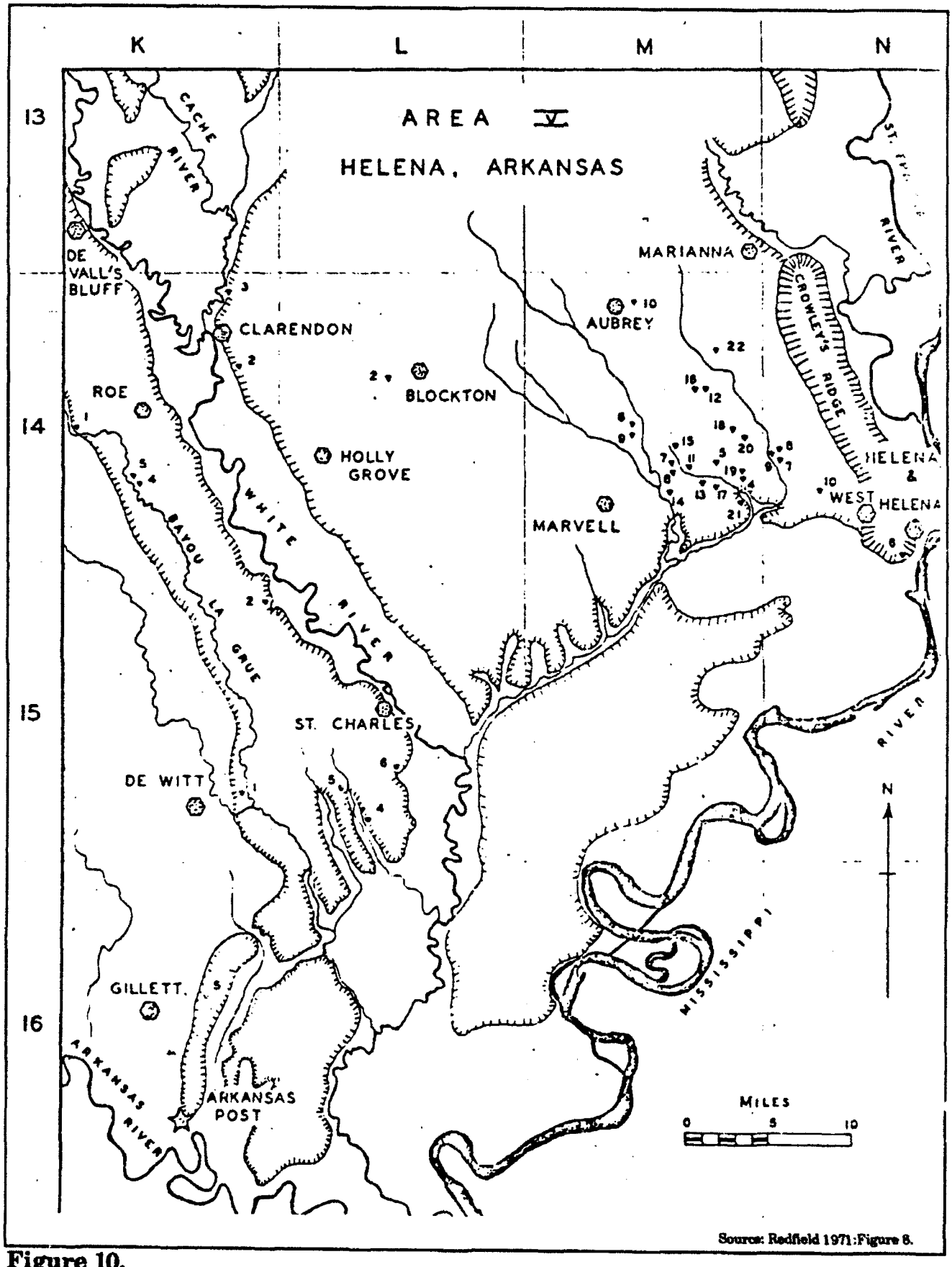


Figure 10.
Dalton Period Sites Discovered During the Ford-Redfield Survey in the Vicinity of the Southern L'Anguille River Basin, Northeast Arkansas.

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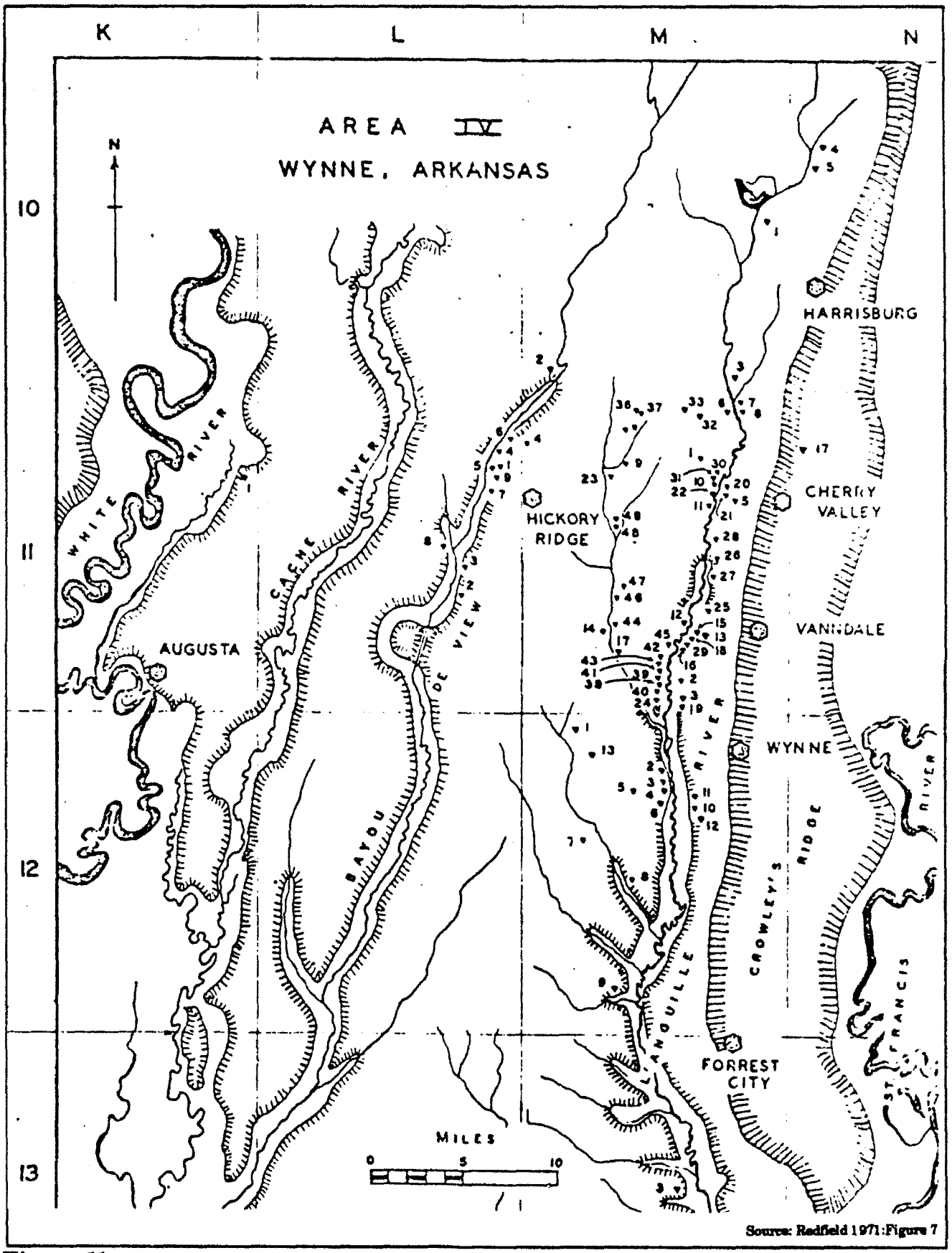


Figure 11.
Dalton Period Sites Discovered During the Ford-Redfield Survey in the Vicinity of the Central and Northern L'Anguille River Basin, Northeast Arkansas.

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Table 3. Ford-Redfield Dalton Project Sites Revisited During the 1987 L'Anguille River Channel Cleanout Project Survey

Site Number	Year Located	Investigator	Comments
3CS12	(1960)	Printup	Small Woodland village, small test unit opened
3CS17	(1960)	J.H. Moselage	One acre Archaic/Woodland village
3CS18*	(1961)	Ford, Printup, Scheel, Moselage	Village site w/low mound, mound 3' high, 50' dia.
3CS22	(1960)	Moselage, Printup	2 acre Woodland village; Baytown pottery and several stemed points
3CS46*	(1962)	Moselage, Scheel	Woodland village w/no mound, Baytown pottery and six Archaic/Woodland stemmed points
3CS47*	(1962)	Moselage, Scheel	Village site on natural levee, no mound, approx. 1 acre in size. Two Daltons, 1 Alba point, net impressed and Baytown Plain pottery reported
3CS48*	(1962)	Scheel	4 acre light flint scatter
3CS49*	(1962)	Moselage, Scheel	Small site extending over ca. 2 acres w/no mound, Baytown Plain pottery, 1 stemmed drill
3CS80*	(1961)	Saucier, Scheel	Small village ca. 100' dia; no diagnostics
3CS81*	(1961)	Saucier, Scheel	Small village ; no diagnostics
3CS210* (old 3CS51)	(1960)	Moselage, Scheel	One Archaic point, no pottery

* Also revisited by James Scholtz in 1966 during his land-leveling project site survey (see Scholtz 1968 and Medford 1972 for details on this project)

(Morse and Morse 1976; Morse and Morse 1980), Mangrum (Klinger et al. 1981), Brougham (Klinger et al. 1983), and Little Cypress Bayou (Dicks and Weed 1986). Several of these projects, notably excavations at the Cherry Valley Mounds, and at the Lace, Brand, and Sloan Dalton sites, occurred in the L'Anguille Basin, ands are briefly described.

The Cherry Valley Mound Group located in Cross County, Arkansas, just to the west of Crowley's Ridge, was examined in 1958 by Gregory Perino (1967). Although the mounds had been extensively disturbed by vandals, three were excavated, and the site has since been recognized as the type localility for an initial Middle Mississippian phase dating to ca. A.D. 1050 - 1150 (Morse and

Morse 1983:243). Submound structures were found underlying two of the three mounds examined. A charnal house/mortuary complex characterized by numerous bundle burials, with lesser quantities of extended burials and remains from cremations was documented, and the site apparently served as a center where local Mississippian populations apparently came to dispose of their dead. Although other Cherry Valley phase mound centers have been reported from the general region (Morse and Morse 1983:246), little is known about habitation sites, or other aspects of the lives of these people.

The Lace Place (3PO17) is a large, multicomponent site in Poinsett County, Arkansas, that was originally located during the Ford-Redfield Dalton project (Redfield and Moselage 1970; Morse and Morse 1983:83). Large numbers of late PaleoIndian Dalton points and other artifacts have been collected at the site, which has been interpretted by Morse (1977) as a probable central base settlement for Dalton populations living in the central L'Anguille River basin (see also Chapter V). Gregory Perino first drew attention to the site, and made collections from it during the late 1950s and after (Perino 1967:12). Literally hundreds of Dalton points, adzes, and other tools have been collected from the area, most from a 0.5 ha central area located on a low but prominant knoll. Three test pits were opened at the site in 1961 as part of operations associated with the Ford-Redfield survey. This work indicated that a midden was present that appeared to date to the Dalton period. The site was situated on a natural levee along a former braided stream channel. In the 1970 report describing the work at Lace, Redfield and Moselage (1970:28) advanced a cultural sequence for the central L'Anguille basin, based on the results of the 1961-1962 Dalton project survey (Figure 12). Unfortunately the Lace Place, a site that may have proven of tremendous importance to the interpretation of Mississippi Valley Dalton occupations, was land-leveled in 1980 (Morse and Morse 1983:83). The site area was revisited during the 1987 L'Anguille survey project (Anderson had visited Lace previously in 1975 with John House), but was found to have been totally destroyed.

The Brand site (3PO139), an intact Dalton site in Poinsett County, Arkansas, was excavated in 1970 by Morse and Goodyear (Goodyear 1974). This site was located on a small natural hillock several kilometers west of the L'Anguille River. Several hundred tools related to the Dalton occupation were recovered, including 305 Dalton points and fragments (Goodyear 1974:16). Artifacts were recovered in several separate concentrations of tools that were interpreted as discrete short-term occupations by male hunting/butchering task groups (Goodyear 1974:16). The Brand site yielded a large sample of points and associated tools, permitting a comprehensive technological and functional analysis of the Dalton toolkit (Goodyear 1984).

The Sloan site (3GE94), an apparent Dalton cemetery located on the summit of a sand dune along the edge of the Cache River floodplain, was completely excavated in 1974 (Morse 1975a). During these excavations, a total of 448 Dalton artifacts, including 144 Dalton points, were recovered from a ca. 11 by 12 meter area, all within 50 centimeters of the ground surface (Morse 1975a:137-138). The artifacts were found, for the most part, to be clustered into a number of discrete groups.

TIME		CULTURES	MANIFESTATIONS TYPE NAMES PROVISIONAL		SITES NORTH TO SOUTH
1700	NUMBERED CHANNELS A1 · A2 · A3 · B1 · B2 · B3 · C1 · C2 · D · E · F · G · H · I · J	HISTORIC ? MISSISSIPPI	HISTORIC ARTIFACTS QUAPAW ? ARROWS-FRESNO, YOUNG TRIANGULAR KNIVES SHELL TEMPERED POTTERY		32, I-1, I-3, 29, 43, 3
1500					
1300					
1100					
900		LATE WOODLAND	STEMMED ARROWS REED, SCALLORN ARROWS BAYTOWN CLAY TEMPERED POTTERY	TRIANGULAR KNIVES MORTARS, PICKS	7, 32, 35, I-1, 30, 31, 10, 22-A, 23, 49-B, 48, 47, 28, 29, 42, 43, 41, 3, 19
700					
500					
300		MIDDLE WOODLAND	NOLAN, BENTON STEMMED HOPEWELL CORNER NOTCH BAYTOWN CLAY TEMPERED POTTERY	OVATE, TRIANGULAR & SMALL KNIVES PICKS, DRILLS	I-1, I-2, I-4, 23, 49-A, 48, 22-A, 11, 26-B, 27, 41, 39
AD 100					
0					
100 BC		EARLY WOODLAND	ADENA THIN STEMMED NOLAN, BURKETT, ELLIS WOODLAND POTTERY	DRILLS, SPEARS ? OVATE, TRIANGULAR & SMALL KNIVES, PICKS	6, 7, 8, 32, 36, I-1, 9, 30, 31, 22-B, 21, 49A & B, 28, 25, 46, 12, 14, 44, 45, 16, 18, 3, 24, 11
500					
1000		LATE ARCHAIC	GARY, NOLAN, ELLIS, TRINITY ENSOR, MOTLEY SIDE NOTCH LARGE CORNER NOTCHED	SPEARS ? DRILLS OVATE, TRIANGULAR KNIVES	33, 32, 34, I-4, 30, 49-A, 26-A & B, 38
1500					
2000		MIDDLE ARCHAIC	NOLAN STEMMED LARGE CORNER NOTCHED LANGE NARROW STEMMED GARY ECUSTA CORNER NOTCH	PITTED STONES ALL KNIFE TYPES PICKS MORTARS ARCHAIC PROJECTILE BASE DRILLS FEW ADZES ? ROUGH BIFACIALLY FLAKED TOOLS	6, 32, 33, 36, I-1, I-2, I-3, I-4, I-5, 30, 23, 20, 49-A, 48, 26-A & B, 27, 25, 15, 16, 42, 17, 39, 2, 3
2500					
3000		EARLY ARCHAIC	BIG SANDY HARDIN SAN PATRICE NOLAN STEMMED CONCAVE BASE { MARTINDALE, FRIO, UVALDE, DALTONOIDS }	PITTED HAMMER-STONES, ADZES ? END SCRAPERS ROUGH BIFACIALLY FLAKED TOOLS DRILLS RUBBING STONES ALL KNIFE TYPES	33, 36, I-1, I-2, I-3, I-4, I-5, 9, 48, 26-A, 27, 47, 29, 3
3500					
4000					
4500					
5000		LATEST PALEO - INDIAN	CONCAVE BASE (ABOVE) SHALLOW DALTON { HARDAWAY, GREENBRIAR, MESERVE, DALTONOIDS }	END SCRAPERS, OVATE, TRIANGULAR KNIVES SMOOTH-SIDED ADZE DALTONOID DRILLS GRAVERS BIFACIALLY ROUGH FLAKED TOOLS	36, 37, I-1, I-5, 48, 27, 25, 42
5500					
6000					
6500		LATE PALEO - INDIAN	LANCEOLATE FORMS CLASSIC DALTON { DALTON, COLBERT, QUAD }	PITTED HAMMER-STONES SMOOTH-SIDED ADZE DALTONOID DRILLS GRAVERS END SCRAPERS TRIANGULAR & OVATE KNIVES, MULTIPLE-USE & ROUGH BIFACIALLY FLAKED TOOLS	36, 37, 34, I-1, I-3, I-5, 31, 22-A, 48, 26-B, 25, 42, 40, 19 MAJOR SITES UNDERLINED
7000					
7500					
8000					
10000		PALEO - INDIAN	CLOVIS, FOLSOM		?

Source: Redfield and Moselage 1970:28.

Figure 12.
Prehistoric Archaeological Remains by Period in the Central L'Anguille River Basin, Northeast Arkansas.

Some of these concentrations were linear, suggesting east to west oriented extended burials. Over 100 identifiable fragments of human bone were found among the artifacts, prompting interpretation of the site as a probable Dalton cemetery (Morse 1975a:138). An intensive analysis of the Sloan site assemblage is currently underway by a team of specialists, and a comprehensive interpretive site report is expected to be released by ca. 1990 or shortly thereafter.

RECENT SURVEY PROJECTS IN THE L'ANGUILLE RIVER BASIN

A number of archaeological surveys have been conducted in northeast Arkansas area in recent years (Stewart-Abernathy 1982:12). These include the work conducted in conjunction with evaluation of land-leveling practices (Scholtz 1968; Medford 1972), the White River Basin Study (Davis 1967; Hoffman 1967; Spears, Myers and Davis 1975), the Cache River Archeological Project (Schiffer and House 1975), a study of the St. Francis River Basin in Arkansas and Missouri (Klinger and Mathis 1978; Klinger et al. 1981), the Poinsett Watershed survey (Padgett 1976; Padgett and House 1977; Commonwealth Associates 1980; Hoxie 1981), the Village Creek survey (Fehon and Viscito 1974; Klinger 1986), and a survey of the Larkin Creek Watershed (Bennett 1982). The only major survey work reported from the L'Anguille Basin following the Ford-Redfield survey has been that associated with an evaluation of site destruction practices (i.e., land-leveling; Scholtz 1968, Medford 1972) and Bennett's (1982) survey in the Larkin Creek Watershed. These are briefly descibed below.

In 1966 James A. Scholtz (1968) conducted a survey of archaeological sites in northeast and southeast Arkansas to study the effects of modern agricultural practices. In northeast Arkansas he examined sites in Cross County, visiting 83 of the 88 sites that had been recorded as of that time. Many of these sites had been located as a result of the Ford-Redfield Dalton project. Several of the sites Scholtz revisited were in the 1987 survey right-of-way, and are indicated in Table 3. Approximately one quarter of the 83 sites visited (N=23) had been destroyed by land leveling, an extremely high attrititon rate given that most of them had been recorded within the previous decade.

In 1970 a second examination of archaeological site destruction due to agricultural practices was undertaken in northeast Arkansas, by Medford (1972). In all, 545 of 1293 recorded sites in the 11 counties forming Medford's study universe were found to have undergone destructive agricultural practices, indicating the attrition noted by Scholtz was continuing at an alarming rate. The area of the L'Anguille basin north of Lee County was included in the study; this terrain was noted as ideal for rice cultivation (Medford 1972:70-72). Because rice requires level, flooded field conditions, extensive land-leveling, ditching, and dike constuction is associated with its cultivation. The destructive effect this procedure had on archaeological sites was documented by Medford, who argued that much of the archaeological record in northeast Arkansas would likely be destroyed if

agricultural practices continued unabated. Given this, sites found in areas that have previously seen little intensive use, like portions of the L'Anguille River channel margin, are likely to be comparatively much better preserved.

In 1981, an intensive survey was performed along approximately 50 miles of proposed U.S.D.A Soil Conservation Service drainage courses in the Larkin Creek Watershed, in Lee and Francis Counties, Arkansas (Bennett 1982). The survey recorded 39 sites, including 21 historic and 29 prehistoric sites. An extensive geomorphological overview of the watershed accompanied the project, providing a detailed, recent perspective on events within the basin over the Late Pleistocene/Holocene era (Saucier 1982; see Chapter II). Most of the historic sites were recently leveled tenant house site locations, while most of the identifiable prehistoric components were found to date to the late Archaic and late Woodland periods; one early Archaic and one Mississippian component were noted (Bennett 1982). One site discovered during the 1981 Larkin Creek Watershed survey, 3LE101, was revisited during the 1987 L'Anguille Channel Cleanout survey, and a well-executed Dalton point was found (Appendix II).

CONCLUSIONS

Aside from occasional site forms submitted by local collectors, little formal archaeological research had been conducted and reported in the vicinity of the 1987 L'Anguille channal margin survey area beyond that described here. If not for the Ford-Redfield Dalton Project and the recent Larkin Creek watershed survey, the L'Anguille basin would be virtually unexplored. As it is, the 222 sites recorded during the 1987 survey significantly add to our knowledge of past use of the immediate channel environment.

V. PREHISTORIC CULTURE HISTORY AND SEQUENCE DEFINITION

INTRODUCTION

Northeast Arkansas has long been recognized as one of the richest archeological areas in eastern North America in terms of the wealth and complexity of prehistoric settlement. The area has seen extensive investigation since the middle of the last century, and early on became a focus for museum expeditions, which often purchased artifacts directly from local citizens. As detailed in Chapter IV, a number of major survey and excavation projects have been conducted in the northeast Arkansas area in recent years, almost all the result of cultural resource management legislation. This work has greatly increased our knowledge of the prehistoric native American Indian occupations in the area, and has greatly facilitated attempts to develop cultural histories and sequences. Several major syntheses have been developed in recent years that detail the cultural history of the northeast Arkansas area (i.e., Phillips 1970; Schiffer and House 1975; Morse 1969, 1982; Morse and Morse 1983; Klinger et al. 1983:27-36). Some of this work, and the sequences resulting from it, has been discussed previously (i.e., Chapter IV, Figures 9 and 12).

In his monumental overview of the record of human occupation in the Lower Mississippi Alluvial Valley, Phillips (1970), formulated and reviewed in depth the evidence for a series of phases in the general vicinity of northeast Arkansas, beginning in Early Woodland times and carrying on through the sequence to the Mississippian period. Phases formally defined by Phillips that have at least some utility in the northeast Arkansas area include: Turkey Ridge (Tchula/Early Woodland period), Helena (Marksville/Middle Woodland period), Dunklin (Middle Woodland), Baytown (Middle-Later Woodland period), the Walnut Bend and Toltec Phases (Coles Creek/Late Woodland period), and the Cherry Valley, Parkin, and Kent Phases (Mississippian period). More focused studies, providing valuable data on specific sections of the local cultural sequence, include Phyllis Morse's (1981) discussion of the Parkin phase, William's (1974) discussion of Baytown chronology, and Morse's (1977) discussion of Late Woodland/initial Mississippian interactions in the region.

The most current general synthesis of culture history in the northeast Arkansas area is to be found in Morse and Morse's (1983) *The Archaeology of the Central Mississippi Valley*, which provides a period by period review of the evidence for human occupation in the general region (Figure 13). The emphasis in this book is on the prehistoric archeological record in northeast Arkansas, where the Morses have worked for the past 20 years. Factual and interpretative discussions of the nature of the local archeological record are provided, encompassing the PaleoIndian; the Early, Middle, and Late Archaic; the Early, Middle, and Late

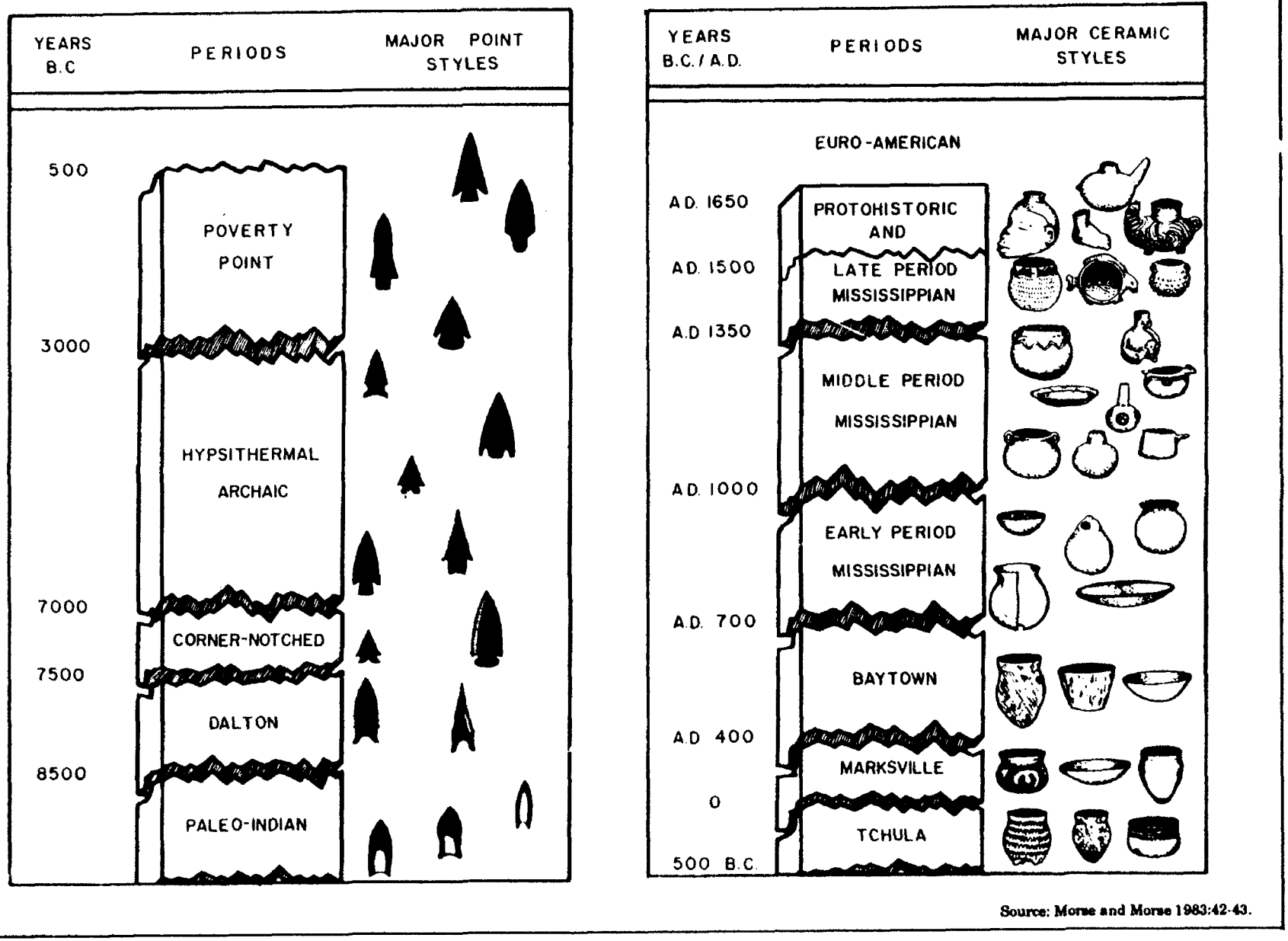


Figure 13.
A Prehistoric Cultural Sequence for Northeast Arkansas: Major Periods and Artifact Styles.

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Woodland; the Early, Middle, and Late Mississippian; and the Protohistoric and Historic eras. A previously published local sequence, using data collected entirely from within the L'Anguille River Basin, was developed by Redfield and Moselage (1970), from data collected during the 1961-1962 Ford-Redfield survey (Figure 12, Chapter IV).

The L'Anguille River Channel Cleanout project represented the first intensive survey of almost the entire main channel of the river, which prior to this time had seen little formal investigation. As a first effort at regional survey within the basin since the Ford-Redfield Survey, and the first systematic examination encompassing virtually the entire main channel, the information about site and component distribution should be of considerable interest to archeologists working in this area. Other than the Ford-Redfield survey, which was an opportunistic effort relying primarily on local informants to determine site locations, previous archeological investigations in the general area of the L'Anguille River have tended to either focus on sites of specific periods, or else encompass fairly small or restricted areas (e.g., Perino 1967; Redfield and Moselage 1970; Redfield 1971; Goodyear 1974; Bennett 1982). The L'Anguille River Channel Cleanout survey project, encompassing almost 7,000 acres along and within 100 m of the main channel, provided the opportunity to collect data from over the entire basin.

In the following sections, a brief description of the cultural history of the L'Anguille River region is presented in a period-by-period format, together with an extended discussion of research questions of interest to archeologists working in the area. As will be demonstrated in the sections that follow, the sites in the basin offer considerable archeological research potential. A number of general sources were consulted, including the (a) State Plan for the Conservation of Archeological Resources in Arkansas (Davis 1982), and (b) several syntheses of northeast Arkansas prehistory (e.g., Morse 1969, 1982; House 1975a, 1975b; Klinger 1976; Klinger et al. 1983; Morse and Morse 1983). More focused studies are referenced as appropriate in the sections that follow. The review presented here is intended to offer a basis for understanding how the significance of the discovered archaeological resources in the L'Anguille River Basin are to be evaluated.

PALEOINDIAN PERIOD (ca. 11,500 - 9800 B.P.)

Fluted Point Occupations

Fluted lanceolate projectile points have been found in moderate quantities in northeast Arkansas, although they are quite rare when compared to the incidence of points of later periods (Morse and Morse 1983:60-64). Most of the known finds in this general region are from surface contexts, and tend to occur along the major river systems (i.e., the former Ohio/Mississippi River channel flowing just to the east of Crowley's Ridge, and the combined Cache, St. Francis, and/or Black rivers flowing through the Western Lowlands).

Two and possibly three clusters of fluted points have been observed in the northeast Arkansas area that may reflect band territories (House 1975a:30; Morse and Morse 1983:61). Two of these clusters (as defined by House 1975; these are considered one cluster by Morse and Morse 1983) are in the Western Lowlands, along the central and upper Cache River basin, and the third is in the Eastern Lowlands to the east of Crowley's Ridge. Settlement appears to have been fairly extensive in this portion of the Mississippi Alluvial Valley, and Morse (1982:22) believes that it is only a matter of time before deeply buried PaleoIndian components are encountered. Although mastodon and other Late Pleistocene faunal remains have been found in some incidence in Northeast Arkansas, there is no evidence to support the view that the hunting of megafauna was a major activity during the PaleoIndian period locally (Morse and Morse 1983:65).

Dalton Period Settlement

The initial post-fluted point occupations of the Northeast Arkansas area were characterized by typically lanceolate, serrated, beveled, and ground Dalton projectile points. The Dalton complex is thought to be the cultural base out of which the Archaic developed in the Southeastern United States (Morse and Morse 1983:71). These occupations have been dated to between 10,500 and 9800 B.P. (Goodyear 1982). Much of our current knowledge about Dalton occupations in Northeast Arkansas comes from work in or near the L'Anguille Basin, notably the data collected during the Ford-Redfield survey (Figures 10 and 11), and from the excavations at the Lace Place (Figure 14; Redfield and Moselage 1970), Brand (Goodyear 1974), and Sloan sites (Morse 1975a). The 1961-1962 Ford-Redfield Dalton Project Survey located a large number of Dalton period sites in the L'Anguille River Basin, mostly on older land surfaces at a fair distance from the main channel (Redfield 1971). Some sites were located near the channel, however, and in fact many of the sites recorded in or near the L'Anguille River (i.e., within 300 feet of the main channel) prior to the present project were Ford-Redfield survey sites. Locational information on these sites, including field notes, site forms, and collections, are filed at the University of Arkansas Museum and with the Arkansas Archeological Survey.

The Ford-Redfield survey noted a pronounced cluster of Dalton sites in the central L'Anguille basin in the vicinity of Wynne. This concentration of sites may represent a well-defined band territory that existed during this time, if Morse's (1975a, 1977) arguments about the distribution of Dalton settlements are correct. The few isolated Dalton sites located near Harrisburg to the north and Forrest City to the south may reflect outliers from this primary site cluster. In brief, Morse (1975a, 1977) has argued that during Dalton times portions of the central Mississippi Alluvial Valley in northeast Arkansas and southeast Missouri were inhabited by bands living in permanent or semi-permanent base camps, from which they exploited hexagonally shaped territories oriented along major watersheds (Figure 15; Morse and Morse 1983:80). Within each territory, the base camps tended to be centrally located in areas roughly 10 km in diameter, allowing for reoccupation of different locations. Outlying logistical stations, most of which

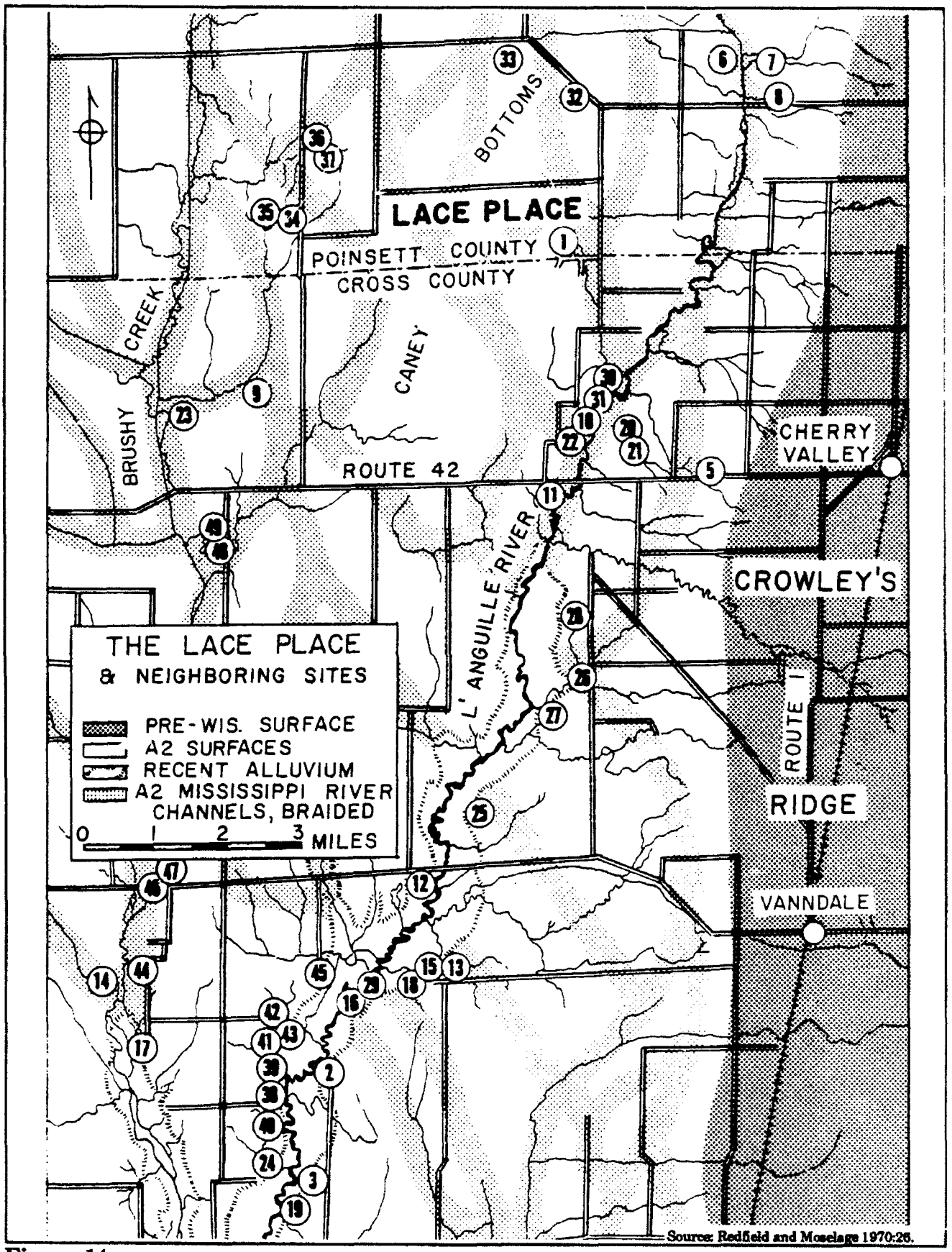


Figure 14.
Dalton Period Sites in the Vicinity of the Lace Place in the Central L'Anguille River Basin, Northeast Arkansas.

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are thought to be male hunting/butchering camps, were scattered throughout the remainder of the territory. The Brand site, excavated by Morse and Goodyear (Goodyear 1974), has been interpreted as this kind of site. Other specialized sites included vegetable food-processsing and collecting loci, cemeteries, and quarry areas. Fixed territories, each roughly 2,200-3,200 square km in extent have been proposed, with formal cemeteries such as the Sloan site (Morse 1975b) present in each territory, possibly serving as settlement foci as well as markers of territorial integrity or claims.

If Morse's model is correct, the cluster of Dalton sites in the central L'Anguille basin represents such a Dalton "territory" (Morse and Morse 1983:80). The larger sites (such as Lace Place) are interpreted as base camps, while many of the smaller sites in the area may be outlying hunting stations or other special purpose camps (Figure 15). The apparent absence of Dalton sites in both the northern and southern portions of the L'Anguille basin may be due to survey coverage, currently unresolved ecological conditions, or may actually reflect less densely occupied buffer zones or boundaries between differing Dalton groups.

Schiffer (1975) and Price and Krakker (1975) have taken considerable exception to Morse's model. They have argued against the existence of linear, drainage-oriented territories, suggesting instead that Dalton groups "occupied territories which crosscut major physiographic and resource zones" (Schiffer 1975:111). The Dalton site cluster in the L'Anguille Basin appears oriented along a single drainage, however, offering little support for this view. Schiffer and House also challenge the existence of year-round settlements, arguing instead for a pattern of greater annual mobility, perhaps between seasonally occupied camps. The Brand site, with its extensive formal tool assemblage, was interpreted as a seasonal base camp rather than a temporary hunting station (Schiffer 1975:100-111). These models of Dalton territoriality, site function, and intra-territorial movement should receive continued examination as appropriate data are collected. Comparative analyses associated with the preparation of the final report on the investigations at the Sloan site, currently underway, should augment our understanding of Dalton settlement and lifeways in the vicinity of Northeast Arkansas.

ARCHAIC OCCUPATIONS (ca. 9800 - 3000 B.P)

Early Archaic (Ca. 9800 - 7000 B.P.)

The Early Archaic occupation of northeast Arkansas has been dated from roughly 9800-7000 B.P, and is recognized by a series of diagnostic projectile points, including San Patrice, Kirk Serrated, Palmer Corner Notched, Beaver Lake, Rice Lobed, Rice Lanceolate, Rice Contracting Stemmed, Graham Cave Notched, Hardin Barbed, St. Charles Notched, Hidden Valley Stemmed, and Cache River Side Notched, and the misclassified Big Sandy Stemmed (Morse 1969:18; House 1975a:30; Chapman 1975:152; Morse and Morse 1983:104). As Morse (1969:18) has

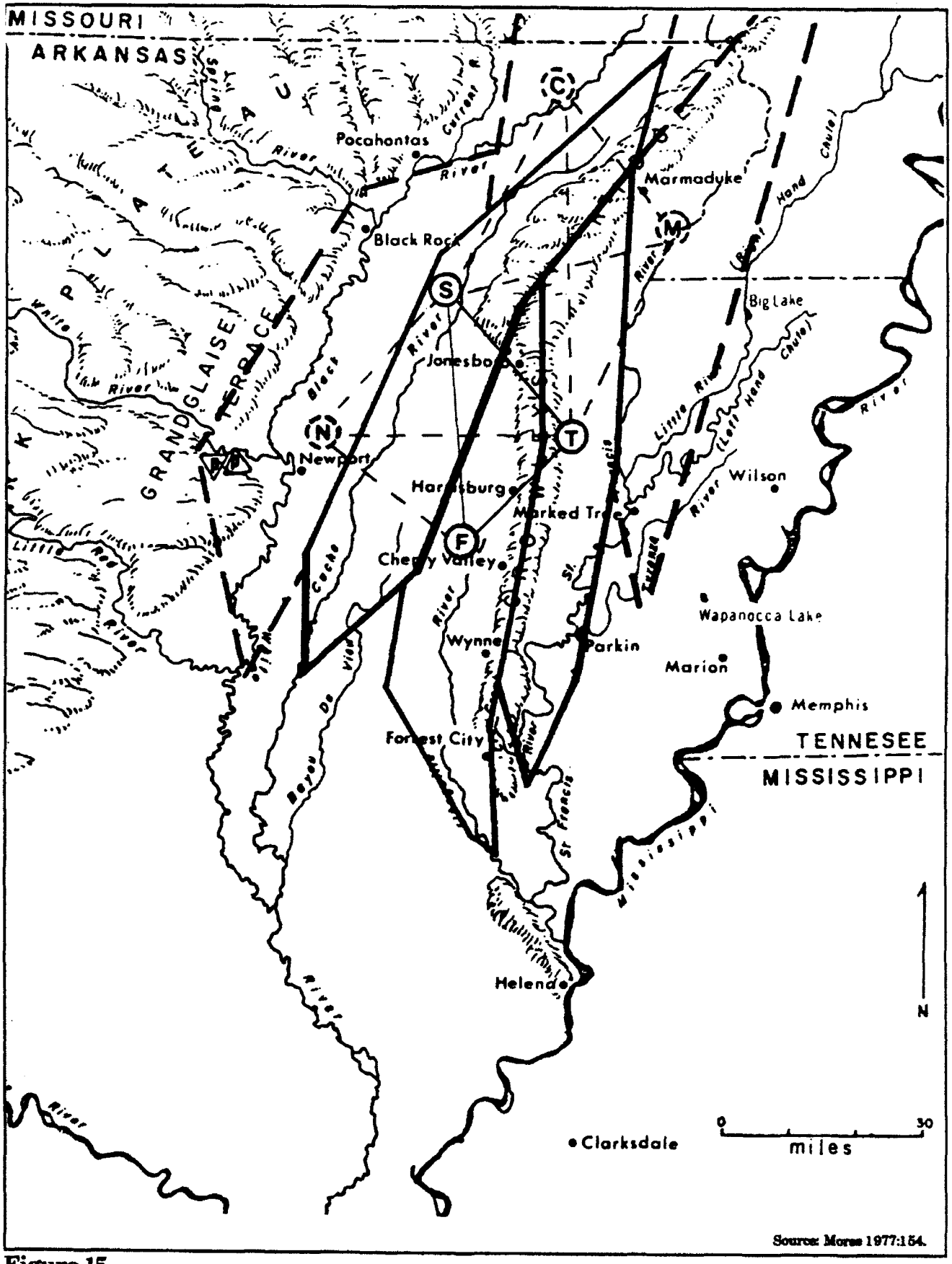


Figure 15.
Hypothetical Dalton Band Territories in the Vicinity of the L'Anguille River Basin, Northeast Arkansas.

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observed "most named Early Archaic forms in the Southeast have been recognized within the north [Mississippi] delta of Arkansas." The most prominent point forms, in approximate chronological order, include San Patrice (ca. 9500 - 9000 B.P.), St. Charles (contemporary to slightly later in time), Hardin (ca. 9000 - 8000 B.P.), and Rice (ca. 8000 - 7000 B.P.). Terminal Early Archaic bifurcate forms, common in other areas of the Southeast, are absent (Figure 16; Morse and Morse 1983). In addition to the diagnostic projectile point types, a number of well-made tool forms are also thought to date to this period, including a diversity of scrapers, large chipped stone choppers, and reworked points, together with a number of possible plant processing tools, including pitted cobbles and manos (Morse and Morse 1983).

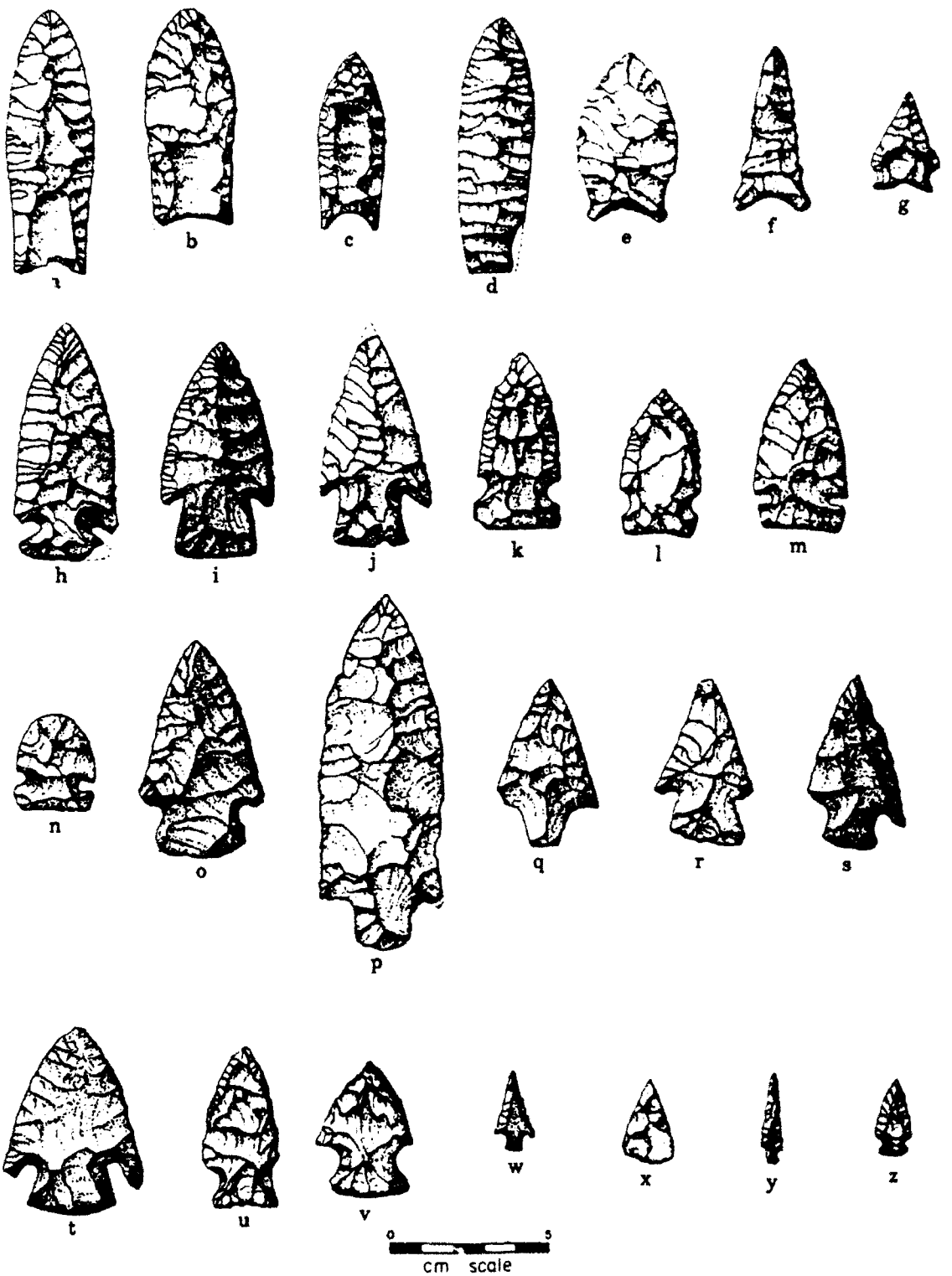
A generalized foraging adaptation by small, highly mobile groups is inferred at this time level. Given the widespread occurrence of Early Archaic artifacts over the region, Morse (1969:18) has suggested that "the Western Lowland of the north [Mississippi] delta of Arkansas must have been an almost perfect setting for Early Archaic man."

More generally, sites found dating to this period can help us refine our understanding about the nature of Early Archaic settlement in the general region. Several investigators have recently suggested that our traditional views of this period are inaccurate and in need of revision (Claggett and Cable 1982; Neusius and Wiant 1985; Anderson and Hanson 1988). In particular, a greater use of plant resources is inferred, suggesting that Early Archaic populations may have had a somewhat more diversified subsistence base with less reliance on hunting than previously thought. Finding undisturbed sites from this period in the L'Anguille Basin, and resolving their contents, would help address these problems. Chapman (1975:157) has noted that the Early Archaic period has been neglected by researchers working in the Mississippi Alluvial Valley lowlands, and has suggested that greater attention to "old soil surfaces, particularly the old natural levees along small streams" would be the best place to look for sites of this period.

Middle Archaic (ca. 7000 - 5000 B.P.)

The Middle Archaic period, unlike the preceding Early Archaic, is very poorly known in the Western Lowlands of the northern Mississippi Alluvial Valley. Chapman (1975:177) has observed that "no systematic archeological research has been conducted on sites occupied during the Archaic period" in the northeast Arkansas/southeast Missouri area. House (1975a:3[illegible] has described the situation in the following terms:

> Following the early Archaic there is a possible gap of over 4000 years in the culture history of the area. Almost no material has been found in lowland northeast Arkansas which is readily attributable to the middle Archaic substage, even though such evidence is not uncommon in nearby portions of the Ozarks.



a-b Clovis; c Sedgewick; d Agate Basin; e Coldwater; f Dalton; g San Patrice; h St. Charles; i-j Hardin; k,l Hickory Ridge Side Notched; m,n Cache River Side Notched; o Big Creek Point; p Burkett point; q Gary; r,s Weems; t McCarty; u Steuben; v Gibson; w Sequoyah-Scallorn; x Madison; y Scallorn; z Schugtown.

Source: Morse and Morse 1983:62. 105, 109, 117, 155, 174, 223, 240.

Figure 16.
Diagnostic Prehistoric Projectile Points by Period, Northeast Arkansas.

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Diagnostic artifacts dating to this period are likewise poorly documented, although basal notched Eva and Calf Creek points and side-notched Hickory Ridge and Cache River points resembling the Godar and Big Sandy Notched types are thought to date to this time level (Chapman 1975:177; Morse 1982:22; Morse and Morse 1983:108-110). Much of our information on assemblages from this time level comes from excavations in other, nearby areas, notably at the Hidden Valley and Bonaker rockshelters in Missouri and at Modoc Rock Shelter in Illinois. Full-grooved axes, expanding-based drills, and a range of flaked stone tool forms are thought to date to this period.

Two divergent opinions currently exist in the literature about the nature of Middle Archaic settlement in the northern Mississippi Alluvial Valley. Morse (1982:22; Morse and Morse 1983:103ff) has argued that there was a pronounced shift in settlement from the preceding Dalton and Early Archaic times. In this view, Middle Archaic populations were located predominantly along, and within, the Ozarks, with only minimal evidence for habitation or use of the lowlands to the east. This population relocation out of the lowlands was due to the regional warming and drying trend, and the emergence of prairie in formerly wooded areas (Morse and Morse 1983:111). Permanent settlements shifted out of these newly formed prairie areas to along water courses and particularly into the Ozark escarpment. The lowlands, particularly away from the river channels, while never abandoned, were utilized much less intensively during this era. A shift from large group territories along lowland rivers to small territories along Ozark streams, and a gradual increase in population over time are also inferred for this period. In contrast to the Morse's view, Chapman (1975:157), based on observations further to the north in Missouri, has noted that small camps dating to the Middle Archaic period do occur in the lowlands, along former river channels or on higher ground surfaces near smaller streams. The lowland areas were thus occupied, but by peoples employing a settlement strategy that was not highly visible archaeologically.

The Middle Archaic period spans the Hypsithermal, or climatic optimum, which was characterized by a pronounced drying trend in the general region and an apparent shift from forests to grasslands over much of the lowlands (Morse 1982; Semken 1983). Morse (1982:22) has suggested that the general depopulation of the Eastern Lowlands observed beginning at the end of the Early Archaic period continues, something other investigators have sharply challenged (e.g., Chapman 1975:179, 183; Brown 1982:352). Like sites of the preceding era, Middle Archaic occupations are assumed to occur on older, more stable land surfaces, particularly on h' her elevations (although the possibility of deeply buried deposits cannot be discounted).

Late Archaic (ca. 5000 - 3000 B.P.)

Late Archaic period sites in the L'Anguille River/northeast Arkansas area are identified by a range of artifact types, including Gary, Burkett, Table Rock Stemmed, and Big Creek projectile points, chipped stone adzes, grooved polished

axes, portable stone mortars, steatite vessels (rare), baked clay balls, bannerstones, a lapidary industry, and a range of triangular and rectangular tools thought to have served as axes or digging implements (Morse 1982:22; Chapman 1975:217; Morse and Morse 1983). Successive Late Archaic subperiods, each characterized by distinctive projectile points, include the Big Creek (ca. 5000 - 4000 B.P.), Burkett (4000 - 3000 B.P.), and Weems (ca. 3000 - 2500 B.P.) periods (Figure 16; Morse and Morse 1983:116). The Weems point extends into the initial ceramic (Tchula) Early Woodland period.

Toward the end of the Late Archaic period, clear relationships with the Poverty Point complex in the Lower Alluvial Valley are evident in the widespread local occurrence of baked clay balls and lapidary items such as carved and polished beads. Morse (1969:19) reports that possible "habitation mounds" of this period may be present in the L'Anguille drainage, although to date none have been investigated, nor were any found during the present survey. That numerous Poverty Point period sites exist in the general northeast Arkansas region is evident from existing survey data. Ford and Redfield, for example, found over 200 baked clay objects during their 1961-1962 Dalton Project Survey (Redfield 1971:57). Most of the baked clay balls found in the project area are comparatively simple, biconical or spherical shapes typical of the Late Archaic (Poverty Point) period. Although some of these artifacts, which functioned as cooking 'stones' in earth ovens, may have persisted later in time, into the Woodland period (Phillips 1970:870), they are typically recovered in preceramic contexts.

A major population expansion is inferred in the lowlands of Northeast Arkansas following the close of the Hypsithermal, as the climate grew cooler and moister and the prairie grasslands gave way to deciduous forests (Morse and Morse 1983:115ff). A tremendous increase in the number of sites and artifacts dating to this period is evident, compared to the preceding Middle Archaic period, something documented in the present study (see Chapter VII). Settlement patterns during this period remain largely unknown. Chapman (1975:224), speaking in general terms, has noted that later Archaic research in the Lowlands of the northern Lower Mississippi Alluvial Valley region has been "sadly neglected" due to a combination of two factors: (a) sites of this period are often deeply buried, and (b) most researchers have focused their attention on the more impressive later developments.

A range of site types, from dense occupational middens to lithic scatters dating to the Late Archaic period have been identified in Northeast Arkansas. Midden sites tend to occur "near the emergence of major streams from the Ozarks and Crowley's Ridge" and adjacent to meander belts (Morse and Morse 1983:130) in the western lowlands, indicating groups were oriented along watersheds. Specific models of Late Archaic settlement patterning, while advanced, remain largely speculative at the present. House (1973) has suggested that several autonomous Late Archaic groups were present in the northeast Arkansas/southeast Missouri area, occupying seasonal villages and oriented along specific watersheds. Morse and Morse (1983:130-132) have suggested that the dense midden sites were reoccupied winter villages, while the smaller lithic scatters probably represented temporary hunting, fishing, or gathering locations.

Group fragmentation into mobile household-size units was inferred during the warmer months, with possible temporary regrouping at summer villages. Movement into the uplands to avoid the heat and insects of the lowlands, and a focus on upland resources, was also inferred.

WOODLAND PERIOD OCCUPATIONS (ca. 3000 - 1300 B.P)

Early Woodland (ca. 3000 - 2500 B.P.)

The Early Woodland period in the Eastern Woodlands is traditionally assumed to have been the time of the initial introduction of pottery into much of the region, the appearance of elaborate burial mound ceremonialism, and the first evidence of intensive horticulture (Griffin 1967:180). The term Tchula has been used to refer to Early Woodland components in the northern portion of the Lower Mississippi Alluvial Valley; these components are assumed to be roughly contemporaneous with those of the Tchefuncte culture in the lower portions of the valley near the river mouth (Phillips et al. 1951:431-436).

A well defined Tchula assemblage has recently been reported from northeast Arkansas, at the McCarty site (Morse and Morse 1983:145-159). The site, located on the Tyronza River, a tributary of the lower St. Francis, occupied ca. 0.25 ha and included eight burials (three with unusual grave goods) and several large (storage?) pit-features. Sites of this period have been previously reported in the vicinity of the L'Anguille Basin, although they appear to be fairly uncommon (Phillips 1970:879; Morse 1982:28); only a small number of Tchula components were found in the present survey assemblage. The McCarty site assemblage, for the present, must be considered representative of possible Tchula components in the project area. Recovered artifacts included Cormorant Cord-Impressed, Mulberry Creek Cord-Marked, Withers Fabric-Impressed, Baytown Plain, Tchefuncte Stamped, and Tammany Punctated-like pottery, Weems points, stone and copper beads, a limonite reel-shaped gorget, biconical baked clay objects, a chipped adze, and a celt (Morse and Morse 1983). The assemblage documents the continued occurrence of baked clay objects into the Woodland period in the general region. This suggests that at least some of the sites yielding baked clay objects in the northeast Arkansas area may derive from periods after the Poverty Point period, particularly during the Early Woodland.

The earliest securely dated pottery assemblage in the general region is characterized by Cormorant Cord-Impressed, Withers Fabric-Impressed, and Mulberry Creek Cord-Marked types (Williams 1954:28). Radiocarbon dates for these materials, from the Burkett site, in southeast Missouri, date to the Middle Woodland period (190 B.C.±250, M-438; A.D. 70±200, M-585). The emergence of two differing yet co-existing cultural systems in the lowlands is inferred at this time, characterized by sandy paste pottery on the older braided stream surfaces, and clay/grog tempered pottery on sites in close proximity to the newly formed Late Archaic meander belts (Morse and Morse 1983:138). Settlement systems were

characterized by small dispersed villages located in the lowlands, with upland areas at best little more than seasonally occupied hinterlands (More and Morse 1983:143-144).

At this time, the Early Woodland period is very poorly defined in the L'Anguille Basin area. While a shift to a greater dependence on horticulture may have occurred (e.g., Morse 1982:28; Asch and Asch 1985), actual evidence for such a change is lacking. What is needed are single components dating to this period, or stratigraphic excavation samples that bracket the Late Archaic through Middle Woodland periods. In spite of a fair amount of work in the region, comparatively few good stratigraphic column samples exist since most excavations have focused on sites dating to later in the sequence.

Middle Woodland (ca. 2500 - 1500 B.P.)

Several summaries exist detailing the evidence for Middle Woodland occupations in the northeast Arkansas area (e.g., Phillips 1970:887-889, Morse 1969:20; Morse and Morse 1983:161-177). For the most part however, this record consists of little more than ceramic assemblages and detailed information on the lifeways of the people is conspicuous in its absence. A pattern of dispersed autonomous villages and infrequent ceremonial centers is inferred (Morse and Morse 1983:162, 172ff), but the actual evidence in support of such a settlement system is meager. The excavations at the Marksville/Hopewell-related Helena Crossing mound group by Ford (1963), just south of the L'Anguille project area, forms the single dramatic exception to this general pattern. Helana Crossing is perhaps the best documented site with Hopewellian materials found to date in this part of the Mississippi Alluvial Valley. At this site, two conical burial mounds were examined (five mounds were present originally, but three had been destroyed by construction prior to the excavations), and were found to cover Hopewellian-like log tombs. Associated grave goods included cut sheet mica, copper earspools, copper-covered panpipes, blades, and Marksville Plain and Red Filmed pottery. Dated from ca. 150 B.C. to A.D. 325, the site appears to have been some kind of a center during the time when the Hopewell/Marksville cultures were at their peak to the north and south, respectively.

Generally, the nature of Hopewell/Marksville influence in the northeast Arkansas area is not well understood. The Helena phase, as defined by Phillips (1970:887-889) is thought to represent the local emergence of a Hopewellian-type culture in the region. The phase is described as "a meander-belt phase" (Morse and Morse 1983:175), with sites occurring to the north along the St. Francis and Mississippi Rivers. While Marksville Stamped and Incised ceramics are sometimes noted, they are comparatively rare on sites in the area around Helena. Some evidence for sites of this period, notably Marksville Incised and Withers Fabric Impressed pottery, was found along the southern part of the L'Anguille River during the present survey. Most initial Middle Woodland sites locally are recognized by the presence of Cormorant Cord Impressed and Withers Fabric Marked ceramics. Ceramic assemblages dating to this period consist predominantly of Mulberry Creek Cord-Marked, Barnes Cord-Marked, and

Baytown Plain types (which unfortunately also date to later periods), together with lesser quantities of the more diagnostic Withers Fabric-Marked and Cormorant Cord-Impressed. Unambiguous markers of the phase, however, are zoned punctated and dentate stamped wares resembling classic Havanna Hopewell and Marksville types. Although these wares admittedly occur in only very small quantities, they do indicate that the occupants of the general region participated at some level in the interregional ceremonial/exchange network known as the Hopewell Interaction Sphere (Caldwell 1964; Struever and Houart 1972).

A second Marksville occupation, the "Kellar phase", has been provisionally suggested for sites along the northern part of the L'Anguille (Morse and Morse 1983:175-177). A Marksville assemblage was defined from salvage work at the Kellar site south of Jonesboro and west of Crowley's Ridge in 1970. The ceramic assemblage, mostly sandy paste wares like the succeeding Barnes tradition, included punctated, rocker stamped, cord marked, and notched designs. Steuben and Gibson-like points were found, as well as basin-shaped pits, an earth oven with crude spherical baked clay objects, and a flexed/bundle burial. Some local differentiation between local Middle Woodland groups is indicated by the differing Kellar and Helena Phase assemblages.

Chapman (1980:65, 68), in some contrast to Phillips, has suggested that the Hopewellian elements observed in the Middle Woodland in this part of the Mississippi Alluvial Valley reflect ephemeral contact, "the result of hunting, moving, or proselytizing expeditions rather than of colonization." He further suggests that more generalized northern influences were appearing about this time in northeastern Arkansas and southeastern Missouri, including cord and fabric marking, grit tempering, and conoidal vessel forms, which are all characteristic attributes of pottery assemblages in the Barnes (Kennett) ceramic series. Although no major centers of the Hopewell interaction sphere are currently known from the L'Anguille drainage, such sites are present just to the south, at Helena, Arkansas.

The initial Middle Woodland occupations are succeeded by the Dunklin (Barnes) and the Baytown and Hoecake phases in the northeast Arkansas area (Morse and Morse 1983:181-197). Terminal Middle Woodland/initial Late Woodland occupations in the general northeast Arkansas area are identified by the presence of sand tempered Barnes or Kennett ceramics of the Dunklin phase, or clay/grog tempered ceramics of the Baytown phase (Phillips 1970:903-904). Dunklin phase assemblages are dominated by Kennett (Barnes) Plain and Cord Marked ceramics, while Baytown and Hoecake phase assemblages are characterized by Baytown Plain and Mulberry Creek Cord Marked ceramics, with lesser occurrences of Larto Red Filmed, Evansville Punctated, Alligator Incised, Yates Net Impressed, possible Coles Creek Incised varieties, and occasional Dunklin phase (sand tempered) sherds. These assemblages tend to have discrete distributions, and are thought to reflect differing, yet contemporaneous ceramic traditions. The reasons for these distributions remain obscure. Phillips (1970:903) suggests that unspecified "environmental influences" may explain the distribution, while Morse (1977) argues that they represent differing social groups.

Explaining the distribution of sand tempered Barnes (Dunklin) pottery and clay/grog tempered Baytown wares in the general northeastern Arkansas area is thus a major area for local researchers. The association of sand tempered pottery with braided stream surfaces, and grog tempered pottery with the meander belt zone noted during the earlier Middle Woodland continues. The paste and decorative differences are so distinct that Morse and Morse (1983:193) discount the possibility that they are differing (seasonal?) manufacturing procedures employed for use in differing environmental zones; they specifically note that the presence of sand in the environment did not result in the preferential manufacture or use of one ware over the other.

Settlement appears to have been in both small villages and isolated households on hamlets for both traditions. Alternate periods of nucleation and dispersion are inferred for Dunklin occupations, with maximal occupation units consisting of 3 to 5 households, dispersing to single households seasonally (Morse and Morse 1983:186-192). The Baytown Hoecake phase sites, in contrast, are larger and have burial mounds associated, suggesting more permanent settlement, and a more complex social organization. Morse (1977, 1982:28) has suggested that the two pottery traditions, which have somewhat discrete but overlapping spatial distributions in the region, reflect the extremes of segmentary tribal level organizations, and that the Baytown people (the more complex and better organized group) expanded at the expense of the Barnes (Dunklin) people over the course of the later Middle Woodland and early Late Woodland. In his view, populations producing Baytown pottery had a more elaborate social organization than those making Barnes pottery; this social organization translated over the long run into greater cultural or societal adaptability. Whether this interpretation is correct remains to be seen; comparatively few sites of either ceramic tradition have been examined in any detail in the immediate region, rendering inferences about ethnic units and social organization somewhat speculative. The nature of Middle Woodland societies in the L'Anguille Basin and surrounding areas needs to be better understood; at the present, our knowledge of the period is comparatively minimal.

Late Woodland (ca. 1500 - 1200 B.P.).

Late Woodland occupations in northeast Arkansas are identified primarily by the presence of Barnes and Baytown ceramics, series that first emerged during the Middle Woodland. Additional diagnostics include Wheeler Check Stamped and Coles Creek Incised, reflecting influences from further to the south in the Mississippi Alluvial Valley. The relationship between local, northeast Arkansas Baytown societies and the Coles Creek cultures to the south remains unexplored, although Phillips (1970:914) has cautioned about "the hazards of differentiating Coles Creek from Baytown period complexes." Some degree of interaction between Coles Creek and Baytown groups appears to have occurred in northeast Arkansas, and the nature of this interaction has been suggested by recent research at the Toltec site (Rolingson 1982; Morse and Morse 1983:195-197).

The great Toltec mound group near Little Rock, occupied from ca. A.D. 700-1000,

was undoubtedly a major regional center during the Late Woodland (Rolingson 1982). Ceramic assemblages identical to those found at Toltec have been observed on several sites in the Western Lowlands, in the lower Cache River basin (House 1975b:158-159), and Phillips' (1970:916-917) concept of a Toltec Coles Creek phase, in central and lower northeast Arkansas, appears to be viable. This has since been renamed the Plum Bayou phase by Rolingson (1982). Toltec appears to have served as a ceremonial center for populations over a fairly appreciable area, and may additionally have served as a trading center, attracting people from considerable distances. Few Toltec Phase sites are actually known from northeast Arkansas to the north and east of the lower Cache River Basin. Phillips (1970:914-916) has described Coles Creek period sites in this area as belonging to what he calls the Walnut Bend phase, which appears to be basically late Baytown assemblages with minor admixtures of Wheeler Check Stamped and Coles Creek Incised wares.

During the Late Woodland period, the foundations of the cultural adaptation known as Mississippian developed in the central Mississippi Alluvial Valley, and an increasing body of evidence points to northeast Arkansas/southeastern Missouri as the area of the emergence and initial spread of this development. Archeological excavations at the Hoecake site in the eastern Cairo Lowlands (Williams 1974:55-88), for example, recovered an extensive artifact and feature assemblage spanning the period from approximately A.D. 400-900 that was characterized by grog and shell tempered ceramics, Kersey clay objects, moderate sized villages with rectangular and semi-subterranean houses, and conical burial mounds over subfloor log-lined tombs. Over the course of the Hoecake phase, grog tempering gradually gives way to shell tempering and a considerable range of paste and finish combinations are evident, indicating a great deal of experimentation (Williams 1974:86). Many of the specific characteristics traditionally equated with the Mississippian period appear during this phase, prompting Williams (1974:86) to note that "it is within the Hoecake phase that one can view the beginning of much of that which several hundred years later, became fully developed Mississippian culture." This position is echoed by both Morse (1982:28; Morse and Morse 1983:202) and Chapman (1980:137). These developments, it should be noted, occur well before the appearance of comparable assemblages in areas to the north such as in the American Bottoms, at Cahokia.

By A.D. 850 Mississippian populations began spreading into northeast Arkansas, as documented at Zebree and other sites of the Big Lake phase (Morse and Morse 1980, 1983). Archeological investigation of local Late Woodland sites thus offers the opportunity to examine the emergence and expansion of Mississippian culture in the central Mississippi Alluvial Valley. Sites of this period may be present in the L'Anguille basin area, and would be of considerable importance if found in good condition. Beyond the obvious importance of documenting the nature of this transition, an additional research topic includes looking for possible connections between the Coles Creek cultures further to the south in the Alluvial Valley, and the developments in the southeast Missouri area. The ultimate source for much of what is called the "Mississippian" adaptation, it is argued, may well lie in this direction (James B. Griffin, personal communication 1986).

MISSISSIPPIAN OCCUPATIONS (ca. 1200 - 300 B.P.)

Early Mississippian (ca. 1200 - 1000 B.P.)

By some time around or shortly after A.D. 850, Mississippian culture was in place in the northeast Arkansas area. Initial Mississippian occupations locally belong to the Hayti and Big Lake phases. Currently the best documented initial Mississippian assemblage comes from the Zebree site in northeast Arkansas (Morse and Morse 1980), which is the type site for the Big Lake phase. Big Lake components have been identified in the western part of the eastern Lowlands, along the St. Francis and Little rivers, although none are currently known from along the L'Anguille. Comparable materials have been described by Marshall (1965:42-69), who has provided a detailed description of an Early Mississippian component at the Kersey Site (23PM42) in Pemiscot County, Missouri, the basis for what he has described as the Hayti phase (see also Chapman 1980:241-244). Hayti Phase components occur in southeast Missouri and northeast Arkansas in the eastern part of the Eastern Lowlands.

While initial Mississippian settlement in the Eastern Lowlands is moderately well documented, virtually nothing is known about the initial Mississippian occupation of the Western Lowlands, in the L'Anguille Basin area. The expansion of Mississippian culture in the general region is an important subject for research, and the subject of some debate. A direct replacement of local Woodland Barnes and Baytown cultures has been advocated by some (e.g., Morse 1977), although arguments about Mississippian expansion through migration and conquest have been challenged in recent years (Smith 1984).

Middle Mississippian (ca. 1000 - 600 B.P.)

By A.D. 1000, Mississippian settlement in the northeast Arkansas area is characterized by a diversity of site types, including fortified ceremonial centers, smaller villages, and isolated farmsteads (Morse and Morse 1983). In the L'Anguille River area, Perino (1967) has documented the presence of an early Middle Mississippian cultural expression called the Cherry Valley Phase, which appears to date between roughly A.D. 1050 and 1150 (see also Phillips 1970:929-930; Morse and Morse 1983:241-246). Cherry Valley phase sites are located predominantly on the western side of Crowley's Ridge, between Cherry Valley and Harrisburg, and include small ceremonial centers with mounds and charnal houses, small villages, and isolated hamlets. Most sites occur in the "uplands" along Crowley's Ridge, although isolated hamlets and small villages may occur along the main channel of the L'Anguille River (Phyllis A. Morse: personal communication 1986).

Intensive agriculture appears to have become securely established by this time. Interestingly, earlier Mississippian occupations in the immediate area do not

appear to have relied extensively on agriculture, at least as evidenced by carbon pathway (C3/C4) analyses (Lynott et al. 1986), although this finding is in need of additional confirmation before it can be unequivocally accepted. If the Mississippian cultural adaptation emerged in this part of the Mississippi Alluvial Valley, as has been suggested, adoption of intensive agriculture probably occurred here at a fairly early date. The study area can thus be viewed as something of a cultural laboratory for the analysis of subsistence change, as well as for the study of political and social evolution, topics of direct relevance to the emergence of Mississippian society.

Late Mississippian (ca. 600 - 300 B.P.)

Although numerous Middle and Late Mississippian assemblages are known from the Eastern Lowlands, on the opposite side of Crowley's Ridge, comparatively few later, post-Cherry Valley phase Mississippian sites are known from within the L'Anguille Basin. A similar pattern has been observed in the lower Cache River to the west (House 1975b:160-161), and much of the lower portion of the Western Lowlands may have been depopulated after ca. A.D. 1400 (Figure 17). At this same time, population nucleation was occurring to the east, along the Mississippi and St. Francis rivers. The reasons for these population movements are currently unknown.

During the later Middle Mississippian period and particularly in the Late Mississippian, settlement nucleation is increasingly evident throughout the northern portion of the Lower Mississippi Alluvial Valley. Fortified villages become common and farmsteads disappear in many areas (Morse and Morse 1983). This has been linked to increasing regional population density, and a concomitant expansion of warfare, arising in part over political rivalries, ultimately based on the control of important resources such as trade routes, agricultural lands, or hunting territories (e.g., Larson 1972; Smith 1978; House 1982). The apparent abandonment of much of the Western Lowlands may be related in some way to this pattern of regional population nucleation; the area may have been a buffer between major political entities, although this is admittedly speculative. Resolving the nature of settlement patterns during the Mississippian in the general region has been recognized as a major research challenge:

> Pinpointing of the fortified ceremonial centers and their satellite villages, hamlets, farmsteads, and collecting stations and a testing and excavation program to obtain definitive information from them is much needed. Such a program is actually a major emergency; it cannot wait much longer due to the fact that agricultural land-Figure 17. Major Late Mississippian Phases in Northeast Arkansas.forming practices are destroying the evidence a hundred times faster than archaeological research is recovering it (Chapman 1980:259-261).

In the L'Anguille River area, the description of local Mississippian assemblages,

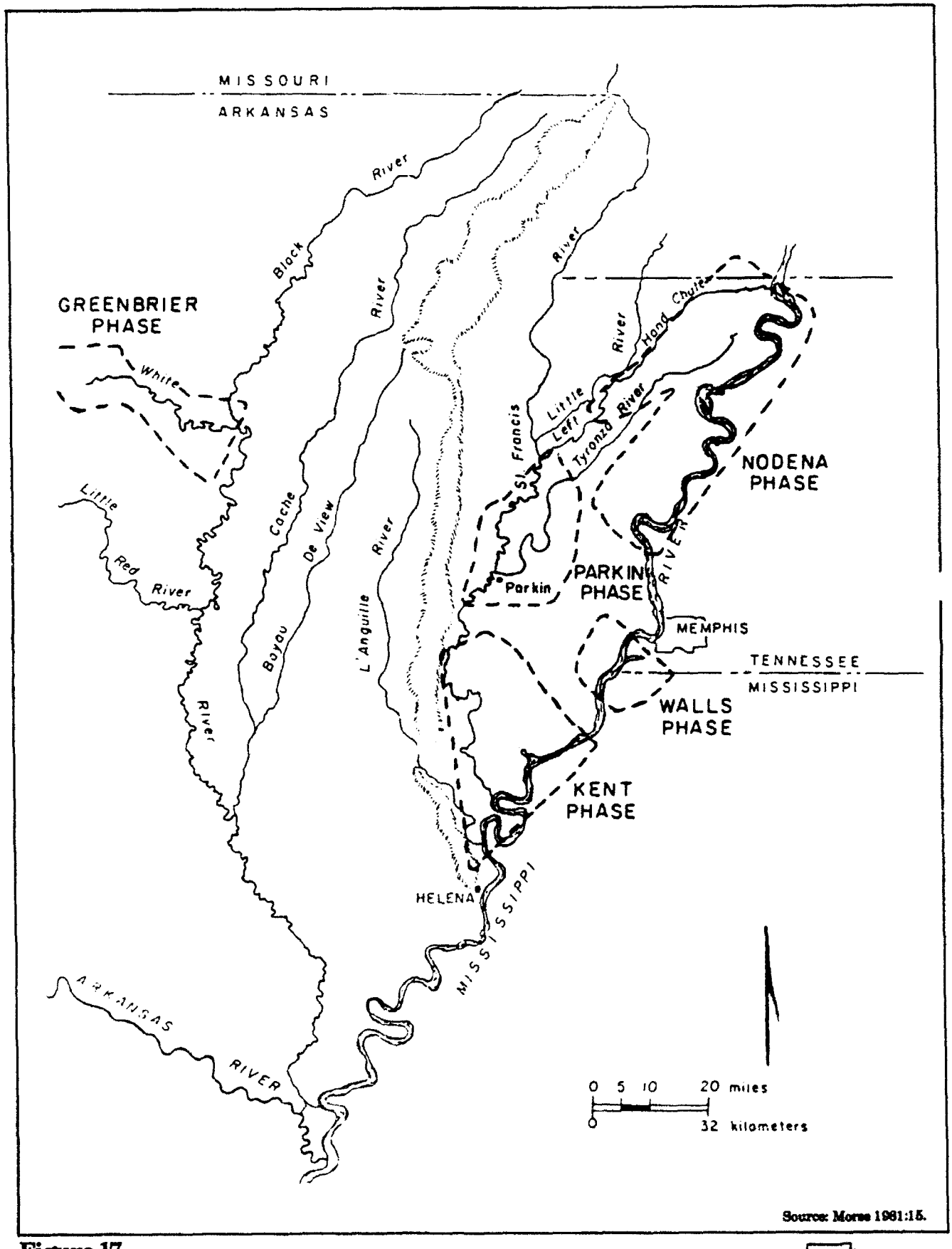


Figure 17.
Major Late Mississippian Phases in Northeast Arkansas.

ARKANSAS
L'Anguille River Survey Project

focused towards the resolution of effective chronology and phase definition is thus an important research topic. Effective chronological control will be essential to the eventual resolution of local cultural history. Examining questions about the nature of local Mississippian settlement systems, and determining the nature of relations between centers and outlying settlements, thus will also necessitate fairly fine-grained chronological control. Finally, at the regional level, the nature of interaction between major polities also warrants examination.

PROTOHISTORIC OCCUPATIONS

Protohistoric occupations in the northeast Arkansas area have been summarized by a number of authors (e.g., Phillips et al. 1951; Morse and Morse 1983). Initial European contact in the general project area occurred in 1540, when the DeSoto entrada crossed the Mississippi River, and encountered complex Mississippian polities in the Eastern Lowlands of northeast Arkansas. The societies described by the DeSoto chroniclers offer valuable ethnographic analogs for the late prehistoric Mississippian occupations in the region (Brain 1985). Research themes appropriate to the study of these early historic period Indian populations, and the archeological record of EuroAmerican settlement, have been detailed in the *State Plan for the Conservation of Archeological Resources in Arkansas* (Stewart-Abernathy and Watkins 1982); much of this effort focuses on pre-A.D. 1900 settlement.

Historic settlement in the northeast Arkansas area was minimal until after 1800, although Spanish, French, and other EuroAmerican travelers are known to have passed through the area prior to this time. A study of the ecological associations of early historic settlements in southeast Missouri, by Lewis (1974), has relevance to work in the L'Anguille River project area, which is characterized by a similar environmental setting. Using Government Land Office survey data, Lewis (1974) produced a reconstruction of early historic era vegetational communities, and used it to resolve ecological associations of both prehistoric and early historic period archeological sites. Settlement over time, he found, consistently favored higher, better drained terrain, characterized by a sweetgum-elm biotic community. Much of the L'Anguille project area, given this, was simply too low and poorly drained to have been an attractive area for early settlement.

Only after 1900 did the first large scale construction of drainage ditches and canals occur, resulting in the rapid transformation of the landscape. The rise of modern agriculture has resulted in the widespread destruction of archeological resources. Maps of archeological sites from the late nineteenth century illustrate not only mounds and fortification walls and ditches, but also house outlines. Within a few seasons of plowing, however, much of this evidence had disappeared. Records of early settlement are thus an important means by which prehistoric occupations may be documented. Comparatively little is known about these early settlers, who Morse (1980) has described as "the forgotten pioneers."

VI. THE L'ANGUILLE RIVER IN HISTORICAL PERSPECTIVE

Phyllis A. Morse

INITIAL EXPLORATION

The first Europeans to explore in the L'Anguille drainage area were members of the De Soto expedition of 1539-1543. The Spaniards spent four years travelling through the interior of the Southeastern United States (Bourne 1904). Half of this time was spent in Arkansas (Hudson 1985). The exact route taken is still not resolved, but cooperative research involving archaeologists, geographers, ethnologists, and historians is providing some very plausible and detailed itineraries. Two major routes have been proposed for Arkansas, based on where the expedition crossed the Mississippi River (Morse and Morse 1983:306). The Swanton route (Swanton 1939:249) chooses the L'Anguille River drainage as the site of the Province of Casqui. However, the more recent route proposed by the Hudson research team and Morse and Morse places Casqui on the St. Francis River, centered near Parkin.

After the De Soto expedition left the Province of Casqui, they stayed a few days at Quiguate. They then crossed through a swampy wilderness to find the province of Coligua. It was then when Hudson (1985) and Morse and Morse (1983: Figure 13.2) think De Soto and his men crossed the L'Anguille.

> ...they took the trail of Coligua which was not peopled in the intervening country. Friday, August 26, they left Quiguate in search of Coligua and passed the night by a swamp, and from swamp to swamp they made a journey over four swamps and days' marches... (Ranjel in Bourne 1904:I:146).

The L'Anguille drainage is interpreted as one of these four swamps crossed during that four day period, with the area being uninhabited at that time.

No recorded Europeans then entered the Central Mississippi Valley until 1673, when Jolliet and Marquette came down the Mississippi River to the mouth of the Arkansas (Thwaites 1900). The Quapaw already possessed such European goods as beads, knives and hoes. They greatly desired guns and powder. La Salle contacted the Quapaw nine years later, and Henri de Tonti established Arkansas Post in 1686. When remnants of La Salle's shipwrecked colony made their way from the Texas coast to Arkansas Post, they found several French trappers already living with various tribes. By the end of the 17th century, the L'Anguille area was undoubtedly involved in the European trade network. Deerskins were the main export from Arkansas Post for over 100 years. The L'Anguille would have been in the Quapaw hunting territory.

The name L'Anguille first appears on a map dating to 1688, although it is shown instead of the St. Francis River (Tucker 1942: Plate IX). The place name L'Anguille ("eel" in French) must have been given by members of the La Salle expedition or the Tonti rescue party. This map was drawn by the Royal Hydrographer in Canada, Jean-Baptiste Louis Franquelin. Franquelin was originally a draftsman for La Salle, and based his 1688 map on earlier La Salle maps (Tucker 1942:4).

After the initial European discovery, Arkansas alternately was claimed as a possession of Spain ("Florida") or France ("Louisiana"). Both used the native American groups as allies in their wars with the British. During this time, smallpox greatly reduced the native populations. Spain acquired Louisiana again in 1762. Disrupted native American groups such as Delaware and Shawnee began moving west of the Mississippi. Cherokee began moving to the St. Francis drainage in 1795. Stringent religious and political requirements kept most American settlers from trying to move to Spanish territory until these strictures were eased at the end of the 18th century.

EARLY HISTORY: 1800-1860

The Jefferson Purchase of 1803 acquired Louisiana territory for the United States, and the area finally was open for settlement. Arkansas Post was taken over by government traders. Quapaw, Delaware, Chickasaw, and Osage all traded there. Arkansas Post became the capitol of Arkansas territory in 1819. It then had a population of about 60 families. Little Rock became the capitol in 1820.

The military Road from Memphis to Little Rock was constructed in 1829 (Chowning 1954:7). The construction of this road greatly facilitated immigration to Arkansas. The Military Road followed an older Indian trail. It crossed the St. Francis River near the boundary of St. Francis and Cross Counties, crossed over Crowley's Ridge, and reached the L'Anguille River by Taylor's Creek. Immigrants began to settle near this road. A mail route was established between Memphis and Little Rock.

The government used the Military Road to move Choctaw and Chickasaw Indians from Mississippi to Oklahoma in the 1830's. The Cherokee who already were living in Arkansas also ceded their lands and moved to Indian territory. The Quapaw had given up much of their territory as early as 1818, and ceded the final two million acres in 1824. The Native American population was essentially eliminated from Arkansas by 1840.

In 1829 there were only 40 families in what was to become Lee County (Goodspeed 1890:568). Seven new families came from Illinois in 1835 and settled west of the L'Anguille. These population figures are representative of the sparse numbers of residents present in the new territory. Americans lived in dispersed settlements of isolated farms, rather than in villages as the

French preferred. Such an isolated family settlement was clearly described by Gerstaecker on the L'Anguille in 1838.

Frederick Gerstaecker left Germany in 1837 to explore and enjoy the untamed areas of the Far West (Gerstaecker 1884). He spent May to October, 1838 in the L'Anguille bottoms, staying with a Mr. Saint and his family. Gerstaecker greatly enjoyed hunting, particularly bear and deer. He described the L'Anguille bottoms as:

> ... swamps and thorns, creepers, wild vines, fallen trees, half or entirely rotted, deep and muddy water-courses, bushes so thick that you could hardly stick a knife in them, and ...clouds of mosquitos and gnats, not to mention snakes (Gerstaecker 1884:134).

Mr. Saint could be considered a typical Arkansas pioneer. He lived in a two pen log house with two fireplaces (Gerstaecker 1884:135). He farmed about five acres of corn, and a little wheat. There was a separate stable building, a corn crib, and a gristmill. The L'Anguille River was close to the house. A smokehouse and a well were also on the property. Mr. Saint also owned about 200 head of cattle, which ran loose in the woods. The closest neighbors were about eleven miles away. This pioneer American farmstead is somewhere right on the banks of the L'Anguille.

Gerstaecker helped Mr. Saint pen up his cattle throughout the summer. He was stricken with the "ague", which was probably malaria, several times. Several visitors came by during this time including a Methodist preacher and two gambling scalawags passing counterfeit money. A cattle buyer came and purchased most of Saint's stock. He then sold his holdings on the L'Anguille and moved to Oil Trough, Arkansas.

St. Francis County was organized in 1827. At first court was held in a private residence, and then Madison became the county seat in 1841. In 1874 Forrest City became the county seat. All the older court records were destroyed in 1862 (Goodspeed 1890:455).

The earliest settlers in St. Francis County date to 1819. William Strong was its best known early settler. He built a four story high building with 20 rooms and a veranda 12 miles north of the Forrest city area in 1827. It was built on the site of an Indian village, on a trail to Arkansas Post. Mr. Strong amassed large amounts of land through dubious means (Goodspeed 1890:453).

Poinsett County was formed in 1838 (Goodspeed 1890:570), two years after Arkansas became a state. Bolivar was the first county seat. Harrisburg became the county seat in 1856. The courthouse was destroyed by fire in 1872, so the original county records were lost. Settlement of the county began in the 1820s. It had a relatively sparse population until the 1840s, although as late as the 1880s yet was still a rural backwater. In 1882 Edward Palmer stayed in

Harrisburg while surveying mounds for the Bureau of Ethnology (Palmer 1917:396). His hotel had wretched beds, badly cooked food, and drinking water with insects in it. The city population was about 150. No saloons were allowed, but Palmer noticed a large crowd near one grocery on Saturday night.

Cross County was formed in 1862, out of portions of Poinsett, St. Francis, and Crittenden Counties (Goodspeed 1890:321). The town of Wittsburg was its first county seat. The first known settler in Cross County was Samuel Filligan, who was there in 1798 (Goodspeed 1890:322) on Cooper's Creek, two miles northwest of Wittsburg. Much of this area of Cross County was parceled out in Spanish land grants. Vanndale became the county seat in 1886. Wynne is the present administrative center of the county.

Lee County was formed in 1873, from portions of Phillips, Monroe, St. Francis, and Crittenden Counties (Goodspeed 1890:566). Marianna was selected as the first county seat, and remains such today. Marianna is located right on the L'Anguille River at the head of steamboat navigation.

In the 1850s the L'Anguille area in the western portion of St. Francis County attracted many settlers with its loamy soil. Improved land sold for $18 to $40 per acre (Chowning 1954:10). Unimproved lands went for $5 to $12 per acre. Cotton and corn were the major crops, with yields of a bale of cotton an acre and 65 bushels of corn per acre being the average. Cattle raising was also extensively practiced. Sawmills were common, exploiting the resources of oak, walnut, and hickory.

The steamboat Plow Boy was the first one recorded to go up the L'Anguille, in 1857 (Wall 1948:227). It carried hides, game and fur to Memphis. Navigation was difficult on the L'Anguille, with large branches, piles of logs and driftwood blocking passage. The head of steamboat navigation was the site of present day Marianna. Smaller keelboats carried goods further upstream.

THE CIVIL WAR AND AFTERMATH: 1860-1900

Two skirmishes took place on the L'Anguille during the Civil War. Col. Robert Rambauer, First Missouri Infantry, reported on July 27, 1862 that a company of rebels was camped on L'Anguille Lake four miles southeast of Marianna (War of the Rebellion 1885 I,XIII:175). They were attacked by howitzers and fled. Five hundred rebels were hiding on "the half island formed by the St. Francis and the L'Anguille Rivers." These men scattered and escaped the Union forces.

Lt. Col. Oscar H. LaGrange, First Wisconsin Cavalry, reported on a skirmish at L'Anguille Ferry August 2-3, 1862 (War of the Rebellion 1885 I,XIII:202). A Major Eggleston was attacked near the ferry, which was located about eight miles from Marianna, Arkansas. Six hundred Texas Rangers under Colonel

Parsons attacked the Union soldiers at daylight. The Union forces were greatly outnumbered, and 11 were killed, 33 wounded, and 30 captured. The Confederates were well equipped with wagons and ambulances, and burned those of the Union. They retreated towards Clarendon.

Col. LaGrange came to rescue the Union troops, crossing the L'Anguille "by a ford eight miles above the ferry"(War of the Rebellion 1885 I,XIII:202). The Confederates had already left, taking with them stock and the Regimental desk and papers.

Major Eggleston's report of the L'Anguille Ferry skirmish adds additional information on Civil War Arkansas (War of the Rebellion 1885 I,XIII:203-204). Large numbers of blacks were joining the Union forces in 1862, and equipping them was difficult. He was ordered to move to Marianna from Madison, and camped on the north bank of the L'Anguille River August 2. He had 27 wagons, 130 men, and 100 horses and mules. There was only one small boat to ferry them across. He camped "one half mile" from the river. Reports from escaped Union prisoners after the skirmish described at least four Confederates being buried in a nearby cornfield. The Union soldiers were armed with Belgian rifles and Springfield muskets, while the Confederates had mostly double barreled shotguns.

Several outlaw gangs formed during the Civil War, preying on both sides. One notorious group, John Murrell's raiders, had its headquarters 1.5 miles northeast of Marianna at Lone Pine. Murrell had a camp and blacksmith shop there. He preyed on river shipping after the war. There are still rumors of buried treasure at this location.

The first railroad bridge to cross the Mississippi was built in 1892, when the Frisco bridge was built near Memphis. Before this, ferries were used to move passengers and goods. In 1858, the Memphis and Little Rock railroad ran from Hopefield, Arkansas to Madison. It did not cross Crowley's Ridge. Another line ran from Little Rock to DeValk Bluff, on the White River. The area in between was crossed by stagecoach or horseback.

General Nathan B. Forrest engineered the linkage of the two railroads after the Civil War (Chowning 1954:16). He hired nearly 1000 Irish laborers in 1866, and had them cut through Crowley's Ridge between Madison and what is now Forrest City. The four mile long area was graded and linkage between Little Rock and Memphis established by 1869. Forrest City itself began while it was chosen as the site of the commissary built for the railroad laborers. The same line is in use today, and is now owned by the Chicago, Rock Island, and Pacific railroad. The L'Anguille River is crossed by this railroad some eight miles southwest of Forrest City.

Marianna, Arkansas was named after Mary Ann Harland, who sold the land for the city's first location. This site was abandoned in 1857, and the city moved three miles downstream where the head of navigation of the L'Anguille was situated. The growth of Marianna is representative of the farming towns in

the delta of eastern Arkansas.

The city of Marianna was laid out by Harry Pharr, a civil engineer from Memphis. He laid out the first streets in 1870. A newspaper, the Marianna Index, began publication in 1874. Two physicians were practicing there by that time, as well as one attorney, a druggist, and a barber. There was one general store (Rives 1970). Yellow fever was the cause of a quarantine in 1879. Guards were posted to prevent anyone from entering the town. The fever did not prevent the growth of Marianna, so the quarantine must have been effective.

By 1889 Marianna had a population of 1,500. There were 25 businesses in town, including six general stores, three druggists, two milliners, and several restaurants (Rives 1970). A livery stable, two hotels, one bank, and four churches were present. Industries included blacksmith shops, steam-powered gins, and a large lumber mill. In 1905, Marianna began to build concrete sidewalks and acquired an electric light plant. A smallpox epidemic broke out in 1906, and a camp was placed south of the town where 70 persons were quarantined. Streets were paved in 1908, and a sewer system laid out. Population grew to 4,810 by 1910.

THE MODERN ERA: 1900 - PRESENT

Arkansas railroads in the early 20th century were one of the state's biggest businesses (Dew 1970:327-344). Large trunk lines such as the Iron Mountain Railroad crossed the state. Small independent lines were of regional importance. Industries, such as mines and lumber mills, owned their own roads. A fourth category was the top line, which originally was a private industrial-owned line, but became a common carrier. They were regulated by the Interstate Commerce Commission (ICC) just like the larger railroads. These top lines were eligible for federal rebates on shipping and proved very profitable to their owners. In most cases, these owners were lumber companies.

The L'Anguille River Railway was one such line. It was only 1.7 miles in length (Dew 1970:343). It was owned by the Indiana Arkansas Lumber and Manufacturing Company It received two cents per hundredweight subsidy from the ICC, or $8 to $12 per carload of lumber. These subsidies proved extremely profitable. The ICC struck down rebate arrangements in 1910. The L'Anguille Railway had revenues of only $744.00 in 1916, and soon closed down.

The agricultural depression after World War I and the overall depression of the 1930s greatly affected the agricultural economy of Arkansas (Harrison 1954:356). Grain prices declined and drainage project taxes could not be paid. In particular, millions of acres in the White, Cache, and L'Anguille drainages became the property of the state.

Individuals could settle this state land by making a small clearing and building a home. They could then gain title to this land with a very nominal investment. Many small households surrounded by 20 to 40 acres plots date to this time period. It was discovered that the bottomland soils of the Cache and L'Anguille could support rice growing, and by World War II rice combines and rice driers were common in this area. Land holdings became consolidated into larger and larger entities. Fewer people were needed to work on the farms. Cotton in particular had been planted and picked by hand. Even after mechanized cotton pickers were in use, weeds were removed by hand hoeing. The increased use of agricultural chemicals put much of the rural population out of work. Many of these people moved into local towns such as Marianna.

Gordon Morgan, a black sociologist on the faculty of the University of Arkansas, studied the racial problems in Marianna in the early 1970s (Morgan 1973). Lee County, Arkansas had 44.3 percent of its population below the poverty line in 1970. This figure was one of the highest in the nation. Morgan attributed this to the poor schools and a lack of job training available to blacks (Morgan 1973:2). Poor housing and absentee landlords also contributed to the racial problems. The titles of the chapters reflect Morgan's interpretations of the causes of continuing poverty in the area, e.g., "The Public High School as a Segregationist Academy" and "Lee County as an Embarrassment to the State" (Morgan 1973).

In 1973 there was considerable unrest in Lee County. A clinic staffed by VISTA doctors was trying to reduce the infant mortality rate and improve the public health. They were denied privileges at the local hospital. Private schools were built as desegregation took place. It would be interesting to see a 15 year update on this sociological study, to see whether economic and social conditions have improved along the L'Anguille. The L'Anguille drainage area still is based on an agricultural economy, with rice, cotton, soybeans and wheat as the major crops. The rich bottomland soils remain very productive. The large agribusiness firms present today evolved from the small five acre subsistence based corn patches of the pioneer settlers.

VII. SURVEY AND ANALYSIS PROCEDURES

INTRODUCTION

In this chapter, procedures used during the L'Anguille River Channel Cleanout project are described in detail. These encompass the specific field, and analytical procedures that were followed in each phase of the investigation. Because the 1987 L'Anguille River survey was the first phase in a complex, multi-stage effort, project activity was devoted to locating and thoroughly documenting sites and assemblages within the project right-of-way. This orientation was designed to produce a data set useful to land use management concerns and of value in synthetic analyses to be undertaken in subsequent stages of the project, once testing had been completed at all sites in the right-of-way.

The 1987 field investigations consisted of an intensive survey of the entire project area, coupled with limited testing at sites along miles 0 to 16. A total of 137 sites were located in the right of way during the survey, with another 85 located in close proximity to it. These latter sites were thoroughly documented, to ensure they did not extend into the right-of-way, but require no further work (save avoidance) in subsequent stages of the project. One m test units were opened at 47 of 56 sites located along channel miles 0 to 16, and are proposed for the 81 sites found in the right-of-way between channel miles 16 and 90. Following completion of the 1 m test units at all intact or nondestroyed sites in the right-of-way, final testing at selected sites was to be accomplished, as warranted, to determine their National Register Eligibility. Specific recommendations are advanced for additional testing at 22 of the 56 sites discovered along channel miles 0 to 16 in this volume. Recommendations for field activities at sites along channel miles 16 to 90 will be advanced upon completion of the 1 m testing program.

The results of all of the survey and testing work in the right-of-way were originally to have been incorporated into a single comprehensive document. The original Scope of Work was modified by the Memphis District, Corps of Engineers during best and final contract negotiations, however, with the result that subsequent phases of the L'Anguille River testing, analysis, and reporting were placed into separate contract phases and reports. This resulted in a substantial reduction in the proposed analytical and reporting effort, and the deferral of the primary geomorphic examinations to later stages of the project. This proved to be a highly effective contracting procedure. The experience and information gained during the first season of fieldwork led to the development of efficient testing and geomorphic programs, which are to be undertaken in subsequent stages of the investigations.

BACKGROUND AND LITERATURE SEARCH

The first work done upon notification of contract award was to begin assembling site and environmental data for the L'Anguille River basin. This activity was designed to collect available information on previously recorded archeological sites in the study region, as well as background environmental data, to facilitate the field and reporting effort. U.S.G.S. 7.5 minute quadrangle sheets, Soil Conservation Service County Soil manuals, and Corps of Engineers 1:5000 project aerials encompassing the project area were obtained. These were used to record site locations and environmental conditions during the project, and photocopies of relevant portions of these three map types accompany each of the 222 site forms produced during the project.

The background and literature search additionally entailed the examination of archaeological records and literature at a number of repositories in Arkansas, including at the Arkansas Archeological Survey and the State Historic Preservation Office. A site files search was contracted with the Arkansas Archeological Survey Registrar's office, and information was obtained on all sites previously recorded within 1000 m of the main channel of the L'Anguille River. Site forms and locational data on a total of 103 sites were obtained, 19 of which lay in the direct impact zone (i.e., within ca. 100 m of the L'Anguille channel). An additional 85 sites had been previously recorded between 100 and 1000 m of the channel, many near the margins of the right-of-way. The locations of all of these sites were marked on the field maps prior to the survey. All of the site areas recorded in the right-of-way, as well as the locations of all sites at the margins of the right-of-way, were revisited during the 1987 fieldwork to determine their extent and condition. Revisits were undertaken at all sites in the right-of-way as part of routine survey coverage. Revisits to sites located at the margins of the right-of-way were undertaken to see if these sites extended into the right-of-way. In all, 85 sites were examined and recorded along the margins of the right-of-way, many of which were previously recorded sites.

A listing of previously recorded sites visited during the present project is given in Table 4. A number of the sites recorded prior to ca. 1970 proved difficult to relocate. Some had been destroyed by land-leveling, and several had apparently been originally misplotted. Where the original site location was in doubt, a new number was assigned. Given the ongoing pace of land modification in northeast Arkansas, which has continued unabated since first documented in detail by Scholtz (1968) and Medford (1972), the disappearance of many previously recorded sites under rice fields or fish ponds is not altogether unexpected. The current survey records must thus be viewed as representative of the surviving archaeological record in the basin as of the late 1980s.

By quadrangle, the number of previously recorded sites in the direct impact zone included: Marianna, Haynes, Forrest City, Hawkins, and Harrisburg quads (no sites); Wynne, Vanndale quads (1 site each); Hamlin, Central, and Cherry Valley West (4 sites each); and Powers Slough (5 sites). Compared with other areas of northeast Arkansas, this incidence of previously recorded sites is quite low.

Table 4. Previously Recorded Archaeological Sites in the L'Anguille River Basin Examined During the 1987 Survey Project.

Lee	St. Francis	Cross	Poinsett
3LE024	3SF15	3CS012	3PO017
3LE101	3SF60	3CS017	3PO020
	3SF80	3CS018	3PO097
		3CS022	3PO098
		3CS046	3PO148
		3CS047	3PO157
		3CS048	3PO199
		3CS049	3PO201
		3CS050	3PO202
		3CS051	3PO203
		3CS080	3PO204
		3CS081	3PO318
		3CS083	
		3CS093	
		3CS121	

There are several reasons for this low incidence of previously recorded sites. First, as detailed in Chapter IV, the L'Anguille channel margins have seen little formal survey by either amateurs or professionals at any time in the past. The only large scale project undertaken in the basin prior to the present effort was the opportunistic 1961-1962 Ford-Redfield survey. Most of the known sites in the direct impact zone, in fact, were reported by the Ford-Redfield survey, and had not been revisited since. Second, the survey corridor (i.e., the area within 100 m of the main channel) along much of the drainage is low seasonally to permanently flooded swampland, and hence less accessible than the surrounding terrain. Large portions of the L'Anguille project right-of-way in Lee and St. Francis counties, which have seen comparatively less drainage and clearing activity than the channel margins in Cross and Poinsett counties, were flooded and inaccessible. Throughout the northeast Arkansas lowlands site density tends to be much higher away from the river swamps, on the better drained terraces and uplands. Third, the scarcity of large Mississippian or other prominant archaeological sites in close proximity to the channel has precluded much direct fieldwork in this area. Fourth, the L'Anguille Basin does not appear to have attracted amateur collectors, at least those who record sites. This is particularly true in the southern part of the basin, in Lee and St. Francis counties, something that was to some extent reflected in the nature of the collections themselves. Sites in the southern part of the basin yielded a higher incidence of tool forms, and hence appeared to have been less heavily collected in the past (see pp. 93ff). Finally, the county with the fewest previously recorded sites in the project area, Lee County, was the furthest from the nearest Arkansas Archeological Survey stations, at Pine Bluff and Jonesboro. Given the general absence of large scale CRM projects in the L'Anguille basin prior to the present effort, the low incidence

of sites also reflects the degree to which the realities of travel time effect contemporary professional coverage.

The information recorded in the Arkansas state site files for the L'Anguille channel survey corridor, while useful, had to be viewed as incomplete. The locations of all previously recorded sites in the project right-of-way were therefore revisited, and when sites were found in these locations they were recorded and mapped like any newly discovered site. The Arkansas listing for the National Register of Historic Places was examined to determine if previously recorded sites were present; none were recorded in the immediate project right-of-way. Prior to undertaking the fieldwork, the Principal Investigator formally contacted archaeologists with the Arkansas Archeological Survey headquarters at the University of Arkansas, Fayetteville, and at the Pine Bluff and Jonesboro Survey stations, to inform them of the project, and to gain a better understanding of current research themes and become aware of significant unpublished data. During the project, historic maps and documents were consulted by Phyllis A. Morse, including USGS quadrangle sheets, early regional survey plats, and other cartographic sources. Finally, an informal component of the background search included routine consultation with local landowners about land use and history during the course of the project.

PALEOENVIRONMENTAL INVESTIGATIONS

A major goal of the L'Anguille River Channel Cleanout project was to delimit relationships between archeological site locations and specific landforms, to determine, among other things, areas likely to contain significant cultural deposits, and those areas unlikely to contain such deposits. Through a study of channel morphology and history, areas likely to contain deeply buried sites, or old enough to possess intact archeological deposits, were delimited for testing in subsequent phases of the project. During the fieldwork Drs. Paul A. Delcourt, Hazel R. Delcourt, and John E. Foss visited the project area and offered their advice on the possibility of finding buried sites. Following field visits to selected areas of the corridor, Dr. Paul A. Delcourt went over all of the maps of the project area and noted locations potentially favorable for buried sites. These locations were mapped on Corps of Engineers project aerials, and have been recommended for deep site testing (using a backhoe and sample screening) in subsequent phases of the project.

The preliminary geomorphological investigations included archival and technical literature review of information, as well as a field data collection phase. Soil samples were collected from twelve sites in the southern part of the right-of-way by Dr. John E. Foss, using an three inch bucket auger (Appendix IV). While funding for a five week program of backhoe data collection and analysis was initially proposed, this portion of the project was canceled during the best and final negotiations, and was rescheduled for later phases, using the results of the preliminary data collection effort to more efficiently allocate resources. That is,

the purpose of the initial geomorphological investigations was to develop guidelines to ensure that the deep testing program eventually adopted in the basin would be directed to landforms likely to contain significant cultural resources, and not to areas too recent or disturbed to contain such resources.

In conjunction with the geomorphological investigations associated with the L'Anguille River Channel Cleanout project, palynological and paleoenvironmental analyses were conducted under the overall direction of Drs. Hazel and Paul Delcourt (Chapter III, Appendix III). Following evaluative and sampling efforts at several locations, a pollen/plant-macrofossil core was obtained from Hood Lake in the vicinity of the northern part of the L'Anguille Basin that helps to document Holocene vegetational, climatic, and hydologic conditions in the project area. This column, supported by ten radiocarbon dates, provides a paleoenvironmental benchmark against which local prehistoric occupations may be evaluated. The results of this analysis can be used, in conjunction with the results of future deep site geomorphological and archeological investigations, to develop a broad picture of the landforms and paleoenvironments occupied by the past inhabitants of the L'Anguille Basin. Preliminary inferences about the relationship between paleoenvironments and human settlement are advanced in Chapter VIII, using the archaeological assemblage data collected in the current investigations.

FIELD PROCEDURES EMPLOYED DURING THE 1987 INTENSIVE SURVEY

A major emphasis of the 1987 fieldwork was the collection of data permitting the careful documentation and description of project sites and assemblages. The specific purpose of the intensive survey was to carefully examine the L'Anguille River Channel Cleanout project area with the objective of locating and providing documentation on the boundaries and general character of all encountered cultural resources, and using this data to advance cultural resource management recommendations. The data that was collected has been summarized in this report, and in the *Final Data Appendix and Catalog* volume (Anderson 1988), the completed Arkansas Archeological Survey site forms, and in the site data cards and project maps produced and submitted in conjunction with this report.

Actual fieldwork during the L'Anguille River Channel Cleanout project fieldwork was conducted in two parts, a site discovery/survey phase, and an intensive data collection phase. The site discovery phase entailed the survey of approximately 6,900 acres of land within 300 ft (ca. 100 m) of the main channel of the L'Anguille, on both sides of the river, for the first 95 channel miles. The site discovery phase was conducted first, when ground cover was minimal, to maximize the possibility of detecting sites. This work included the reexamination of known sites in the right-of-way as well as the discovery and documentation of new sites. A total of 222 sites were found during the survey, 137 in the right-of-way, and another 85 outside of it (see Table 1). The location and boundaries of each site were

documented at this time. Controlled sample or general surface collections, systematic shovel testing, and boundary definition activities were undertaken each of these sites. In all, intensive sample surface collections were made at 45 sites, 9 saw systematic shovel testing, and 172 locations saw controlled general surface collection (including later collections at some sites previously collected using the sampling procedure).

Following the completion of the site discovery phase, a limited testing and data collection phase was conducted at each demonstrably non-destroyed site found within project miles 0 to 16. A 1 m test unit was opened at each site, followed by additional controlled data collection (surface collection or systematic shovel testing), datum placement, and mapping, as warranted. In all, 1 m test units were opened at 47 of the 56 sites located in the right-of-way in channel miles 0 to 16 (the remaining sites were either recent or destroyed). Descriptions of specific procedures employed during the site discovery/survey and the testing/data collection phases of the project are provided below.

Site Discovery/Survey Phase Field Procedures

The site discovery phase entailed two major tasks, each with specific methodologies: (1) site discovery in wooded or overgrown portions of the study area; and (2) site discovery in open agricultural lands in the study area. Throughout the project, a *site* was defined as any grouping of five or more non-modern (i.e., greater than 50 years old) historic or prehistoric artifacts from surface context within an area 20 X 20 meters in maximum extent in open areas, or any positive shovel test in wooded or overgrown areas. Five or less artifacts from within larger areas were considered *isolated finds*. In all, 209 sites and 21 isolated finds were initially recorded. Because the Arkansas Archeological Survey does not maintain a separate isolated find category, 13 of the isolated finds were later assigned site numbers (bringing the project total to 222 sites), and the remaining 9 isolated finds were added to existing site inventories (these artifacts having been found within ca. 50-75 m of the boundaries of previously recorded sites). All isolated finds were marked on the project maps and the artifact(s) were collected, with the information receiving full site documentation.

Site Discovery in Wooded Areas. The major site discovery technique employed in areas with greater than 50 percent ground cover was shovel testing using a 30 m grid system. A 30 X 30 cm shovel test was excavated to at least 50 cm at each 30 m along transects separated by 30 m in non-flooded areas. All fill was screened through 0.25 inch mesh hardware cloth. In overgrown, nonflooded wooded areas, one or more transects were walked on each side of L'Anguille River, ensuring 30 m transect coverage over the 300 foot width of the right-of-way (the number of transects employed depended upon ground conditions). The 30 m shovel test interval was paced; when sites were discovered and the interval was reduced to 10 m, this distance was taped. Significant natural and cultural features were regularly referenced to substantiate proper transect (and surveyor!) location. Transect and shovel test locations were marked on the appropriate quadrangle

maps and project blue-line maps.

Nine sites were discovered using the intensive shovel testing procedure, a comparatively low number given the extensive wooded terrain present along portions of the corridor, particularly in northern Lee and St. Francis counties. This was a reflection, however, of modern land use practices. Throughout most of the project area the terrain along the river margin had been cleared to near the river channel (except for a narrow ribbon of trees in some areas), or else was low, and hence flooded and densely overgrown in swamp hardwoods. Comparatively few areas of higher ground were found in an overgrown or wooded state. When such locations were encountered, they were sufficiently infrequent to warrant more intensive shovel testing (i.e., less than the 30 m interval) if sites were strongly suspected; several sites were found using such a procedure (i.e., more intensively shovel testing of highly favored areas).

All positive shovel tests (defined as tests yielding one or more demonstrably non-modern artifacts) were flagged. Each positive shovel test was recorded, and labeled surveyor wire flags were placed at the beginning and ending points of the site on each transect. These flags provided a starting point for subsequent, more detailed delineation of site boundaries. In practice, whenever only an isolated positive shovel test occurred (i.e., when artifacts were found in only one test along a transect), the area around the positive shovel tests was intensively examined using at least four more shovel tests, spaced at 10 m along cardinal directions. Site boundaries were flagged using plastic orange surveyors tape, and were carefully recorded on project maps to facilitate relocation during subsequent testing/data collection phases. All artifacts recovered were placed in a field bag and were labeled by project, date, personnel, shovel test number, and survey site number. The site flagging was similarly marked, and the project survey site number was used to mark the site on the project maps. A running record of daily activity with specific data on the work accomplished, the results, and methods used was maintained. In addition, each crew member maintained a shovel test log in which data on the excavated tests was recorded; this log included brief soil descriptions, artifact summaries, and other contextual information.

Site Discovery in Agricultural Fields. The principal site discovery technique in plowed fields or other open (i.e., heavily eroded) areas with greater than 50 percent surface visibility was pedestrian surface survey. This was accomplished along transects spaced a maximum of 30 m apart. In practice, given the use of two to four person survey teams, and the fact that each area was covered twice (radiating out from a vehicle and then back), the transect intervals were more typically 10 to 15 m. Pedestrian transects were oriented parallel to the L'Anguille River. When sites were located the extent of the scatter was carefully determined by close interval transect (ca. 10-15 m), and a decision was made (based on uniformity of ground cover and overall artifact density) as to whether a controlled sample circle or 100% timed collection was warranted.

Datum Placement, Mapping, Boundary Definition, Controlled Surface Collection, and Systematic Shovel Testing. At project sites subjected to controlled sample surface collection, systematic shovel testing, or test unit excavation, standardized

site documentation procedures were employed. These entailed the placement of a permanent site datum, the production of a site contour map, and the careful documentation of site surface, depositional, and environmental conditions. At sites where 100% timed collections were employed, site boundaries where recorded on project aerials, and surface, depositional, and environmental conditions were recorded. At locations where massively disturbed artifact scatters were found, factors decisively precluding the possibility of significant cultural resources were recorded.

Permanent datums consisted of two or three foot lengths of iron rebar driven to ca. 5 cm above ground level in wooded areas; for sites in plowed fields, the datum was established in the nearest woods margin. Datum stakes were marked with red plastic flagging tape and noted on project maps to facilitate subsequent relocation. These datum points were tied in, whenever possible, to permanent reference points in the area, such as standing structures, large trees, marked railroad or telephone poles, or other such features.

Mapping was conducted with a transit, 75 m tape, and a metric stadia rod. Standardized collection forms were used to record the elevation at each sample point. With these data it was possible to produce accurate contour maps of each site. Tapes were used throughout the project to deploy test units, and record their locations in relation to project datums. Site specific information was recorded by the mapping crew, including all information necessary for completing Arkansas State Site Forms. Ongoing or potential impact to the sites was also documented.

On sites located in open areas, typically within plowed fields in the project area, a controlled surface collection was made over the scatter until no further artifacts were encountered. In areas of uneven visibility, characterized by differential ground cover or erosional conditions, or where artifact density was extremely low (i.e., typically under 1 artifact per 10 x 10 m area), a 100% general collection strategy was followed. Collection time was recorded in person hours or fractions thereof, permitting some degree of intersite comparability. To ensure adequate surface coverage, the extent of each scatter was traversed by the project team using transects no more than 2 m apart. Using this procedure, it was possible to obtain complete (100%) collections from most of the sites so collected.

A probabilistic sample collection procedure was used on surface scatters characterized by uniform visibility and a moderate artifact density (i.e., typically more than 1 artifact per 5 x 5 m area). The sampling procedure entailed the collection of artifacts from equal-sized units dispersed over the site area using a randomly generated, probabilistically-based sampling frame. Use of such a procedure on sites characterized by uneven surface visibility or differential erosion would have resulted in skewed data, with delimited concentrations reflecting extent of crop cover or erosion rather than actual artifact concentrations. On such sites use of the timed, general surface collection procedure was more appropriate. Full documentation of collection procedures and results, including artifact catalog/inventories by provenience, accompany the project site forms.

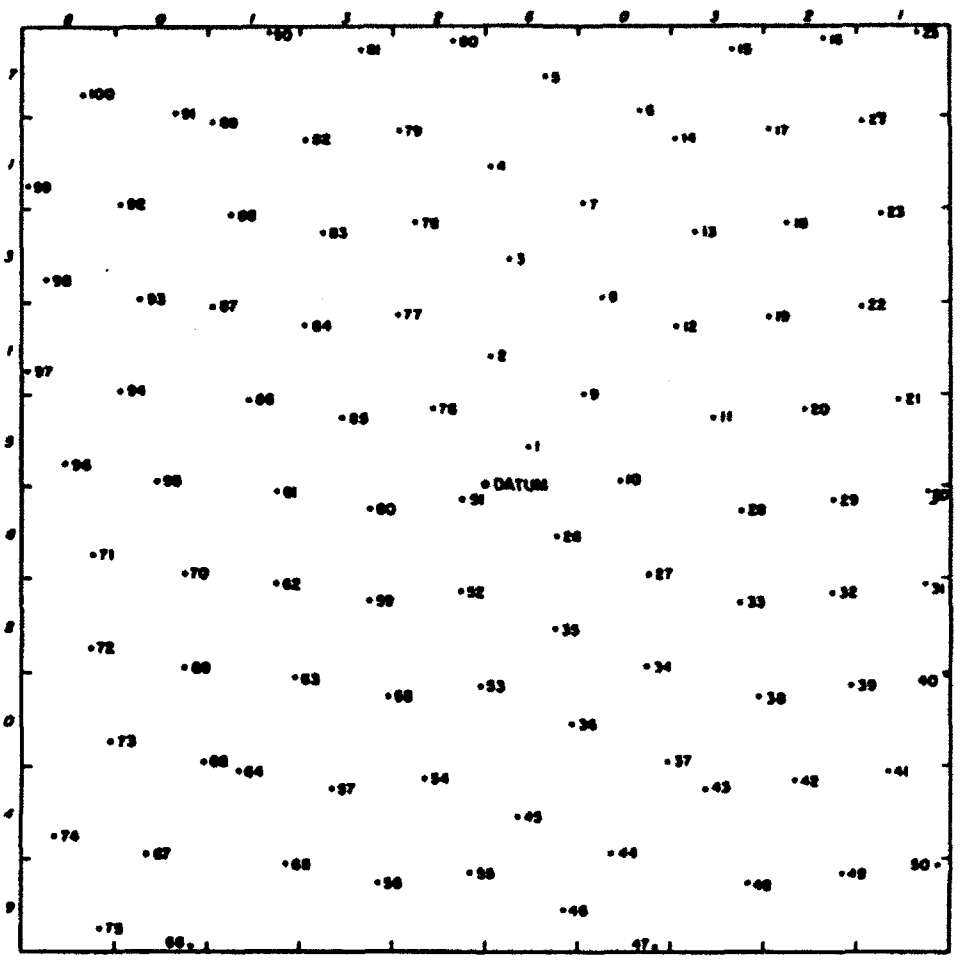
The surface sampling procedure employed a stratified systematic unaligned sampling frame (Haggett 1966:196-198; Redman and Watson 1970). The extent of artifact scatter was arbitrarily divided into grid blocks 10 m on a side, and one 3.38 m radius circle (ca. 6.75 m in diameter) was collected from each block. The resulting unit size, ca. 36 square meters, provided a 36 percent sample fraction of site area from each grid. The use of a stratified systematic sampling scheme ensured even coverage, while the use of the unaligned unit dispersion procedure ensured that the actual collection points were not dispersed at regular intervals. The procedure thus provided for even coverage while avoiding possible periodicity in the data. This technique provided a representative, standardized artifactual (and areal) sample from the site surface, useful not only for the delimitation of intrasite patterning and specific assemblage parameter estimation, but also of value in intersite comparative analyses.

The collection points were predetermined in the lab and implemented in the field. Using graph paper, in the lab, the angle and distance to each sample point was recorded from a centrally fixed referent. This was used to design a standardized collection form, giving the angle and distance to each point, and providing space to record the elevation at that point (Figure 18). Once in the field, a transit was set up on this referent and sample points were located using a stadia rod and/or tape. The actual transit reference location did not have to be predetermined; once in the field, the datum was established in such a location as to ensure coverage over the entire scatter. At three sites where the scatter extended over 100 x 100 m (the size of the predetermined collection grid), secondary datums were located at 100 m intervals from the primary datum, along cardinal directions, and a second series of points was collected.

An example of a large site collected using this procedure was 3SF270, which required three separate datums (Figure 19). The entire 3SF270 scatter, some 20,000 square m in extent, and stretching over 300 m along the river margin, was mapped and surface collected in two days by the crew of eight. The 3019 artifacts recovered, including 59 diagnostic projectile points, were all thus tied in to within a ca. 10 m area. Comparable fine-grained provenience data was collected from 45 project sites, and should prove an invaluable sample from the basin for future researchers concerned with intra and intersite analyses.

Field artifact collection entailed two parts. First, sample points were dispersed using the transit and stadia from the arbitrarily placed datum (the datum location was carefully recorded in relation to fixed landmarks and securely placed in relation to the site permanent datum, as discussed above). As each point was located, a stake or surveyor wire flag was planted and numbered. This number corresponded to that listed with the appropriate angle and distance on the record sheet (Figure 18). If more than one datum was required, sample location numbers were increased by 100 for the second datum, and so on (i.e., 101, 102, 103, etc). Since a stadia rod was used, elevations were recorded for each point, providing the basis for a site contour map. The second portion of the fieldwork involved the actual artifact collection phase. Using a dog-leash method, a 3.34 m radius circle was scribed about each sample point, and all artifacts were collected from within this circle.

L'ANGUILLE RIVER CHANNEL CLEANOUT SURVEY SAMPLING FRAME
SUMMER 1987 FIELD PROGRAM



STRATIFIED SYSTEMATIC UNALIGNED SAMPLE DATA POINTS

SAMPLE	DISTANCE	ANGLE
R.S. 1	6.5	45
R.S. 2	14.5	0
R.S. 3	24.5	6
R.S. 4	34.5	0
R.S. 5	45	8
R.S. 6	44	22
R.S. 7	32.5	19
R.S. 8	24.5	31
R.S. 9	15	45
R.S. 10	14.5	88
R.S. 11	25.5	72
R.S. 12	27	49.5
R.S. 13	35.5	39
R.S. 14	43	28
R.S. 15	54.5	29
R.S. 16	61	37
R.S. 17	49.5	38.5
R.S. 18	43.5	48.5
R.S. 19	35.5	58.5
R.S. 20	35.5	75.5
R.S. 21	45.5	78
R.S. 22	45	89.5
R.S. 23	52	55.5
R.S. 24	57	45.5
R.S. 25	68	43

SAMPLE	DISTANCE	ANGLE
R.S. 26	9.5	125
R.S. 27	20	118.5
R.S. 28	27.5	96
R.S. 29	37.5	92.5
R.S. 30	48	91
R.S. 31	49	102.5
R.S. 32	39.5	107
R.S. 33	30.5	114.5
R.S. 34	26.5	138.5
R.S. 35	17.5	154
R.S. 36	22.5	160
R.S. 37	36	147
R.S. 38	37.5	128
R.S. 39	45	118.5
R.S. 40	54	112.5
R.S. 41	53.5	125
R.S. 42	46.5	133.5
R.S. 43	40.5	144
R.S. 44	42	161.5
R.S. 45	36	175
R.S. 46	46.5	169.5
R.S. 47	53.5	159.5
R.S. 48	51.5	146.5
R.S. 49	57	137.5
R.S. 50	63.5	130

SAMPLE	ANGLE	DISTANCE
R.S. 51	3	237.5
R.S. 52	12	193
R.S. 53	22	181.5
R.S. 54	32.5	192
R.S. 55	42	182
R.S. 56	44.5	195.5
R.S. 57	37.5	207
R.S. 58	25	205
R.S. 59	18	225
R.S. 60	13	258
R.S. 61	23	268
R.S. 62	25	245
R.S. 63	24.5	225
R.S. 64	41	221
R.S. 65	46	208
R.S. 66	59	212.5
R.S. 67	54	223
R.S. 68	43	226
R.S. 69	38.5	239
R.S. 70	34.5	253.5
R.S. 71	43.5	280
R.S. 72	46.5	247.5
R.S. 73	49.5	236
R.S. 74	60	231
R.S. 75	63.5	221

SAMPLE	ANGLE	DISTANCE
R.S. 76	10.5	325.5
R.S. 77	21	333
R.S. 78	30	345
R.S. 79	40	346
R.S. 80	49	355.5
R.S. 81	49.5	344
R.S. 82	42.5	332
R.S. 83	33	327
R.S. 84	21.5	312
R.S. 85	17.5	295
R.S. 86	27.5	290
R.S. 87	35.5	303.5
R.S. 88	40.5	317
R.S. 89	49.5	323
R.S. 90	55	334.5
R.S. 91	53	320
R.S. 92	50	307.5
R.S. 93	43	298.5
R.S. 94	41.5	285
R.S. 95	36	270.5
R.S. 96	46	273.5
R.S. 97	51.5	284.5
R.S. 98	53	295.5
R.S. 99	59.5	303
R.S. 100	61.5	314

Figure 18.
L'Anguille River Survey,
Sampling Frame, Summer 1987 Survey.

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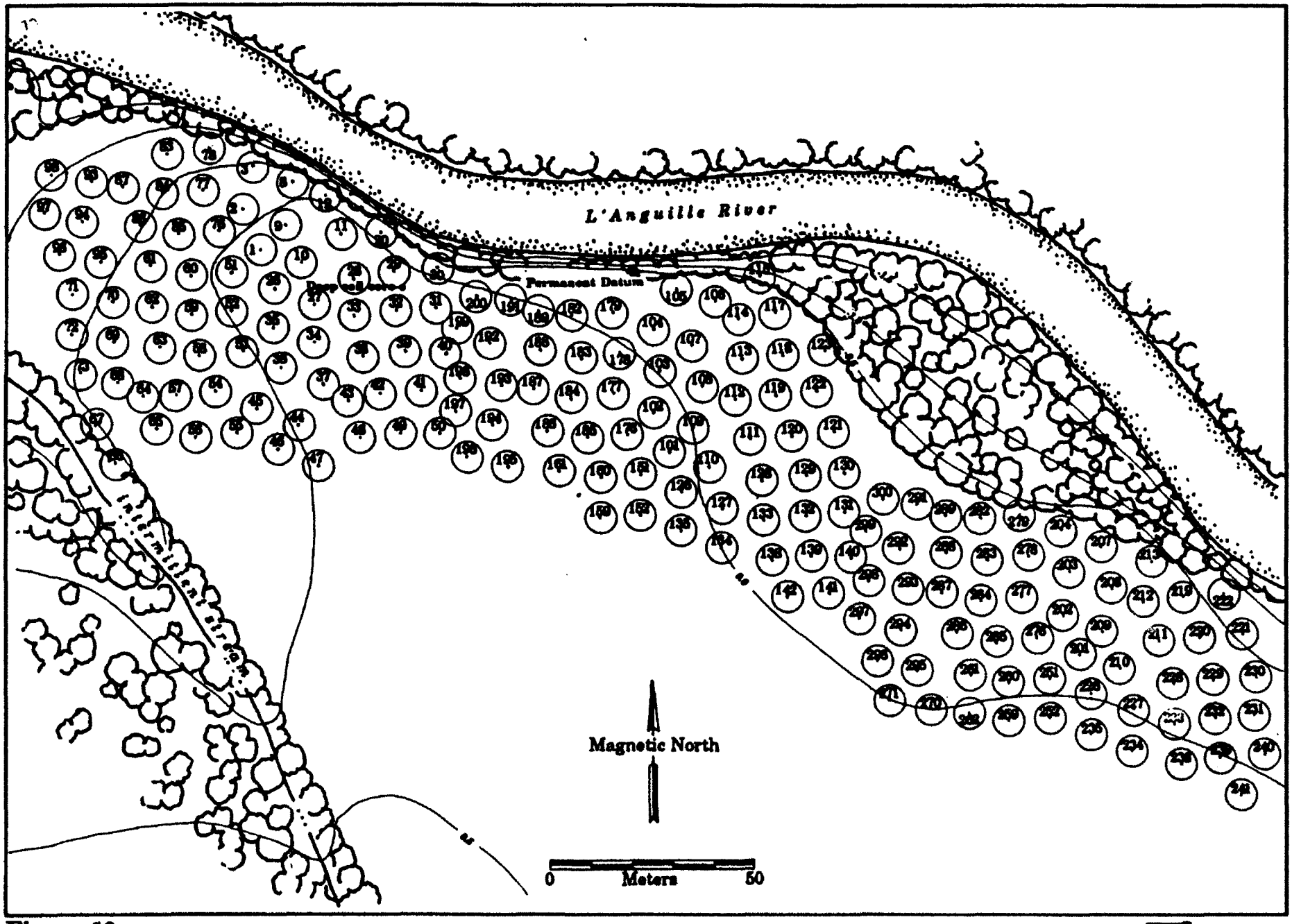


Figure 19.
Site 3SF270 (LRP-77) Proveniences
Controlled Surface Collection Circles
and Test Units.

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All artifacts were bagged and labeled in reference to each collection point. To further insure standardized collection samples, each circle was collected for a minimum of five minutes. This prevented cursory examination, and ensured that areas with low artifact density were not quickly "written off". Once the controlled surface collection had been made, a general or "grab sample" collection was made of the surrounding area, and again labeled in reference to the sample point. In this manner, tight spatial control was maintained over every surface artifact. The location of every artifact collected from each site, in both the controlled and general collections, using these procedures, is thus known to within approximately 10 m. In practice, a two person team initiated the mapping and collection point dispersal (one on the transit, and one holding the stadia, tape, and wire flags). Once a few points were dispersed, the remaining team members began their collection. Most average sized sites (ca. 0.5 ha in extent, requiring 50 sample points) could be mapped and collected in under 4 hours with the crew of eight. More extensive descriptions of the use and effectiveness of this type of surface collection procedure has been provided elsewhere (Anderson 1979, Anderson and Carter 1985, Anderson and Schuldenrein 1985).

Care was taken during this procedure to note potential disturbance processes which may have displaced surface artifacts at each site, such as land leveling and other construction. Specific surface conditions were recorded at each collection point (where these differed appreciably from the site average, as at field margins where part of the circle might be in the woods), to ensure comprehensive documentation of the nature and extent of site surface visibility.

In wooded or overgrown areas, shovel tests were excavated at 10 m intervals across the extent of the site. All shovel tests were placed within a uniform grid system; unit dispersion was altered from this grid pattern as necessary to accommodate terrain features (i.e., gullies running through the site area, trees). Units were dispersed along cardinal directions using a compass and tape; all units on recorded and tested sites were later mapped in using a transit, tape, and stadia rod. Shovel testing proceeded until two sterile units were encountered. The site boundary was mapped as the mid-point between the last positive test and the first negative test. Sites encompassing both overgrown and cleared areas were collected using an appropriate mixture of both collection strategies.

Site Testing/Data Collection Phase Field Procedures

A one 1 m test unit was excavated at each non-destroyed site in the project right-of-way along miles 0.0 to 16.0. In all, 1 m test units were opened at 47 sites. All sites in the right-of-way were tested except for nine where it could be convincingly demonstrated that no significant (i.e., nonmodern or non-extensively disturbed) subsurface cultural remains were present. All of the test units were excavated using arbitrary 10 cm levels, or by natural strata where these were present. Typically the only natural strata employed were plowzones at sites in plowed fields (uniformly removed as a unit, with thickness recorded), and humus/leaf zones in wooded areas (also uniformly removed as a unit, with thickness

recorded). Below these natural initial levels, excavation proceeded in every case using arbitrary 10 cm levels. Test units were excavated to at least 20 cm (two levels) below artifact bearing soils, and a 30 x 30 cm test was excavated in a corner of each unit to at least 40 cm below this depth. Where the plowzone was found to be sterile, subplowzone levels were opened over only half the square (a 1.0 x 0.5 m area); if artifacts were found, the entire level was removed. Use of the latter procedure was adopted, with Memphis COE approval, when a number of the initial test units opened proved sterile, or were on deposits located on intractable clays. Test units, like all other controlled collection units, were tied into a permanent site datum with a transit and tape.

All fill from each excavation unit was dry screened using 1/4 inch mesh. Representative profiles were drawn for each unit, with Munsell charts used to document soil colors. Color slide (Kodochrome 64 film) and black and white (Panatomic X 125 film) photographs were made of representative profiles and floor plans at every test unit. Unit photographs included a scale and north arrow, and were labeled using a letter board. Project photography included representative shots of survey conditions and fieldwork at many project sites. As part of this documentation, a light plane was rented for a period of one hour and used to overfly the project area. Aerials were taken of unusual sites and surface conditions. In all, ca. 700 color slides and 300 black and white prints were taken documenting project activities, and have been curated with the primary collections.

LABORATORY ANALYSIS PROCEDURES

All project artifacts were returned to Atlanta where they were washed and cataloged, and subjected to a detailed descriptive and techno-functional analysis. Cataloging procedures were accomplished in coordination with the Arkansas Archeological Survey Registrar's office, and following the advice of the Arkansas State University and University of Arkansas-Pine Bluff station archaeologists, where the collections would eventually be curated. All artifacts were bagged by major analytical category (i.e., debitage, cores, tools, pottery), in .002 mil transparent mylar zip lock bags. Catalog numbers were marked on the exterior of these bags, and two labeled Arkansas Archeological Survey specimen cards were included in each bag. Approximately 10 to 25% of all artifacts within each bag were labeled using India ink, and coated with nail polish. All flaked stone tools (including all projectile points and point fragments), as well as all cores and quarry waste, were labeled with individual catalog numbers.

The laboratory analysis included the comprehensive description of all recovered prehistoric and historic artifacts, utilizing temporally diagnostic types wherever possible. A primary emphasis of the analysis was the determination of occupation span and function of each site component or components. A copy of the analysis form that was employed is given in Appendix II. Over the prehistoric assemblage, count or weight data were recorded by artifact category

and raw material. For ceramic artifacts, temper type and surface finish were initially recorded, and a typological analysis of the collections was then conducted by Phyllis A. Morse. Lithic artifacts were cataloged and examined using House's (1975a) functional typology, which has seen use in the Cache River and other subsequent survey projects in northeast Arkansas. Count and weight data were recorded for all core, quarry waste, and debitage categories (i.e., primary decortication flakes, secondary decortication flakes, and interior flakes, and shatter fragments; category definitions follow those by White 1963:5 and House 1975a). Count data was recorded for chipped stone tool categories, including wear retouched and intentionally retouched flakes (differentiated by the presence of intentional as opposed to wear-derived marginal retouch), thick and thin bifaces, dart and arrow points and point tips, hafted scrapers, spokeshaves and notches, adzes and axes, and denticulates (sorted following House's 1975a criteria). An "other" category was established to accommodate unusual tool specimens. Raw material was recorded over all debitage and tool forms, with primary categories including Crowley's Ridge chert (thermally altered and unaltered), Pitkin chert, chert breccia, white (Boone?) chert, quartzite/orthoquartzite, and banded chert; again, an "other" category was used to handle unusual specimens, which were then described on the form. Raw material identification was facilitated using descriptions advanced by House (1975b) and Mathis (1986). Fire cracked rock was recorded by by count and weight, while a range of cobble tool categories was described, again using criteria advanced by House (1975a). The result is a data set directly comparable with that developed by other researchers in the region. Count data was recorded for all project historic artifacts using typological criteria advanced by South (1977) and Garrow (1982). Patrick Garrow, as project technical advisor, was available to supervise and evaluate the coding of the historic artifacts, and answer questions about their identity and function.

DISPOSITION OF PROJECT DATA

Final Data Appendix and Catalog

The results of the cataloging and analysis have been combined into a comprehensive *Final Data Appendix and Catalog* (encompassing ca. 800 pages), which has been prepared as a separate, limited distribution volume (Anderson 1988). Copies of this volume have been curated with the Arkansas Archeological Survey, at the Memphis District office of the Corps of Engineers, at Garrow & Associates, Inc. headquarters in Atlanta, Georgia, and with the project Principal Investigator. Copies of the Apple MacIntosh™ *4th Dimension*™ relational database used to prepare this study are maintained by the Principal Investigator and at the Garrow & Associates, Inc. headquarters in Atlanta, Georgia.

The L'Anguille River data set consists of surface and subsurface data from 222 sites located along the first 90 miles of the L'Anguille River channel, from its modern confluence with the St. Francis north to near its headwaters in Poinsett County, Arkansas. Comprehensive surface collections were made at each of these sites, generating an assemblage that documents the nature of the surface

archaeological record in the L'Anguille River Basin as of the late 1980s. Beyond documentation, the *Final Data Appendix and Catalog* volume has the additional purpose of facilitating the use of the L'Anguille River Basin survey data set by subsequent researchers. Artifact and provenience data are detailed in a form amenable to rapid appraisal, providing a starting point for future research with the collections. It must be emphasized, however, that this database is designed to delimit the information *potential* of the project artifactual assemblage. Subsequent researchers will want to make use of this record in conjunction with the primary collections.

To supplement the project data detailed at length in the *Final Data Appendix and Catalog* volume and in the site forms, a discussion of the fieldwork and results at each site found in the project right-of-way, including cultural and chronological data, and cultural resource management recommendations, is given in Appendix I. Detailed maps of each intact (non-destroyed) site that was probabilistically surface collected are provided in this appendix; these maps include the primary datums, site contours, major cultural and topographic features, and all collection units. Additional maps document the distribution of artifacts over the surfaces at each collected site. The MacContour™ program was used to generate the artifact density maps. Summary assemblage measures for each of the 222 sites found during the survey are provided in Appendix II.

Arkansas State Site Forms

Arkansas Archeological Survey site forms for each of the 222 sites located during the 1987 L'Anguille River survey were prepared by Anderson, using a computerized copy of the form developed by Mr. Keith Bracknall of Garrow & Associates, Inc (Appendix V). These forms have been submitted and accepted by the Arkansas Archeological Survey, and are currently maintained at Fayetteville and at the appropriate Survey station office. Copies of this MacIntosh™ *4th Dimension*™ data file are maintained at Garrow & Associates, Inc. headquarters in Atlanta, Georgia, and with the project Principal Investigator. These forms were prepared following the guidance of Mr. Jerry Hilliard, Arkansas Archeological Survey Registrar, as well as Drs. Dan F. Morse and Leslie Stuart-Abernathy, the station archeologists where the original forms were curated. These site forms include photocopies of relevant sections of U.S.G.S quadrangle sheets, SCS county soil map sheets, and Corps of Engineer project aerials, providing thorough locational data for each site. In addition, copies of all the catalog/inventory sheets, site base maps, and site artifact contour/distribution maps were submitted with these forms.

In conjunction with the submittal of the Final Report, a set of 5 X 8 inch Site Data Cards were submitted to the Memphis Corps of Engineers for each site in the project right-of-way. An example of a completed card is given in Table 5 below. These cards are designed to provide a fast reference of site data, and represent a highly useful management tool when used with the project aerials and quadrangle sheets. Each card contains the following information: site number,

site name, locational data (township range, UTM), county and state, quadrangle reference, date of discovery/recordation, description, condition, testing results (if appropriate), typical artifacts, temporal span, relation to project, previous and present investigations at the site (including contract number), and additional remarks including recommendations for NRHP eligibility, and the curatorial facility storing the collections.

Table 5. Example of a L'Anguille Project Site Data Card

State Site Number:	3PO20	**Site Name:**	Moore
Project Site Number:	LRP-133	**Date of Visit:**	29 June 1987
County: Poinsett		**USGS Quad:**	Cherry Valley W 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered).
Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.
Description: Site 3PO20 (LRP-133) is a low density surface artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the field was in fairly high milo, offering only fair surface visibility (ca. 0 to 50%, averaging ca. 25%). No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 25000 square meters (275 x 100 m in maximum extent). A minor tributary defines the northern limits of the site, while the southern limits are at a hedgerow in the field. The site area is on a low bluff overlooking the main channel of the L'Anguille, which is located ca. 90 to 100 m southwest. At the time of survey the 3PO20 area was in milo, with visibility ca. 25% on average. The location and boundaries of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made for 0.5 person-hours. No test units were opened at the site.
Condition: The site soils are classified as Hillemann silt loam/Calloway silt loam, 0-1% slopes (Hm/CaA; USDA 1977b).
Previous Investigations: The site was recorded as a 200x50' Woodland and Archaic scatter by C. L. Scheel in 1961. Five small potsherds and a point (none were typed) were found during this visit. The site area has in all probability seen prior collection by amateurs.
NRHP Status: Undetermined.
NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present.
Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

Locational Information

Locational information and brief, summary data on all of the archaeological sites encountered during the project have been submitted separately to the Arkansas Archeological Survey and the Memphis District, U.S. Army Corps of Engineers. Specific site locations are not illustrated or otherwise presented in the text of this report at Corps of Engineers request, in an effort to preserve the archaeological record within the L'Anguille River basin. Four copies of each quadrangle map in the project area, and a set of project aerials have been submitted to the Memphis district under separate cover. The location of each discovered or revisited site is clearly marked on these maps, and labeled with the appropriate site numbers.

Curation

All of the artifacts, photographs, original analysis sheets, and field notes from the 1987 archaeological survey along the L'Anguille River channel margin, as well as

copies of the technical report and the data appendix volume, have been curated with the Arkansas Archeological Survey. Primary records for the entire project are maintained at the Arkansas Archeological Survey Registrar's office at the University of Arkansas, Fayetteville. The artifacts and records from Lee County are curated at the survey station at the University of Arkansas-Pine Bluff, while the collections and records from sites in St. Francis, Cross, and Poinsett counties have been curated at the survey station at Arkansas State University, Jonesboro.

VIII. SURVEY RESULTS AND TECHNICAL CONCLUSIONS

INTRODUCTION

In all, 222 archaeological sites were examined during the 1987 L'Anguille River survey. These sites were found all along the channel, although the number discovered varied considerably from county to county (Figure 20). The greatest number of sites was found in Lee County (107 sites), followed by Cross (67 sites), Poinsett (28 sites), and St. Francis (20 sites) counties. As noted previously, these figures were directly related to the nature of terrain along the channel margin (see Chapters II and VII). In Lee County the channel flows through the Marianna Gap in Crowley's Ridge. As a result, the river is fairly deeply incised through much of the county, particularly in the southern reaches, and a considerable expanse of elevated, comparatively well drained terrain conducive to past settlement is present in close proximity to the channel. To the north, particularly in St. Francis County, in contrast, the river is less deeply entrenched, and broad swamplands parallel the main channel in many areas. Few sites were found in this area. In the narrow upper reaches of the basin, in Cross and Poinsett Counties, where extensive clearing and drainage has occurred, site density increased, reflecting both greater survey accessibility and the proximity of older land surfaces to the main channel.

With the exception of a small collection made at the Lace Place (3PO17), all of the materials recovered during the 1987 survey came from locations within ca. 200 m of the L'Anguille River channel. Given the use of carefully controlled recovery procedures, the collections are amenable to comparative analyses, offering an excellent sample from which to begin examining past occupations in the basin. In this chapter archaeological observations and inferences that can be drawn from the data collected during the 1987 survey along the L'Anguille channel margin are briefly recounted. The presentation is more of an overview than an in-depth analysis, reflecting the initial stage of the project. Comprehensive technical analysis and synthesis of the archaeological data from the basin must await the completion of subsequent testing phases. The primary data collected during the 1987 survey, and supporting the analyses described here, is detailed by site and individual provenience in the separate *Final Data Appendix and Catalog* volumes (Anderson 1988). Summary information on the assemblages found in 1987 at the 222 project sites is given in the appendices accompanying this volume. The primary collections themselves, with accompanying documentation, have been curated at the Arkansas State University and University of Arkansas-Pine Bluff Arkansas Archeological Survey station offices.

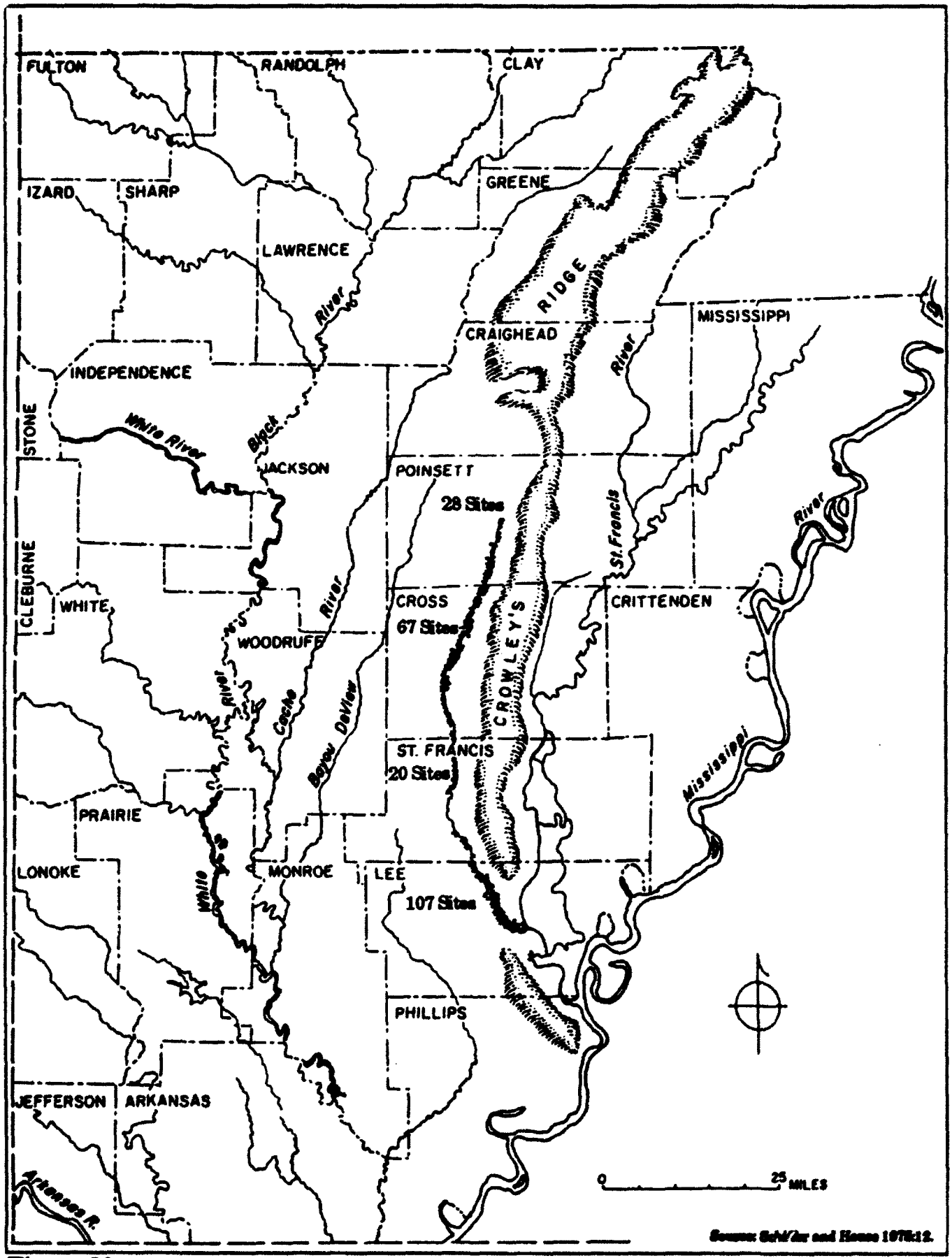


Figure 20.
L'Anguille River Survey Sites, Poinsett, Cross, St. Francis, and Lee Counties, Arkansas.

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EVIDENCE FOR PREHISTORIC OCCUPATIONS IN THE L'ANGUILLE RIVER BASIN

Prehistoric artifacts were found at 219 of the 222 sites examined in 1987. Only three sites (3LE151, 3LE163, and 3LE165) had only historic components, although historic remains themselves, mostly the debris from recent tenant houses (removed to clear and expand fields), were comparatively common in the basin, particularly along the lower reaches. Extensive reoccupation of favored areas, by both prehistoric and historic populations, was indicated. Given drainage conditions in the vicinity of the channel, favorable terrain was at a premium in some areas, prompting such a pattern.

In all, 39,791 separate prehistoric artifacts were collected during the 1987 survey (Appendix II). This total included 3400 sherds, 4486 stone tools, and 25,723 pieces of debitage, as well as several thousand pieces of fire cracked rock, cracked rock, and fired clay. Procedures by which these materials were analyzed were described in Chapter VII (page 85ff). In brief, for ceramic artifacts temper type and surface finish were initially recorded. Lithic artifacts were cataloged and examined using House's (1975a) functional typology, with count and weight data recorded for all core, quarry waste, and debitage categories. Count data were recorded for chipped stone and modified cobble tool categories. Raw material and presence or absence of intentional thermal alteration were recorded for all debitage and tool forms. Fire cracked rock was recorded by by count and weight. Following these efforts, a detailed typologically-oriented analysis of the ceramics, projectile points, and unusual stone tools was conducted by Phyllis A. Morse.

Summary data on the distribution of stone tool forms on the project sites, by county, is presented in Table 6. Percentage figures are presented by type within a county (top) and between counties (bottom), in an effort to indicate, and control for, the differing sample sizes (i.e., numbers of sites and artifacts) found in the four counties comprising the survey area. Examining the figures in Table 6, some assemblage differences are readily apparent from county to county over the various tool categories. At least some of this variation appears to reflect intensity of prior site collection (i.e., the number of times a site or area has been collected). Collection of virtually every open field along the L'Anguille drainage by relic hunters must be assumed, given previous discussions of collector behavior in the general region (i.e., House and Schiffer 1975:50-52; Morse and Morse 1983:30-33), and information provided by informants during the 1987 survey.

Dart points, adzes, and intentionally retouched flake tools were more commonly recovered on sites in the southern part of the basin, and a clear decline in the total number of tools was observed proceeding from south to north in the basin. These figures do not appear closely linked to the total number of sites examined per county, as large numbers of artifacts were found in St. Francis County, which had the lowest site total. What the overall assemblage figures suggest is that collection intensity seems to vary within the basin, with greater collection in the northern counties (Poinsett and Cross), and somewhat less in the southern

L'ANGUILLE RIVER BASIN: STONE TOOLS BY COUNTY

PERCENT OF TOTAL PER TYPE

COUNTY	# OF SITES	Wear Ret. Flakes	Int. Ret. Flakes	Thick Bifaces	Thin Bifaces	Dart Points	Unid. Points	Arrow Points	Adze/ Axe	Hammer Stones	Abrader	Pitted Cobble	Unmod. Cobble	Grinding Basin	Grand Totals
LEE	107 Sites	664 43.01%	192 12.44%	86 5.57%	188 12.18%	183 11.85%	71 4.60%	7 0.45%	26 1.68%	66 4.27%	9 0.58%	20 1.30%	27 1.75%	5 0.32%	1544 100.00%
ST. FRANCIS	20 Sites	790 59.53%	162 12.21%	37 2.79%	117 8.82%	111 8.36%	42 3.17%	1 0.08%	12 0.90%	26 1.96%	3 0.23%	10 0.75%	15 1.13%	1 0.08%	1327 100.00%
CROSS	67 Sites	594 57.56%	91 8.82%	23 2.23%	104 10.08%	75 7.27%	51 4.94%	8 0.78%	6 0.58%	37 3.59%	9 0.87%	13 1.26%	16 1.55%	5 0.48%	1032 100.00%
POINSETT	28 Sites	291 49.91%	51 8.75%	34 5.83%	69 11.84%	40 6.86%	23 3.95%	2 0.34%	4 0.69%	37 6.35%	5 0.86%	8 1.37%	19 3.26%	0 0.00%	583 100.00%
Grand Totals	222 Sites	2339 52.14%	496 11.06%	180 4.01%	478 10.66%	409 9.12%	187 4.17%	18 0.40%	48 1.07%	166 3.70%	26 0.58%	51 1.14%	77 1.72%	11 0.25%	4486 100.00%

PERCENT OF TOTAL PER COUNTY

COUNTY	# OF SITES	Wear Ret. Flakes	Int. Ret. Flakes	Thick Bifaces	Thin Bifaces	Dart Points	Unid. Points	Arrow Points	Adze/ Axe	Hammer Stones	Abrader	Pitted Cobble	Unmod. Cobble	Grinding Basin	Grand Totals
LEE	107 Sites 48.20%	664 28.39%	192 38.71%	86 47.78%	188 39.33%	183 44.74%	71 37.97%	7 38.89%	26 54.17%	66 39.76%	9 34.62%	20 39.22%	27 35.06%	5 45.45%	1544 34.42%
ST. FRANCIS	20 Sites 9.01%	790 33.78%	162 32.66%	37 20.56%	117 24.48%	111 27.14%	42 22.46%	1 5.56%	12 25.00%	26 15.66%	3 11.54%	10 19.61%	15 19.48%	1 9.09%	1327 29.58%
CROSS	67 Sites 30.18%	594 25.40%	91 18.35%	23 12.78%	104 21.76%	75 18.34%	51 27.27%	8 44.44%	6 12.50%	37 22.29%	9 34.62%	13 25.49%	16 20.78%	5 45.45%	1032 23.00%
POINSETT	28 Sites 12.61%	291 12.44%	51 10.28%	34 18.89%	69 14.44%	40 9.78%	23 12.30%	2 11.11%	4 8.33%	37 22.29%	5 19.23%	8 15.69%	19 24.68%	0 0.00%	583 13.00%
Grand Totals	222 Sites 100.00%	2339 100.00%	496 100.00%	180 100.00%	478 100.00%	409 100.00%	187 100.00%	18 100.00%	48 100.00%	166 100.00%	26 100.00%	51 100.00%	77 100.00%	11 100.00%	4486 100.00%

Table 6. Prehistoric Stone Tool Categories Recovered During the 1987 L'Anguille River Survey: Totals by County.

counties (Lee and St. Francis). This may reflect the proximity of large population centers (i.e., Jonesboro), or reflect collector orientation for sites yielding artifacts of specific periods, such as Dalton or Mississippian; sites of both periods are apparently more common in the northern part of the basin.

The most common tool forms recovered throughout the project area were wear and intentionally retouched flake tools (differentiated by the presence of wear damage as opposed to intentional flake removal along the margins), artifact categories least likely to have been collected. These artifact categories, given their relatively expedient nature, however, would have also been the most common tool forms produced.

A total of 409 dart points and 18 arrow points were recovered during the 1987 survey, of which 288 could be assigned to a specific cultural-historical type (Table 7). Fairly appreciable occupation of the basin during earlier prehistoric periods (i.e., the Archaic and Woodland) was suggested by the large numbers of dart points recovered. The comparatively low number of arrow points found, in contrast, indicated settlement may have been comparatively sparse during the late prehistoric, particularly during the Mississippian. As we shall see, this pattern was also suggested over the ceramic artifacts; few shell tempered ceramics were found in the 1987 survey collections from along the channel.

Among the diagnostic projectile points recovered were a single Clovis base and 20 Dalton points, indicating fairly appreciable PaleoIndian, or at least late PaleoIndian occupation within the basin. The Clovis was an isolated find from a large site (3SF270, see Figure 19), and no other artifacts could be associated with it from within the general scatter. The point was made of an excellent fine-grained chert, indicating considerable care had been exercised in raw material selection; this may be linked to an extensive mobility strategy and a concomitant need to maximize raw material usage (c.f., Goodyear 1979). The largest incidence of Dalton points, interestingly, was in Cross County, near the center of the Dalton site concentration documented in this area during the Ford-Redfield survey, and where Morse has posited a Dalton band was residing (see Figures 11 and 15). A second slight concentration of Dalton points in the southern part of the basin, in Lee County, may be related to the Ford-Redfield concentration noted west of Helena, and may document the northern extent of a second Dalton territory (Figure 10).

A moderate number of Early and Middle Archaic projectile points were found within the basin, in about equal numbers over each period (Figure 21; Table 8). During the Early Archaic period Hardin Barbed forms are the most common, while Hickory Ridge and Cache River Side Notched forms tend to characterize Middle Archaic assemblages. While a depopulation of the Western Lowlands has been posited at this general time, particularly during the Middle Archaic period, roughly equivalent numbers of diagnostics were found along the channel margin during the Dalton, Early, and Middle Archaic periods. Some population reduction may be indicated, given the fact that the Dalton period is a much shorter interval than the two later periods (e.g., Goodyear 1982, see Chapter V).

L'ANGUILLE RIVER BASIN: DIAGNOSTIC POINTS BY COUNTY

COUNTY	# OF SITES	Clovis	Dalton	San Patrice	Hardin	Searcy	Hickory Ridge	Rice Lobed	Cache River	Eva-like	Big Creek	Burkett	Gary	Weems
LEE	107 Sites	0 0.00%	8 5.76%	1 0.72%	9 6.47%	0 0.00%	4 2.88%	0 0.00%	0 0.00%	5 3.60%	12 8.63%	12 8.63%	20 14.39%	44 31.65%
ST. FRANCIS	20 Sites	1 1.32%	3 3.95%	2 2.63%	4 5.26%	0 0.00%	3 3.95%	0 0.00%	1 1.32%	2 2.63%	8 10.53%	10 13.16%	17 22.37%	21 27.63%
CROSS	67 Sites	0 0.00%	7 15.22%	0 0.00%	3 6.52%	1 2.17%	2 4.35%	1 2.17%	0 0.00%	1 2.17%	1 2.17%	1 2.17%	9 19.57%	6 13.04%
POINSETT	28 Sites	0 0.00%	2 7.41%	0 0.00%	1 3.70%	0 0.00%	1 3.70%	0 0.00%	1 3.70%	0 0.00%	3 11.11%	3 11.11%	7 25.93%	6 22.22%
Grand Totals	222 Sites	1 0.35%	20 6.94%	3 1.04%	17 5.90%	1 0.35%	10 3.47%	1 0.35%	2 0.69%	8 2.78%	24 8.33%	26 9.03%	53 18.40%	77 26.74%

COUNTY	# OF SITES	Motley	Harrison Turkey-Tail	Marks-ville	Woodland Stemmed	Baytown Stemmed	Dickson	Steuben	Scallorn	Schugtown	Sequoyah	Madison	Nodena	Grand Totals
LEE	107 Sites	1 0.72%	0 0.00%	2 1.44%	5 3.60%	4 2.88%	2 1.44%	4 2.88%	1 0.72%	1 0.72%	1 0.72%	2 1.44%	1 0.72%	139 100.00%
ST. FRANCIS	20 Sites	0 0.00%	1 1.32%	0 0.00%	0 0.00%	1 1.32%	0 0.00%	2 2.63%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	76 100.00%
CROSS	67 Sites	0 0.00%	0 0.00%	4 8.70%	0 0.00%	1 2.17%	0 0.00%	2 4.35%	5 10.87%	1 2.17%	0 0.00%	1 2.17%	0 0.00%	46 100.00%
POINSETT	28 Sites	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	1 3.70%	1 3.70%	1 3.70%	0 0.00%	0 0.00%	0 0.00%	27 100.00%
Grand Totals	222 Sites	1 0.35%	1 0.35%	6 2.08%	5 1.74%	6 2.08%	2 0.69%	9 3.13%	7 2.43%	3 1.04%	1 0.35%	3 1.04%	1 0.35%	288 100.00%

Table 7. Prehistoric Projectile Points Recovered During the 1987 L'Anguille River Survey: Totals by Type and County.

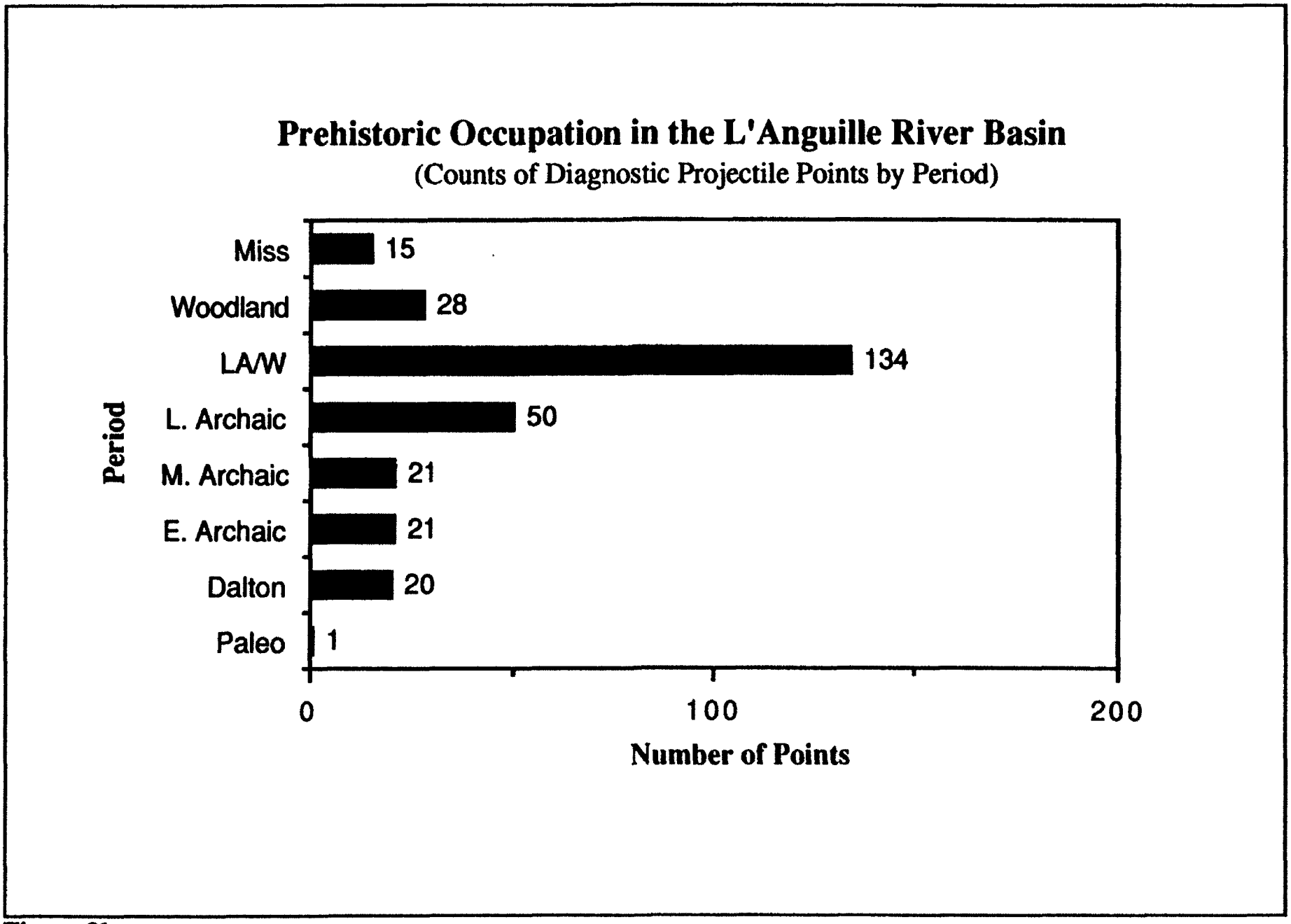


Figure 21.
L'Anguille River Survey
Evidence for Prehistoric Occupation-
Diagnostic Projectile Points.

ARKANSAS
L'Anguille River Survey Project

It appears, however, that this population reduction was not as extreme as has been thought, or that it began in immediate post-Dalton times, and not during the Hypsithermal interval, as has sometimes been suggested. If this is the case, the population decline observed during the post-Dalton period may have been the result of changing social conditions, associated with changes in technological organization. Little change in paleoenvironmental conditions was observed during the immediate post-Dalton era locally (Chapter III), rendering a strict environmental explanation for the collapse of the Dalton adaptation somewhat improbable. The onset of mid-Holocene climatic conditions, furthermore, didn't occur until ca. 2,000 years after the end of Dalton times.

In other parts of the Southeast the Early Archaic period witnessed a gradual replacement of logistical systems by more residentially mobile adaptations, as part of a broad regional adaptation by human populations to post-glacial era conditions (Anderson and Hanson 1988). The same phenomenon may have occurred in northeast Arkansas. In this view, the Dalton adaptation, with its curated, logistically organized technological system characterized by central base camps, cemeteries, and hunting camps, and its apparent large attendant local populations, became an increasingly untenable means of dealing with the more homogeneous regional environmental conditions and resource structure that had emerged during earlier PaleoIndian times in the central Mississippi Valley. Such conditions are better suited to foraging populations than to centrally-based, logistically organized groups (Binford 1980). The "Dalton collapse" was thus not so much a population *decline* (although this probably also occurred) as a population (and organizational) *rearrangement*. That is, populations once concentrated in centrally-based territories were now much more residentially mobile, dispersing over greater areas, and leaving a less concentrated, and hence less pronounced archaeological record of their activities. This pattern apparently continued through the Middle Archaic locally.

A major pattern of population increase within the L'Anguille basin is indicated during Late Archaic period that may be tied to the rise in local water tables and the expansion of swamplands that occurred at this time (see p. 31). Big Creek, Burkett, Gary, and particularly Weems points are common, although it must be cautioned that some of these forms, particularly the latter two point types, continue in use into the Woodland era. For this reason the Big Creek and Burkett points were assigned to a preceramic Late Archaic category in the analyses (i.e., Figure 21, Table 8), while the Gary and Weems points that were found were placed in a transitional Late Archaic/Woodland category, together with the small numbers of Motley, Harrison Turkey Tail, and Dickson points that were found.

The greatest numbers of Late Archaic and Late Archaic/Woodland points, as over all periods, came from the southern part of the basin, something that has been linked to prior collection intensity (Table 7, Table 8 bottom). When the figures are standardized by county using percentages, however, two concentrations of Late Archaic and Late Archaic/Woodland projectile points were evident within the basin, in the northern and southern areas (Table 8, top). Comparatively few diagnostics dating to these periods occur in Cross County, at least when

PERCENT OF TOTAL PER PERIOD

COUNTY	# OF SITES	PALEO INDIAN	DALTON	EARLY ARCHAIC	MIDDLE ARCHAIC	LATE ARCHAIC	LA/ WOODLAND	WOODLAND	MISSIS-SIPPIAN	Grand Totals
LEE	107 Sites	0 0.00%	8 5.76%	10 7.19%	9 6.47%	24 17.27%	67 48.20%	17 12.23%	6 4.32%	139 100.00%
ST. FRANCIS	20 Sites	1 1.32%	3 3.95%	6 7.89%	6 7.89%	18 23.68%	39 51.32%	3 3.95%	0 0.00%	76 100.00%
CROSS	67 Sites	0 0.00%	7 15.22%	4 8.70%	4 8.70%	2 4.35%	15 32.61%	7 15.22%	7 15.22%	46 100.00%
POINSETT	28 Sites	0 0.00%	2 7.41%	1 3.70%	2 7.41%	6 22.22%	13 48.15%	1 3.70%	2 7.41%	27 100.00%
Grand Totals	222 Sites	1 0.35%	20 6.94%	21 7.29%	21 7.29%	50 17.36%	134 46.53%	28 9.72%	15 5.21%	288 100.00%

PERCENT OF TOTAL PER COUNTY

COUNTY	# OF SITES	PALEO INDIAN	DALTON	EARLY ARCHAIC	MIDDLE ARCHAIC	LATE ARCHAIC	LA/ WOODLAND	WOODLAND	MISSIS-SIPPIAN	Grand Totals
LEE	107 Sites 48.20%	0 0.00%	8 40.00%	10 47.62%	9 42.86%	24 48.00%	67 50.00%	17 60.71%	6 40.00%	139 48.26%
ST. FRANCIS	20 Sites 9.01%	1 100.00%	3 15.00%	6 28.57%	6 28.57%	18 36.00%	39 29.10%	3 10.71%	0 0.00%	76 26.39%
CROSS	67 Sites 30.18%	0 0.00%	7 35.00%	4 19.05%	4 19.05%	2 4.00%	15 11.19%	7 25.00%	7 46.67%	46 15.97%
POINSETT	28 Sites 12.61%	0 0.00%	2 10.00%	1 4.76%	2 9.52%	6 12.00%	13 9.70%	1 3.57%	2 13.33%	27 9.38%
Grand Totals	222 Sites 100.00%	1 100.00%	20 100.00%	21 100.00%	21 100.00%	50 100.00%	134 100.00%	28 100.00%	15 100.00%	288 100.00%

Table 8. Prehistoric Projectile Points Recovered During the 1987 L'Anguille River Survey: Totals by Major Period and County.

compared with the areas to the north and south. The pattern is most pronounced during the Late Archaic (4.35% in Cross County vs. an average of 21.06% in the other three counties), and trends towards a somewhat more even distribution during the Late Archaic/Woodland period (32.61% in Cross County vs. an average of 49.22% in the other three counties). The emergence of discrete social entities (Late Archaic/Early Woodland tribal groups or segments?) occupying the northern and southern parts of the basin, with a vacant area between them in Cross County area, may be indicated by these distributions.

A much lower number of diagnostic point forms attributable solely to the Woodland period was found during the survey, and on first appraisal a population decline might be indicated within the basin (Figure 21). Given the moderate occurrence of grog-tempered pottery within the basin (Table 9), and the fact that the point types placed in the Late Archaic/Woodland category also occurred during the Woodland era, an actual population decline is unlikely. There is evidence, however, for population *movement* within the basin.

Two discrete concentrations of points are again indicated in the L'Anguille survey area during the Woodland period, in the northern and southern parts of the basin. The southern concentration, as before, remains centered in Lee County. This time, however, the northern concentration is centered on Cross County while St. Francis County to the south and southern Poinsett County to the north are relatively underrepresented (and hence presumably comparatively unoccupied). A shift in population concentrations in the northern part of the basin, from the northern to the north-central area, is indicated from the Late Archaic to the Woodland periods. This projectile point distribution is paralleled by that of grog-tempered pottery within the basin (Table 9), indicating that this patterning is probably a fairly accurate appraisal of Woodland population concentrations in the basin.

What is indicated by these apparent Late Archaic and Woodland population concentrations, and realignments, is currently unknown. It is tempting to speculate that what we are seeing is territorial realignment and circumscription brought about by population increase over the Late Archaic and Woodland era. In this view, the Late Archaic assemblage distributions reflect the presence of two social entities within the basin. The Woodland pattern may reflect the emergence of yet another social entity in the northern part of the basin, in northern Poinsett County or beyond, that led to the southward movement of the peoples formerly living in this area. Three or more Woodland groups may have been present within the basin, in this view. These social entities need not have been culturally distinct or antagonistic. They may have been part of a larger cultural entity (i.e., separate lineage-based communities within Morse's hypothesized Baytown segmentary tribal configuration; see p. 61) but may have kept separate for a number of reasons, such as the need to maintain viable hunting territories, firewood supplies, or other resources. Parenthetically, so few sand tempered sherds were found within the basin that it was not possible to examine Morse's (1977) idea that the distribution of Barnes vs. Baytown ceramics equated with the location and movement of discrete Woodland cultural systems. All of these

Table 9. Prehistoric Ceramics Recovered During the 1987 L'Anguille River Survey: Totals by Major Temper Group and County.

PERCENT OF TOTAL PER CATEGORY

COUNTY	# OF SITES	POTTERY Grog	POTTERY Shell	POTTERY Sand	Grand Totals
LEE	107 Sites	1110 91.80%	87 7.20%	12 1.00%	1209 100.00%
ST. FRANCIS	20 Sites	50 94.30%	3 5.70%	0 0.00%	53 100.00%
CROSS	67 Sites	1941 98.50%	21 1.10%	9 0.40%	1971 100.00%
POINSETT	28 Sites	133 79.60%	23 13.80%	11 6.60%	167 100.00%
Grand Totals	222 Sites	3234 95.10%	134 3.90%	32 1.00%	3400 100.00%

PERCENT OF TOTAL PER COUNTY

COUNTY	# OF SITES	POTTERY Grog	POTTERY Shell	POTTERY Sand	Grand Totals
LEE	107 Sites 48.20%	1110 32.65%	87 2.56%	12 0.35%	1209 35.56%
ST. FRANCIS	20 Sites 9.01%	50 1.47%	3 0.09%	0 0.00%	53 1.56%
CROSS	67 Sites 30.18%	1941 57.09%	21 0.62%	9 0.26%	1971 57.97%
POINSETT	28 Sites 12.61%	133 3.91%	23 0.68%	11 0.32%	167 4.91%
Grand Totals	222 Sites 100.00%	3234 95.10%	134 3.90%	32 1.00%	3400 100.00%

inferences, it must be stressed, warrant eventual testing with the final L'Anguille survey data set, and with materials from over the surrounding region.

Comparatively few Mississippian period diagnostics, which included all arrow points and shell tempered ceramics, were found during the L'Anguille River survey project (Tables 7-9). Arrow points accounted for just over 5% of the diagnostic projectile points recovered in the basin, while shell tempered pottery accounted for just under 4% of all the prehistoric ceramics (Table 9). A population decline may be indicated, at least in comparison with the earlier Woodland period (Figure 21). At the time of the De Soto entrada the L'Anguille area was described as a vast unoccupied swampland (Hudson 1985). At this time (and earlier?) the basin may have been largely depopulated, possibly serving as a buffer or hunting territory for the complex Mississippian chiefdoms occupying the Eastern Lowlands at this time (see Figure 17).

Slight concentrations of Mississippian artifacts were observed in two areas. Shell tempered pottery tended to occur in Lee and St. Francis Counties in the southern part of the basin and in Poinsett County to the north, while arrow points tended to concentrate in Lee County in the southern part of the basin and Cross and Poinsett Counties in the northern reaches. These assemblages did not come from large or extensive Mississippian period sites, so whatever is represented by these "concentrations", dense settlement is not indicated. The Mississippian sites in the southern part of the basin are tentatively interpreted as outlying Kent phase hamlets and hunting stations; the main centers and population concentrations from this and ancestral earlier phases are for the most part located to the south and east along the St. Francis (House 1987). Only the Greer Mound, which yielded little evidence for Mississippian occupation, lay within the L'Anguille. Mississippian sites in the northern part of the basin may be comparable outlying sites from the Parkin phase chiefdoms to the east across Crowley's Ridge. At least some of these northern sites may alternatively be Cherry Valley phase occupation sites.

Evidence for variability in prehistoric lithic raw material utilization and reduction practices was also evident within the 1987 L'Anguille River assemblages. All debitage was sorted by reduction stage, and this data is summarized in Table 10. Although there are no lithic raw material sources within the L'Anguille basin, considerable localized reduction is inferred. This is indicated by the presence of an appreciable proportion of primary and secondary decortication flakes within the assemblages, and by the large numbers of cores. Procurement of lithic raw materials in cobble form (most of the materials utilized were Crowley's Ridge cherts, see below), which were brought into the basin in this form prior to reduction, is indicated, at least over some periods. Given the comparatively small number of quarry waste pieces (tested cobbles seeing no subsequent reduction) that were recovered, these local populations were adept at selecting high quality cobbles from within the Ridge gravel deposits.

Some difference in overall reduction behavior is evident between assemblages from the north and south end of the basin that is best seen within the interior and

L'ANGUILLE RIVER BASIN: DEBITAGE TYPE BY COUNTY

PERCENT OF TOTAL PER CATEGORY

COUNTY	# OF SITES	Quarry Waste	Cores	Primary	Secondary	Interior	Shatter	Grand Totals
LEE	107 Sites	105 1.41%	339 4.56%	414 5.56%	2659 35.74%	2802 37.66%	1121 15.07%	7440 100.00%
ST. FRANCIS	20 Sites	46 0.65%	238 3.34%	385 5.41%	2261 31.76%	3037 42.65%	1153 16.19%	7120 100.00%
CROSS	67 Sites	90 1.41%	318 4.98%	377 5.91%	2406 37.69%	1513 23.70%	1679 26.30%	6383 100.00%
POINSETT	28 Sites	59 1.23%	212 4.44%	259 5.42%	1785 37.34%	1270 26.57%	1195 25.00%	4780 100.00%
Grand Totals	222 Sites	300 1.17%	1107 4.30%	1435 5.58%	9111 35.42%	8622 33.52%	5148 20.01%	25723 100.00%

PERCENT OF TOTAL PER COUNTY

COUNTY	# OF SITES	Quarry Waste	Cores	Primary	Secondary	Interior	Shatter	Grand Totals
LEE	107 Sites 48.20%	105 35.00%	339 30.62%	414 28.85%	2659 29.18%	2802 32.50%	1121 21.78%	7440 28.92%
ST. FRANCIS	20 Sites 9.01%	46 15.33%	238 21.50%	385 26.83%	2261 24.82%	3037 35.22%	1153 22.40%	7120 27.68%
CROSS	67 Sites 30.18%	90 30.00%	318 28.73%	377 26.27%	2406 26.41%	1513 17.55%	1679 32.61%	6383 24.81%
POINSETT	28 Sites 12.61%	59 19.67%	212 19.15%	259 18.05%	1785 19.59%	1270 14.73%	1195 23.21%	4780 18.58%
Grand Totals	222 Sites 100.00%	300 100.00%	1107 100.00%	1435 100.00%	9111 100.00%	8622 100.00%	5148 100.00%	25723 100.00%

Table 10. Prehistoric Debitage Recovered During the 1987 L'Anguille River Survey: Totals by Reduction Stage and County.

shatter categories. Interior flakes comprise a higher proportion of site assemblages in the southern part of the basin, in Lee and St. Francis Counties, than they do in the two northernmost counties examined. The opposite pattern is evident over the shatter category, which is comparatively infrequent in the southern counties and more common in the northern part of the basin. What is indicated by this patterning is uncertain. It may be related to the quality of lithic raw material sources (i.e., with poorer quality stone more likely to shatter occurring more commonly in the northern part of the basin), although this seems unlikely. Alternatively, and a perhaps more probable explanation, this pattern may be linked to the distance local populations had to travel to obtain raw materials. Sites in the southern part of the basin, particularly in Lee County in the vicinity of the Marianna Gap, are somewhat further from Crowley's Ridge (and possible raw material sources) than sites in the northern part of the basin. This greater distance may have prompted greater care in cobble selection during procurement forays, and greater care in reduction. Occupants of the northern part of the basin, having to expend less effort to obtain stone, may have been comparatively profligate in its use. This is indicated by the fire-cracked rock distribution within the basin, which shows a clear pattern of increase from south to north (Table 11). Use of fire cracked rock is far more common in the northern part of the basin than in the southern reaches, presumably indicating greater ease of procurement.

Table 11. Prehistoric Fire Cracked Rock Recovered During the 1987 L'Anguille River Survey: Total by County.

COUNTY	# OF SITES	FCR
LEE	107 Sites 48.20%	526 9.10%
ST. FRANCIS	20 Sites 9.01%	1049 18.14%
CROSS	67 Sites 30.18%	1783 30.84%
POINSETT	28 Sites 12.61%	2424 41.92%
Grand Totals	222 Sites 100.00%	5782 100.00%

L'ANGUILLE RIVER BASIN: RAW MATERIAL UTILIZATION BY COUNTY

PERCENT OF TOTAL PER RAW MATERIAL

COUNTY	# OF SITES	Crowleys Ridge Chert	ITA Crowleys Ridge	Pitkin Chert	Chert Breccia	White Chert	Quart-zite	Banded Chert	Other Unknown	Gray Chert	Novac-ulite	Grand Totals
LEE	107 Sites	5877	1908	161	62	107	216	373	72	61	28	8865
		66.29%	21.52%	1.82%	0.70%	1.21%	2.44%	4.21%	0.81%	0.69%	0.31%	100.00%
ST. FRANCIS	20 Sites	5949	1941	269	34	22	220	322	35	11	8	8811
		67.52%	22.03%	3.05%	0.39%	0.25%	2.50%	3.65%	0.40%	0.12%	0.09%	100.00%
CROSS	67 Sites	3627	2489	133	16	84	484	392	35	72	8	7340
		49.41%	33.91%	1.81%	0.22%	1.14%	6.59%	5.34%	0.48%	0.98%	0.11%	100.00%
POINSETT	28 Sites	2677	1936	65	7	56	354	159	12	31	0	5297
		50.54%	36.55%	1.22%	0.13%	1.06%	6.68%	3.00%	0.23%	0.59%	0.00%	100.00%
Grand Totals	222 Sites	18130	8274	628	119	269	1274	1246	154	175	44	30313
		59.81%	27.30%	2.07%	0.39%	0.89%	4.20%	4.11%	0.51%	0.58%	0.15%	100.00%

PERCENT OF TOTAL PER COUNTY

COUNTY	# OF SITES	Crowleys Ridge Chert	ITA Crowleys Ridge	Pitkin Chert	Chert Breccia	White Chert	Quart-zite	Banded Chert	Other Unknown	Gray Chert	Novac-ulite	Grand Totals
LEE	107 Sites	5877	1908	161	62	107	216	373	72	61	28	8865
	48.20%	32.42%	23.06%	25.64%	52.10%	39.78%	16.95%	29.94%	46.75%	34.86%	63.64%	29.24%
ST. FRANCIS	20 Sites	5949	1941	269	34	22	220	322	35	11	8	8811
	9.01%	32.81%	23.46%	42.83%	28.57%	8.18%	17.27%	25.84%	22.73%	6.29%	18.18%	29.07%
CROSS	67 Sites	3627	2489	133	16	84	484	392	35	72	8	7340
	30.18%	20.01%	30.08%	21.18%	13.45%	31.23%	37.99%	31.46%	22.73%	41.14%	18.18%	24.22%
POINSETT	28 Sites	2677	1936	65	7	56	354	159	12	31	0	5297
	12.61%	14.77%	23.40%	10.35%	5.88%	20.82%	27.79%	12.76%	7.79%	17.71%	0.00%	17.47%
Grand Totals	222 Sites	18130	8274	628	119	269	1274	1246	154	175	44	30313
	100.00%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Table 12. Prehistoric Lithic Raw Material Utilization in the L'Anguille River Basin: Totals by Raw Material Category and County.

The distributions of lithic raw materials within the basin support some of the inferences noted above. Crowley's Ridge chert accounts for the vast majority (87.11%) of all lithic raw material found within the basin, and occurs in roughly equivalent proportions in each of the four counties (Table 12 top; the sum of intentionally thermally altered and unaltered Crowley's Ridge chert ranges from a low of 83.32% in Cross County to a high of 89.55% in St. Francis County). Interestingly, the incidence of intentional thermal alteration varies appreciably within this same sample. Thermal alteration was more evident in the northern part of the basin, where it accounted for approximately one-third of the total raw material assemblage. This may be linked to the greater incidence of fire cracked rock in these same counties. In this view, some of the fire cracked rock observed in these counties may be alteration production failures. Alternatively, some of the intentionally thermally altered chert may be misidentified, and may have been accidentally fired.

Materials other than Crowley's Ridge chert comprise only a minor part of the basin assemblages, although again some variation in the occurrence of these materials was noted. Pitkin chert, for example, was most commonly found in St. Francis County, although why this was the case was unknown. Chert breccia decreased in incidence from south to north in the basin. Mathis (1986:297) noted that this material was most common in the central Village Creek basin, well to the north of the L'Anguille River area. The distribution of chert breccia in the L'Anguille basin is thus the opposite that expected from earlier studies. The L'Anguille breccia, a well-cemented conglomeritic-like material, probably derives from a different source than the materials from along Village Creek.

White chert, presumably from the Ozark escarpment, was infrequent throughout the basin, with a low in St. Francis County (where black Pitkin chert, presumably also from the Ozarks, was the most common). The distribution of gray chert, which was a very high quality material, was similar to that of the white chert, suggesting that the two materials came from the same areas, or were utilized in the same fashion. Banded chert, high-quality jasper-like material that may derive from Crowley's Ridge gravels (given the frequent presence of pebble cortex) was found in about even incidence throughout the basin. Quartzites, another material originating on Crowley's Ridge (House 1975b), were comparatively more common in the northern part of the basin as opposed to within the southern counties. This distribution may also be related to raw material availability; utilization of quartzites in the northern part of the basin may reflect the proximity of sources, as well as less concern with the procurement of high quality stone. This assumes, of course, that Crowley's Ridge quartzite was perceived as a less desirable raw material than chert. Finally, novaculite, while extremely uncommon within the basin, occurred with greatest incidence in Lee County. This area was presumably the closest to the sources for this material in southwest and central Arkansas, and also to the transportation routes by which it made its way into northeast Arkansas (i.e., along the Arkansas and White rivers).

EVIDENCE FOR HISTORIC OCCUPATIONS IN THE L'ANGUILLE RIVER BASIN

Historic artifacts were found at 101 of the 222 sites examined during the 1987 survey along the L'Anguille channel margin (Table 13). By far the majority of these were light scatters of material, typically isolated pieces of glass or pottery, that do not appear to derive from former structures, outbuildings, or intensive activity areas (i.e., logging and hunting/fishing camps). Twenty six sites, almost all located in Lee County, however, were characterized by dense debris scatters, commonly including brick fragments, that appear to be the remains of nineteenth and twentieth century farm or tenant houses. Most of these were comparatively

Table 13. Historic Sites in the L'Anguille River Basin: Totals by General Site Type and County.

County	# of Sites	Tenant Houses	Early House Sites	Other Sites
Lee	67	18	6	2
St. Francis	9			
Cross	18	2		1
Poinsett	7			
Totals	101	20	6	3

Tenant Houses: 3LE150, 3LE151, 3LE152, 3LE153, 3LE154, 3LE155, 3LE158, 3LE161, 3LE162, 3LE164, 3LE175, 3LE195, 3LE197, 3LE206, 3LE208, 3LE209, 3LE229, 3LE231, 3CS207, 3CS221,

Early House Sites: 3LE2, 3LE141, 3LE149, 3LF166, 3LE190, 3LE235

Other Site Types: 3LE163, 3LE183 (early-to-mid twentieth century dumps); 3CS22 (protohistoric? French gunflint present)

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recent scatters dating to the early to mid-twentieth century, and could be identified by informants as the locations of former tenant houses. In many cases architectural debris from these structures was present on the riverbank below the scatters, where it had been pushed by heavy equipment. Six of the scatters were characterized by extensive quantities of mid-to-late nineteenth century debris, that appear to reflect earlier settlement. The fact that most of the historic sites were found in Lee County appears linked to drainage conditions in the basin; only in this county were appreciable areas of elevated, well-drained terrain found in close proximity to the channel margin (see pp. 14, 76).

Only one possible earlier (18th or early 19th century) historic site was found, at 3CS22, which yielded a French gunflint amid an otherwise (inferred) prehistoric assemblage. French gunflints continued to be used well into the nineteenth century, however, so the site may be comparatively recent. The only other historic site type noted were two early-to-mid twentieth century trash dumps produced by occupants of the town of Marianna. Modern trash (i.e., under ca. 25 years old) was common along the river margins, but was not collected or recorded.

IX. CULTURAL RESOURCE MANAGEMENT RECOMMENDATIONS

INTRODUCTION

In this chapter management recommendations are advanced to guide subsequent cultural resource investigations on the L'Anguille River Channel Cleanout project in Lee, St. Francis, Cross, and Poinsett counties, Arkansas. Generalized locational information and brief, summary information on all of the archaeological sites encountered during the project has been included in this document (Tables 14 to 17; Appendix VI). Precise site locational data and boundaries are provided in the map sheets accompanying the project site forms, and have been illustrated on blue line aerial project maps on file with the Memphis District, U.S. Army Corps of Engineers.

For sites in the first 16 miles of the right-of-way, where limited testing (i.e., the excavation of a 1 m test unit) was undertaken, evaluations of site significance in terms of National Register Eligibility criteria have been made, where sufficient data was at hand to make effective judgement. Where such data was not available, the recommendations as to the appropriate level of effort needed to determine significance have been advanced. For sites located in the project right-of-way between channel miles 16 and 90, initial testing (i.e., excavation of a 1 m test unit) is necessary, following Corps of Engineer guidelines specified in the Scope of Work for the conduct of the project. Archaeological sites located immediately adjacent to, but outside of the right-of-way require no further investigation. These have been marked on project maps, and should be avoided during construction.

PROJECT RESULTS

A total of 222 sites were located and documented in the L'Anguille River Channel Cleanout survey area, 137 in the immediate 300 foot right-of-way, and another 85 immediately adjacent to, but outside of this corridor. Along channel miles 0 to 16, 56 sites were found within the right-of-way (Table 14), while from channel miles 16 to 90, 81 sites were found in the project right-of-way (Table 15). Along channel miles 0 to 16 another 44 sites were found immediately adjacent to, but outside of, the project right-of-way (Table 16). An additional 41 sites were found immediately adjacent to the right-of way from channel miles 16 to 90 (Table 17). The number of sites located by county is as follows: Lee County (107 sites), St. Francis County (20 sites), Cross County (67) sites, and Poinsett County (28 sites). All of these sites were plotted on the Memphis District, Corps of Engineers project maps.

L'ANGUILLE RIVER PROJECT: SITES IN RIGHT-OF-WAY, CHANNEL MILES 0 TO 16

STATE SITE #	PROJECT SITE #	Miles 0-16	WITHIN R-O-W	COUNTY	C.O.E. MAP #	U.S.G.S. QUAD	FIELDWORK C	G	ST	TP	Further Work at this site?	Recommended Fieldwork 2m units (#)	stripping	backhoe	Commentary
3LE141	1	1	Yes	Lee	3	Marianna	1			1	Yes	3	Yes		Early historic site...subplowzone features possible.
3LE142	2	1	Yes	Lee	3	Marianna	1			1	No				Shallow, badly eroded
3LE143	3	1	Yes	Lee	3	Marianna	1			1	No				Shallow, badly eroded
3LE144	4	1	Yes	Lee	3	Marianna	1			1	Yes	3	Yes		No artifacts below plowzone; features possible.
3LE145	5	1	Yes	Lee	3	Marianna		1		1	No				Minimal materials
3LE149	9	1	Yes	Lee	2	Marianna	1			1	Yes	5	Yes		Dense scatter, features possible
3LE150	10	1	Yes	Lee	2	Marianna		1		1	No				Minimal materials
3LE151	11	1	Yes	Lee	2	Marianna		1		•	No				Recent historic scatter
3LE152	12	1	Yes	Lee	2	Marianna		1		1	No				Recent tenant site, house pushed onto river bank
3LE153	13	1	Yes	Lee	2	Marianna	1			1	No				Minimal scatter
3LE154	14	1	Yes	Lee	2	Marianna	1			1	No				Recent tenant site; house pushed onto river bank
3LE155	15	1	Yes	Lee	2	Marianna	1			1	Yes	3			Fairly deep deposits; historic artifacts to 30cm
3LE156	16	1	Yes	Lee	2	Marianna	1			1	No				No artifacts in unit
3LE157	17	1	Yes	Lee	2	Marianna		1		1	Yes	5	Yes	Yes	Shallow deposits, scatter rich, features possible.
3LE158	18	1	Yes	Lee	1	Soudan	1			1	Yes	5	Yes	Yes	Mississippian hamlet?
3LE159	19	1	Yes	Lee	1	Soudan	1			1	Yes	3	Yes	Yes	Features possible, dense scatter
3LE160	20	1	Yes	Lee	1	Soudan	1			•	No				Recent historic scatter
3LE161	21	1	Yes	Lee	1, 2	Soudan	1			1	Yes	3	Yes		Possible features below plowzone?
3LE162	22	1	Yes	Lee	1, 2	Marianna	1			1	Yes	3	Yes		Mississippian hamlet?
3LE163	23	1	Yes	Lee	1, 2	Marianna	1			1	No				Extensive historic scatter, but recent
3LE164	24	1	Yes	Lee	1, 2	Marianna	1			1	Yes	3	Yes		Dense scatter; Mississippian hamlet?
3LE165	25	1	Yes	Lee	2	Marianna	1			•	No				Recent historic scatter
3LE166	26	1	Yes	Lee	2	Marianna	1			1	Yes	3			Dense prehistoric and historic scatter.
3LE167	27	1	Yes	Lee	2	Marianna		1		•	No				Modern debris from dump at bridge
3LE175	35	1	Yes	Lee	2, 3	Marianna	1			1	Yes	5		Yes	Intact subplowzone Baytown midden
3LE176	36	1	Yes	Lee	2	Marianna	1			1	Yes	3		Yes	Possible feature, Baytown sherd scatter
3LE177	37	1	Yes	Lee	2	Marianna	1			1	No				Minimal materials
3LE179	39	1	Yes	Lee	2, 3	Marianna		1		1	No				Minimal materials
3LE180	40	1	Yes	Lee	2, 3	Marianna	1			1	No				Minimal materials
3LE183	43	1	Yes	Lee	2, 3	Marianna	1			1	Yes	5		Yes	Artifacts below disk zone
3LE184	44	1	Yes	Lee	3	Marianna	1			1	Yes	3		Yes	Artifacts to 40cm in test unit
3LE186	46	1	Yes	Lee	2	Marianna		1		•	No				Recent historic scatter
3LE188	48	1	Yes	Lee	1, 2	Marianna		1		•	No				Highly disturbed by heavy equipment
3LE190	50	1	Yes	Lee	3	Marianna		1		1	No				Minimal materials
3LE192	52	1	Yes	Lee	4	Marianna	1			1	No				Badly eroded
3LE193	53	1	Yes	Lee	4	Marianna	1			1	No				Shallow deposits, steatite/LA materials?
3LE195	56	1	Yes	Lee	1	Soudan	1			1	No				Minimal materials
3LE197	58	1	Yes	Lee	1	Soudan		1		1	No				Minimal materials
3LE198	59	1	Yes	Lee	1	Soudan		1		1	No				Minimal materials
3LE199	60	1	Yes	Lee	2	Marianna		1		•	No				Highly disturbed by heavy equipment
3LE201	62	1	Yes	Lee	1	Soudan		1		1	Yes	3		Yes	Dense scatter

Table 14. L'Anguille River Channel Cleanout Project: Sites in Right-of-Way, Channel Miles 16 to 90, 1987 Field Survey.

L'ANGUILLE RIVER PROJECT: SITES IN RIGHT-OF-WAY, CHANNEL MILES 0 TO 16 (Continued)

STATE SITE #	PROJECT SITE #	Miles 0-16	WITHIN R-O-W	COUNTY	C.O.E. MAP #	U.S.G.S. QUAD	FIELDWORK C	G	ST	TP	Further Work at this site?	Recommended Fieldwork 2m units (#)	stripping	backhoe	Commentary
3LE202	63	1	Yes	Lee	1	Soudan		1		1	No				Minimal materials
3LE203	64	1	Yes	Lee	1	Soudan		1		1	No				Minimal materials
3LE205	66	1	Yes	Lee	3	Marianna		1		1	Yes	3		Yes	Possibly deeply buried deposits
3LE206	69	1	Yes	Lee	1	Soudan		1		1	Yes	3		Yes	Possibly deeply buried deposits
3LE207	71	1	Yes	Lee	1	Soudan	1			1	No				Minimal materials
3LE208	72	1	Yes	Lee	1	Soudan	1			1	No				Minimal materials
3LE209	73	1	Yes	Lee	1	Soudan		1		*	No				Recent historic scatter
3LE210	74	1	Yes	Lee	3	Marianna		1		1	No				Minimal materials
3LE211	75	1	Yes	Lee	1	Soudan		1		1	No				Minimal materials
3LE221	183	1	Yes	Lee	3	Marianna			1	1	Yes	3			Possible single component, unplowed
3LE222	184	1	Yes	Lee	3	Marianna		1	1	1	Yes	3			Possible single component, unplowed
3LE223	185	1	Yes	Lee	3	Marianna				1	No				Shallow, eroded
3LE226	188	1	Yes	Lee	4	Marianna			1	1	Yes	3		Yes	Tchula? Artifacts to 70 cm in test pit
3LE229	191	1	Yes	Lee	4	Marianna			1	1	Yes	3		Yes	Dense historic site, prehistoric below surface
3LE243	216/IF6	1	Yes	Lee	2	Marianna		1			No				Isolated hammerstone, no other material associated
	TOTALS:	56	Sites				29	23	4	47	22 sites	76			

C = controlled surface collection, stratified systematic unaligned sampling frame
G = controlled surface collection, 100% timed collection
ST = shovel testing
TP = 1 m test unit excavated to sterile
* = modern or heavily disturbed scatter, not tested

Table 14. L'Anguille River Channel Cleanout Project: Sites in Right-of-Way, Channel Miles 16 to 90, 1987 Field Survey. (cont).

Table 15. L'Anguille River Channel Cleanout Project: Sites in Right-of-Way, Channel Miles 16 to 90, 1987 Field Survey.

L'ANGUILLE RIVER PROJECT: SITES IN RIGHT OF WAY, CHANNEL MILES 16 TO 90

STATE SITE #	PROJECT SITE #	Miles 16-90	WITHIN R-OF-W	COUNTY	C.O.E. MAP #	U.S.G.S. QUAD	FIELDWORK C	G	ST	TP	Further Work at this site?	Commentary
3LE213	82	1	Yes	Lee	5	Haynes		1			1m test unit	
3LE214	83	1	Yes	Lee	5	Haynes		1			1m test unit	
3LE215	84	1	Yes	Lee	5	Haynes		1			1m test unit	
3LE216	85	1	Yes	Lee	5	Haynes		1			1m test unit	
3LE217	86	1	Yes	Lee	5	Haynes		1			1m test unit	
3LE218	87	1	Yes	Lee	5	Haynes		1			1m test unit	
3CS012	181	1	Yes	Cross	17, 18	Vanndale		1			1m test unit	
3CS017	122	1	Yes	Cross	16	Central		1			1m test unit	
3CS018	129	1	Yes	Cross	20	C.V. West		1			1m test unit	
3CS022	154	1	Yes	Cross	17	Central	1				1m test unit	
3CS046	131	1	Yes	Cross	20	C.V. West	1	1			1m test unit	
3CS048	111	1	Yes	Cross	21	C.V. West		1			1m test unit	
3CS049	123	1	Yes	Cross	16	Central		1			1m test unit	
3CS080	92	1	Yes	Cross	13, 14	Hamlin		1			1m test unit	
3CS081	91	1	Yes	Cross	13, 14	Hamlin		1			1m test unit	
3CS093	174	1	Yes	Cross	17	Vanndale		1			1m test unit	
3CS121	147	1	Yes	Cross	16	Central	1				1m test unit	
3CS176	96	1	Yes	Cross	18	Vanndale		1			1m test unit	
3CS176	176	1	Yes	Cross	17	Vanndale		1			1m test unit	
3CS177	97	1	Yes	Cross	18	Vanndale		1			1m test unit	
3CS179	98	1	Yes	Cross	18	Vanndale		1			1m test unit	
3CS180	99	1	Yes	Cross	18	Vanndale		1			1m test unit	
3CS181	100	1	Yes	Cross	18	Vanndale		1			1m test unit	
3CS183	101	1	Yes	Cross	18	Vanndale		1			1m test unit	
3CS184	175	1	Yes	Cross	17	Vanndale		1			1m test unit	
3CS188	179	1	Yes	Cross	17, 18	Vanndale		1			1m test unit	
3CS189	180	1	Yes	Cross	17, 18	Vanndale		1			1m test unit	
3CS190	209	1	Yes	Cross	17	Vanndale		1			1m test unit	
3CS193	103	1	Yes	Cross	20, 21	C.V. West		1			1m test unit	
3CS194	104	1	Yes	Cross	20, 21	C.V. West		1			1m test unit	
3CS195	105	1	Yes	Cross	21	C.V. West		1			1m test unit	
3CS196	106	1	Yes	Cross	21	C.V. West		1			1m test unit	
3CS197	107	1	Yes	Cross	21	C.V. West		1			1m test unit	
3CS198	108	1	Yes	Cross	21	C.V. West		1			1m test unit	
3CS199	109	1	Yes	Cross	21	C.V. West		1			1m test unit	
3CS200	110	1	Yes	Cross	21	C.V. West		1			1m test unit	
3CS201	127	1	Yes	Cross	20	C.V. West		1			1m test unit	
3CS202	128	1	Yes	Cross	20	C.V. West	1	1			1m test unit	

C = controlled surface collection, stratified systematic unaligned sample
G = controlled surface collection, 100%, timed collection
ST = shovel testing
TP = 1 m test unit excavated to sterile

Table 15. L'Anguille River Channel Cleanout Project: Sites in Right-of-Way, Channel Miles 16 to 90, 1987 Field Survey. (cont)

L'ANGUILLE RIVER PROJECT: SITES IN RIGHT OF WAY, CHANNEL MILES 16 TO 90

STATE SITE #	PROJECT SITE #	Miles 16-90	WITHIN R-OF-W	COUNTY	C.O.E. MAP #	U.S.G.S. QUAD	FIELDWORK C	G	ST	TP	Further Work at this site?	Commentary
3CS203	132	1	Yes	Cross	21	C.V.West		1			1m test unit	
3CS205	121	1	Yes	Cross	16	Central	1				1m test unit	
3CS207	148	1	Yes	Cross	16	Central	1				1m test unit	
3CS208	149	1	Yes	Cross	16	Central		1			1m test unit	
3CS210	151	1	Yes	Cross	16	Central		1			1m test unit	
3CS211	152	1	Yes	Cross	16	Central		1			1m test unit	
3CS212	153	1	Yes	Cross	17	Central		1			1m test unit	
3CS218	93	1	Yes	Cross	13, 14	Hamlin		1			1m test unit	
3CS219	94	1	Yes	Cross	14	Hamlin		1			1m test unit	
3CS220	95	1	Yes	Cross	14	Hamlin		1			1m test unit	
3CS221	160	1	Yes	St. Fran.	12, 13	Hamlin		1			1m test unit	
3CS222	165	1	Yes	Cross	14, 15	Hamlin		1			1m test unit	
3CS223	166	1	Yes	Cross	15	Hamlin		1			1m test unit	
3CS226	169	1	Yes	Cross	15	Hamlin		1			1m test unit	
3SF257	68	1	Yes	St. Fran.	10	Hawk/FC		1			1m test unit	
3SF260	70	1	Yes	St. Fran.	11	Hawkins		1			1m test unit	
3SF261	88	1	Yes	St. Fran.	9	Hawkins					1m test unit	
3SF263	203	1	Yes	St. Fran.	10	Hawkins		1	1		1m test unit	
3SF264	204	1	Yes	St. Fran.	10	Hawkins		1			1m test unit	
3SF265	205	1	Yes	St. Fran.	10	Hawkins		1			1m test unit	
3SF266	159	1	Yes	St. Fran.	12, 13	Hamlin		1			1m test unit	
3SF267	162	1	Yes	St. Fran.	12	Hamlin		1			1m test unit	
3SF268	81	1	Yes	St. Fran.	6	Haynes		1			1m test unit	
3SF269	202	1	Yes	St. Fran.	5	Haynes		1			1m test unit	
3SF269	207	1	Yes	St. Fran.	10	Forrest C		1			1m test unit	
3SF270	77	1	Yes	St. Fran.	8	Palestine	1				1m test unit	
3SF271	78	1	Yes	St. Fran.	6, 7	Palestine	1				1m test unit	
3SF272	79	1	Yes	St. Fran.	6, 7	Palestine	1				1m test unit	
3SF273	80	1	Yes	St. Fran.	6, 7	Palestine	1				1m test unit	
3PO020	133	1	Yes	Poinsett	21	C.V. West		1			1m test unit	
3PO157	119	1	Yes	Poinsett	25	Powers S	1	1			1m test unit	
3PO201	172	1	Yes	Poinset	23	Powers S		1			1m test unit	
3PO202	208	1	Yes	Poinsett	23	Powers S		1			1m test unit	
3PO204	146	1	Yes	Poinsett	23	Powers S			1		1m test unit	
3PO520	120	1	Yes	Poinsett	25	Powers S		1			1m test unit	
3PO522	138	1	Yes	Poinsett	26	Powers S.	1				1m test unit	
3PO523	139	1	Yes	Poinsett	26	Powers S		1			1m test unit	
3PO524	140	1	Yes	Poinsett	26	Powers S		1			1m test unit	

C = controlled surface collection, stratified systematic unaligned sample
G = controlled surface collection, 100%, timed collection
ST = shovel testing
TP = 1 m test unit excavated to sterile

Table 15. L'Anguille River Channel Cleanout Project: Sites in Right-of-Way, Channel Miles 16 to 90, 1987 Field Survey. (cont)

L'ANGUILLE RIVER PROJECT: SITES IN RIGHT OF WAY, CHANNEL MILES 16 TO 90

STATE SITE #	PROJECT SITE #	Miles 16-90	WITHIN R-OF-W	COUNTY	C.O.E. MAP #	U.S.G.S. QUAD	FIELDWORK C	G	ST	TP	Further Work at this site?	Commentary
3PO525	141	1	Yes	Poinsett	26	Powers S	1	1			1m test unit	
3PO526	142	1	Yes	Poinsett	26	Powers S		1			1m test unit	
3PO527	143	1	Yes	Poinsett	26	Powers S		1			1m test unit	
3PO531	113	1	Yes	Poinsett	21, 22	C.V. West		1			1m test unit	
3PO533	134	1	Yes	Poinsett	21	C.V. West		1			1m test unit	
	TOTALS:	81	Sites				13	70	2	0		

C = controlled surface collection, stratified systematic unaligned sample
G = controlled surface collection, 100%, timed collection
ST = shovel testing
TP = 1 m test unit excavated to sterile

The survey work at this point is essentially complete, although it should be noted that a small number of new sites may be found in the recommended deep site testing program (see below). The large number of sites in Lee County is due to the presence of extensive areas of high, well drained terrain near the river. The Crowley's Ridge escarpment is bisected by the L'Anguille in this area, offering unusually high bluffs along the river in many areas. The results of the 1987 survey clearly indicate that these bluff crests saw extensive utilization in the past. Further to the north along the L'Anguille, the terrain is lower and poorly drained (particularly in St. Francis County, where beaver dams have flooded large areas), or has been disturbed by land-leveling and levee construction. Fewer sites, accordingly, were found in the immediate project right-of-way, although it should be noted that large numbers of sites are documented in Arkansas Archeological Survey site files back away from the floodplain, on higher land surfaces.

The full extent of all sites found in and adjacent to the project direct impact zone have been carefully plotted on COE project aerials, county soils maps, and U.S.G.S. quadrangles. They can be readily relocated on the ground, a matter of considerable importance to both COE planners and archaeological researchers. Sites in the right-of-way within channel miles 0 to 16 have been initially evaluated for significance, based on the survey-level investigations, and the excavation of 1 m test units. Sites in the project right-of-way along channel miles 16 to 90 have not been subject to limited test excavation, and have not been evaluated.

The content and boundaries of all project sites were determined through controlled surface collection procedures. Collections using a stratified systematic unaligned collection procedure were made at 42 of the 137 sites found in the right of way, with every artifact plotted in to within 10 meters. This procedure was employed at every site where surface conditions (i.e., uniform visibility) permitted its successful application. At sites where portions of the ground surface were overgrown, badly eroded, or disturbed, these specific controlled procedures could not be employed. Their use in such conditions would result in maps showing high artifact concentrations in deflated site areas (where large numbers of artifacts tend to occur), or low densities in partially overgrown areas. At sites such as these, 100 percent controlled collections were made. The boundaries of the scatter were carefully determined on the ground and on project aerials, and *every* visible artifact was collected. The amount of collection time in person hours was recorded, to ensure comparability of the samples. This collection procedure was employed at 93 of the 137 sites found in the right of way (Tables 14, 15).

At sites found in overgrown areas, systematic shovel testing was employed to define site extent. When positive shovel tests occurred, shovel tests were opened at 10 m intervals in each of the four cardinal directions until at least two sterile tests occurred. All positive shovel tests were flagged and labeled using surveyors' tape. These collection procedures were employed at 6 of the 137 sites found in the right of way (Tables 14, 15). At sites extending from cleared areas into woods, both controlled surface and shovel test collection procedures were employed to define site extent.

Table 16. L'Anguille River Channel Cleanout Project: Sites Outside of Right-of-Way, Channel Miles 0 to 16, 1987 Field Survey.

STATE SITE #	PROJECT SITE #	Miles 0-16	WITHIN R-OF-W	COUNTY	C.O.E. MAP #	U.S.G.S. QUAD	FIELDWORK C	G	ST	TP	Further Work at this site?	Commentary
3LE002	200	1	No	Lee	4	Marianna		1			No-avoid	Outside of direct impact zone.
3LE024	211	1	No	Lee	NA	Soudan		1			No-avoid	Outside of direct impact zone.
3LE101	55	1	No	Lee	4	Marianna		1			No-avoid	Outside of direct impact zone.
3LE146	6	1	No	Lee	2	Marianna		1			No-avoid	Outside of direct impact zone.
3LE147	7	1	No	Lee	2	Marianna		1			No-avoid	Outside of direct impact zone.
3LE148	8	1	No	Lee	2	Marianna		1			No-avoid	Outside of direct impact zone.
3LE168	28	1	No	Lee	2	Marianna		1			No-avoid	Outside of direct impact zone.
3LE169	29	1	No	Lee	2	Marianna		1			No-avoid	Outside of direct impact zone.
3LE170	30	1	No	Lee	2	Marianna		1			No-avoid	Outside of direct impact zone.
3LE171	31	1	No	Lee	2	Marianna		1			No-avoid	Outside of direct impact zone.
3LE172	32	1	No	Lee	2	Marianna	1				No-avoid	Outside of direct impact zone.
3LE173	33	1	No	Lee	2, 3	Marianna		1			No-avoid	Outside of direct impact zone.
3LE174	34	1	No	Lee	2, 3	Marianna		1			No-avoid	Outside of direct impact zone.
3LE178	38	1	No	Lee	2	Marianna		1			No-avoid	Outside of direct impact zone.
3LE181	41	1	No	Lee	2, 3	Marianna		1			No-avoid	Outside of direct impact zone.
3LE182	42	1	No	Lee	2, 3	Marianna		1			No-avoid	Outside of direct impact zone.
3LE185	45	1	No	Lee	2	Marianna		1			No-avoid	Outside of direct impact zone.
3LE187	47	1	No	Lee	2	Marianna		1			No-avoid	Outside of direct impact zone.
3LE189	49	1	No	Lee	3	Marianna		1			No-avoid	Outside of direct impact zone.
3LE191	51	1	No	Lee	4	Marianna		1			No-avoid	Outside of direct impact zone.
3LE194	54	1	No	Lee	4	Marianna		1			No-avoid	Outside of direct impact zone.
3LE196	57	1	No	Lee	1	Soudan		1			No-avoid	Outside of direct impact zone.
3LE200	61	1	No	Lee	2	Marianna		1			No-avoid	Outside of direct impact zone.
3LE204	65	1	No	Lee	1	Soudan		1			No-avoid	Outside of direct impact zone.
3LE212	76	1	No	Lee	1	Soudan		1			No-avoid	Outside of direct impact zone.
3LE220	182	1	No	Lee	3	Marianna			1		No-avoid	Outside of direct impact zone.
3LE224	186	1	No	Lee	3	Marianna		1			No-avoid	Outside of direct impact zone.
3LE225	187	1	No	Lee	4	Marianna		1			No-avoid	Outside of direct impact zone.
3LE227	189	1	No	Lee	4	Marianna					No-avoid	Outside of direct impact zone.
3LE228	190	1	No	Lee	4	Marianna			1		No-avoid	Outside of direct impact zone.
3LE230	192	1	No	Lee	4	Marianna			1		No-avoid	Outside of direct impact zone.
3LE231	193	1	No	Lee	4	Marianna		1			No-avoid	Outside of direct impact zone.
3LE232	194	1	No	Lee	4	Marianna		1			No-avoid	Outside of direct impact zone.
3LE233	195	1	No	Lee	4	Marianna		1			No-avoid	Outside of direct impact zone.
3LE234	196	1	No	Lee	4	Marianna		1			No-avoid	Outside of direct impact zone.
3LE235	197	1	No	Lee	4	Marianna		1			No-avoid	Outside of direct impact zone.
3LE236	198	1	No	Lee	4	Marianna		1			No-avoid	Outside of direct impact zone.
3LE237	199	1	No	Lee	4	Marianna		1			No-avoid	Outside of direct impact zone.
3LE238	201	1	No	Lee	4	Haynes		1			No-avoid	Outside of direct impact zone.
3LE239	210/IF1	1	No	Lee	4	Haynes		1			No-avoid	Outside of direct impact zone.
3LE240	213/IF2	1	No	Lee	2	Marianna		1			No-avoid	Outside of direct impact zone.
3LE241	214/IF3	1	No	Lee	2	Marianna		1			No-avoid	Outside of direct impact zone.
3LE242	215/IF5	1	No	Lee	2	Marianna		1			No-avoid	Outside of direct impact zone.
3LE244	217/IF11	1	No	Lee	2	Marianna		1			No-avoid	Outside of direct impact zone.
	TOTALS:	44	Sites				1	36	3	0		

C = controlled surface collection, stratified systematic unaligned sample
G = controlled surface collection, 100%, timed collection
ST = shovel testing
TP = 1 m test unit excavated to sterile

Table 17. L'Anguille River Channel Cleanout Project: Sites Outside of Right-of-Way, Channel Miles 16 to 90, 1987 Field Survey.

STATE SITE #	PROJECT SITE #	Miles 16-90	WITHIN R-OF-W	COUNTY	C.O.E. MAP #	U.S.G.S. QUAD	FIELDWORK C	G	ST	TP	Further Work at this site?	Commentary
3LE219	145	1	No	Lee	5	Haynes		1			No-avoid	
3SF015	163	1	No	St. Fran.	12	Hamlin		1			No-avoid	
3SF060	67	1	No	St. Fran.	10	Forrest C		1			No-avoid	
3SF258	206	1	No	St. Fran.	10	Hawk/FC		1			No-avoid	
3SF262	89	1	No	St. Fran.	9	Hawkins		1			No-avoid	
3CS047	130	1	No	Cross	20	C.V. West		1			No-avoid	
3CS083	164	1	No	Cross	13	Hamlin		1			No-avoid	
3CS186	177	1	No	Cross	17	Vanndale		1			No-avoid	
3CS187	178	1	No	Cross	17, 18	Vanndale		1			No-avoid	
3CS191	218/IF12	1	No	Cross	18	Vanndale		1			No-avoid	
3CS192	102	1	No	Cross	20, 21	C.V. West		1			No-avoid	
3CS204	222/IF20	1	No	Cross	20	C. V. West		1			No-avoid	
3CS206	126	1	No	Cross	16	Central		1			No-avoid	
3CS209	150	1	No	Cross	16	Central		1			No-avoid	
3CS213	155	1	No	Cross	17	Central		1			No-avoid	
3CS214	156	1	No	Cross	17	Central		1			No-avoid	
3CS215	173	1	No	Cross	17	Central		1			No-avoid	
3CS216	219/IF15	1	No	Cross	16	Central		1			No-avoid	
3CS217	90	1	No	Cross	13, 14	Hamlin		1			No-avoid	
3CS221	161	1	No	Cross	13	Hamlin		1			No-avoid	
3CS224	167	1	No	Cross	15	Hamlin		1			No-avoid	
3CS225	168	1	No	Cross	15	Hamlin		1			No-avoid	
3CS227	170	1	No	Cross	15	Hamlin		1			No-avoid	
3CS228	221/IF19	1	No	Cross	15	Hamlin		1			No-avoid	
3CS230	124	1	No	Cross	16	Central		1			No-avoid	
3CS231	125	1	No	Cross	16	Central		1			No-avoid	
3CS232	220/IF16	1	No	Cross	16	Central		1			No-avoid	
3PO017	212	1	No	Poinsett	NA	C. V. West		1			No-avoid	
3PO097	137	1	No	Poinsett	23	Powers S		1			No-avoid	
3PO098	116	1	No	Poinsett	24	Powers S		1			No-avoid	
3PO148	117	1	No	Poinsett	24	Powers S		1			No-avoid	
3PO199	171	1	No	Poinsett	23	Powers S		1			No-avoid	
3PO203	135	1	No	Poinsett	23	Powers S	1				No-avoid	
3PO318	144	1	No	Poinsett	24	Powers S		1			No-avoid	
3PO518	115	1	No	Poinsett	24	Powers S		1			No-avoid	
3PO519	118	1	No	Poinsett	25	Powers S	1				No-avoid	
3PO521	136	1	No	Poinsett	23	Powers S		1			No-avoid	
3PO528	157	1	No	Poinsett	26	Powers S		1			No-avoid	
3PO529	158	1	No	Poinsett	26	Powers S		1			No-avoid	
3PO530	112	1	No	Poinsett	21, 22	C.V. West		1			No-avoid	
3PO532	114	1	No	Poinsett	21, 22	C.V. West		1			No-avoid	
	TOTALS:	41	Sites				2	39	0	0		

C = controlled surface collection, stratified systematic unaligned sample
G = controlled surface collection, 100%, timed collection
ST = shovel testing
TP = 1 m test unit excavated to sterile

Part of the 1987 survey investigations included revisits to known sites in and immediately adjacent to the project right-of-way. Supplemental site forms on all revisited sites were submitted, with completed forms for newly discovered sites, to the Arkansas Archeological Survey. It should be noted that several previously recorded sites were mapped incorrectly by the original investigators. Correct locational data on these sites was submitted to the Arkansas Archeological Survey. A number of previously recorded sites in and near the project area also no longer exist. Supplemental information on these site areas, for the most part destroyed by recent rice dike or catfish pond construction, was also be submitted to the Survey.

FIELDWORK AND RECOMMENDATIONS: CHANNEL MILES 0 TO 16

Fieldwork

In the area of most immediate concern to COE planners, along channel miles 0 to 16, 56 sites were found in the project right-of-way (Table 14). Another 44 sites were found immediately adjacent to, but outside of, the project right-of-way (Table 16). In accordance with the project Scope of Work, one meter test units were excavated at 47 of the 56 sites located in the immediate right-of-way. This included all nondestroyed, nonmodern sites, where the possibility for intact subsurface materials was expected. At the 47 tested sites, 1 m units were opened to a minimum depth of one sterile (10 cm) level below the artifact-bearing levels. A 30 x 30 cm test unit was then opened an additional 40 cm in one corner of the unit. All fill was screened through one-quarter inch mesh. Floorplans and profiles were drawn and photographed (color slide and black and white record shots) at every tested site. Test units were tied in to permanent, flagged datums placed in secure, nearby locations.

The nine sites that were not tested included two that had been effectively destroyed by heavy equipment operation, one isolated prehistoric artifact with no other associated material (3LE243), and six recent (post-1940) historic scatters. The two sites damaged by heavy equipment (Sites 3LE188 and LE199) had been massively disturbed to a depth of several feet, well below the artifact-bearing levels of other sites in comparable areas. The recent historic scatters (Sites 3LE151, 3LE160, 3LE165, 3LE167, 3LE186, and 3LE209) consisted of scattered trash dumped along the river bank. All were identified as recent dumps by local landowners, who were questioned about the age and origin of these features.

Recommendations

The results of the field survey and testing operations at the 56 sites in the right-of-way in channel miles 0 to 16 are summarized in Table 14. At 34 of the sites, no evidence for intact, subplowzone artifact or feature assemblages was found.

These sites are: 3LE142, 3LE143, 3LE145, 3LE150, 3LE151, 3LE152, 3LE153, 3LE154, 3LE156, 3LE160, 3LE163, 3LE165, 3LE167, 3LE177, 3LE179, 3LE180, 3LE186, 3LE188, 3LE190, 3LE192, 3LE193, 3LE195, 3LE197, 3LE198, 3LE199, 3LE202, 3LE203, 3LE207, 3LE208, 3LE209, 3LE210, 3LE211, 3LE223, and 3LE243. These sites are not considered to met National Register significance criteria (see below), and no further investigations at these locations are recommended. In Table 14, "No" is recorded in the column headed "Further Work Required at this Site?" The level of information collected to date from these sites provides comprehensive documentation about the nature and extent of these resources.

No sites were found in the project area that could be unequivocally considered eligible for the National Register of Historic Places. Twenty-two sites require further investigation before National Register Eligibility can be adequately determined. Artifacts or features were found in apparently undisturbed context below the cultivation or humus zone at 16 sites during the testing program, at 3LE149, 3LE155, 3LE158, 3LE159, 3LE161, 3LE162, 3LE164, 3LE166, 3LE175, 3LE176, 3LE183, 3LE184, 3LE221, 3LE222, 3LE226, and 3LE229. At six other locations (sites 3LE141, 3LE144, 3LE157, 3LE201, 3LE205, and 3LE206), all in plowed fields, no subplowzone artifacts were found in the excavated test units. The possibility for undisturbed features at these sites was thought to be good, however, given the density of the surface artifact scatter. Additional investigations at these 22 sites will be necessary to determine their significance in terms of National Register eligibility criteria.

Field testing activity recommended at these 22 sites is summarized in Table 14. A minimum of three 2 m units should be opened at each of the 22 sites where subsurface deposits or features are either present or highly likely. Excavation of five 2 m units is recommended at the five largest sites, to ensure adequate coverage. These units should be opened to a minimum of one sterile 10 cm level below the base of the plowzone, with a 1 m (one-quarter) subsection carried to at least 40 cm below that, again using 10 cm levels. All fill should be screened through 1/4 inch mesh. Given the high silt-clay content of the deposits, water screening is highly recommended to speed the field effort. Excavation of these test units will document the age and context of the subsurface assemblages at these sites. In all, excavation of a total of 76 2 x 2 m units is recommended at the 22 sites in project channel miles 0 to 16.

Limited transect stripping, using a motor grader or comparable machinery, is recommended at nine sites, to determine whether or not features are present at the base of the plowzone. Given the large size of these sites, transect stripping would be an efficient, cost-effective feature discovery procedure. This procedure has proven to be an effective method of site evaluation, and is a far superior method of documenting site feature contents than the excavation of small test units (Shott n.d.). This stripping would be conducted after completion of the test pitting activity. Transects would be opened to the base of the plowzone (or lower, if warranted by the test pitting), with encountered features mapped and sampled for content. The transect would then be backfilled. Detailed examination of site feature assemblages would not be warranted at the evaluation stage, unless they

could be completely removed within allotted time and budgetary constraints.

Based on the results of the fieldwork to date, particularly the results of geomorphological and soils analyses by the Delecourts and Dr. John Foss, a number of locations in the first 16 channel miles have been identified that show potential for yielding deeply buried cultural deposits. These should be examined prior to clearance of these areas. Such a deep site testing program will ensure that deeply buried cultural resources, undetectable by present survey procedures, are not missed.

Areas where deep site testing should occur in Channel Miles 0 to 16 are indicated in Table 14, under the "Backhoe" column under Recommended Fieldwork. In some cases, the locations where deep site testing is recommended occur on or adjacent to known sites. Precise locations of these areas, and other selected locations that away from known sites, have been delimited on project aerials submitted to the Memphis District. Typically, the areas to be examined lie close to the river bank. Deep site testing in these locations should consist of the excavation, and partial screening, of fill from several small backhoe trenches. These should be no more than three to five meters long, and at least three meters in depth. Excavation of deeper units, if warranted by conditions in the first three meters, should be stepped for safety. It must be stressed that fill from these trenches must be screened through 1/4 inch mesh screen. Excavation of backhoe trenches in the absence of screening is unlikely to document the presence of buried occupation surfaces, since artifacts are unlikely to be readily apparent in the backdirt.

FIELDWORK AND RECOMMENDATIONS CHANNEL MILES 16 TO 90

Fieldwork

In the area of less immediate concern to COE planners, along channel miles 16 to 90, 81 sites were found in the project right-of-way (Table 15). Another 41 sites were found immediately adjacent to, but outside of, the project right-of-way (Table 17). The locations and boundaries of these sites were plotted on project blue-line aerial maps and submitted to the Memphis District. Site content, extent, and boundaries were determined following the same procedures employed at sites in Channel Miles 0 to 16, with the exception that one meter test units were not opened at these sites.

All pre-1940 historic sites and debris scatters in the channel mile 16 to 90 area were fully collected and recorded. It should be noted, however, that modern, post-1940 debris scatters from obvious trash dumping were not recorded as sites in this portion of the right-of-way. The river margins have served as a trash dumping area for local residents, and extensive quantities of debris are present in some areas. These areas were noted on project field maps. The practice of assigning site numbers to discrete debris scatters, which was followed at six sites in the

channel mile 0 to 16 area was discontinued in the channel mile 16 to 90 area.

Recommendations

The results of the field survey operations at the 81 sites in the right-of-way in channel miles 16 to 90 are summarized in Table 15. Significance evaluations have been deferred until one m test units can be opened at these sites, following the procedures employed at the sites along channel miles 0 to 16. None of these sites are badly disturbed, precluding further examination. At these 81 sites in the project right-of-way along channel miles 16 to 90, one m test units should be excavated.

Based on the results of the fieldwork to date, particularly the results of geomorphological and soils analyses by the Delecourts and Dr. John Foss, a number of locations in channel miles 16 to 90 have been identified that show potential for yielding deeply buried cultural deposits. These should be examined prior to clearance of these areas. Areas where deep site testing should occur in Channel Miles 16 to 90 are indicated in Table 15, under the "Backhoe" column under Recommended Fieldwork. Precise locations of these areas, and other selected locations that away from known sites, have been delimited on project aerials submitted to the Memphis District. Typically, the area to be examined lies close to the river bank. In some cases the locations where deep site testing is recommended occur on or adjacent to known sites. Deep site testing procedures should consist of the excavation, and partial screening, of fill from several small backhoe trenches. These should be no more than three to five meters long, and at least three meters in depth. It must be stressed that fill from these trenches must be screened through 1/4 inch mesh screen. Excavation of backhoe trenches in the absence of screening is unlikely to document the presence of buried occupation surfaces, since artifacts are unlikely to be readily apparent in the backdirt.

PALEOENVIRONMENTAL RESEARCH

Geomorphological/Soils Research

Fine grained geomorphological and soils investigations will need to accompany the proposed deep site testing program proposed above, to ensure accurate interpretation of the profiles and assemblages recovered. Minimally, a soil scientist and preferably a geoarchaeologist should be present during the deep site testing operations, to document the operations, and obtain the necessary samples. Where warranted by preservational conditions, pollen and macrovegetation samples should also be collected from these columns, particularly from archaeological horizons, and should be submitted to the relevant paleoenvironmental specialists for examination. Funding should be provided for laboratory analysis of representative samples of this information.

Monitoring Operations: Baldcypress

The planned Corps of Engineers channel cleanout should be monitored for exposure of subfossil baldcypress (*Taxodium distichum*) logs and canoes which are extremely valuable for paleoclimatology and archaeology in the Lower Mississippi Valley. Baldcypress trees are known to reach ages greater than 1,000 years and are sensitive to growing season drought (Stahle et al. 1985a). Moreover, cypress wood can be preserved in river channels, swamp and lake beds, and in buried sedimentary contexts for thousands of years (Stahle et al. 1985b). At present, living baldcypress grow along the L'Anguille River and subfossil cypress logs have been observed buried in the floodplain and channel sediments. While no baldcypress chronologies currently exist from the L'Anguille itself, there are two from the Cache River (Stahle et al. 1985c) that would certainly crossdate with L'Anguille River material. Additional baldcypress tree ring chronologies are currently under development elsewhere in eastern Arkansas and will also be useful in dating any material recovered from the L'Anguille.

Baldcypress chronologies 1000 to 5000 years long compiled from living trees and subfossil materials such as may be found in the L'Anguille River can be used to reconstruct growing season precipitation, streamflow, and drought indices for each year over the past millennia. In addition, these very long chronologies could be used to date wooden artifacts recovered from prehistoric archaeological sites in the lower Mississippi Valley. The longest chronology presently available in Arkansas begins in A.D. 1417 (Stahle 1985c), but in southeast Missouri a chronology begins in A.D. 1184 (Stahle et al. 1985b). Longer chronologies from living trees will certainly be developed in the near future, but subfossil logs in submerged and buried deposits offer the only hope for long extensions of the tree-ring record further into prehistory. Vegetation removal, snagging, and dredging associated with the L'Anguille channel cleanout, accordingly, should include monitoring and documentation of baldcypress paleoenvironmental records.

STANDARDS FOR FUTURE CULTURAL RESOURCE INVESTIGATIONS DURING THE L'ANGUILLE RIVER SURVEY PROJECT

In this section specific standards for future cultural resource investigations during the L'Anguille River survey project are advanced. These guidelines are meant to complement and clarify existing federal and state of Arkansas guidelines, and not to replace them. These recommendations, it must be stressed, are based on lessons learned during the preparation of the present report on the 1987 fieldwork. The presentation of effective guidelines for future research, it is believed, will help ensure the continuation of the the L'Anguille River survey project at a high technical level.

General Reporting Standards

A major goal of all future cultural resource projects undertaken in conjunction with the L'Anguille River Channel Cleanout project must be the production of final reports giving detailed, comprehensive, and intelligible presentations of the cultural resources examined. These reports must include thorough justifications for all research conclusions and management recommendations advanced. All work associated with the cultural resources investigations along the L'Anguille River must, accordingly, be directed toward thorough fieldwork, analysis, and assemblage documentation. Final reports of cultural resources investigations should be comprehensive descriptive and interpretive documents, designed to be easily used by both land use managers and archeological researchers.

These reports must represent both management/compliance documents, and scholarly contributions to Arkansas archeology. As such, they should include a thorough presentation of the project research design and methods, a complete presentation of the results, interpretation of the results in light of the research design, and a discussion of the significance of the results. Management recommendations must be clearly presented and soundly justified. Concise management summaries, documenting project procedures and results, and prepared from a management/land-use planning perspective, should appear in the front of the report. This summary should detail how many sites were found, which sites are NRHP eligible and which are not, which sites need further investigation and which do not, and what must be done to implement these recommendations. Detailed descriptions and justifications for these statements should appear in the body of the report. Finally, appropriate and comprehensive appendices and references must be included.

The strong linkage between cultural resources management and archeological and historical research must be emphasized. Cultural resource significance and National Register (NRHP) eligibility is normally determined by the potential of a site to yield information important to prehistory and history (see below). This can only be accomplished through explicit arguments linking these sites to specific archeological or historic research questions (Butler 1987). The potential of identified cultural resources to yield (or not yield) important contributions to research much be explicitly stated and justified, using arguments developed from the theoretical and substantive knowledge of the relevant disciplines (i. e., archaeology, history). Significance justifications, presented in these terms, must appear in technical cultural resource management (CRM) reports prepared for subsequent phases of the L'Anguille River Channel Cleanout project.

Evaluation Standards: National Register of Historic Places Criteria

The National Historic Preservation Act of 1966 outlined four criteria under which a historic or prehistoric site could be qualified for listing on the National Register of Historic Places. These are listed in 36 CFR 60:

> The quality of significance in American history, architecture, archeology, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:
>
> (a) that are associated with events that have made a significant contribution to the broad pattern of our history; or
>
> (b) are associated with the lives of persons significant in our past; or
>
> (c) that embody the distinctive characteristics of a type, period or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
>
> (d) that have yielded, or may be likely to yield, information important in prehistory or history.

Archeological site eligibility is normally considered under criterion (d): the potential to yield information important to prehistory and history. Determining what information is important in prehistory or history can only be accomplished through explicit arguments linking the site(s) and cultural resources in question to theoretical and substantive questions and issues of archeological or historic knowledge. This process has been described in detail by Butler (1987:821):

> The intent of the cultural resource laws dating from the 1890s (an act to preserve Casa Grande in Arizona under the War Department) is to preserve and protect elements of our national patrimony. Protection includes physical protection as well as the act of preserving the information contained in such resources. Preservation of information can be accomplished only by individuals properly trained to gather and interpret those data to generate knowledge. Thus, the preservation of knowledge from archaeological resources requires that information be gained and interpreted based on the current theoretical and substantive concerns of the discipline....Hence compliance with the cultural resources laws demands that National Register of Historic Places (NRHP) significance for archaeological properties be well understood.... Importance is based on the theoretical and substantive knowledge (T&SK) of the discipline — nothing more, nothing less; i.e., what we know and what we do not know (Butler 1987:821-823).

These linking arguments, or significance justifications, must be present in technical cultural resource management (CRM) reports prepared during the L'Anguille River project. The potential of all identified cultural resources to yield (or not yield) important contributions to research much be explicitly stated, and justified, using arguments developed from the theoretical and substantive knowledge of the relevant disciplines (i. e., archaeology, history).

For Memphis District Corps of Engineers land managers to make responsible land-use management decisions regarding archeological resources, CRM reports must include explicit discussions of the scientific findings and the importance of identified cultural resources (in terms of criterion (d)). That is, these reports must provide "clearly supportable statements and recommendations about National Register of Historic Places significance" (Butler 1987:827). To do this, it is necessary to understand the status of current archeological research in general, and in northeast Arkansas in particular, in order to evaluate this potential.

Guidelines for Evaluating National Register Eligibility of L'Anguille River Cultural Resources

In order for any archeological site to be eligible for the National Register, it must meet criterion (d) of 36 CFR 60. That is, it must be able to yield information important to history or prehistory. Exactly how a given site has the potential to yield this information must be detailed, with full justification provided in terms of current theoretical and substantive knowledge (T&SK) of prehistory and history (Butler 1987). Explicit linking arguments must be present, specifically referencing the *State Plan for the Conservation of Archeological Resources in Arkansas* (Davis 1982), or other archaeological or historical sources, as appropriate and relevant to significance justification:

> Although significance is based on the T&SK, federal agencies and SHPOs need to know precisely what those important substantive or theoretical questions are in order to evaluate them and to make decisions based on the archaeologists recommendations. Such questions are best presented in a research design....A clear and precise proposal that reviews the relevant literature and proposes realistic work given the T&SK of the area and sites at hand is required. From such a presentation, the agency and the SHPO are provided with the basis on which National Register significance recommendations are to be rendered and can thereby place considerable confidence in any recommendations....In sum, a research design based on current theoretical and substantive knowledge is a powerful tool to aid the archaeologist in making supportable and defendable National Register recommendations and is of great assistance to a SHPO and federal agency in making enlightened management decisions (Butler 1987:822-823).

Adhering to these guidelines will ensure that cultural resource reports produced for the L'Anguille River Channel Cleanout project contain sufficient information to justify recommendations about significance, project impacts, and future actions that are advanced.

The presence of any of the following characteristics at sites in the L'Anguille River Channel Cleanout project area would tend to automatically make them

eligible for inclusion on the NRHP:

(1). Intact buried deposits, particularly occupation surfaces characterized by well-defined features. These types of sites are currently extremely rare in the L'Anguille River basin area.

(2). Stratified deposits, with components that can be isolated horizontally or vertically. This would facilitate detailed examination of single periods of occupation.

(3). Sites with intact architectural features (i.e., hearths, post stains, wall trenches on prehistoric sites; foundations, wells, privies, cisterns, etc. on early historic sites).

(4). Major quarry or workshop sites with extensive reduction or manufacturing debris. Given the general absence of immediately available lithic raw materials, few such sites are expected in the project area.

(5). Unique prehistoric or historic sites possessing information not available at other locations.

(6). Sites associated with the early (pre-1860) settlement of the area.

To these six points should be added consideration of Glassow's (1977) criteria. By themselves these are not eligibility criteria, but only guidelines to consider when determining site significance.

(7). Degree of Integrity. What condition are the cultural resources in? Does the site contain intact remains which allow each component to be segregated and studied individually, or are the remains so badly disturbed as to preclude the recovery of information important to prehistory or history?

(8). Degree of Preservation. Does the site possess, in a well preserved state, cultural features, or faunal/floral remains, or skeletal remains, or materials suited to absolute dating techniques, which would allow this site to make contributions to the study of history and prehistory?

(9). Uniqueness. Can preservation or data recovery at a particular site yield information of a critical nature, or does this site possess information also possessed by numerous other archeological sites? Do better examples of this particular site type exist, or have better examples been excavated? Can this site present new and contributing information through uniqueness, preservation, integrity, or the application of new analytical techniques, or is the information available redundant?

The presence of any of the following characteristics would tend to automatically make a site ineligible for inclusion on the NRHP:

(1). Isolated artifacts. Little information beyond that obtained at the time of collection can be derived from such assemblages. Care must be taken, however, to ensure that the presence of other deposits has been ruled out. Isolates may be the only detected evidence of a complex site.

(2). Disturbed surface scatters.

(3). Sites damaged by cultural or natural factors to the extent that deposit integrity is destroyed.

(4). Recent (post-1940) historic sites.

These criteria were used to assess the 56 sites located in the right-of-way along channel miles 0 to 16, and differentiate those sites requiring further work from those considered not significant, and requiring no further examination. Sites considered not significant along channel miles 0 to 16 met one or more of the four criteria tending to make sites ineligible.

Specific Reporting Standards

The effective documentation of field and analytical procedures, specifically documenting site locational data, field collection units, and recovered artifactual material must be included in all future reports of cultural resource investigations associated with the L'Anguille River Channel Cleanout project. Arkansas Archeological Survey site forms must be filled out and submitted for all new sites located during subsequent field activities (i.e., during the deep testing phase), and before reports are accepted.

Full artifact inventories (catalog and or analysis sheets) should accompany the completed site forms, and these data must be included in the final report, or referenced in an accessible Appendix volume. These assemblage inventories should be completed for collections obtained from new sites, and for materials collected during revisits to older, previously recorded sites. Assemblage data must be reported by provenience, and not solely in summary format. This includes data from individual shovel tests excavated during survey level investigations. The level of documentation must be such as to tie all recovered artifacts to specific provenience units (i.e., shovel tests, test pits, general surface, etc.).

Any intensive site investigations beyond the initial survey level, particularly those involving the placement of subsurface units, should indicate the location of these units on a detailed site map, and the location of all collection proveniences should be illustrated in the final report. This will be accomplished through the

production of a contour map for each tested site, showing the location of site datums, prominent landmarks in the immediate area, and all collection units. These maps must be professionally executed, and legible, and the collection units must be tied to the artifact inventory. Additional maps should be prepared, as appropriate, documenting the distribution of artifacts over the surfaces (or in the shovel test units) at each site.

A comprehensive descriptive inventory of all artifacts found in each provenience, as noted previously, must accompany the site descriptions, maps, and other illustrations, both in the final report and with the site data. To facilitate the description and analysis of individual site assemblages, detailed, standardized classifications should be employed for all of the artifacts recovered during a project. Care should be taken to ensure that artifact counts are fully reported, and that data tables add up. In particular, analysis results must be consistently reported; discrepancies in counts within the text or between the text and the tables must be avoided. A primary emphasis of the laboratory analysis should be the determination of occupation span and function for each site, or for each component within complex sites. Sufficient data should be provided to ensure that subsequent investigators can evaluate conclusions and interpretations.

Standards for Field Investigation

Careful site mapping and documentation of provenience locations, as noted previously, is absolutely essential in future fieldwork during the L'Anguille River survey project. Researchers and land use planners must be able to accurately assess how site data were collected, and where on a given land form the data came from. Maps showing the extent of surface artifact scatter and all subsurface collection units must, accordingly, be prepared for all sites found or revisited in future investigations. The level of mapping effort, as noted above, will depend on the nature of the project. Accurate sketch maps are appropriate for survey level projects, while contour maps must be prepared for any sites intensively collected or tested. Upon completion of investigations, all units should be backfilled to prevent erosion or later injury. Throughout the course of any fieldwork, strict attention to safety standards must be maintained. Following these procedures should ensure that standardized assemblage samples are recovered from the sites examined during the L'Anguille River Channel Cleanout project.

Standards for Curation

Assemblage information — artifacts, field notes, project related slides and photographs, and analysis notes — must be curated with the Memphis District office of the Corps of Engineers or at the Arkansas Archeological Survey upon completion of cultural resource investigations and acceptance of the final report. These collections and records, furthermore, must be curated in an organized fashion so future researchers can quickly find and use project notes and materials, and not have to rummage aimlessly through disorganized or poorly

labeled boxes of material. Responsible curation goes beyond artifactual data to include the field and laboratory records, analysis notes, and photographs and negatives collected during cultural resource investigations. All future cultural resource investigations associated with the L'Anguille River survey project must include provisions for the responsible curation of artifact collections; field and analysis maps, notes, and photographs; and photographic negatives.

LONG TERM RESEARCH DIRECTIONS FOR L'ANGUILLE RIVER CULTURAL RESOURCE INVESTIGATIONS

In this section long term research directions for the L'Anguille River Channel Cleanout project are presented, based on insight gained during the preparation of the present volume. The questions and directions advanced in this section are meant to guide, and not mandate, future research in the L'Anguille River area. Cultural resource investigations undertaken during the L'Anguille River project should be conducted within the context of an explicit research design and framework, that should be incorporated at the proposal stage and reiterated in the final report, with modifications noted as necessary. This research design should adhere to standards advanced in existing federal guidelines, and in the *State Plan for the Conservation of Archeological Resources in Arkansas* (Davis 1982). Research questions raised by previous investigators working with collections from the L'Anguille River or general northeast Arkansas area should also be considered when subsequent work relevant to those topics is done. Assuming responsibility for continuing within a tradition of ongoing research should not in any way preclude the development of additional research topics. It is intended to ensure, however, that research themes deemed important by the State of Arkansas and by previous investigators working in the L'Anguille River area are at least considered. This will help ensure that resource significance is evaluated within a consistent framework, and that the final cultural resource reports represent useful contributions to the regional literature.

In the remaining sections of this chapter, research questions of relevance to future cultural resource investigations in the L'Anguille River project area are presented. These are problem areas and research directions that have been identified in the work to date that should be strongly considered by subsequent researchers. Supporting information about the specific research directions developed here may be found in earlier sections of this report and in previous reports of cultural resource investigations in the L'Anguille River/northeast Arkansas area.

Specific Prehistoric Research Themes

An important subject for future research during the L'Anguille River Channel Cleanout project will be refining our understanding of the local cultural sequence and chronology. The absence of a locally defined prehistoric cultural sequence,

particularly for the post Dalton Archaic era has greatly hindered component recognition. What is clearly needed in the the L'Anguille River area is extensive work at single component or stratified sites that can lead to sequence refinement and dating. Sites yielding stratified cultural deposits, or intact features, would be particularly valuable for addressing sequence definition and chronological resolution. Given such refinement, existing site environmental and locational data can be better used to develop an understanding of prehistoric occupations. The information collected to date suggests that intact, charcoal-bearing features suitable for radiocarbon dating and associated paleosubsistence analyses are present at some sites in the project area (e.g., sites 3LE175 and 3CS202 in particular). Sites with these kinds of features are thus extremely important.

Over every period of occupation, prehistoric archeological research associated with the L'Anguille River Channel Cleanout project can be directed to questions of chronology, settlement patterning, paleosubsistence, technological organization, geoarcheology, and a range of other domains relevant to the study of northeast Arkansas archeology and history (i.e., Morse and Morse 1983, Klinger et al. 1983; Klinger 1986). Research topics identified as important to investigations focusing on specific periods of human occupation have been reviewed in Chapters IV, V, and VIII of this volume. Major themes are briefly recounted here, employing a period by period format.

Considerable controversy revolves around the age, composition, and interpretation of sites and assemblages of the PaleoIndian period in northeast Arkansas. PaleoIndian occupations are recognized by the presence of assemblages characterized by Clovis and Dalton points. The dating of these assemblages is currently poorly documented (Goodyear 1982). Intact, deeply buried PaleoIndian (and later period) components may be present in the project area, particularly in areas of extensive alluviation or colluviation. Can measures of regional population density be developed for this period? Were populations increasing rapidly, as might be suggested by the increasing numbers of diagnostics between the earlier (i.e., Clovis) and later (i.e., Dalton) portions of this period (see Figure 21)? Were fairly sophisticated information exchange and mating networks in place? Can Dalton sites found in the project area help resolve the ongoing debate over the nature of Dalton settlement in the central Mississippi Valley (see pp. 50-52)? Do the various Dalton points found in the survey collections indeed represent remains from Dalton territories? Do changes in lithic raw material utilization patterns occur over time, and how does this relate to differing patterns of group technological organization?

How are Early Archaic occupations identified in the L'Anguille River survey project area? Do classic late PaleoIndian Dalton forms (assuming proper identification of these types) continue into the Early Archaic period? What is the nature of the relationship, if any, between populations utilizing classic Southeastern Early Archaic diagnostics, and those using Midwestern forms? What does the occurrence of a range of forms such as San Patrice, Hardin Barbed, St. Charles, and Searcy points indicate? Are these forms temporal markers, or indicative of differing social/cultural units, or both? Are shifts in settlement and subsistence evident between this period and the earlier

PaleoIndian era? Is a locally generalized foraging strategy employed by small, highly mobile groups? What is the nature of Early Archaic settlement in the general area of the L'Anguille River basin? Did these populations have a more diversified subsistence base, with less reliance on hunting, than previously thought? Do undisturbed sites from this period exist in the the L'Anguille River survey project area?

How effective are the criteria used to identify Middle Archaic components in northeast Arkansas? What is indicated by the morphological variability evident in Middle Archaic point forms such as the Rice Lobed, Hickory Ridge, Cache River, and Eva types? Are the currently accepted temporal spans for these forms accurate (i.e., Morse and Morse 1983:108-111)? Were the Western Lowlands, particularly the L'Anguille River basin, minimally occupied during this period as has been suggested (see p. 56), and if so, why? If such a population decline can be documented, is it due to a decline in exploitable biomass in the lowlands, and if so how is this associated with the mid-Holocene Hypsithermal interval? Alternatively, was the area occupied, but by groups using diagnostic markers that are currently unrecognized? Are deeply buried deposits dating to this period present?

How effective are current measures used to identify Late Archaic components in the L'Anguille River basin? Is finer-grained temporal refinement among the many presently employed projectile point categories (i.e., Big Creek, Burkett, Weems, Gary, Motley) possible? What relationships, if any, existed between local populations and the Poverty Point complex in northeast Louisiana?

What is the nature of Early Woodland period occupation in the the L'Anguille River basin? Are Tchula components present, as appeared indicated (e.g., as at 3LE175 and 3LE226)? If so, how do these occupations relate to more visible Tchula manifestations elsewhere in the Mississippi Alluvial Valley and in northeast Arkansas? Did a shift to horticulture occur at this time?

What does the presence of small numbers of Middle Woodland Marksville ceramics interspersed among comparatively larger numbers of undifferentiated Baytown assemblages mean in the L'Anguille River area? Do differences in settlement patterning characterize earlier from later Woodland occupations in the basin, that is, are the distributions of sand tempered Barnes/Dunklin and grog tempered Baytown ceramics in the L'Anguille River area different, and if so, why? How do these distributions compare with the occurrence of later Coles Creek-like materials? At what level did the occupants of the L'Anguille River basin participate in the Hopewell Interaction Sphere? Do the infrequent Marksville-like elements observed in the the L'Anguille River area reflect ephemeral contact, by foraging or resource procurement task groups based elsewhere? What is the relationship of the the L'Anguille River survey project area to the major Marksville components present just to the south, at Helena, and to the less well defined Kellar phase in the northern part of the basin?

How are later Woodland components defined in the the L'Anguille River survey project area? What cultural relationships are implied by the occurrence and distributions of sand tempered and sand/grog and clay/grog tempered wares? Is it possible that the pastes reflect the overlap of populations from differing tribal level organizations, centered in differing regions, as has been suggested (i.e., Morse 1977)? What effects did the emergence of complex societies in the Late Woodland/initial Mississippian period have on settlement in the the L'Anguille River survey area? Is evidence for intensive agriculture present at this time, or does it come in later? Bone chemistry analysis of skeletal samples like those at 3CS202 for C3/C4 values could help resolve this question (c.f., Lynott et al. 1986). Does the presence of Coles Creek Incised-like ceramics reflect increased use of the L'Anguille River area by populations centered further to the east, along the St. Francis and Mississippi rivers, or to the south and southwest along the Arkansas River, at the Toltec site? What is the nature of local Late Woodland land use?

Can archeological data from the L'Anguille River survey project area contribute to our understanding of the origin and evolution of late prehistoric agricultural societies in the general region? Did a direct replacement of local Woodland populations by groups from other areas occur, or were local populations present throughout the late prehistoric era? Was the L'Anguille River basin a buffer zone or hunting territory for the complex Late Mississippian polities located to the east in the St. Francis River basin? Is there evidence for direct transition from Coles Creek to Mississippian locally (i.e., as indicated at site 3LE175), suggesting cultural continuity rather than population replacement in the general region? What is the nature of the observed variation in Woodland and Mississippian site distributions in the L'Anguille River survey project area, and is this due to an intrusion of Mississippian populations into the area, either replacing local populations, or interacting with them in some as of yet unresolved fashion? Could this reflect changes in land use practices by the same basic populations inhabiting the region, in response to the emergence of new forms of social organization and subsistence?

Could some of the small Mississippian sites located in the lower part of the L'Anguille River survey project area reflect seasonal population dispersal, or outlying Kent phase villages or hamlets? How do these sites relate to centers such as the Greer Mound (3LE024), one of the few large ceremonial sites found in the basin? Was all or part of the area comprising the L'Anguille River survey project in use as a hunting territory, or possibly a buffer or neutral zone during portions of the Mississippian? What is the nature of Cherry Valley phase Mississippian, and are sites of this phase present along the main channel? What are the relationships between major Mississippian centers, such as those located along the St. Francis, and the smaller settlements observed to date in the L'Anguille River basin?

Many of these prehistoric research questions are narrowly focused and will require the recovery of well-preserved single component or stratified assemblages. Given the absence of a secure cultural sequence for the L'Anguille River area, particularly for the preceramic Archaic era, questions of sequence definition and

chronology should receive high priority in future research. Future research should also be directed to developing and refining models of prehistoric land use and settlement. Greater attention needs to be directed to relationships between archeological assemblages found in the L'Anguille River basin and materials reported from elsewhere in the region. Finally, continuing effort needs to be directed to identifying gaps in existing knowledge.

Specific Historic Research Themes:

Historic period research in the L'Anguille River Channel Cleanout project area also needs to be directed to specific research questions and themes. The record of historic period settlement in the L'Anguille River basin was briefly summarized in Chapter VI. Perhaps the single most important question facing researchers is resolving the nature of historic period settlement patterning. What natural and cultural factors shaped historic period settlement patterns? What changes in settlement patterning occurred over time? Research to date, for example, suggests that historic settlement patterning is linked to drainage conditions. Few historic sites were found in low-lying terrain in close proximity to the river channel, which is not surprising given seasonal flooding. How tightly linked are these phenomena (i.e., drainage and settlement patterns)?

On a finer level of analysis, what decisions prompted settlers to select one tract of land over another? Was land selected in terms of agricultural or commercial potential? What environmental, social, and economic factors influenced these choices (Joyce 1981:15-48)? Did earliest settlement focus on the floodplain or main channel of the drainage? What were the effects of ethnicity, religion, and national or regional ties on settlement decisions? Can differing patterns of historic settlement be resolved in the L'Anguille River area? Current research indicates that tenant house sites are differentially distributed over the region, with most identified sites located in the southern part of the drainage, in Lee County. Is this a factor of land form and drainage conditions (see above), or some other factor? What is the nature of antebellum period settlement in the L'Anguille River area, and why was so little evidence for it found? Did individual farmers during the period of initial settlement cultivate one large or several small plots, and if so, why? How did this influence household and outbuilding location? What environmental zones were preferred habitats for early farm sites (e.g., site 3LE141)? Intensive cultural resource investigations conducted at historic sites examined during subsequent phases of the L'Anguille River survey project should include provisions for archival/documentary research, particularly the inspection of inventories, old maps, and land plats.

The survey methods employed to date in the L'Anguille River basin have included surface inspection and systematic excavation of comparatively shallow subsurface shovel tests. These procedures are unlikely to detect deeply buried deposits in alluvial floodplain/terrace settings. Current survey procedures also appear inappropriate for the location of buried deposits in areas where colluviation may result in considerable accumulation. Geoarcheological research, coupled with greater use of deep site testing procedures (i.e., use of

backhoes or other equipment capable of reaching deeply buried deposits) should be an integral part of subsequent phases of the L'Anguille River Channel Cleanout survey. Future cultural resource work in the L'Anguille basin should also be directed to the development of site locational models, to examine changing patterns of prehistoric and historic land use over time. The current survey data, augmented by the results of the subsequent testing activity, should be ideal for these purposes.

CONCLUSIONS

The 1987 L'Anguille River Channel Cleanout survey effort yielded a large number of sites (N=222) and artifacts (>40,000). The timing of the project fieldwork, which was coordinated with the Memphis District staff archaeologists, resulted in excellent surface collecting conditions for almost every site examined. The field team was able to visit almost all cleared areas while the crops were low, or after the winter wheat had been removed. As a result of the ideal survey conditions, and the high site density encountered, an extensive site and artifactual data base was recovered that should prove to be of considerable value to researchers concerned with archaeology and history in northeast Arkansas.

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CULTURAL RESOURCE INVESTIGATIONS IN THE L'ANGUILLE RIVER BASIN LEE, ST. FRANCIS, CROSS, AND POINSETT COUNTIES, ARKANSAS

APPENDICES

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(David G. Anderson)

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(David G. Anderson)

APPENDIX VII. **PROJECT SCOPE OF WORK**
(Memphis District, U.S. Army Corps of Engineers)

APPENDIX VIII. **SOIL PROFILES FROM TESTED SITES**
(David G. Anderson)

APPENDIX I.

SITE DESCRIPTIONS: ALL SITES IN PROJECT RIGHT-OF-WAY

by

David G. Anderson
Garrow & Associates, Inc.

Notes:

Exact site locations have been deleted from this Appendix. This information is maintained by the Memphis District, U.S. Army Corps of Engineers, and in the Arkansas state archaeological site files maintained by the Arkansas Archeological Survey.

All test unit profiles are presented in Appendix VIII.

State Site Number:	3LE141	**Site Name:**	None recorded
Project Site Number:	LRP-001	**Date of Visit:**	9 June 1987
County:	Lee	**USGS Quad:**	Marianna 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Late 19th/early 20th century historic house site, Late Archaic/Woodland prehistoric lithic artifacts.

Diagnostic Artifacts: 2 Gary's, 1 probable Weems points.

Description: Site 3LE141 (LRP-001) is a dense historic surface artifact scatter with lesser amounts of prehistoric materials located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River (Figures 1-3). The site extends over approximately 6000 square meters (100 x 90 m in maximum extent). The remains of an old house or outbuilding lie in a patch of woods to the east of the field, where the structure was apparently pushed during field clearing. At the time of survey, the site had been recently plowed and rained on, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Crops present on the site at the time of survey were low (< 6 in. high) sunflowers. The main channel of the L'Anguille River is located due north of the site area through a narrow tree line; a steep dropoff occurs just beyond this treeline. The site area can be best described as on a bluff overlooking the channel. A controlled surface collection was made using sixty 3.34 m radii circles dispersed using a stratified systematic unaligned procedure. A minimum of 5 minutes was spent in every circle, and collection proceeded until no more artifacts could be found. A one meter test unit was opened to a depth of 50 cm, through four 10 cm levels below the base of the plowzone. A 30 cm x 30 cm test was then opened an additional 40 cm in one corner of the unit. A permanent datum consisting of a 24 inch piece of iron rebar, marked with red flagging tape, was placed in the woods to the east of the scatter (Figure 1). All fill was dry screened through 1/4 inch mesh.

Condition: Currently unknown. No subplowzone materials were found, although both historic and prehistoric features may lie at the base of the plowzone. Site soils are Earle silty clay, gently undulating (EaB; USDA 1977a), characterized by loess deposits with extensive fine clay particles in the upper part of profile. (Profile obtained from test unit excavated to a depth of 90 cm in the middle of the artifact scatter).

Previous Investigations: None reported; site area has in all probability seen prior collection by amateurs.

NRHP Status: Indeterminate.

NRHP Recommendations: This site requires additional testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present. Limited stripping should be made with a piece of heavy machinery to see if features are present at the base of the plowzone.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

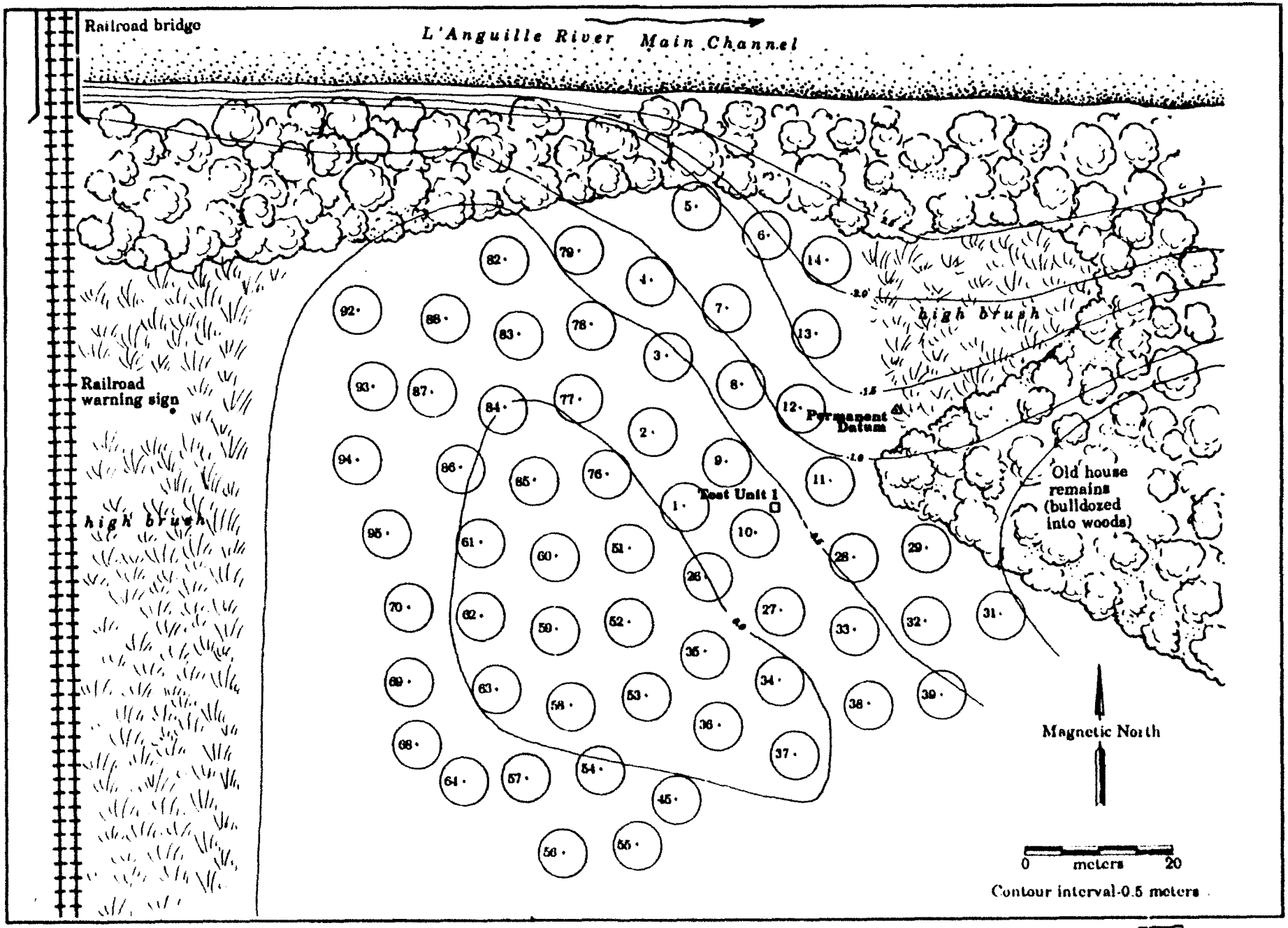
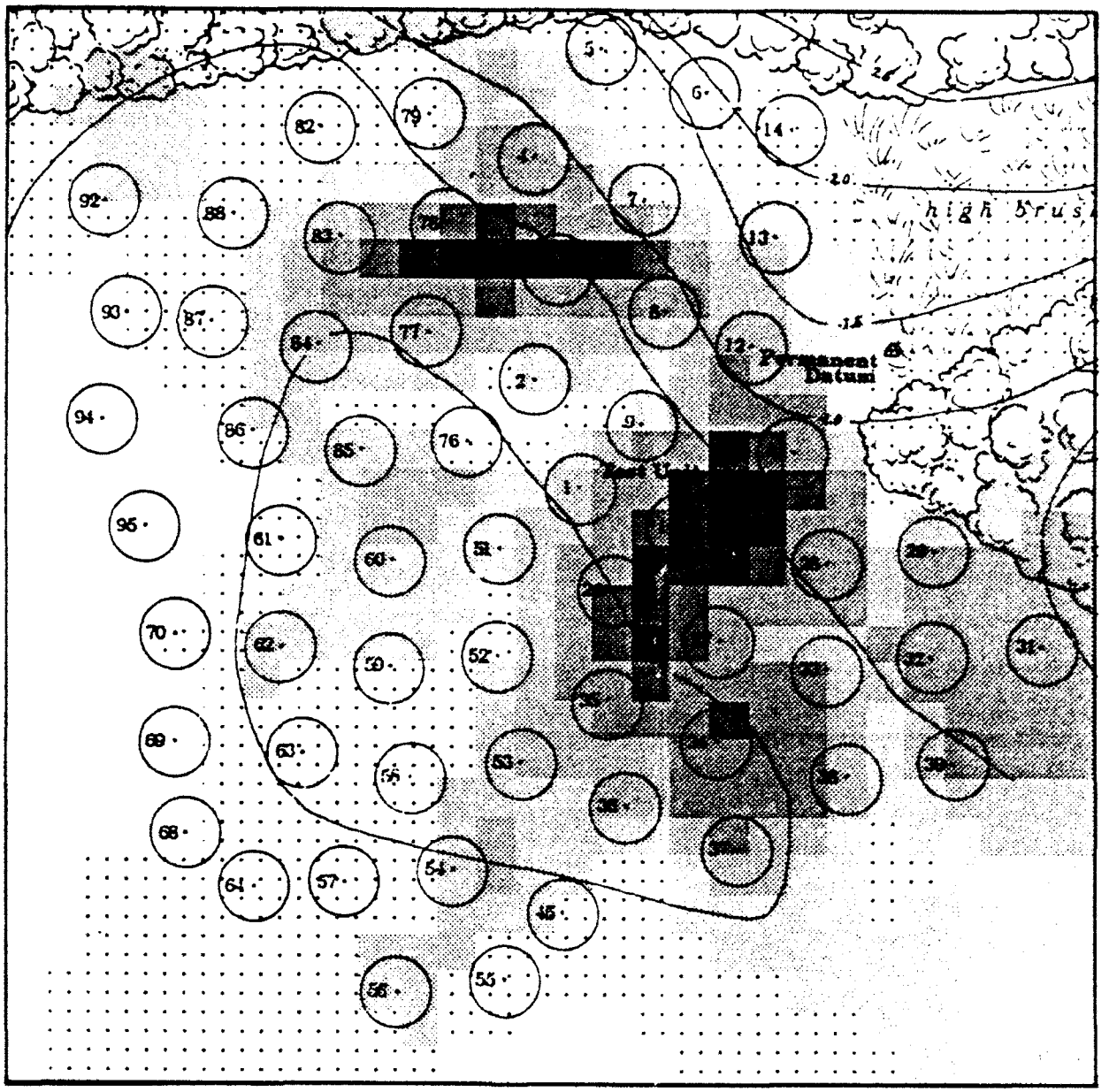


Figure A1.
Site 3LE141 (LRP-1) Proveniences
Controlled Surface Collection Circles
and Test Units.

ARKANSAS
L'Anguille River Survey Project



Average Artifact Density (number of artifacts)

-- 5
-- 8
-- 11
-- 13
-- 16
-- 19
-- 22
-- 24
-- 27
-- 30

= Controlled Surface Collection Unit (3.34 m radii)

Magnetic North

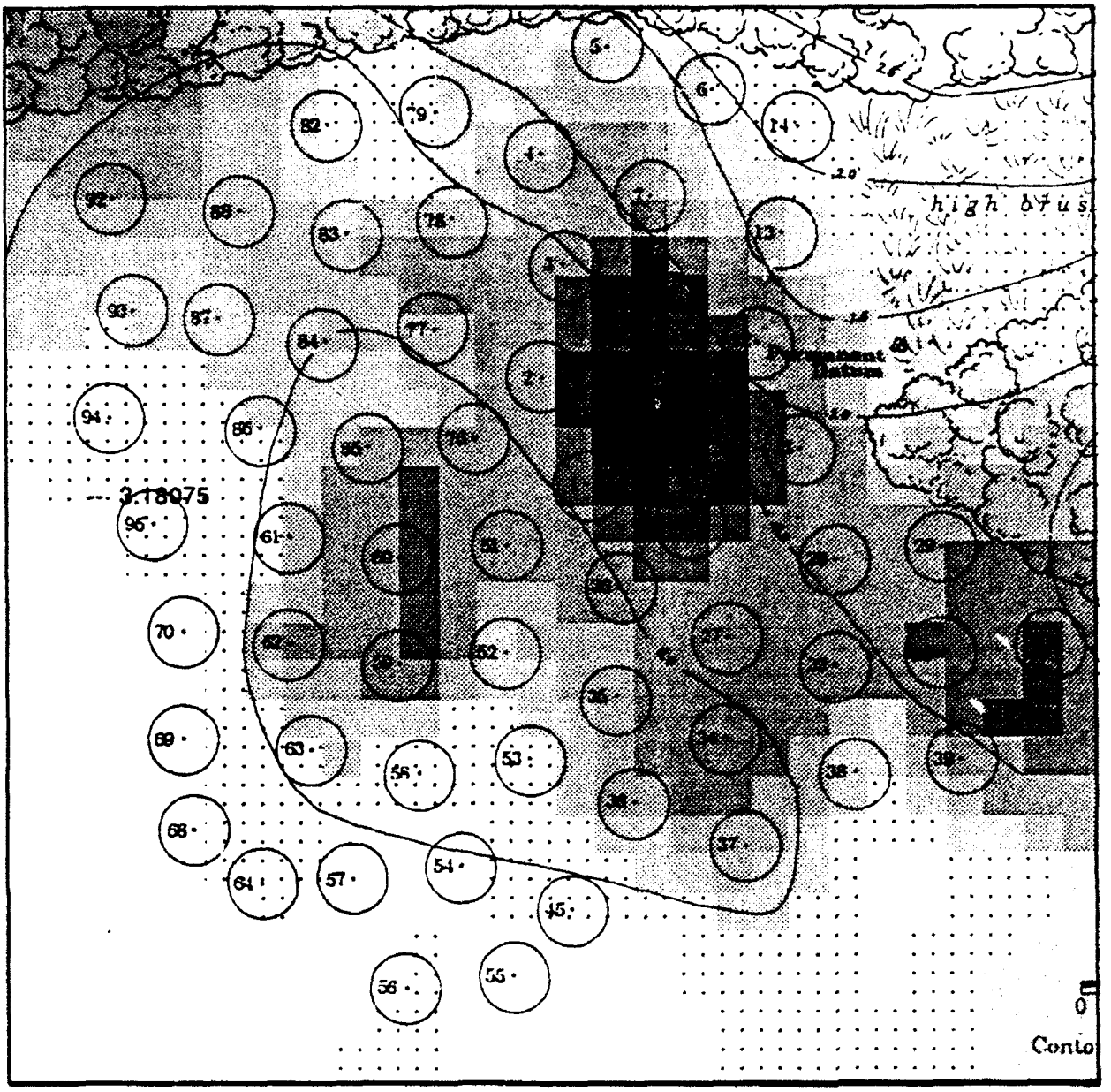
0 25

Meters

Figure A2.
Site 3LE141 (LRP-1)
Prehistoric Artifacts - Surface Distributions.

ARKANSAS

L'Anguille River Survey Project



Average Artifact Density (number of artifacts)

-- 7
-- 11
-- 16
-- 20
-- 24
-- 29
-- 33
-- 38
-- 42
-- 46

= Controlled Surface Collection Unit (3.34 m radii)

Magnetic North

0 25

Meters

Figure A3.
Site 3LE141 (LRP-1)
Historic Artifacts - Surface Distributions.

ARKANSAS
L'Anguille River Survey Project

State Site Number:	3LE142	**Site Name:**	None recorded
Project Site Number:	LRP-002	**Date of Visit:**	10 June 1987
County: Lee		**USGS Quad:**	Marianna 1984 7.5

Location:	1/4	1/4	1/4; Section	T	R	(deleted)
UTM:	Zone: 15		Northing:	Easting:		(deleted)

Temporal Span: Early Archaic (Dalton) lithic scatter with minor accompanying recent historic debris.

Diagnostic Artifacts: Two Dalton points recovered, one a late style point and the other a Dalton base recycled into scraper.

Description: Site 3LE142 (LRP-002) is a surface artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. The site is on a low knoll in the somewhat undulating terrain near the river margin and extends over approximately 3000 square meters (70 x 60 m in maximum extent; Figures 4 and 5). At the time of survey, the site had been recently plowed and rained on, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed, and no crops had been planted. The main channel of the L'Anguille River is located due north of the site area through a narrow treeline; a steep dropoff occurs just beyond this treeline. A controlled surface collection was made using thirty 3.34 m radii circles, and one meter test unit was opened in the eastern part of the scatter. This unit was opened to a depth of 21 cm. Thick gray clay deposits were found below a thin (11 cm) plowzone. No artifacts were found in the unit. A permanent datum, consisting of a 30 inch piece of iron rebar, and marked with red flagging tape, was located in the woods line to the east of the site (Figure 4). All fill was dry screened through 1/4 inch mesh.

Condition: Site is shallow and badly eroded, consisting of a thin plowzone resting on sterile loess deposits. The site soils are Loring silt loam, 8-12 % slopes, eroded (LoD2; USDA 1977a). The deposits are fine silt clays with extensive clay particles in the upper part of profile from recent alluviation.

Previous Investigations: None known. A collector from Forrest City reported that a Clovis point came from this general area; this point has since been sold.

NRHP Status: Not eligible.

NRHP Recommendations: No further work is recommended at this site.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE143	**Site Name:**	None recorded
Project Site Number:	LRP-003	**Date of Visit:**	10 June 1987
County: Lee		**USGS Quad:**	Marianna 1984 7.5

Location:	1/4	1/4	1/4; Section	T	R	(deleted)
UTM:	Zone: 15		Northing:	Easting:		(deleted)

Temporal Span: Early Archaic (Dalton), Middle Woodland (Baytown) lithic and ceramic scatter. Minor recent historic debris was also observed.

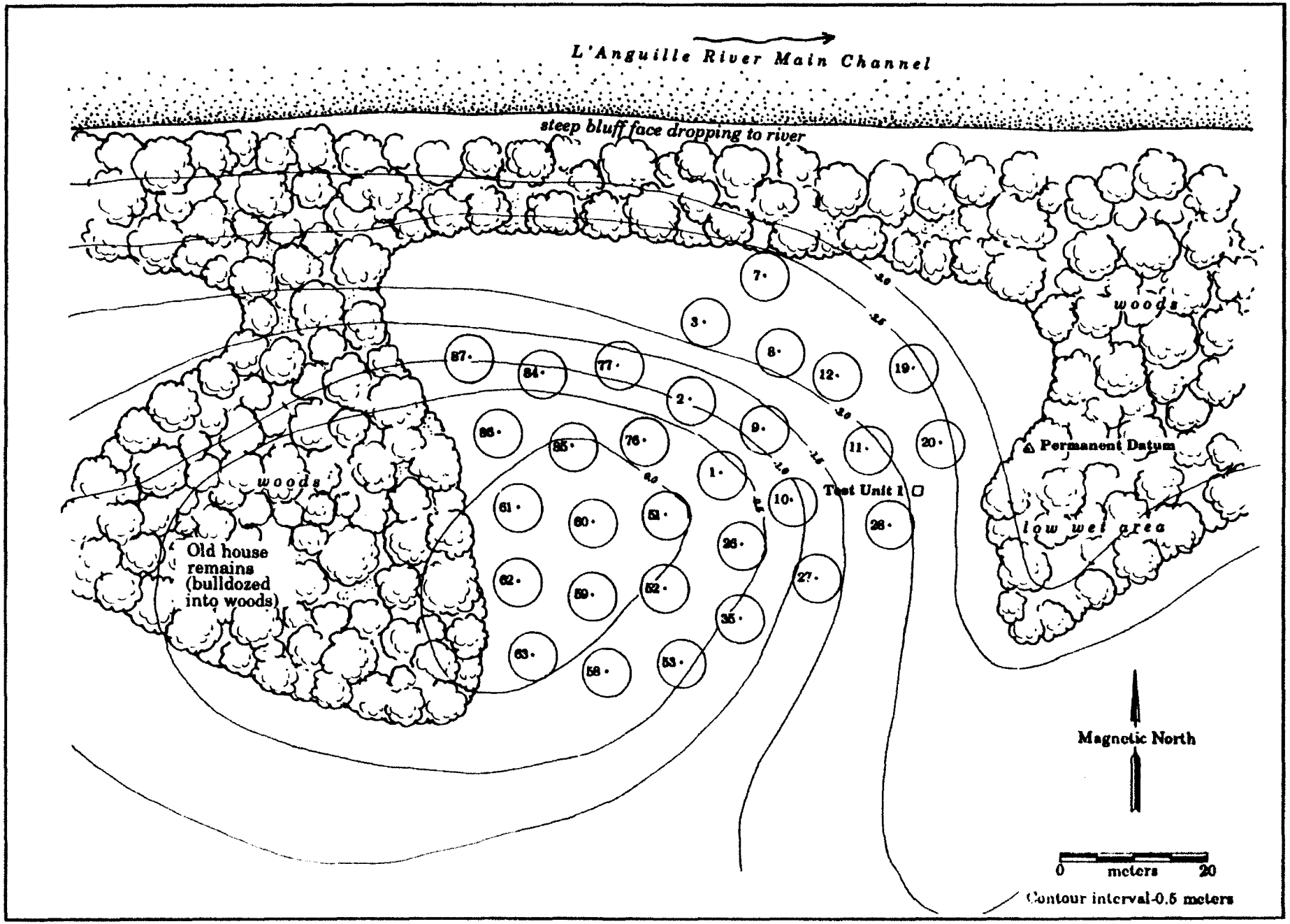


Figure A4.
Site 3LE142 (LRP-2) Proveniences
Controlled Surface Collection Circles
and Test Units.

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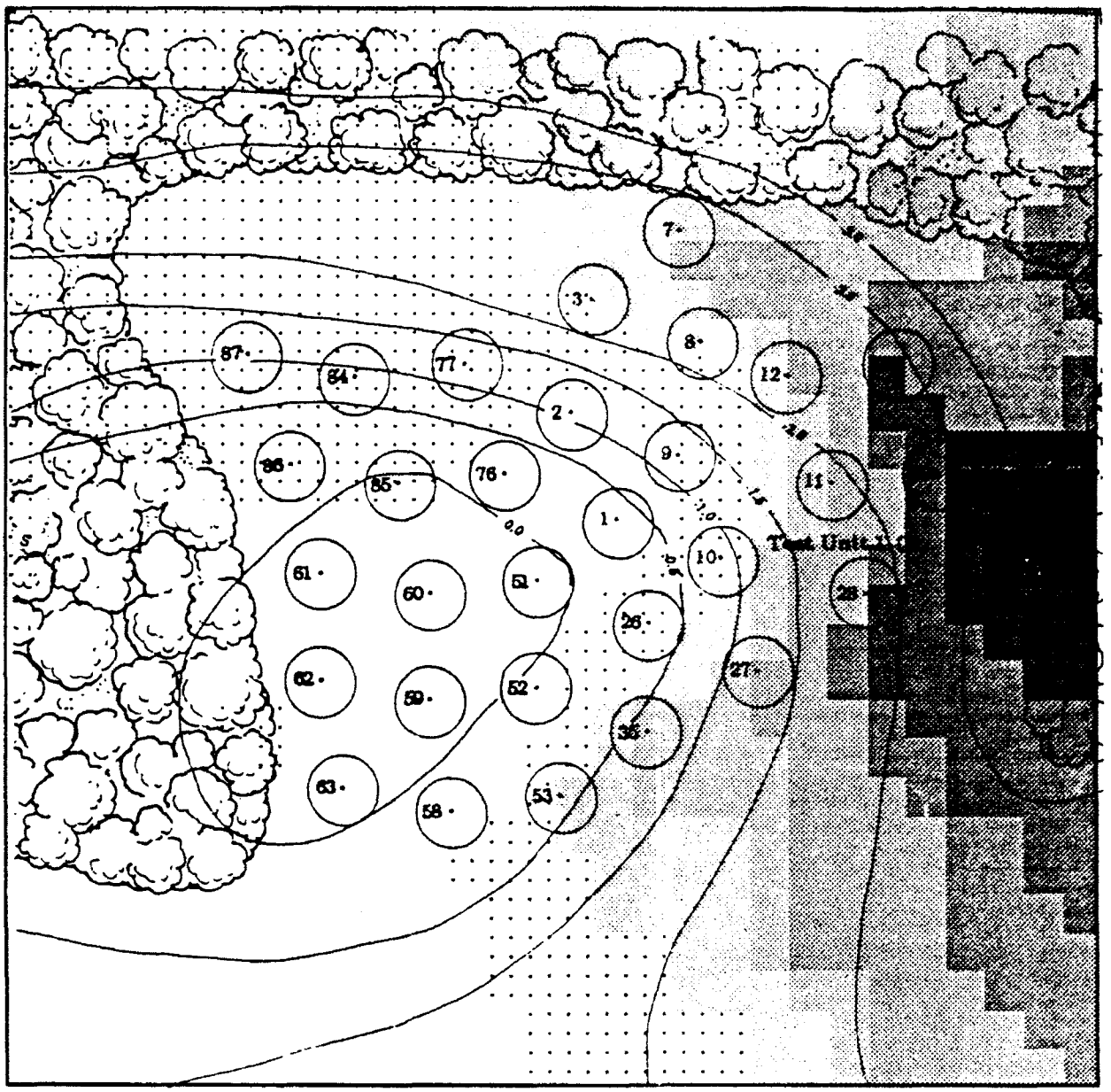


Figure A5.
Site 3LE142 (LRP-2)
Prehistoric Artifacts - Surface Distributions.

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Diagnostic Artifacts: 1 Dalton preform, Baytown Plain pottery, 1 Weems-like (Marksville-period?) point.

Description: Site 3LE143 (LRP-003) is a surface artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. The main channel of the L'Anguille River is located due north of the site area, through a comparatively narrow tree line. A low swampy depression lay between the site and the river, where field runoff had eroded a channel leading to the river. The site area can be best described as on a bluff overlooking the river, and extends over approximately 2800 square meters (90 x 50 m in maximum extent; Figures 6 and 7). At the time of survey, the site had been recently plowed and rained on, with no crops planted, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. A controlled surface collection was made using 28 3.34 m radii circles dispersed using a stratified systematic unaligned procedure. A one meter test unit was opened to a depth of 20 cm, one sterile 10 cm level below the plowzone, which was also sterile. A 30 cm x 30 cm test was then opened an additional 40 cm in one corner of the unit. A permanent datum consisting of a 30 inch piece of iron rebar, marked with red flagging tape, was located in the woodline and is illustrated on the site map (Figure 6). All fill was dry screened through 1/4 inch mesh.

Condition: Site is badly eroded and deflated, with no subplowzone artifacts found. The site soils are Alligator clay, frequently flooded (Ag; USDA 1977a). The deposits are fine silt clays with extensive clay particles in the upper part of profile from recent alluviation.

Previous Investigations: None reported; site area has in all probability seen prior collection by amateurs.

NRHP Status: Not eligible.

NRHP Recommendations: No further work is recommended at this site.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE144	**Site Name:**	None recorded
Project Site Number:	LRP-004	**Date of Visit:**	10 June 1987
County:	Lee	**USGS Quad:**	Marianna 1984 7.5

Location:	1/4	1/4	1/4; Section		T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Middle Archaic, aceramic Late Archaic/Woodland (no pottery present); minor recent historic debris.

Diagnostic Artifacts: 2 Hickory Ridge Side Notched points, 1 Gary, 1 Weems point.

Description: Site 3LE144 (LRP-004) is a surface artifact scatter located on a small but pronounced knoll in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. The site area extends over approximately 4100 square meters (80 x 80 m in maximum extent; Figures 8, 9). The main channel of the L'Anguille River is located 30 m due north of the site area. Several gullys cut through the field in this general area around and below the knoll, indicating considerable erosion of the deposits. At the time of survey, the site had been recently plowed and rained on, with no crops planted, offering excellent surface visibility. No footprints indicative of

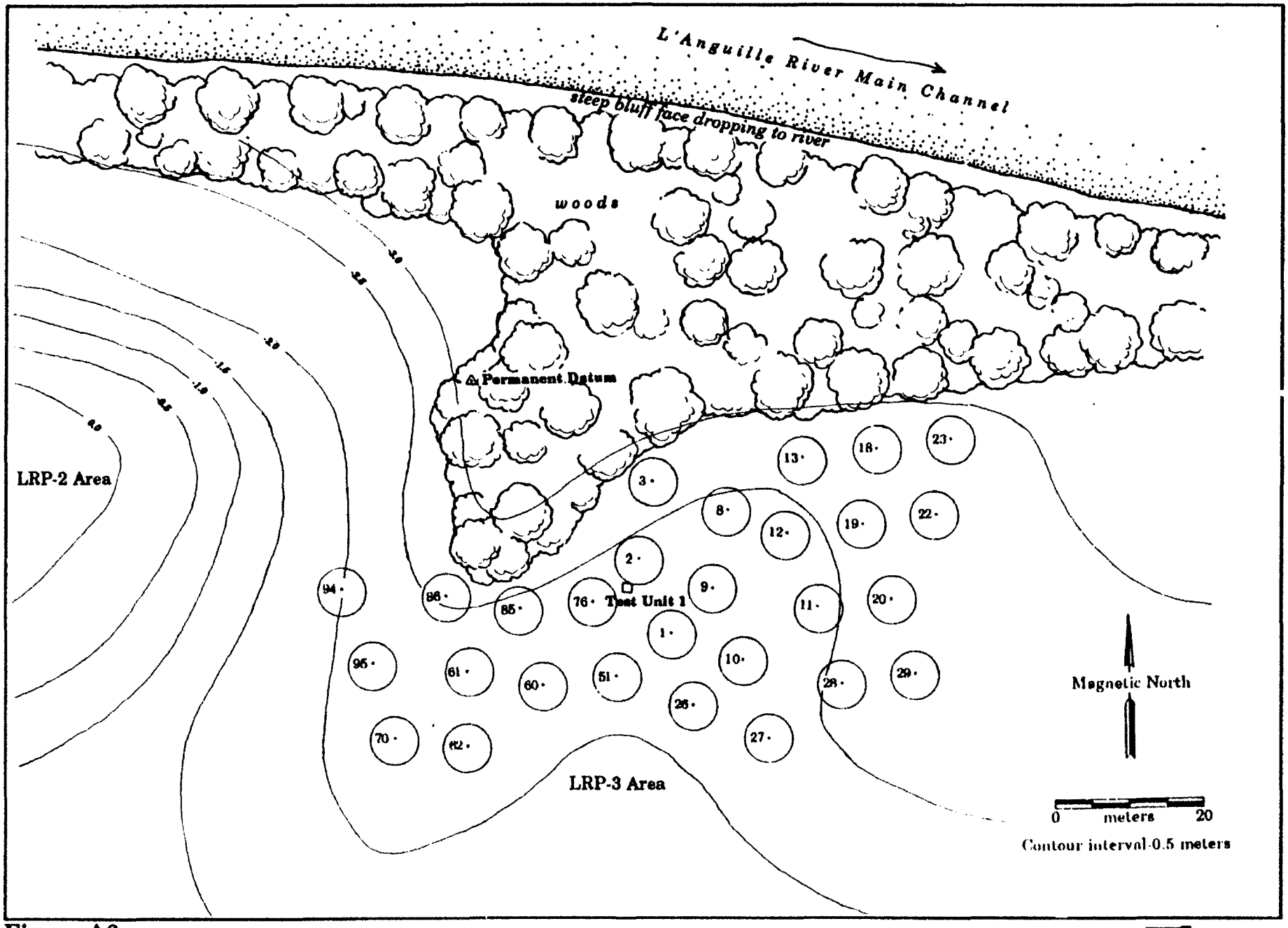
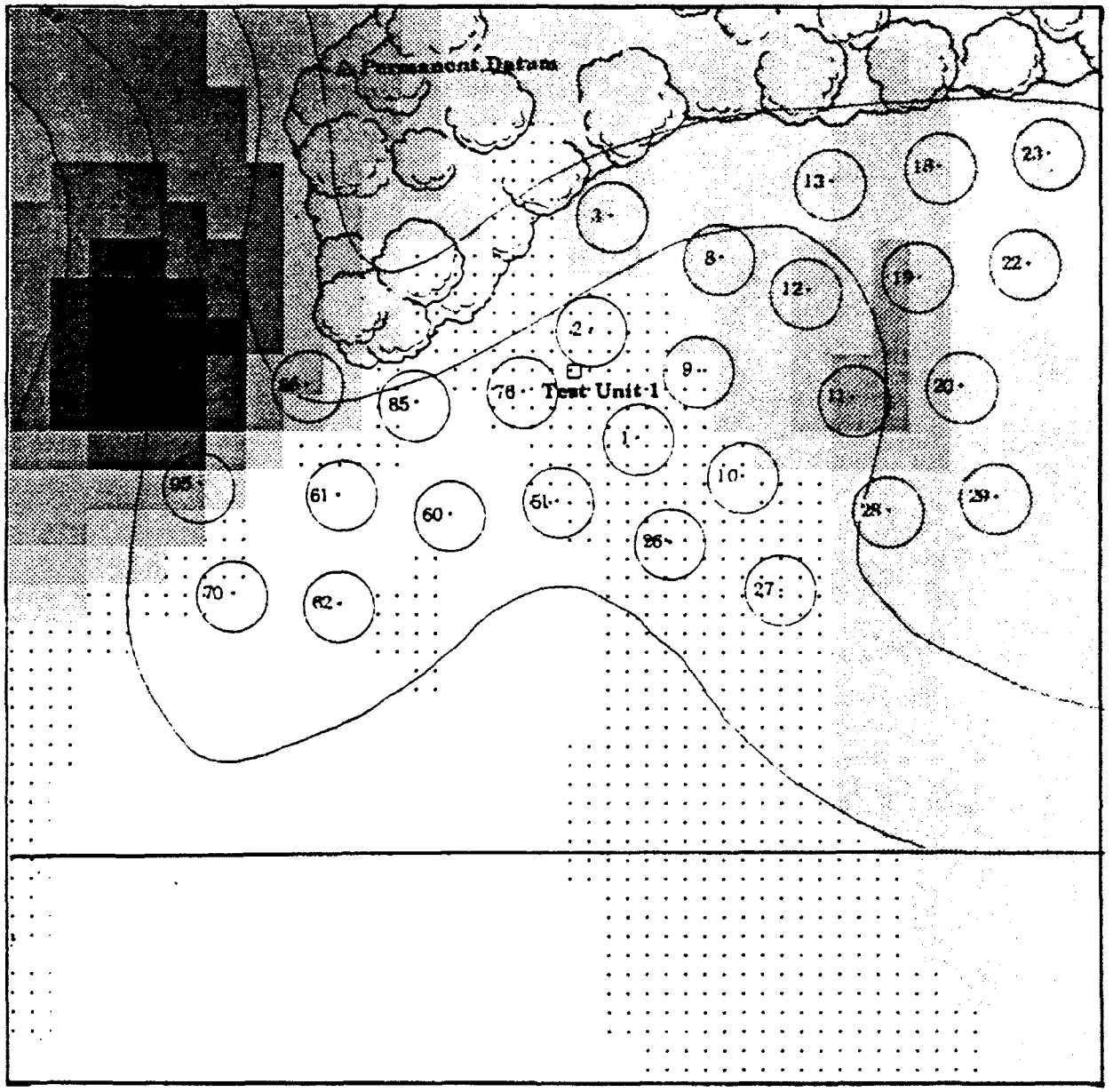


Figure A6.
Site 3LE143 (LRP-3) Proveniences
Controlled Surface Collection Circles
and Test Units.

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Average Artifact Density (number of artifacts)

-- 3
-- 5
-- 8
-- 10
-- 12
-- 15
-- 17
-- 19
-- 22
-- 24

= Controlled Surface Collection Unit (3.34 m radii)

Magnetic North

0 25

Meters

Figure A7.
Site 3LE143 (LRP-3)
Prehistoric Artifacts - Surface Distributions.

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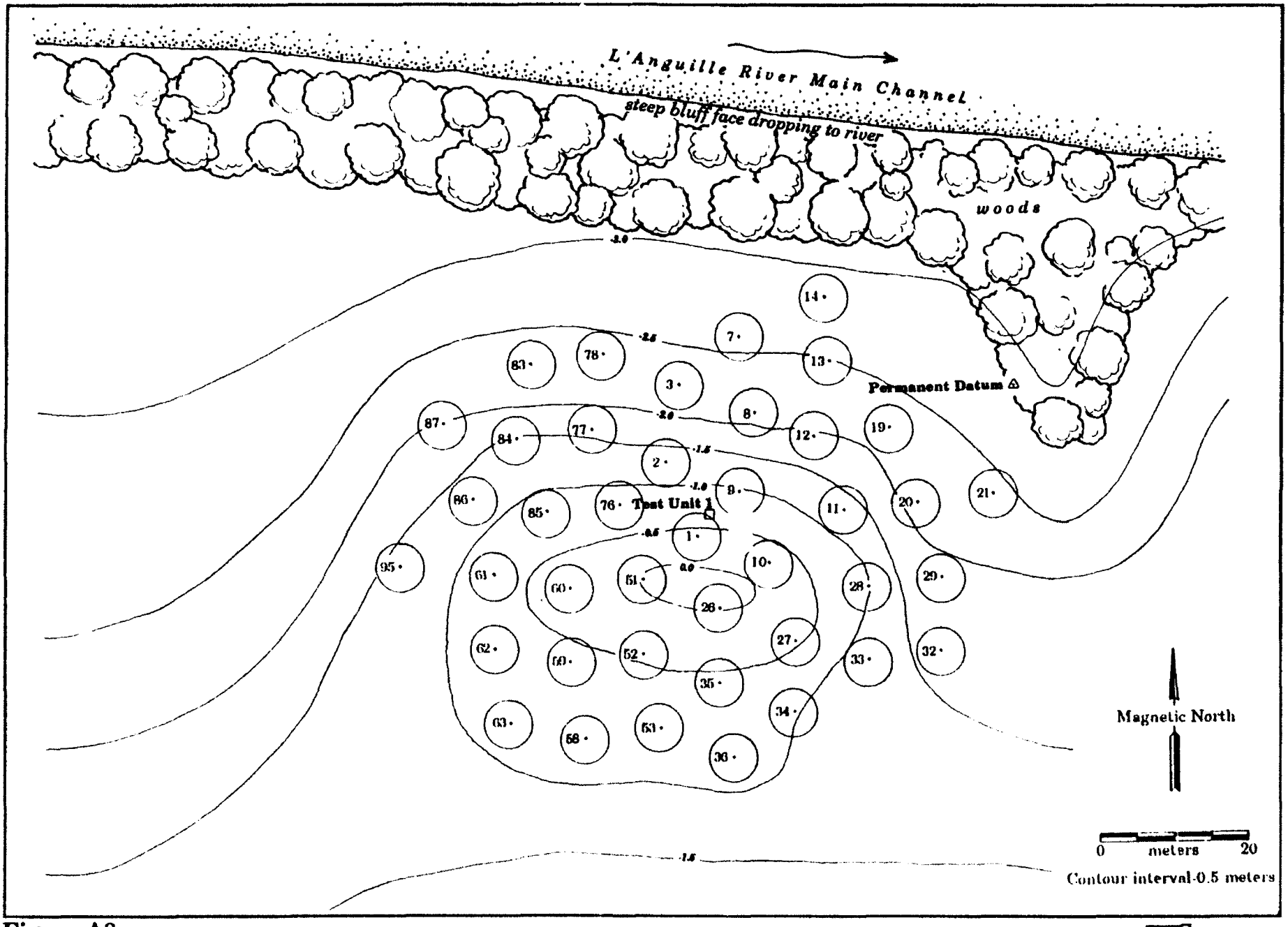


Figure A8.
Site 3LE144 (LRP-4) Proveniences
Controlled Surface Collection Circles
and Test Units.

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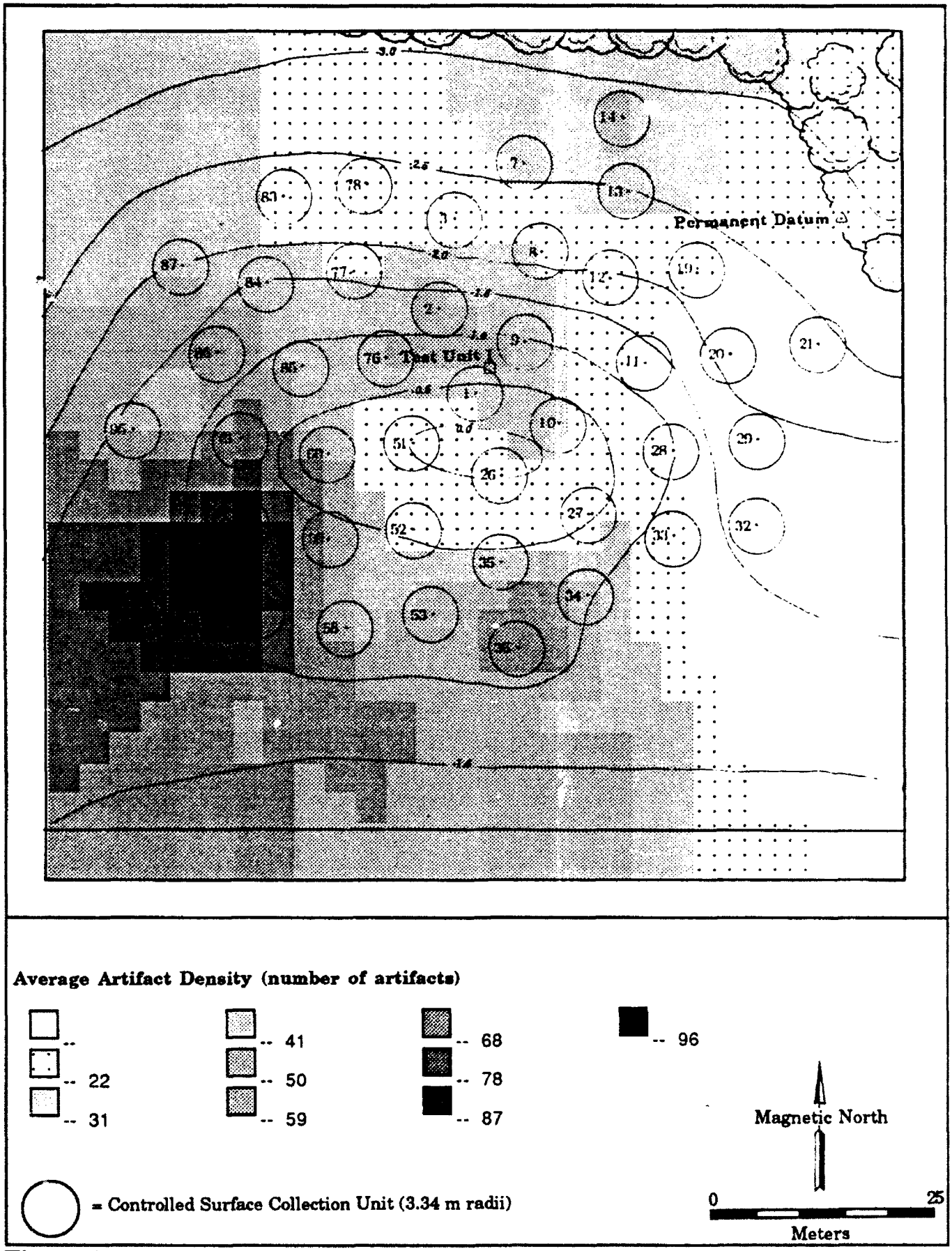


Figure A9.
Site 3LE144 (LRP-4)
Prehistoric Artifacts - Surface Distributions.

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prior collecting this plowing cycle were observed. Moderate quantities of fired clay were present on the surface, suggesting plowed hearths or structures were present on the site. A controlled surface collection was made using forty-one 3.34 m radii circles dispersed using a stratified systematic unaligned procedure. A minimum of 5 minutes was spent in every circle, and collection proceeded until no more artifacts could be found. A one meter test unit was opened to a depth of 18 cm level, one 10 cm level below the artifact bearing plowzone. A 30 cm x 30 cm test was then opened an additional 40 cm in one corner of the unit, to 58 cm. A permanent datum consisting of a 30 inch piece of iron rebar, marked with red flagging tape, was located near the woods margin. All fill was dry screened through 1/4 inch mesh.

Condition: Currently unknown. No subplowzone materials were found, although prehistoric features may lie at the base of the plowzone. The site soils are described as Alligator clay, frequently flooded (Ag; USDA 1977a), but are loess deposits, with some clay in the upper levels, suggesting they are misclassified and probably better described as Loring silt loam. (Profile obtained from test unit excavated to a depth of 58 cm in the center of the artifact scatter).

Previous Investigations: None reported; site area has in all probability seen prior collection by amateurs.

NRHP Status: Indeterminate.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present, and limited stripping should be made with a piece of heavy machinery to see if features are present at the base of the plowzone.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE3LE145	**Site Name:**	None recorded
Project Site Number:	LRP-005	**Date of Visit:**	13 June 1987
County: Lee		**USGS Quad:**	Marianna 1984 7.5

Location:	1/4	1/4	1/4;	Section	T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Prehistoric Late Archaic/Woodland; probably Late Archaic (no ceramics were found).

Diagnostic Artifacts: 1 Weems point.

Description: Site 3LE145 (LRP-005) is a very light prehistoric surface artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. The site area extends over approximately 7000 square meters (100 x 70 m in maximum extent). The main channel of the L'Anguille River is located due north of the site area through a narrow tree line; a steep dropoff occurs just beyond this treeline. At the time of survey, the site had been recently plowed and rained on, with no crops planted, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Dense woods were located to the east of the site; some recent logging has occurred in this area. No artifacts were found in this area, in spite of systematic shovel testing. Site LRP-005 was a very light density scatter, precluding the utility of a controlled surface collection. Because such a low density scatter was observed, a 100

percent surface collection was made. The boundaries of the scatter were mapped on the project aerials in the field, and every visible artifact was collected, for a minimum of one person-hour. A one meter test unit was opened near the woodline on the east side of the field ca. 50 m from the river. This unit was opened to a depth of 22 cm, one sterile 10 cm level below the plowzone, where a single flake was found. A 30 cm x 30 cm test was then opened an additional 30 cm in one corner of the unit to 52 cm. All fill was dry screened through 1/4 inch mesh.

Condition: Currently unknown. No subplowzone materials were found, although prehistoric features may lie at the base of the plowzone. The site soils are described as Alligator clay, frequently flooded (Ag; USDA 1977a), and are loess deposits with fine clay particles in the upper part of profile from recent alluviation. (Profile obtained from test unit excavated to a depth of 52 cm in the eastern part of the artifact scatter).

Previous Investigations: None reported; site area has in all probability seen prior collection by amateurs.

NRHP Status: Not eligible.

NRHP Recommendations: Site is of such low artifact density as to preclude National Register Eligibility Status.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE149	**Site Name:**	None recorded
Project Site Number:	LRP-009	**Date of Visit:**	11 June 1987
County: Lee		**USGS Quad:**	Marianna 1984 7.5

Location:	1/4	1/4	1/4; Section		T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Prehistoric (Archaic and Woodland) and historic. A late 19th/early 20th century house site was present in this area but has been removed.

Diagnostic Artifacts: 2 Weems, 3 Gary points; Baytown Plain, Mulberry Creek Cord Marked pottery.

Description: Site 3LE149 (LRP-009) is a prehistoric and historic surface artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. The site area extends over approximately 2800 square meters (80 x 40 m in maximum extent). At the time of survey, the site was in low (< 6 in. high) soybeans, offering excellent surface visibility (Figures 10, 11). No footprints indicative of prior collecting this plowing cycle were observed. The site is located on thick loess deposits cut by the river channel and can be best described as on a bluff overlooking the river. The main channel of the L'Anguille River is located southwest of the site area ca. 30 m downslope through woods. A deep drainage ditch/hedgerow is located immediately to the south, and separates this site from 3LE157 (LRP-017). The site area has seen extensive prior collection by amateurs (this area is described as the "Jaco" site by local residents). A controlled surface collection was made using 28 3.34 m radii circles dispersed using a stratified systematic unaligned procedure. A minimum of 5 minutes was spent in every circle, and collection proceeded until no more artifacts could be found. A one meter test unit was opened to 20 cm, one sterile 10 cm level below the plowzone. A 30 cm x 30 cm test was then opened an additional 40 cm in one corner of the unit. A permanent datum, a 30 inch piece of iron rebar marked with red flagging

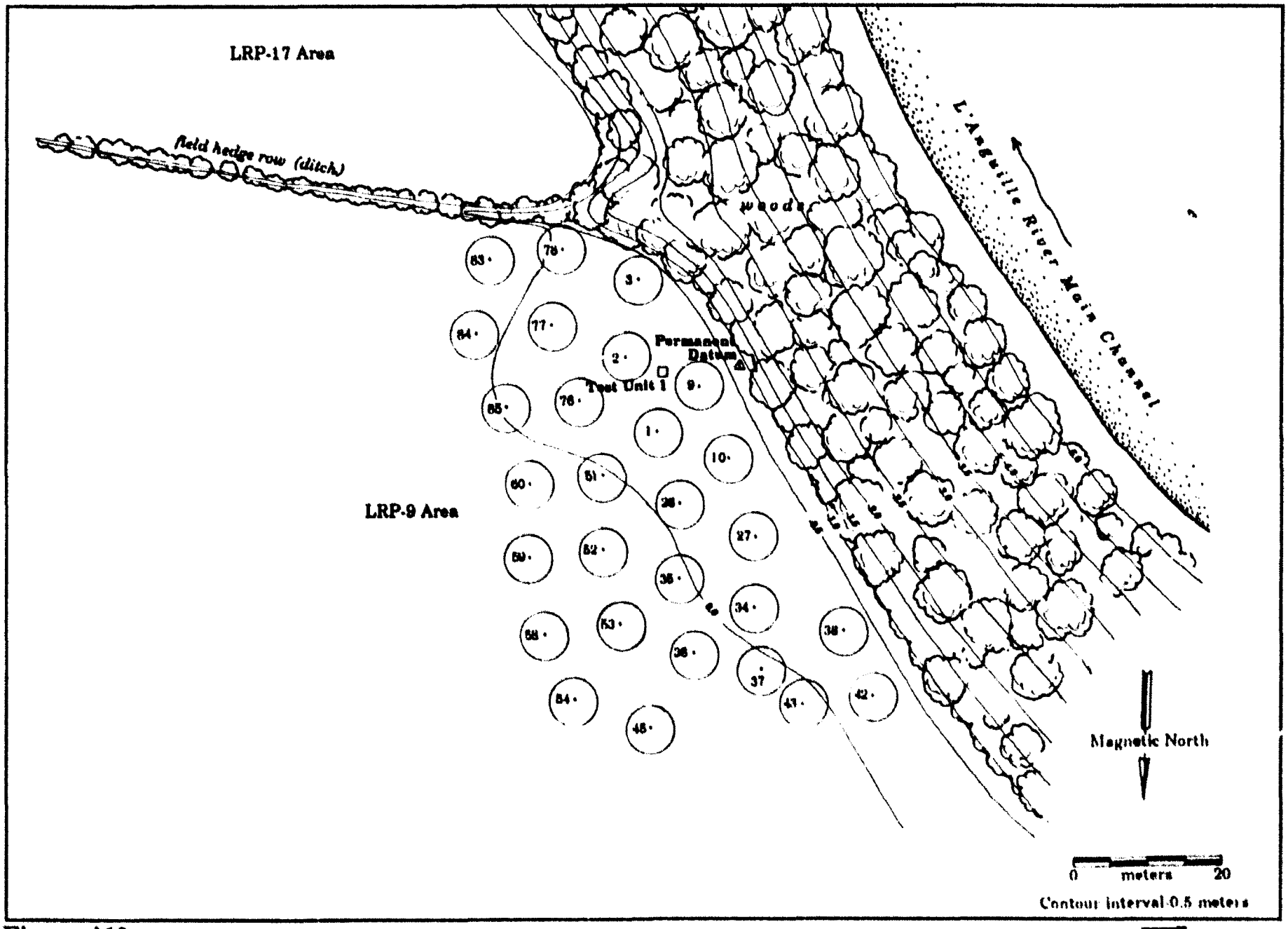


Figure A10.
Site 3LE149 (LRP-9) Proveniences
Controlled Surface Collection Circles
and Test Units.

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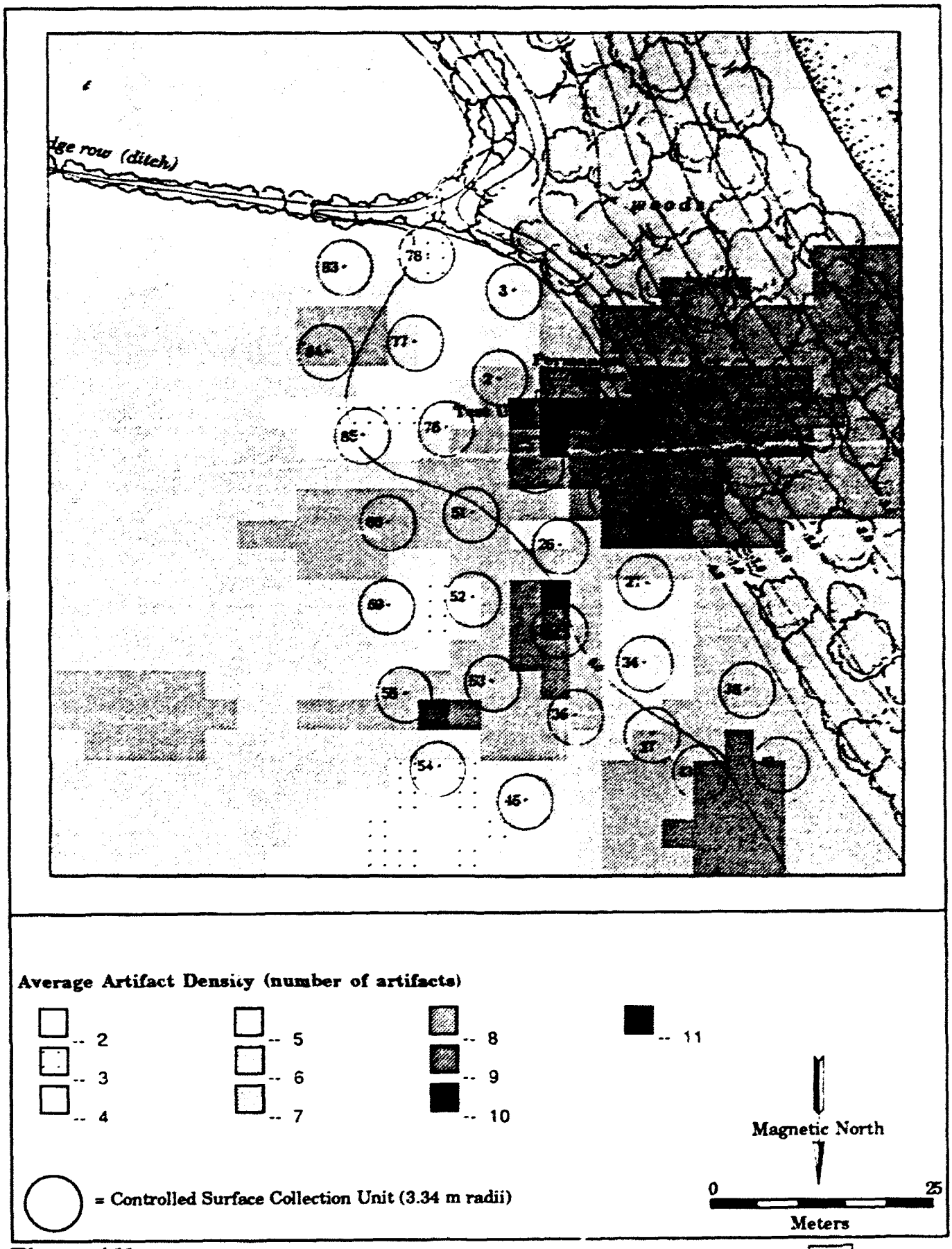


Figure A11.
Site 3LE149 (LRP-9)
Prehistoric Artifacts - Surface Distributions.

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tape, was placed in the woods 9.5 m due west of the NW corner of the unit. All fill was dry screened through 1/4 inch mesh.

Condition: Currently unknown. No subplowzone materials were found, although features may lie at the base of the plowzone. The site soils are classified as Dundee silt loam and Alligator clay, frequently flooded (Du/Ag; USDA 1977a), and are silt/clay loess deposits with extensive fine clay particles in the upper part of profile from recent alluviation. Sandy clay found at about 40 cm. (Profile obtained from test unit excavated to a depth of 60 cm in the southern part of the scatter).

Previous Investigations: None reported; site area has in all probability seen prior collection by amateurs.

NRHP Status: Indeterminate.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined. At least five 2 m test pits should be opened to determine if stratification is present, followed by limited stripping to see if features are present at the base of the plowzone.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE150	**Site Name:**	None recorded
Project Site Number:	LRP-010	**Date of Visit:**	11 June 1987
County: Lee		**USGS Quad:**	Marianna 1984 7.5

Location:	1/4	1/4	1/4; Section		T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Prehistoric aceramic Late Archaic/Woodland; recent historic debris.

Diagnostic Artifacts: 1 Weems point.

Description: Site 3LE150 (LRP-010) is a very light surface artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. The site area extends over approximately 900 square meters (30 x 30 m in maximum extent). At the time of survey, the site was in low (< 6 in. high) soy beans, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Site 3LE151 (LRP-011) is located ca. 100 m due east. The main channel of the L'Anguille River is located ca. 40 m due south of the site area, through trees lining the river; the terrain drops off fairly quickly down to the river from the field edge. The scatter was extremely light. A 100 percent general surface collection was made, with the boundaries of the scatter mapped on the project aerials in the field. Every visible artifact was collected for 0.75 person-hours. A one meter test unit was opened ca. 5 m east of the woods edge to a depth of 10 cm; no artifacts were found. A permanent datum consisting of a 24 inch piece of iron rebar marked with red flagging tape was placed in the woods 6 m due west of the northwest corner of the test pit. All fill from the test unit was screened through 1/4 inch mesh.

Condition: Currently unknown. No subplowzone materials were found, although both historic and prehistoric features may lie at the base of the plowzone. The site soils are classified as Dundee silt loam (Du; USDA 1977a) and are characterized by loess deposits with extensive fine clay particles in the upper part of profile from recent alluviation. (Profile obtained from test unit excavated to a depth of 10 cm ca. 5 m east of the woods edge).

Previous Investigations: None reported; site area has in all probability seen prior collection by amateurs.

NRHP Status: Not Eligible.

NRHP Recommendations: Site requires no additional testing. The scatter was extremely light and no artifacts were found in the 1 m test unit opened.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE151	**Site Name:**	None recorded
Project Site Number:	LRP-011	**Date of Visit:**	11 June 1987
County: Lee		**USGS Quad:**	Marianna 1984 7.5

Location:	1/4	1/4	1/4;	Section	T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Early 20th century historic artifact scatter (probable old tenant house in general area).

Diagnostic Artifacts: Extensive mid-20th century historic artifacts.

Description: Site 3LE151 (LRP-011) is a very light surface scatter of recent historic debris located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was in low (< 6 in. high) soy beans, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. No house debris was noted in area. The main channel of the L'Anguille River is located ca. 75 m due south of the site area, which can be best described as on a bluff overlooking the river. The site is located on a gentle break in the field, below which the ground drops off gradually to the tree line/river channel, and extended over approximately 600 square meters (30 x 20 m in maximum extent. A 100 percent general collection of all visible artifacts was made for 0.5 person hours, and the boundaries of the scatter were mapped on aerials in the field. No test units were opened due to access problems.

Condition: Light density scatter. The site soils are classified as Dundee silt loam (Du; USDA 1977a). Extremely low density scatter.

Previous Investigations: None reported; site area has in all probability seen prior collection by amateurs.

NRHP Status: Not Eligible.

NRHP Recommendations: Site requires no additional testing, given the extremely low density and recent age of the debris scatter.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE152	**Site Name:**	None recorded
Project Site Number:	LRP-012	**Date of Visit:**	11 June 1987
County:	Lee	**USGS Quad:**	Marianna 1984 7.5

Location:	1/4	1/4	1/4;	Section	T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Unknown prehistoric and recent historic scatter (outlying debris from 3LE153/LRP-013 house site?)

Diagnostic Artifacts: No diagnostic prehistoric artifacts recovered; mid-20th century historic artifacts.

Description: Site 3LE152 (LRP-012) is a light, predominantly historic surface artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site had been recently plowed and rained on, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. The site extended over approximately 1050 square meters (35 x 30 m in maximum extent). Crops present on the site at the time of survey were low (< 6 in. high) soy beans. Site 3LE153 (LRP-013), a historic house site, is located ca. 75 m due east; this may be debris from that site. The main channel of the L'Anguille River is located 50 due south of the site area through a tree line. The site is located on a gentle break in the field, beyond which the terrain slopes fairly rapidly down to the tree line and river channel cut. A 100 percent general surface collection was made, and the boundaries of the scatter were mapped on the project aerials in the field. Every visible artifact was collected, with one person-hour spent in collection. A one meter test unit was opened to a depth of 20 cm on the west side of the scatter near a recent erosional gully. This unit was opened to a depth of 20 cm, one sterile 10 cm level below the plowzone. A 30 cm x 30 cm test was then opened an additional 30 cm in the SW corner of the unit.

Condition: Currently unknown. No subplowzone materials were found, although both historic and prehistoric features may lie at the base of the plowzone. The site soils are classified as Dundee silt loam (Du; USDA 1977a) and are characterized by loess deposits with extensive fine clay particles in the upper part of profile from recent alluviation. (Profile obtained from test unit excavated to a depth of 50 cm).

Previous Investigations: None reported; site area has in all probability seen prior collection by amateurs.

NRHP Status: Not eligible.

NRHP Recommendations: Site requires no additional testing. The scatter was very light, and few non-modern artifacts were found in the 1 m test unit opened.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE153	**Site Name:**	None recorded
Project Site Number:	LRP-013	**Date of Visit:**	11 June 1987
County:	Lee	**USGS Quad:**	Marianna 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Prehistoric Late Archaic/Woodland (Archaic?/no ceramics); recent 20th century historic materials. Former tenant house site.

Diagnostic Artifacts: 1 Weems point; mid-20th century historic artifacts.

Description: Site 3LE153 (LRP-013) is a surface scatter of predominantly historic artifacts located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River (Figures 12, 13). A tenant house was located here but was pushed (bulldozed?) downslope into the river as part of field clearing. At the time of the survey, the site was in low (< 6 in. high) soybeans, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. The site is on a bluff overlooking the main channel of the river, which is located 75 m due south, and extended over approximately 1400 square meters (50 x 40 m in maximum extent). The site is located on the last level ground before a break in the field; the ground slopes fairly quickly down to the treeline/river bank beyond this point. A controlled surface collection was made using 14 3.34 m radii circles dispersed using a stratified systematic unaligned procedure. A minimum of 5 minutes was spent in every circle, and collection proceeded until no more artifacts could be found. A general collection was made as well. A one meter test unit was opened in the NE corner of the scatter to a depth of 22 cm, one sterile 10 cm level below the plowzone. A 30 cm x 30 cm test was then opened an additional 40 cm in the SW corner of the unit. A permanent datum consisting of a 24 inch piece of flagged iron rebar was placed 10 m east of the SE corner of the unit, in high brush. All fill was dry screened through 1/4 inch mesh.

Condition: Currently unknown. No subplowzone materials were found, although both historic and prehistoric features may lie at the base of the plowzone. The site soils are classified as Dundee silt loam (Du; USDA 1977a) and are characterized by yellowish brown loess underlain by gummy gray clay. (Profile obtained from 1 m test unit excavated to a depth of 60 cm in the edge of the scatter).

Previous Investigations: None reported; site area has in all probability seen prior collection by amateurs.

NRHP Status: Not eligible.

NRHP Recommendations: Site requires no additional testing to determine National Register Status. The mid-20th century tenant house in this location was (bulldozed?) off the field into the treeline by the river. Few surviving subsurface features are thought likely.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

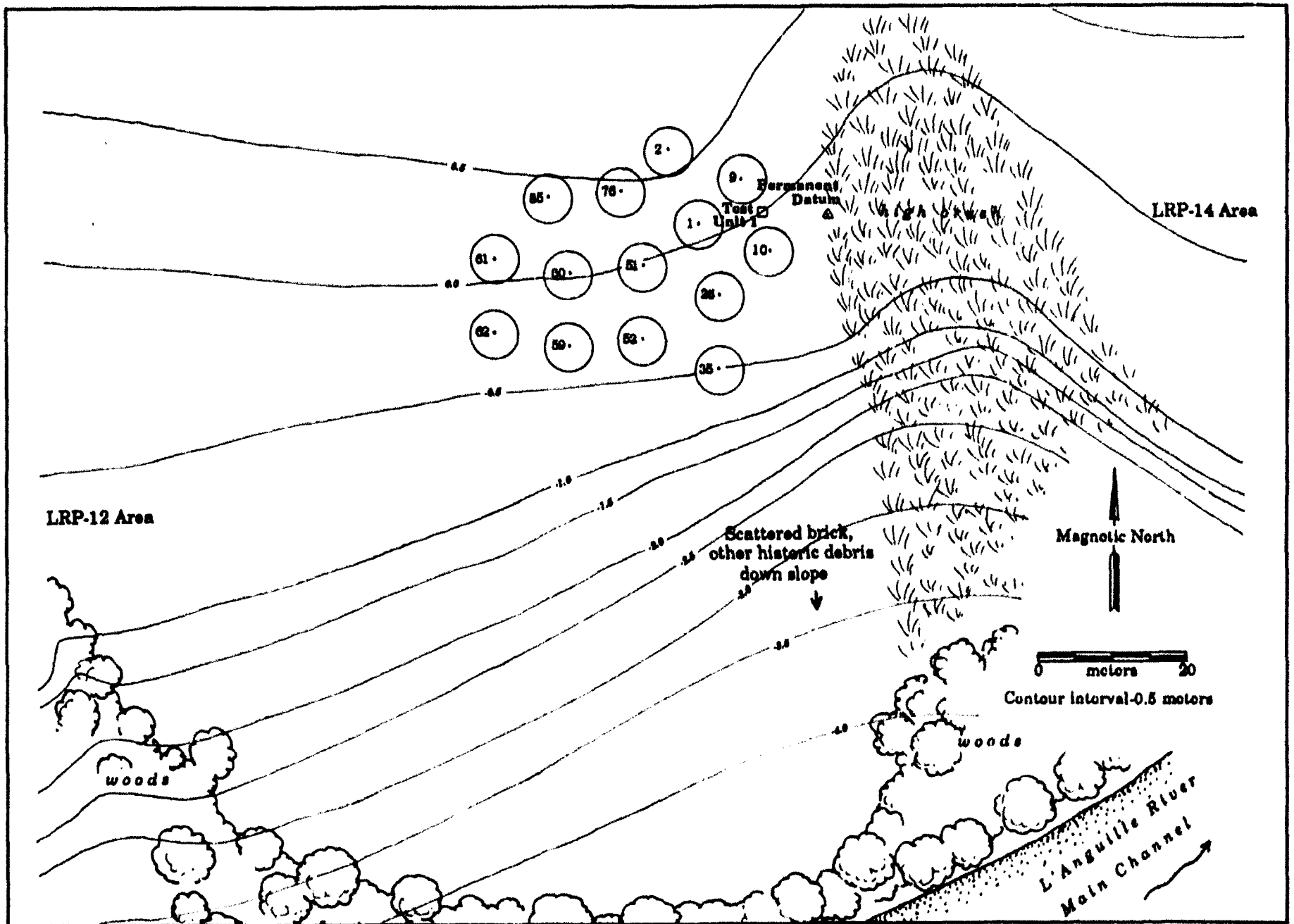


Figure A12.
Site 3LE153 (LRP-13) Proveniences
Controlled Surface Collection Circles
and Test Units.

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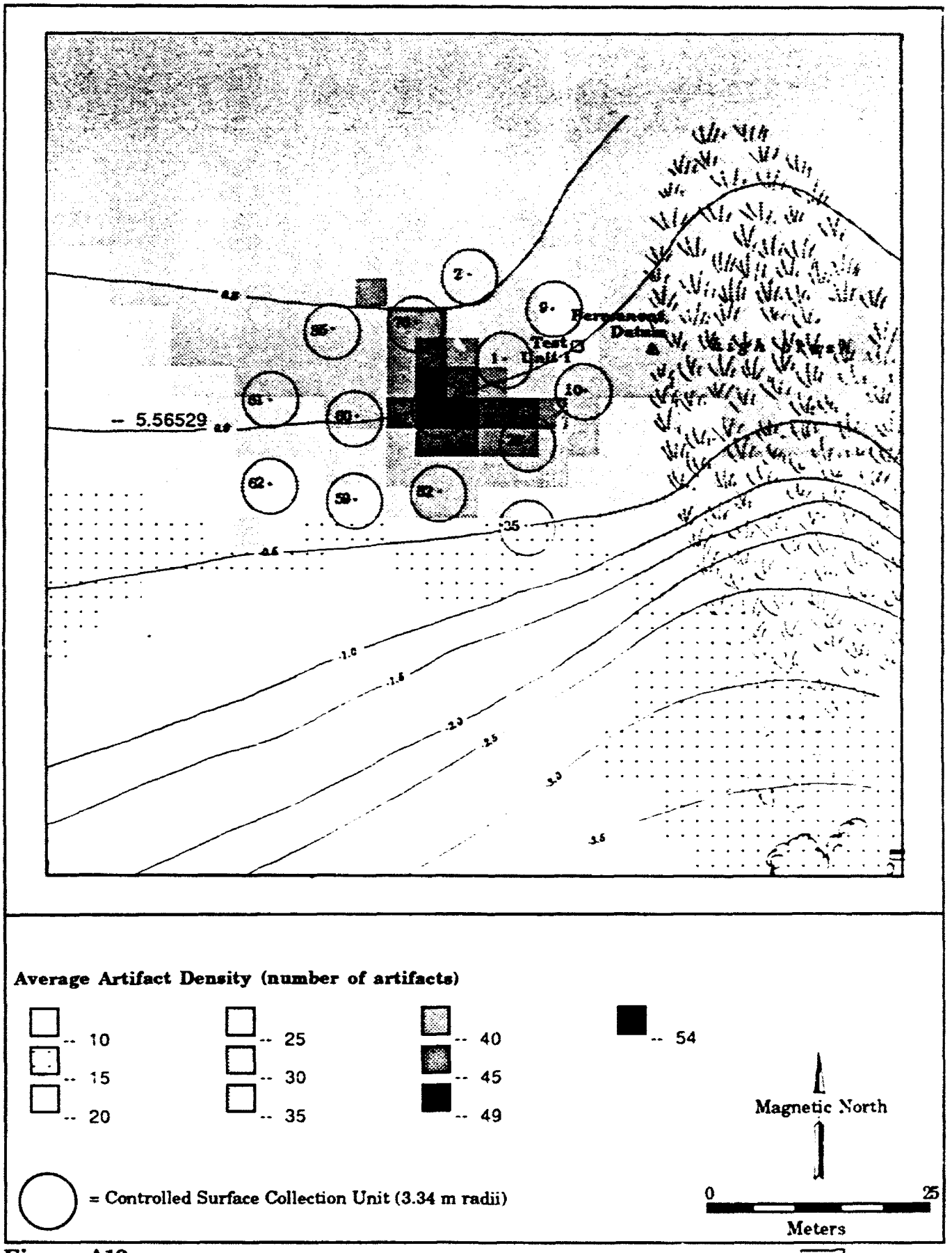


Figure A13.
Site 3LE153 (LRP-13)
Prehistoric Artifacts - Surface Distributions.

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State Site Number:	3LE154	**Site Name:**	None recorded
Project Site Number:	LRP-014	**Date of Visit:**	11 June 1987
County:	Lee	**USGS Quad:**	Marianna 1984 7.5

Location:	1/4	1/4	1/4;	Section	T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Prehistoric (Archaic?/no ceramics) and recent historic scatter from 20th century tenant house site (since bulldozed? down the river bank.

Diagnostic Artifacts: No diagnostic prehistoric artifacts; mid-20th century historic artifacts.

Description: Site 3LE154 (LRP-014) is a predominantly historic surface artifact scatter with minor amounts of prehistoric lithics located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River (Figures 14, 15). At the time of survey the site was in low (< 6 in. high) soy beans, offering excellent visibility. No footprints indicative of prior collecting this plowing cycle were observed. A tenant house had been present here but had been pushed into the treeline to the south, down the river bank. Surviving disarticulated structural remains were observed on the bank slope. The site area is on a bluff overlooking the main channel of the L'Anguille River, which is located 50 m due south, and extended over approximately 1300 square meters (40 x 40 m in maximum extent). A gully overgrown with dense brush is located to the west of the site area, separating this scatter from site 3LE153 (LRP-013). A controlled surface collection was made using 13 3.34 m radii circles dispersed using a stratified systematic unaligned procedure. A minimum of 5 minutes was spent in every circle, and collection proceeded until no more artifacts could be found. A one meter test unit was opened in the southern part of the scatter, to a depth of 18 cm, one sterile 10 cm level below the plowzone. A 30 cm x 30 cm test was then opened an additional 40 cm in the SE corner of the unit. A permanent datum consisting of a 24 inch piece of iron rebar was placed 3 m south of the SE corner of the unit. All fill was dry screened through 1/4 inch mesh.

Condition: Currently unknown. No subplowzone materials were found, although both historic and prehistoric features may lie at the base of the plowzone. The site soils are classified as Dundee silt loam (Du; USDA 1977a) and are characterized by loess silt/clay deposits underlain/saturated by gray clay. (Profile obtained from test unit excavated to a depth of 58 cm in the southern part of the artifact scatter).

Previous Investigations: None reported; site area has in all probability seen prior collection by amateurs.

NRHP Status: Not Eligible.

NRHP Recommendations: Site requires no additional testing to determine National Register Status. Due to the disturbed nature and recent date of the assemblage it is not considered eligible. Surviving features are thought to be minimal.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

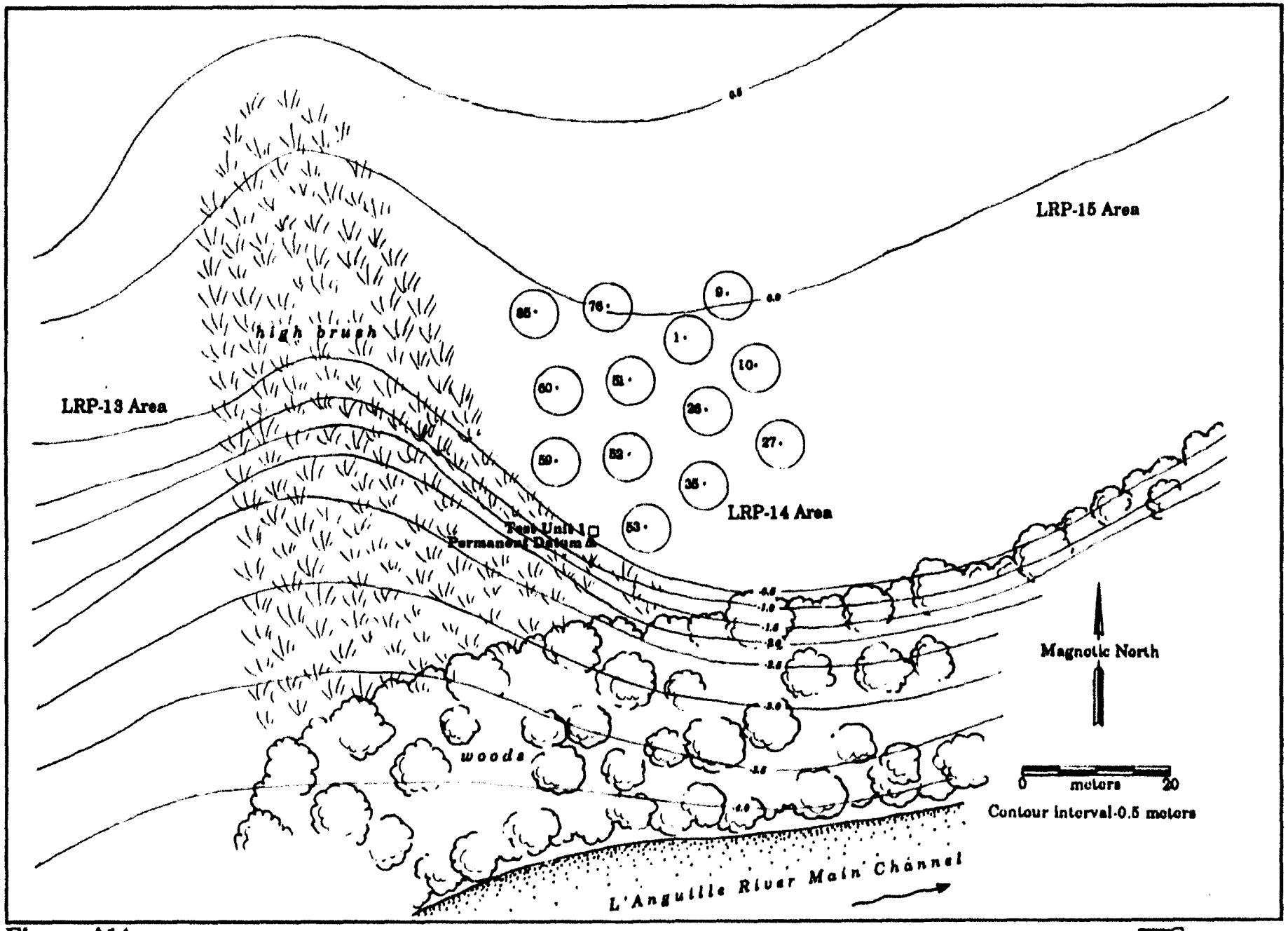
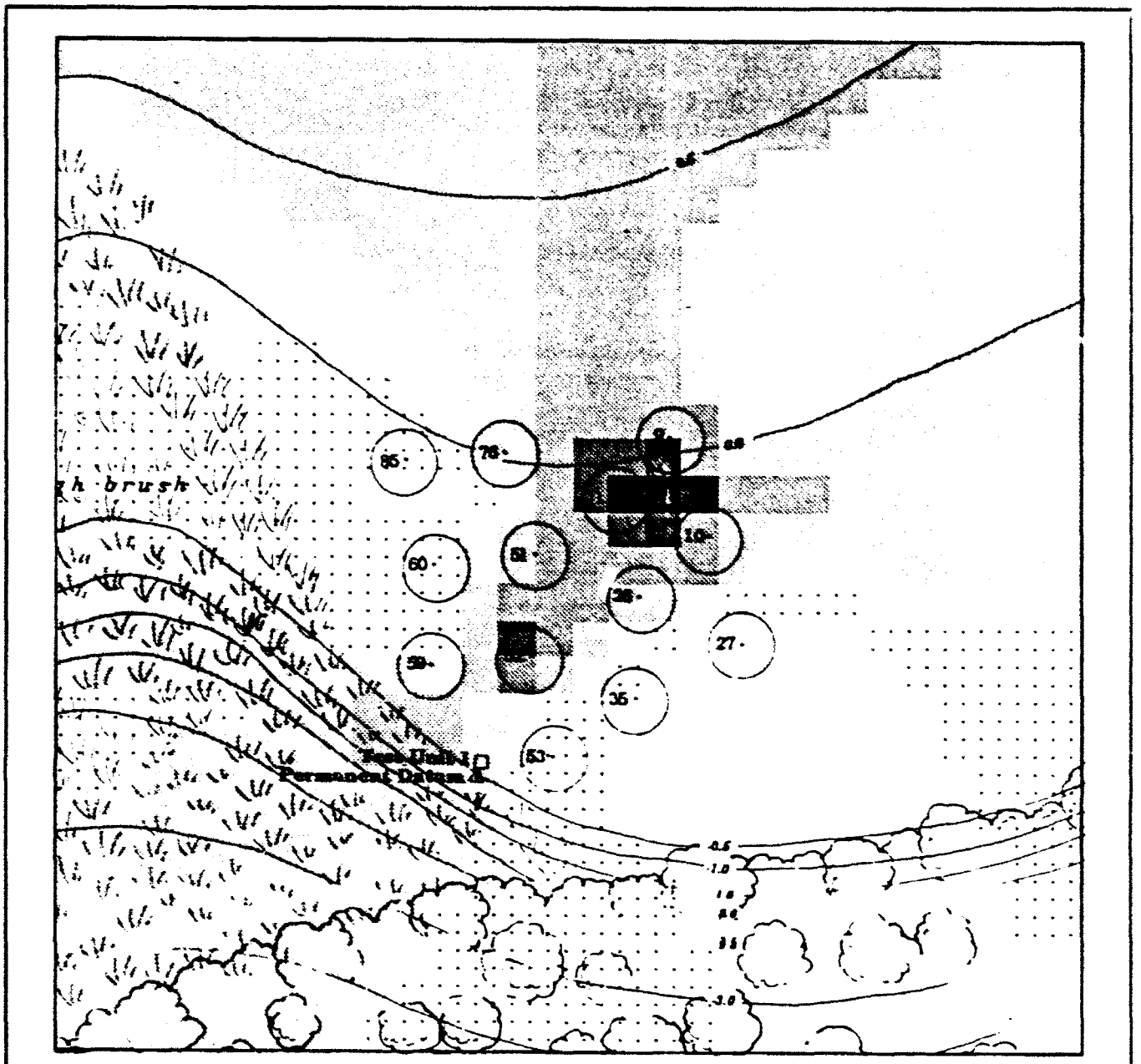


Figure A14.
Site 3LE154 (LRP-14) Proveniences
Controlled Surface Collection Circles
and Test Units.

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Average Artifact Density (number of artifacts)

-- 7	-- 23	-- 34	-- 46
-- 15	-- 27	-- 38	
-- 19	-- 30	-- 42	

= Controlled Surface Collection Unit (3.34 m radii)

Figure A15.
Site 3LE154 (LRP-14)
Historic Artifacts - Surface Distributions.

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L'Anguille River Survey Project

State Site Number:	3LE155	**Site Name:**	None recorded
Project Site Number:	LRP-015	**Date of Visit:**	11 June 1987
County:	Lee	**USGS Quad:**	Marianna 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Prehistoric Late Archaic/Woodland (possibly Archaic?/no ceramics); 20th century historic house site.

Diagnostic Artifacts: (3 Weems points); mid-20th century historic artifacts.

Description: Site 3LE155 (LRP-015) is a dense scatter of historic artifacts from a probable tenant occupation, with a lighter scatter of prehistoric remains, located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River (Figures 16, 17). The site extended over approximately 2100 square meters (100 x 30 m in maximum extent). At the time of survey, the site was in low (< 6 in. high) soy beans, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. The site is on a bluff overlooking the main channel of the L'Anguille River, which is located ca. 50 due south, downslope through the trees lining the bank. A fairly deep gully was located southeast of the site in the woods running down to the river. The gully was filled with architectural debris from a probable tenant house that had been pushed into it. A controlled surface collection was made using 22 3.34 m radii circles dispersed using a stratified systematic unaligned procedure. A minimum of 5 minutes was spent in every circle, and collection proceeded until no more artifacts could be found. A one meter test unit was opened in the SE part of the scatter to a depth of 30 cm. Artifacts were found in the 9 cm disk zone and in the cracked clay below. A 30 cm x 30 cm test was opened an additional 40 cm in the NW corner of the unit. A permanent datum, a 24 inch piece of iron rebar, marked with red flagging tape, was located 10 m south of the unit in the woods. All fill was dry screened through 1/4 inch mesh.

Condition: Currently unknown. No subplowzone materials were found, although both historic and prehistoric features may lie at the base of the plowzone. The site soils are classified as Dundee silt loam (Du; USDA 1977a) and are characterized by loess deposits with extensive fine clay. (Profile obtained from 1 m test unit excavated to a depth of 70 cm in the SE part of the artifact scatter).

Previous Investigations: None reported; site area has in all probability seen prior collection by amateurs.

NRHP Status: Indeterminate.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined. Three 2 m test pits should be opened to determine if stratification is present. Limited stripping with a piece of heavy machinery might be considered to see if features are present at the base of the plowzone.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

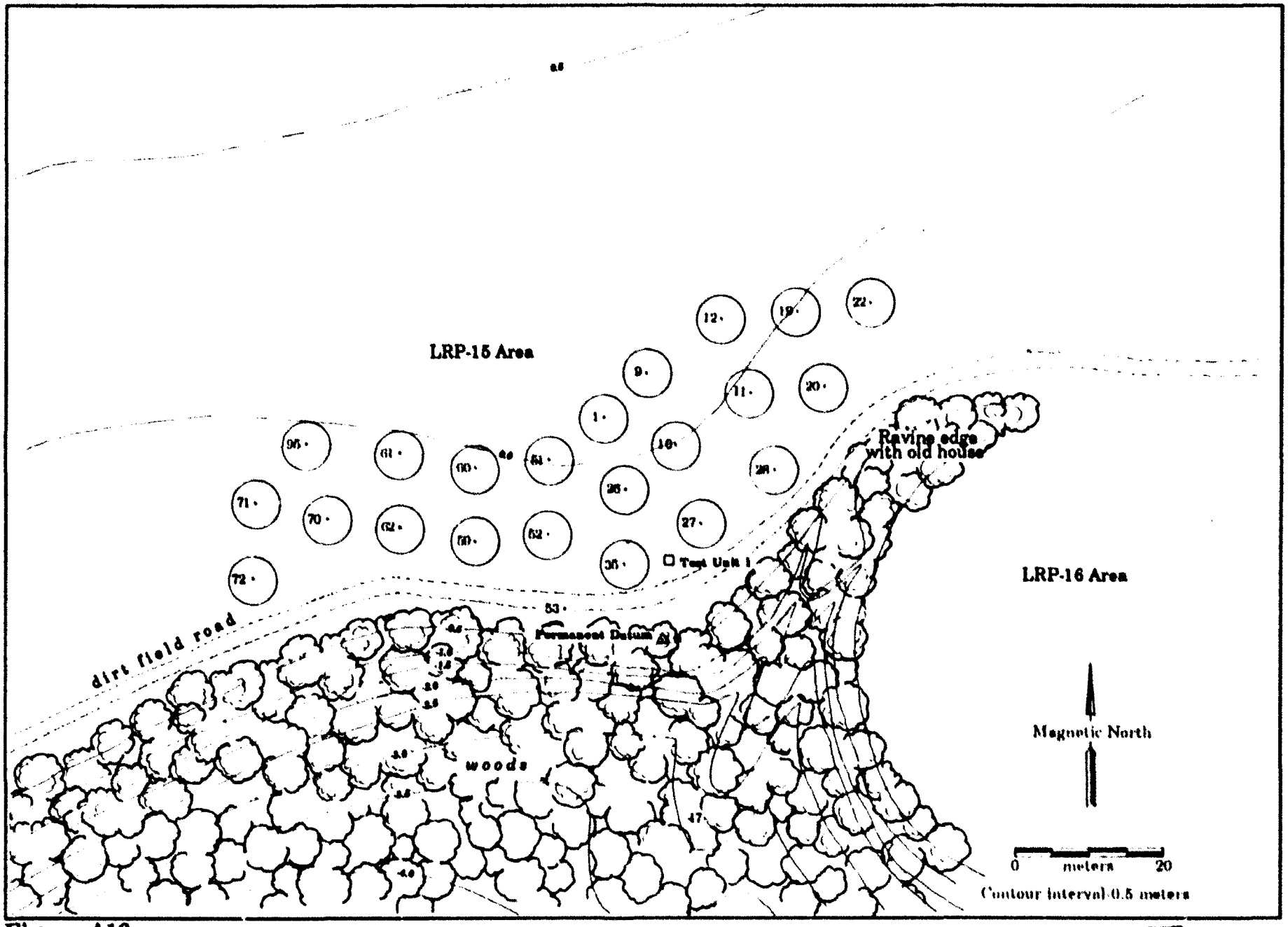


Figure A16.
Site 3LE155 (LRP-15) Proveniences Controlled Surface Collection Circles and Test Units.

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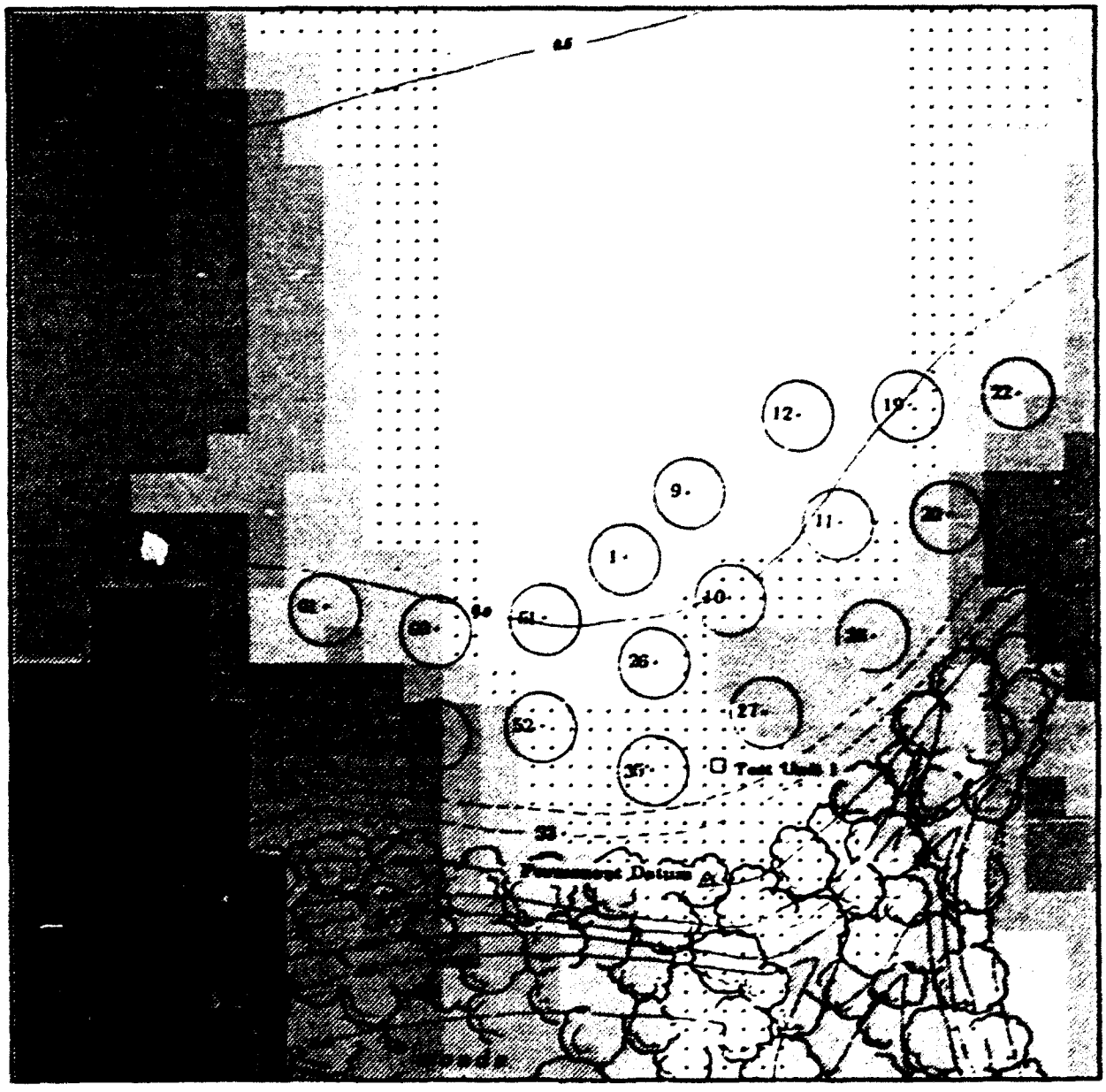


Figure A17.
Site 3LE155 (LRP-15)
Historic Artifacts - Surface Distributions.

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State Site Number: 3LE156 **Site Name:** None recorded
Project Site Number: LRP-016 **Date of Visit:** 11 June 1987
County: Lee **USGS Quad:** Marianna 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Prehistoric (possibly Archaic?/no ceramics); 20th century historic debris.

Diagnostic Artifacts: No diagnostic prehistoric artifacts; mid-20th century historic artifacts.

Description: Site 3LE156 (LRP-016) was a dense historic surface scatter from a possible tenant house together minor prehistoric debris located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River (Figures 18, 19). The site extended over approximately 2400 square meters (60 x 40 m in maximum extent). At the time of survey, the site was in low (< 6 in. high) soy beans, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. The site is on a bluff overlooking the main channel of the L'Anguille River, which is located ca. 30 m south, downslope through the trees lining the bank. A deep gully separates this site from 3LE155 (LRP-015); as noted in the description for 3LE155, a house had been pushed into this gully, probably from the more proximate 3LE155 area. A controlled surface collection was made using fifteen 3.34 m radii circles dispersed using a stratified systematic unaligned procedure. A minimum of 5 minutes was spent in every circle, and collection proceeded until no more artifacts could be found. A one meter test unit was opened to a depth 16 cm in the west side of the scatter, to one sterile 10 cm level below the 6 cm thick artifact bearing disk zone. A 30 cm x 30 cm test was then opened an additional 40 cm in the NW corner of the unit. All fill was dry screened through 1/4 inch mesh.

Condition: Currently unknown. No subplowzone materials were found, although both historic and prehistoric features may lie at the base of the plowzone. The site soils are classified as Dundee silt loam (Du; USDA 1977a) and are characterized by loess deposits with extensive fine clay particles increasing with depth. (Profile obtained from test unit excavated to a depth of 56 cm in the western part of the scatter).

Previous Investigations: None reported; site area has in all probability seen prior collection by amateurs.

NRHP Status: Not Eligible.

NRHP Recommendations: Site requires no additional testing to determine National Register Status. Material is recent, and structures have been removed; no evidence for stratification was found in the 1 m unit opened.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number: 3LE157 **Site Name:** None recorded
Project Site Number: LRP-017 **Date of Visit:** 11 June 1987
County: Lee **USGS Quad:** Marianna 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

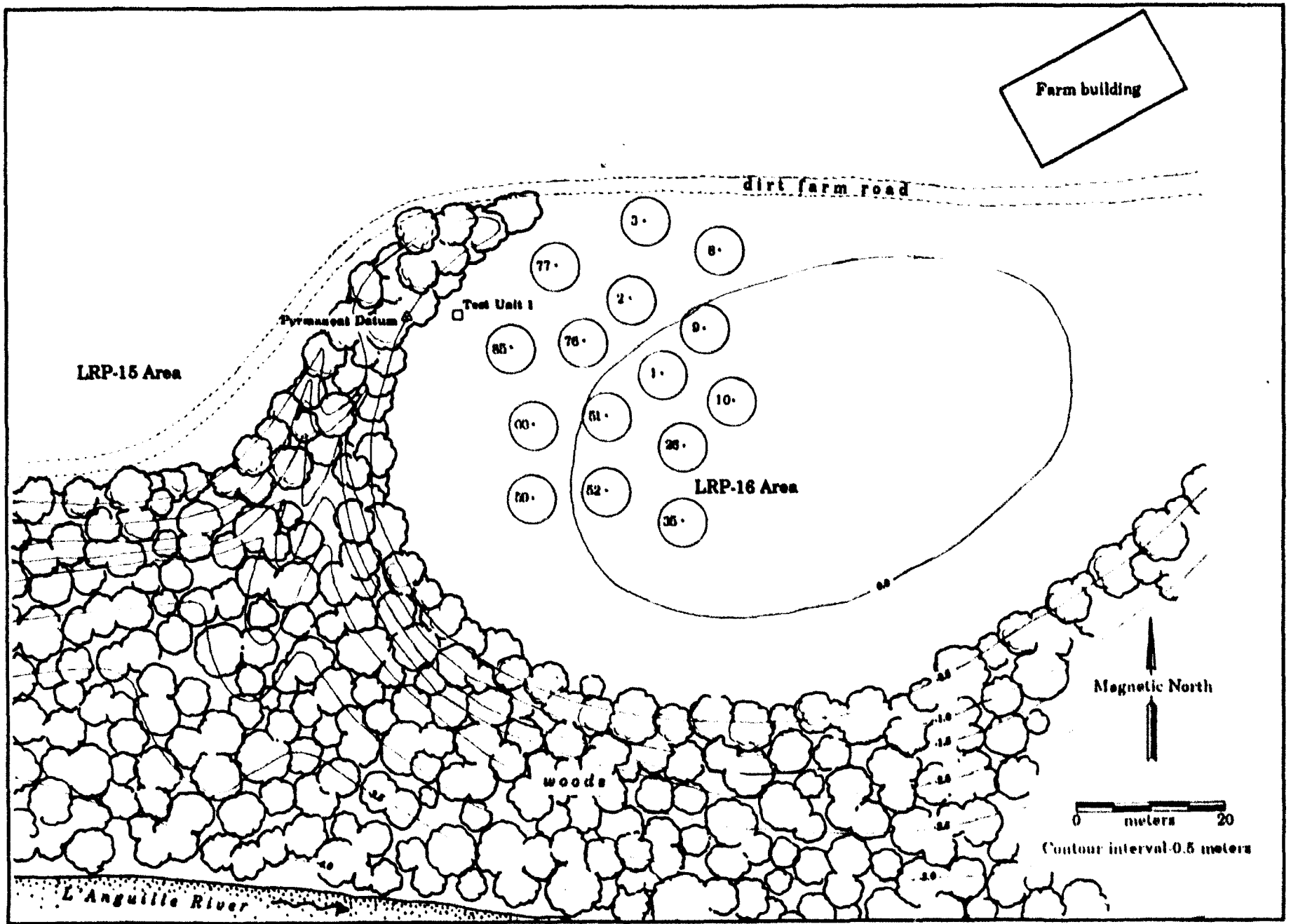


Figure A18.
Site 3LE156 (LRP-16) Proveniences
Controlled Surface Collection Circles
and Test Units.

L'Anguille River Survey Project

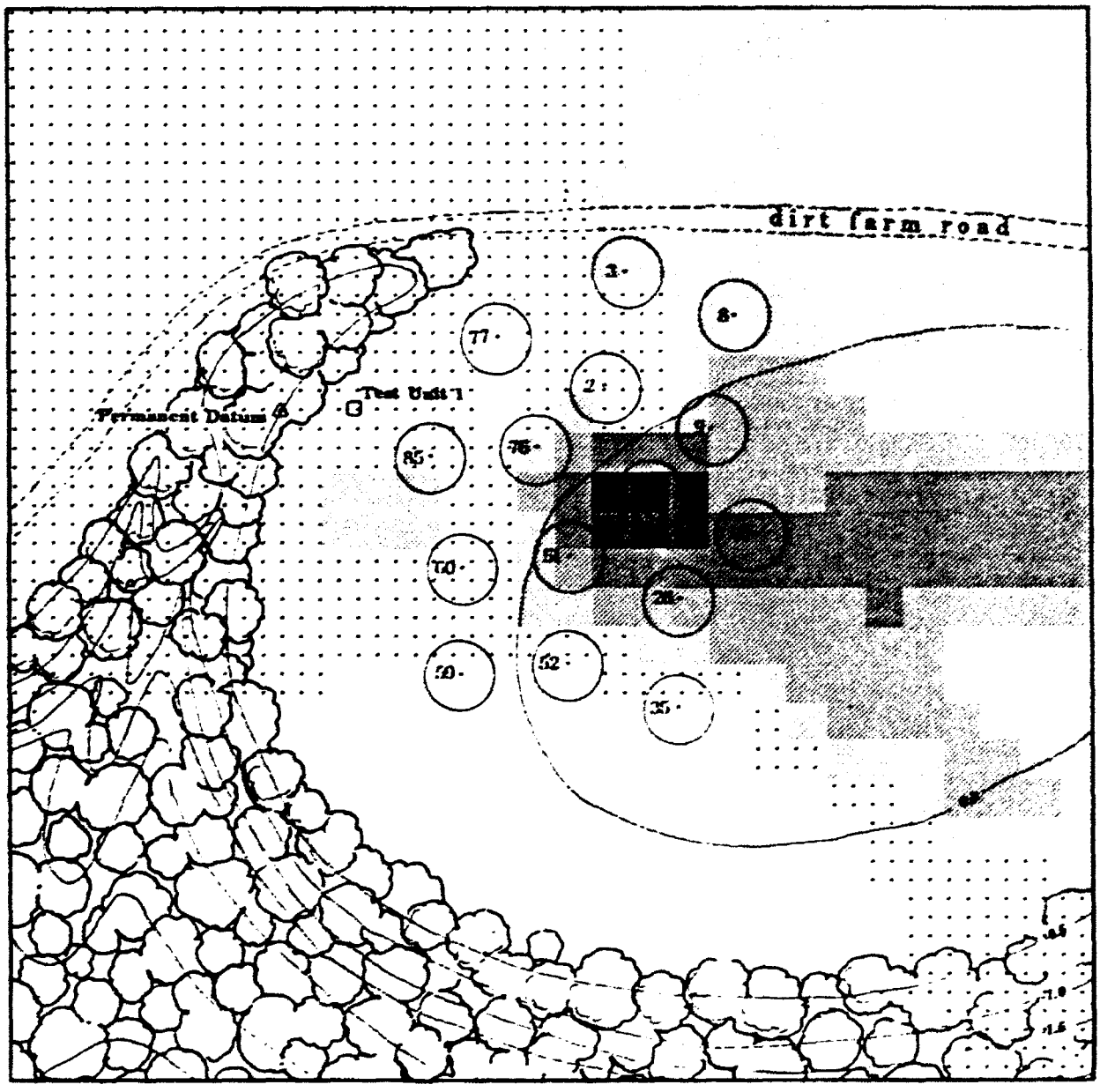


Figure A19.
Site 3LE156 (LRP-16)
Historic Artifacts - Surface Distributions.

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Temporal Span: Prehistoric Archaic and Woodland; late 19th/early 20th century historic scatter (partially derived from 3LE149/LRP-009?)

Diagnostic Artifacts: 1 Hickory Ridge Side Notched, 3 Weems, 1 Gary, and 1 probable Baytown period stemmed point; Baytown Plain, Mulberry Creek Cord Marked pottery; late 19th/early 20th century artifacts.

Description: Site 3LE157 (LRP-017) is a large, predominantly prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was in low (< 6 in. high) soy beans, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Site 3LE149 (LRP-009) is located due northwest through a thin hedgerow; these two sites are probably all one very large scatter. The site is on a bluff overlooking the main channel of the L'Anguille River, which is located ca. 30 m due west, downslope through the trees lining the channel. The scatter was light, with no concentrations noted, and extended over approximately 8000 square meters (200 x 40 m in maximum extent). A 100 % sample of all visible artifacts was collected for a period of two person hours, and the boundaries of the scatter were mapped on the project aerials in the field. A 1 m unit was opened in the northwest part of the scatter near the woods and ca. 20 m south of the hedgerow separating this site from 3LE149 (LRP-009). The test unit was opened to a depth 17 cm, one sterile 10 cm level below the artifact bearing 7 cm disk zone. A 30 cm x 30 cm test was then opened an additional 40 cm in the northeast corner of the unit. A permanent datum consisting of a 24 inch piece of iron rebar marked with red flagging tape was located 8 m west of the northeast corner of the unit. All fill was dry screened through 1/4 inch mesh.

Condition: Currently unknown. No subplowzone materials were found, although both historic and prehistoric features may lie at the base of the plowzone. The site soils are classified as Dundee silt loam (Du; USDA 1977a) and are characterized by loess deposits with extensive fine clay particles increasing with depth. (Profile obtained from test unit excavated to a depth of 57 cm in the northwest part of the scatter near the woods).

Previous Investigations: None known, although the site area has in all probability seen prior collection by amateurs. This area, with 3LE149, is part of the"Jaco" site collected by local residents.

NRHP Status: Indeterminate.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined. Five 2 m test pits should be opened to determine if stratification is present. Limited stripping should then be made with a piece of heavy machinery to see if features are present at the base of the plowzone. Deep testing should also be conducted.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE158	**Site Name:**	None recorded
Project Site Number:	LRP-018	**Date of Visit:**	19 June 1987
County: Lee		**USGS Quad:**	Soudan 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Prehistoric Archaic and Woodland (dart points and pottery present); 20th century historic material (possible tenant house site).

Diagnostic Artifacts: 2 Weems, 1 Scallorn, 1 Madison point; Baytown Plain and Mississippian Plain pottery; 20th century historic artifacts.

Description: Site 3LE158 (LRP-018) a surface historic and prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. The site extended over approximately 3700 square meters (100 x 40 m in maximum extent; Figures 20-22). At the time of survey, the site was in low (< 15 in. high) milo, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. The site is on a bluff overlooking the main channel of the L'Anguille River, which is located ca. 100 m due south. The site is on a second, high terrace; a lower terrace ca. 40 m wide or so is present in the woods south of the site, before the terrain drops to the river channel itself. A controlled surface collection was made using 37 3.34 m radii circles dispersed using a stratified systematic unaligned procedure. A minimum of 5 minutes was spent in every circle, and collection proceeded until no more artifacts could be found. The boundaries of the scatter were mapped on the project aerials in the field, and every visible artifact was collected. A one meter test unit was opened to a depth of 30 cm in the center of the scatter, one 10 cm level below the first two artifact bearing levels. A 30 cm x 30 cm test was then opened an additional 40 cm in the SE corner of the unit. A permanent datum consisting of a 24 inch piece of iron rebar marked with red flagging tape was placed 20 m south of the unit at the woods edge. All fill was dry screened through 1/4 inch mesh.

Condition: Currently unknown. No subplowzone materials were found, although both historic and prehistoric features may lie at the base of the plowzone. The site soils are classified as Earle silty clay, gently undulating (EaB; USDA 1977a) and are characterized by loess deposits with some fine clay particles in the upper part of profile from alluviation. (Profile obtained from test unit excavated to a depth of 56 cm in the center of the scatter).

Previous Investigations: None reported; the site area has seen prior collection by amateurs according to the current tenant.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined. Five 2 m test pits should be opened to determine if stratification is present. Limited stripping should then be conducted with a piece of heavy machinery to see if features are present at the base of the plowzone, followed by deep testing.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE159	**Site Name:**	None recorded
Project Site Number:	LRP-019	**Date of Visit:**	12 June 1987
County: Lee		**USGS Quad:**	Soudan 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Prehistoric Archaic, Mississippian; mid to late 20th century historic debris.

Diagnostic Artifacts: 1 Big Creek point; 2 Weems points; Baytown Plain pottery.

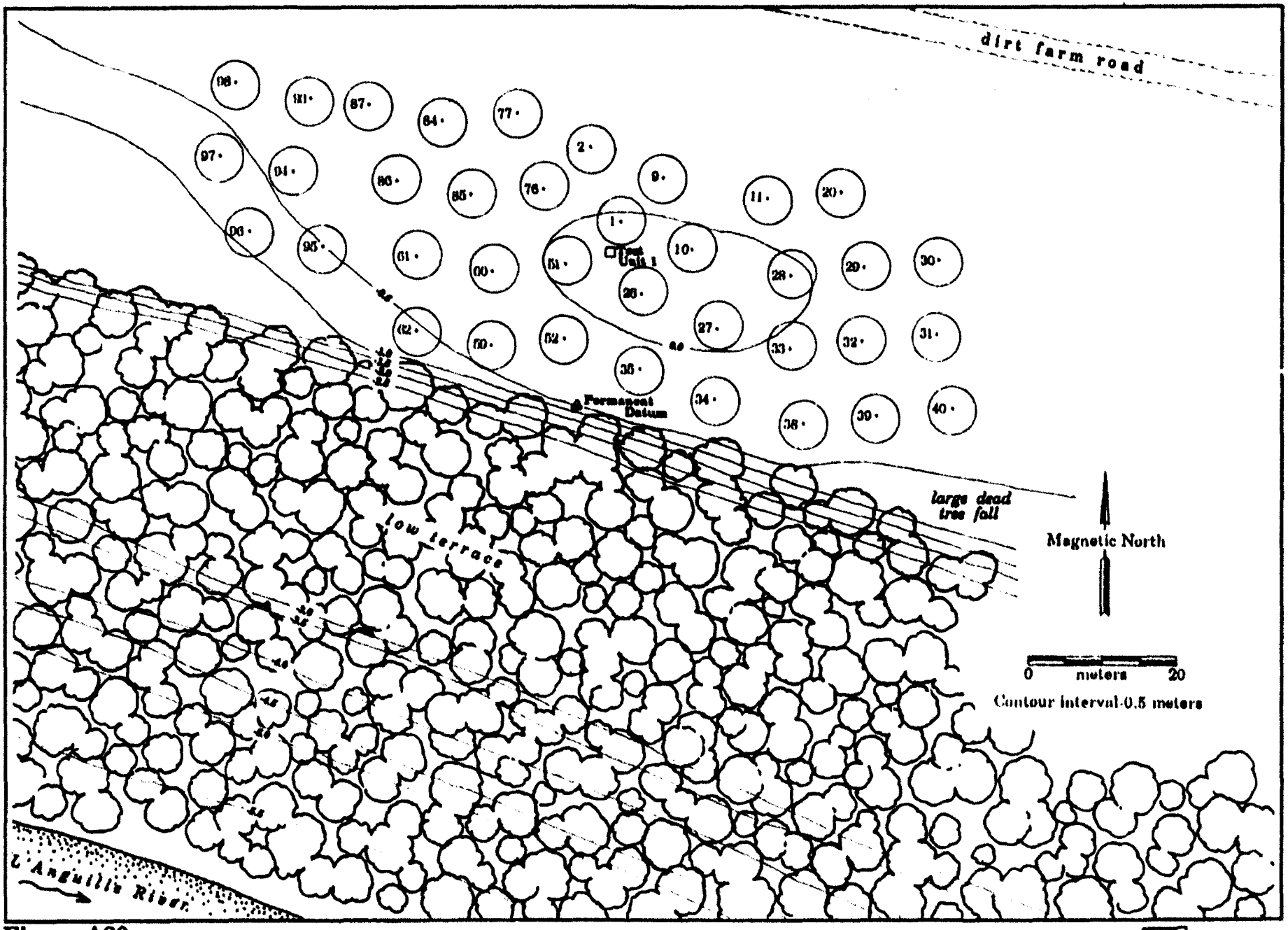
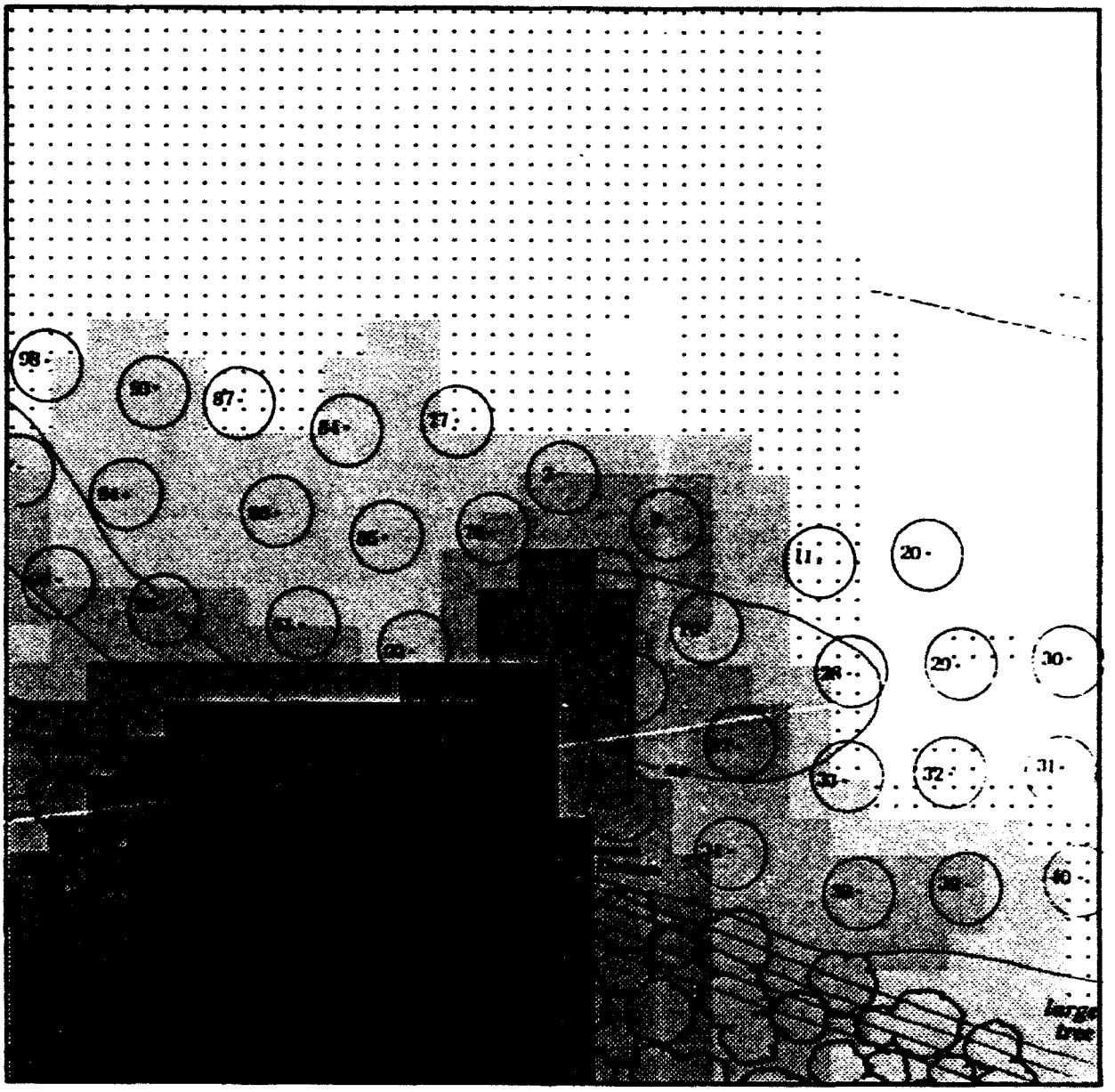


Figure A20.
Site 3LE158 (LRP-18) Proveniences
Controlled Surface Collection Circles
and Test Units.

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Average Artifact Density (number of artifacts)

-- 5 -- 7 -- 10 -- 12 -- 15 -- 17 -- 20 -- 22 -- 25

= Controlled Surface Collection Unit (3.34 m radii)

Magnetic North

0 25

Meters

Figure A21.
Site 3LE158 (LRP-18)
Prehistoric Artifacts - Surface Distributions.

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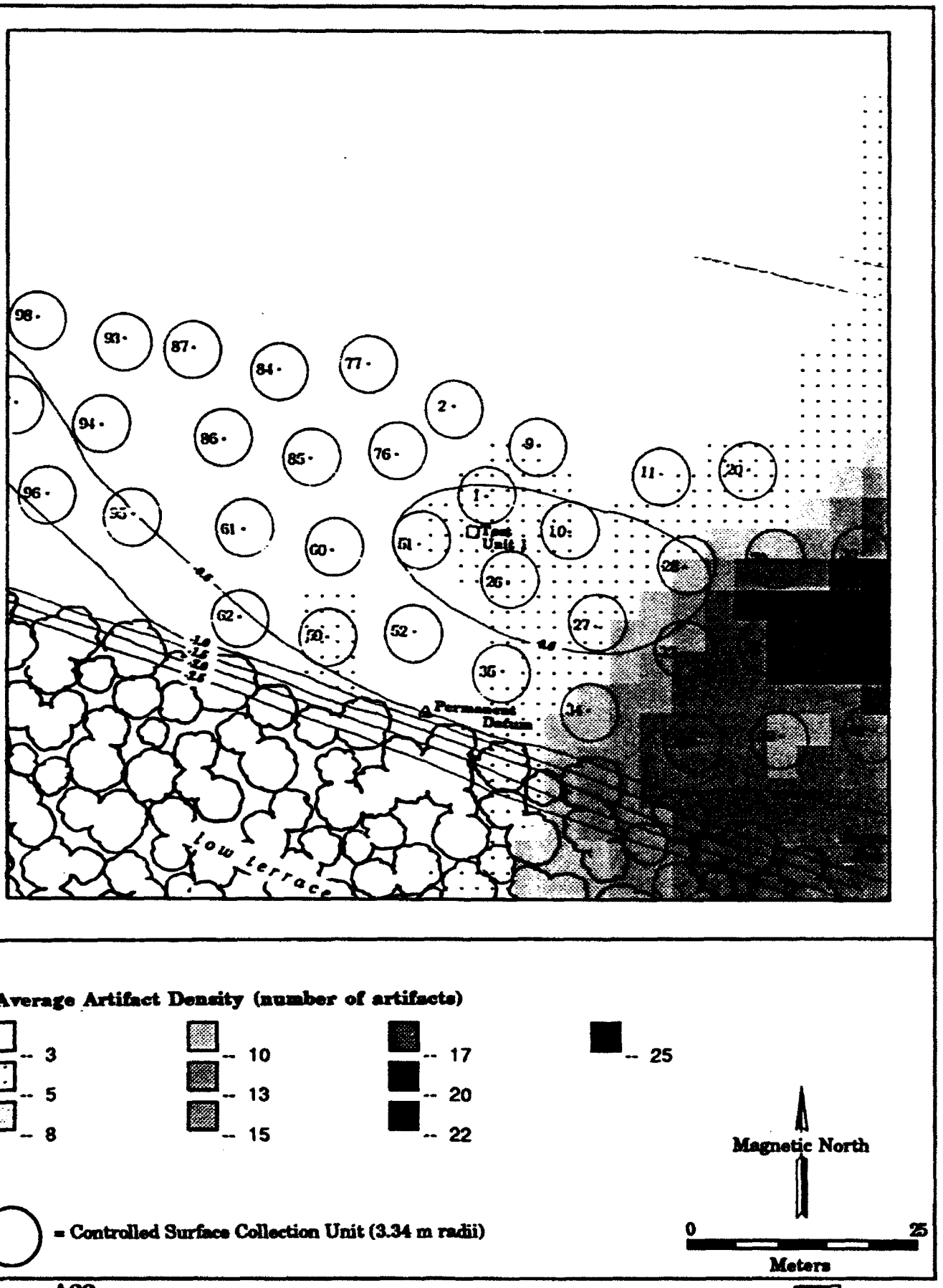


Figure A22.
Site 3LE158 (LRP-18)
Historic Artifacts - Surface Distributions.

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Description: Site 3LE159 (LRP-019) is a surface artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River (Figures 23-25). At the time of survey, the site was in low (< 15 in. high) milo, offering excellent surface visibility. Artifacts were observed over an area of approximately 1400 square meters (90 x 25 m in maximum extent). No footprints indicative of prior collecting this plowing cycle were observed. The site area is on a bluff overlooking the main channel of the L'Anguille River, which is located ca. 100 m due south through a thick forest. The site is actually on a higher, second terrace; a lower terrace ca. 50 m wide and 1.5 m lower lies in the woods to the south, between the site and the drop off leading to the river. A controlled surface collection was made using 14 3.34 m radii circles dispersed using a stratified systematic unaligned procedure at every site where surface conditions (i.e., uniform visibility) permitted. A minimum of 5 minutes was spent in every circle, and collection proceeded until no more artifacts could be found. A one meter test unit was opened to a depth of 30 cm, one sterile 10 cm level below the artifact bearing levels (0-10, 10-20 cm). A 30 cm x 30 cm test was then opened an additional 40 cm in the SW corner of the unit. A 260 cm deep soil core was taken from beside the test pit by John Foss, the project soil scientist (see Appendix II). A permanent datum consisting of a 24 inch piece of iron rebar marked with red flagging tape was placed in the woods edge 5 m south of the NW corner of the unit. All fill was dry screened through 1/4 inch mesh.

Condition: Currently unknown. No subplowzone materials were found, although both historic and prehistoric features may lie at the base of the plowzone. The site soils are classified as Earle silty clay, gently undulating (EaB; USDA 1977a) and are characterized by loess deposits with extensive fine clay particles in the upper part of profile from recent alluviation. (Profile obtained from test unit excavated to a depth of 70 cm in the center of the scatter, and from a ca. 3 m auger core taken by the project soil scientist).

Previous Investigations: None reported; the site area has seen prior collection by amateurs according to the current tenant.

NRHP Status: Indeterminate.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined. Three 2 m test pits should be opened to determine if stratification is present. Limited stripping should be made with a piece of heavy machinery to see if features are present at the base of the plowzone, followed by deep site testing with a backhoe.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE160	**Site Name:**	None recorded
Project Site Number:	LRP-020	**Date of Visit:**	19 June 1987
County: Lee		**USGS Quad:**	Soudan 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Very light prehistoric scatter; historic debris from 20th century (tenant?) house site.

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found; mid-20th century historic artifacts.

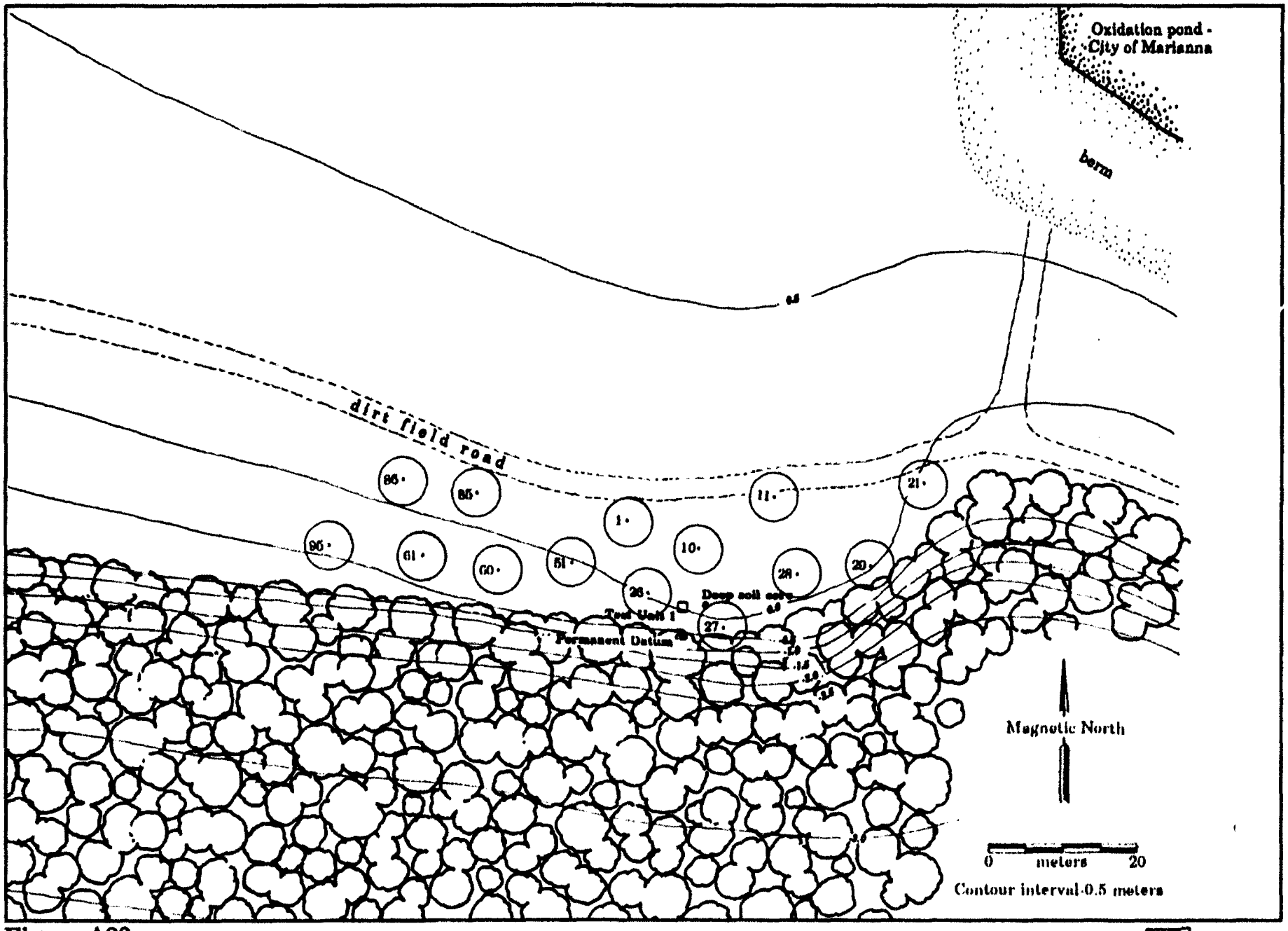
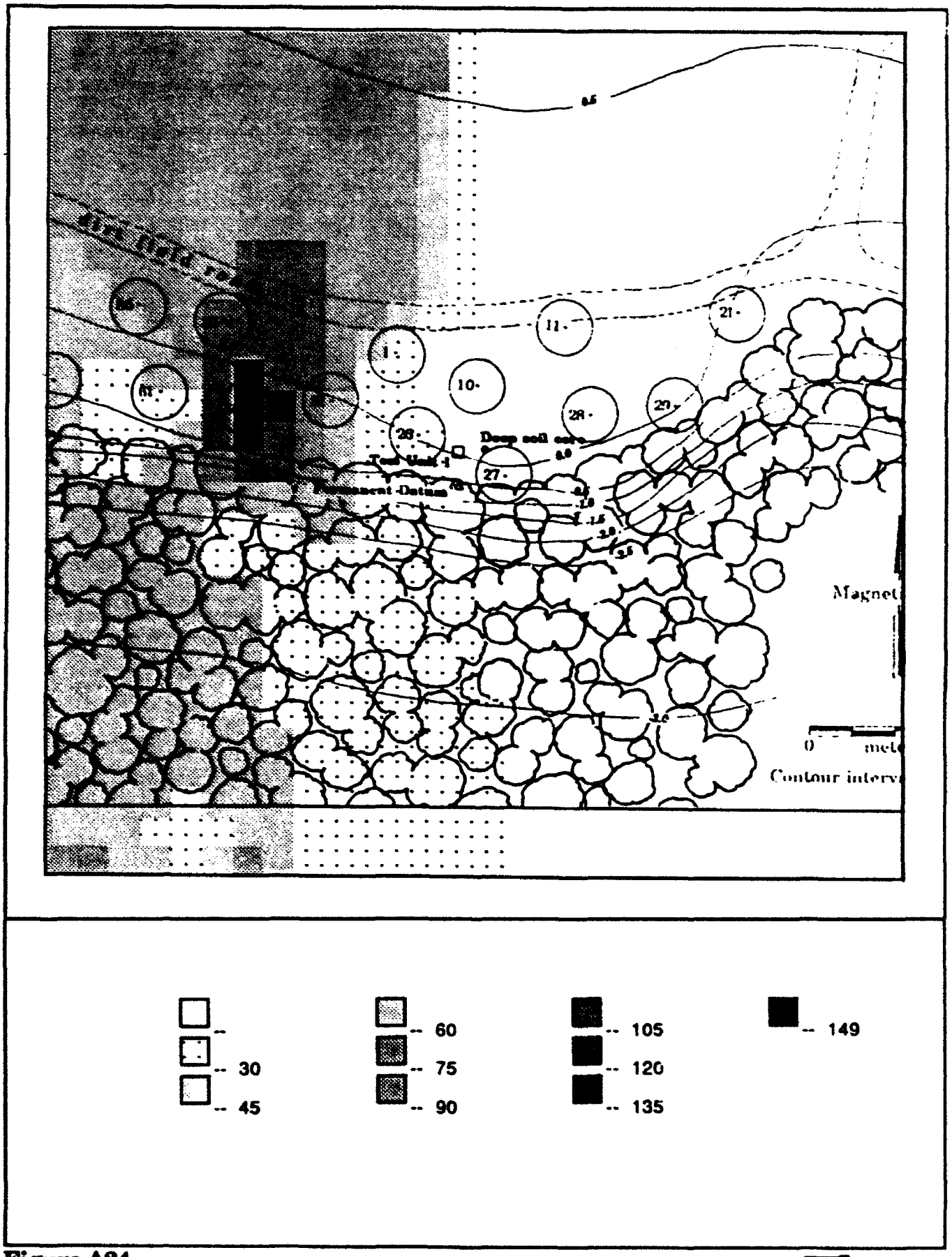


Figure A23.
Site 3LE159 (LRP-19) Proveniences
Controlled Surface Collection Circles
and Test Units.

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-- 30
-- 45
-- 60
-- 75
-- 90
-- 105
-- 120
-- 135
-- 149

Figure A24.
Site 3LE159 (LRP-19)
Prehistoric Artifacts - Surface Distributions.

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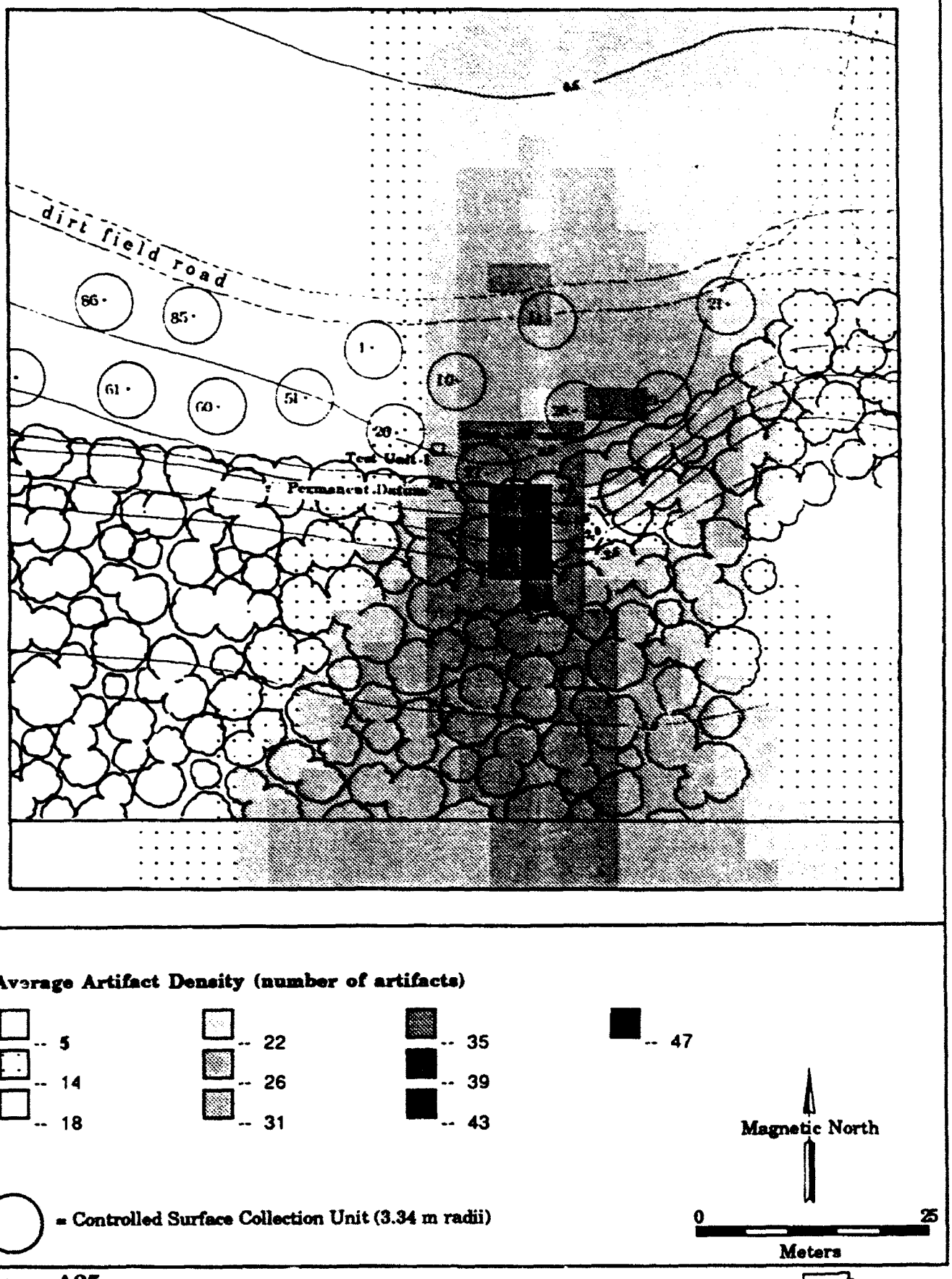


Figure A25.
Site 3LE159 (LRP-19)
Historic Artifacts - Surface Distributions.

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Description: Site 3LE160 (LRP-020) is a light surface artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River (Figures 26, 27). At the time of survey, the site was in low (< 15 in. high) milo, offering excellent surface visibility. Artifacts were observed over an area of approximately 1500 square meters (50 x 30 m in maximum extent). No footprints indicative of prior collecting this plowing cycle were observed. The site area is on a bluff overlooking the main channel of the L'Anguille River, which is located 50 southwest and west of the site through woods along the river margin. A small gully is located to the north and west of the site, running to the river. Concrete pilons from an old bridge over the L'Anguille are located in the woods to the west of the site; no other evidence of this structure was observed. A stratified systematic unaligned controlled surface collection procedure was employed. Eleven sample circles 6.68 m in diameter were collected, providing a 35.9 percent sample of the scatter. Due to the light scatter and recent age of the material, no test units were opened.

Condition: The site soils are classified as Earle silt clay, gently undulating (EaB; USDA 1977a) and are characterized by loess deposits with extensive fine clay particles in the upper part of profile from recent alluviation. (Profile observed in gully near site area).

Previous Investigations: None reported; the site area has seen prior collection by amateurs according to the current tenant.

NRHP Status: Indeterminate.

NRHP Recommendations: Site requires no additional testing to determine National Register Status. Due to the low density and recent nature of the scatter, the area does not possess significant cultural resources. The old bridge site, which dated to the early 20th century in origin according to the tenant, had been removed.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE161	**Site Name:**	None recorded
Project Site Number:	LRP-021	**Date of Visit:**	19 June 1987
County: Lee		**USGS Quad:**	Soudan 1984 7.5

Location:	1/4	1/4	1/4; Section		T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Prehistoric Late Archaic; 20th century historic.

Diagnostic Artifacts: 1 Late Archaic Burkett point.

Description: Site 3LE161 (LRP-021) is a surface artifact scatter of predominantly historic artifacts located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River (Figures 28, 29). At the time of survey, the site was in low (< 15 in. high) milo, offering excellent surface visibility. Artifacts were observed over an area of approximately 2000 square meters (50 x 40 m in maximum extent). No footprints indicative of prior collecting this plowing cycle were observed. The site area is on a bluff overlooking the main channel of the L'Anguille River, which is located 30 m due west, downslope through the treeline. A controlled surface collection was made using 17 3.34 m radii circles dispersed using a stratified systematic unaligned procedure. A minimum of 5 minutes was spent in every circle, and collection proceeded until no more artifacts

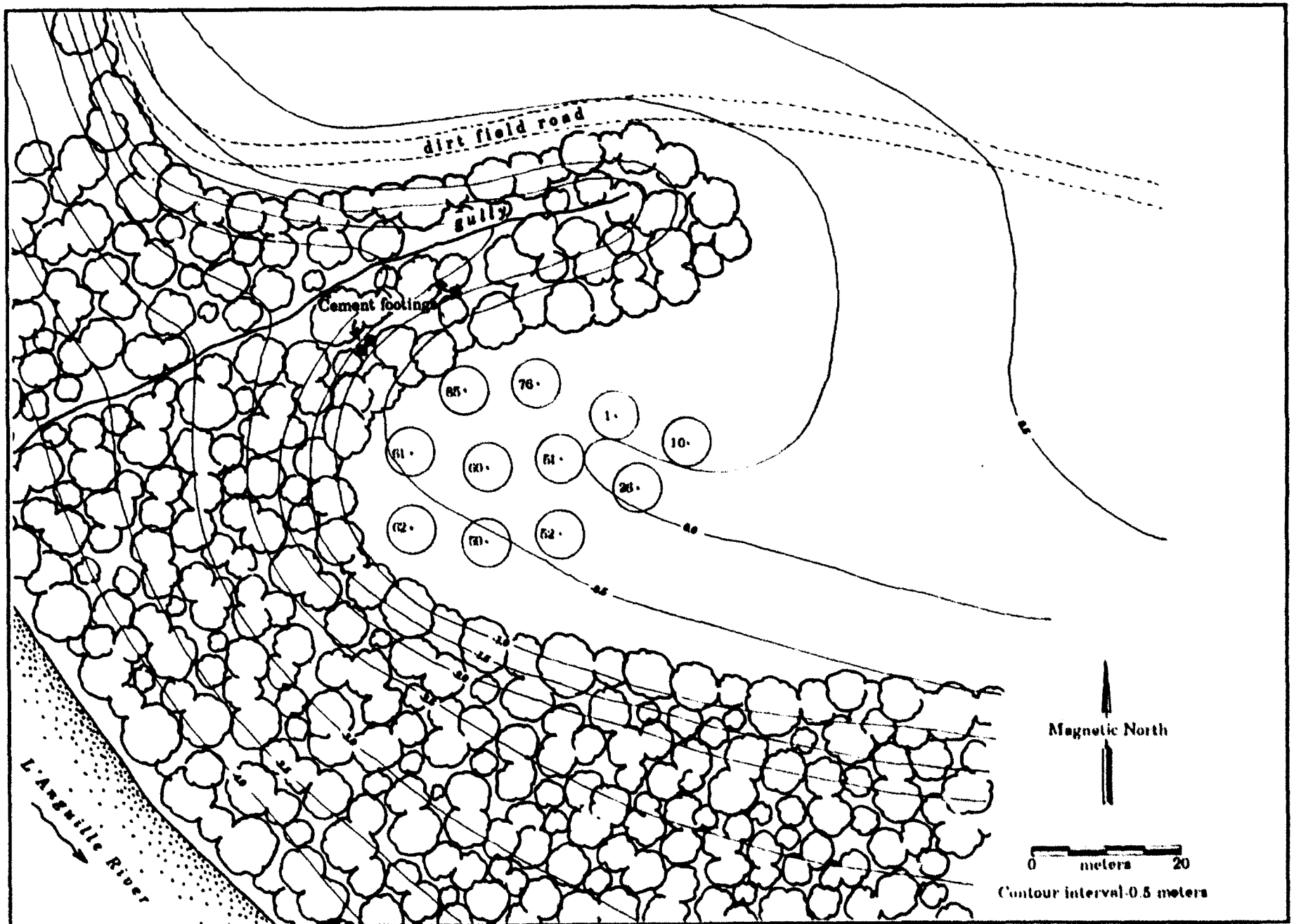


Figure A26.
Site 3LE160 (LRP-20) Proveniences
Controlled Surface Collection Circles
and Test Units.

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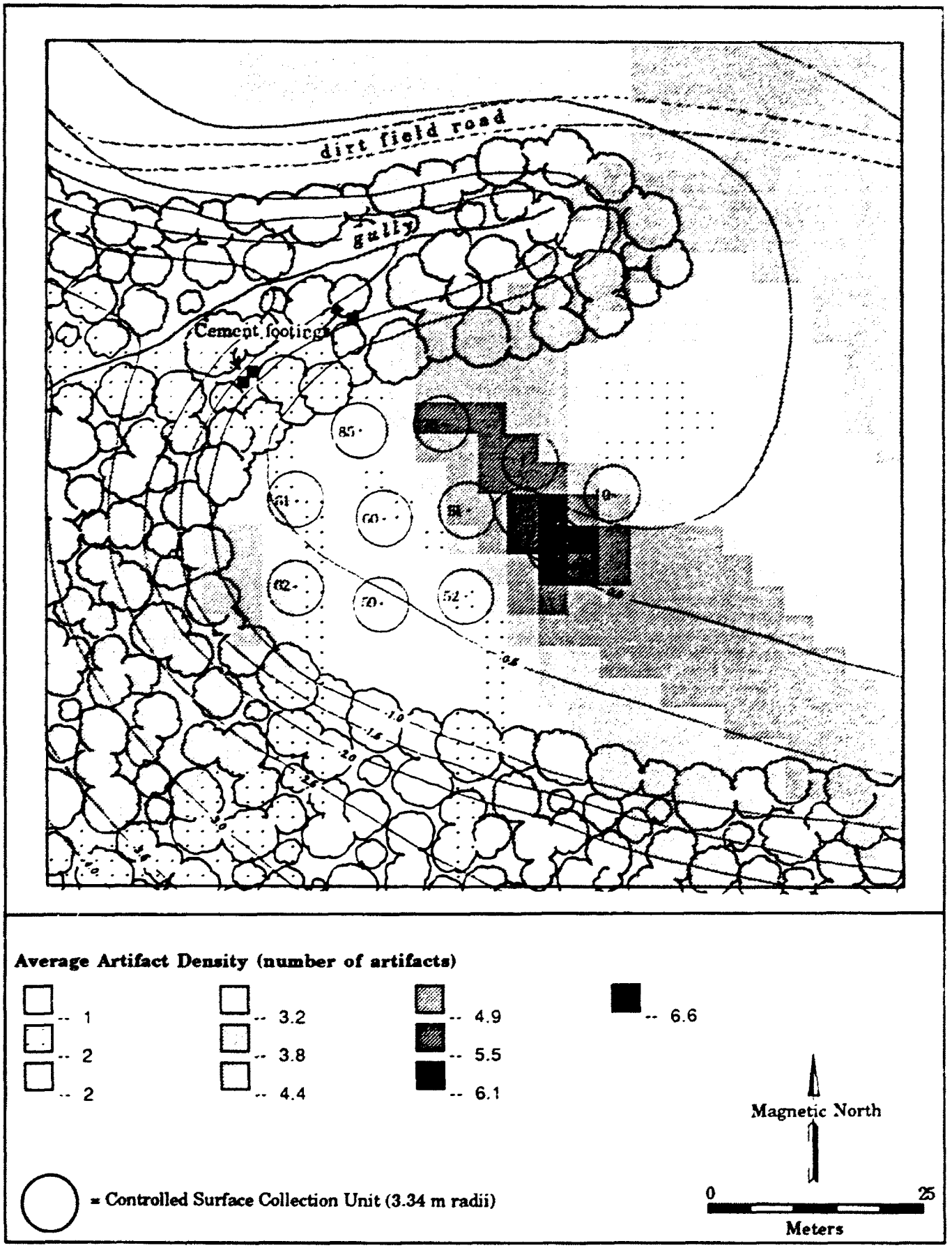


Figure A27.
Site 3LE160 (LRP-20)
Historic / Artifacts - Surface Distributions.

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L'Anguille River Survey Project

could be found. The boundaries of the scatter were mapped on the project aerials in the field. A one meter test unit was opened to a depth of 20 cm, one sterile 10 cm level below the artifact bearing plowzone level. A 30 cm x 30 cm test was then opened an additional 30 cm in the NE corner of the unit. A permanent datum consisting of a 24 inch piece of iron rebar marked with red flagging tape was placed in the woods margin 15 m due east of the NW corner of the 1 m unit. All fill was dry screened through 1/4 inch mesh.

Condition: Currently unknown. No subplowzone materials were found, although both historic and prehistoric features may lie at the base of the plowzone. The site soils are classified as Dubbs loam, gently undulating (DsB; USDA 1977a) and are characterized by loess deposits with fine clay in the upper part of profile from recent alluviation. (Profile obtained from test unit excavated to a depth of 50 cm in the center of the artifact scatter). A drainage ditch cuts through the field to the north of the site, and has left a most dramatic profile (ca. 6 m high) near the river.

Previous Investigations: None reported; the site area has seen prior collection by amateurs according to the current tenant.

NRHP Status: Indeterminate.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined. Three 2 m test pits should be opened to determine if stratification is present, followed by limited stripping to see if features are present at the base of the plowzone.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE162	**Site Name:**	None recorded
Project Site Number:	LRP-022	**Date of Visit:**	19 June 1987
County: Lee		**USGS Quad:**	Marianna 1984 7.5

Location:	1/4	1/4	1/4; Section		T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Prehistoric Early Archaic, Late Archaic, Late Archaic/Woodland, Middle Woodland, and Mississippian; recent 20th century historic debris.

Diagnostic Artifacts: 1 Hardin, 1 Burkett, 1 Weems, 1 Steuben projectile point; Baytown Plain pottery; Mississippi Plain pottery.

Description: Site 162 (LRP-022) is a surface artifact scatter of predominantly prehistoric artifacts, with minor amounts of recent historic debris, located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River (Figure 30). At the time of survey, the site was in low (< 15 in. high) milo, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 1800 square meters (50 x 40 m in maximum extent). Given the presence of shell-tempered pottery, a Mississippian hamlet may be present in the area. The light historic scatter does not appear to come from a house. The site area is on a bluff overlooking the main channel of the L'Anguille River, which is located ca. 75 m due west, through a treeline. A fairly gradual drop-off to the river occurs at this point; the main boat landing for the town of Marianna is across the river and ca 200 to 300 m upstream. A controlled surface collection was made using eighteen 3.34 m radii circles, and a one meter test unit was opened to a depth of 20 cm, one sterile 10 cm level below the artifact bearing disk

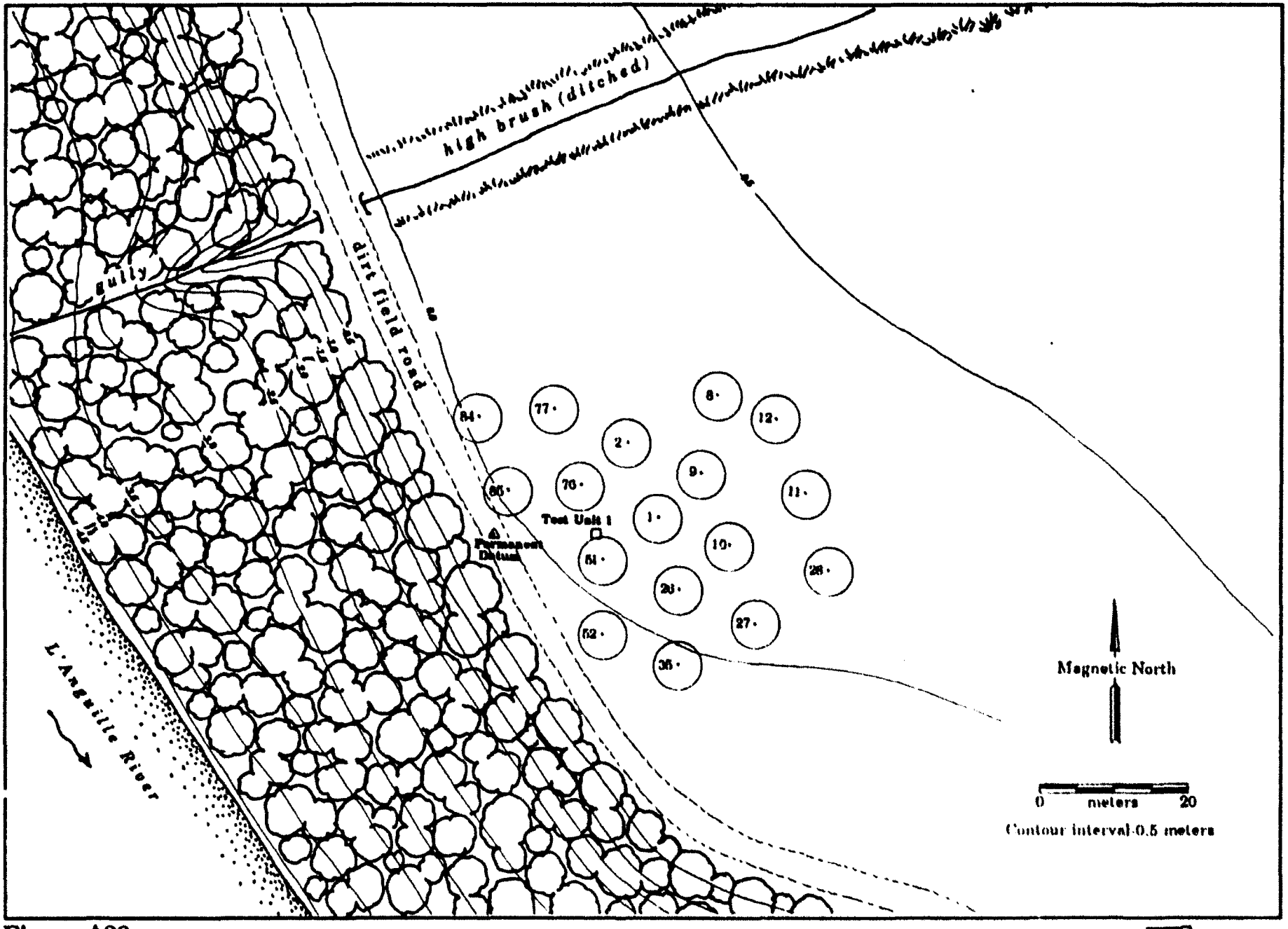
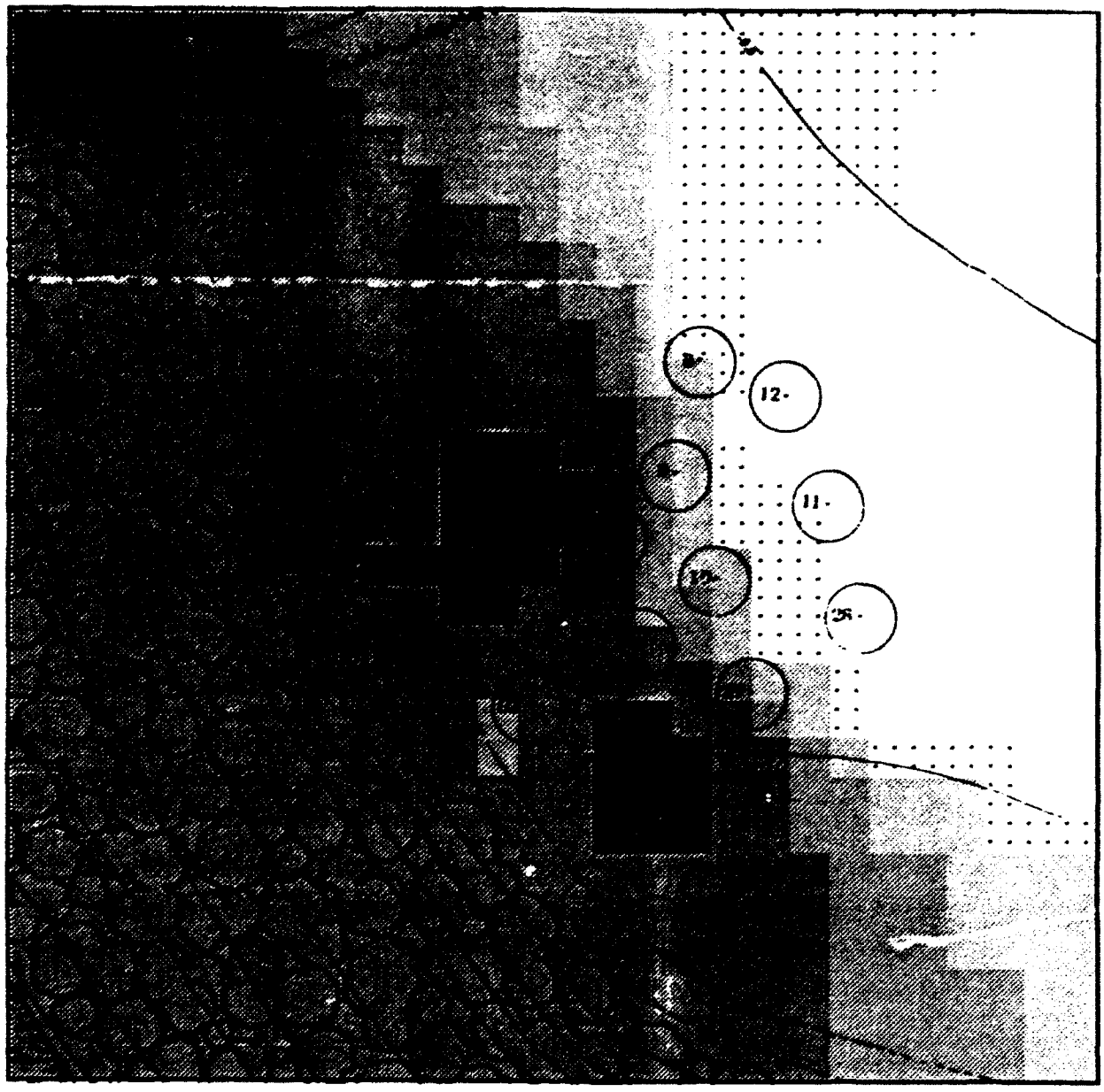


Figure A28.
Site 3LE161 (LRP-21) Proveniences
Controlled Surface Collection Circles
and Test Units.

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L'Anguille River Survey Project



Average Artifact Density (number of artifacts)

-- 4
-- 6
-- 8
-- 10
-- 12
-- 14
-- 16
-- 18
-- 20

= Controlled Surface Collection Unit (3.34 m radii)

Magnetic North

0 25

Meters

Figure A29.
Site 3LE161 (LRP-21)
Historic Artifacts - Surface Distributions.

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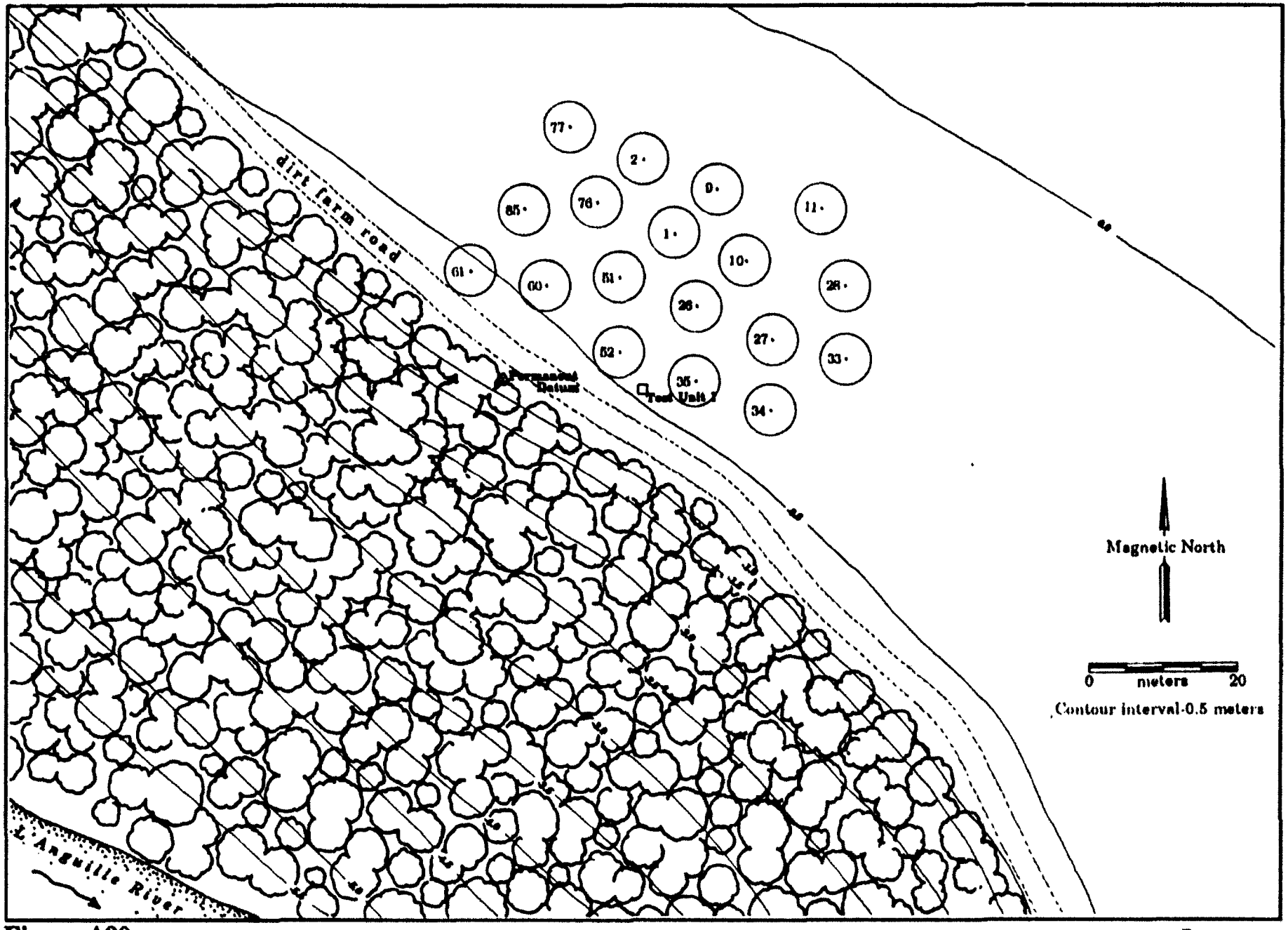


Figure A30.
Site 3LE162 (LRP-22) Proveniences
Controlled Surface Collection Circles
and Test Units.

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zone. A 30 cm x 30 cm test was then opened an additional 40 cm in the NE corner of the unit. A permanent datum consisting of a 24 inch piece of iron rebar marked with red flagging tape was placed in the woods margin 20 m west of the NE corner of the unit. All fill was dry screened through 1/4 inch mesh.

Condition: Currently unknown. No subplowzone materials were found, although both historic and prehistoric features may lie at the base of the plowzone. The site soils are classified as Earle silt clay, gently undulating (EaB; USDA 1977a) and are characterized by loess deposits with extensive fine clay particles in the upper part of profile from recent alluviation. (Profile obtained from test unit excavated to a depth of 60 cm in the center of the scatter).

Previous Investigations: None reported; the general area has seen prior collection by amateurs, according to the tenant.

NRHP Status: Indeterminate

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined. Three 2 m test pits should be opened to determine if stratification is present, followed by limited stripping with a piece of heavy machinery to see if features are present at the base of the plowzone.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE163	**Site Name:**	None recorded
Project Site Number:	LRP-023	**Date of Visit:**	15 June 1987
County:	Lee	**USGS Quad:**	Marianna 1984 7.5

Location:	1/4	1/4	1/4;	Section	T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Dense early to mid 20th century historic midden/scatter, with minor prehistoric material. The area is an old dump site.

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found; extensive mid-20th century historic materials.

Description: Site 3LE163 (LRP-023) is a dense historic scatter of early to mid 20th century artifacts located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River (Figure 31). At the time of survey, the site had been recently plowed and rained on, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Crops present on the site at the time of survey were low (< 6 in. high) milo. Artifacts were observed over an area of approximately 2000 square meters (50 x 40 m in maximum extent). This area was used as a dump until the mid-1950's, which was discovered after a controlled surface collection and the excavation of a 1 m unit had been completed. The site is on a bluff overlooking the main channel of the L'Anguille, which is located ca. 100 m due south and west , downslope through trees lining the channel. A controlled surface collections was made using twelve 3.34 m radii circles. A one meter test unit was opened to 20 cm by the treeline at the east side of the scatter. Below 20 cm, and under a thin layer of waterlain sands, a very dense historic midden 30 cm thick was encountered. A 40 cm x 40 cm test was then opened 40 cm through this midden in the NW corner of the unit. A very large oak was located 5 m southeast of the NW corner

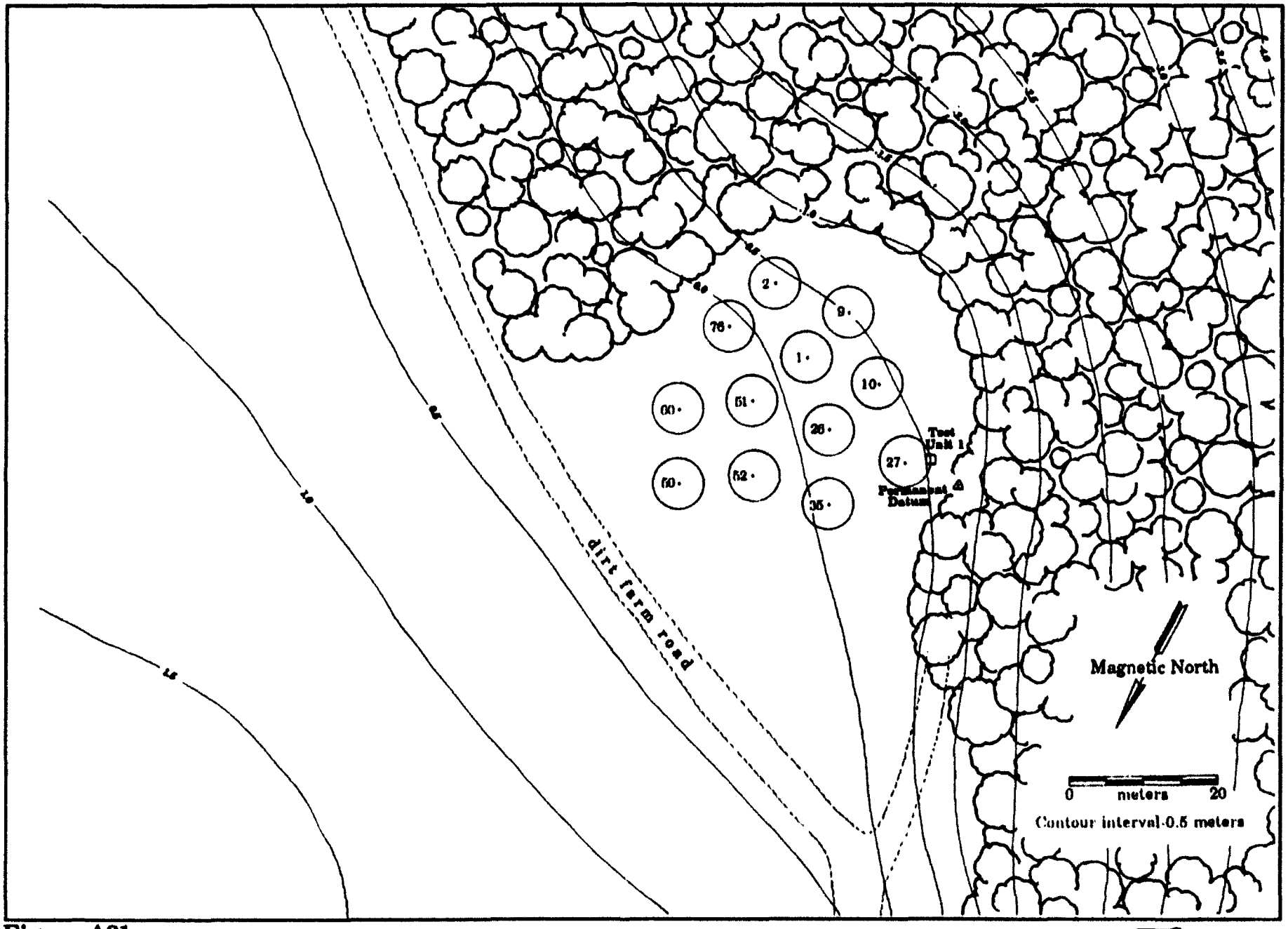


Figure A31.
Site 3LE163 (LRP-23) Proveniences
Controlled Surface Collection Circles
and Test Units.

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of the unit, and served as a datum. All fill was dry screened through 1/4 inch mesh. The artifacts were washed and bagged by provenience, but were not analyzed or cataloged due to their recent age.

Condition: Subplowzone midden of recent historic debris present. The site soils are classified as Earle silt clay, gently undulating (EaB; USDA 1977a) and are characterized by loess deposits in disk zone underlain by waterlain sands and a ca. 30 cm thick historic midden, below which is a mottled gray silt/clay. (Profile obtained from test unit excavated to a depth of 60 cm in the edge of the artifact scatter).

Previous Investigations: None reported, although the general site area has seen prior collection by amateurs according to the present tenant.

NRHP Status: Not Eligible.

NRHP Recommendations: Site requires no additional testing to determine National Register Status. Given the recent age of this scatter (under 50 years old), it is not considered eligible.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE164	**Site Name:**	None recorded
Project Site Number:	LRP-024	**Date of Visit:**	15 June 1987
County: Lee		**USGS Quad:**	Marianna 1984 7.5

Location:	SW 1/4	SE 1/4	NE 1/4;	Section	14	T2N	R3E
UTM:	Zone:	15	Northing:	3851000	Easting:	705710	

Temporal Span: Prehistoric (Woodland and Mississippian); 20th century historic debris.

Diagnostic Artifacts: Baytown Plain, Mulberry Creek Cord Marked, Mississippi Plain pottery; Mill Creek hoe fragment); mid-20th century historic artifacts

Description: Site 3LE164 (LRP-024) is a surface artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River (Figures 32, 33). At the time of survey, the site was in low (< 15 in. high) milo, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 1500 square meters (60 x 40 m in maximum extent). A historic tenant (?) house appears to have been located in the area, as well as possible Woodland and Mississippian hamlets,given the prehistoric pottery. The site area is on a bluff overlooking the main channel of the L'Anguille River, which is located 50 to 75 m due west and northwest through a treeline. The site is on a low rise in the field, which drops off somewhat to the south toward the 3LE163 (LRP-023) area. A controlled surface collection was made using 15 3.34 m radii circles dispersed using a stratified systematic unaligned procedure. A minimum of 5 minutes was spent in every circle, and collection proceeded until no more artifacts could be found. A one meter test unit was opened to a depth of 28 cm, one sterile 10 cm level below the 0-8 cm (disk zone) and 8-18 cm artifact bearing levels. A well-defined pit-like feature extended from ca. 25 to 60 cm; no artifacts were found in it, although only a portion was tested. A 30 cm x 30 cm test was opened from 28 to 68 cm in the NE corner of the unit. A buried cable marker in the woods by the side of the road served as the permanent datum; the test unit's NE corner is 17 m east of this pole. All fill was dry screened through 1/4 inch mesh.

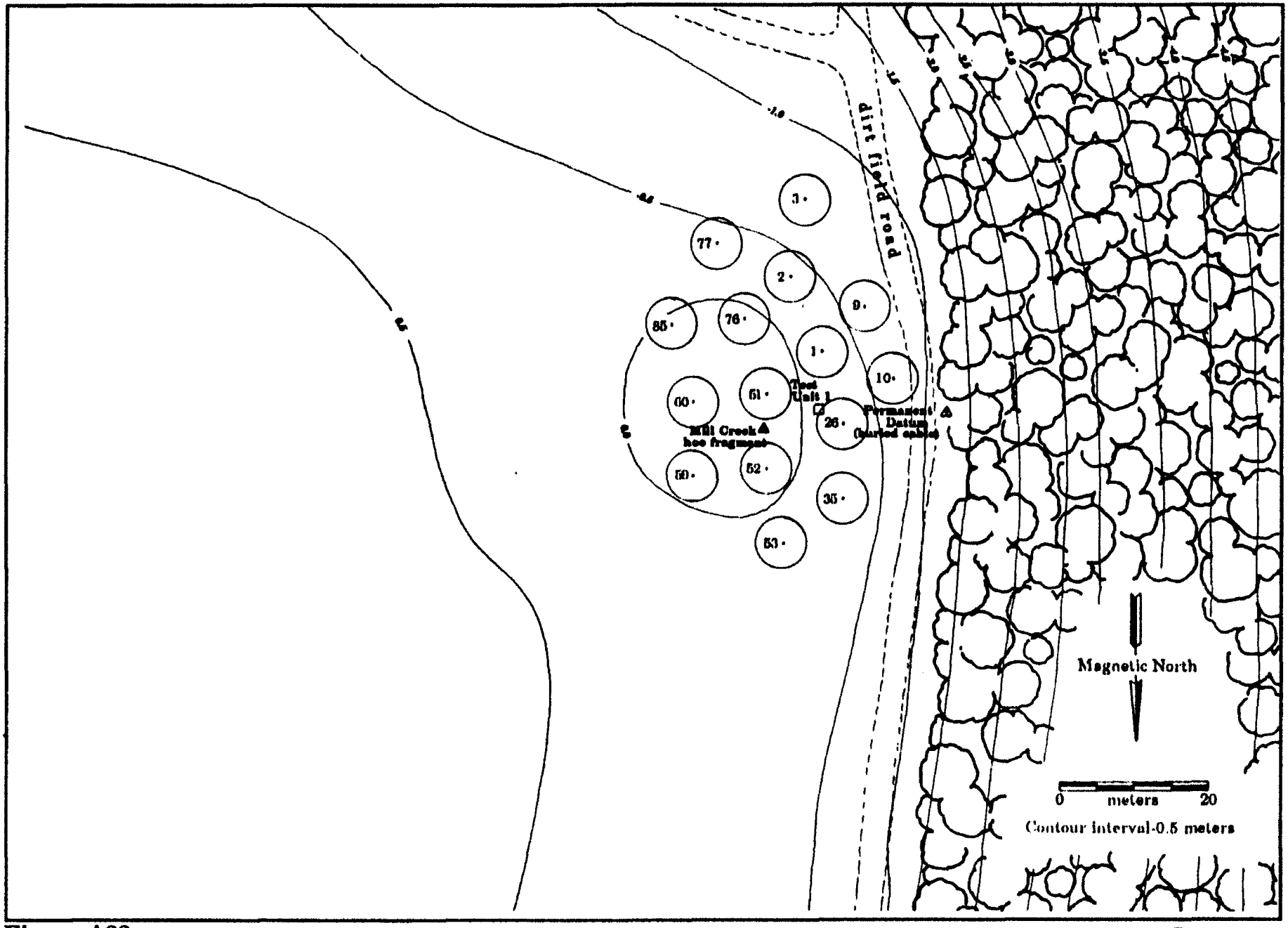
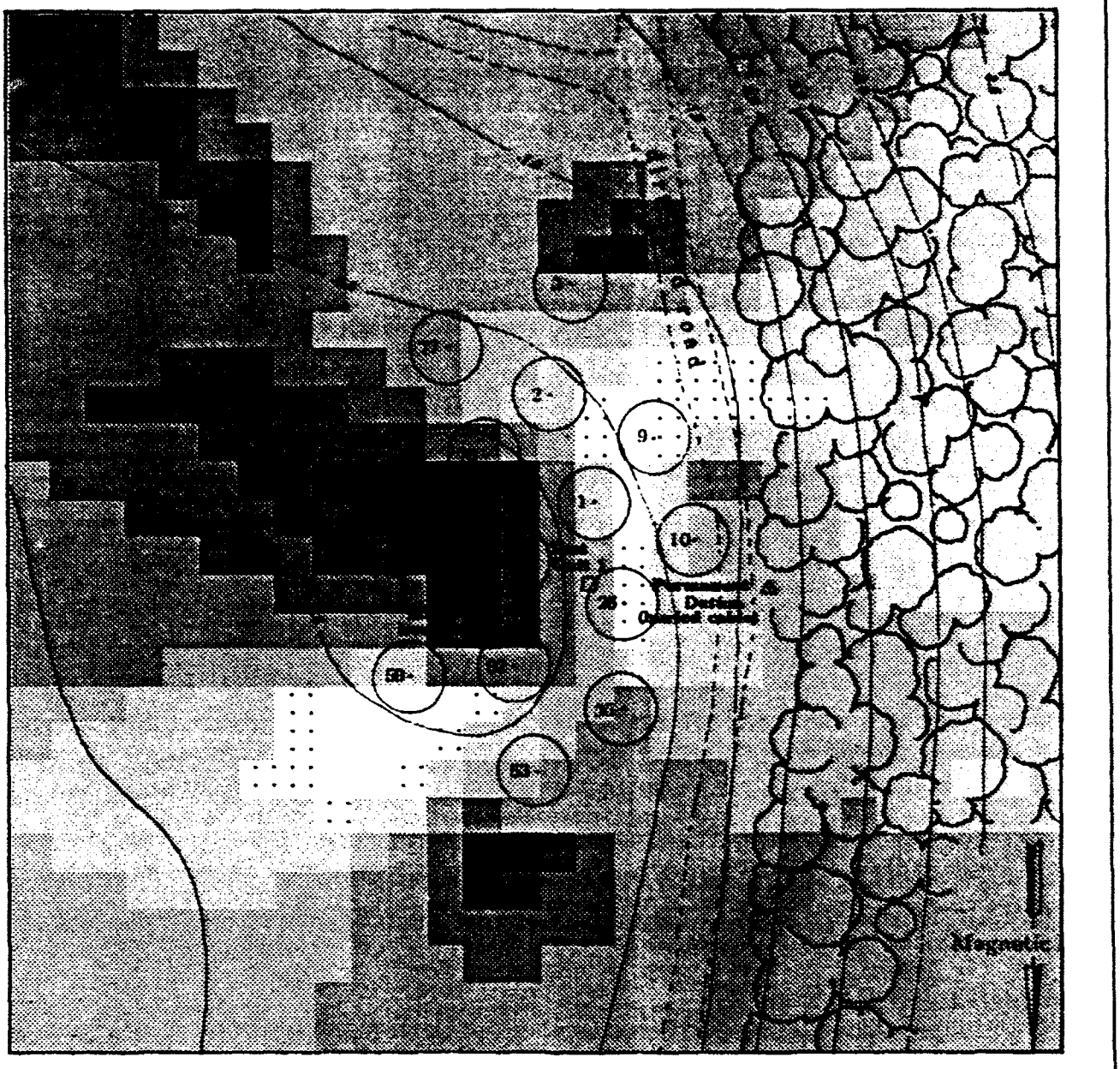


Figure A32.
Site 3LE164 (LRP-24) Proveniences
Controlled Surface Collection Circles
and Test Units.

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Average Artifact Density (number of artifacts)

-- 6
-- 10
-- 12
-- 14
-- 16
-- 18
-- 20
-- 22
-- 24
-- 26

= Controlled Surface Collection Unit (3.34 m radii)

Magnetic North

0 25

Meters

Figure A33.
Site 3LE164 (LRP-24)
Historic Artifacts - Surface Distributions.

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Condition: Currently unknown. No subplowzone materials were found, although both historic and prehistoric features may lie at the base of the plowzone. The site soils are classified as Earle silt clay, gently undulating (EaB; USDA 1977a) and are characterized by loess deposits with extensive fine clay particles from recent alluviation. (Profile obtained from test unit excavated to a depth of 68 cm in the center of the artifact scatter).

Previous Investigations: None reported, although the general site area has seen extensive prior collection by amateurs according to the current tenant.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined. Three 2 m test pits should be opened to determine if stratification is present, followed by limited stripping with a piece of heavy machinery to see if features are present at the base of the plowzone.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE165	**Site Name:**	None recorded
Project Site Number:	LRP-025	**Date of Visit:**	9 June 1987
County: Lee		**USGS Quad:**	Soudan 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Recent historic scatter, possibly debris from recent dumping.

Diagnostic Artifacts: mid 20th century historic debris.

Description: Site 3LE165 (LRP-025) is a light recent historic artifact scatter located on a very slight rise in a plowed field adjacent to and overlooking the main channel of the L'Anguille River (Figure 34). At the time of survey, the site was in low (< 15 in. high) milo, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 2000 square meters (50 x 50 m in maximum extent). The site area is on a bluff overlooking the main channel of the L'Anguille River, which is located 50 m due west through the treeline. The debris appears to be from dumping; while the scatter may be from a former tenant house, no evidence for structures was found. A controlled surface collection was made using 17 3.34 m radii circles dispersed using a stratified systematic unaligned procedure. A minimum of 5 minutes was spent in every circle, and collection proceeded until no more artifacts could be found. No test units were opened at the site due to the recent nature of the scatter. The collection was not analyzed in detail due to its recent nature (mid-20th century).

Condition: Recent historic debris scatter. The site soils are classified as Earle silt clay, gently undulating (EaB; USDA 1977a).

Previous Investigations: None reported, although the general site area has seen extensive prior collection by amateurs according to the current tenant.

NRHP Status: Not Eligible.

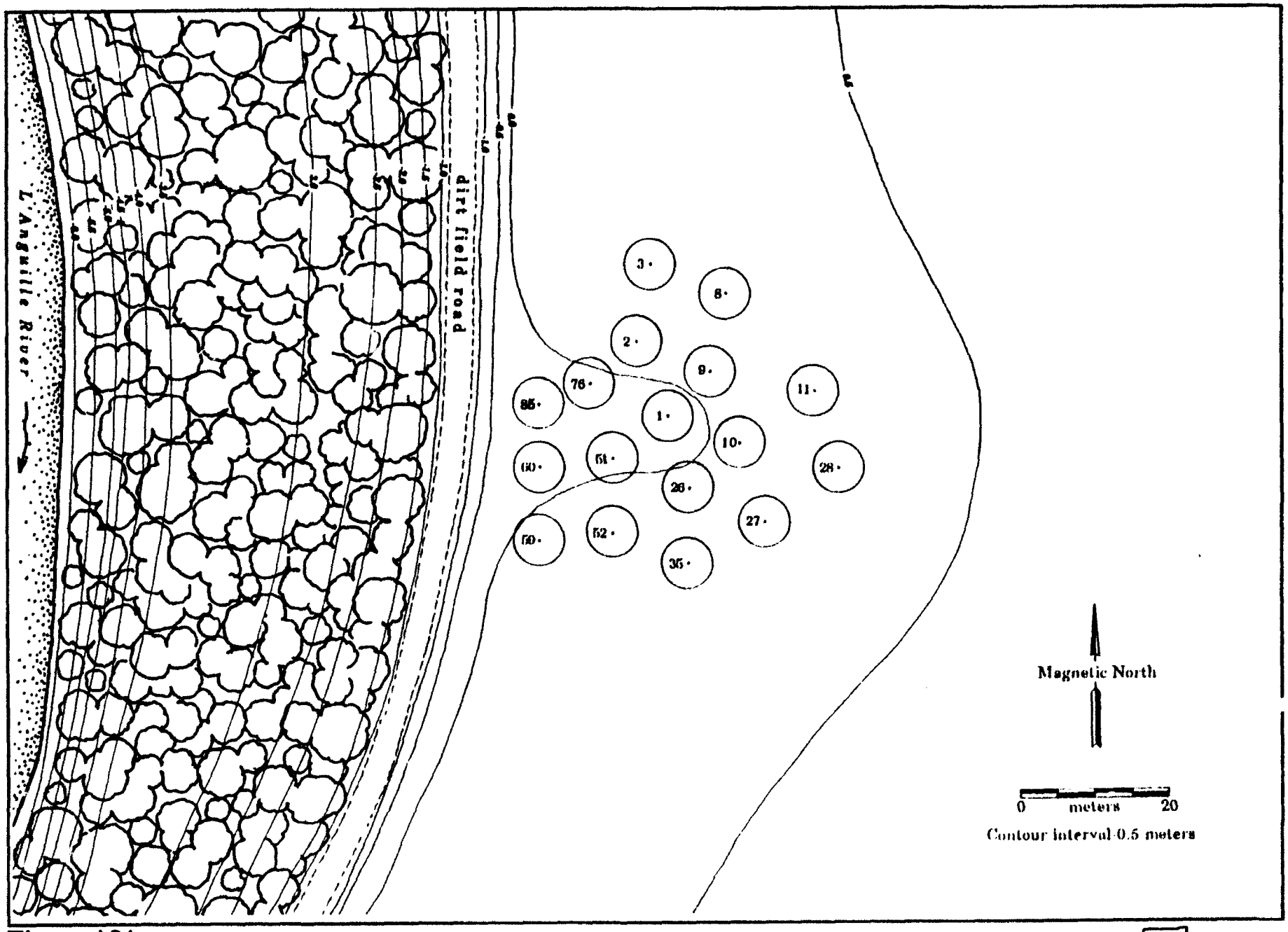


Figure A34.
Site 3LE165 (LRP-25) Proveniences
Controlled Surface Collection Circles
and Test Units.

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NRHP Recommendations: Site requires no additional testing to determine National Register Status. Given the recent nature of this scatter, and the lack of evidence for present or former structures, the site is considered not eligible.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE166	**Site Name:**	None recorded
Project Site Number:	LRP-026	**Date of Visit:**	15 June 1987
County: Lee		**USGS Quad:**	Marianna 1984 7.5

Location:	1/4	1/4	1/4;	Section	T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Prehistoric Archaic and Woodland, 20th century historic material (old tenant house site?)

Diagnostic Artifacts: Baytown Plain pottery.

Description: Site 3LE166 (LRP-026) is a dense surface historic and prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River (Figures 35, 36). Artifacts were observed over an area of approximately 3000 square meters (80 x 40 m in maximum extent). Two standing shacks, both recent historic field buildings, were located near the bluff edge, at the SW corner of the scatter. The site was in fallow corn when first visited and collected on June 15th, 1987; when revisited for testing on July 21, 1987, it had been plowed and rained on, and a second, general collection was made to augment the earlier controlled collection. No footprints indicative of prior collecting this plowing cycle were observed either visit. The site area is on a bluff overlooking the main channel of the L'Anguille River, which is located immediately west of the site area down a very steep (60-70 degrees) bank face littered with historic debris. A house site was apparently located in the general area earlier in the century, and was apparently removed in field clearing operations. A controlled surface collection was made the first visit using 19 3.34 m radii circles. During the later revisit a general collection was made for 0.5 person hours. A one meter test unit was opened to a depth of 40 cm, one sterile 10 cm level below the artifact bearing levels. A 30 cm x 30 cm test was then opened an additional 40 cm in the SE corner of the unit. A soil core was opened to a depth of 160 cm in the same area by the project soil scientist. A permanent datum consisting of a 24 inch piece of iron rebar marked with red flagging tape was located at the corner of one of the shacks. The NW corner of the 1 m pit is 85 degrees east and 21.15 m from this datum. All fill was dry screened through 1/4 inch mesh.

Condition: Currently unknown. No subplowzone materials were found, although both historic and prehistoric features may lie at the base of the plowzone. The site soils are classified as Earle silt clay, gently undulating (EaB; USDA 1977a), and are characterized by loess deposits with some fine clay particles in the upper part of profile from recent alluviation. (Profile obtained from test unit excavated to a depth of 80 cm in the center of scatter; soil core opened to 160 cm in same area).

Previous Investigations: None reported; the general site area has seen prior collection by amateurs according to the tenant.

NRHP Status: Indeterminate.

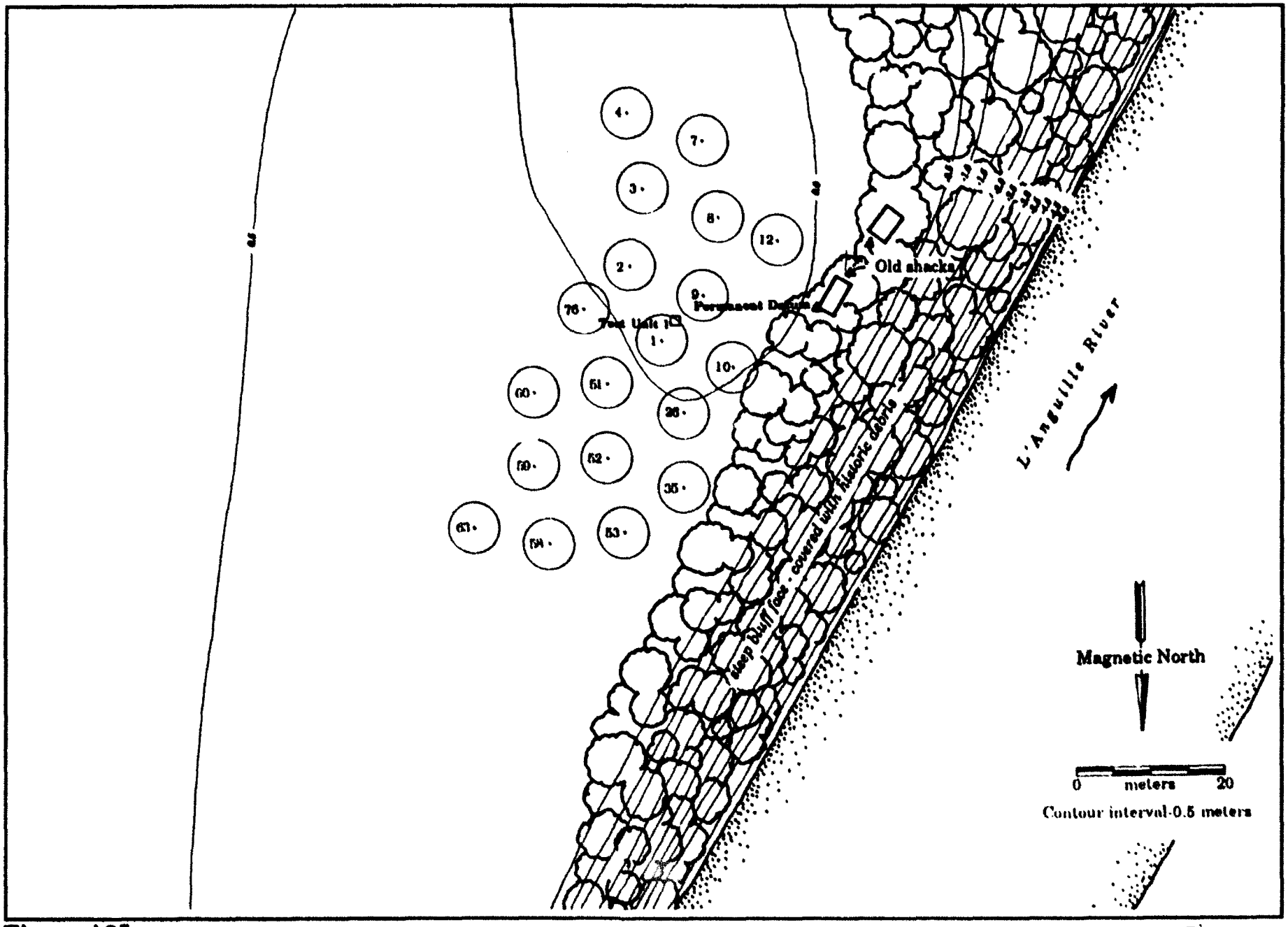


Figure A35.
Site 3LE166 (LRP-26) Proveniences
Controlled Surface Collection Circles
and Test Units.

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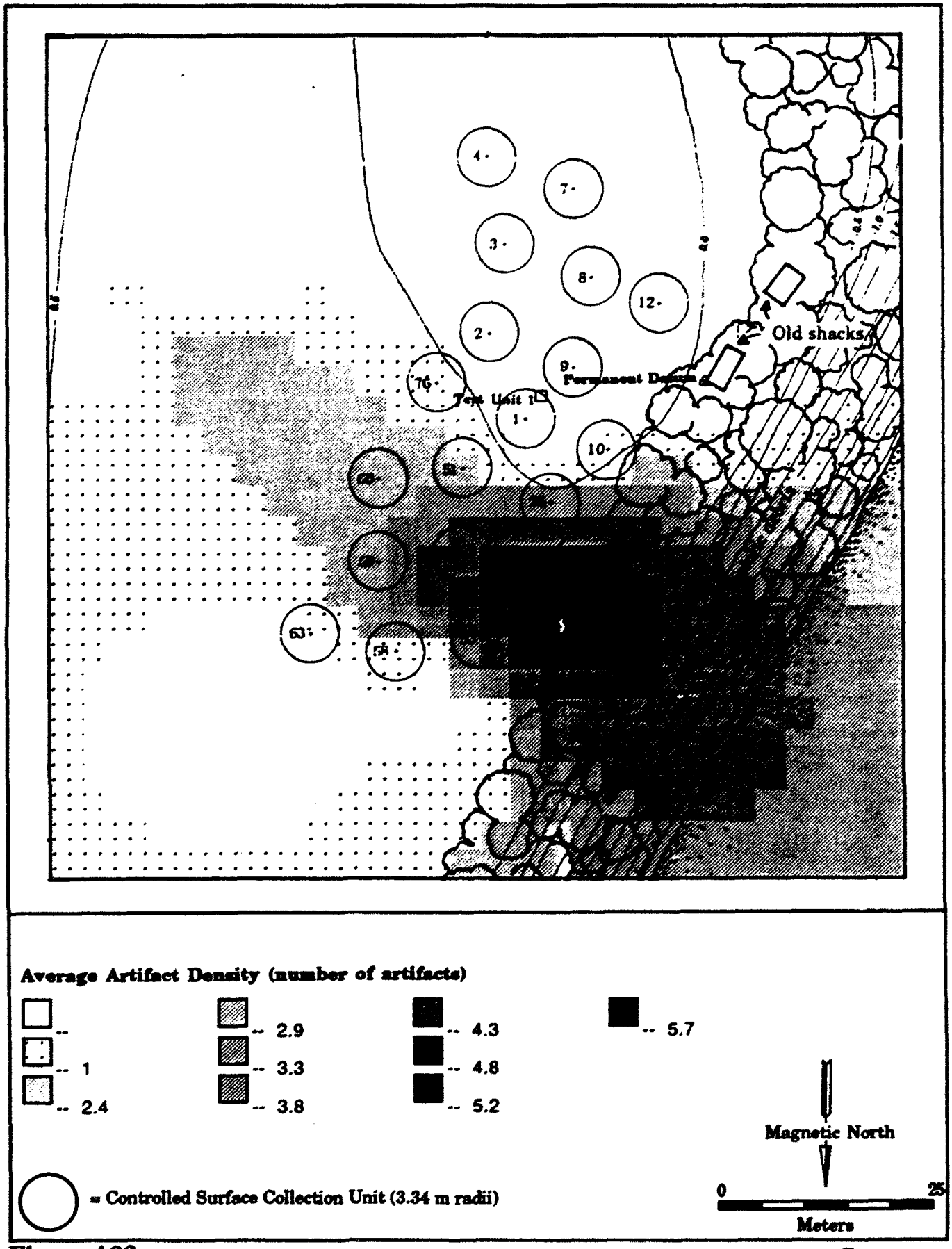


Figure A36.
Site 3LE166 (LRP-26)
Historic Artifacts - Surface Distributions.

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NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined. Three 2 m test pits should be opened to determine if stratification is present. Limited stripping with a piece of heavy machinery should be conducted to see if features are present at the base of the plowzone.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE167	**Site Name:**	None recorded
Project Site Number:	LRP-027	**Date of Visit:**	15 June 1987
County:	Lee	**USGS Quad:**	Marianna 1984 7.5

Location:	1/4	1/4	1/4;	Section	T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Unknown prehistoric; recent 20th century historic material.

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found; recent 20th century historic material.

Description: Site 3LE167 (LRP-027) is a predominantly historic artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River, immediately south of the SR 79 bridge over the L'Anguille. Artifacts were observed over an area of approximately 1500 square meters (50 x 30 m in maximum extent). At the time of survey, the site was in low (< 15 in. high) milo, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. The site is on a bluff overlooking the main channel of the L'Anguille River, which is located ca. 30-40 m due west across a field road and through a treeline. A great deal of recent debris is around the underside of the bridge ca. 30 m to the north; the site assemblage may be outlying scatter from this dumping. A 100% sample of all visible artifacts was collected for a period of 45 person-minutes. No test pits opened due to recent nature of scatter.

Condition: Recent historic debris scatter. The site soils are classified as Earle silt clay, gently undulating (EaB; USDA 1977a), and are characterized by loess deposits with some fine clay particles in the upper part of profile from recent alluviation. (Profile obtained from test unit excavated to a depth of 80 cm in the center of scatter; soil core opened to 160 cm in same area).

Previous Investigations: None reported; the general site area has seen prior collection by amateurs, according to the tenant.

NRHP Status: Not Eligible.

NRHP Recommendations: Site requires no additional testing to determine National Register Status. Due to the recent nature of the scatter, and the lack of evidence for structures (past or present), the site is not considered eligible.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE175	**Site Name:**	None recorded
Project Site Number:	LRP-035	**Date of Visit:**	17 June 1987
County:	Lee	**USGS Quad:**	Marianna 1984 7.5

Location:	1/4	1/4	1/4; Section	T	R	(deleted)
UTM:	Zone:	15	Northing:	Easting:		(deleted)

Temporal Span: Prehistoric transitional PaleoIndian/Early Archaic, Late Archaic, Early Woodland, Middle Woodland, Late Woodland, and Mississippian; recent historic tenant site.

Diagnostic Artifacts: 1 Dalton, 1 Burkett, 1 Gary, 1 Weems, 1 Shugtown projectile point; Tchefuncte Stamped, Withers Fabric, Baytown Plain, Thomas Plain, Mulberry Creek Cord Marked, Coles Creek Incised, Mazique Incised, Larto Red Filmed, Mississippi Plain; 20th century historic artifacts.

Description: Site 3LE175 (LRP-035) is located in a plowed field on a high bluff adjacent to and overlooking the main channel of the L'Anguille River (Figure 37). At the time of survey, the site had been recently plowed and rained on, with no crops planted, offering excellent surface visibility. Artifacts were observed over an area of approximately 6000 square meters (100 x 70 m in maximum extent). No footprints indicative of prior collecting this plowing cycle were observed. A rich Baytown midden is located in the northwest part of the site, and an early 20th century (tenant?) house scatter was present in the southern part of the scatter. The site is on a high bluff overlooking the main channel of the L'Anguille River, which is located ca. 40 m to the southeast, down a very steep slope through the treeline. A sheer bluff face some 6-8 m high is present along part of the bank. A controlled surface collection was made using forty four 3.34 m radii circles. Two 1 m test units were opened, Unit 1 to 50 cm with a 30 cm x 30 cm test opened an additional 40 cm in the corner of the unit; Unit 2 was opened to 30 cm to obtain an additional sample of the Baytown midden observed from ca. 10 to 30 cm. Unit 2 was 10 to 11 m due north of unit 1. A permanent datums consisting of a 24 inch piece of iron rebar marked with red flagging tape was placed by the bluff edge in front of a large tree. The NE corner of TU1 is 75.5 m from this datum at an angle of 307 degrees east of north. All fill was dry screened through 1/4 inch mesh.

Condition: Currently unknown. No subplowzone materials were found, although both historic and prehistoric features may lie at the base of the plowzone. The site soils are classified as Loring silt loam, varying slopes (LoD2/LoB; USDA 1977a), and are characterized by loess deposits (soil core taken to 3.0 m and analyzed; see Appendix II).

Previous Investigations: None reported; the general site area has seen prior collection by amateurs, according to the tenant.

NRHP Status: Indeterminate.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined. Five 2 m test pits should be opened to determine if stratification is present, followed by careful deep testing.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

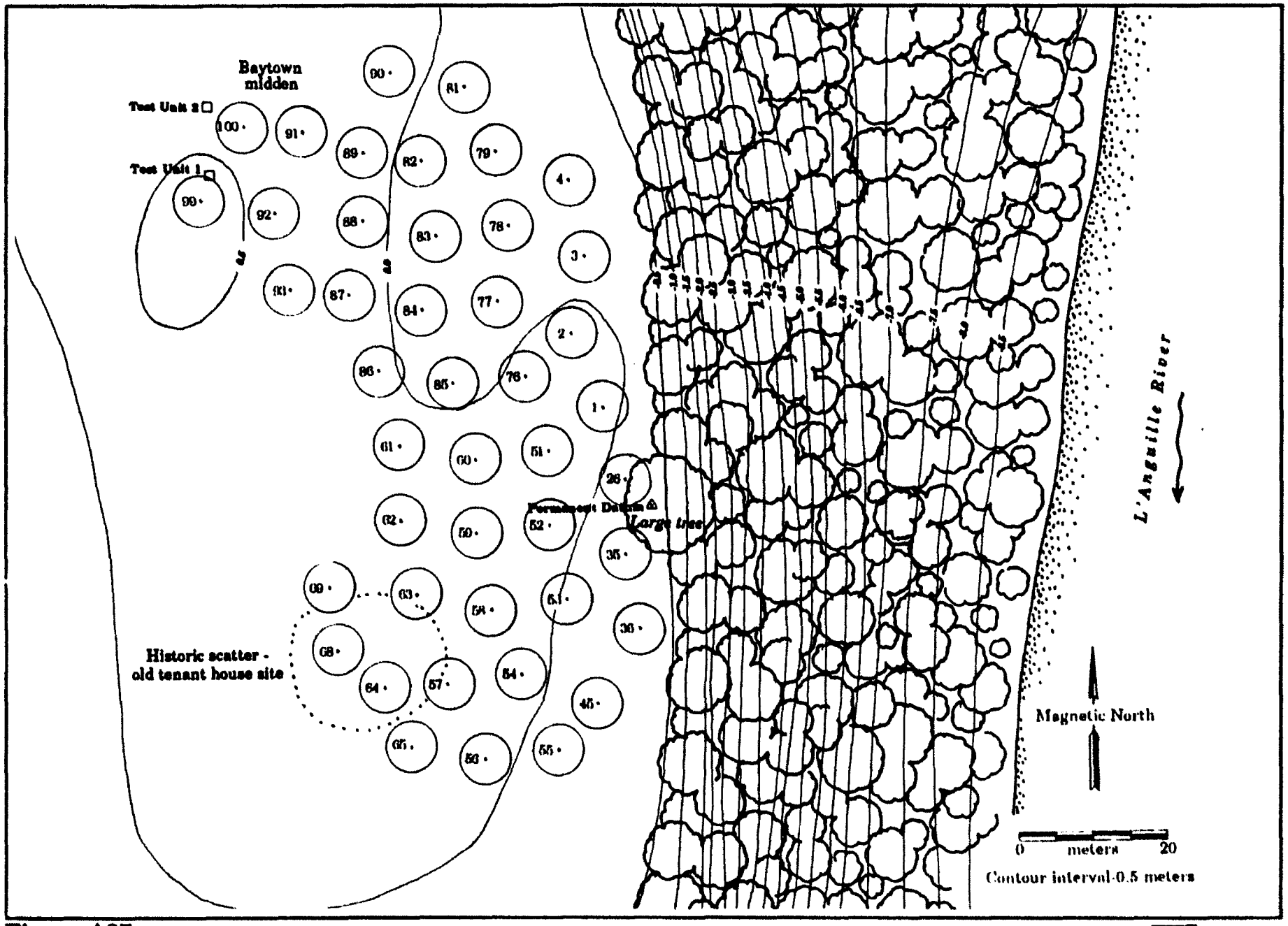


Figure A37.
Site 3LE175 (LRP-35) Proveniences
Controlled Surface Collection Circles
and Test Units.

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State Site Number:	3LE176	**Site Name:**	None recorded
Project Site Number:	LRP-036	**Date of Visit:**	17 June 1987
County: Lee		**USGS Quad:**	Marianna 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Prehistoric Woodland and Mississippian; minor recent 20th century historic material.

Diagnostic Artifacts: Baytown Plain, Mulberry Creek Cord Marked, Mississippi Plain.

Description: Site 3LE176 (LRP-036) is a low density surface artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River (Figures 38, 39). At the time of survey the site had been recently plowed and rained on, and no crops had been planted, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 6000 square meters (100 x 70 m in maximum extent). Historic debris may be outlying material from the house site at 3LE175 (LRP-035) to the north; a minor Baytown occupation may be present here, also an outlier from 3LE175. The site area is on a high bluff overlooking the main channel of the L'Anguille River, which is located 30 m east down a steep bluff. The site area is in a slight bowl-like depression on the bluff edge. A controlled surface collection was made using 20 3.34 m radii circles dispersed using a stratified systematic unaligned procedure. A minimum of 5 minutes was spent in every circle, and collection proceeded until no more artifacts could be found. A one meter test unit was opened near the bluff edge to 46 cm, three 10 cm levels below the plowzone. A possible post was observed at 36 cm. A 30 cm x 30 cm test was then opened an additional 40 cm in the NE corner of the unit. A permanent datum consisting of a 24 inch piece of iron rebar marked with red flagging tape was placed by the bluff edge 2.5 m due east of the NE corner of the unit. A soil core was taken to a depth of 150 cm by John Foss, the project soil scientist, in the corner of the unit. All fill was dry screened through 1/4 inch mesh.

Condition: Currently unknown. No subplowzone materials were found, although both historic and prehistoric features may lie at the base of the plowzone. The site soils are classified as Loring silt loam, varying slopes (LoD2/LoB; USDA 1977a), and are characterized by loess deposits (Profile obtained from test unit excavated to a depth of 86 cm near the bluff edge; soil core taken to ca. 150 cm in same area; see Appendix II).

Previous Investigations: None reported; the site area has seen prior surface collection by amateurs according to the landowner.

NRHP Status: Indeterminate.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined. Three 2 m test pits should be opened to determine if stratification is present, followed by limited deep testing.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

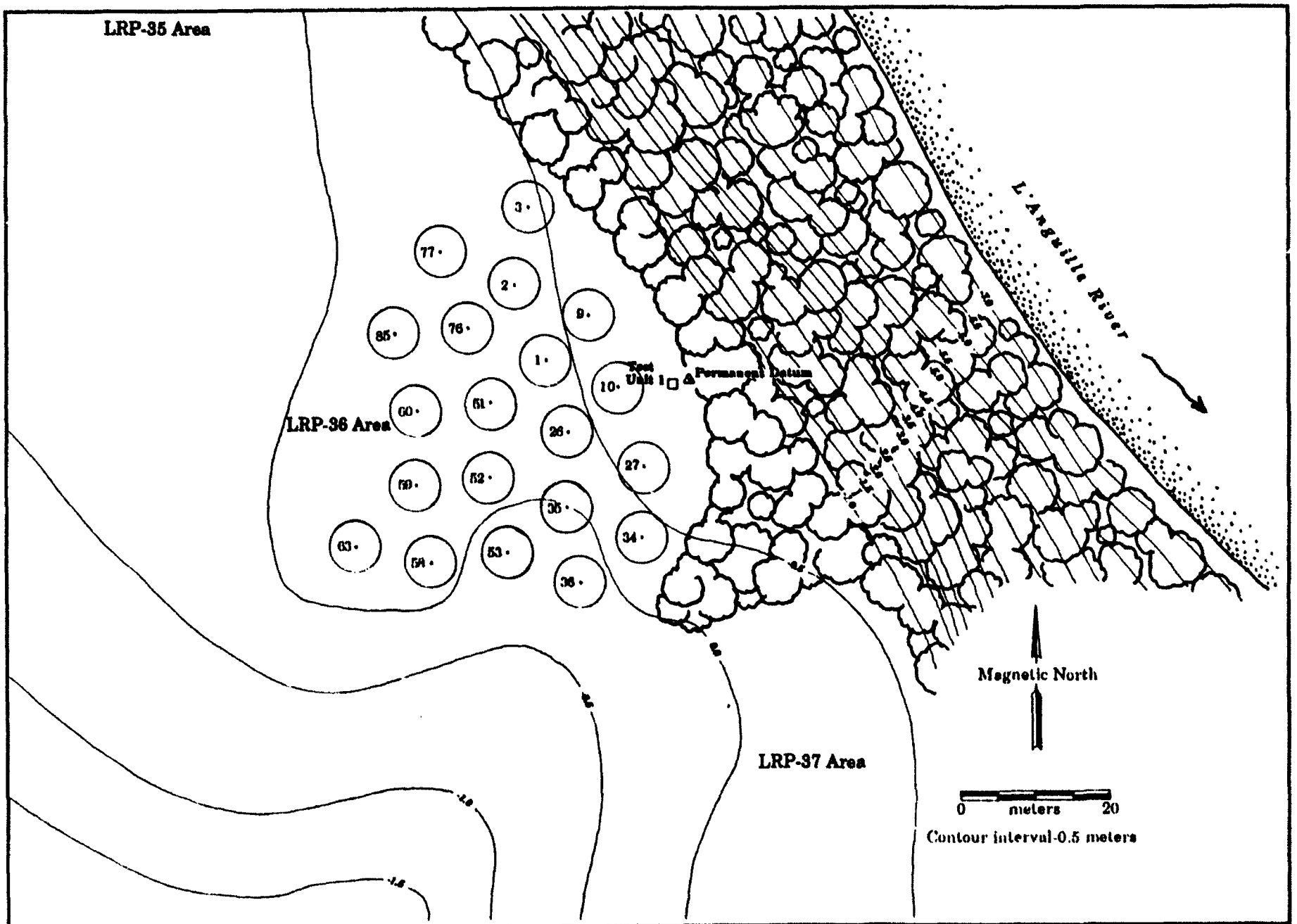
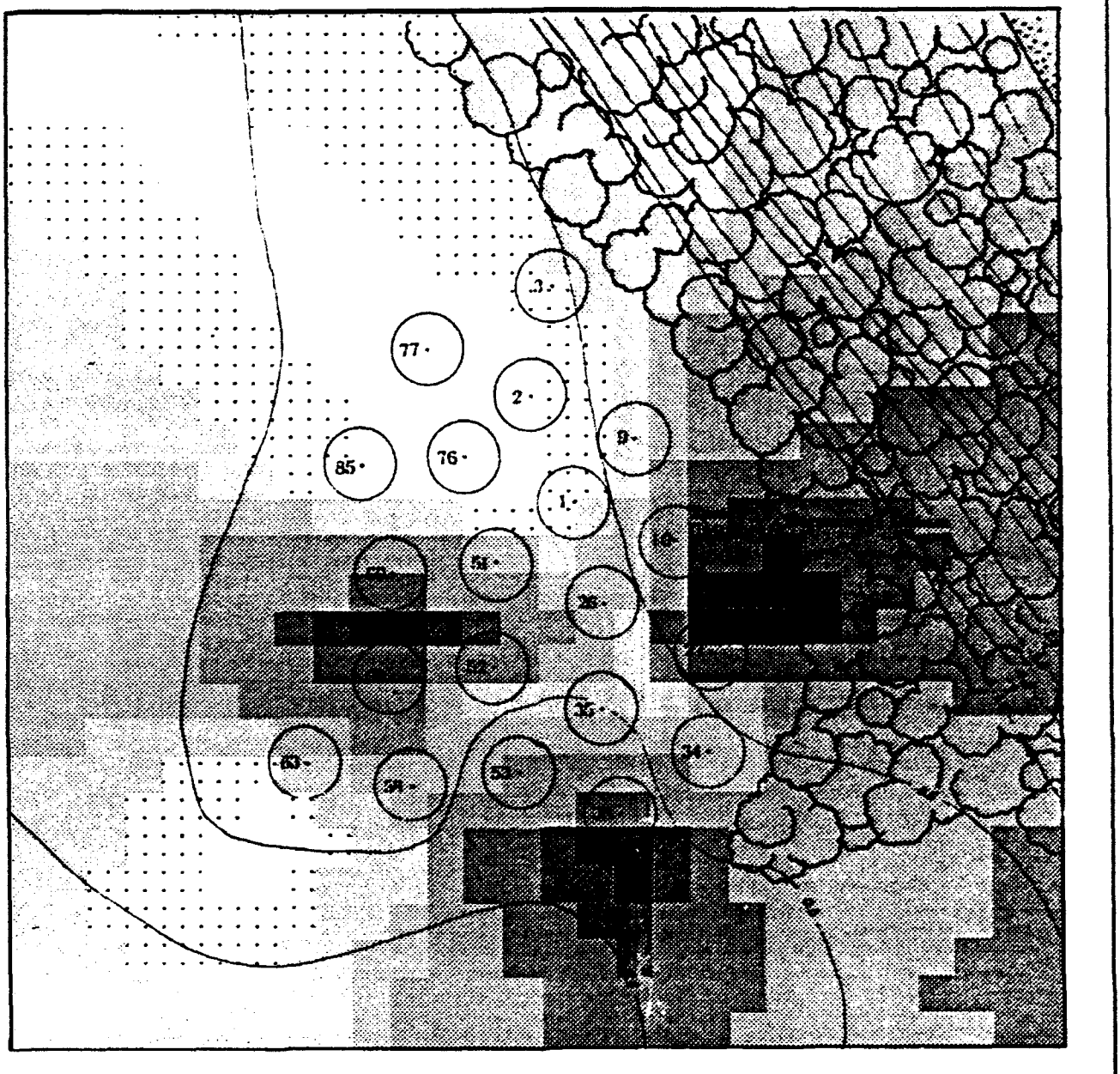


Figure A38.
Site 3LE176 (LRP-36) Proveniences
Controlled Surface Collection Circles
and Test Units.

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Average Artifact Density (number of artifacts)

--
-- .8
-- 1.3
-- 1.7
-- 2.1
-- 2.5
-- 3.0
-- 3.4
-- 3.8
-- 4.3

Magnetic North

= Controlled Surface Collection Unit (3.34 m radii)

0 25
Meters

Figure A39.
Site 3LE176 (LRP-36)
Historic Artifacts - Surface Distributions.

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State Site Number:	3LE177	**Site Name:**	None recorded
Project Site Number:	LRP-037	**Date of Visit:**	17 June 1987
County:	Lee	**USGS Quad:**	Marianna 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Prehistoric Late Archaic, Woodland, and Mississippian; trace amounts of recent historic debris.

Diagnostic Artifacts: 3 Big Creek points, grog-tempered and shell tempered pottery.

Description: Site 3LE177 (LRP-037) is a predominantly prehistoric artifact scatter, with trace amounts of recent historic material, located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River (Figures 40, 41). At the time of survey, the site had been recently plowed and rained on, and no crops had been planted, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 1500 square meters (50 x 30 m in maximum extent). The site is located on thick loess deposits cut by the river channel and can be best described as on a bluff and bluff slope overlooking the river. The bluff drops off rapidly to the southeast, toward a lower terrace containing sites 3LE178 and 3LE179. The main channel of the L'Anguille River is located ca. 30 to 60 m due east of the site area. Some erosion has occurred due to plowing along the bluff slopes. A controlled surface collection was made using 34 3.34 m radii circles dispersed using a stratified systematic unaligned procedure. A minimum of 5 minutes was spent in every circle, and collection proceeded until no more artifacts could be found. The boundaries of the scatter were mapped on the project aerials in the field. A one meter test unit was opened to a depth of 25 cm, one sterile 10 cm level below the plowzone, in the southern part of the scatter. A 30 cm x 30 cm test was then opened to 60 cm in the SW corner of the unit. A permanent datum, consisting of a 24 inch piece of iron rebar marked with red flagging tape, was placed at the edge of the field 17.5 m from the NE corner of the unit at 28.5 degrees east of north. All fill was dry screened through 1/4 inch mesh.

Condition: Currently unknown. No subplowzone materials were found, although both historic and prehistoric features may lie at the base of the plowzone. The site soils are classified as Loring silt loam, 8 to 12 % slopes, eroded (LoD2; USDA 1977a), and are characterized by loess deposits (Profile obtained from test unit excavated to a depth of 60 cm in the southern part of the artifact scatter).

Previous Investigations: None reported; the site area has seen prior surface collection by amateurs according to the landowner.

NRHP Status: Not Eligible.

NRHP Recommendations: Site requires no additional testing before National Register Status can be adequately determined. The low density of the surface scatter, eroded nature of the deposits, and lack of evidence for subsurface materials argues against eligibility.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

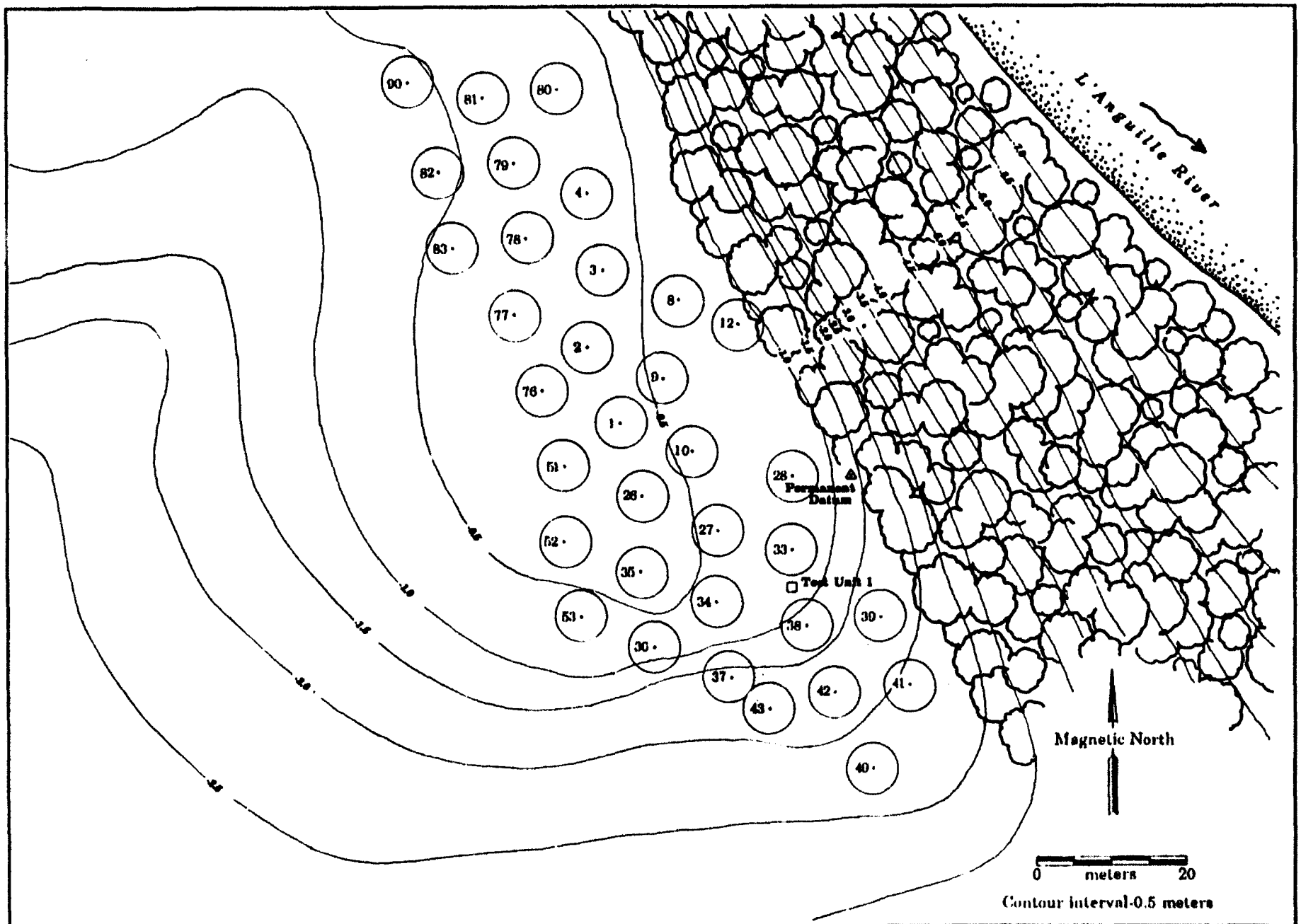


Figure A40.
Site 3LE177 (LRP-37) Proveniences
Controlled Surface Collection Circles
and Test Units.

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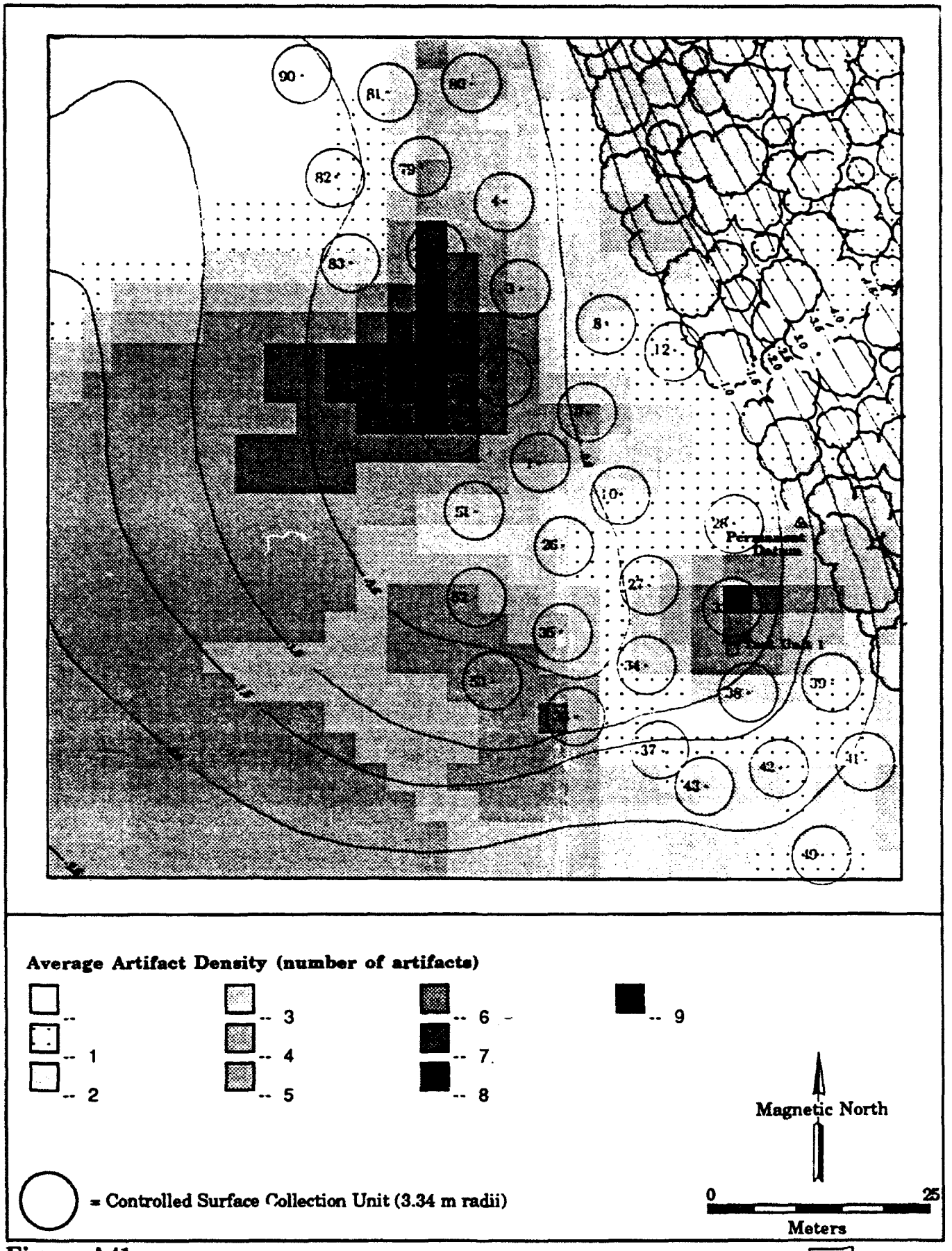


Figure A41.
Site 3LE177 (LRP-37)
Prehistoric Artifacts - Surface Distributions.

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State Site Number: 3LE179 **Site Name:** None recorded
Project Site Number: LRP-039 **Date of Visit:** 18 June 1987
County: Lee **USGS Quad:** Marianna 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Unknown prehistoric, possibly Mississippian.

Diagnostic Artifacts: One tiny shell tempered sherd was found.

Description: Site 3LE179 (LRP-039) is a very light surface artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site had been recently plowed and rained on, with no crops planted, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 2100 square meters (70 x 30 m in maximum extent). A large isolated shagbark hickory is located in the field in the center of the scatter. The site is located on thick silt/clays overlooking the river channel on a low, frequently flooded terrace. The main channel of the L'Anguille River is located ca. 50 to 75 m to the north of the site area, and ca. 150 m to the east. A low swampy area is located to the east of the site. Colluvial deposits may be present to the west of the scatter, below the high loess bluff defining site 3LE177 (LRP-037). A 100% collection of all visible artifacts was made for a period of 1.0 person hours. A one meter test unit was opened to a depth of 21 cm, one sterile 10 cm level below the plow zone. A 30 cm x 30 cm test was then opened an additional 40 cm in the NW corner of the unit. A soil core was taken to a depth of 150 cm in the corner of the unit by John Foss, project soil scientist (see Appendix II). The large tree, which was 5 m due east of the unit, served as the permanent datum. All fill was dry screened through 1/4 inch mesh.

Condition: Currently unknown. No subplowzone materials were found, although both historic and prehistoric features may lie at the base of the plowzone. The site soils are classified as Alligator clay, frequently flooded (Ag; USDA 1977a), and are characterized by fine silt deposits with extensive clay from recent alluviation. (Profile obtained from test unit excavated to a depth of 55 cm in the center of the artifact scatter; soil core taken to 150 cm in same area).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Not Eligible.

NRHP Recommendations: Site requires no additional testing to determine National Register Status. The scatter is minimal, and no evidence for materials below the disk zone was found.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number: 3LE180 **Site Name:** None recorded
Project Site Number: LRP-040 **Date of Visit:** 18 June 1987
County: Lee **USGS Quad:** Marianna 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Prehistoric Late Archaic/Woodland; Mississippian.

Diagnostic Artifacts: 1 Weems-like point, 1 Sequoyah point.

Description: Site 3LE 180 (LRP-040) is a surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River, which is located ca. 20 m due south through a treeline (Figures 42, 43). At the time of survey, the site was in low soybeans and had been recently rained on, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 1100 square meters (50 x 30 m in maximum extent). The bluff overlooking the river in the woodline to the south of the scatter is quite steep. The site is located at the neck of a large meander loop; no sites were located in this loop, suggesting it is fairly recent in age. A controlled surface collection was made using 11 3.34 m radii circles dispersed using a stratified systematic unaligned procedure. A minimum of 5 minutes was spent in every circle, and collection proceeded until no more artifacts could be found. A one meter test unit was opened to a depth of 20 cm, one sterile 10 cm level below the artifact bearing plowzone. A 30 cm x 30 cm test was then opened an additional 35 cm in the SW corner of the unit; fill was a silt/clay. A permanent datum consisting of a 24 inch piece of iron rebar marked with red flagging tape was placed in the woodline 5.5 m due south of the SE corner of the unit. All fill was dry screened through 1/4 inch mesh.

Condition: Currently unknown. No subplowzone materials were found, although both historic and prehistoric features may lie at the base of the plowzone. The site soils are classified as Alligator clay, frequently flooded (Ag; USDA 1977a), and are characterized by silt/loam deposits with extensive clay below the disk zone. (Profile obtained from test unit excavated to a depth of 55 cm in the south side of the artifact scatter).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Not Eligible.

NRHP Recommendations: Site requires no additional testing to determine National Register Status. The site area produced few artifacts, and no evidence for subplowzone deposits.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE183	**Site Name:**	None recorded
Project Site Number:	LRP-043	**Date of Visit:**	16 June 1987
County:	Lee	**USGS Quad:**	Marianna 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Late Archaic, Late Archaic/Woodland, Woodland; recent historic debris (modern dump located at NW side of site)

Diagnostic Artifacts: 1 Burkett, 2 Weems, 2 Baytown stemmed, 1 Steuben projectile points; plain grog-tempered pottery, Mulberry Creek Cord Marked.

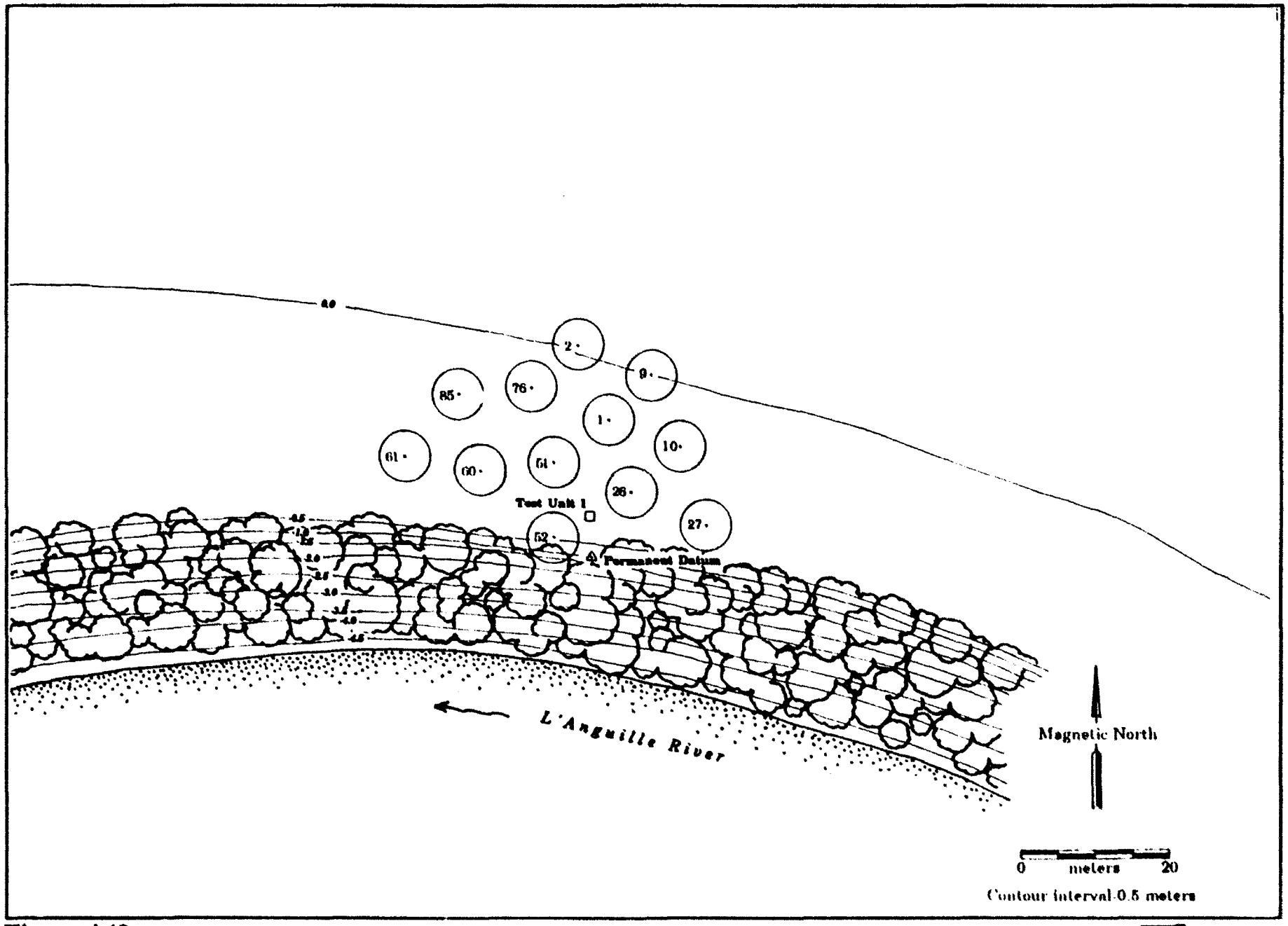
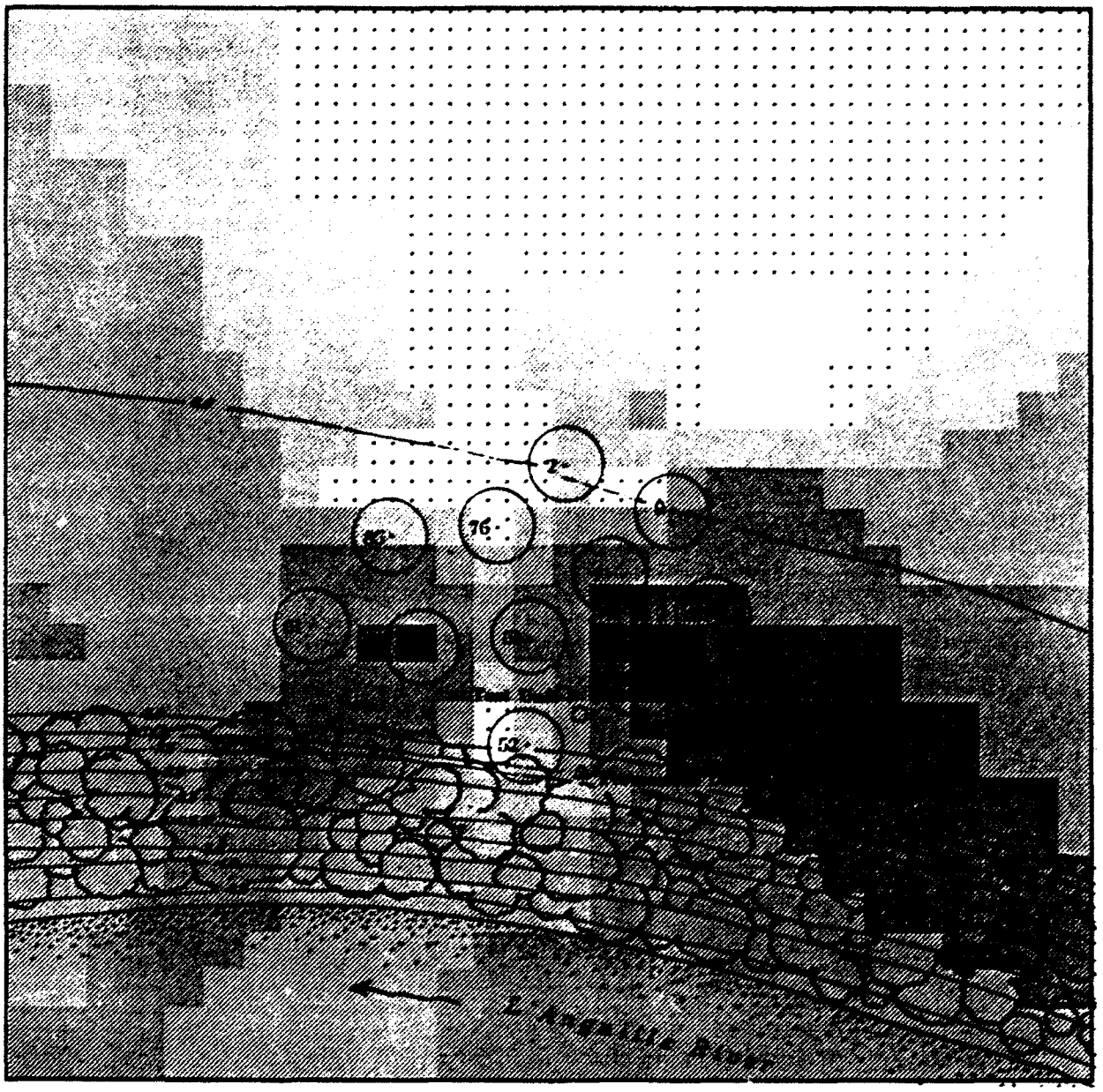


Figure A42.
Site 3LE180 (LRP-40) Proveniences
Controlled Surface Collection Circles
and Test Units.

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Average Artifact Density (number of artifacts)

-- .9	-- 2.2	-- 3.4	-- 4.7
-- 1.3	-- 2.6	-- 3.8	
-- 1.8	-- 3.0	-- 4.2	

= Controlled Surface Collection Unit (3.34 m radii)

Magnetic North

0 25

Meters

Figure A43.
Site 3LE180 (LRP-40)
Prehistoric Artifacts - Surface Distributions.

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Description: Site 3LE183 (LRP-043) is a dense prehistoric surface artifact scatter, with minor quantities of recent historic debris, located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River (Figure 44). At the time of survey, the site was in low (< 12 in. high) cotton, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 5000 square meters (100 x 60 m in maximum extent). A historic trash had been dumped in a gully near the bluff edge on the northwest side of the scatter. The site is on a high bluff overlooking the main channel of the L'Anguille River, which is located immediately north of the site area, through a narrow tree line. The dropoff to the river is very steep, with a sheer face ca. 6 m high. A controlled surface collection was made using fifty 3.34 m radii circles. A one meter test unit was opened to a depth of 27 cm in the northern part of the scatter near the bluff edge. The unit was taken to one sterile 10 cm level below the artifact bearing levels. A 30 cm x 30 cm test was then opened an additional 43 cm in the NW corner of the unit. The project soil scientist, John Foss took a soil core to a depth of 260 cm in the corner of this unit (Appendix II). A permanent datum consisting of a 24 inch piece of iron rebar marked with red flagging tape was placed in the woodline 7 m ENE of the test unit. All fill was dry screened through 1/4 inch mesh.

Condition: Currently unknown. No subplowzone materials were found, although both historic and prehistoric features may lie at the base of the plowzone. The site soils are classified as Loring silt loam, 1 to 3% slopes; 8 to 12 % slopes, eroded (LoB/LoD2; USDA 1977a), and are characterized by loess deposits, with a possible buried A horizon located just below the plowzone (Profile obtained from test unit excavated to a depth of 70 cm in the north-central part of the artifact scatter; the project soil scientist took a soil core to 260 cm in this same area).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Indeterminate.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined. Five 2 m test pits should be opened to determine if stratification is present. Limited stripping using a piece of heavy machinery to see if features are present at the base of the plowzone should then be considered. Deep testing with a backhoe should be conducted.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE184	**Site Name:**	None recorded
Project Site Number:	LRP-044	**Date of Visit:**	16 June 1987
County: Lee		**USGS Quad:**	Marianna 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Prehistoric Archaic?, Woodland; modern historic debris possibly from LRP-044 dump area.

Diagnostic Artifacts: 1 small (Woodland?) stemmed point.

Description: Site 3LE184 (LRP-044) is a predominantly prehistoric surface artifact scatter, with minor quantities of recent historic debris, located in a plowed field adjacent to and overlooking the

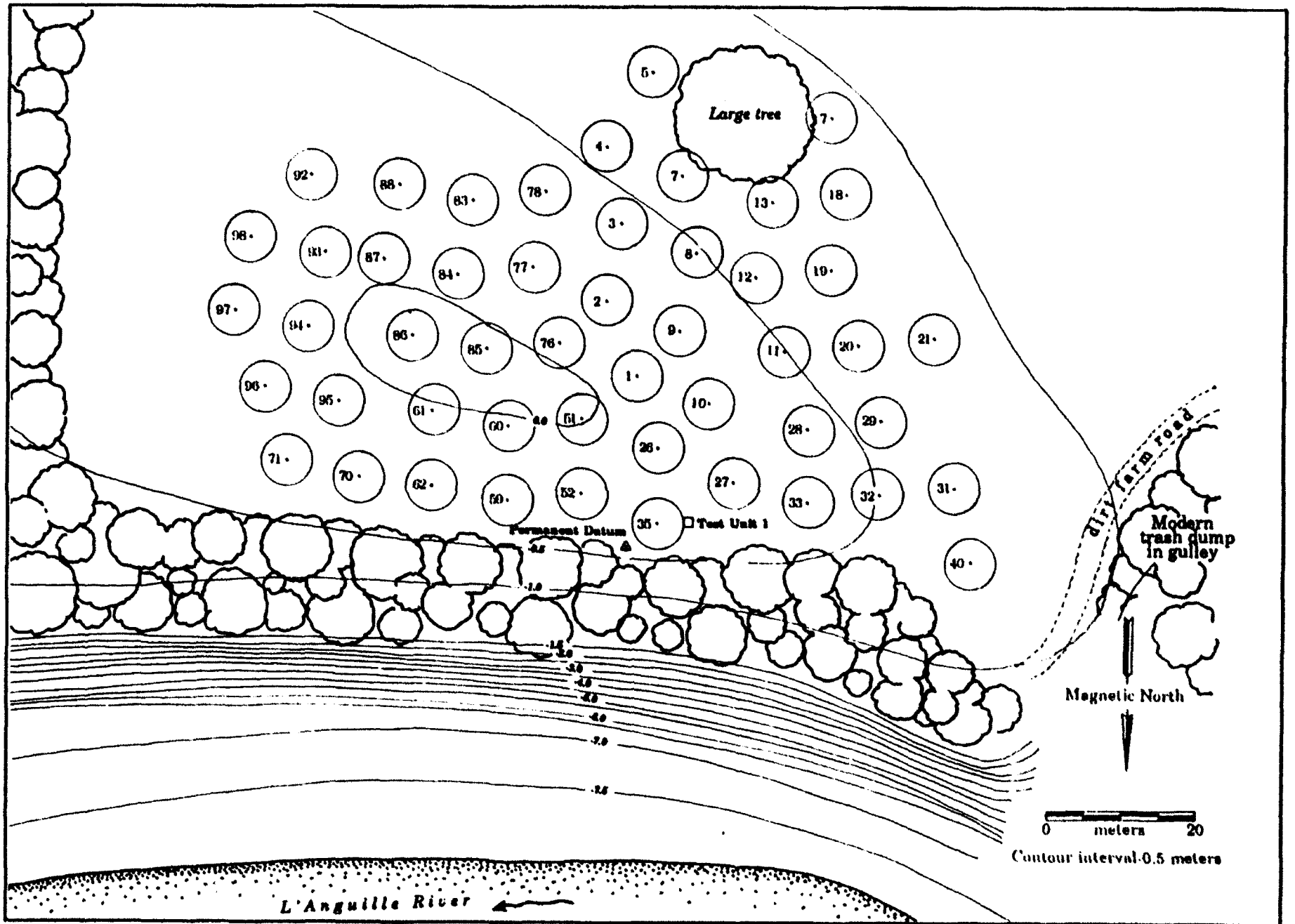


Figure A44.
Site 3LE183 (LRP-43) Proveniences
Controlled Surface Collection Circles
and Test Units.

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main channel of the L'Anguille River (Figure 45, 46). At the time of survey, the site was in low cotton, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 2000 square meters (60 x 40 m in maximum extent). Site 3LE184 (LRP-044) lies ca. 40 m to the east through a clump of trees demarcating a gully that has been used as a historic dump. The site is located on thick loess deposits and is on a bluff overlooking the main channel of the L'Anguille River, which is located ca. 75 m due north; the river makes a pronounced shift in direction from an east/west to a north/ south direction below the site. A fairly recent meander loop appears to be forming immediately to the north of the site, with the channel migrating to the north. A controlled surface collection was made using twenty 3.34 m radii circles, and a one meter test unit was opened to a depth of 47 cm in the NE part of the scatter, one sterile 10 cm level below the artifact bearing levels. A 30 cm x 30 cm test was then opened an additional 40 cm in the NE corner of the unit. A permanent datum consisting of a 24 inch piece of iron rebar marked with red flagging tape was located 11 m north of the NW corner of the unit. All fill was dry screened through 1/4 inch mesh.

Condition: Currently unknown. Subplowzone materials were found, and both historic and prehistoric features may lie at the base of the plowzone. The site soils are classified as Loring silt loam, 1 to 3% slopes (LoB; USDA 1977a), and are characterized by loess deposits. (Profile obtained from test unit excavated to a depth of 87 cm in the northeast part of the scatter).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Indeterminate.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined. Three 2 m test pits should be opened to determine if stratification is present, followed by deep testing with a backhoe.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE186	**Site Name:**	None recorded
Project Site Number:	LRP-046	**Date of Visit:**	15 June 1987
County:	Lee	**USGS Quad:**	Marianna 1984 7.5

Location:	1/4	1/4	1/4; Section		T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Mississippian

Diagnostic Artifacts: Mississippi Plain shell tempered pottery.

Description: Site 3LE186 (LRP-046) is a very light prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was in low (< 6 in. high) soy beans, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 1500 square meters (50 x 30 m in maximum extent). The site is on a bluff overlooking the main channel of the L'Anguille River, which is located ca. 60 m due east. A 100% sample of all visible artifacts was collected for a period of 0.5 person hours; the scatter was completely collected. No evidence for subsurface remains was noted in eroding profiles. Due to

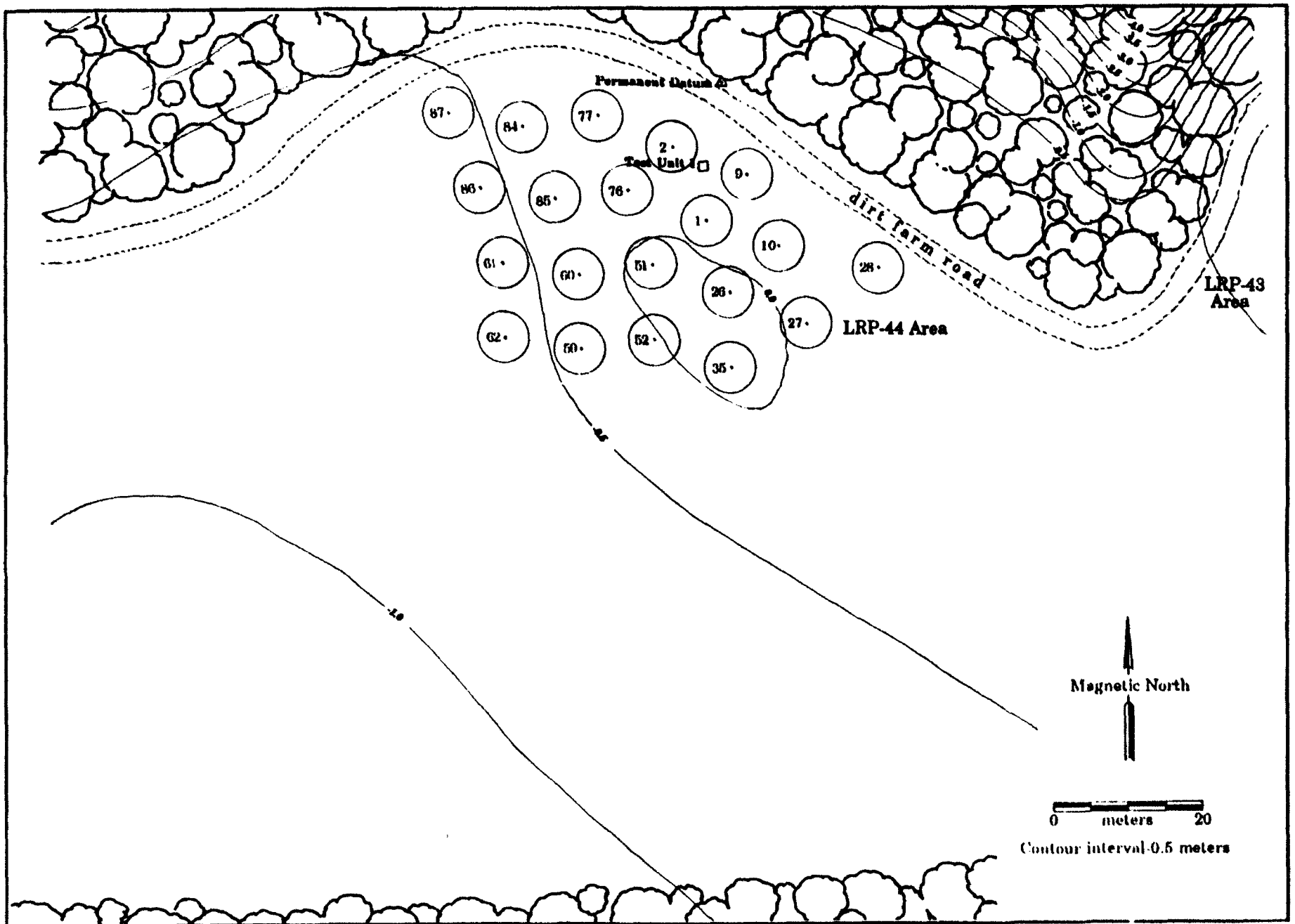


Figure A45.
Site 3LE184 (LRP-44) Proveniences
Controlled Surface Collection Circles
and Test Units.

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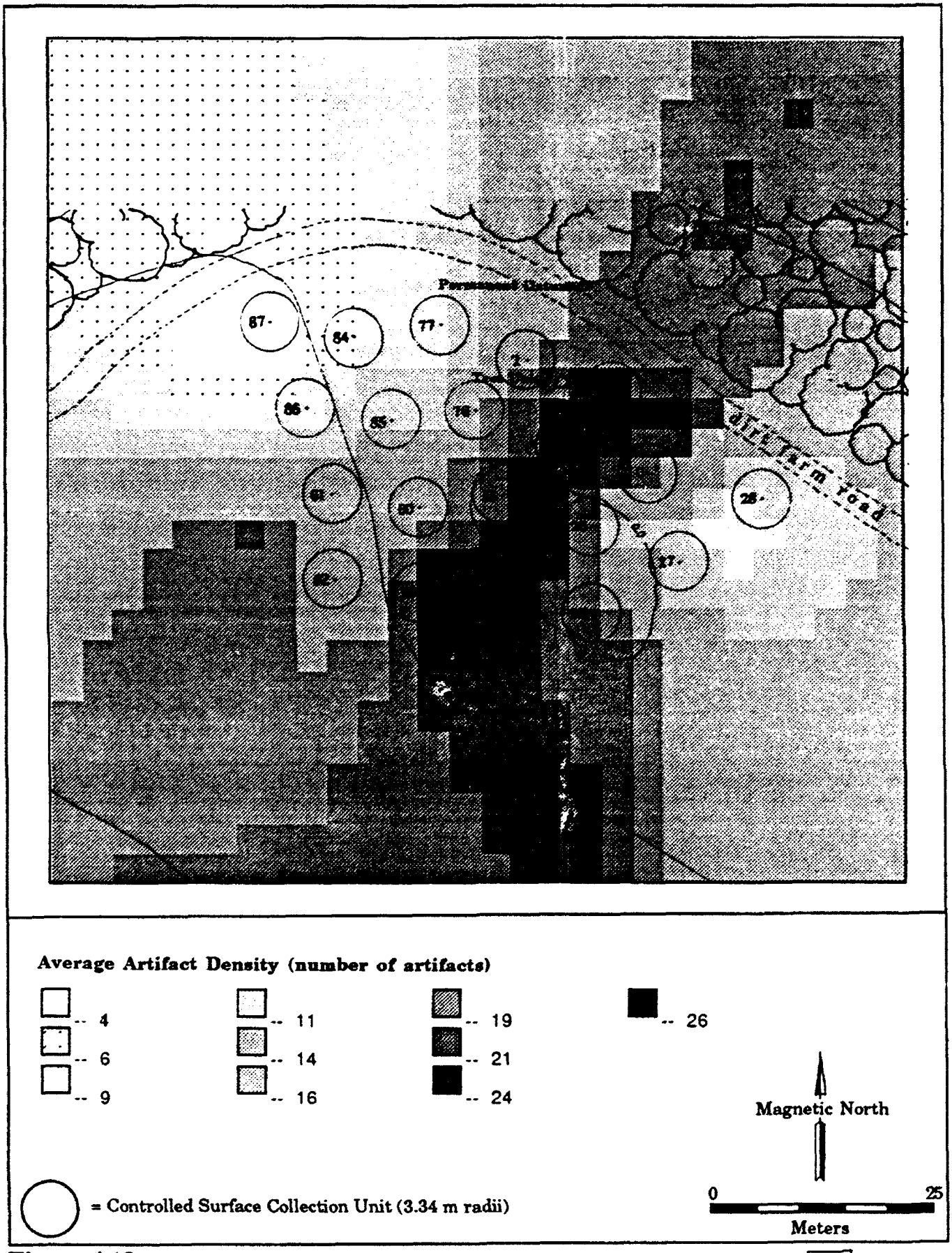


Figure A46.
Site 3LE184 (LRP-44)
Prehistoric Artifacts - Surface Distributions.

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the extreme low artifact density, no test units were opened at the site.

Condition: Extremely low density scatter. The site soils are classified as Alligator clay, frequently flooded (Ag; USDA 1977a), and are characterized by silt/loam deposits with extensive clay below the disk zone. (Profile observed in bank face).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Indeterminate.

NRHP Recommendations: Due to the very light scatter of artifacts and the absence of evidence for subsurface deposits the site is not considered eligible.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE188	**Site Name:**	None recorded
Project Site Number:	LRP-048	**Date of Visit:**	15 June 1987
County:	Lee	**USGS Quad:**	Marianna 1984 7.5

Location:	1/4	1/4	1/4;	Section	T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Prehistoric, Archaic? (no ceramics); recent historic debris.

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found; 20th century historic artifacts.

Description: Site 3LE188 (LRP-048) is a light density prehistoric and historic surface artifact scatter located in a fallow field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the field was fallow in low weeds, with visibility ca. 75%. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 2400 square meters (80 x 30 m in maximum extent). The terrain is highly disturbed from heavy equipment maneuvering, and a considerable amount of historic debris (apparently from buildozed brick buildings and trash dumping) is present, particularly at the south end of the scatter. The northern end of the field was planted in crops , while the southern end, which was more disturbed was fallow. The site area is on a bluff overlooking the main channel of the L'Anguille River, which is located ca. 50 to 75 m due east. A 100% sample of all visible artifacts was collected for a period of 1.0 person hours. No test units were opened at this site due to the extensive heavy equipment disturbance. The site area, particularly the southern end, was littered with brick, glass, and other debris from apparently bulldozed buildings (and some trash dumping). The terrain in this area was chewed up from heavy equipment maneuvering, and the deposits appear quite disturbed.

Condition: Highly disturbed. The site soils are classified as Dundee silt loam (Du; USDA 1977a).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Not Eligible.

NRHP Recommendations: Site is heavily disturbed by heavy construction equipment.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE190	**Site Name:**	None recorded
Project Site Number:	LRP-050	**Date of Visit:**	23 June 1987
County: Lee		**USGS Quad:**	Marianna 1984 7.5

Location:	1/4	1/4	1/4; Section		T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Early Archaic, Middle Archaic; 19th and 20th century historic.

Diagnostic Artifacts: 1 San Patrice, 1 Hickory Ridge, 1 Basal Notched (Middle Archaic?); 19th and 20th century historic artifacts.

Description: Site 3LE190 (LRP-050) is a surface historic and prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was in low cotton and had been recently plowed and rained on, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 6000 square meters (120 x 50 m in maximum extent). The site area is on a bluff overlooking the main channel of the L'Anguille River, which is located ca. 60 m due east. The terrain sloped gently down through woods to the channel; site LRP-183 was located ca. 150 m to the NE. A 100% controlled surface collection of every visible artifact was collected for one person-hour. A one meter test unit was opened on the southeast side of the scatter 7 m from the woods edge. The unit was opened to 29 cm, one sterile 10 cm level below the artifact bearing levels. A 30 cm x 30 cm test was then opened an additional 40 cm in the NW corner of the unit to a depth of 69 cm. All fill was dry screened through 1/4 inch mesh. A telephone pole in the center of scatter (marked "Fordyce F5 82 SPP-5 5-35" on the southeast side) was established as the permanent datum, and is located 17.6 m from the SW corner of the test unit at an angle of 223 degrees E of magnetic north.

Condition: Currently unknown. No subplowzone materials were found, although both historic and prehistoric features may lie at the base of the plowzone. The site soils are classified as Loring silt loam, 8 to 12% slopes, eroded (LoD2; USDA 1977a), and are characterized by loess deposits with extensive fine clay particles below the disk zone from recent alluviation. (Profile obtained from test unit excavated to a depth of 69 cm in the east side of the artifact scatter).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Not Eligible.

NRHP Recommendations: Due to the diffuse, low density of the scatter and the absence of subsurface materials the site is not considered eligible.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number: 3LE192 **Site Name:** None recorded
Project Site Number: LRP-052 **Date of Visit:** 17 June 1987
County: Lee **USGS Quad:** Marianna 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Late Archaic/Woodland; recent 20th century historic debris.

Diagnostic Artifacts: 1 Weems point, 1 Gary point; 20th century historic artifacts.

Description: Site 3LE192 (LRP-052) is a surface artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River (Figure 47, 48). At the time of survey, the site had been recently plowed and rained on, with no crops planted, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. No crops were present at the time of survey. Artifacts were observed over an area of approximately 1800 square meters (60 x 40 m in maximum extent). The site area is on a bluff overlooking the main channel of the L'Anguille River, which is located ca. 20 to 30 m due east, downslope through a narrow treeline. The site area is heavily eroded, and markedly dissected by gullies; the profiles of these gullies indicate that the deposits are shallow. A controlled surface collection was made using eighteen 3.34 m radii circles dispersed using a stratified systematic unaligned procedure. A minimum of 5 minutes was spent in every circle, and collection proceeded until no more artifacts could be found. A one meter test unit was opened to a depth of 22 cm in the southern part of the scatter, one sterile 10 cm level below the artifact bearing levels. A 30 cm x 30 cm test was then opened an additional 40 cm in the corner of the unit. All fill was dry screened through 1/4 inch mesh. A permanent datum consisting of a 24 inch piece of iron rebar marked with red flagging tape was placed in the woodline 30 m east of the SE corner of the unit.

Condition: Currently unknown. No subplowzone materials were found, although both historic and prehistoric features may lie at the base of the plowzone. The site soils are classified as Alligator clay, frequently flooded (Ag; USDA 1977a), and are characterized by loess deposits with extensive fine clay particles lower in the profile from alluviation. (Profile obtained from test unit excavated to a depth of 62 cm in the southern part of the scatter).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Not Eligible.

NRHP Recommendations: Site requires no additional testing to determine National Register Status. The site area is badly eroded, with no evidence for subplowzone deposits.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number: 3LE193 **Site Name:** None recorded
Project Site Number: LRP-053 **Date of Visit:** 17 June 1987
County: Lee **USGS Quad:** Marianna 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

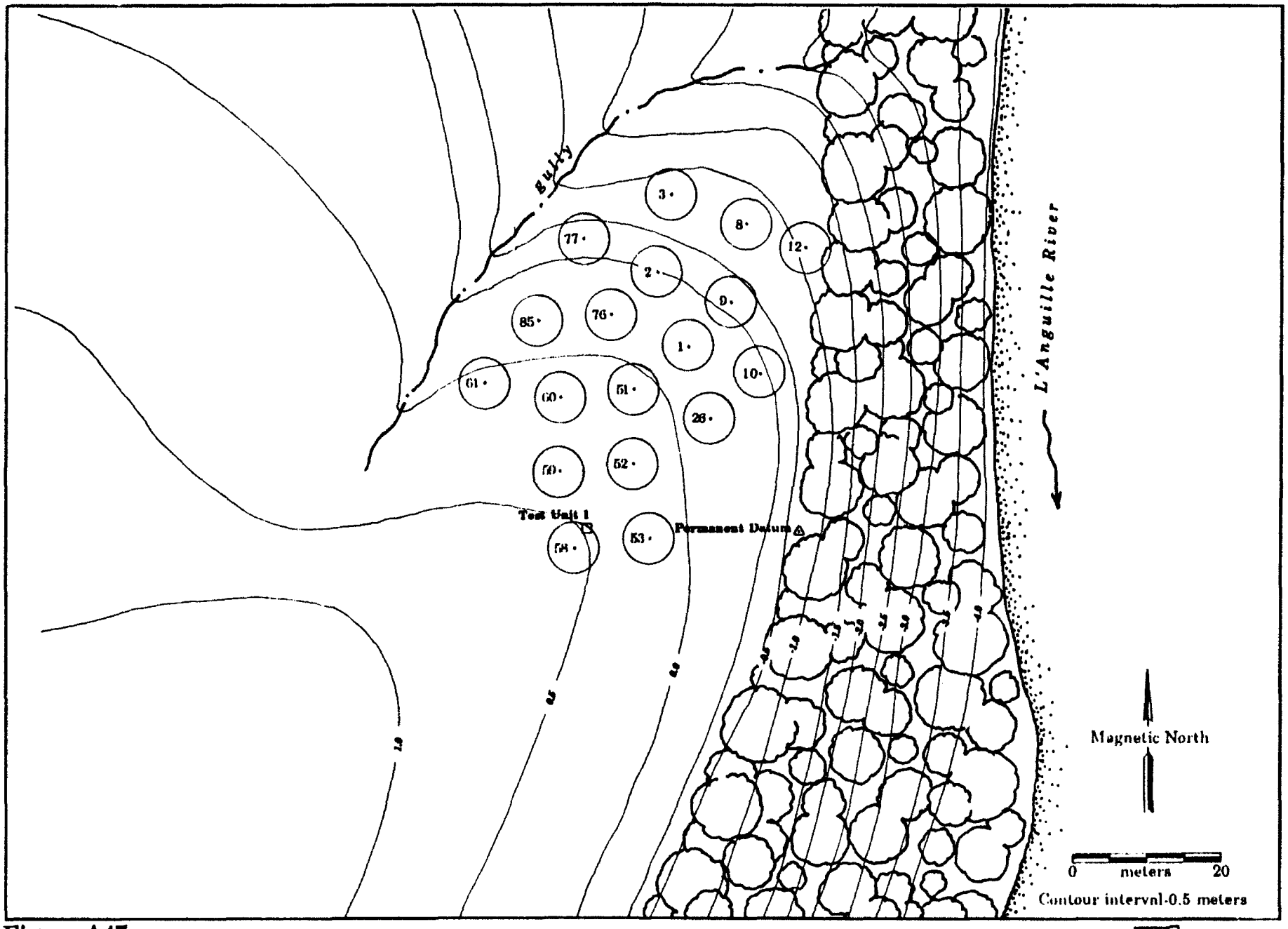
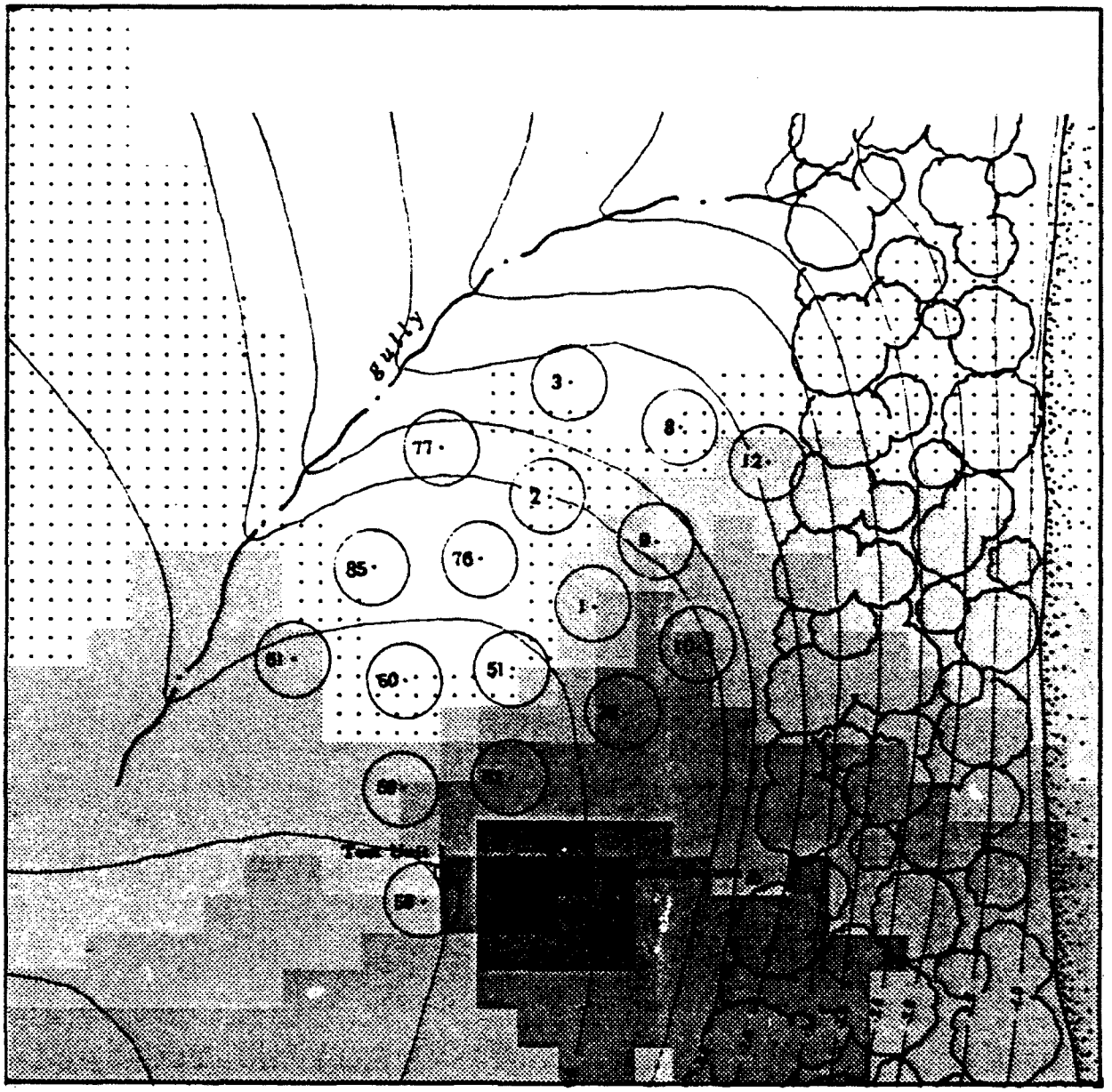


Figure A47.
Site 3LE182 (LRP-52) Proveniences
Controlled Surface Collection Circles
and Test Units.

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Average Artifact Density (number of artifacts)

-- 2
-- 11
-- 16
-- 21
-- 26
-- 31
-- 36
-- 40
-- 45
-- 50

= Controlled Surface Collection Unit (3.34 m radii)

Magnetic North

0 25

Meters

Figure A48.
Site 3LE182 (LRP-52)
Prehistoric Artifacts - Surface Distributions.

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Temporal Span: Middle Archaic, Late Archaic, Middle Woodland

Diagnostic Artifacts: 2 basal notched (Middle Archaic?) points, 1 Big Creek?, 1 Burkett, 1 Marksville corner-notched point.

Description: Site 3LE193 (LRP-053) is a surface artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River (Figures 49, 50). At the time of survey, the site was in low (< 6 in. high) soy beans, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 2800 square meters (80 x 40 m in maximum extent). The site area is on a low bluff overlooking the main channel of the L'Anguille River, which is located ca. 20 m east through a narrow treeline. Site 3LE193 (LRP-053) marked the northernmost point we were able to travel from the river mouth using a boat; beyond this point the channel was clogged with logs. A controlled surface collection using twenty-eight 3.34 m radii circles dispersed using a stratified systematic unaligned procedure was made, with minimum of 5 minutes spent in every circle. A 100% collection of all visible artifacts was made from the northern end of the scatter, designated Area A, which had a much lower density, for one person hour. A one meter test unit was opened to 20 cm in the south central part of the scatter, revealing minor quantities of debitage. A 30 cm x 30 cm test was then opened an additional 40 cm in the SE corner of the unit. All fill was dry screened through 1/4 inch mesh. A permanent datum consisting of a 24 inch piece of iron rebar marked with red flagging tape was placed in the woodline 18.6 m due east of the NE corner of the testpit.

Condition: Currently unknown. No subplowzone materials were found, although both historic and prehistoric features may lie at the base of the plowzone. The site soils are classified as Alligator clay, frequently flooded (Ag; USDA 1977a), and are characterized by loess deposits with extensive fine clay and manganese nodules below the plow zone. (Profile obtained from test unit excavated to a depth of 60 cm in the south-central part of the scatter).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Not Eligible.

NRHP Recommendations: Due to the shallow deposits the site is not considered eligible for inclusion on the National Register of Historic Places.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE195	**Site Name:**	None recorded
Project Site Number:	LRP-056	**Date of Visit:**	22 June 1987
County:	Lee	**USGS Quad:**	Marianna 1984 7.5

Location:	1/4	1/4	1/4;	Section	T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Archaic, Woodland, Mississippian; 20th century historic

Diagnostic Artifacts: 1 Big Creek point, 1 stemmed/corner-notched point; Baytown Plain, Mississippi Plain pottery; mid-20th century historic artifacts

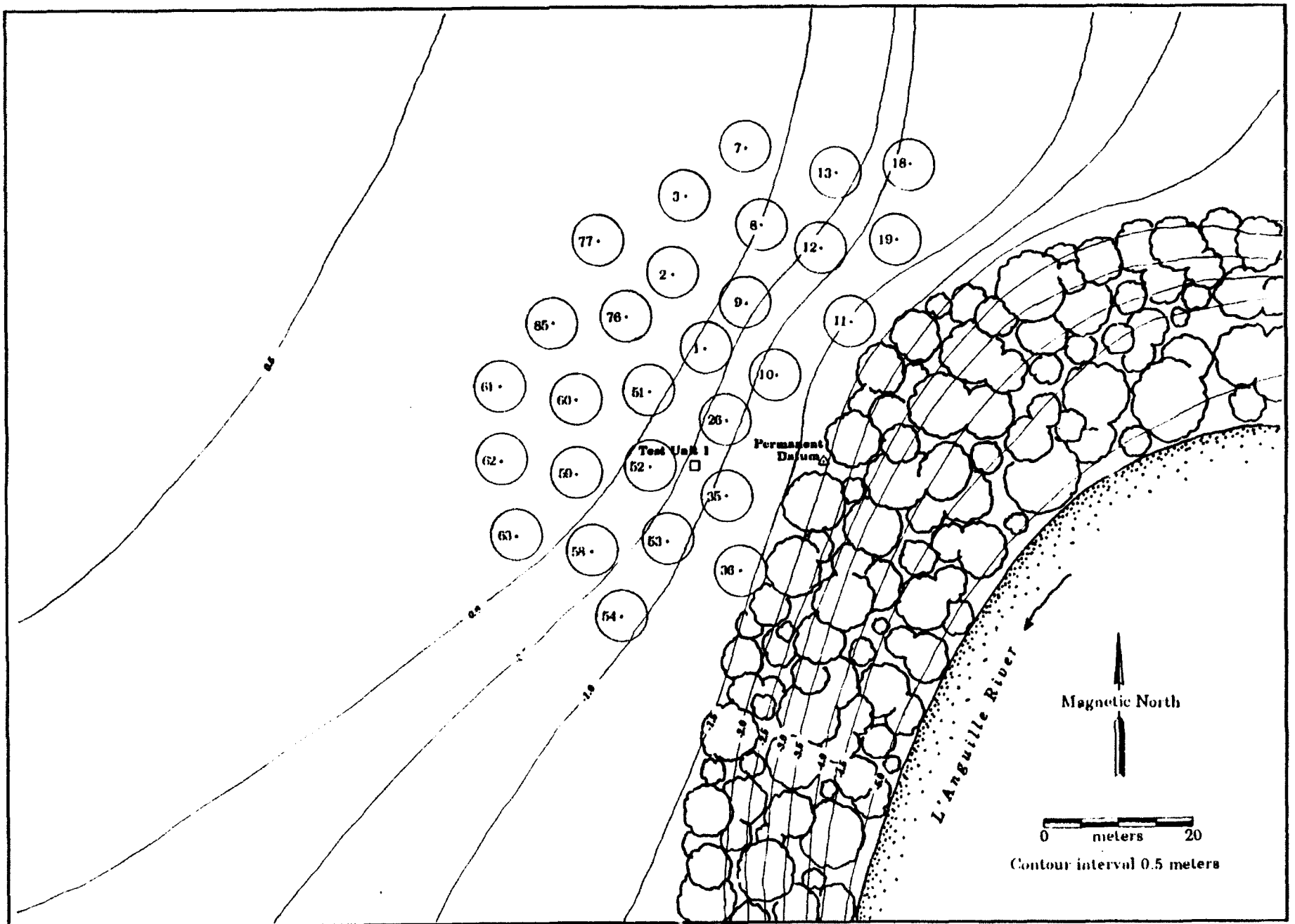
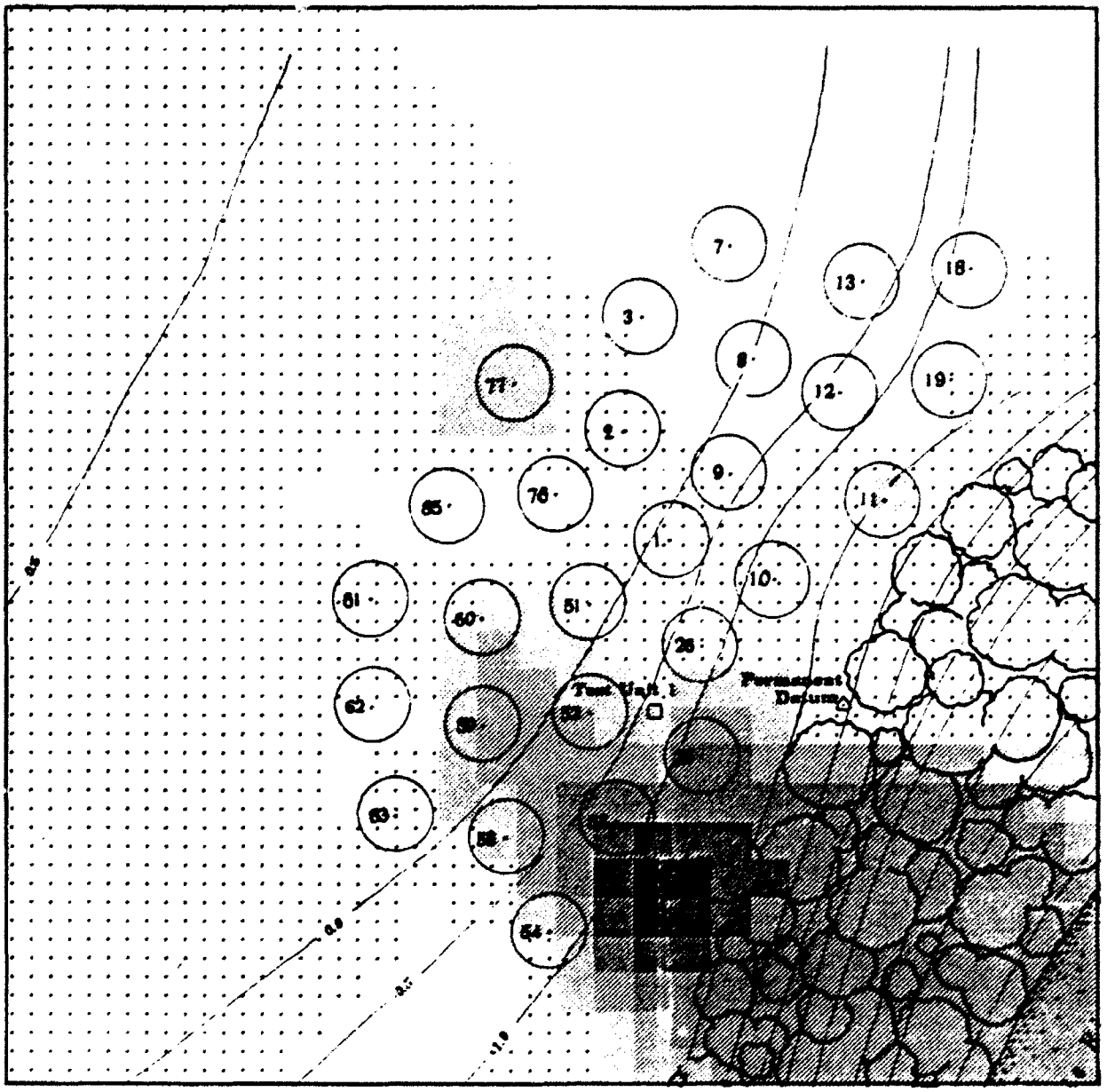


Figure A49.
Site 3LE193 (LRP-53) Proveniences
Controlled Surface Collection Circles
and Test Units.

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Average Artifact Density (number of artifacts)

-- 3
-- 6
-- 9
-- 12
-- 14
-- 17
-- 20
-- 23
-- 26
-- 28

Magnetic North

= Controlled Surface Collection Unit (3.34 m radii)

0 25

Meters

Figure A50.
Site 3LE193 (LRP-53)
Prehistoric Artifacts - Surface Distributions.

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Description: Site 3LE195 (LRP-056) is a surface prehistoric and historic artifact scatter located in a plowed field south of and overlooking the main channel of the L'Anguille River (Figures 51, 52). At the time of survey, the site was in low soybeans, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 2000 square meters (50 x 50 m in maximum extent). Site 3LE196 (LRP-057) is located just to the east through a narrow hedgerow, and is probably a continuation of this scatter. The site is on a bluff overlooking the main channel of the L'Anguille River, which is located ca. 25 m due north, downslope through the trees lining the river. A controlled surface collection was made using twenty 3.34 m radii circles dispersed using a stratified systematic unaligned procedure. A minimum of 5 minutes was spent in every circle, and collection proceeded until no more artifacts could be found. A 100 percent general collection was made over the surrounding area. A 1 m unit was opened on the east side of the scatter near the hedgerow to a depth of 21 cm, one sterile 10 cm level below the artifact bearing diskzone. A 30 cm x 30 cm test was then opened an additional 40 cm in the NE corner of the unit. All fill was dry screened through 1/4 inch mesh. A permanent datum consisting of a 24 inch piece of iron rebar marked with red flagging tape was located in the woodline (see map).

Condition: Currently unknown. No subplowzone materials were found, although both historic and prehistoric features may lie at the base of the plowzone. The site soils are classified as Earle silty clay, gently undulating. (EaB; USDA 1977a), and are characterized by loess deposits with extensive fine clay particles below the disk zone (Profile obtained from test unit excavated to a depth of 61 cm in the east part of the artifact scatter).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Not Eligible.

NRHP Recommendations: Site requires no additional testing to determine National Register Status. Due to the low density of the scatter and lack of evidence for subplowzone materials the site is not considered eligible.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE197	**Site Name:**	None recorded
Project Site Number:	LRP-058	**Date of Visit:**	17 June 1987
County:	Lee	**USGS Quad:**	Soudan 1984 7.5

Location:	1/4	1/4	1/4; Section		T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Recent historic scatter (tenant site?).

Diagnostic Artifacts: 20th century historic artifacts.

Description: Site 3LE 197 (LRP-058) is a surface historic artifact scatter located in a plowed field south of and overlooking the main channel of the L'Anguille River. At the time of initial survey, the site was in pasture, offering 50-70% visibility; when revisited to dig the test unit, the field had been recently plowed and rained on, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of

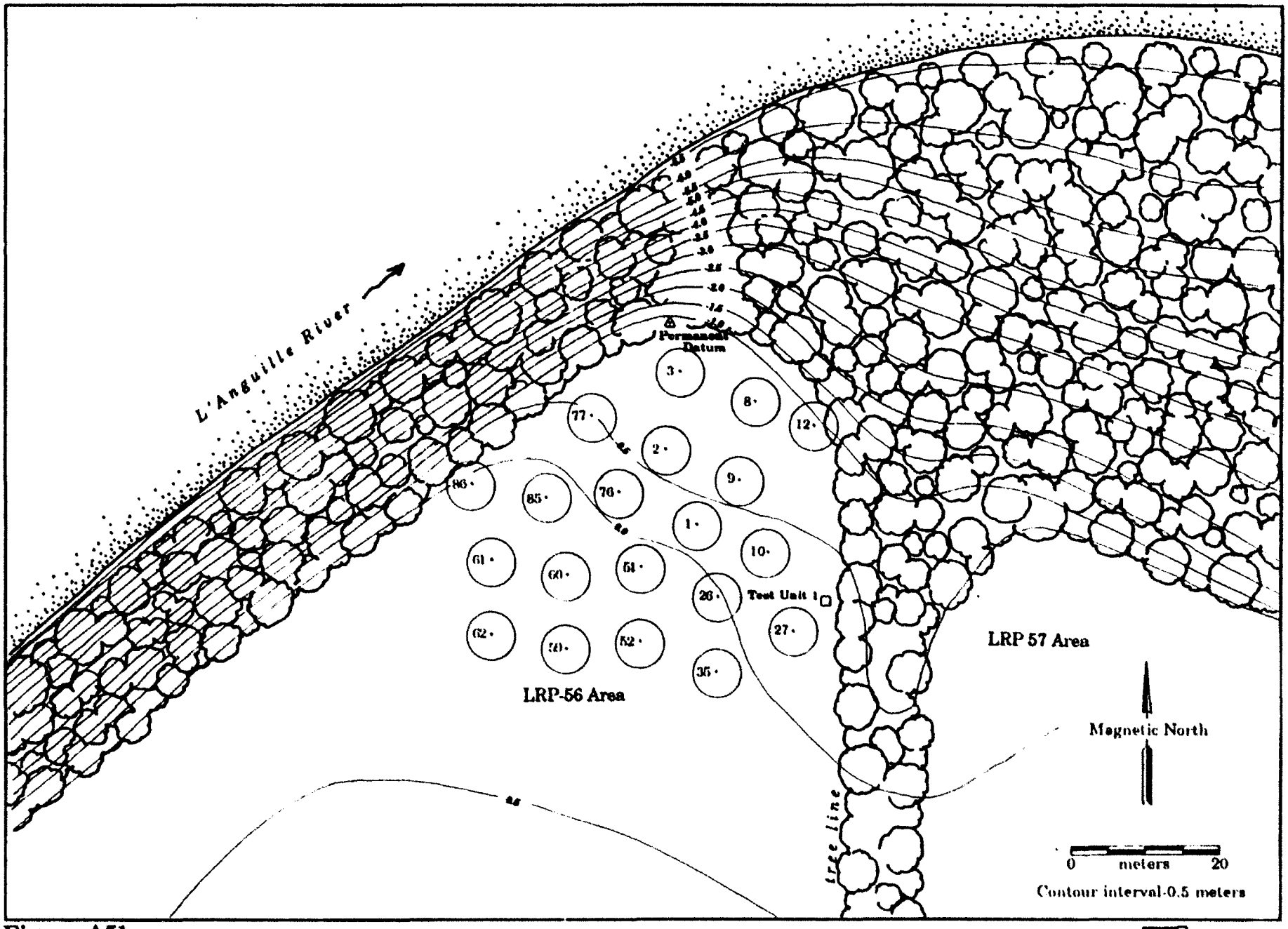
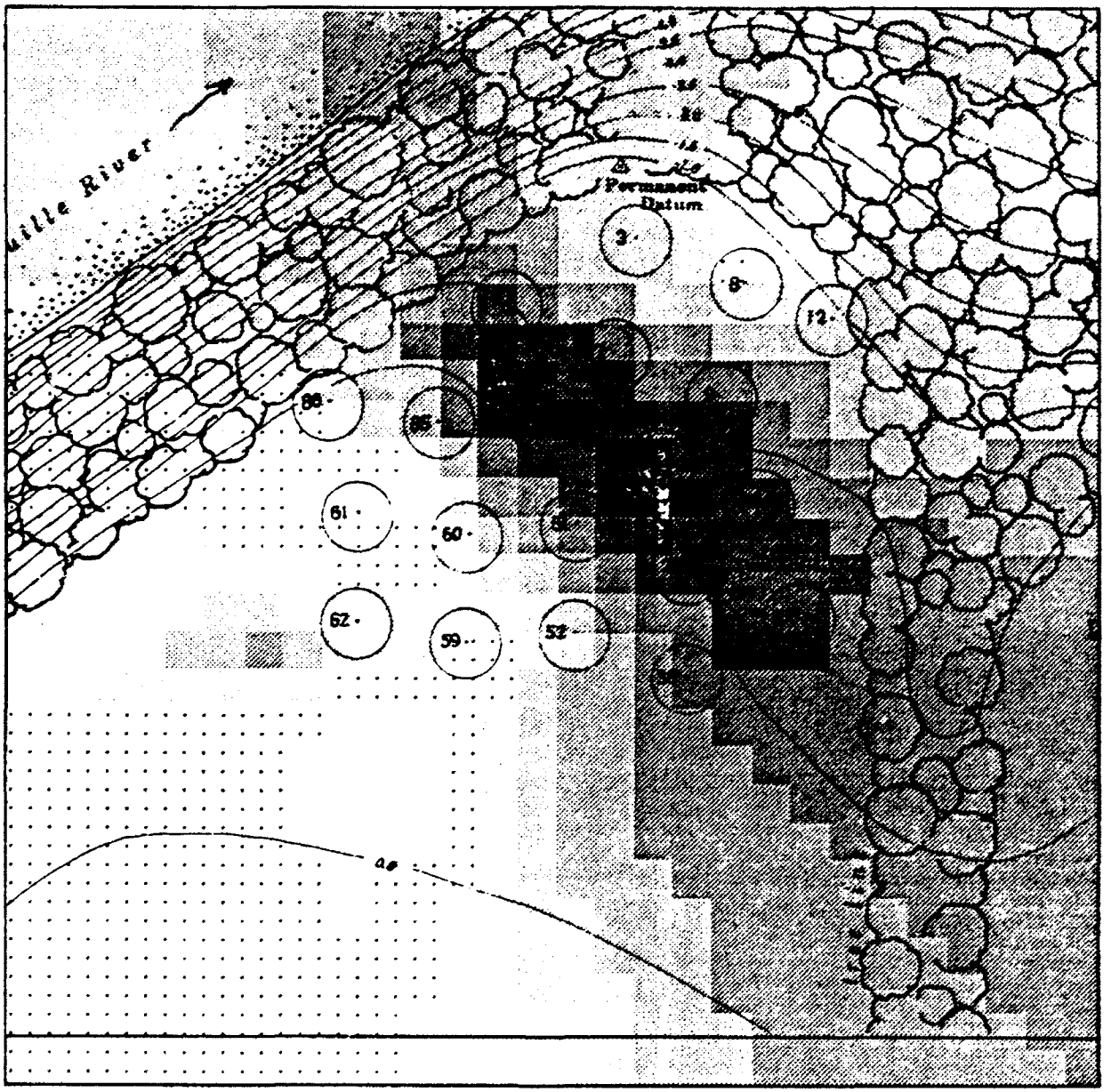


Figure A51.
Site 3LE195 (LRP-56) Provenience Controlled Surface Collection Circles and Test Units.

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Average Artifact Density (number of artifacts)

-- 1.5
-- 2.0
-- 2.6
-- 3.1
-- 3.6
-- 4.2
-- 4.7
-- 5.3
-- 5.8

= Controlled Surface Collection Unit (3.34 m radii)

Magnetic North

0 25
Meters

Figure A52.
Site 3LE195 (LRP-56)
Prehistoric Artifacts - Surface Distributions.

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approximately 1250 square meters (50 x 25 m in maximum extent). The site area is on a bluff overlooking the main channel of the L'Anguille River, which is located ca. 40 m due north down a fairly steep slope through the trees. A 100 percent surface collection of all visible artifacts was collected for one person-hour. A one meter test unit was opened to a depth of 22 cm in the north central part of the scatter, one sterile 10 cm level below the artifact bearing disk zone. A 30 cm x 30 cm test was then opened an additional 30 cm in NW corner of the unit. All fill was dry screened through 1/4 inch mesh.A permanent datum consisting of a 24 inch piece of iron rebar marked with red flagging tape was placed in the woodline 5 m north of the SE corner of the unit.

Condition: Currently unknown. No subplowzone materials were found, although both historic and prehistoric features may lie at the base of the plowzone. The site soils are classified as Alligator clay, frequently flooded (Ag; USDA 1977a), and are characterized by loess deposits with extensive fine clay particles below the plowzone. (Profile obtained from test unit excavated to a depth of 52 cm in the north central part of the scatter).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Not Eligible.

NRHP Recommendations: Site requires no additional testing to determine National Register Status. The low artifact density and the recent age of the materials, and the lack of evidence for subplowzone deposits argues against eligibility.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE198	**Site Name:**	None recorded
Project Site Number:	LRP-059	**Date of Visit:**	17 June 1987
County: Lee		**USGS Quad:**	Soudan 1984 7.5

Location:	1/4	1/4	1/4; Section		T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered); minor recent historic.

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found; 20th century historic artifacts.

Description: Site 3LE198 (LRP-059) is a surface prehistoric artifact scatter, with minor amounts of recent historic debris, located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was fallow, with surface visibility ca. 60-80%. Artifacts were observed over an area of approximately 2400 square meters (80 x 30 m in maximum extent). Due to the varied ground cover, a general collection of all visible artifacts was made for a period of 1.0 person hour. The site area is on a bluff overlooking the main channel of the L'Anguille River, which is located ca. 30 m due north through a narrow treeline. The location and boundaries of the scatter were recorded on project blue line 1/5000 aerials. A one meter test unit was opened to a depth of 20 cm in the north part of the scatter, one sterile 10 cm level below the artifact bearing plowzone. A 30 cm x 30 cm test was then opened an additional 40 cm in the northeast corner of the unit. A permanent datum consisting of a 24 inch piece of iron rebar marked with red flagging tape was placed in the woodline 5 m northwest of the test unit. All fill

was dry screened through 1/4 inch mesh.

Condition: Currently unknown. No subplowzone materials were found, although both historic and prehistoric features may lie at the base of the plowzone. The site soils are classified as Alligator clay, frequently flooded (Ag; USDA 1977a), and are characterized by loess deposits with extensive silt clay particles below the plowzone (Profile obtained from test unit excavated to a depth of 60 cm in the north part of the scatter).

Previous Investigations: None reported; the site has in all probability seen prior collection by amateurs.

NRHP Status: Not Eligible.

NRHP Recommendations: Site requires no additional testing to determine National Register Status. Due to the low density of the scatter, and the lack of evidence for subplowzone materials, the site is not considered eligible.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE199	**Site Name:**	None recorded
Project Site Number:	LRP-060	**Date of Visit:**	18 June 1987
County:	Lee	**USGS Quad:**	Marianna 1984 7.5

Location:	1/4	1/4	1/4;	Section	T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Mississippian; 20th century historic.

Diagnostic Artifacts: 1 shell tempered sherd; 20th century historic artifacts.

Description: Site 3LE199 (LRP-060) was a low density prehistoric and historic artifact scatter located in a heavily disturbed cleared area overlooking the main channel of the L'Anguille River. The site area had been recently logged and bulldozed, and was very badly disturbed. Artifacts were observed over an area of approximately 2100 square meters (70 x 30 m in maximum extent); no concentrations were noted. The site area is on a bluff overlooking the main channel of the L'Anguille River, which is located ca. 60 m due east. A 100% sample of all visible artifacts was collected for a period of 1.0 person hours, and the site location and boundaries were recorded on project aerials in the field. No test units were opened at this site.

Condition: Highly disturbed. The site soils are classified as Loring silt loam, 8 to 12 % slopes, eroded (LoD2; USDA 1977a).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Not Eligible.

NRHP Recommendations: Site requires no additional testing to determine National Register Status. Due to the heavy equipment disturbance and the low density of the scatter, the site is not considered eligible.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE201	**Site Name:**	None recorded
Project Site Number:	LRP-062	**Date of Visit:**	19 June 1987
County: Lee		**USGS Quad:**	Soudan 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Woodland; 20th century historic.

Diagnostic Artifacts: Baytown plain pottery; 20th century historic artifacts.

Description: Site 3LE201 (LRP-062) is a very light surface artifact scatter located in a plowed field south of and overlooking the main channel of the L'Anguille River. At the time of survey, the site had been recently plowed and rained on, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 18000 square meters (180 x 100 m in maximum extent). Curiously, no artifacts were noted in the fields to the NE along the river margin, in spite of excellent visibility. The site area is on a bluff overlooking the main channel of the L'Anguille River, which is located ca. 30 m due north through the treeline. Because the artifact density was extremely low, a 100 percent controlled surface collection of all visible artifacts was made, with a minimum of one person-hour spent in collection (over two visits, 0.5 hours upon discovery, and another 0.5 hours during testing). No concentrations were noted; the location and boundaries of the scatter were recorded on project aerials in the field. A one meter test unit was opened to a depth of 26 cm in the northern part of the scatter, one sterile 10 cm level below the artifact bearing plowzone. A 30 cm x 30 cm test was then opened an additional 40 cm in one corner of the unit. The test was placed 10 m from the woodline in the north central part of the scatter. All fill was dry screened through 1/4 inch mesh.

Condition: Currently unknown. No subplowzone materials were found, although both historic and prehistoric features may lie at the base of the plowzone.The site soils are classified as Earle silty clay, gently undulating (EaB; USDA 1977a), and are characterized by silt loam in the plowzone underlain by compact gray silt clay (Profile obtained from test unit excavated to a depth of 60 cm in the northern part of the scatter).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined. Three 2 m test pits should be opened to determine if stratification is present, followed by deep site testing with a backhoe.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number: 3LE202 **Site Name:** None recorded
Project Site Number: LRP-063 **Date of Visit:** 19 June 1987
County: Lee **USGS Quad:** Soudan 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Unknown prehistoric.

Diagnostic Artifacts: No diagnostic prehistoric artifacts were recovered.

Description: Site 3LE202 (LRP-063) is a very light surface prehistoric artifact scatter located in a plowed field south of and overlooking the main channel of the L'Anguille River. At the time of survey the site had been recently plowed and rained on, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 2100 square meters (70 x 30 m in maximum extent). The site is located just to the SW of the field containing 3LE201 (LRP-062), and begins west of where a field road running through the woods between the sites opens out into a long narrow field. The site area is on a bluff overlooking the main channel of the L'Anguille River, which is located ca. 40 m due north downslope through the treeline. A 100 percent collection of all visible artifacts was made for a period of 0.5 person-hours, and the location and boundaries of the scatter were recorded on project blue line 1/5000 aerials. A one meter test unit was opened to a depth of 20 cm, one sterile 10 cm level below the artifact bearing plowzone. A 30 cm x 30 cm test was then opened an additional 40 cm in the NE corner of the unit. The unit was located in the eastern part of the scatter near where the farm road enters the field and under a large (shade) tree. All fill was dry screened through 1/4 inch mesh.

Condition: No subplowzone materials were found, and the scatter was very low density. The site soils are classified as Earle silty clay, gently undulating (EaB; USDA 1977a), and are characterized by silt loam underlain by silt clay below plowzon (Profile obtained from test unit excavated to a depth of 60 cm in the eastern part of the artifact scatter).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Not Eligible.

NRHP Recommendations: Site requires no additional testing to determine National Register Status. Due to the low density of the scatter and the lack of evidence for subplowzone deposits the site is not considered eligible.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number: 3LE203 **Site Name:** None recorded
Project Site Number: LRP-064 **Date of Visit:** 19 June 1987
County: Lee **USGS Quad:** Soudan 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Unknown prehistoric.

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3LE203 (LRP-064) is a very light surface prehistoric artifact scatter located in a plowed field south of and overlooking the main channel of the L'Anguille River. At the time of survey the site was in low soybeans offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 1000 square meters (50 x 20 m in maximum extent). The site area was revisited on July 29th and 30th, 1987 when a 1 m test unit was opened in the north-central part of the scatter near the treeline. The site area is on a bluff overlooking the main channel of the L'Anguille River, which is located ca. 50 m due north down a fairly steep bluff through the woods. Because the artifact density was extremely low, a 100 percent controlled surface collection of all visible artifacts was made for one person-hour (0.5 hours on 6/19/87, 0.5 hours on 7/30/87); the location and boundaries of the scatter were recorded on project blue line 1/5000 aerials. A one meter test unit was opened to a depth of 18 cm, one sterile 10 cm level below the artifact bearing disk zone. A 30 cm x 30 cm test was then opened an additional 40 cm in the SE corner of the unit. The unit was placed ca. 3 m south of the woodline at the north central part of the scatter. All fill was dry screened through 1/4 inch mesh.

Condition: Currently unknown. No subplowzone materials were found, although both historic and prehistoric features may lie at the base of the plowzone. The site soils are classified as Earle silty clay, gently undulating (EaB; USDA 1977a), and are characterized by silt loam with extensive fine clay particles below the plowzone. (Profile obtained from test unit excavated to a depth of 58 cm in the northern part of the scatter).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Not Eligible.

NRHP Recommendations: Site requires no additional testing to determine National Register Status. The low density of the scatter and the lack of evidence for subplowzone deposits argues against eligibility.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE205	**Site Name:**	None recorded
Project Site Number:	LRP-066	**Date of Visit:**	19 June 1987
County: Lee		**USGS Quad:**	Marianna 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Unknown prehistoric (Dalton?), minor recent historic debris.

Diagnostic Artifacts: 1 (Dalton?) adze butt.

Description: Site 3LE205 (LRP-066) is a very light surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was in low milo, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of

approximately 6250 square meters (125 x 50 m in maximum extent). A narrow powerline corridor and farm road runs along the northern margin of the scatter, and artifacts were found eroding out of gullies in this area. A recent meander loop and lower terrace area lies to the west and southwest of the site. The area is on a bluff overlooking the main channel of the L'Anguille River, which is located ca. 20 m west. Due to the extremely low density of the scatter away from the gully area where most materials were found, a 100 percent controlled surface collection of all visible artifacts was collected for one person-hour. The location and boundaries of the scatter were recorded on project blue line 1/5000 aerials. A one meter test unit was opened ca. 10 m south of the gully and ca. 5 m west of the tree line. The 1 m pit was opened to 22 cm, with a 30 cm x 30 cm test opened an additional 40 cm in the SW corner of the unit. All fill was dry screened through 1/4 inch mesh. A metal pipe located at the woods edge 6 m southwest of the southwest corner of the unit served as the permanent datum and was marked with red flagging tape.

Condition: Currently unknown. Two flakes were found from 20-30 cm, in subplowzone context, although extensive root disturbance was evident and may account for these artifacts. Historic and prehistoric features may lie at the base of the plowzone, although no evidence for this was found in the testing. The site soils are classified as Alligator clay, frequently flooded (Ag; USDA 1977a), and are characterized by loess (fine silts) underlain by silt-clays below the plowzone. (Profile obtained from test unit excavated to a depth of 62 cm).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined. Three 2 m test pits should be opened to determine if stratification is present, followed by deep testing with a backhoe.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE206	**Site Name:**	None recorded
Project Site Number:	LRP-069	**Date of Visit:**	23 June 1987
County:	Lee	**USGS Quad:**	Soudan 1984 7.5

Location:	1/4	1/4	1/4;	Section	T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Early Archaic, Middle Archaic (?), Late Archaic, Late Archaic/Woodland, Woodland; 20th century historic.

Diagnostic Artifacts: 2 Hardin, 1 basal-notched point, 2 Big Creek points, 1 Burkett, 1 Weems, 1 Gary Baytown Plain, 1 Dickson point, 1 Baytown point; Baytown Plain pottery; 20th century historic artifacts.

Description: Site 3LE206 (LRP-069) is a very large, diffuse surface scatter of prehistoric and historic artifacts in a plowed field to the north of and overlooking the main channel of the L'Anguille River (Figures 53, 54). At the time of survey, the site was in low milo and soybeans, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 20000 square meters (500 x 40 m in maximum extent) along the terrace margin. The site area was divided into four ca. 125 m

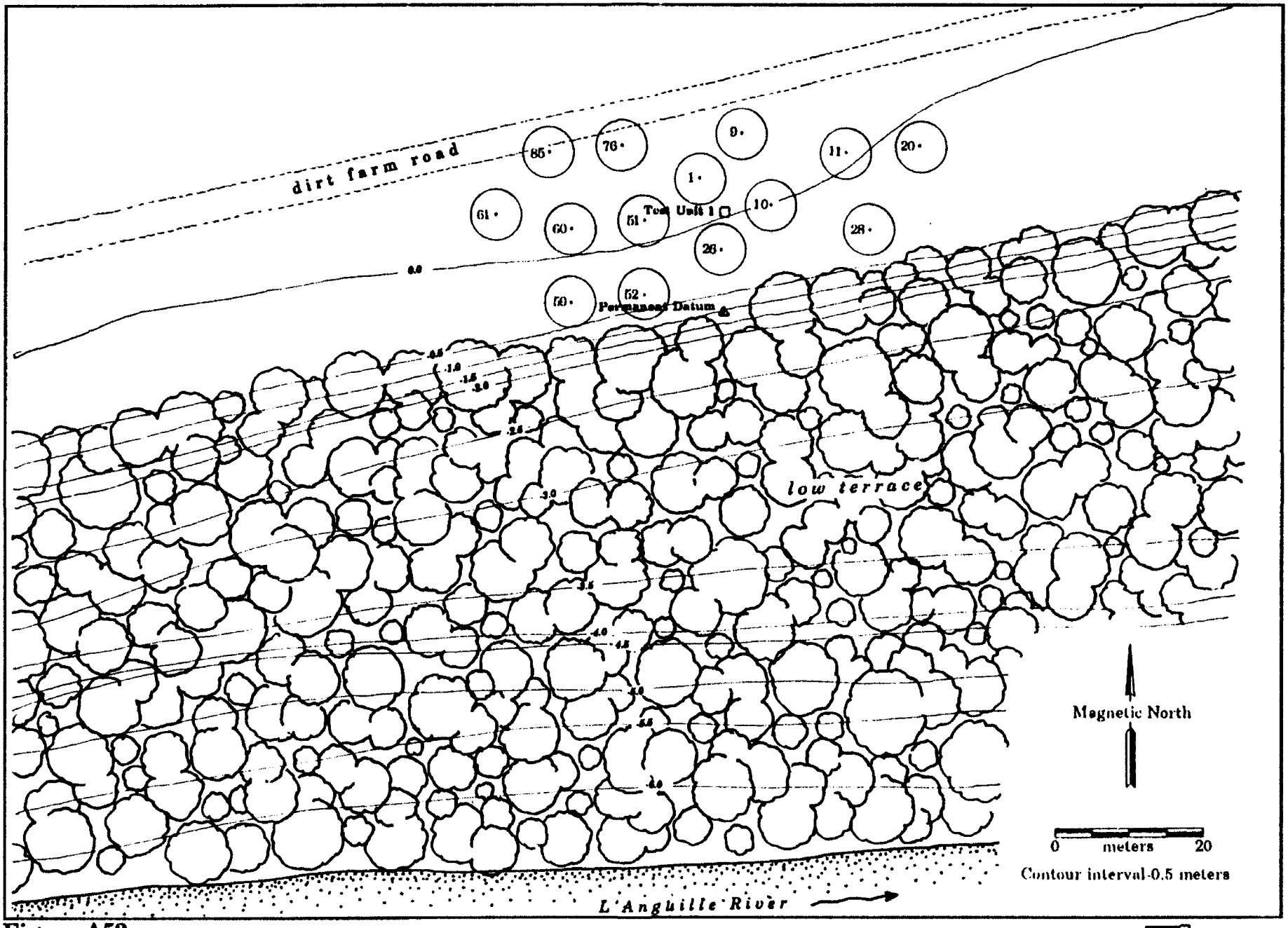
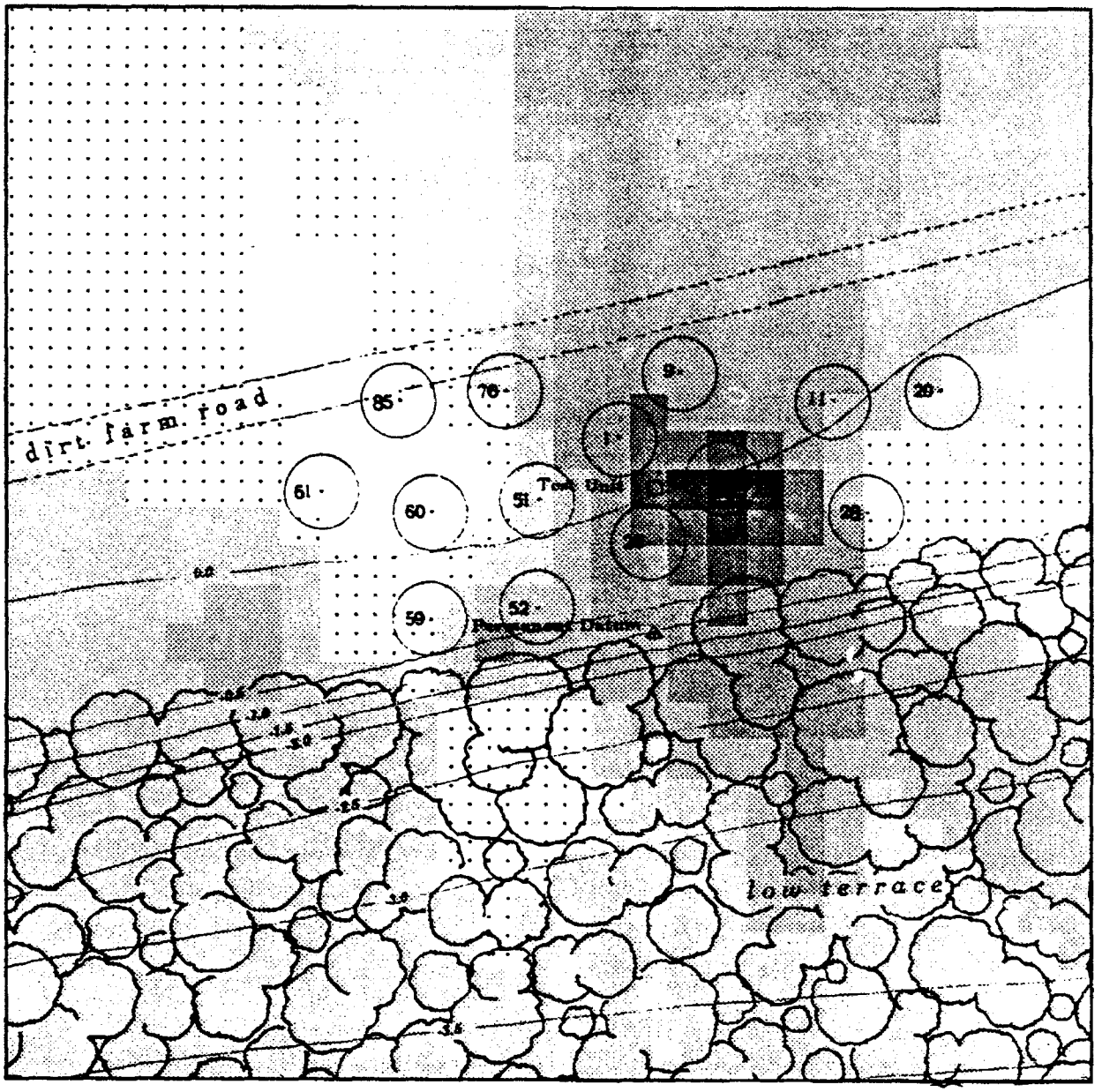


Figure A53.
Site 3LE206 (LRP-69) Proveniences
Controlled Surface Collection Circles
and Test Units.

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Average Artifact Density (number of artifacts)

-- 2
-- 3
-- 5
-- 6
-- 7
-- 8
-- 10
-- 11
-- 12

Magnetic North

= Controlled Surface Collection Unit (3.34 m radii)

0 25
Meters

Figure A54.
Site 3LE206 (LRP-69)
Prehistoric Artifacts - Surface Distributions.

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segments proceeding from west to east along the field; these were designated areas A, B, C, and D, respectively. The site area is on a bluff overlooking the main channel of the L'Anguille River, which is located ca. 80-100 m due south through the woods. A second, lower terrace lies below the site, between it and the river. A controlled surface collections were made using fourteen 3.34 m radii circles in Area B. A 100% general collections for a minimum of 1 person-hour each were made in Areas A, C, and D. A one meter test unit was opened in Area D in the eastern part of the scatter to a depth of 32 cm, one sterile 10 cm level below the artifact bearing levels. A 30 cm x 30 cm test was then opened an additional 40 cm in the SW corner of the unit. Two soil cores were taken from Area D, one by the unit and one 15 m south, on the lower terrace (Appendix II)

Condition: Currently unknown. No subplowzone materials were found, although both historic and prehistoric features may lie at the base of the plowzone. The site soils are classified as Earle silty clay, gently undulating. Two soil cores were taken in 3LE206D (LRP-069D) area, one to 260 cm in the site area and a second to 160 cm on the lower terrace. A test unit was also excavated to a depth of 72 cm in Area D.

Previous Investigations: None reported; the site area has likely seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined. Three 2 m test pits should be opened to determine if stratification is present, followed by extensive deep testing along the upper and lower terrace areas.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE207	**Site Name:**	None recorded
Project Site Number:	LRP-071	**Date of Visit:**	9 June 1987
County:	Lee	**USGS Quad:**	Soudan 1984 7.5

Location:	1/4	1/4	1/4; Section		T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Late Archaic, Woodland; 20th century historic

Diagnostic Artifacts: 1 Motley-like point, Baytown Plain pottery; 20th century historic artifacts.

Description: Site 3LE207 (LRP-071) is a surface artifact scatter located in a plowed field to the north of and overlooking the main channel of the L'Anguille River (Figure 55). At the time of survey the site was in low soybeans (< 6 in. high), offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 1300 square meters (70 x 20 m in maximum extent). The site is located just beyond a fenceline demarcating the end of 3LE206 (LRP-069), and just before a field cleared almost to the river on the lower terrace. The site area is on a bluff overlooking the main channel of the L'Anguille River, which is located ca. 100 m due south of the site area. A lower terrace is located in the woods to the south, between the site and the river. A controlled surface collection was made using thirteen 3.34 m radii circles dispersed using a stratified systematic unaligned procedure. A minimum of 5 minutes was spent in every circle, and collection proceeded until no more artifacts could be found. A one meter test unit was opened to a depth of 20 cm in the south-central part of the scatter, one sterile 10 cm level below the artifact bearing

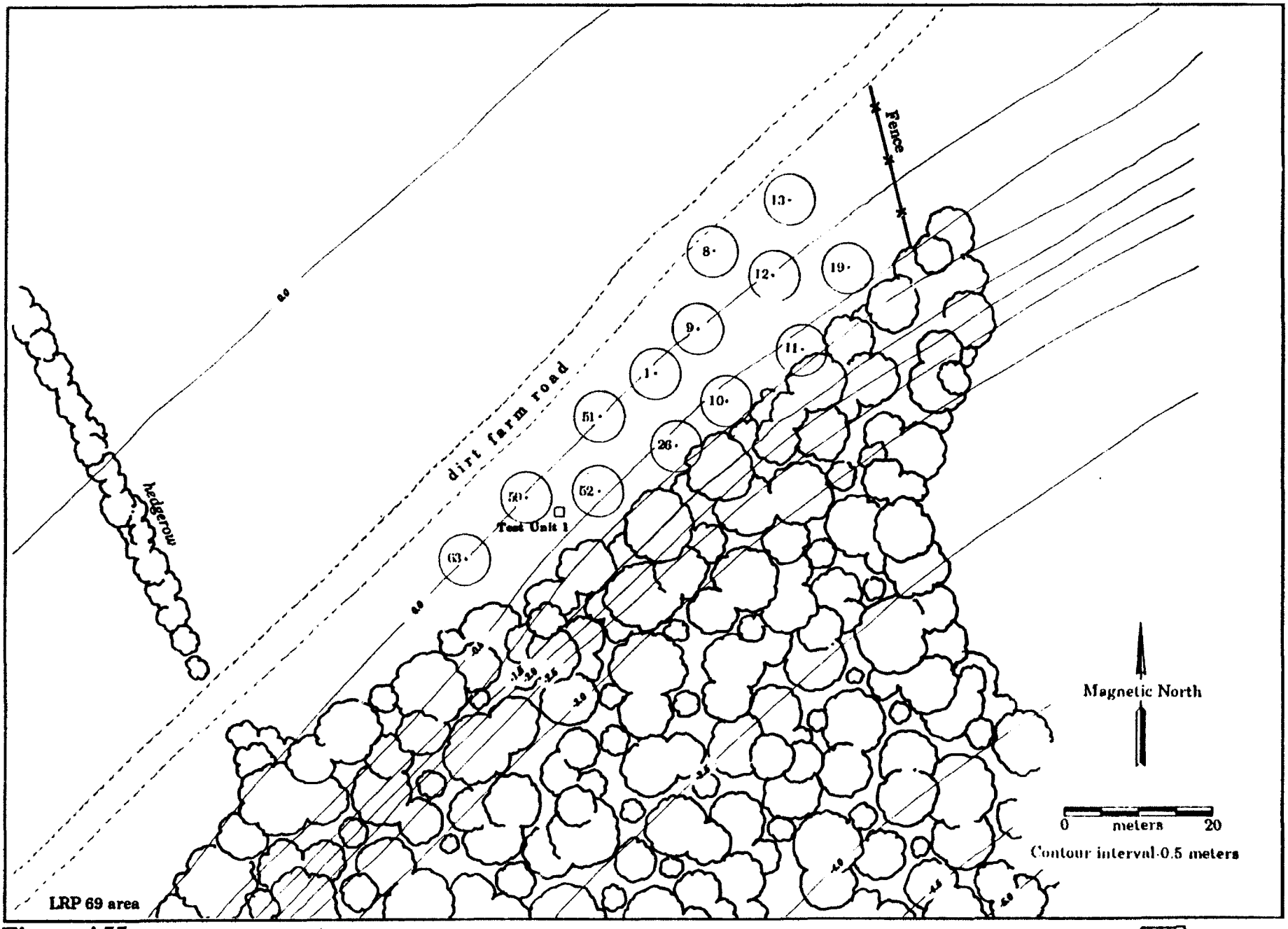


Figure A55.
Site 3LE207 (LRP-71) Proveniences
Controlled Surface Collection Circles
and Test Units.

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plowzone. A 30 cm x 30 cm test was then opened an additional 30 cm in one corner of the unit. A permanent datum consisting of a 24 inch piece of iron rebar marked with red flagging tape was located in the woodline 10 m south of the NW corner of the testpit. All fill was dry screened through 1/4 inch mesh.

Condition: Currently unknown. No subplowzone materials were found, although both historic and prehistoric features may lie at the base of the plowzone. The site soils are classified as Earle silty clay, gently undulating (EaB; USDA 1977a), and are characterized by loess deposits with extensive fine clay particles in the upper part of profile. A 1 m test unit was excavated to a depth of 50 cm in the center of the scatter.

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Not Eligible.

NRHP Recommendations: Site requires no additional testing to determine National Register Status. Due to the low density of the scatter, and the lack of evidence for subplowzone materials, the site is not considered eligible.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE208	**Site Name:**	None recorded
Project Site Number:	LRP-072	**Date of Visit:**	23 June 1987
County: Lee		**USGS Quad:**	Soudan 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Late Archaic/Woodland; 20th century historic.

Diagnostic Artifacts: 1 Gary point; 20th century historic artifacts.

Description: Site 3LE208 (LRP-072) is a surface prehistoric and historic artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River (Figures 56, 57). At the time of survey the site was in low (< 6 in. high) soybeans, offering excellent surface visibility. The site extends along an upper terrace margin; a broad lower terrace lies in the woods between the site and the river. Artifacts were observed over an area of approximately 1700 square meters (80 x 30 m in maximum extent. The site area is on a bluff overlooking the main channel of the L'Anguille River, which is located ca 100 m southeast. A controlled surface collection was made using seventeen 3.34 m radii circles, and a one meter test unit was opened to a depth of 25 cm in the southeast side of the scatter, one sterile 10 cm level below the artifact bearing plowzone. A 30 cm x 30 cm test was then opened an additional 40 cm in one corner of the unit. A permanent datum consisting of a 12 inch piece of iron rebar marked with red flagging tape was placed in the woodline 1.75 m east of the unit corner. All fill was dry screened through 1/4 inch mesh.

Condition: No subplowzone materials were found, and the scatter appears extremely low density. The site soils are classified as Earle silty clay, gently undulating (EaB; USDA 1977a), and are characterized by loess deposits with extensive fine clay particles below the plowzone. A 1 m test unit was opened to a depth of 65 cm in the southeast side of the artifact scatter.

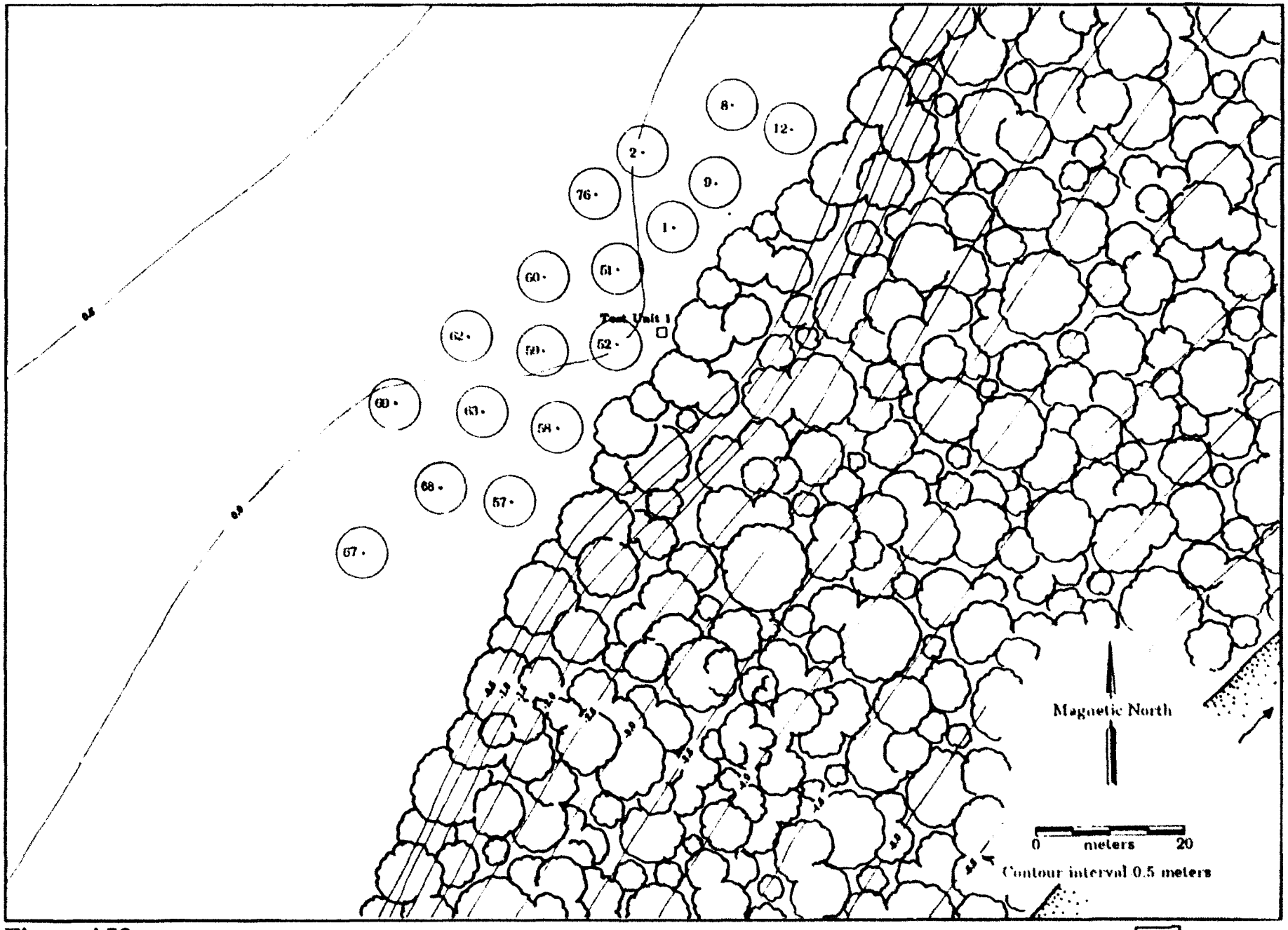
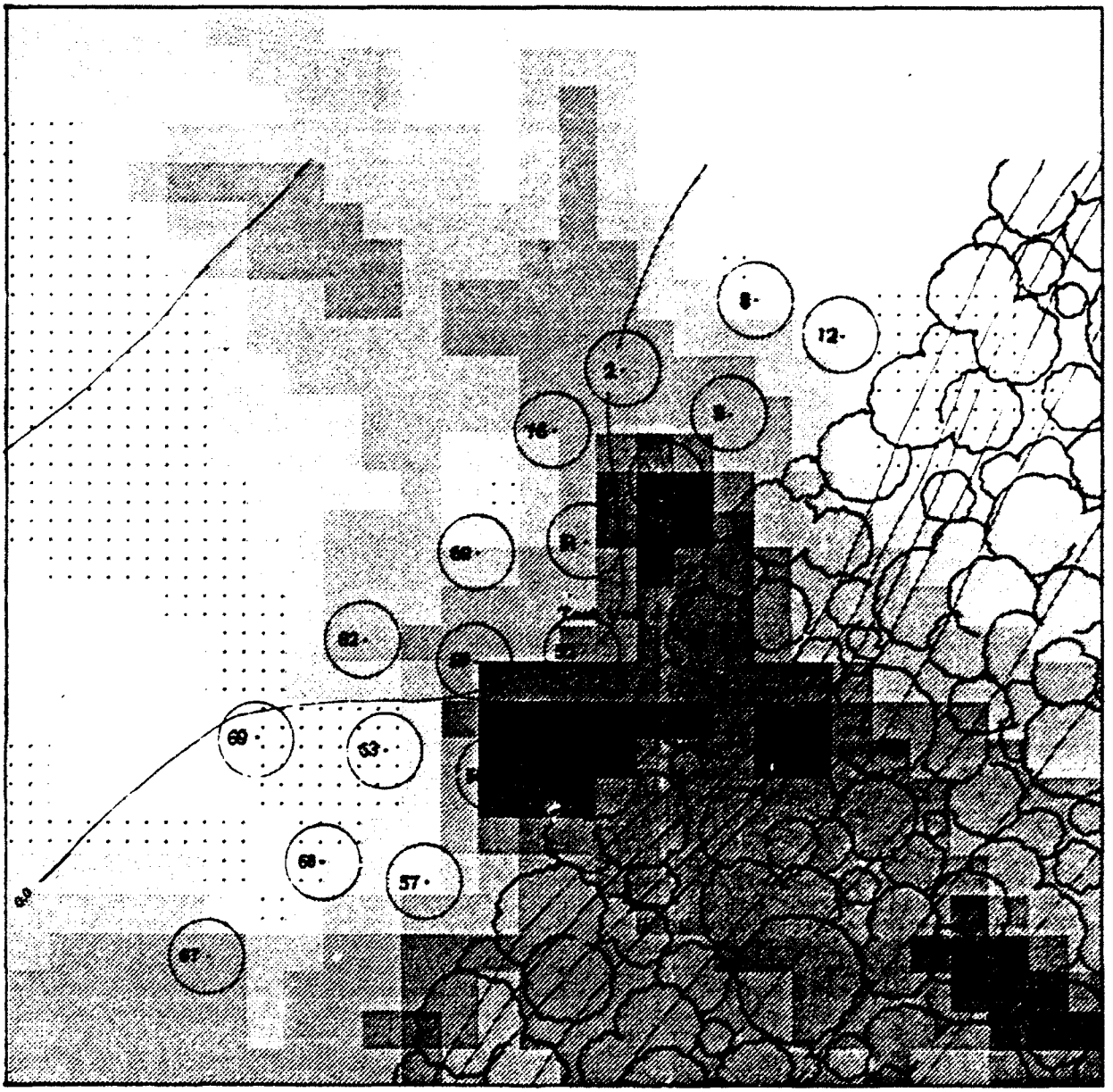


Figure A56.
Site 3LE208 (LRP-72) Proveniences
Controlled Surface Collection Circles
and Test Units.

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Average Artifact Density (number of artifacts)

-- 2.2
-- 3.1
-- 4.0
-- 4.9
-- 5.8
-- 6.7
-- 7.7
-- 8.6
-- 9.5

= Controlled Surface Collection Unit (3.34 m radii)

Magnetic North

0 25
Meters

Figure A57.
Site 3LE208 (LRP-72)
Prehistoric Artifacts - Surface Distributions.

ARKANSAS
L'Anguille River Survey Project

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Not Eligible.

NRHP Recommendations: Site requires no additional testing to determine National Register Status. Due to the low density of the scatter and the absence of evidence for subplowzone deposits, the site is not considered eligible.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE209	**Site Name:**	None recorded
Project Site Number:	LRP-073	**Date of Visit:**	22 June 1987
County:	Lee	**USGS Quad:**	Soudan 1984 7.5

Location:	1/4	1/4	1/4;	Section	T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Recent historic scatter (old tenant house site?)

Diagnostic Artifacts: 20th century historic artifacts.

Description: Site 3LE209 (LRP-073) was a light recent historic surface artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River, just northwest of the modern confluence of the L'Anguille with the St. Francis. At the time of survey, the site was in low soybeans, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 1500 square meters (75 x 20 m in maximum extent). The site area is on a bluff overlooking both the L'Anguille and the St. Francis rivers. The main channel of the L'Anguille River is located ca. 100 m due east of the site area, while the modern course of the St. Francis is located ca. 40 m to the NE; the confluence is ca. 50 m due east. A 100% sample of all visible artifacts was collected for a period of 1.0 person-hours; the location and boundaries of the scatter were recorded on project blue line 1/5000 aerials. No test units were opened at this site due to the recent age of the scatter.

Condition: Recent debris scatter. The site soils are classified as Alligator clay, frequently flooded (Ag ; USDA 1977a).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Not Eligible.

NRHP Recommendations: Site requires no additional testing to determine National Register Status. Due to the recent age of the scatter it is not considered eligible.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number: 3LE210 **Site Name:** None recorded
Project Site Number: LRP-074 **Date of Visit:** 9 June 1987
County: Lee **USGS Quad:** Soudan 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Unknown prehistoric; 20th century historic.

Diagnostic Artifacts: No diagnostic prehistoric artifacts were recovered; 20th century historic artifacts.

Description: Site 3LE210 (LRP-074) is a very low density prehistoric surface artifact scatter, with a minor amount of recent historic material, located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. A minor drainage channel marked by a treeline enters the river in this area, and defines the northwestern margin of the scatter. The site area is on a low bluff overlooking the main channel of the L'Anguille River, which is located ca. 40 m southwest down a fairly steep bluff beyond a narrow treeline. At the time of survey the site area was fallow, having been plowed the previous fall, offering fair surface visibility, between 25 and 75%. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 1875 square meters (75 x 25 m in maximum extent). The location and boundaries of the scatter were recorded on project blue line 1/5000 aerials, and a 100 percent collection of all visible artifacts was collected for one person-hour. A one meter test unit was opened in the center of the scatter 15 m east of the field margin. This unit was opened to a depth of 22 cm, one sterile 10 cm level below the artifact bearing plowzone. A 30 cm x 30 cm test was then opened an additional 40 cm in the southeast corner of the unit. All fill was dry screened through 1/4 inch mesh.

Condition: No subplowzone materials were found. The site soils are classified as Alligator clay, frequently flooded (Ag; USDA 1977a), and are characterized by silt loam underlain by dense silt-clays (test unit opened to 62 cm in center of scatter).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Not Eligible.

NRHP Recommendations: Site requires no additional testing to determine National Register Status. Due to the low density of the scatter and the lack of evidence for subplowzone deposits the site is not considered eligible.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number: 3LE211 **Site Name:** None recorded
Project Site Number: LRP-075 **Date of Visit:** 22 June 1987
County: Lee **USGS Quad:** Soudan 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Unknown prehistoric.

Diagnostic Artifacts: No diagnostic prehistoric artifacts recovered.

Description: Site 3LE211 (LRP-075) is a very low density surface prehistoric artifact scatter located in a plowed field south of and overlooking the main channel of the L'Anguille River. At the time of survey, the site was in low (< 6 in. high) soybeans, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 250 square meters (25 x 10 m in maximum extent). Site 3LE197 (LRP-058) is located ca. 75 m to the east through a wooded area. Isolated Find-10 (Acc. #87-952-1), an aborted adz preform, was found ca. 30 m west of this scatter and is included as a part of it. The site area is on a bluff overlooking the main channel of the L'Anguille River, which is located ca. 60 m due north downslope through a thick treeline. The location and boundaries of the scatter were recorded on project aerials, and a 100 percent controlled collection of all visible artifacts was made for one person-hour. A one meter test unit was opened to a depth of 28 cm, one sterile 10 cm level below the artifact bearing levels. A 30 cm x 30 cm test was then opened an additional 40 cm in the NE corner of the unit. A permanent datum consisting of a large spike was placed at the base of a large tree 4 m north and 1 m east of the NE corner of the unit. All fill was dry screened through 1/4 inch mesh.

Condition: No subplowzone materials were found. The site soils are classified as Earle silty clay, gently undulating(EaB; USDA 1977a), and are characterized by silt loam with extensive fine clay particles below the plowzone. (Profile determined from a test unit opened to 68 cm in the northwest corner of the scatter, near the woods margin).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Not Eligible.

NRHP Recommendations: Site requires no additional testing to determine National Register Status. Due to the extremely low density of the scatter and the lack of evidence for subplowzone deposits the site is not considered eligible.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE213	**Site Name:**	None recorded
Project Site Number:	LRP-082	**Date of Visit:**	2 July 1987
County: Lee		**USGS Quad:**	Haynes 1958/1976 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Middle Archaic; trace modern historic debris.

Diagnostic Artifacts: 1 Cache River; 1 basal notched point; 1 brick fragment.

Description: Site 3LE213 (LRP-082) is a surface artifact scatter located in a plowed and fallow field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site had been fallow since the previous fall, and surface visibility was between 50 and 75%. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 3000 square meters (100 x 30 m in maximum extent). The site area

is on a low terrace overlooking the main channel of the L'Anguille River, which is located ca. 50-75 m due east through a tree line. A boat landing was located at the north end of the site, in the woods. The location and boundaries of the scatter were recorded on project aerials, and a 100 % surface collection of every visible artifact was collected for a period of 1.5 person-hours. No test units were opened.

Condition: Currently unknown. The site soils are classified as Zachary soils, frequently flooded (Za; USDA 1977a).

Previous Investigations: None reported; according to the tenant the site area has seen extensive prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: The site requires testing before National Register Status can be adequately determined.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE214	**Site Name:**	None recorded
Project Site Number:	LRP-083	**Date of Visit:**	2 July 1987
County:	Lee	**USGS Quad:**	Haynes 1958/1976 7.5

Location:	1/4	1/4	1/4;	Section	T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Unknown prehistoric; trace modern historic debris

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found; 1 modern glass fragment.

Description: Site 3LE214 (LRP-083) is a very light surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site had been fallow since the previous winter, offering ca. 75% surface visibility (ca. 50-75%). No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed on a low rise over an area of approximately 3000 square meters (60 x 50 m in maximum extent). A dense swamp is located immediately NW of the site, and extensive levee construction has occurred to the north of this swamp along the river. The site is located on thick silt/clay deposits and is on a low terrace overlooking the main channel of the L'Anguille River, which is located ca. 40 to 50 m to the northeast. The location and boundaries of the scatter were recorded on project aerials, and a 100% surface collection of all visible artifacts was made for a period of 1.5 person-hours. No test units were opened at this site.

Condition: Currently unknown. The site soils are classified as Zachary soils, frequently flooded (Za; USDA 1977a).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately

determined.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE215	**Site Name:**	None recorded
Project Site Number:	LRP-084	**Date of Visit:**	3 July 1987
County: Lee		**USGS Quad:**	Haynes 1958/1976 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Late Archaic/Woodland; trace modern historic debris.

Diagnostic Artifacts: 1 Weems-like projectile point; 1 recent glass fragment.

Description: Site 3LE215 (LRP-084) is a light surface prehistoric artifact scatter located in a field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site had been fallow since the previous fall or winter, offering good surface visibility (ca. 50-75%). No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 2250 square meters (75 x 30 m in maximum extent). The site area is on a low terrace overlooking the main channel of the L'Anguille River, which is located ca. 20 m due east through a narrow treeline. Very little relief was noted over field area. The location and boundaries of the scatter were recorded on project aerials, and a 100 percent surface collection of every visible artifact was made for 1.5 person-hours. No test units were opened at this site.

Condition: Currently unknown. The site soils are classified as Zachary soils, frequently flooded (Za; USDA 1977a).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE216	**Site Name:**	None recorded
Project Site Number:	LRP-085	**Date of Visit:**	25 June 1987
County: Lee		**USGS Quad:**	Haynes 1958/1976 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered).

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3LE216 (LRP-085) is a very light prehistoric surface artifact scatter located in a field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was fallow, having been plowed the previous fall or winter; surface visibility was ca. 50-75%. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 7500 square meters (125 x 50 m in maximum extent). The site area is on a low terrace overlooking the main channel of the L'Anguille River, which is located ca. 10 to 20 m due north through a narrow treeline, and ca. 200 m east of the site through a low swampy area. The location and boundaries of the scatter were recorded on project blue line aerials, and on USDA County Soil Map aerials and USGS quad sheets. A 100 percent controlled surface collection of every visible artifact was made for 1.5 person-hours. No test units were opened at this site.

Condition: Currently unknown. The site soils are classified as Zachary soils, frequently flooded (Za; USDA 1977a).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE217	**Site Name:**	None recorded
Project Site Number:	LRP-086	**Date of Visit:**	25 June 1987
County:	Lee	**USGS Quad:**	Haynes 1958/1976 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Late Archaic.

Diagnostic Artifacts: 1 Burkett projectile point.

Description: Site 3LE217 (LRP-086) is a very light surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was fallow, having been plowed the previous fall or winter, offering good surface visibility (between 50 and 75%). No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 3500 square meters (70 x 50 m in maximum extent). The site area is on a low terrace overlooking the main channel of the L'Anguille River, which is ca. 75 m due east through a low swampy area. The locations and boundaries of the scatter were recorded on project blue line aerials, and a 100 percent controlled surface collection of every visible artifact was made for 1.5 person-hours. No test units were opened at this site.

Condition: Currently unknown. The site soils are classified as Zachary soils, frequently flooded (Za; USDA 1977a).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE218	**Site Name:**	None recorded
Project Site Number:	LRP-087	**Date of Visit:**	2 July 1987
County:	Lee	**USGS Quad:**	Haynes 1958/1976 7.5

Location:	1/4	1/4	1/4; Section		T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Dalton, Late Archaic; possible Early Archaic, Woodland.

Diagnostic Artifacts: 1 Dalton, 1 (Early Archaic?) corner notched point, 1 Burkett, 1 Gary projectile point); 1 grog tempered sherd.

Description: Site 3LE218 (LRP-087) is a dense surface artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was fallow, offering good surface visibility (ca. 50%). No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 17500 square meters (350 x 50 m in maximum extent). The site is heavily eroded in several areas, with gullies up to 0.75 m deep. Many of these had large quantities of artifacts in their sides and bottom. The site area was arbitrarily divided into three roughly 100 x 50 m areas designated A, B, and C, proceeding from north to south, respectively. The site area is on a low terrace overlooking the main channel of the L'Anguille River, which is located ca. 100 m due east, through a low swampy wooded area. The locations and boundaries of the scatter were recorded on the project aerials, and a 100 percent controlled surface collection of every visible artifact was made, for 1.0 hours in Areas A and C (northern and southern 100 m of the scatter), with 3.0 person hours spent in Area B, the heavily eroded central portion of the site, where the greatest artifact density was noted. A great deal of material was observed on the surface, and the six person hours spent in collection time did not begin to recover all that was visible. This appears to be a very rich site.

Condition: Currently unknown. The site soils are classified as Zachary soils, frequently flooded (Za; USDA 1977a). Artifact occurrence in eroding gullies suggests up to 50 - 60 cm of stratified deposits may be present.

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE221	**Site Name:**	None recorded
Project Site Number:	LRP-183	**Date of Visit:**	14 July 1987
County:	Lee	**USGS Quad:**	Marianna 1984 7.5

Location:	1/4	1/4	1/4; Section		T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered).

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3LE221 (LRP-183) was located on a high bluff overlooking the L'Anguille River channel. The site area was densely overgrown in mature hardwoods, and was discovered during systematic shovel testing along the river margin. The site area (ca. 30 m in diameter) is boxed between two large erosional gullies. Three positive shovel tests were found here, two on the bluff edge and one ca. 30 m back from it. Artifacts occurred an area of approximately [illegible] square meters (30 x 30 m in maximum extent). A 1 m test unit (marked with rebar) was placed 10 m back from the bluff edge near (flagged) positive shovel test 2. The site area is on a bluff overlooking the main channel of the L'Anguille, which is located immediately east. At the time of survey the site area was in dense woods; artifacts were found in the upper 20 cm or so of three positive shovel tests on a bluff overlooking the river. Systematic shovel testing at 30 m intervals located the site; when the first positive test occurred, this interval was reduced to 10 m. A one meter test unit was opened to a depth of 40 cm in the center of the scatter, two sterile 10 cm levels below the artifact bearing levels. A 30 cm x 30 cm test was then opened an additional 40 cm in one corner of the unit; no artifacts were found. A permanent datum consisting of a 24 inch piece of iron rebar marked with red flagging tape was placed in the corner of the unit. All fill from shovel tests and test pits was dry screened through 1/4 inch mesh.

Condition: Currently unknown. The site soils are classified as Alligator clay, frequently flooded; these appear to be mapped wrong, and are probably Loring silt loam (Ag; USDA 1977a). The deposits are characterized by a root/humus mat in the first 5 cm; from 5 to 20 cm by yellow clayey silt (the artifact-bearing zone); and from 20 to 80 by yellow gray silty clay, with the incidence of clay increasing with depth.

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number: 3LE222 **Site Name:** None recorded
Project Site Number: LRP-184 **Date of Visit:** 14 July 1987
County: Lee **USGS Quad:** Marianna 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered).

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3LE222 (LRP-184) is a subsurface prehistoric artifact scatter in dense woods on a bluff adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was densely wooded, with visibility 0%. Artifacts were observed eroding out of the bluff face along the river, and in a gully immediately to the north. Seven shovel tests were opened in the woods back from the bluff; only one yielded artifacts. A 1 m test unit was opened southwest of this shovel test, yielding a number of artifacts in a horizon at a depth of ca. 17 to 27 cm below the surface. A general collection was made from the eroding bluff face, with the remaining materials coming from the positive shovel test and from the 1 m unit. An intact component is indicated. The scatter appears to extend over a maximum area of approximately 1000 square meters (30 x 30 m in maximum extent). The site area is on a bluff overlooking the main channel of the L'Anguille, which is located immediately east. The one meter test unit was opened to a depth of 47 cm, two sterile 10 cm levels below the artifact bearing zone. A 30 cm x 30 cm test was then opened an additional 20 cm in the northwest corner of the unit. A permanent datum, a 24 inch piece of iron rebar marked with red flagging tape was placed next to the corner of this unit. All fill from the shovel tests and the 1 m unit was dry screened through 1/4 inch mesh.

Condition: The site soils are classified as Alligator clay, frequently flooded (Ag; USDA 1968). The deposits are characterized by a humus/rootmat from 0-7 cm; sterile sand from 7 to 17 cm; light brown/gray silt clay from 17 to 47 cm; and compact silt clay from 47 to 77 cm.

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number: 3LE223 **Site Name:** None recorded
Project Site Number: LRP-185 **Date of Visit:** 21 June 1987
County: Lee **USGS Quad:** Marianna 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered).

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3LE223 (LRP-185) is a very low density prehistoric surface artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was in low soybeans and had been rained on, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 1500 square meters (50 x 30 m in maximum extent). The pieces of debitage that were observed may be outlying debris from site 3LE224 (LRP-186), which is located upslope to the west. The site area is on a low terrace overlooking the main channel of the L'Anguille, which is located ca. 25 m due east. A 100% collection of all visible artifacts was collected for ca. 30 person minutes. A few pieces of debitage was observed and collected (the entire site was thoroughly combed in ca. 30 person-minutes minutes); these artifacts were unfortunately later lost in the lab. The location and extent of the scatter was recorded on project aerials, and a one meter test unit was opened 3 m south of a gate in a barbed wire fence on the northeast side of the scatter. This unit was opened to a depth of 24 cm cm, two sterile 10 cm levels below the artifact bearing 4 cm thick disk zone. No 30 cm x 30 cm test was opened and screened as the underlying soils, which were probed to ca 50 cm, were brick-hard gray backswamp clays.

Condition: Currently unknown. The site soils are classified as Alligator clay, frequently flooded (Ag; USDA 1977a), and are characterized by a thin silt/clay plowzone ca. 10 cm thick underlain by at least 50 cm of dense gray clay (1 m test unit opened).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires no additional testing to determine National Register Status. The scatter is very low density, and is lying on clay deposits, suggesting redeposition from LRP-186 to the west.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE226	**Site Name:**	None recorded
Project Site Number:	LRP-188	**Date of Visit:**	14 July 1987
County:	Lee	**USGS Quad:**	Marianna 1984 7.5

Location:	1/4	1/4	1/4;	Section	T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Early Woodland/Tchula-Marksville, later Woodland.

Diagnostic Artifacts: Tchefuncte Stamped, Baytown Plain pottery.

Description: Site 3LE226 (LRP-188) is a dense prehistoric artifact scatter located on the end of a long ridgenose extending out into the L'Anguille River swamp. At the time of survey, the site was densely overgrown in hardwoods; these were being logged as the site area was tested. Material was restricted to the crest of the ridge, where artifacts were found in 6 consecutive shovel tests spaced at 30 m intervals within an area approximately 4500 square meters (150 x 30 m in maximum extent). The main channel of the L'Anguille River is located ca. 50 to 75 m southwest, down a steep slope. No material was found in shovel tests on the ridge slopes. The upper soil profile (ca. 0 to 20 cm) exhibited extensive disturbance, presumably from previous logging

activity; below this the deposits were undisturbed. A one meter test unit was opened in 10 cm levels to 70 cm; artifacts were found in every level, and in the first 20 cm of the 30 cm x 30 cm test opened to 120 cm in the NE corner of the unit. A permanent datum consisting of a 24 inch piece of iron rebar marked with red flagging tape was placed in one corner of the backfilled unit. All fill from shovel tests and test pits was dry screened through 1/4 inch mesh.

Condition: Stratified deposits were found. The site soils are classified as Memphis silt loam, 1 to 3% slopes, 8 to 12% slopes, eroded (MeB/MeD2; USDA 1977a), and are characterized by loess deposits. (Profile obtained from test unit excavated to a depth of 120 cm).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined. Test pits should be opened to determine the nature of the stratification that was observed.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE229	**Site Name:**	None recorded
Project Site Number:	LRP-191	**Date of Visit:**	15 July 1987
County:	Lee	**USGS Quad:**	Marianna 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered).

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3LE229 (LRP-191) is a dense historic and prehistoric artifact scatter located on a woods on a bluff edge adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, all but the eastern edge of the area, which was a field in high soybeans, was densely overgrown. The field was surface collected for ca. 15 person-minutes but little was noted; most of the site is in the woods. Artifacts were observed over an area of approximately 3750 square meters (75 x 50 m in maximum extent). Three shovel tests were opened in the woods to determine stratigraphy (historic debris was scattered over the area). A possible privy hole or well (?) was noted near the bluff edge. The current landowner says the area was a historic dump, and that prior to 1940 an old white male lived there and made whiskey. The site area is on a bluff overlooking the main channel of the L'Anguille, which is located ca. 75 m due west. At the time of survey the easternmost part of the site was in dense soybeans; a general collection was made for 15 person minutes but little was found. Dense historic debris was observed in the woods, and a hole from an old well or privy was noted near the bluff edge. A one meter test unit was opened 10 m south of the privy(?) hole near the bluff edge. This unit was opened to a depth of 28 cm, and a 30 cm x 30 cm test was then opened an additional 40 cm in the northeast corner of the unit. Two flakes were found below 18 cm.

Condition: The site soils are classified as Memphis silt loam, 8-12% slopes, eroded (MeD2; USDA 1977a), and are characterized by a humus/root mat from 0 to 8 cm, light brown silt from 8 to 28 cm,

and a darker reddish brown silt from 28 to 68 cm. (Profile obtained from a 1 m test opened to 68 cm).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present. Deep testing should be conducted in the bluff edge and slope for deeply buried colluvial deposits.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3LE243	**Site Name:**	None recorded
Project Site Number:	LRP-216	**Date of Visit:**	13 June 1987
County:	Lee	**USGS Quad:**	Marianna 1984 7.5

Location:	1/4	1/4	1/4;	Section	T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Isolated hammerstone of unknown age.

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3LE243 (LRP-216/formerly LRP-IF-6) was an isolated hammerstone found by the edge of a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was fallow, offering fair surface visibility (ca. 10-50%). No footprints indicative of prior collecting this plowing cycle were observed. Site 3LE172 (LRP-032) is located ca. 100 m to the northeast, and this may be an outlying artifact from that scatter. Nothing else was observed near it, nor in two screened shovel tests opened in the general area. The site is on a bluff overlooking the main channel of the L'Anguille, which is located ca. 20 m due west. The artifact location was recorded on project blue line 1/5000 aerials. No other artifacts were observed (15 person-minutes were spent looking for others), and nothing was observed in two shovel tests opened in the immediate area.

Condition: The site soils are classified as Alligator clay, frequently flooded (Ag; USDA 1977a), and were characterized by loess deposits with extensive fine clay particles in the upper part of profile (noted in shovel tests).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Not Eligible.

NRHP Recommendations: Site is not eligible for the National Register. The isolated artifact had no other materials in association, and testing revealed no evidence for buried materials.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number: 3SF80 **Site Name:** Dye
Project Site Number: LRP-160 **Date of Visit:** 7 July 1987
County: St Francis **USGS Quad:** Hamlin 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Woodland; 20th century historic.

Diagnostic Artifacts: Baytown Plain, Yates Net Impressed pottery; 2 20th century historic sherds, 1 brick fragment.

Description: Site 3SF80 (LRP-160) is a dense surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was in low soybeans, offering excellent surface visibility. Artifacts were observed over an area of approximately 9000 square meters (175 x 75 m in maximum extent). Unfortunately, a collector had beaten us to the site, as footprints were everywhere. During earlier visits the field had been too dusty; we arrived 3 days after a major rainstorm, yet had been beaten. The site was divided into two areas, Area A to the north of a fenceline/hedgerow, and Area B to the south. The site area is on a bluff overlooking the main channel of the L'Anguille, which is located ca. 25 to 50 m east. At the time of survey the 3SF80 area was in low soybeans and sufficient rainfall had occurred to ensure excellent surface visibility. Unfortunately a collector had been on the site within a day or two before us (looking for points). The site was divided into two areas (A & B, located to the north and south, respectively, of a fenceline/hedgerow cutting across the field). The location and boundaries of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made for a period of 0.5 person hours each from Areas A and B. No test units were opened.

Condition: Currently unknown. The site soils are classified as Loring silt loam, 1-3% slopes, 3-8% slopes, eroded (LgB/LgC2; USDA 1966).

Previous Investigations: Previously recorded as 3SF80 in 1971. The site was described at that time as a "small mound and village area about 1 acre, shed on 1 edge of site." Two point bases and a few sherds were reported; no information on the "mound" was provided, and no trace of such a feature was observed in 1987. The site area has seen prior collection and digging by amateurs, according to a local informant.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number: 3SF257 **Site Name:** None recorded
Project Site Number: LRP-068 **Date of Visit:** 18 July 1987
County: St. Francis **USGS Quad:** Forrest City 1976 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Unknown prehistoric; trace 19th century historic.

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found; 2 pearlware sherds.

Description: Site 3SF257 (LRP-068) is a light surface prehistoric artifact scatter located in a fallow field west of and overlooking the main channel of the L'Anguille River. At the time of survey the 3SF257 area was a fallow field with artifacts observed along a dirt farm road and in bare spots. Surface visibility was very poor, except along the dirt field road where it was ca. 50%. Artifacts were observed over an area of approximately 30000 square meters (250 x 120 m in maximum extent). The absence of diagnostics and the site location next to 3SF60 suggests prior collecting has probably occurred. The scatter may extend downslope through the woods to the southeast, but this was considered unlikely. Although almost all of the site area lies outside the right-of-way, a small portion lies within it. The area is on a low ridgenose overlooking the main channel of the L'Anguille River, which is located ca. 100 m due east through the river swamp. The approximate boundaries and location of the scatter were recorded on project blue line 1/5000 aerials, and a 100 percent controlled surface collection of every visible artifact was collected for ca. 0.5 person-hours. No test units were opened.

Condition: Currently unknown. The site soils are classified as Loring silt loam, 1 to 3 percent slopes; 8-12% slopes, severely eroded (LgB/LgD3; USDA 1966).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3SF259	**Site Name:**	None recorded
Project Site Number:	LRP-207	**Date of Visit:**	18 July 1987
County:	St. Francis	**USGS Quad:**	Forrest City 1958/1976 7.5

Location:	1/4	1/4	1/4;	Section	T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Unknown prehistoric, Archaic?

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found; two dart points were found that may be Archaic.

Description: Site 3SF259 (LRP-207) was a low density surface prehistoric artifact scatter located in a plowed and drilled bean field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was in low (ca. 12" high) soybeans, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 7500 square meters (150 x 75 m in maximum extent). The site area is on a bluff overlooking the main channel of the L'Anguille River is located ca. 85 to 120 m due east of the site area. The location and boundaries of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made,

with 1.0 person-hours spent in collection. No test units were opened at this site.

Condition: Currently unknown. The site soils are classified as Loring silt loam, 1 to 3%; 8 to 12% slopes, eroded (LgB/LgD2; USDA 1966).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3SF260	**Site Name:**	None recorded
Project Site Number:	LRP-070	**Date of Visit:**	18 June 1987
County:	St. Francis	**USGS Quad:**	Hawkins 1984 7.5

Location:	1/4	1/4	1/4;	Section	T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Woodland, Middle/Late Woodland

Diagnostic Artifacts: Baytown Plain, Larto Red Filmed pottery.

Description: Site 3SF260 (LRP-070) is a low density surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was in low soybeans that had been cultivated and rained on, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 40000 square meters (400 x 100 m in maximum extent). The south end of the site directly overlooks the river, while the northern end is ca. 200 m from the channel. The site area is on a low bluff overlooking the river. The main channel of the L'Anguille is located due west of the southern end of the site area; ca. 200 m of river swamp separates the northern end of the site from the main channel. At the time of survey the 3SF260 (LRP-070) area was in ca 15" soybeans that had recently been cultivated and rained on, offering excellent surface visibility. The location and boundaries of the scatter were recorded on project blue line aerials, and a 100 percent controlled surface collection of all visible artifacts were collected for a period of 0.5 person-hours. No test units were opened. When the field is cleared a controlled surface collection would be appropriate.

Condition: Currently unknown. The site soils are classified as Loring silt loam, 1-3% slopes, eroded; 8-12% slopes, severely eroded (LgB2/LgD3; USDA 1966).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires additional testing before National Register Status can be

adequately determined. Test pits should be opened to determine if stratification is present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number: 3SF261 **Site Name:** None recorded
Project Site Number: LRP-088 **Date of Visit:** 25 June 1987
County: St. Francis **USGS Quad:** Hawkins 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Unknown prehistori. (no diagnostics found).

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3SF261 (LRP-088) is a low density surface prehistoric artifact scatter located in a fallow field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site area was heavily gullied with great variation in ground cover, providing only fair surface visibility (ca. 30 to 50%). No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 900 square meters (30 x 30 m in maximum extent). A large leveled and ditched rice field is located immediately south of the field containing the scatter, and it is probable that the site once extended into this area. The site area is on a bluff/ridgenose overlooking the main channel of the L'Anguille River, which is located ca. 50 m due east through a low wooded area. The location and boundaries of the scatter were recorded on project aerials, and a 100 percent collection of every visible artifact was made for 0.5 person-hours. No test units were opened at this site.

Condition: Currently unknown. The site soils are classified as Loring silt loam, 8 to 12 % slopes, eroded (LgD2; USDA 1966), and are characterized by silts and silt/clays (materials observed eroding out of bank).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number: 3SF263 **Site Name:** None recorded
Project Site Number: LRP-203 **Date of Visit:** 18 July 1987
County: St. Francis **USGS Quad:** Hawkins 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Woodland; 20th century historic.

Diagnostic Artifacts: Baytown Plain, Thomas Plain, Blue Lake Cord Marked, Mulberry Creek Cord Marked, Yates Net Impressed; recent 20th historic artifacts.

Description: Site 3SF263 (LRP-203) is a surface artifact scatter located along a wooded bluff overlooking the main channel of the L'Anguille River. At the time of survey, the site area was in dense woods but a field road cut through it, offering 100% visibility. Artifacts were common along the road surface. The southernmost part of the scatter was not cut by the road. A low knob was located here, and three shovel tests were placed at 30 m intervals into this area. The first was sterile, but the latter two yielded artifacts. It is possible that a low mound is located in the area of this knob, due to the suspicious shape of the terrain. Artifacts were observed over an area of approximately 7500 square meters (250 x 30 m in maximum extent). The site area is on a bluff overlooking the main channel of the L'Anguille, which is from 20 to 100 m east of the site area. The location and extent of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made from the road area, with 1.0 person-hours spent in collection (collection time was typically recorded). No artifacts were found in shovel tests opened in wooded areas off to the side of the road, suggesting a fairly low density scatter. All fill was dry screened through 1/4 inch mesh.

Condition: Currently unknown. The site soils are classified as Loring silt loam/Zachary silt loam (LgB/Za; USDA 1966), with silt loams observed in the shovel tests.

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present, particularly on the knob at the south end of the scatter.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3SF264	**Site Name:**	None recorded
Project Site Number:	LRP-204	**Date of Visit:**	18 July 1987
County:	St. Francis	**USGS Quad:**	Hawkins 1984 7.5

Location:	1/4	1/4	1/4; Section	T	R	(deleted)
UTM:	Zone:	15	Northing:	Easting:		(deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered).

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3SF264 (LRP-204) is a surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the field was fallow, with surface visibility varying considerably, between 0 and 5% in most areas, and up to 50% along and beside a dirt farm road. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 6000 square meters (90 x 80 m in maximum extent). The site area is on a bluff/ridgenose overlooking the main channel of the L'Anguille, which is located ca. 50 to 60 m east of the site area. The extent of

the scatter was recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made, with 0.5 person-hours spent in collection. No test units were opened at this site.

Condition: Currently unknown. The site soils are classified as Loring silt loam, 1 to 3% slopes; 8 to 12% slopes, eroded (LgB/LgD2; USDA 1968).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number: 3SF265 **Site Name:** None recorded
Project Site Number: LRP-205 **Date of Visit:** 18 July 1987
County: St. Francis **USGS Quad:** Hawkins 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered during the current survey; the landowner has 2 St. Charles points that came from this field)..

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3SF265 (LRP-205) was a low density surface artifact scatter located in a diffuse pasture adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey surface visibility was varied from 0 to 100%, averaging ca. 10%. Artifacts were observed over an area of approximately 11250 square meters (150 x 75 m in maximum extent). The point of land defining the scatter is bounded on both sides (to the north and south) by minor tributary channels. The site area is on a bluff overlooking the main channel of the L'Anguille, which is located ca. 35 m southeast through a swamp. The location and extent of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made for 0.5 person-hours. No test units were opened at this site.

Condition: Currently unknown. The site soils are classified as Calloway silt loam, 1-3% slopes/Loring silt loam, 8-12% slopes, eroded (ClB/LgD2; USDA 1966).

Previous Investigations: None reported; the landowner found two St. Charles points on this site.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number: 3SF266 **Site Name:** None recorded
Project Site Number: LRP-159 **Date of Visit:** 6 July 1987
County: St. Francis **USGS Quad:** Hamlin 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Woodland; 20th century.

Diagnostic Artifacts: Baytown Plain pottery; 1 ironstone sherd.

Description: Site 3SF266 (LRP-159) is a low density surface prehistoric artifact scatter located on a rise in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was in low soybeans, offering excellent surface visibility. Artifacts were observed over an area of approximately 4000 square meters (80 x 70 m in maximum extent). Unfortunately a collector had reached the site ahead of us; footprints were all over the field (see also 3SF80/LRP-160, which was similarly plundered). These fields had been too dusty to collect during a previous visit; we got there 3 days after a major rainstorm and had been beaten by this person. The site lies behind an occupied house on a low rise overlooking the main channel of the L'Anguille, which is located between 75 and 125 m east. The extent and boundaries of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made, with 0.5 person-hours spent in collection (the collector appeared to be only after points). No test units were opened at this site.

Condition: Currently unknown. The site soils are classified as Loring silt loam, 3-8% slopes, severely eroded (LgC3; USDA 1966).

Previous Investigations: No formal investigations reported; the site area has seen prior collection and digging by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number: 3SF267 **Site Name:** None recorded
Project Site Number: LRP-162 **Date of Visit:** 7 July 1987
County: St. Francis **USGS Quad:** Hamlin 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Woodland.

Diagnostic Artifacts: Baytown Plain pottery.

Description: Site 3SF267 (LRP-162) is a low density surface artifact scatter located in a plowed field adjacent to and overlooking the main c. nnel of the L'Anguille River. At the time of survey,

the site was fallow and densely overgrown, offering poor to good surface visibility (0 to 50%). No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 6000 square meters (120 x 65 m in maximum extent). An old badly fallen in and overgrown house site is located in the eastern part of the scatter near the river. According to the current landowner, his parents had lived in this structure, and that it was ca. 80 to 100 years old. It was photographed extensively (as best as possible given the dense underbrush around it). According to a local informant who dug in the field to the west of this house, unmarked historic period graves are present; no sign of these was observed. The site area is on a low bluff overlooking the main channel of the L'Anguille, which is located ca. 75 m east. The location and extent of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made, with one person-hour spent in collection. No test units were opened at this site.

Condition: Currently unknown. The site soils are classified as Loring silt loam, 1-3% slopes (LgB; USDA 1966).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present in the deposits, and to verify whether or not historic graves are present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3SF268	**Site Name:**	None recorded
Project Site Number:	LRP-081	**Date of Visit:**	23 June 1987
County: Lee		**USGS Quad:**	Haynes 1958/1976 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Unknown prehistoric (no diagnostics).

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3SF268 (LRP-081) was a very light density surface artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was in low milo, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 10000 square meters (200 x 50 m in maximum extent). The scatter begins just east of a boat landing at the end of a dirt farm road and continues to a leveled and ditched rice field. The presence of low rise in the milo field defining the site suggests the area was not leveled. The site area is on a low terrace overlooking the main channel of the L'Anguille River, which is located ca. 30 m due north of the site area, through a narrow tree line. A large drainage ditch parallels the field along the river, indicating massive disturbance in this area. No test units were opened at this site. The locations and boundaries of the scatter were recorded on project aerials, and a 100 percent collection of every visible artifact was made for a period of 1.5 person-hours.

Condition: Currently unknown. The site soils are classified as Zachary silt loam (Za; USDA 1977a). The deposits are silt/clays (Profile observed from exposure in the bank cut/boat landing).

Previous Investigations: None reported; according to the tenant the site area has seen extensive prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined.

Curatorial Facility: Arkansas Archeological Survey Pine Bluff Station.

State Site Number:	3SF269	**Site Name:**	None recorded
Project Site Number:	LRP-202	**Date of Visit:**	16 July 1987
County:	St. Francis	**USGS Quad:**	Haynes 1958/1976 7.5

Location:	1/4	1/4	1/4; Section		T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered).

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3SF269 (LRP-202) is a surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. A road leading to a boat landing on the river lies to the north of the site. At the time of survey the site was fallow, with visibility varying dramatically between 0 and 100%. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 6000 square meters (100 x 60 m in maximum extent). The site area is on a ridgenose overlooking the main channel of the L'Anguille, which is located ca. 75 m northwest. At the time of survey the site area was fallow, with visibility varying between 0 and 100%, averaging ca. 50% in many areas. The location and extent of the scatter was recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made for 1.5 person-hours. No test units were opened.

Condition: Currently unknown. The site soils are classified as Calloway silt loam, 0-1% slopes/Zachary silt loam (ClA/Za; USDA 1966).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number: 3SF270 **Site Name:** None recorded
Project Site Number: LRP-077 **Date of Visit:** 24 June 1987
County: St. Francis **USGS Quad:** Palestine 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: PaleoIndian through Late Archaic/Woodland; 20th century historic.

Diagnostic Artifacts: 1 Clovis; Hardin, San Patrice, Hickory Ridge, basal-notched, Gary, Weems, Burkett, Harrison Turkey Tail, Big Creek, and Steuben projectile points; Dalton adze; 20th century historic artifacts.

Description: Site 3SF270 (LRP-077) is a large, dense surface prehistoric artifact scatter, with a minor amount of recent historic debris, located in a plowed field adjacent to the main channel of the L'Anguille River (Figure 58). At the time of survey, the site had been recently plowed and rained on, and was in low soybeans (< 6 in. high), offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 19400 square meters (300 x 70 m in maximum extent). The river flows immediately north of the site through a narrow treeline; the channel is located from 5 to 75 m due north through a treeline, and the site is only elevated about two meters above the channel. The site is located on thick silt/clay deposits adjacent to the channel, and the area can be best described as on a low terrace overlooking the river. Given the density of the scatter, and the large numbers of diagnostics observed on the surface, a controlled surface collection was made over the entire scatter using 194 3.34 m radii circles dispersed using a stratified systematic unaligned procedure. This was the densest and richest surface site found in the river basin. A soil core was taken at the northern end of the site near the river by John Foss, project soil scientist (Appendix II).

Condition: Currently unknown. The site soils are classified as Zachary silt loam (Za; USDA 1966), and are characterized by silt to silt clay in the first 2 m. (Profile determined from a soil core taken to a depth of 2.0 m by the project soil scientist in the northwest portion of the scatter, near where fluted point was found).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site must see extensive testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present, and deep testing should be conducted with a backhoe. This is a very rich Archaic scatter.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number: 3SF271 **Site Name:** None recorded
Project Site Number: LRP-078 **Date of Visit:** 2 July 1987
County: St. Francis **USGS Quad:** Palestine 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

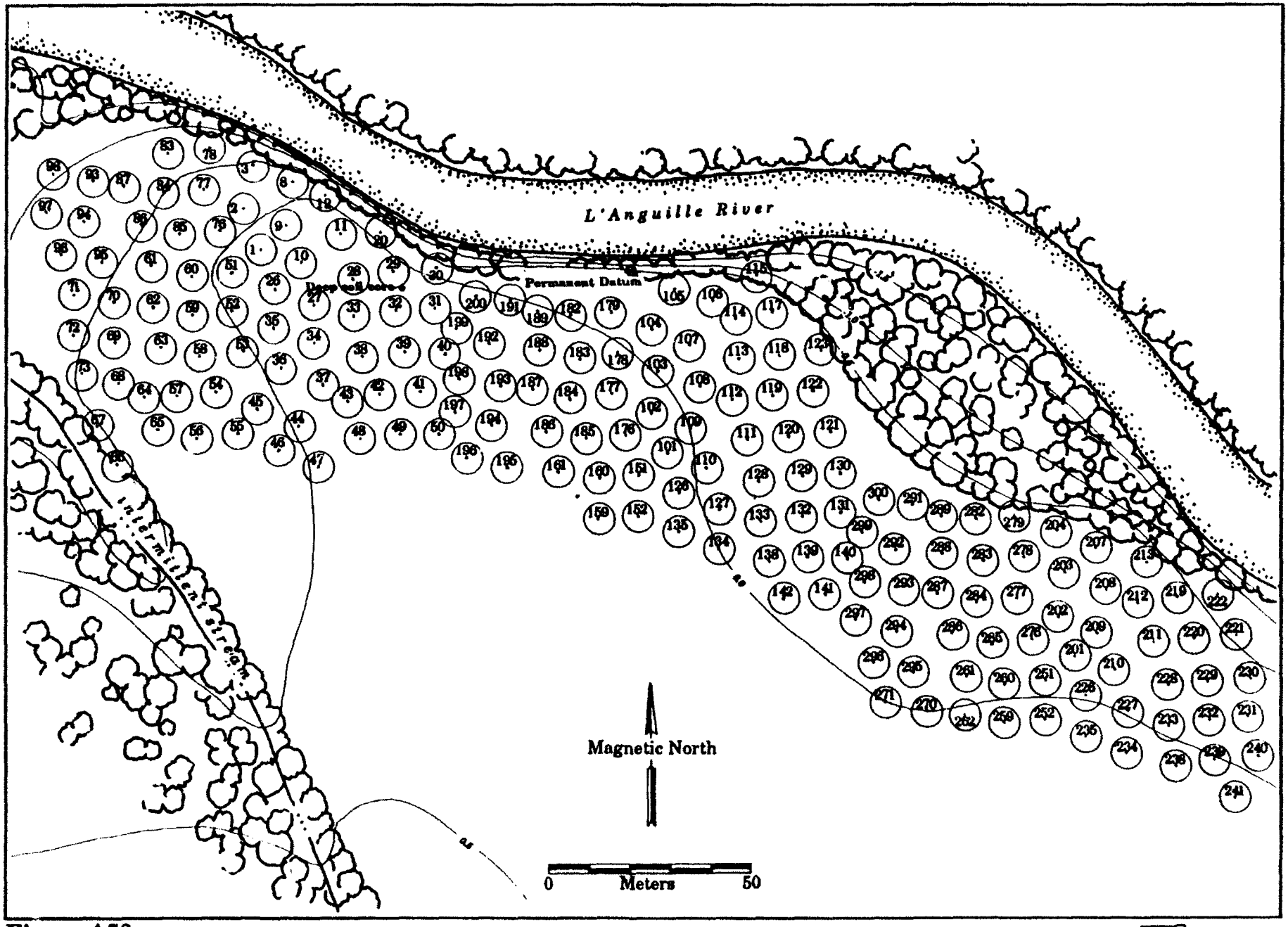


Figure A58.
Site 3SF270 (LRP-77) Proveniences
Controlled Surface Collection Circles
and Test Units.

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Temporal Span: late PaleoIndian, Late Archaic, Woodland; 20th century historic.

Diagnostic Artifacts: 1 Dalton 2 Burkett, 1 Big Creek projectile points; Baytown Plain pottery; 20th century historic artifacts.

Description: Site 3SF271 (LRP-078) is a surface artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River (Figure 59, 60). At the time of survey, the site had been recently plowed and rained on, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 5700 square meters (100 x 80 m in maximum extent). The site is on a low rise at the end of the field, and is separated from site 3SF272 (LRP-079) to the southeast by a minor gully. The site area is on a bluff overlooking the main channel of the L'Anguille River, which is located immediately north and northeast through a narrow (ca. 5-10 m thick) tree line. The site area lies ca. 2-4 m above the channel. A controlled surface collections was made using fifty-seven 3.34 m radii circles dispersed using a stratified systematic unaligned procedure. A minimum of 5 minutes was spent in every circle, and collection proceeded until no more artifacts could be found. No test units were opened. A permanent datum consisting of a 24 inch piece of iron rebar marked with red flagging tape was placed in the woods 25.0 m due north of the field datum.

Condition: Currently unknown. The site soils are classified as Zachary silt loam (Za; USDA 1966).

Previous Investigations: None reported; according to the tenant the site area has seen extensive prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number: 3SF272 **Site Name:** None recorded
Project Site Number: LRP-079 **Date of Visit:** 2 July 1987
County: St. Francis **USGS Quad:** Palestine 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Unknown prehistoric; minor recent historic debris

Diagnostic Artifacts: No diagnostic prehistoric artifacts recovered; 20th century historic artifacts.

Description: Site 3SF272 (LRP-079) is a light surface prehistoric and historic artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River (Figures 61, 62). At the time of survey, the site had been recently plowed and rained on, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 1400 square meters (60 x 30 m in maximum extent). The site lies between sites 3SF271 and 3SF273 and is separated from each by

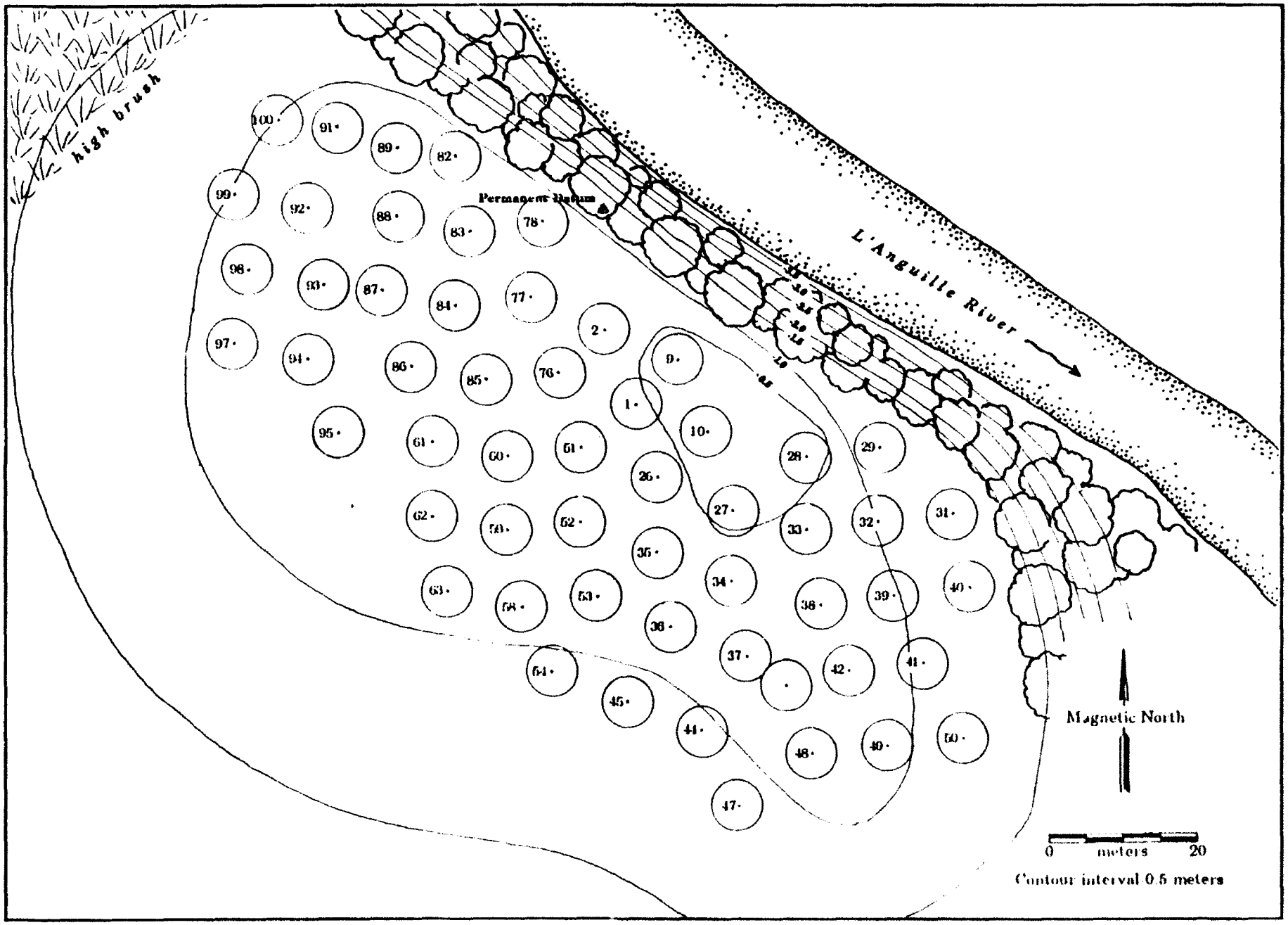
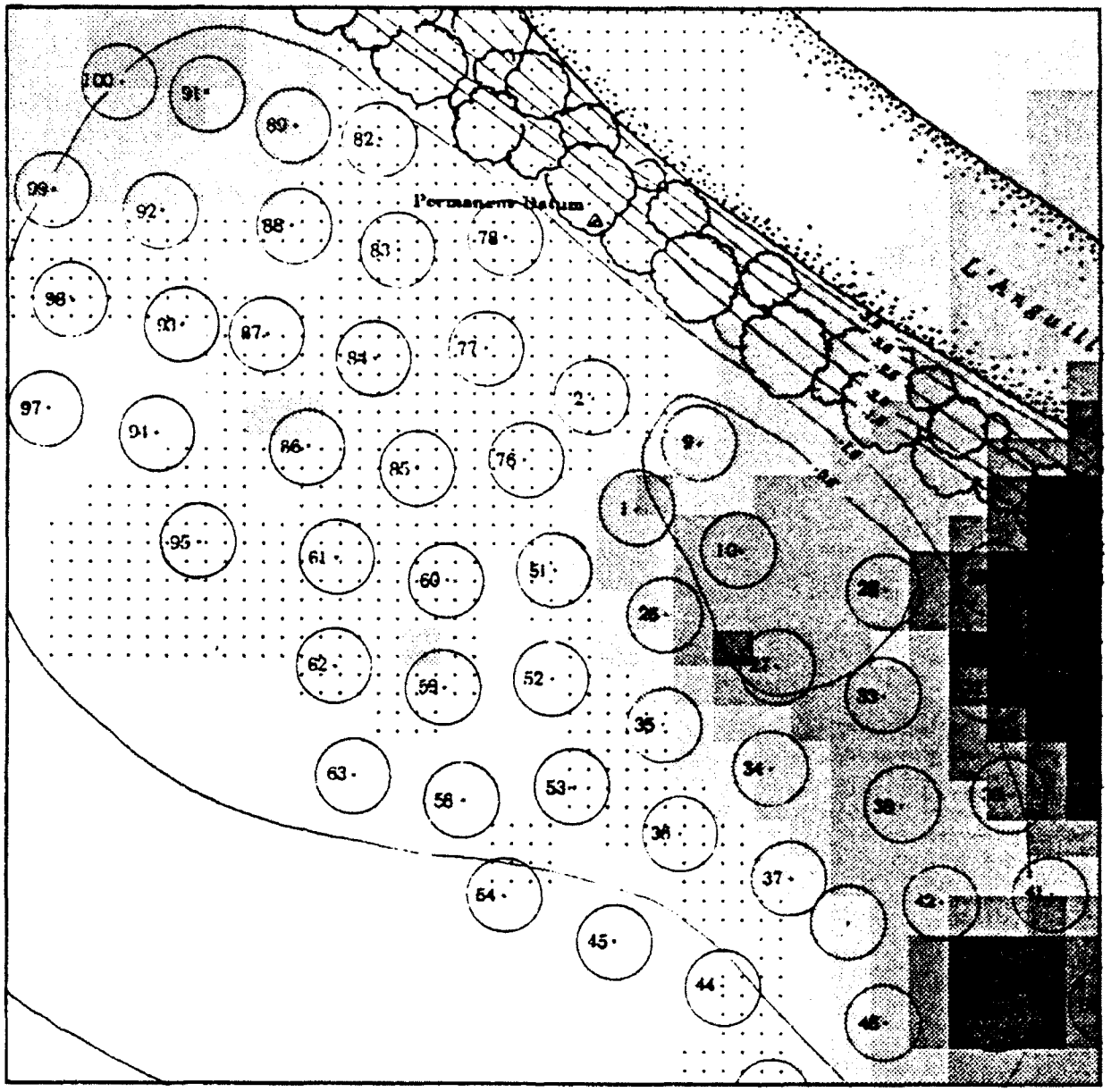


Figure A59.
Site 3SF271 (LRP-78) Proveniences
and Controlled Surface Collection Circles.

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Average Artifact Density (number of artifacts)

-- 12
-- 18
-- 23
-- 29
-- 34
-- 40
-- 45
-- 51
-- 56

= Controlled Surface Collection Unit (3.34 m radii)

Magnetic North

0 25
Meters

Figure A60.
Site 3SF271 (LRP-78)
Prehistoric Artifacts - Surface Distributions.

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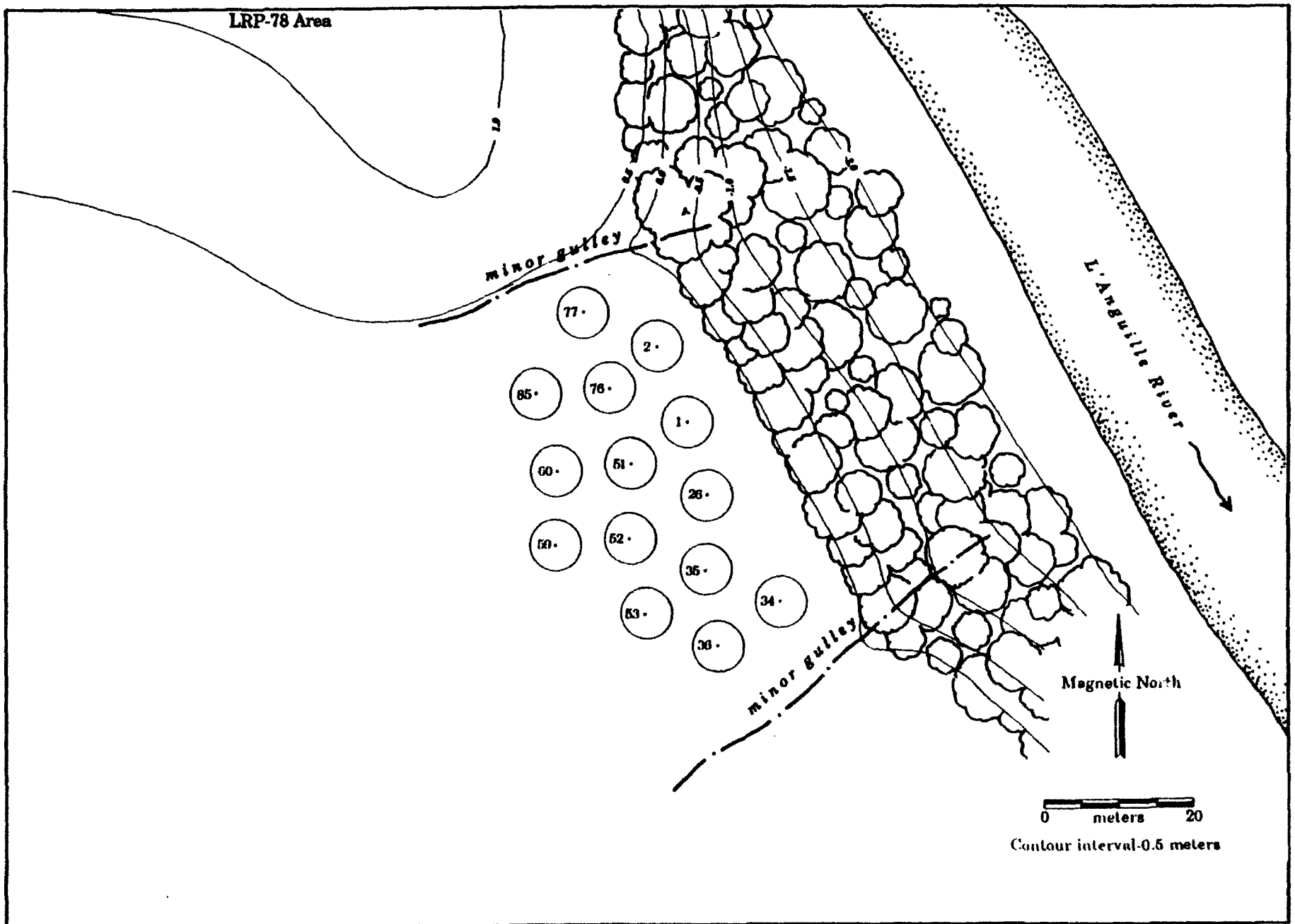
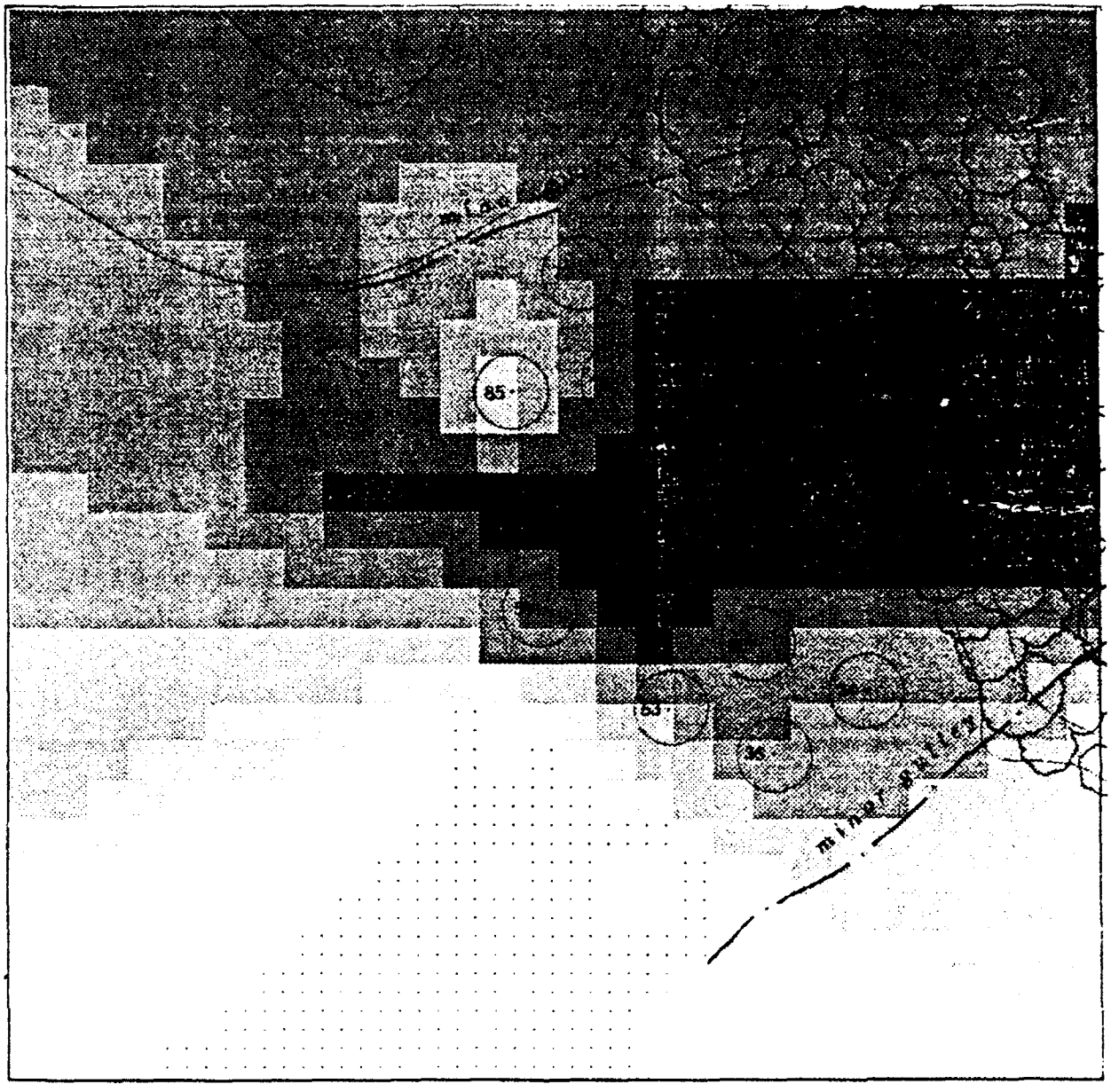


Figure A61.
Site 3SF272 (LRP-79) Proveniences
and Controlled Surface Collection Circles.

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Average Artifact Density (number of artifacts)

-- .8
-- 1.2
-- 1.6
-- 2.0
-- 2.4
-- 2.8
-- 3.2
-- 3.6
-- 4.0

= Controlled Surface Collection Unit (3.34 m radii)

Magnetic North

0 25
Meters

Figure A62.
Site 3SF272 (LRP-79)
Prehistoric Artifacts - Surface Distributions.

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minor gullies cutting across the field and running into the river. The site area is on a low bluff or terrace overlooking the main channel of the L'Anguille River, which is located ca. 30 to 60 m due east through a low wooded area. A controlled surface collection was made using fourteen 3.34 m radii circles dispersed using a stratified systematic unaligned procedure. A minimum of 5 minutes was spent in every circle, and collection proceeded until no more artifacts could be found. A permanent datum consisting of a 24 inch piece of iron rebar marked with red flagging tape was located in the woods margin 16.4 m from the field datum at an angle of 18 degrees east of magnetic north.

Condition: Currently unknown. The site soils are classified as Zachary silt loam (Za; USDA 1966). Silt clays were observed in a nearby eroding gully. (No test units were opened at this site).

Previous Investigations: None reported; according to the tenant the site area has seen extensive prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3SF273	**Site Name:**	None recorded
Project Site Number:	LRP-080	**Date of Visit:**	1 July 1987
County:	St. Francis	**USGS Quad:**	Palestine 1984 7.5

Location:	1/4	1/4	1/4; Section		T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Middle Archaic, Late Archaic/Woodland (no pottery); trace recent historic material.

Diagnostic Artifacts: 1 Hickory Ridge, 2 Burkett, 4 Gary, 2 Weems projectile points; 2 recent glass fragments.

Description: Site 3SF273 (LRP-080) is a dense surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River (Figure 63). At the time of survey, the site had been recently plowed and rained on, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 12800 square meters (200 x 70 m in maximum extent). Coffee Creek (a trickle at the time of survey) flows into the L'Anguille River at the southern end of the scatter. A dirt farm road to a boat landing lies just beyond the stream channel. The site area is on a low terrace ca. 2-4 m above and overlooking the main channel of the L'Anguille River, which is located from 30 to 75 m east through low woods. The river turns away from the site in the 3SF273 (LRP-080) area, and is close at hand only at the northern and southern ends of the scatter. A controlled surface collection was made using 128 3.34 m radii circles dispersed using a stratified systematic unaligned procedure. A minimum of 5 minutes was spent in every circle, and collection proceeded until no more artifacts could be found. A permanent datum consisting of a 24 inch piece of iron rebar marked with red flagging tape was located in the woods margin 25 m due north of temporary field datum 2.

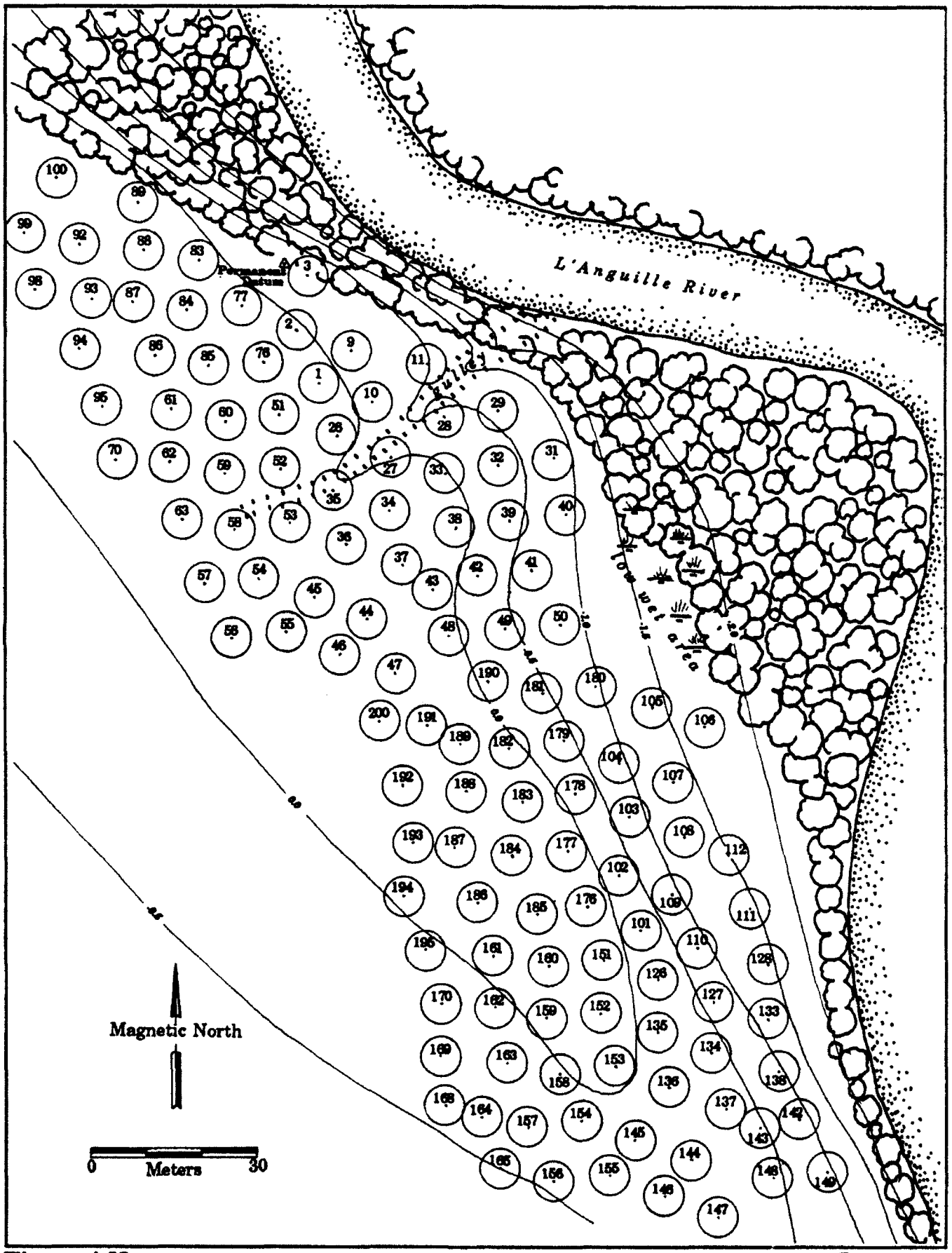


Figure A63.
Site 3SF273 (LRP-80) Proveniences
and Controlled Surface Collection Circles.

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Condition: Currently unknown. The site soils are classified as Zachary silt loam (Za; USDA 1966). Two soil cores were taken to depths of 1.6 m on the crest and river facing slope of the site. Silts and silt clays were found throughout.

Previous Investigations: None reported; according to the tenant the site area has seen extensive prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS12	**Site Name:**	Elber Site
Project Site Number:	LRP-181	**Date of Visit:**	10 July 1987
County:	Cross	**USGS Quad:**	Vanndale 1984 7.5

Location:	1/4	1/4	1/4; Section		T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered).

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3CS12 (LRP-181) is a low density surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site had been recently chisel plowed and rained on, offering excellent surface visibility (50 to 75%). No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 2500 square meters (75 x 50 m in maximum extent). Site LRP-180 is located ca 50 m to the west, across a ditch. The site area is on a low bluff overlooking the main channel of the L'Anguille, which is located ca 75 m east through woods. At the time of survey the site area had been freshly chisel plowed and sufficient rainfall had occurred to ensure excellent surface visibility (50 to 75%). The location and extent of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made for 1.0 person-hours. No test units were opened at this site.

Condition: Currently unknown. The site soils are classified as Loring silt loam, 3-8% slopes, eroded (LgC2; USDA 1968).

Previous Investigations: The site was recorded as a small Woodland village by Printup and Madison in 1960. A survey sheet was filed with the Arkansas Archeological Survey as part of the Ford-Redfield investigations. A small test unit was opened by Printup, with no material found below the plowzone. The site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS17	**Site Name:**	R. T. Holt Place
Project Site Number:	LRP-122	**Date of Visit:**	7 July 1987
County:	Cross	**USGS Quad:**	Central 1984 7.5

Location:	1/4	1/4	1/4;	Section	T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Woodland.

Diagnostic Artifacts: Baytown Plain pottery.

Description: Site 3CS17 (LRP-122) is a light surface artifact scatter located on a rise in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was in low (<15" high) soybeans offering good surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 4000 square meters (100 x 50 m in maximum extent). Site 3CS205 (LRP-121) is located ca. 75 m to the south on another low rise. The site area is on a low terrace overlooking the main channel of the L'Anguille, which is located ca. 10 to 15 m due west through a narrow treeline. At the time of survey the 3CS17 area was in low soybeans and sufficient rainfall had occurred to ensure excellent surface visibility. A considerable amount of undergrowth had developed between discovery on June 29th and an attempt at controlled collection on July 10, 1987, precluding the controlled collection. The location and extent of the scatter were recorded on project blue line 1/5000 aerials, and a controlled collection of every visible artifact was made for 1.0 person-hours. No test units were opened at this site.

Condition: Currently unknown. The site soils are classified as Loring silt loam, 3-8% slopes, eroded (LgC2; USDA 1968).

Previous Investigations: The site was recorded as a small one acre or more Archaic and Woodland village by J. H. Moselage in 1960. One Dalton point and Woodland pottery was found on the site. A survey sheet was filed with the Arkansas Archeological Survey as part of the Ford-Redfield investigations. The site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification and intact deposits are present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS18	**Site Name:**	None recorded
Project Site Number:	LRP-129	**Date of Visit:**	29 June 1987
County:	Cross	**USGS Quad:**	Cherry Valley W 1984 7.5

Location:	1/4	1/4	1/4;	Section	T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Woodland.

Diagnostic Artifacts: Mulberry Creek Cord Marked; Baytown Plain pottery.

Description: Site 3CS18 (LRP-129) is a low density surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was in low (< 6 in. high) soybeans, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 7500 square meters (150 x 50 m in maximum extent). Site 3CS18 is mapped just north of here, but no artifacts were visible in the field (in spite of 100% visibility). This scatter is probably 3CS18. The site area is on a low bluff overlooking the main channel of the L'Anguille, which is located ca. 10-15 m due east through a narrow treeline. The location and extent of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made for 0.5 person-hours. No test units were opened at this site.

Condition: The site soils are classified as Grenada silt loam, 1-3% slopes/Loring silt loam, 3-8% slopes, eroded (GrB/LgC2; USDA 1968).

Previous Investigations: The site was recorded as a "village site [with] low mound; mound 3' high 50' dia. Area Appprox 1 acre" by Ford, Printup, Scheel, and Moselage during the Ford Redfield survey in January 1961. Burials were reported plowed out of the site, and the mound was described as originally ca. eight feet high. Baytown pottery was reported. The site area was revisited by James Scholtz during the 1966 Land Leveling Project. The site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification and intact deposits are present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS22	**Site Name:**	C M. Stacy Site
Project Site Number:	LRP-154	**Date of Visit:**	6 July 1987
County:	Cross	**USGS Quad:**	Central 1984 7.5

Location:	1/4	1/4	1/4;	Section	T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Early Archaic, Late Archaic/Woodland, Woodland; early historic(?).

Diagnostic Artifacts: 1 Hardin, 1 side notched, 2 Gary, 1 Weems, 1 Steuben, 1 Marksville projectile point; Baytown Plain pottery; 1 retouched blade type French gunflint.

Description: Site LRP-154 (3CS22) is a dense surface artifact scatter located in a plowed field adjacent to and overlooking the L'Anguille River swamp (Figures 64, 65). At the time of survey, the site had been recently plowed and rained on, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed

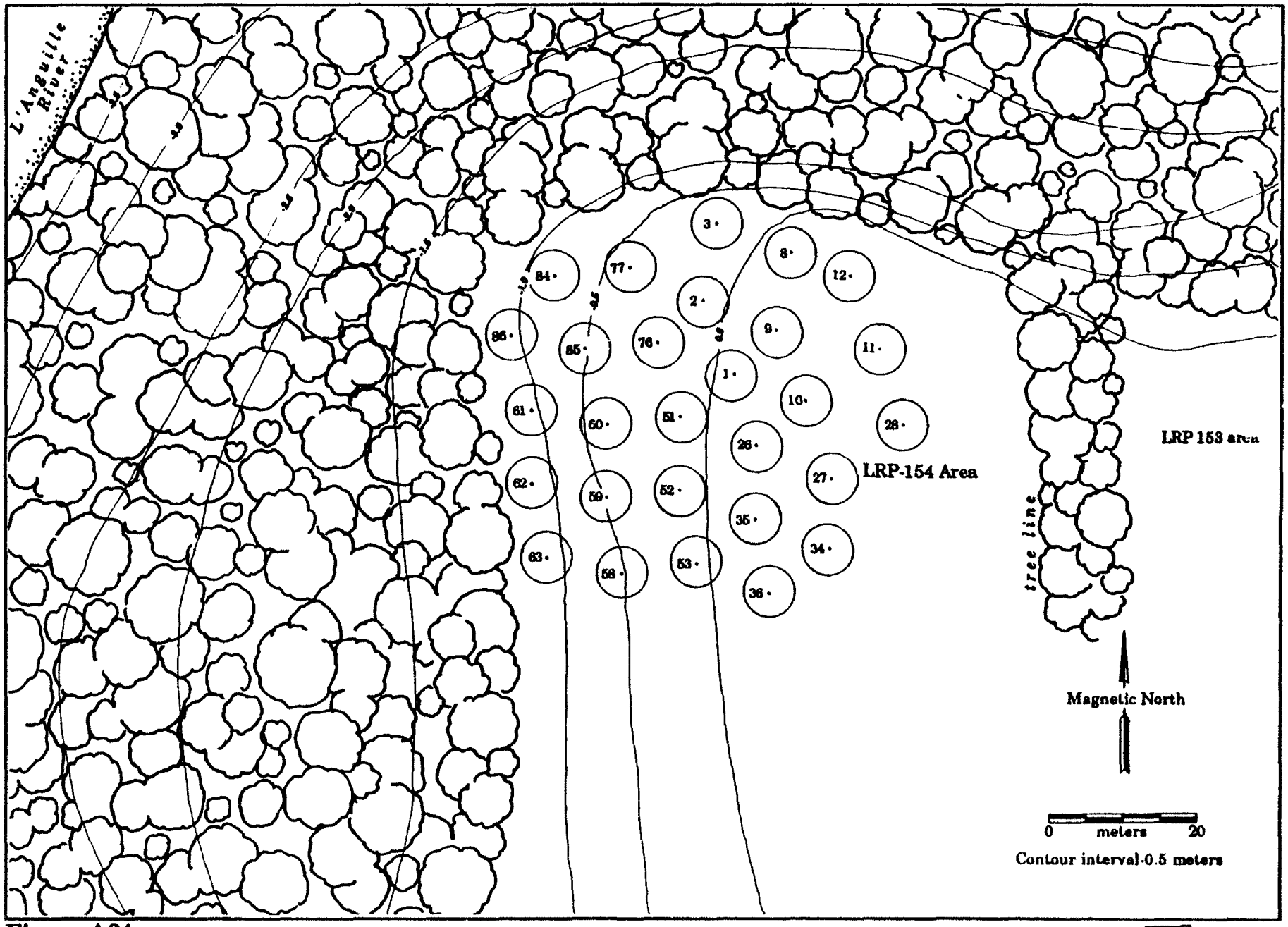
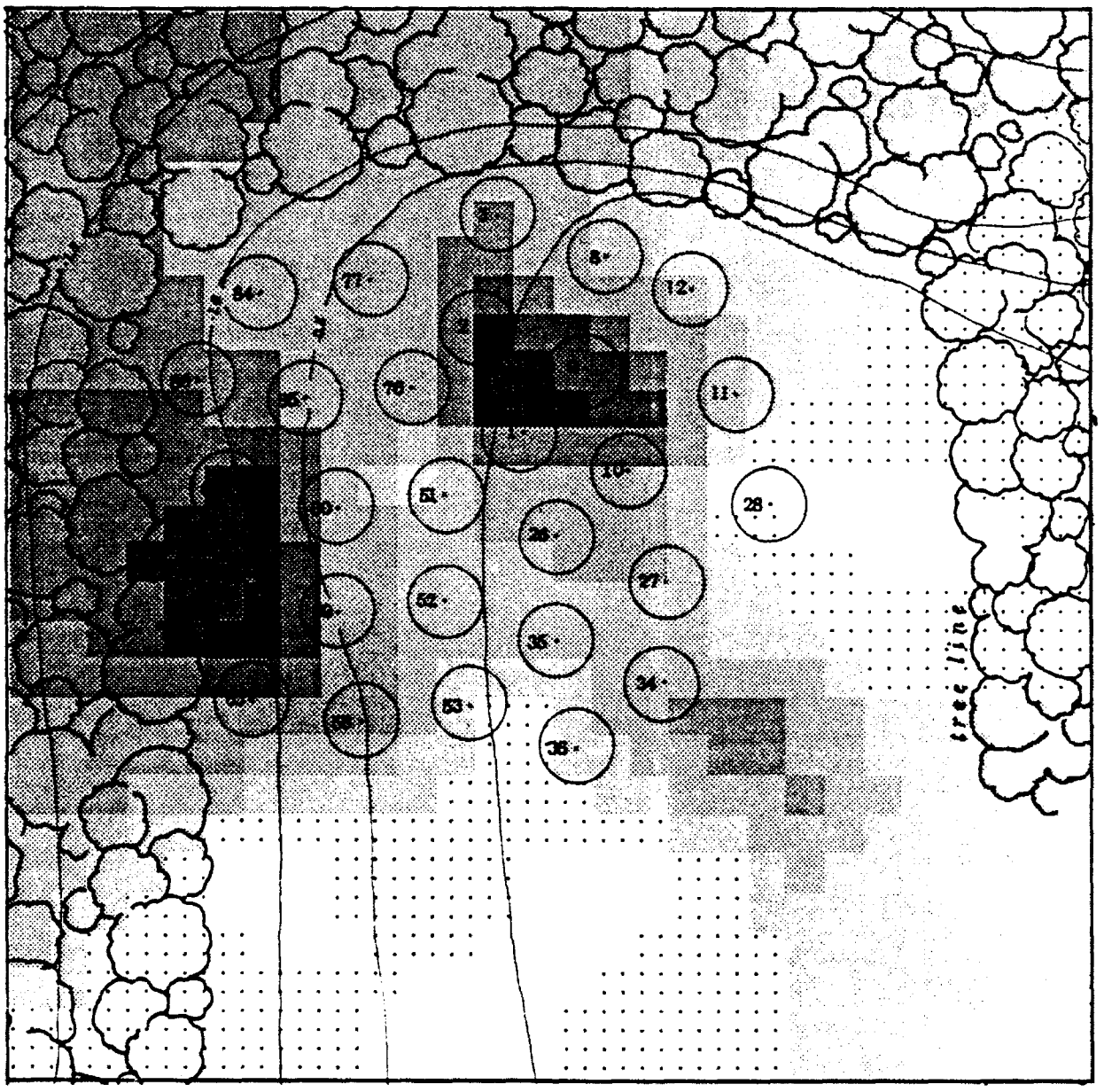


Figure A64.
Site 3CS22 (LRP-154) Proveniences
and Controlled Surface Collection Circles.

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Average Artifact Density (number of artifacts)

-- 12
-- 14
-- 17
-- 19
-- 22
-- 24
-- 27
-- 29
-- 32

= Controlled Surface Collection Unit (3.34 m radii)

Magnetic North

0 25

Meters

Figure A65.
Site 3CS22 (LRP-154)
Prehistoric Artifacts - Surface Distributions.

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over an area of approximately 15000 square meters (200 x 75 m in maximum extent). A leveled rice field is located to the southeast of the scatter, where the field narrows. The northern end of the site (designated Area A) was collected using a controlled surface collection; Area B, at the southern end of the site, was lower in density and was completely collected using a general procedure until no more artifacts could be found. The site area is on a bluff/low terrace overlooking the main channel of the L'Anguille, which is located from 75 to 125 m north, west, and southwest of the site, through a dense wooded swampy area. A controlled surface collection was made using twenty eight 3.34 m radii circles dispersed using a stratified systematic unaligned procedure over the dense, northern end of the scatter. A minimum of 5 minutes was spent in every circle, and collection proceeded until no more artifacts could be found. At the southern end of the scatter a general collection of every visible artifact was collected, with 1.5 person-hours spent in collection. No test units were opened at this site.

Condition: Currently unknown. The site soils are classified as Zachary silt loam/Loring silt loam, 3 to 8% slopes, eroded (Za/LgC2; USDA 1968).

Previous Investigations: The site was recorded as a small two acre Woodland village by Moselage and Printup in 1960. Baytown pottery was reported, as well as several (unidentified) stemmed points. A survey sheet was filed with the Arkansas Archeological Survey as part of the Ford-Redfield investigations. The site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS46	**Site Name:**	Ezekial Sims
Project Site Number:	LRP-131	**Date of Visit:**	8 July 1987
County: Cross		**USGS Quad:**	Cherry Valley W 1984 7.5

Location:	1/4	1/4	1/4; Section		T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Early Archaic, Late Archaic/Woodland, Middle Woodland, Mississippian (shell tempered).

Diagnostic Artifacts: 1 Hardin, 1 Weems, 2 corner notched (Marksville?) projectile point; Baytown(?) adze; Baytown Plain, Thomas Plain, Neeley's Ferry Plain pottery.

Description: Site 3CS46 (LRP-131) is a dense surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River (Figure 66). At the time of survey, the site had been recently plowed and rained on, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 2600 square meters (80 x 40 m in maximum extent). The site is in a small pocket in the field/river swamp margin. The site area is on a low bluff/narrow ridge nose overlooking the main channel of the L'Anguille River is located ca. 50 to 75 m southeast of the site area. The location and extent of the scatter were recorded on project blue

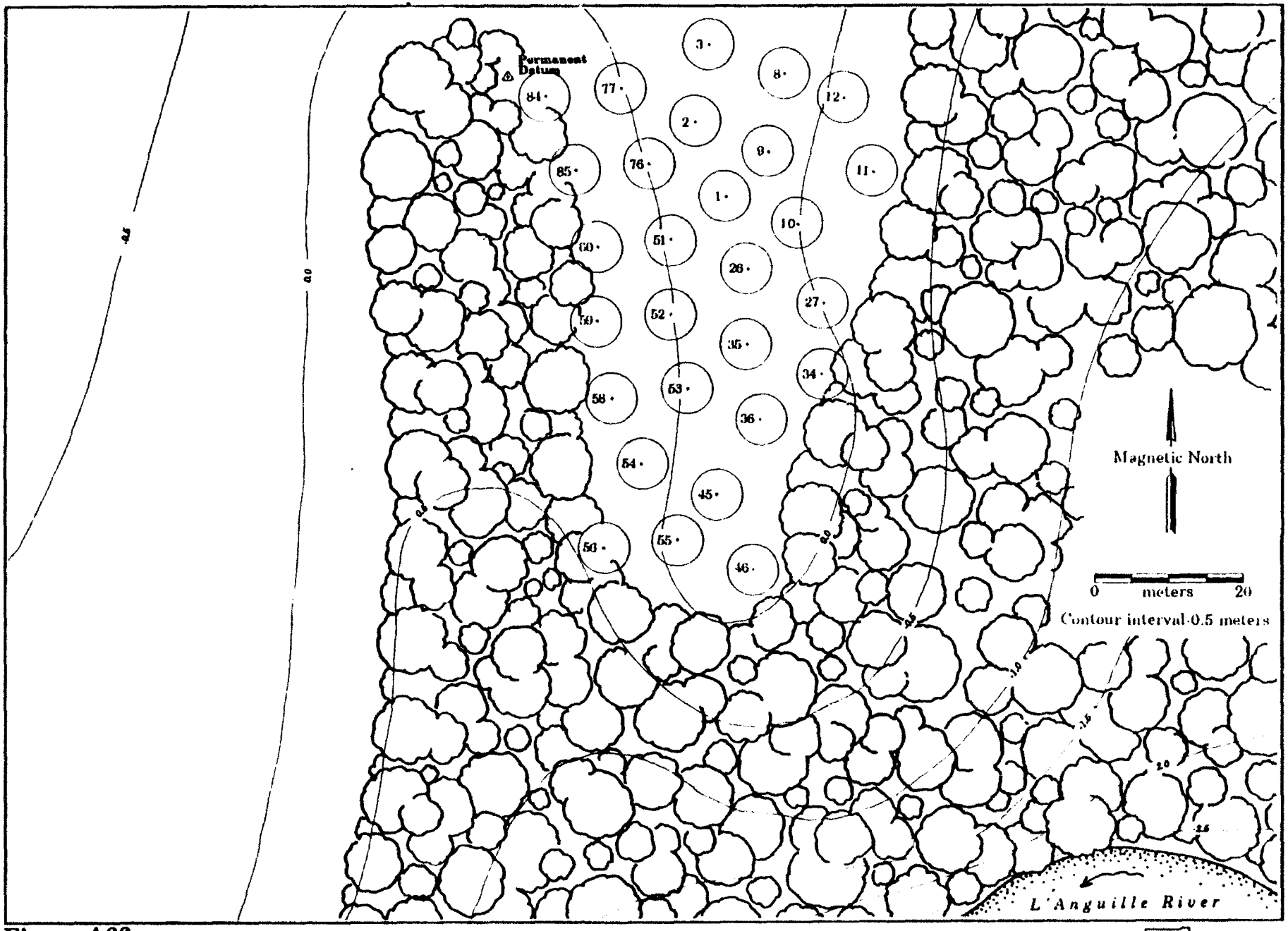


Figure A66.
Site 3CS46 (LRP-131) Proveniences and Controlled Surface Collection Circles.

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line 1/5000 aerials, and a controlled surface collection was made using twenty six 3.34 m radii circles dispersed using a stratified systematic unaligned procedure. A minimum of 5 minutes was spent in every circle, and collection proceeded until no more artifacts could be found. A permanent datum consisting of a 24 inch piece of iron rebar marked with red flagging tape was located in the hedgerow margin at a distance of 26.5 m at 312 degrees east of magnetic north from the field datum. No test units were opened at this site.

Condition: The site soils are classified as Loring silt loam, 3-8% slopes, eroded (LgC2; USDA 1968).

Previous Investigations: The site was recorded as a "Woodland village [with] no mound" by the Ford Redfield survey in March 1962. Baytown pottery and six Woodland and Archaic points were found during this visit. The site area was revisited by James Scholtz during the 1966 Land Leveling Project; no collections were made. The site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification and intact deposits are present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS47	**Site Name:**	Chas. East Site
Project Site Number:	LRP-130	**Date of Visit:**	29 June 1987
County:	Cross	**USGS Quad:**	Cherry Valley W 1984 7.5

Location:	1/4	1/4	1/4; Section		T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Woodland .

Diagnostic Artifacts: 1 Gary, 1 Scallorn projectile point; Baytown Plain pottery.

Description: Site 3CS47 (LRP-130) is a low density surface prehistoric artifact scatter located on a slight rise in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site area had been freshly plowed and rained on, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 3000 square meters (60 x 50 m in maximum extent). Isolated finds 13 and 14 were located ca. 100 m to the north and south of the site, respectively. IF-13 (87-955-1, 2) was two artifacts, a Gary and and indeterminate point; IF-14 (87-856-1) was a Scallorn point of unknown exotic chert. No other artifacts were noted near these isolated finds. The site area is on a low bluff overlooking the main channel of the L'Anguille, which is located ca. 100 m due east. The location and boundaries of the scatter were recorded on project blue line 1/5000 aerials, and on USDA County Soil Map aerials and USGS quad sheets. A controlled surface collection of every visible artifact was collected, with a minimum of 0.5 person-hours spent in collection. No test units were opened at this site.

Condition: The site soils are classified as Grenada silt loam, 1-3% slopes (GrB; USDA 1968).

Previous Investigations: The site was recorded as a "village site, on natural levee, no mound, approx. 1 Acre in size" by the Ford Redfield survey in March 1962. Two Dalton points, an Alba point, 1 net impressed sherd, and considerable Baytown Plain pottery was found during this visit. A 5x5 foot test pit was opened to a depth of 2.0 feet , with artifacts found to 1.1 feet (detailed profile description w/site form). The site area was revisited by James Scholtz during the 1966 Land Leveling Project; no collections were made. The site area has in all probability seen prior collection by amateurs.

NRHP Status: *Undetermined.*

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification and intact deposits are present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS48	**Site Name:**	Short
Project Site Number:	LRP-111	**Date of Visit:**	26 June 1987
County:	Cross	**USGS Quad:**	Cherry Valley W 1984 7.5

Location:	1/4	1/4	1/4;	Section	T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered).

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3CS48 (LRP-111) is a low density surface prehistoric artifact scatter (previously recorded as site 3CS48) located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was in low soybeans (< 6 in. high), offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were noted. Artifacts were observed over an area of approximately 24000 square meters (325 x 80 m in maximum extent). The site area is on a low terrace overlooking the main channel of the L'Anguille, which is located 25 m due north and 75 m due east through low wooded areas. At the time of survey the 3CS48 area was in low soybeans and sufficient rainfall had occurred to ensure excellent surface visibility. Only a very light scatter was observed along the terrace/woods margin. The location and boundaries of this scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made for 0.75 person-hours. No test units were opened at the site.

Condition: Currently unknown. The site soils are classified as Zachary silt loam/Crowley and Hillemann silt loams, 0-1% slopes (Za/CrA; USDA 1968).

Previous Investigations: The site was recorded as a ca. 4 acre light flint scatter by Scheel in 1962. No diagnostics were found during this visit. The site area was revisited by James Scholtz during the 1966 Land Leveling Project. The site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately

determined.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS49/229	**Site Name:**	Ben Moore Place
Project Site Number:	LRP-123	**Date of Visit:**	6 July 1987
County:	Cross	**USGS Quad:**	Central 1984 7.5

Location:	1/4	1/4	1/4;	Section	T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Dalton, Early Archaic, Woodland.

Diagnostic Artifacts: 1 Dalton adze, 1 side notched point, Baytown Plain pottery.

Description: Site 3CS49/3CS229 (LRP-123) is a surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. Site number 3CS049 had been previously reported from this area. Because of uncertainties in the location of that site, which was reported in 1962, a new number, 3CS229, was assigned to the location in 1988. At the time of survey, the part of the site closest to the river, at the break in the terrace sloping down to the river, had been recently plowed and rained on, offering excellent surface visibility. The remainder of the site, back (west) from the river, was in milo (also 100% visibility). No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 6250 square meters (125 x 50 m in maximum extent). The site area is on a low bluff overlooking the main channel of the L'Anguille, which is located 100-175 m due east. Material was densest at the break in slope leading down to the river swamp. The location and boundaries of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made, with 0.75 person-hours spent in collection. According to the current landowner the site area has been collected for over 50 years, and has produced many arrowheads. No test units were opened at this site.

Condition: Currently unknown. The site soils are classified as Loring silt loam, 3-8% slopes, eroded (LgC2; USDA 1968).

Previous Investigations: Previously recorded as 3CS49 by Moselage and Scheel as part of the Ford-Redfield survey in March 1962. The site was described as a small village extending over approximately two acres, with no mound present. Baytown pottery was recovered, together with one stemmed drill. The landowner reports collection has occurred for at least 50 years.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification and intact deposits are present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number: 3CS80 **Site Name:** Mason Place #2.
Project Site Number: LRP-092 **Date of Visit:** 25 June 1987
County: Cross **USGS Quad:** Hamlin 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered).

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3CS80 (LRP-092) is a low density surface artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was fallow with surface visibility varying between 25 and 100%, averaging ca. 50-75%. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 8250 square meters (275 x 30 m in maximum extent). The site was arbitrarily divided into two parts, Areas A and B, corresponding to the southern and northern portions of the scatter, respectively. The site area is on a low bluff overlooking the main channel of the L'Anguille River, which is located ca. 25 m due east through a narrow treeline and a dirt farm road. The locations and boundaries of the scatter were recorded on project blue line 1/5000 aerials, and a 100% collection of all visible artifacts was made, with one person-hours each spent in collection in Areas A and B. No test units were opened.

Condition: Currently unknown. The site soils are classified as Loring silt loam, 3-8% slopes, eroded (LgC2 ; USDA 1968).

Previous Investigations: The site was recorded as a small village ca. 100 feet in diameter by the Ford Redfield survey (Saucier and Scheel) in 1961. No diagnostics were found during this visit. The site area was revisited by James Scholtz during the 1966 Land Leveling Project; no collections were made. The site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number: 3CS81 **Site Name:** Mason #3
Project Site Number: LRP-091 **Date of Visit:** 25 June 1987
County: Cross **USGS Quad:** Hamlin 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered).

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3CS81 (LRP-091) is a very light density surface artifact scatter located in a plowed field adjacent to and overlooking the confluence of Malone Branch with the main channel

of the L'Anguille River. At the time of survey, the site was in low (< 6 in. high) soybeans, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 10000 square meters (150 x 100 m in maximum extent). The site is located on silt/clay deposits and is on a low bluff overlooking the main channel of the L'Anguille River, which is located 75 to 100 m to the northeast and southeast. The confluence of Malone Branch is ca. 200 m south of the site, through woods (shovel tested with no result). The location and boundaries of the scatter were recorded on project blue line 1/200 aerials, and a 100% sample of every visible artifact was collected for a period of 1.0 person-hours. No test units were opened.

Condition: Currently unknown. The site soils are classified as Loring silt loam, 3 to 8% slopes, eroded (LgC2; USDA 1968).

Previous Investigations: The site was recorded as a small "village site" by the Ford Redfield survey in 1961. No diagnostics were found during this visit. The site area was revisited by James Scholtz during the 1966 Land Leveling Project; no collections were made. The site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS93	**Site Name:**	None recorded
Project Site Number:	LRP-174	**Date of Visit:**	10 July 1987
County:	Cross	**USGS Quad:**	Vanndale 1984 7.5

Location:	1/4	1/4	1/4;	Section	T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Unknown prehistoric (Archaic?).

Diagnostic Artifacts: 1 (Archaic?) dart point.

Description: Site 3CS93 (LRP-174) is a very light density surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site had been recently plowed and rained on, offering excellent surface visibility (100%). No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 25000 square meters (350 x 80 m in maximum extent). The site area is on a low bluff overlooking the main channel of the L'Anguille, which is located 50 to 150 m east of the site area. The extent and boundaries of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made for 1.5 person-hours. No test units were opened at this site.

Condition: Currently unknown. The site soils are classified as Zachary silt loam/Loring silt loam, 3-8% slopes, eroded (Za/LgC2; USDA 1968).

Previous Investigations: None reported; the site area has in all probability seen prior collection by

amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS121	**Site Name:**	None recorded
Project Site Number:	LRP-147	**Date of Visit:**	9 July 1987
County:	Cross	**USGS Quad:**	Central 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Late Archaic/Woodland, Woodland, Mississippian; 20th century historic.

Diagnostic Artifacts: 1 Gary, 1 probable Baytown period projectile point; Baytown Plain, Thomas Plain, Neeleys Ferry Plain pottery; recent historic material.

Description: Site 3CS121 (LRP-147) is a dense surface prehistoric artifact scatter, with minor amounts of recent historic debris, located on a low rise in a plowed field adjacent to and overlooking the main channel of the L'Anguille River (Figure 78). At the time of survey, the site was in moderately high milo (ca. 15"), offering excellent surface visibility when the plants were pushed aside. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 3200 square meters (80 x 60 m in maximum extent). A small farm pond is located immediately north of the site, and separates it from 3CS207 (LRP-148). The field to the east of the scatter across a dirt farm road is in rice, and has been leveled and diked. The site area is on a bluff/ low terrace overlooking the main channel of the L'Anguille, which is located ca. 25 to 50 m due west of the site through a low swampy area. The location and extent of the scatter were recorded on project blue line 1/5000 aerials. A controlled surface collection was made using thirty two 3.34 m radii circles dispersed using a stratified systematic unaligned procedure. A minimum of 5 minutes was spent in every circle, and collection proceeded until no more artifacts could be found. A permanent datum consisted of a 24 inch piece of iron rebar marked with red flagging tape was located at the northwest edge of the field, 35 m at an angle of 311.5 degrees east of north of the field datum. No test units were opened.

Condition: Currently unknown. The site soils are classified as Loring silt loam, 3-8% slopes, eroded (LgC2; USDA 1968).

Previous Investigations: The site was recorded as a small 1 acre Woodland and Mississippian site in 1972. The pond was in place then; a shell tempered sherd was found. The site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification and intact deposits are present.

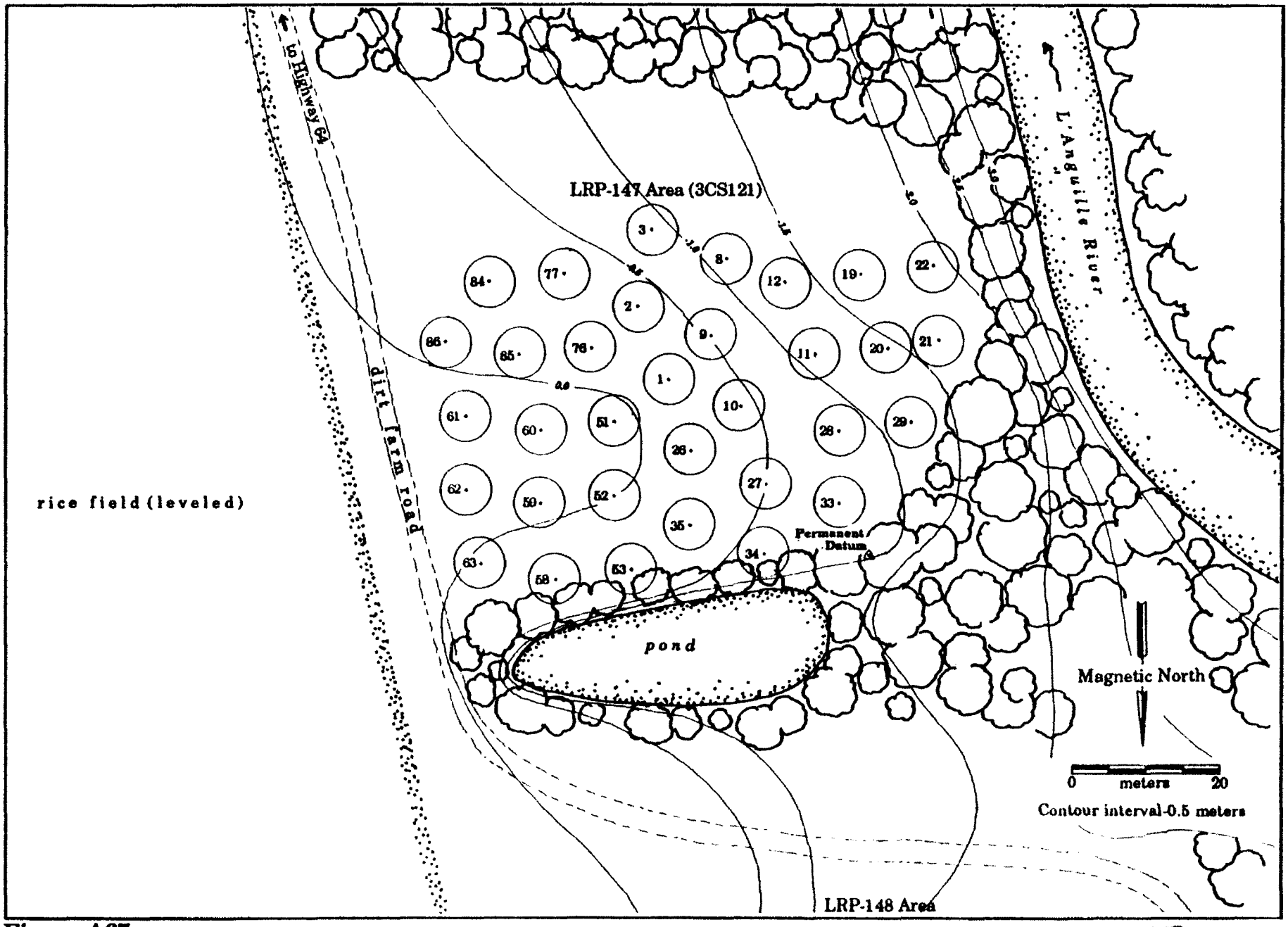


Figure A67.
Site 3CS121 (LRP-147) Proveniences and Controlled Surface Collection Circles.

ARKANSAS
L'Anguille River Survey Project

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS176	**Site Name:**	None recorded
Project Site Number:	LRP-096	**Date of Visit:**	26 June 1987
County:	Cross	**USGS Quad:**	Vanndale 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered).

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3CS176 (LRP-096) is an extremely low density surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site had been recently plowed and rained on, with no crops planted, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 600 square meters (40 x 15 m in maximum extent). The scatter is on a slight rise near the woods edge, and is separated from 3CS177 (LRP-097) by a slight gully. The site area is on a bluff overlooking the main channel of the L'Anguille River, which is located ca. 100 m due east downslope through a wooded and swampy area. The location and boundaries of the scatter were recorded on project blue line 1/5000 aerials, and a 100 percent controlled surface collection of every visible artifact was made, with 0.5 person-hours spent in collection. No test units were opened.

Condition: Currently unknown. The site soils are classified as Zachary silt loam (Za; USDA 1968).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS177	**Site Name:**	None recorded
Project Site Number:	LRP-097	**Date of Visit:**	26 June 1987
County:	Cross	**USGS Quad:**	Vanndale 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered).

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3CS177 (LRP-097) is a very low density surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site had been recently plowed and rained on, with no crops planted, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 700 square meters (35 x 20 m in maximum extent). Site 3CS176 (LRP-096) is located ca. 30 m to the south, across a small gully. The two sites occcupy low rises at the field/bank margin. The site area can be best described as on a bluff overlooking the main channel of the L'Anguille, which is located ca. 80 m due east, downslope through a wooded area. The location and boundaries of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made, with 0.5 person-hours spent in collection. No test units were opened.

Condition: Currently unknown. The site soils are classified as Zachary silt loam (Za; USDA 1968).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS179	**Site Name:**	None recorded
Project Site Number:	LRP-098	**Date of Visit:**	26 June 1987
County:	Cross	**USGS Quad:**	Vanndale 1984 7.5

Location:	1/4	1/4	1/4; Section		T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered).

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3CS179 (LRP-098) is a very low density surface prehistoric artifact scatter located on a slight rise in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site had been recently plowed and rained on, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 1250 square meters (50 x 25 m in maximum extent). The ca. 50 m rise along the woods/field margin defining the site is bounded to the north and south by small gullies. Site 3CS180 (LRP-099) is located just to the north across one of these gullies. The site area can be best described as on a bluff overlooking the main channel of the L'Anguille, which is located ca 25 m due east, downslope through a wooded area. The location and boundaries of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made for a period of 0.5 person-hours. No test units were opened.

Condition: Currently unknown. The site soils are classified as Loring silt loam, 3-8% slopes, eroded (LgC2; USDA 1968).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number: 3CS180 **Site Name:** None recorded
Project Site Number: LRP-099 **Date of Visit:** 26 June 1987
County: Cross **USGS Quad:** Vanndale 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered).

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3CS180 (LRP-099) is a very low density surface prehistoricartifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site had been recently plowed and rained on, with no crops in, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 1500 square meters (50 x 30 m in maximum extent). The site area is on a slight rise near the field margin, and is separated from 3CS179 (LRP-098) located just to the south by a minor gully. The site area is on a bluff overlooking the main channel of the L'Anguille, which is located ca. 50 m to the southeast, down a steep slope through the treeline. The location and boundaries of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made, with 0.5 person-hours spent in collection. No test units were opened.

Condition: Currently unknown. The site soils are classified as Loring silt loam, 3-8% slopes, eroded (LgC2; USDA 1968).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS181	**Site Name:**	None recorded
Project Site Number:	LRP-100	**Date of Visit:**	26 June 1987
County:	Cross	**USGS Quad:**	Vanndale 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered).

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3CS181 (LRP-100) is a very low density surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site had been recently plowed and rained on, with no crops planted, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 6000 square meters (200 x 30 m in maximum extent). The site consists of occasional artifacts that were observed for ca. 200 m along the field/woods margin. The site area is on a bluff overlooking the main channel of the L'Anguille, which is located ca. 25 to 100 m due east. The location and boundaries of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made, with 1.0 person-hours spent in collection. No test units were opened.

Condition: Currently unknown. The site soils are classified as Crowlet & Hilman silt loams, 0-1% slopes; Calloway silt loam, 1-3% slopes (CrA/ClB; USDA 1968).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS182	**Site Name:**	None recorded
Project Site Number:	LRP-101	**Date of Visit:**	26 June 1987
County:	Cross	**USGS Quad:**	Vanndale 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Late Archaic

Diagnostic Artifacts: 1 Big Creek point.

Description: Site 3CS182 (LRP-101) is a low density surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was in low (< 6 in. high) soybeans, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 2250 square meters (75 x 30 m in maximum extent). Materials were

observed on the slope and crest of a rise along the woods/field margin. A deep drainage ditch is located ca. 50 m north of the scatter, on Mr. W. W. Bonds property, providing a good picture of the soil profile. The site area is on a bluff overlooking the main channel of the L'Anguille River, which is located 100 m due east of the site, down the slope through a wooded area. The location and boundaries of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made for 1.0 person-hours. No test units were opened.

Condition: Currently unknown. The site soils are classified as Calloway silt loam, 1-3% slopes (ClB; USDA 1968), and are characterized by deep loess deposits (deep soil profile observed in drainage ditch 50 m north of the site area).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS184	**Site Name:**	None recorded
Project Site Number:	LRP-175	**Date of Visit:**	10 July 1987
County:	Cross	**USGS Quad:**	Vanndale 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Dalton/Early Archaic, Late Archaic/Woodland.

Diagnostic Artifacts: 1 late variety Dalton, 1 Gary.

Description: Site 3CS184 (LRP-175) is a low density surface artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey the site had been recently plowed and rained on, offering excellent surface visibility (100%). No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 8250 square meters (275 x 30 m in maximum extent). The scatter was arbitrarily divided into two parts, Area A (corresponding to the extreme northern 50 m of the scatter) and Area B (corresponding to the southern 225 m). The site area is on a low bluff overlooking the main channel of the L'Anguille, which is located between 75 and 300 m east through dense swamp. The river meanders a great deal in this area, close to and then away from the site area. The scatter was divided into two areas, A and B, corresponding to the northern 50 and southern 225 m of the site, respectively. The location and boundaries of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made, with 15 person-minutes spent in Area A and 45 person-minutes in Area B. No test units were opened at this site.

Condition: Currently unknown. The site soils are classified as Loring silt loam, 3-8% slopes, eroded/Zachary silt loam (LgC2/Za; USDA 1968).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS185	**Site Name:**	None recorded
Project Site Number:	LRP-176	**Date of Visit:**	10 July 1987
County:	Cross	**USGS Quad:**	Vanndale 1984 7.5

Location:	1/4	1/4	1/4; Section		T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered); 20th century historic.

Diagnostic Artifacts: No diagnostic prehistoric artifacts recovered; one 20th century glass fragment, 2 sherds.

Description: Site 3CS185 (LRP-176) is a surface artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site had been recently plowed and rained on, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 1250 square meters (50 x 25 m in maximum extent). Site 3CS184 (LRP-175) is located ca 100 m to the northwest, and site 3CS190 (LRP-209) is ca 100 m to the southwest. The site area is on a low bluff overlooking the main channel of the L'Anguille River is located ca. 30 m east of the site downslope through a narrow treeline/swampy area. The locations and boundaries of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made, with 0.5 person-hours spent in collection. No test units were opened at this site.

Condition: Currently unknown. The site soils are classified as Zachary silt loam (Za; USDA 1968).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS188	**Site Name:**	None recorded
Project Site Number:	LRP-179	**Date of Visit:**	10 July 1987
County:	Cross	**USGS Quad:**	Vanndale 1984 7.5

Location:	1/4	1/4	1/4;	Section	T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Early Archaic, Late Archaic/Woodland, Woodland.

Diagnostic Artifacts: 1 Searcy, 1 Gary, 1 corner notched; Baytown Plain pottery.

Description: Site 3CS188 (LRP-179) is a low density surface artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site had been recently plowed and rained on, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 6000 square meters (110 x 65 m in maximum extent). Site 3CS189 (LRP-180) is located ca. 15 m to the north across a ditch/treeline. A large rice field is located immediately west of the scatter. The site area is on a low bluff overlooking the main channel of the L'Anguille, which is located ca. 25 m east, downslope through a narrow treeline. The location and boundaries of the scatter were recorded on project blue line 1/200 aerials, and a controlled surface collection of every visible artifact was made for 1.5 person-hours (completely collecting the site). No test units were opened.

Condition: Currently unknown. The site soils are classified as Calloway silt loam, 1-3% slopes/Loring silt loam, 3-8% slopes, eroded (ClB/LgC2; USDA 1968).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS189	**Site Name:**	None recorded
Project Site Number:	LRP-180	**Date of Visit:**	10 July 1987
County:	Cross	**USGS Quad:**	Vanndale 1984 7.5

Location:	1/4	1/4	1/4;	Section	T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Unknown prehistoric; minor 20th century historic.

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found; 1 recent glass fragment.

Description: Site 3CS189 (LRP-180) was a low density surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site had been recently plowed and rained on, offering excellent surface visibility

(100%). No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 10000 square meters (200 x 50 m in maximum extent). Site 3CS188 (LRP-179) is located just to the south across a narrow treeline/ditch, while site 3CS12 (LRP-181) is located ca. 70 m to the NE. The site area is on a low bluff overlooking the river main channel of the L'Anguille River is located from ca. 25 to 200 m east of the site area. The river meanders a great deal in this area, next to and away from the site. The location and boundaries of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was collected, with 1.5 person-hours spent in collection. Originally the northern end of the site was collected as Area A and the southern end as Area B, but these collections were accidentally combined in the lab. No test units were opened at this site.

Condition: The site soils are classified as Loring silt loam, 3-8% slopes, eroded (LgC2; USDA 1968).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS190	**Site Name:**	None recorded
Project Site Number:	LRP-209	**Date of Visit:**	10 July 1987
County:	Cross	**USGS Quad:**	Cross 1984 7.5

Location:	1/4	1/4	1/4;	Section	T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Unknown prehistoric; 20th historic.

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found; 20th century pottery.

Description: Site 3CS190 (LRP-209) is a low density surface prehistoric artifact scatter, with a minor amount of recent historic debris, located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site had been recently plowed and rained on, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 25000 square meters (250 x 100 m in maximum extent). A minor tributary channel is located in woods just to the west of the site, while 3CS93 (LRP-174) is on the far side of this creek. The site area is on a bluff overlooking the main channel of the L'Anguille, which is located ca. 50 to 125 m south and southeast. The location and boundaries of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made for 0.5 person-hours. No test units were opened at this site.

Condition: Currently unknown. The site soils are classified as Calloway silt loam, 1-3% slopes/Loring silt loam, 3-8% slopes (ClB/LgC; USDA 1968).

Previous Investigations: None reported; the site area has in all probability seen prior collection by

amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS193	**Site Name:**	None recorded
Project Site Number:	LRP-103	**Date of Visit:**	26 June 1987
County:	Cross	**USGS Quad:**	Cherry Valley W 1984 7.5

Location:	1/4	1/4	1/4; Section		T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Dalton, Late Archaic, Late Archaic/Woodland, Woodland

Diagnostic Artifacts: 1 Dalton adz butt, 1 Burkett, 2 Weems points), Baytown Plain pottery.

Description: Site 3CS193 (LRP-103) is a dense surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was fallow, having been plowed the previous winter. Visibility ranged from 25 to 100%, negating the utility of a controlled surface collection (which would have documented cleared areas, and not necessarily concentrations). No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 7500 square meters (150 x 50 m in maximum extent). The site area can be best described as on a slight nose overlooking the river; a minor tributary flows to the west of the site. The main channel of the L'Anguille River is located ca. 75 m due south of the site, through a low swampy area. The location and boundaries of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was collected, with 4.0 person-hours spent in collection. No test units were opened.

Condition: Currently unknown. The site soils are classified as Arkabutla silt loam(Ar; USDA 1968).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number: 3CS194 **Site Name:** None recorded
Project Site Number: LRP-104 **Date of Visit:** 26 June 1987
County: Cross **USGS Quad:** Cherry Valley W 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Woodland

Diagnostic Artifacts: Baytown Plain pottery.

Description: Site 3CS194 (LRP-104) is a badly disturbed surface artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site 3CS194 area was fallow, with visibility close to 0%. Artifacts were observed over an area of approximately 2500 square meters (100 x 30 m in maximum extent). A farm pond had recently been put in, and artifacts were observed eroding out of dirt roads, construction scars, and gullies bisecting the field. Intact deposits may remain near the field/swamp margin. The site area is on a low bluff overlooking the main channel of the L'Anguille, which is located ca. 30 m due east. At the time of survey the 3CS194 area was heavily disturbed, as a fish pond had been recently constructed in the (presumed) site area. Artifacts were observed in access roads and eroding gullies, and in field margins. The location and boundaries of the scatter were recorded on project blue line 1/5000 aerials, anda controlled surface collection of every visible artifact was collected for 0.75 person-hours. No test units were opened.

Condition: Currently unknown. The site soils are classified as Loring silt loam, 3 to 8% slopes, eroded (LgC2; USDA 1968), and are characterized by fine silt/clays, as observed in eroding gully profiles..

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.
NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Intact deposits may remain near terrace/woods margin.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number: 3CS195 **Site Name:** None recorded
Project Site Number: LRP-105 **Date of Visit:** 26 June 1987
County: Cross **USGS Quad:** Cherry Valley W 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered).

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3CS195 (LRP-105) is a low density surface prehistoric artifact scatter located in a field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was fallow, offering poor to fair surface visibility (25-75%). No footprints indicative of

prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 10000 square meters (135 x 75 m in maximum extent). A wooded drainage feature (an old tributrary?) forms the site's western boundary; the site overlooks the confluence of this drainage and the L'Anguille. The site can be best described as on a low bluff or nose overlooking the main channel of the L'Anguille, which is located 75 m due south. The location and boundaries of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made for a period of 0.5 person-hours. No test units were opened.

Condition: Currently unknown. The site soils are classified as Grenada silt loam, 1-3% slopes, eroded (GrB2; USDA 1968).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS196	**Site Name:**	None recorded
Project Site Number:	LRP-106	**Date of Visit:**	26 June 1987
County:	Cross	**USGS Quad:**	Cherry Valley W 1984 7.5

Location:	1/4	1/4	1/4; Section		T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered).

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3CS196 (LRP-106) is a very light surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was in low (< 6 in. high) soybeans, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 7500 square meters (150 x 50 m in maximum extent). A drainage ditch defines the southern limits of the scatter; no artifacts were noted in the field on the other side of this ditch. The site area is on a low terrace overlooking the main channel of the L'Anguille, which is located ca. 50 m south. The location and boundaries of this low density scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made for 0.5 person-hours. No test units were opened.

Condition: Currently unknown. The site soils are classified as Zachary silt loam (Za; USDA 1968).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS197	**Site Name:**	None recorded
Project Site Number:	LRP-107	**Date of Visit:**	26 June 1987
County:	Cross	**USGS Quad:**	Cherry Valley W 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered).

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3CS197 (LRP-107) is a very low density surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was in low (< 6 in. high) soybeans, offering excellent (95%) surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 2700 square meters (90 x 30 m in maximum extent). The site area is on a low terrace overlooking the main channel of the L'Anguille, which is located 35 m due south through a narrow treeline. The location and boundaries of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made, with 0.5 person-hours spent in collection. No test units were opened.

Condition: Currently unknown. The soils are classified as Zachary silt loam (Za; USDA 1968).

Previous Investigations: None reported; the area has in all probability seen collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS198	**Site Name:**	None recorded
Project Site Number:	LRP-108	**Date of Visit:**	26 June 1987
County:	Cross	**USGS Quad:**	Cherry Valley W 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered).

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3CS198 (LRP-108) is a very light surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was in low soybeans (< 6 in. high), offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 2400 square meters (80 x 30 m in maximum extent). This site, with sites 3CS196 to 3CS200, is part of a very light, almost continuous scatter along the river margin in this area. The site area is on a low terrace overlooking the main channel of the L'Anguille, which is located 25 m due east, through a narrow treeline. The location and boundary of the scatter was recorded on project blue line 1/200 aerials, and a controlled surface collection of every visible artifact was made for 0.5 person-hours. No test units were opened.

Condition: Currently unknown. The soils are classified as Zachary silt loam (Za; USDA 1968).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS199	**Site Name:**	None recorded
Project Site Number:	LRP-109	**Date of Visit:**	26 June 1987
County: Cross		**USGS Quad:**	Cherry Valley W 1984 7.5

Location:	1/4	1/4	1/4; Section		T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered); minor recent historic.

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found; 2 pieces of recent glass.

Description: Site 3CS199 (LRP-109) is a low density surface artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was in low soybeans (< ^{6} in. high), offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 5000 square meters (150 x 40 m in maximum extent). The site area is on a low terrace overlooking the main channel of the L'Anguille, which is located ca. 15 m north and east through a narrow treeline. The location and boundaries of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made, with 0.5 person-hours spent in collection. No test units were opened.

Condition: Currently unknown. The site soils are classified as Zachary silt loam (Za; USDA 1968).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS200	**Site Name:**	None recorded
Project Site Number:	LRP-110	**Date of Visit:**	26 June 1987
County:	Cross	**USGS Quad:**	Cherry Valley W 1984 7.5

Location:	1/4	1/4	1/4;	Section	T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered); minor recent historic.

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found; 20th century historic artifacts.

Description: Site 3CS200 (LRP-110) is a low density surface artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was in low soybeans (< 6 in. high), offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 3750 square meters (125 x 30 m in maximum extent). The site area can be best described as on a low terrace overlooking the main channel of the L'Anguille, which is located ca. 15 to 20 m due east through a narrow treeline. The location and boundaries of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made, with 0.5 person-hours spent in collection. No test units were opened.

Condition: Currently unknown. The site soils are classified as Zachary silt loam/Grenada silt loam, 1-3% slopes, eroded (Za/GrB2; USDA 1968).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS201	**Site Name:**	None recorded
Project Site Number:	LRP-127	**Date of Visit:**	29 June 1987
County:	Cross	**USGS Quad:**	Cherry Valley W 1984 7.5

Location:	1/4	1/4	1/4;	Section	T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Early Archaic.

Diagnostic Artifacts: 1 Hardin projectile point.

Description: Site 3CS201 (LRP-127) is a low density surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was in low (< 6 in. high) soybeans, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 37500 square meters (250 x 150 m in maximum extent). Site 3CS30 is located to the south across a narrow hedgerow; the 3CS30 field was fallow and no artifacts were recovered in it. The site area is on a low ridgenose overlooking the main channel of the L'Anguille, which is located from 15 to 125 m east, through a dense wooded swamp. The location and extent of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was collected for 0.67 person-hours. No test units were opened at this site.

Condition: Currently unknown. The site soils are classified as Grenada silt loam, 1-3% slopes/Loring silt loam, 3-8% slopes, eroded (GrB/LgC2; USDA 1968).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification and intact deposits are present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS202	**Site Name:**	None recorded
Project Site Number:	LRP-128	**Date of Visit:**	8 July 1987
County:	Cross	**USGS Quad:**	Cherry Valley W 1984 7.5

Location:	1/4	1/4	1/4;	Section	T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Dalton, Middle Archaic, Late Archaic, Woodland, Mississippian; trace recent historic debris.

Diagnostic Artifacts: 2 Dalton, 1 Rice Lobed, 1 Hickory Ridge, 1 Weems, 3 Scallorn, 1 Schugtown projectile point; Baytown Plain, Yates Net Impressed, Tchefuncte Stamped, Mulberry Creek Cord Marked, Thomas Plain, Coles Creek Incised, Neeleys Ferry Plain pottery; recent glass.

Description: Site 3CS202 (LRP-128) is a dense surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River (Figures 68, 69). At the time of survey, the site was in low soybeans, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 4400 square meters (80 x 70 m in maximum extent). The 3CS202 area is located on a low rise near the field edge (see site map). Site 3CS18 (LRP-129) is located just

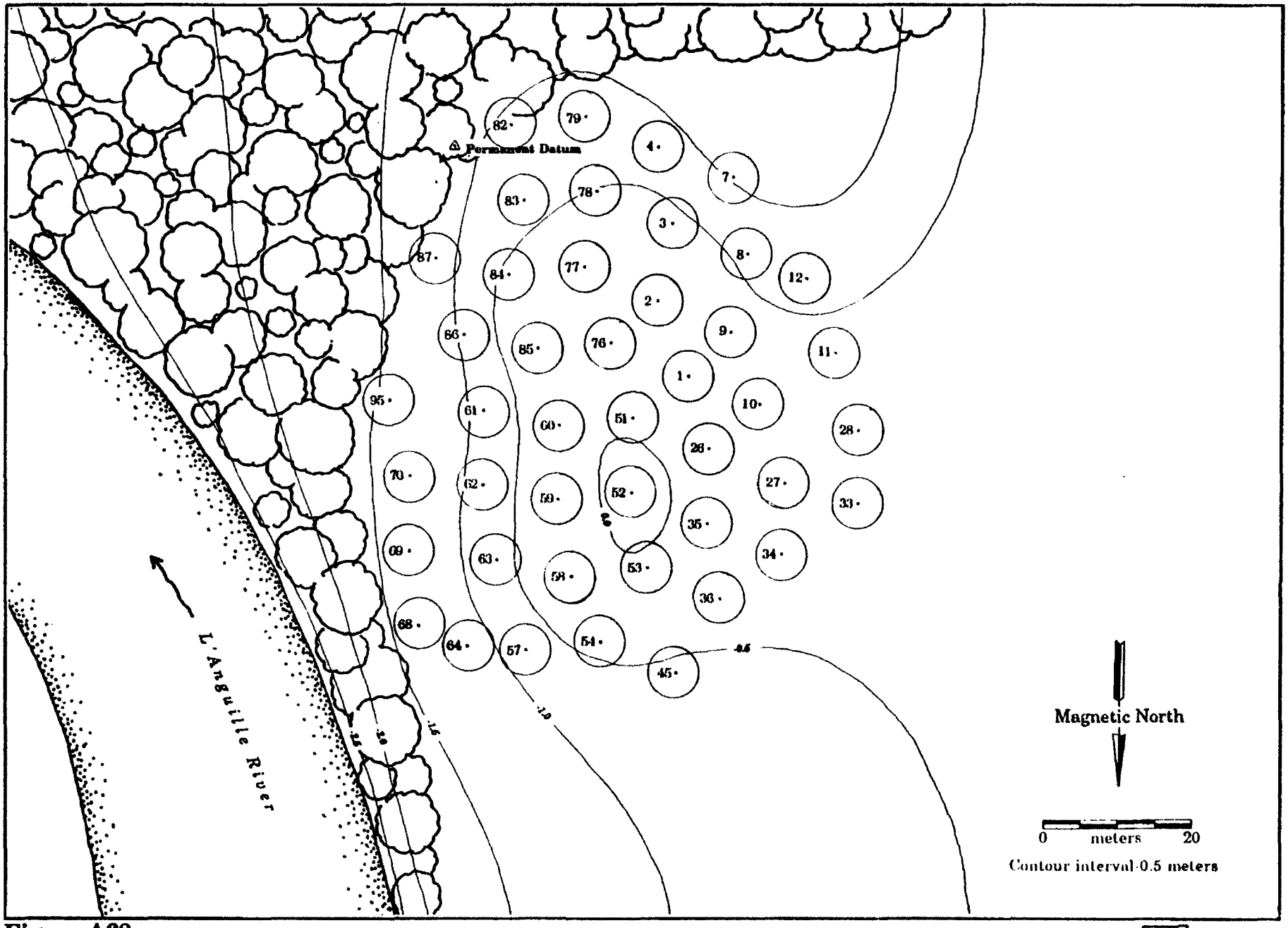


Figure A68.
Site 3CS202 (LRP-128) Proveniences
and Controlled Surface Collection Circles.

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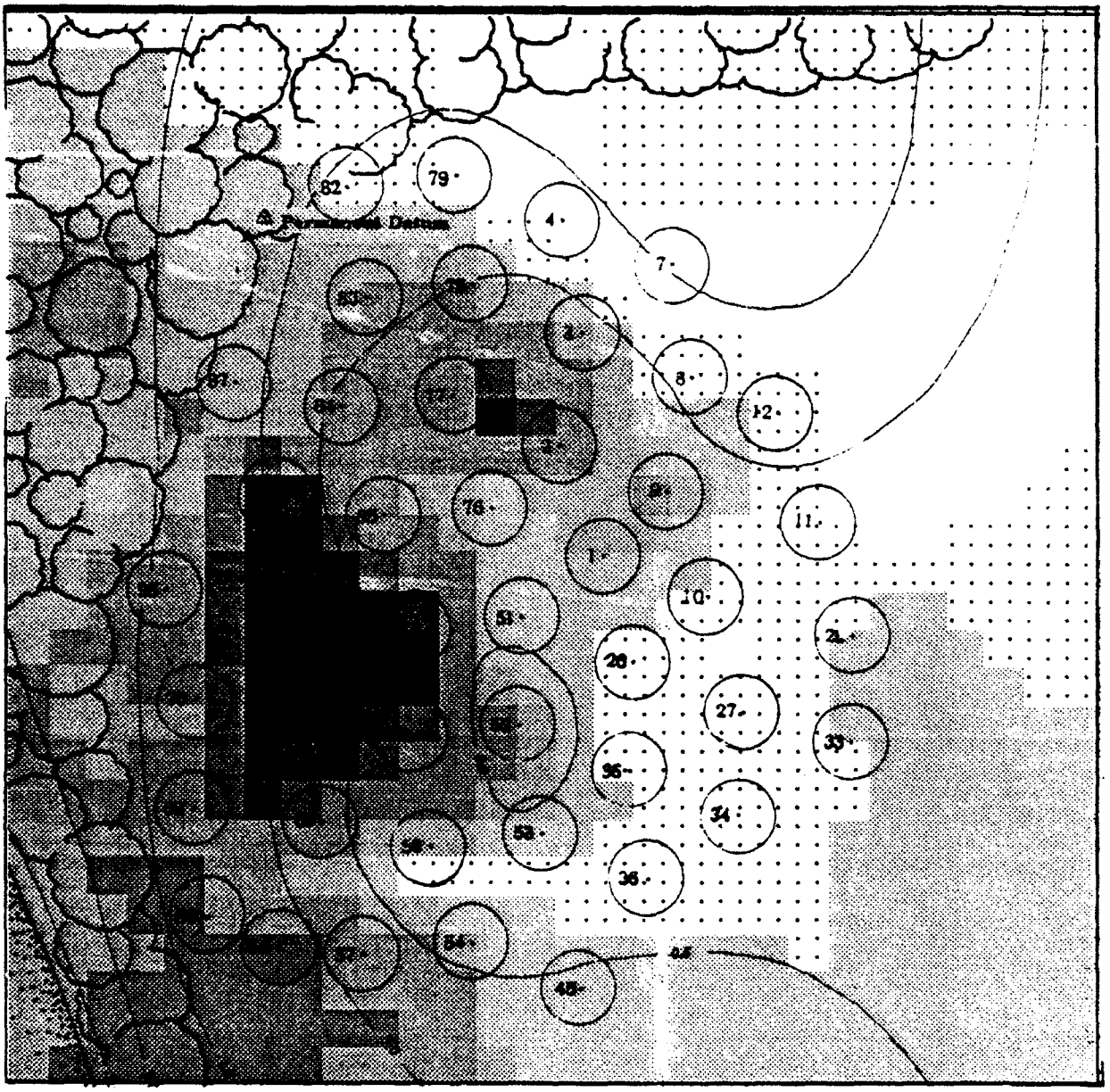


Figure A69.
Site 3CS202 (LRP-128)
Prehistoric Artifacts - Surface Distributions.

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to the north. A great deal of human bone was found in the collections, indicating burials are being hit by the plow. The site area is on a low bluff overlooking the main channel of the L'Anguille, which is located ca. 25 m east through a narrow treeline. The location and extent of the scatter were recorded on project blue line 1/5000 aerials. A controlled surface collection was made using forty-four 3.34 m radii circles dispersed using a stratified systematic unaligned procedure. A minimum of 5 minutes was spent in every circle, and collection proceeded until no more artifacts could be found. A permanent datum consisting of a 24 inch piece of iron rebar marked with red flagging tape was located in the woods margin at the SE part of the site, 44.5 m from the field datum at an angle of 141.5 degrees east of magnetic north. No test units were opened at this site.

Condition: Currently unknown. The site soils are classified as Grenada silt loam, 1-3% slopes; Loring silt loam, 3-8% slopes, eroded (GrB/LgC2; USDA 1968).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification and intact deposits are present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS203	**Site Name:**	None recorded
Project Site Number:	LRP-132	**Date of Visit:**	29 June 1987
County:	Cross	**USGS Quad:**	Cherry Valley W 1984 7.5

Location:	1/4	1/4	1/4; Section		T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered).

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3CS203 (LRP-132) is a low density surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was fallow, offering poor (ca. 5%) surface visibility, although near the field margin conditions were much better (50%). No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 6000 square meters (125 x 50 m in maximum extent). The site is inside a major levee in a field that looks to have been used to grow rice at one time. The site area is on a low terrace overlooking the main channel of the L'Anguille, which is located ca. 15 to 25 m due north of the site area through a narrow treeline. At the time of survey the LRP-132 area was fallow, with visibility between 0 and 50%. The location and extent of the scatter could be determined, however, and were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made, with 0.5 person-hours spent in collection. No test units were opened at the site.

Condition: The site soils are classified as Zachary silt loam (Za; USDA 1968).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratified, intact deposits are present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS205	**Site Name:**	None recorded
Project Site Number:	LRP-121	**Date of Visit:**	10 July 1987
County: Cross		**USGS Quad:**	Central 1984 7.5

Location:	1/4	1/4	1/4;	Section	T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Dalton, Woodland; historic 19th/20th century.

Diagnostic Artifacts: 1 Dalton point, Baytown Plain pottery; 19th/20th century artifacts.

Description: Site 3CS205 (LRP-121) is a small, low density surface prehistoric scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River (Figure 70, 71). At the time of survey, the site was in low (< 15 in. high) soybeans, offering fair to good surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 2000 square meters (50 x 50 m in maximum extent). Site 3CS17 (LRP-122) is located ca. 75 m to the north, on a separate rise. The site is elevated ca. 2 m above the river channel. The site area is on a bluff/ low terrace overlooking the main channel of the L'Anguille, which is located ca. 10 to 15 m due west through a narrow treeline. The location and boundaries of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collections were made using twenty 3.34 m radii circles dispersed using a stratified systematic unaligned procedure. A minimum of 5 minutes was spent in every circle, and collection proceeded until no more artifacts could be found. No test units were opened at this site.

Condition: Currently unknown. The site soils are classified as Loring silt loam, 3-8% slopes, eroded (LgC2 ; USDA 1968).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification and intact deposits are present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

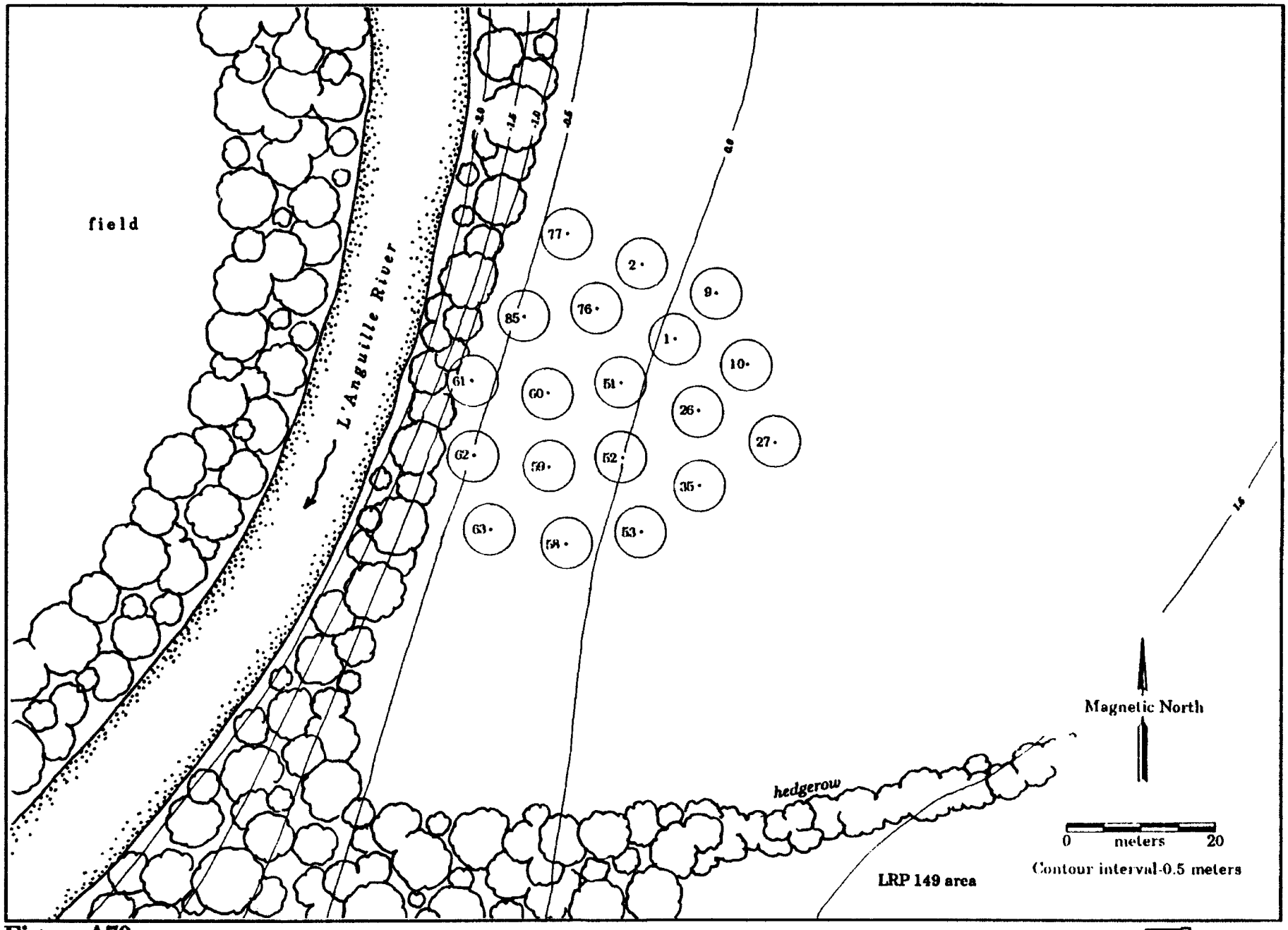


Figure A70.
Site 3CS205 (LRP-121) Proveniences
and Controlled Surface Collection Circles.

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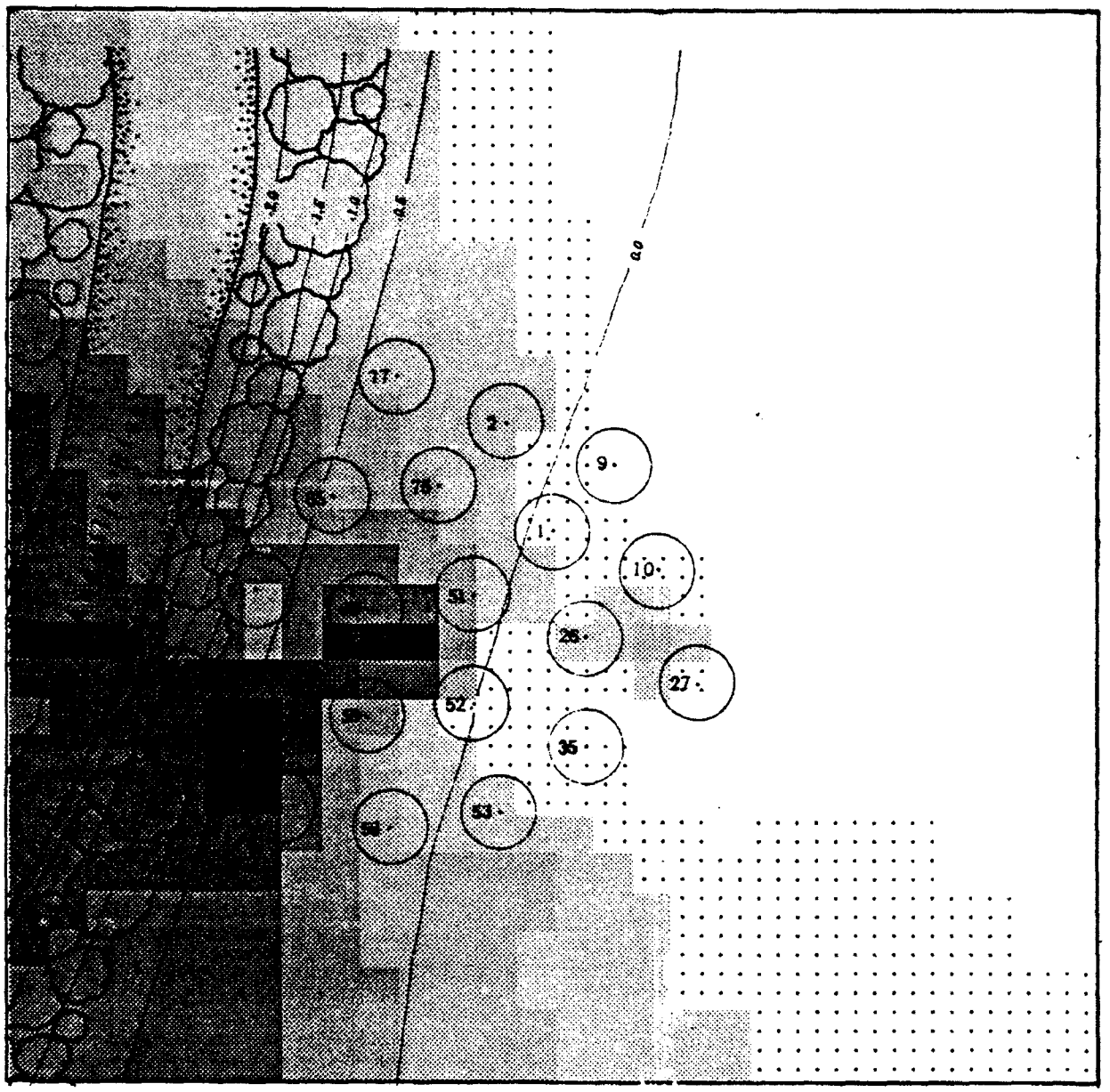


Figure A71.
Site 3CS205 (LRP-121)
Prehistoric Artifacts - Surface Distributions.

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State Site Number:	3CS207	**Site Name:**	None recorded
Project Site Number:	LRP-148	**Date of Visit:**	9 July 1987
County: Cross		**USGS Quad:**	Central 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Late Archaic/Woodland, Woodland, Mississippian; early 20th century historic.

Diagnostic Artifacts: 1 Gary, 1 Scallorn projectile point; Baytown Plain, Thomas Plain, Neeley's Ferry Plain pottery; dense early 20th century assemblage.

Description: Site 3CS207 (LRP-148) is a dense surface historic and prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River (Figures 72, 73). At the time of survey, the site was in low soybeans (< 12 in. high), offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 5200 square meters (100 x 70 m in maximum extent). An old outbuilding is located on the western side of the field; an early 20th century house site appears to have been in the field proper, judging by the quantity of debris observed. A dirt road runs by this outbuilding down to a rickety wooden bridge crossing the river. The site area is on a low rise overlooking the main channel of the L'Anguille, which is located ca. 25 m due west through a wooded area. The location and boundaries of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection was made using fifty two 3.34 m radii circles dispersed using a stratified systematic unaligned procedure. A minimum of 5 minutes was spent in every circle, and collection proceeded until no more artifacts could be found. A permanent datum consisting of a 24 inch piece of iron rebar marked with red flagging tape was located 32.5 m from the field datum at an angle of 278 degrees east of magnetic north. No test units were opened.

Condition: Currently unknown. The site soils are classified as Loring silt loam, 3-8% slopes, eroded (LgC2; USDA 1968).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification and intact deposits are present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS208	**Site Name:**	None recorded
Project Site Number:	LRP-149	**Date of Visit:**	10 July 1987
County: Cross		**USGS Quad:**	Central 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

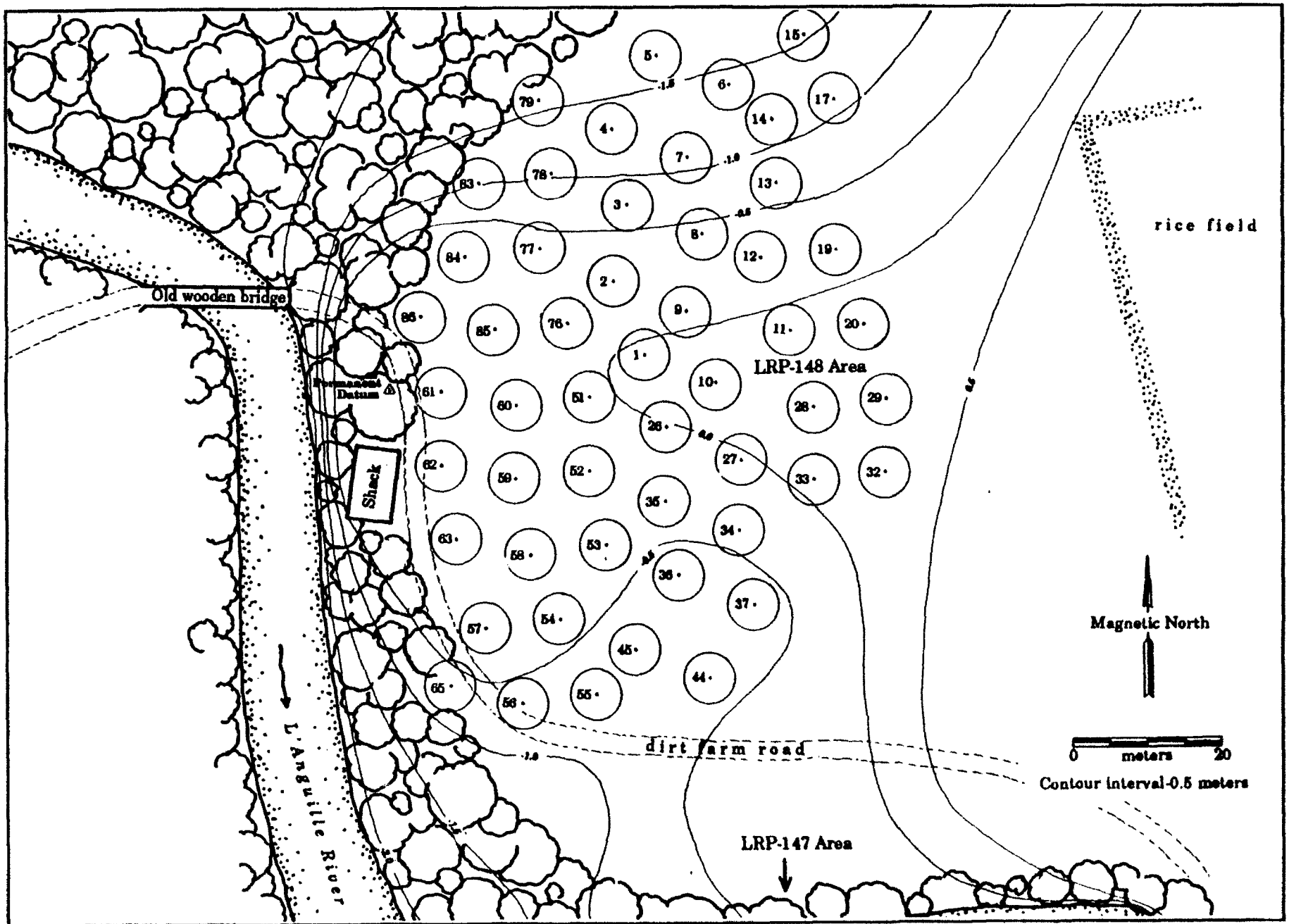


Figure A72.
Site 3CS207 (LRP-148) Proveniences
and Controlled Surface Collection Circles.

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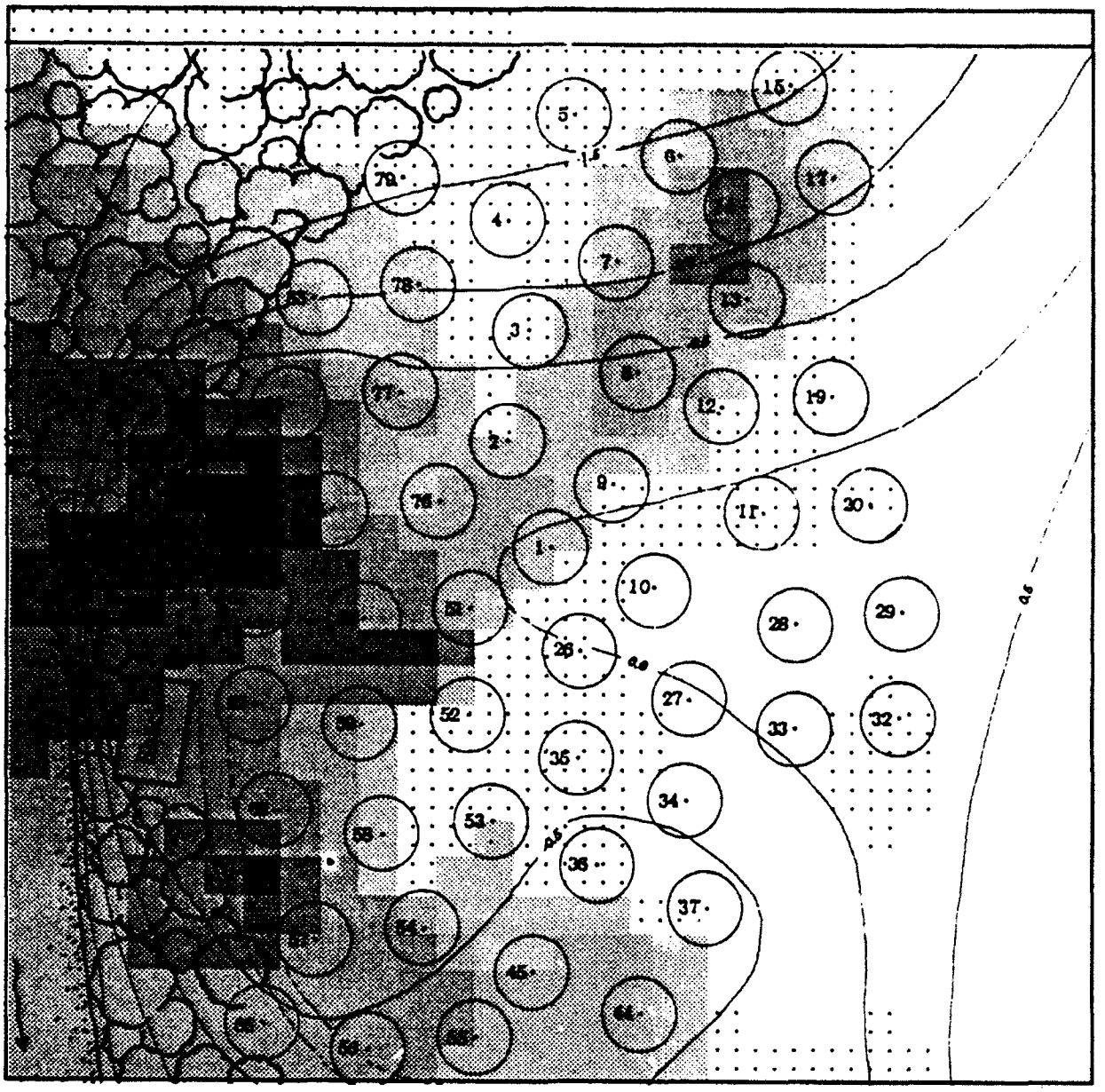


Figure A73.
Site 3CS207 (LRP-148)
Prehistoric Artifacts - Surface Distributions.

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Temporal Span: Middle Archaic?

Diagnostic Artifacts: 1 damaged side notched (Hickory Ridge?) projectile point.

Description: Site 3CS208 (LRP-149) is a very low density surface artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was in low soybeans (< 15 in. high), offering excellent surface visibility (ca. 95%). No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 4000 square meters (85 x 50 m in maximum extent). Site 3CS207 (LRP-148) is located ca 100 m to the north through a hedgerow. The site area is on a low bluff or terrace overlooking the main channel of the L'Anguille, which is located ca. 75 to 100 m west through a low swampy area. The location and boundaries of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made for 0.75 person hours (complete collection of scatter). No test units were opened.

Condition: Currently unknown. The site soils are classified as Loring silt loam, 3-8% slopes, eroded (LgC2 ; USDA 1968).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification and intact deposits are present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS210	**Site Name:**	A. W. White Place
Project Site Number:	LRP-151	**Date of Visit:**	6 July 1987
County:	Cross	**USGS Quad:**	Central 1984 7.5

Location:	1/4	1/4	1/4; Section		T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered).

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3CS210 (LRP-151) is a highly disturbed surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site had been recently plowed and rained on, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 4500 square meters (150 x 35 m in maximum extent). A field road runs through the scatter, which is located just to the east of a leveled and diked rice field. Previously recorded site 3CS51, mapped in this rice field, has apparently been destroyed; this debris may be from that site, although it has been assigned a new number. The site area is on a low bluff overlooking the river swamp; the main channel of the L'Anguille River is located 75 m southeast of the site area. At the time of survey the 3CS210 area, which lay between a large rice field

and the river swamp margin, had been freshly plowed, with sufficient rainfall to ensure excellent surface visibility. The site area appears highly disturbed, with borrowing and leveling suggested in some areas. Intact deposits may, however, still be present, particularly near the terrace margin. The location and extent of the scatter was recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made for 0.5 person-hours. No test units were opened.

Condition: Currently unknown. The site soils are classified as Calloway silt loam, 0-1% slopes/Loring silt loam, 3-8% slopes (ClA/LgC; USDA 1968).

Previous Investigations: The site was recorded as a small Archaic village by Moselage and Scheel in 1960. No pottery and 1 Archaic(?) point were reported. A survey sheet was filed with the Arkansas Archeological Survey as part of the Ford-Redfield investigations. The site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification and intact deposits are present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS211	**Site Name:**	None recorded
Project Site Number:	LRP-152	**Date of Visit:**	6 July 1987
County:	Cross	**USGS Quad:**	Central 1984 7.5

Location:	1/4	1/4	1/4; Section		T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Archaic? (1 dart point), Woodland .

Diagnostic Artifacts: Baytown Plain pottery.

Description: Site 3CS211 (LRP-152) was a low density surface prehistoric artifact scatter located in two plowed fields adjacent to and overlooking the main channel of the L'Anguille River. Artifacts were observed over an area of approximately 12000 square meters (225 x 50 m in maximum extent). The scatter occurred near the break in the field where it began to slope down to the river swamp. A fenced treeline with a dirt farm road on the south side bisects the scatter. Two collection areas were defined, to the north and south of this treeline. At the time of survey, the area to the north (Area A) had been recently plowed and rained on, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. The area to the south of the treeline was in low soybeans, also offering excellent surface visibility. A boat landing is located in the extreme northeast corner of the site scatter, in Area A. The landowner indicated an old cemetery was believed to be located in the woods to the southeast of the site, across an old levee. Nothing was found in this area, although the undergrowth was dense. The site area is on a low bluff overlooking the main channel of the L'Anguille, which is located ca. 10 to 50 m due east. Most materials were located near the hedgerow, at a break in the field where it began to slope toward the river. The location and extent of the scatter was recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made, with 10 minutes spent in Area A and 30 person-minutes spent in Area B. No test units were opened.

Condition: Currently unknown. The site soils are classified as Arkabutla silt loam (Ar; USDA 1968).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened in both areas A and B to determine if stratification is present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS212	**Site Name:**	None recorded
Project Site Number:	LRP-153	**Date of Visit:**	6 July 1987
County:	Cross	**USGS Quad:**	Central 1984 7.5

Location:	1/4	1/4	1/4;	Section	T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered).

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3CS212 (LRP-153) is a low density surface artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was in low soybeans, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Most materials came from a low rise in the field near the woodline. Artifacts were observed over an area of approximately 4000 square meters (85 x 50 m in maximum extent). The site area is on a low bluff overlooking the main channel of the L'Anguille, which is located ca. 80 to 90 m due north through a wooded swampy area. The location and extent of the scatter was recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was collected for 0.5 person-hours. No test units were opened at this site.

Condition: The site soils are classified as Zachary silt loam (Za; USDA 1968).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number: 3CS218 **Site Name:** None recorded
Project Site Number: LRP-093 **Date of Visit:** 25 June 1987
County: Cross **USGS Quad:** Hamlin 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered).

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3CS218 (LRP-093) is a very light surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the field was fallow, with surface visibility varying from 25 to 100%. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 12800 square meters (160 x 80 m in maximum extent). An old historic house was once present in a clump of trees located 100 m east of the site, which is confined to the east side of an old farm road. The site area is on a low bluff/ridgenose overlooking the main channel of the L'Anguille River, which is located ca. 50 to 75 m due east through a low wooded area. The location and boundaries of the scatter were recorded on project blue line 1/5000 aerials, and a 100 percent controlled surface collection of every visible artifact was made for a period of 1.0 person-hours. No test units were opened.

Condition: Currently unknown. The site soils are classified as Loring silt loam, 3-8% slopes, eroded (LgC2 ; USDA 1968).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number: 3CS219 **Site Name:** None recorded
Project Site Number: LRP-094 **Date of Visit:** 25 June 1987
County: Cross **USGS Quad:** Hamlin 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Prehistoric Woodland.

Diagnostic Artifacts: Baytown Plain pottery.

Description: Site 3CS219 (LRP-094) is a low density surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the field was fallow, with visibility between 25 to 100%, offering fair to good surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts

were observed over an area of approximately 22500 square meters (175 x 50 m in maximum extent). The scatter was arbitrarily divided into two parts, with the northern third on a narrow ridgenose designated Area B and the remainder, along a broader terrace/bluff surface to the south, designated Area A. The site area overlooks the main channel of the L'Anguille River, which is located 50 to 125 m to the northeast. The locations and boundaries of the scatter were recorded on project blue line 1/5000 aerials. A 100 percent controlled surface collection of every visible artifact was collected from each area, with 1.0 person-hours spent in collection in Area A and 1.0 hours in Area B. No test units were opened.

Condition: Currently unknown. The site soils are classified as Calloway silt loam, 1-3% slopes (Area A), and Loring silt loam, 3-8% slopes, eroded (Area B) (ClB /LgC2 USDA 1968).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number: 3CS220 **Site Name:** None recorded
Project Site Number: LRP-095 **Date of Visit:** 25 June 1987
County: Cross **USGS Quad:** Hamlin 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Woodland

Diagnostic Artifacts: Baytown Plain pottery)

Description: Site 3CS220 (LRP-095) is a very low density surface artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was in low (< 6 in. high) soybeans, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 10500 square meters (175 x 60 m in maximum extent). The site area is on a bluff slope overlooking the main channel of the L'Anguille River, which is located ca. 75 m northeast through wooded swampy terrain. The location and boundaries of the scatter were recorded on project blue line 1/5000 aerials, and a 100 percent controlled surface collection of every visible artifact was made, with 1.0 person-hours spent in collection. No test units were opened.

Condition: Currently unknown. The site soils are classified as Loring silt loams, 3-8% slopes, eroded (LgC2; USDA 1968).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS222	**Site Name:**	None recorded
Project Site Number:	LRP-165	**Date of Visit:**	7 July 1987
County: Cross		**USGS Quad:**	Hamlin 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered).

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3CS222 (LRP-165) is a low density surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was in low soybeans, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 8000 square meters (120 x 75 m in maximum extent). The scatter is located to the north of two trailers and a boat landing located by the river edge. The landowner reports that a number of points have been found in this area. The site area is on a low bluff overlooking the main channel of the L'Anguille, which is located ca. 25 m due east through a narrow treeline. Most of the material was found to the north of the trailers by the river edge. The location and extent of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made for 0.67 person-hours. No test units were opened at this site.

Condition: Currently unknown. The site soils are classified as Loring silt loam, 3-8% slopes, eroded (LgC2; USDA 1968).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS223	**Site Name:**	None recorded
Project Site Number:	LRP-166	**Date of Visit:**	7 July 1987
County: Cross		**USGS Quad:**	Hamlin 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Possibly Early Archaic or Dalton, Late Archaic/Woodland.

Diagnostic Artifacts: 1 probable Dalton point, 1 corner notched point base.

Description: Site 3CS223 (LRP-166) is a surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the field was fallow, offering between 0 and 75% surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 13500 square meters (180 x 75 m in maximum extent). The owner reported collecting arrowheads from this field and from the vicinity of a horse pasture to the east, across a fence and treeline. No artifacts were observed in the pasture area, although visibility was poor (ca. 0 to 10%). IF-17 (Acc. # 87-959-2), a recent brick fragment, was found 200 m to the south near a pond, and was added to this site collection. The site area is on a low terrace overlooking the main channel of the L'Anguille, which is located from 50 to 150 m due east. The location and extent of the scatter was recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made for 1.0 person hours. No test units were opened at this site.

Condition: Currently unknown. The site soils are classified as Loring silt loam, 3-8% slopes, eroded (LgC2; USDA 1968).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3CS226	**Site Name:**	None recorded
Project Site Number:	LRP-169	**Date of Visit:**	7 July 1987
County:	Cross	**USGS Quad:**	Hamlin 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered).

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3CS226 (LRP-169) is a surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was fallow, with surface visibility between 50 and 75%. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 2500 square meters (80 x 35 m in maximum extent). A leveled and diked rice field is located immediately west of the site, and the confluence of Brushy Creek with the L'Anguille lies ca. 75 m to the east through a dense swamp. Part of the site area appears to have been destroyed by the rice cultivation. The site area is on a low bluff overlooking the confluence of Brushy Creek with the main channel of the L'Anguille River. The location and boundaries of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made for 0.5 person-hours. No test units were opened at this site.

Condition: Currently unknown. The site soils are classified as Calloway silt loam, 0-1% slopes (ClA; USDA 1968).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3PO20	**Site Name:**	Moore
Project Site Number:	LRP-133	**Date of Visit:**	29 June 1987
County: Poinsett		**USGS Quad:**	Cherry Valley W 1984 7.5

Location:	1/4	1/4	1/4; Section		T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered).

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3PO20 (LRP-133) is a low density surface artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the field was in fairly high milo, offering only fair surface visibility (ca. 0 to 50%, averaging ca. 25%). No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 25000 square meters (275 x 100 m in maximum extent). A minor tributary defines the northern limits of the site, while the southern limits are at a hedgerow in the field. The site area is on a low bluff overlooking the main channel of the L'Anguille, which is located ca. 90 to 100 m southwest. At the time of survey the 3PO20 area was in milo, with visibility ca. 25% on average. The location and boundaries of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made for 0.5 person-hours. No test units were opened at the site.

Condition: The site soils are classified as Hillemann silt loam/Calloway silt loam, 0-1% slopes (Hm/CaA; USDA 1977b).

Previous Investigations: The site was recorded as a 200x50' Woodland and Archaic scatter by C. L. Scheel in 1961. Five small potsherds and a point (none were typed) were found during this visit. The site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number: 3PO157 **Site Name:** None recorded
Project Site Number: LRP-119 **Date of Visit:** 30 June 1987
County: Poinsett **USGS Quad:** Powers Slough 1980 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Dalton, Late Archaic, Late Archaic/Woodland.

Diagnostic Artifacts: 1 Dalton, 1 Big Creek, 1 Burkett, 2 Gary, 1 Weems projectile point.

Description: Site 3PO157 (LRP-119) is a dense surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River (Figure 74). At the time of survey, the site had been recently plowed and rained on, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 20000 square meters (400 x 50 m in maximum extent). Large fish ponds were located just south of the site, which is set off from the ponds by a deep ditch and an elevated farm road around the ponds. The southern 200 m of the ca. 400 m long scatter were collected using controlled collection procedures, while a general collection procedure was used in the northern 200 m. The owner of the fishponds indicated that the field may have been leveled at one time (he was not sure), prompting our abandonment of the controlled collection procedure. The site area is on a low terrace overlooking the main channel of the L'Anguille, which is located ca. 25 to 75 m due east through a narrow treeline. The location and extent of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection was made over the southern part of the site using 102 3.34 m radii circles dispersed using a stratified systematic unaligned procedure. A minimum of 5 minutes was spent in every circle, and collection proceeded until no more artifacts could be found. A 100% general collection was made for a period of 4.0 person hours over the northern part of the scatter. No test units were opened.

Condition: Currently unknown. The site soils are classified as Tichnor soils, frequently flooded (Tc; USDA 1977b).

Previous Investigations: The site was recorded as 3PO157 in 1970. The site form had no information other than locational data. The site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification and intact deposits are present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number: 3PO201 **Site Name:** None recorded
Project Site Number: LRP-172 **Date of Visit:** 7 July 1987
County: Poinsett **USGS Quad:** Powers Slough 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

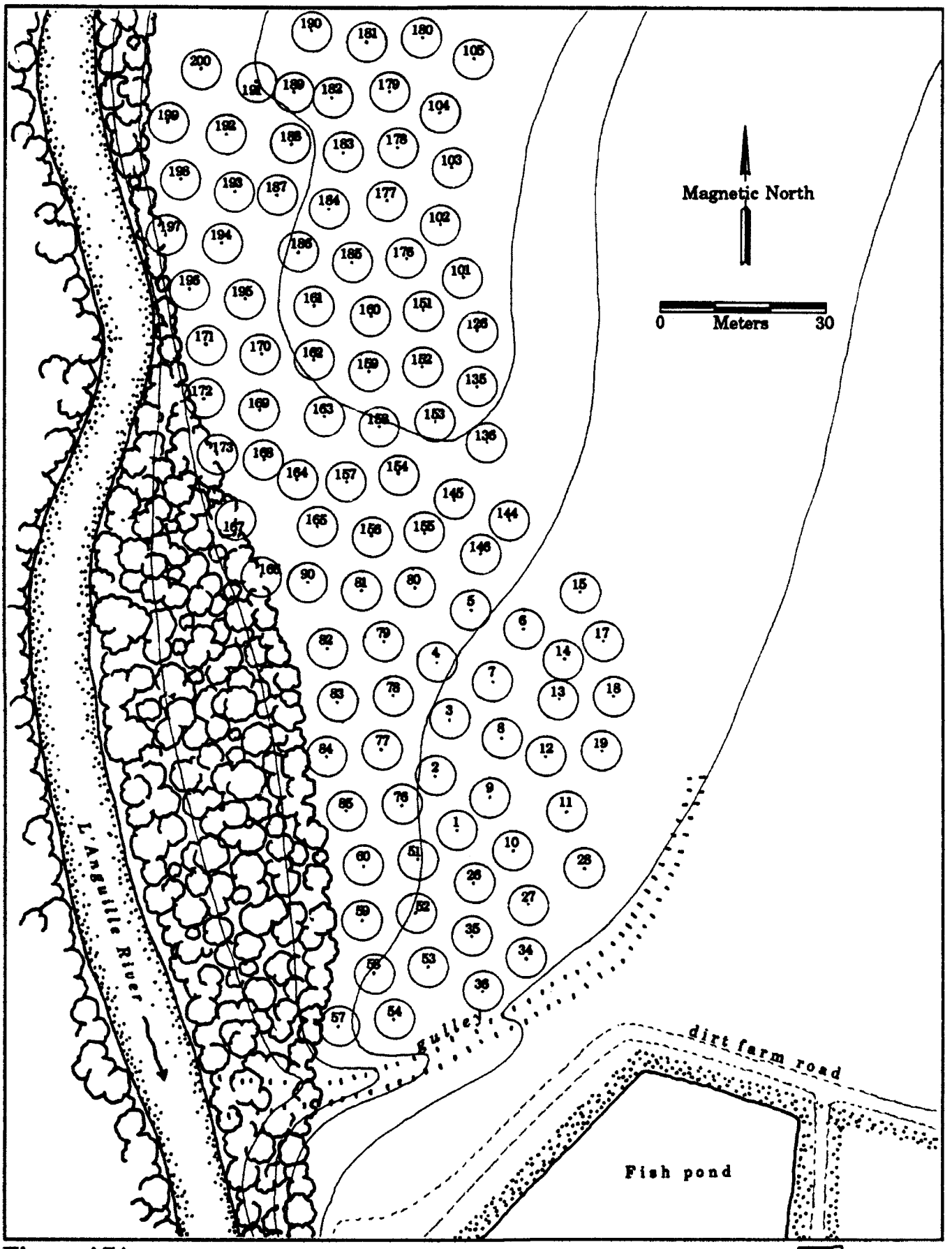


Figure A74.
Site 3PO157 (LRP-119) Proveniences
and Controlled Surface Collection Circles.

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Temporal Span: Archaic(?),Woodland.

Diagnostic Artifacts: 2 (Archaic?) dart points; Mulberry Creek Cordmarked, Baytown Plain pottery.

Description: Site 3PO201 (LRP-172) is a surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the field was fallow, with visibility varying between 10 and 100%, averaging ca. 50%. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 6000 square meters (100 x 60 m in maximum extent). The site area is on a low terrace overlooking the main channel of the L'Anguille, which is located 75 m due west, through a low swamp. The extent and boundaries of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made, with one person-hour spent in collection. No test units were opened at this site.

Condition: Currently unknown. The site soils are classified as Calloway silt loam, 1-3% slopes (CaB; USDA 1977b).

Previous Investigations: This site was recorded as 3PO201 by C. L. Scheel in May 1971, who described it as a "small village about 1 acre" in extent; an Archaic age was attributed to the scatter. No diagnostics were found during this visit.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires additional testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3PO202	**Site Name:**	None recorded
Project Site Number:	LRP-208	**Date of Visit:**	29 June 1987
County:	Poinsett	**USGS Quad:**	Powers Slough 1980 7.5

Location:	1/4	1/4	1/4; Section		T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered).

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3PO202 (LRP-208) was revisited during the survey. At the time of the revisit the site was fallow and densely overgrown. No artifacts were observed in the area, or in shovel tests opened in the right of way at 30 m intervals. The site has been recorded (even given the negative evidence) as warranting additional inspection, since the shovel testing may not have been sufficient to locate a low density scatter. The area should be revisited after plowing, or should see the excavation of a 1 m unit. The site area is on a low terrace overlooking the main channel of the L'Anguille, which is located ca. 75 m due west, through a dense swamp. Additional testing, with a larger (1m) unit is recommended, or revisitation after plowing has occurred. The site area should not be written off on the basis of the negative evidence of the present survey.

Condition: Currently unknown. The site soils are classified as Calloway silt loam, 0 to 1% slopes (CaA; USDA 1977b, and are charactcrized by silt/clay deposits with extensive fine clay particles in the upper part of profile. (Profile observed in shovel tests).

Previous Investigations: The site was recorded as an Archaic scatter by C. L. Scheel in 1971. No diagnostics were found during this visit, although points were reported by a local informant.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3PO203	**Site Name:**	None recorded
Project Site Number:	LRP-135	**Date of Visit:**	30 June 1987
County: Poinsett		**USGS Quad:**	Powers Slough 1984 7.5

Location:	1/4	1/4	1/4; Section		T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Late Archaic/Woodland, Woodland, Mississippian.

Diagnostic Artifacts: 1 Weems projectile point; Baytown Plain, Thomas Plain, Mississippian pottery.

Description: Site 3PO203 (LRP-135) is a dense surface artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River (Figures 75, 76). At the time of survey, the site was in low soybeans, offering excellent surface visibility (when they were pushed aside). No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 2700 square meters (70 x 60 m in maximum extent). The site area is on a low bluff overlooking the main channel of the L'Anguille, which is located ca. 150 m due west through a dense swamp. The location and boundaries of the scatter were recorded on project blue line 1/5000 aerials. A controlled surface collection was made using twenty seven 3.34 m radii circles dispersed using a stratified systematic unaligned procedure. A minimum of 5 minutes was spent in every circle, and collection proceeded until no more artifacts could be found. The controlled collection was made before it was realized that the site lay outside of the right of way (it was visited after an attempt to collect LRP-208/3PO202 had to be abandoned due to poor visibility). No test units were opened at this site.

Condition: The site soils are classified as Henry silt loam (He; USDA 1968).

Previous Investigations: The site was recorded as a "village [of] about 1 acre" by C. L. Scheel in 1971. No diagnostics were found during this visit. The site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site lies outside of the right-of-way; no further work required.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

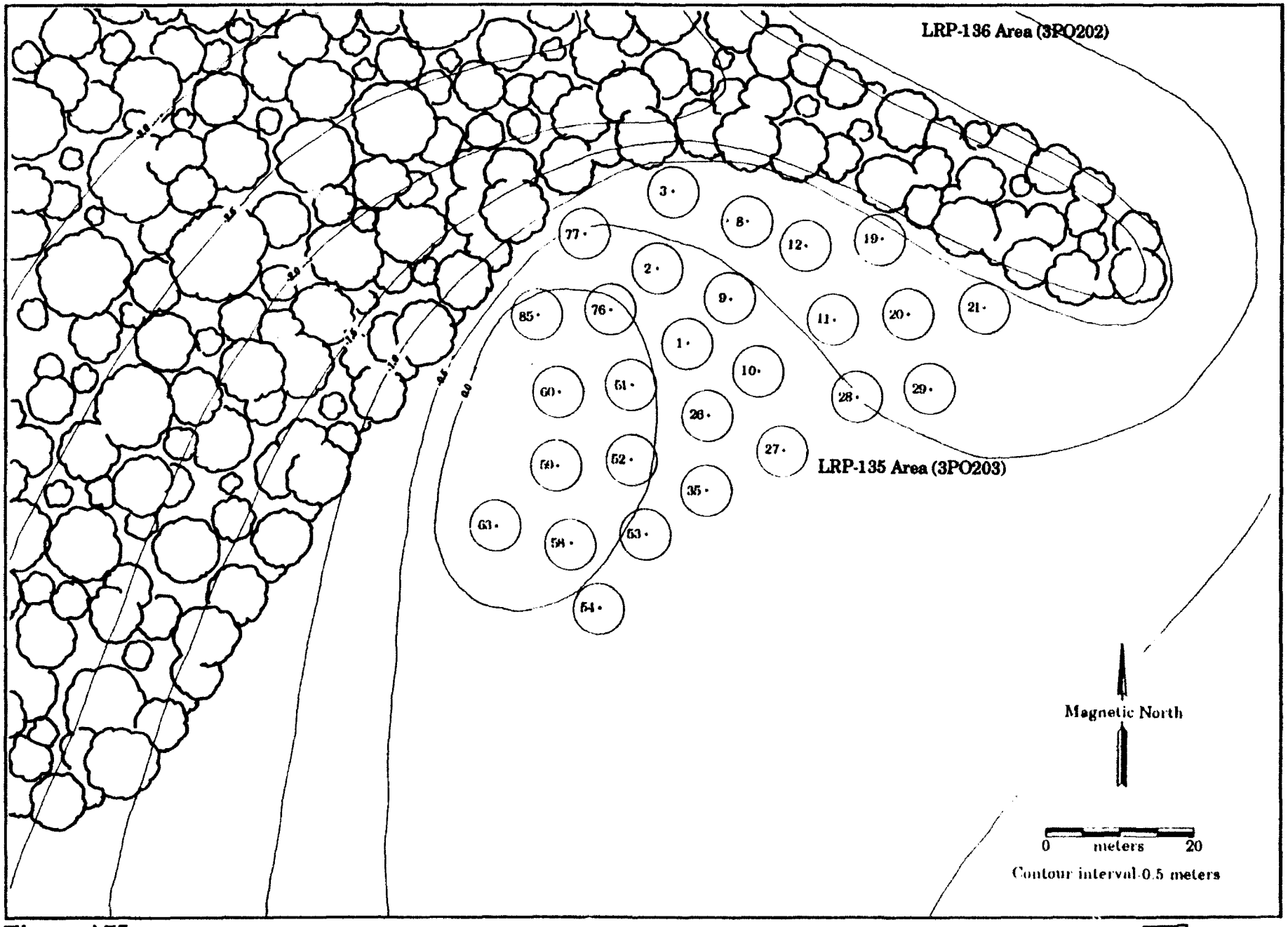
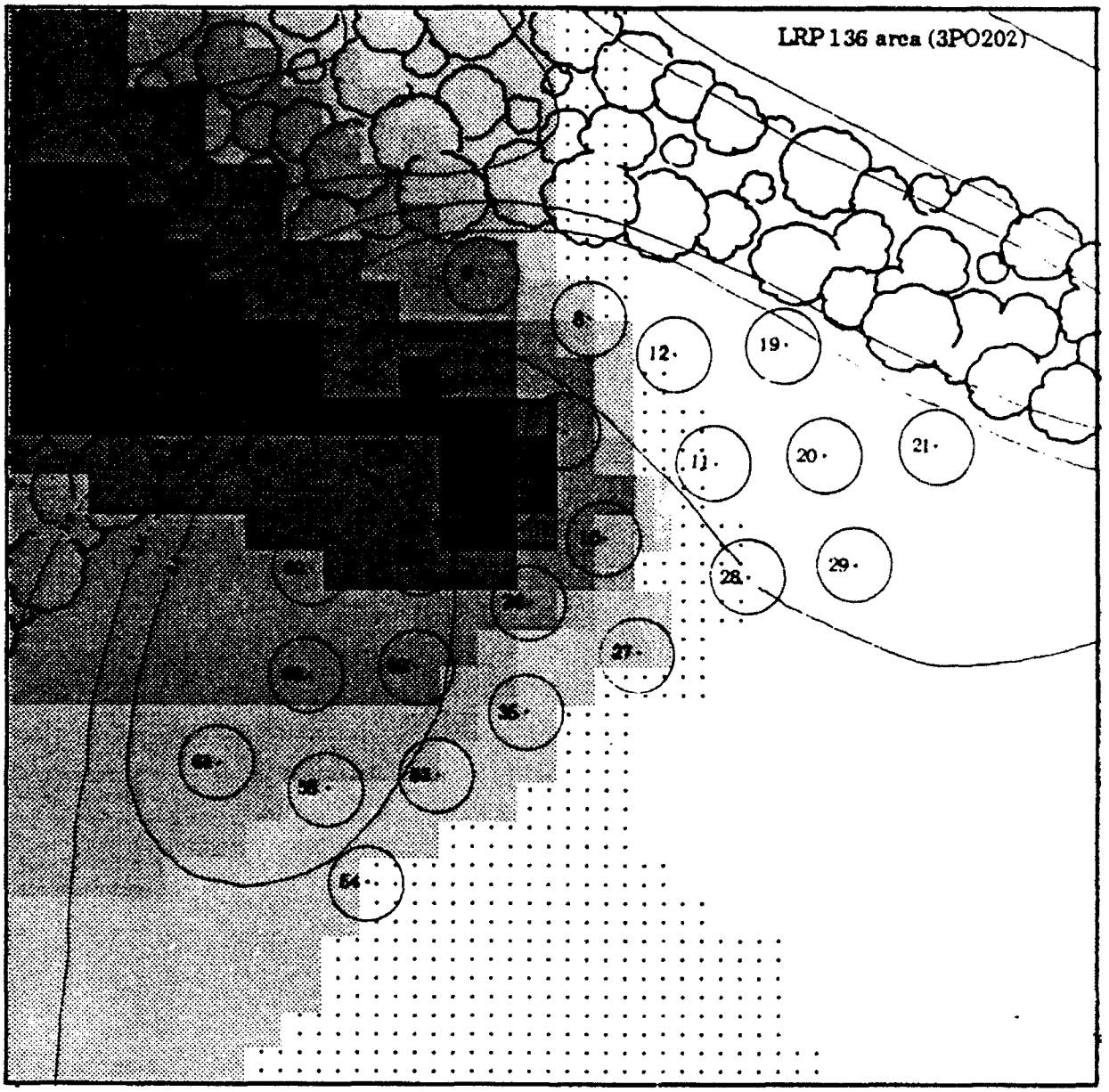


Figure A75.
Site 3PO203 (LRP-135) Proveniences and Controlled Surface Collection Circles.

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Average Artifact Density (number of artifacts)

-- 27
-- 40
-- 53
-- 67
-- 80
-- 94
-- 107
-- 120
-- 134

= Controlled Surface Collection Unit (3.34 m radii)

Magnetic North

0 25
Meters

Figure A76.
Site 3PO203 (LRP-135)
Prehistoric Artifacts - Surface Distributions.

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State Site Number: 3PO204 **Site Name:** None recorded
Project Site Number: LRP-146 **Date of Visit:** 29 June 1987
County: Poinsett **USGS Quad:** Powers Slough 1980 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered).

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3PO204 (LRP-146) is a dense artifact scatter located in the southwestern portion of a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was fallow and densely overgrown, offering minimal surface visibility. A series of shovel tests were opened; those in the southwest portion of the field yielded a surprising amount of material in the upper 30 cm. Artifacts were observed over an area of approximately 1000 square meters (30 x 30 m in maximum extent). The site area is on a low terrace overlooking the main channel of the L'Anguille, which is located ca. 75 m due west of the site area through dense swamp. Shovel tests were placed at 10 m intervals in cardinal directions about the first positive test; all material came from a low rise or terrace in the southwest corner of the field. A series of systematically dispersed shovel tests were opened over the field; with material noted only in the extreme southwestern corner on a low rise or terrace. Five shovel tests opened in this area, in an area ca. 30 x 30 m in extent, produced artifacts. The location and extent of the scatter was recorded on project blue line 1/5000 aerials. No test units were opened.

Condition: Currently unknown. The site soils are classified as Calloway silt loam, 0-1% slopes (CaA; USDA 1977b) and are characterized by silt loam to 30 cm, with white clay ith orange mottles below this depth. Artifacts were found in the upper, plowzone level.

Previous Investigations: Previously recorded as 3PO204 by C. L. Scheel in 1970, who described it as a 3 acre village. Archaic points (not typed) were reported. The site area has seen extensive prior collection by amateurs according to the recorder.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present. Ideally the field should be plowed and then collected in a controlled fashion; low density areas in the scatter, or the full extent of the scatter, may have been missed in the shovel testing.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number: 3PO519 **Site Name:** None recorded
Project Site Number: LRP-118 **Date of Visit:** 7 July 1987
County: Poinsett **USGS Quad:** Powers Slough 1980 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Archaic?, Middle Mississippian.

Diagnostic Artifacts: 1 damaged corner notched point, 1 Scallorn point.

Description: Site 3PO519 (LRP-118) is a surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the L'Anguille River swamp (Figures 77, 78). At the time of survey the site was fallow, with visibility ca. 50%. No footprints indicative of prior collecting this plowing cycle were observed. A large fishpond is located immediately north of the site area, and an old farm building is located in the woods in the northwest part of the field defining the scatter. Artifacts were observed over an area of approximately 3000 square meters (70 x 60 m in maximum extent). The site area is on a low terrace overlooking the main channel of the L'Anguille, which is located ca 110 m due west. Bear Branch, a minor tributary, flows in the swamp below the site area. A controlled surface collections were made using thirty 3.34 m radii circles dispersed using a stratified systematic unaligned procedure. A minimum of 5 minutes was spent in every circle, and collection proceeded until no more artifacts could be found. No test units were opened.

Condition: Currently unknown. The site soils are classified as Henry silt loam (He; USDA 1977b).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site lies at the right-of-way margin; should be avoided.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3PO520	**Site Name:**	None recorded
Project Site Number:	LRP-120	**Date of Visit:**	26 June 1987
County:	Poinsett	**USGS Quad:**	Powers Slough 1980 7.5

Location:	1/4	1/4	1/4;	Section	T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Late Archaic.

Diagnostic Artifacts: 1 Big Creek point.

Description: Site 3PO520 (LRP-120) is a low density surface artifact scatter located in a plowed field adjacent to and overlooking the channelized course of the L'Anguille River. At the time of survey, the site had been recently plowed and rained on, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 8000 square meters (120 x 75 m in maximum extent). A large pond is located immediately northeast of the site, along the river margin. Site 3PO157 is located ca. 150 m to the southwest. The site area is on a low terrace overlooking the main channel of the L'Anguille River is located 25 m NW of the site area through a narrow treeline. The location and extent of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was collected for 1.0 person-hours. No test units were opened.

Condition: The site soils are classified as Tichnor soils, frequently flooded (Tc; USDA 1977b).

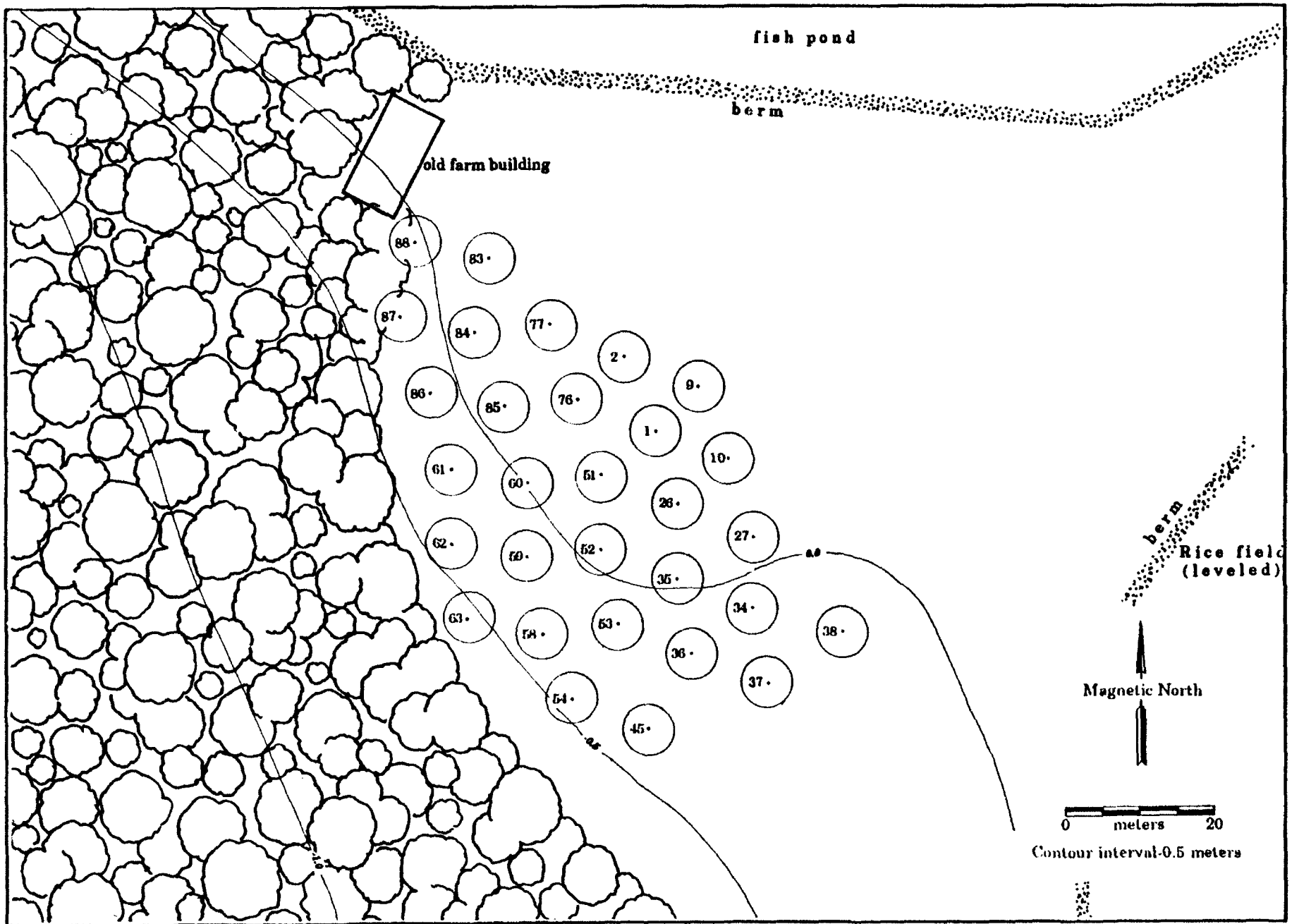


Figure A77.
Site 3PO519 (LRP-118) Proveniences
and Controlled Surface Collection Circles.

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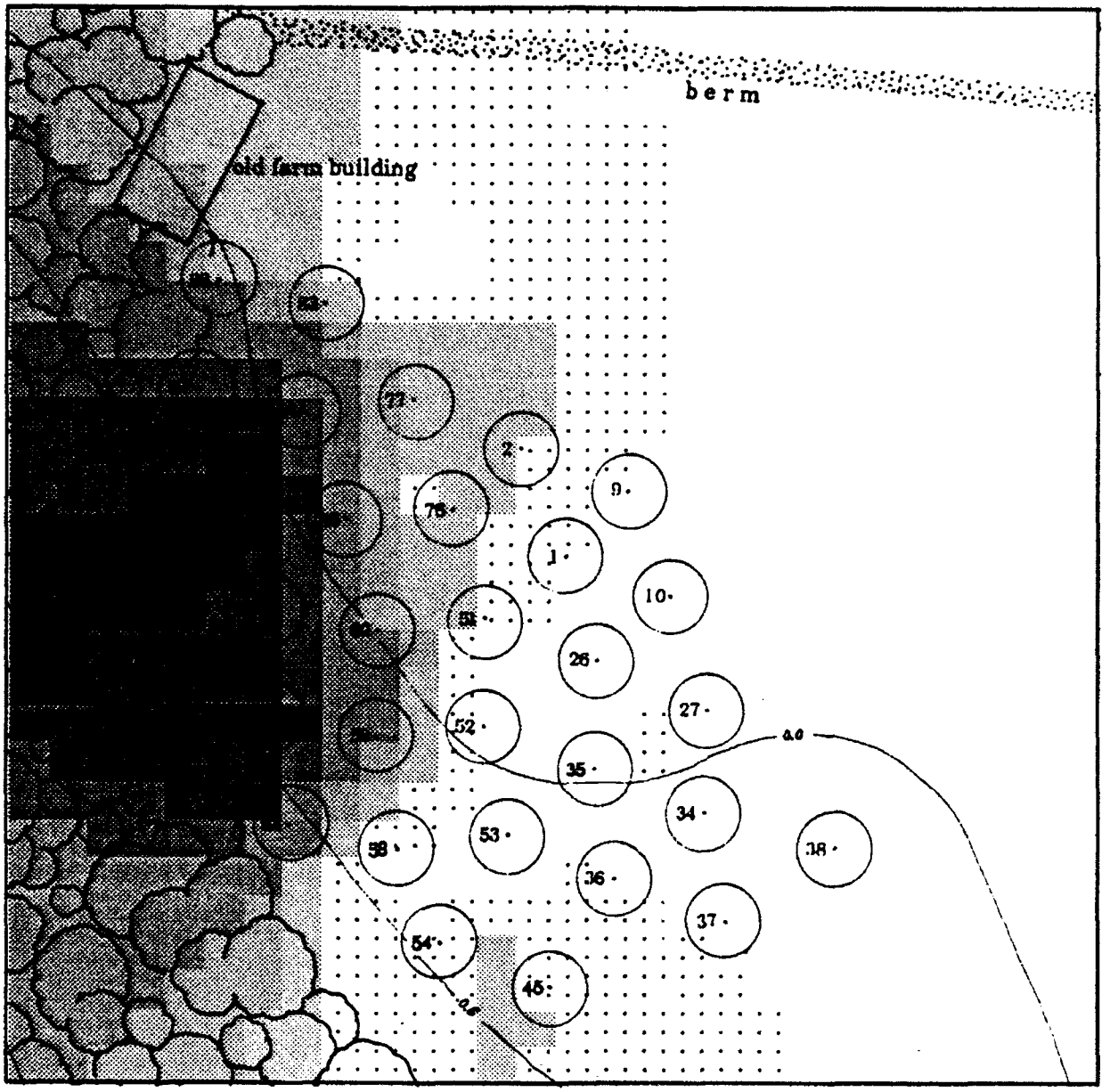


Figure A78.
Site 3PO519 (LRP-118)
Prehistoric Artifacts - Surface Distributions.

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Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification and intact deposits are present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3PO522	**Site Name:**	None recorded
Project Site Number:	LRP-138	**Date of Visit:**	6 July 1987
County:	Poinsett	**USGS Quad:**	Powers Slough 1984 7.5

Location:	1/4	1/4	1/4;	Section	T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Late Archaic/Woodland, Woodland; 20th century historic.

Diagnostic Artifacts: Late Archaic/Woodland (1 Weems point); Woodland (Baytown Plain/grog tempered pottery); 20th century artifacts.

Description: Site 3PO522 (LRP-138) is a surface artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River (Figure 79, 80). At the time of survey, the site had been recently plowed and rained on, offering excellent (100%) surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 2500 square meters (60 x 50 m in maximum extent). The site area is bounded on the north and south by drainage ditches/hedgerows. Site 3PO528 (LRP-157) is located ca. 100 m to the east. The site area is on a low terrace overlooking the channelized course of the L'Anguille, which is located ca. 50 m west, through a wooded swampy area. The location and extent of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection was made using twenty five 3.34 m radii circles dispersed using a stratified systematic unaligned procedure. A minimum of 5 minutes was spent in every circle, and collection proceeded until no more artifacts could be found. No test units were opened at this site.

Condition: The site soils are classified as Tichnor soils, frequently flooded (Tc; USDA 1977b).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

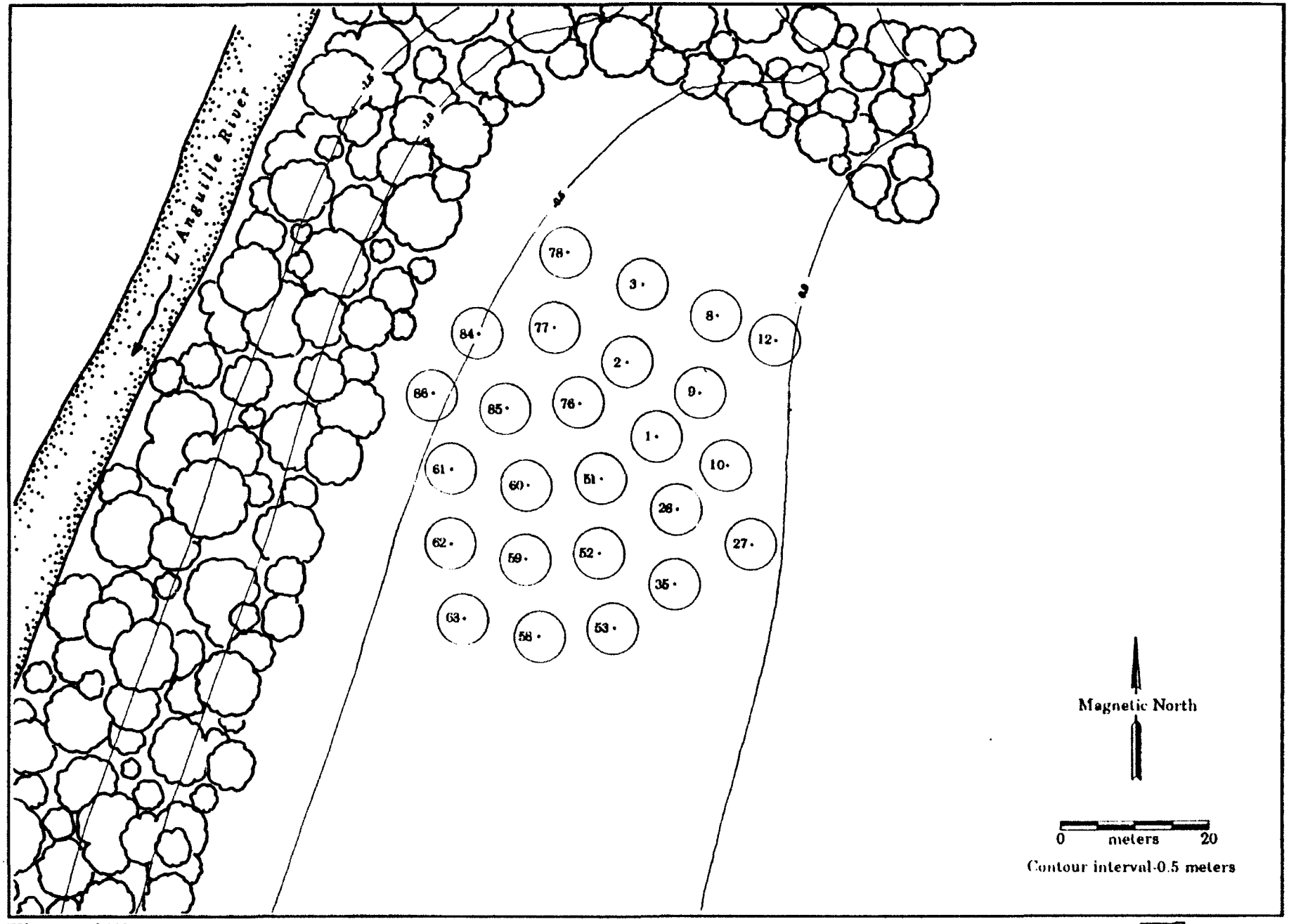
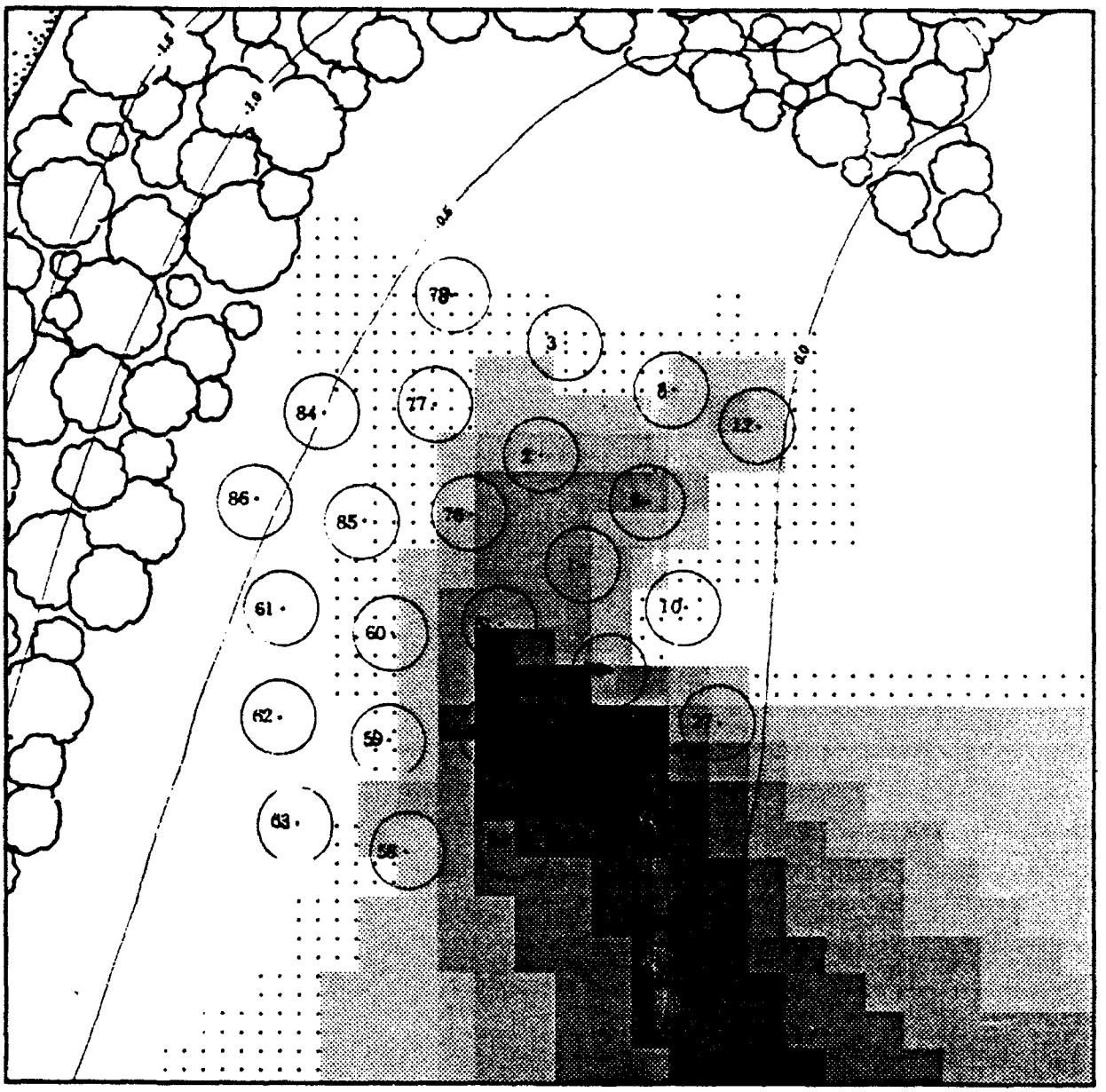


Figure A79.
Site 3PO522 (LRP-138) Proveniences
a[illegible] Controlled Surface Collection Circles.

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Average Artifact Density (number of artifacts)

-- 6 -- 8 -- 11 -- 14 -- 17 -- 20 -- 23 -- 26 -- 28

= Controlled Surface Collection Unit (3.34 m radii)

Magnetic North

0 25

Meters

Figure A80.
Site 3PO522 (LRP-138)
Prehistoric Artifacts - Surface Distributions.

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L'Anguille River Survey Project

State Site Number: 3PO523 **Site Name:** None recorded
Project Site Number: LRP-139 **Date of Visit:** 29 June 1987
County: Poinsett **USGS Quad:** Powers Slough 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered).

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3PO523 (LRP-139) is a low density surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site had been recently plowed and rained on, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 8000 square meters (250 x 40 m in maximum extent). An artificial levee runs along the river bank, suggesting the site may be disturbed. The site area is on a low terrace overlooking the main channelized course of the L'Anguille, which is located ca. 25 m due west across a recent levee. The soils map shows a meander scar bisecting the site. If true, the field may have been leveled. The location and boundaries of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was collected, with 1.0 person-hours spent in collection. No test units were opened at this site.

Condition: The site soils are classified as Tichnor soils, frequently flooded (Tc; USDA 1977b).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number: 3PO524 **Site Name:** None recorded
Project Site Number: LRP-140 **Date of Visit:** 29 June 1987
County: Poinsett **USGS Quad:** Powers Slough 1984 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Unknown prehistoric.

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3PO524 (LRP-140) is a low density surface artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site had been recently plowed and rained on, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed

over an area of approximately 800 square meters (40 x 20 m in maximum extent). The channelized course of the L'Anguille lies just to the east of the scatter, suggesting the site area might be disturbed. The site area is on a low terrace overlooking the modern channelized course of the L'Anguille River, which is located ca. 15 m east, across a modern levee. The location and boundaries of the scatter were recorded on project blue line 1/5000 aerials and a controlled surface collection of every visible artifact was made, with 0.5 person-hours spent in collection. No test units were opened at this site.

Condition: The site soils are classified as Tichnor soils, frequently flooded (Tc; USDA 1977b).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3PO525	**Site Name:**	None recorded
Project Site Number:	LRP-141	**Date of Visit:**	6 July 1987
County:	Poinsett	**USGS Quad:**	Powers Slough 1984 7.5

Location:	1/4	1/4	1/4; Section		T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Early/Middle Archaic, Late Archaic, Late Archaic/Woodland, Woodland, Mississippian.

Diagnostic Artifacts: 1 Cache River, 1 Burkett, 1 Big Creek, 3 Gary, 2 Weems, 1 Steuben-like projectile points; Baytown Plain, Thomas Plain, Mississippi Plain pottery.

Description: Site 3PO525 (LRP-141) is a dense surface artifact scatter located in a plowed field adjacent to and overlooking the former main channel of the L'Anguille River (Figures 81, 82). At the time of survey, the site had been recently plowed and rained on, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. The site area is on a low terrace overlooking the main channel of the L'Anguille, which is located ca. 25 to 100 m due west of the site area across a recent levee and through a low swampy area (the original channel). The location and extent of the scatter were recorded on project blue line 1/5000 aerials, and on USDA County Soil Map aerials and USGS quad sheets. A controlled surface collection was made over an area of approximately 5500 square meters (100 x 80 m in maximum extent) in the western part of the scatter. The eastern half of the scatter, designated Areas B and C, had been leveled and was collected using a general collection procedure. The controlled surface collection was made using fifty five 3.34 m radii circles dispersed using a stratified systematic unaligned procedure. A minimum of 5 minutes was spent in every circle, and collection proceeded until no more artifacts could be found. No test units were opened at this site.

Condition: The site soils are classified as Tichnor soils, frequently flooded (Tc; USDA 1977b).

Previous Investigations: None reported; the site area has in all probability seen prior collection by

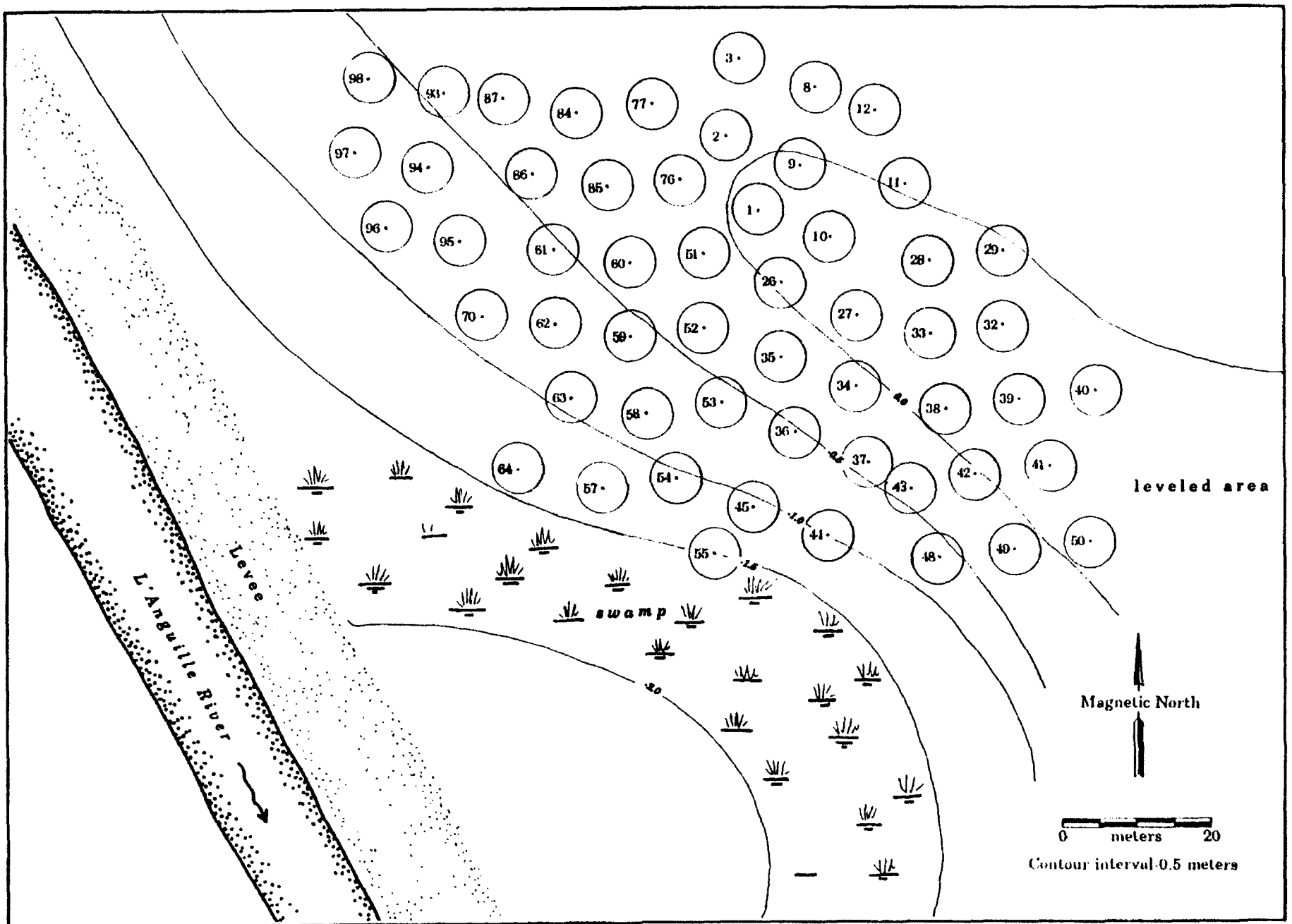
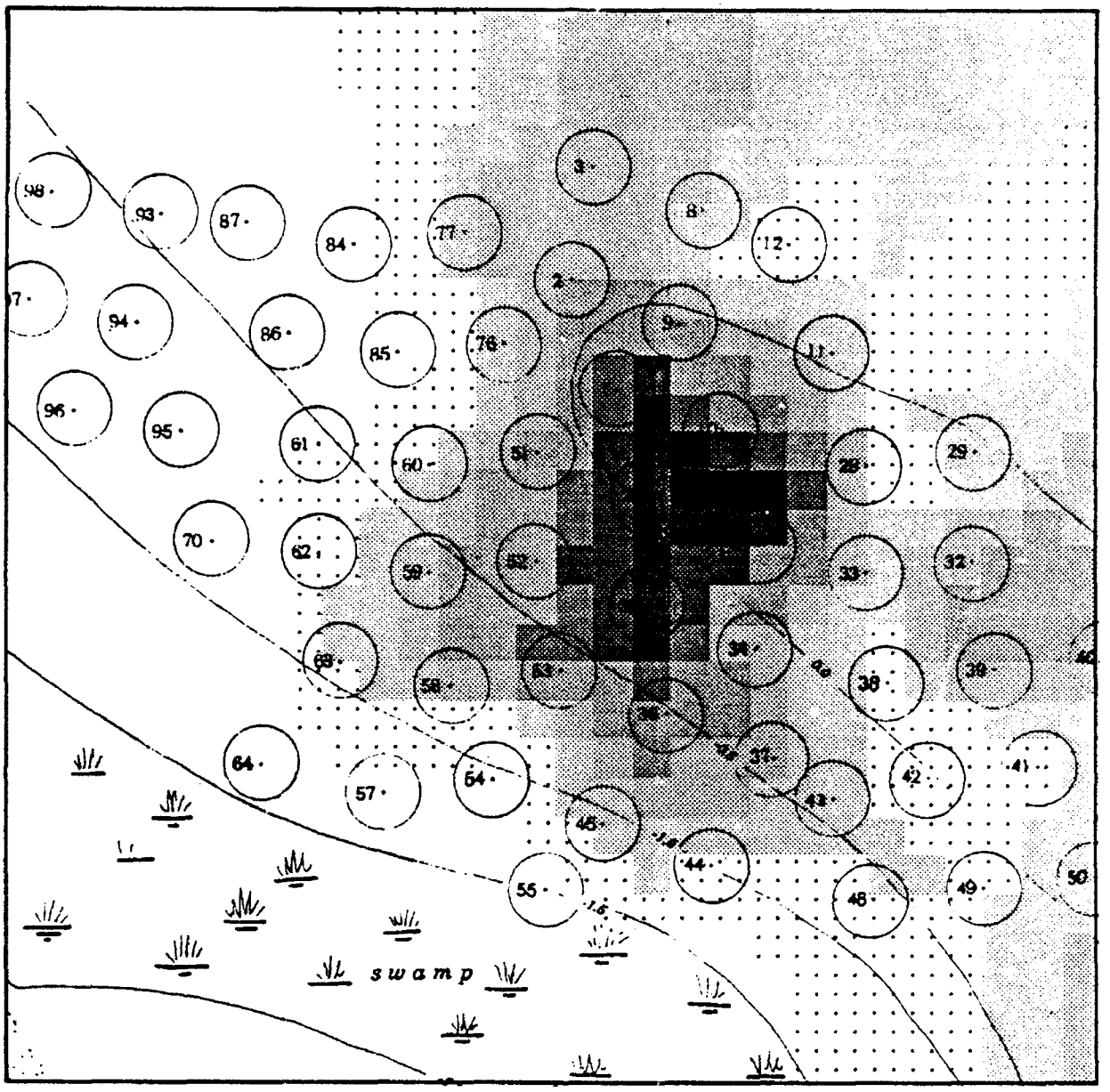


Figure A81.
Site 3PO525 (LRP-141) Proveniences
and Controlled Surface Collection Circles.

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Average Artifact Densit (number of artifacts)

--
-- 55
-- 82
-- 109
-- 136
-- 163
-- 190
-- 217
-- 244
-- 271

= Controlled Surface Collection Unit (3.34 m radii)

Magnetic North

0 25

Meters

Figure A82.
Site 3PO525 (LRP-141)
Prehistoric Artifacts - Surface Distributions.

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L'Anguille River Survey Project

amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3PO526	**Site Name:**	None recorded
Project Site Number:	LRP-142	**Date of Visit:**	29 June 1987
County:	Poinsett	**USGS Quad:**	Powers Slough 1980 7.5

Location: 1/4 1/4 1/4; Section T R (deleted)
UTM: Zone: 15 Northing: Easting: (deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered).

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3PO526 (LRP-142) was a low density surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site had been recently plowed and rained on, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 2000 square meters (75 x 25 m in maximum extent). The former main channel of the L'Anguille River flowed to the west of the site; the scatter now lies adjacent to the recent, channelized course of the river, which is located ca. 25 m due east across a modern levee. The location and extent of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made for 0.5 person-hours. No test units were opened.

Condition: Currently unknown. The site soils are classified as Tichnor soils, frequently flooded (Tc; USDA 1977b).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Numbe .	3PO527	**Site Name:**	None recorded
Project Site Number:	LRP-143	**Date of Visit:**	29 June 1987
County: Poinsett		**USGS Quad:**	Powers Slough 1984 7.5

Location:	1/4	1/4	1/4; Section		T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Unknown prehistoric; recent historic.

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found; 2 glass fragments.

Description: Site 3PO527 (LRP-143) is a low density surface prehistoric artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site was in high milo (ca. 24"), but the intervening crop rows were clear and sufficient rainfall had occurred to ensure good surface visibility (ca. 50%). No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 6000 square meters (125 x 50 m in maximum extent). The site area is on a low terrace overlooking the main channel of the L'Anguille, which is located ca. 25 m due east across a modern levee. The location and boundaries of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was made, with 0.5 person-hours spent in collection. No test units were opened at this site.

Condition: Currently unknown. The site soils are classified as Henry silt loam (He; USDA 1977b).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3PO530	**Site Name:**	None recorded
Project Site Number:	LRP-113	**Date of Visit:**	26 June 1987
County:	Poinsett	**USGS Quad:**	Cherry Valley W 1984 7.5

Location:	1/4	1/4	1/4; Section		T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered).

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3PO530 (LRP-113) is a low density surface artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site had been recently plowed and rained on, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 20000 square meters (160 x 150 m in maximum extent). A minor

tree-lined tributary lies just to the north of the scatter and defines it northern extent. The confluence of this minor channel and the L'Anguille is approximately 125 m due east. Site is located on silt/clay deposits cut by the river channel. The site area is on a low terrace overlooking the river. The main channel of the L'Anguille River is located 75-125 m southeast and east, through a low swampy wooded area. The location and boundaries of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was collected, with 1.5 person-hours spent in collection. No test units were opened.

Condition: Currently unknown. The site soils are classified as Grenada silt loam, 1-3% slopes (GrB; USDA 1968).

Previous Investigations: The site area was previously reported as 3CS48; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

State Site Number:	3PO533	**Site Name:**	None recorded
Project Site Number:	LRP-134	**Date of Visit:**	29 June 1987
County:	Poinsett	**USGS Quad:**	Cherry Valley W 1984 7.5

Location:	1/4	1/4	1/4; Section		T	R	(deleted)
UTM:	Zone:	15	Northing:		Easting:		(deleted)

Temporal Span: Unknown prehistoric (no diagnostics recovered).

Diagnostic Artifacts: No diagnostic prehistoric artifacts were found.

Description: Site 3PO533 (LRP-134) was a large, extremely low density prehistoric scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site had been recently plowed and rained on, offering excellent (100%) surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. Artifacts were observed over an area of approximately 50000 square meters (400 x 140 m in maximum extent). Slight concentrations of artifacts were observed at the northern and southern ends of the scatter, near the minor tributaries/hedgerows defining the limits of the site. The site area is on a low bluff overlooking the main channel of the L'Anguille, which is located ca. 25 to 50 m due east through a woodline. The location and extent of the scatter were recorded on project blue line 1/5000 aerials, and a controlled surface collection of every visible artifact was collected, with 0.75 person-hours spent in collection. No test units were opened at this site.

Condition: The site soils are classified as Hillemann silt loam/Calloway silt loam, 0-1% slopes (He/CaB; USDA 1977b).

Previous Investigations: None reported; the site area has in all probability seen prior collection by amateurs.

NRHP Status: Undetermined.

NRHP Recommendations: Site requires testing before National Register Status can be adequately determined. Test pits should be opened to determine if stratification is present.

Curatorial Facility: Arkansas Archeological Survey Arkansas State University Station.

APPENDIX II.

PREHISTORIC ARTIFACTS FROM THE L'ANGUILLE RIVER SURVEY: PROJECTILE POINTS, POTTERY, DEBITAGE, MISC. TOOL FORMS, AND LITHIC RAW MATERIALS, BY SITE. PROJECT CATALOG/ANALYSIS FORMS

by

David G. Anderson
Garrow & Associates, Inc.

State Site Number: _____ Date Collected: _____
Field Site Number: _____ Analysis Date: _____
Field Prov. Number: _____ Analyzed By: _____
Collection Accession Number: _____

CERAMICS (all categories count data unless noted)

Total Sherds (count): _____ Total Sherds (Weight): _____

Grog Tempered Plain: _____ Shell Tempered Plain: _____ Sand Tempered Plain: _____
Grog Tempered Dec: _____ Shell Tempered Dec: _____ Sand Tempered Dec: _____

Indeterminate: _____ Decorated Types: _____
Other Ceramic: _____
Fired Clay (weight): _____

LITHICS (all categories count data unless noted)

Unmodified Flaked Stone

(total count: _____)	Quarry Waste	Cores	Primary	Secondary	Interior	Shatter
Crowleys' Ridge:	____/____	____/____	____/____	____/____	____/____	____/____
Thermally altered:	____/____	____/____	____/____	____/____	____/____	____/____
Pitkin:	____/____	____/____	____/____	____/____	____/____	____/____
Chert breccia:	____/____	____/____	____/____	____/____	____/____	____/____
White chert:	____/____	____/____	____/____	____/____	____/____	____/____
Quartzite:	____/____	____/____	____/____	____/____	____/____	____/____
Banded chert	____/____	____/____	____/____	____/____	____/____	____/____
Other:	____/____	____/____	____/____	____/____	____/____	____/____

Flaked Stone Tools	Wear Retouched	Intent. Ret.	Thick Bifaces	Thin Bifaces	Dart Points	Dart Tips	Unid Pt. Frags
Crowleys' Ridge:							
Thermally altered:							
Pitkin:							
Chert breccia:							
White chert:							
Quartzite:							
Banded chert							
Other:							

	Arrow Points	Arrow Frags	Hafted Scrapers	Spoke/Notch	Adze/Axe	Denticulate	Other
Crowleys' Ridge:							
Thermally altered:							
Pitkin:							
Chert breccia:							
White chert:							
Quartzite:							
Banded chert							
Other:							

Cultural Hist. Types: _____

Fire Cracked Rock (weight): _____ (count) _____ Other CR (weight): _____ (count): _____

GROUND & PECKED COBBLES	(Intact)	(Fragmentary)
Hammerstones		
Abraders		
Pitted Cobbles "U" pit		
Pitted Cobbles "V" pit		
Pitted Cobbles "U &V" pits		
Unmodified Cobble		N/A
Grinding Basin		
Unusual/other		

Other Unmod. Rock (weight): _____ (count): _____

OTHER ARTIFACT CATEGORIES/MISC. OBSERVATIONS

_____

State Site Number	Project Site Number	Acc. No. 87-	County	Pottery Grog	Pottery Shell	Pottery Sand	Quarry Waste	Cores	Primary	Secondary	Interior	Shatter	Wear Ret.	Int. Ret.	Thick Bifaces	Thin Bifaces	Dart Points	Unid. Points	Arrow Points	Adze/ Axe	FCR	HS	Abrader	Pitted Cobble	Unmod. Cobble	Grinding Basin	Grand Totals
3LE002	LRP-200	930	Lee	2	0	0	0	1	1	3	5	7	2	1	0	0	0	0	0	0	0	0	0	0	0	0	22
3LE024	LRP-211	941	Lee	29	1	0	2	4	4	14	4	7	3	1	0	1	0	0	0	0	0	1	0	0	0	0	71
3LE101	LRP-55	785	Lee	0	0	0	0	1	0	7	0	0	0	0	1	0	0	0	0	1	2	0	0	0	0	0	12
3LE141	LRP-1	731	Lee	0	0	0	2	8	23	152	211	51	54	11	3	10	5	2	0	0	8	1	0	0	6	1	548
3LE142	LRP-2	732	Lee	0	0	0	0	2	3	30	32	18	8	7	1	4	1	0	0	0	18	1	0	0	0	0	125
3LE143	LRP-3	733	Lee	1	1	0	1	4	5	31	39	11	12	4	2	7	4	0	0	0	9	0	0	0	1	0	132
3LE144	LRP-4	734	Lee	0	1	0	3	8	19	130	151	51	31	9	1	10	5	5	0	1	81	7	1	0	0	0	514
3LE145	LRP-5	735	Lee	0	0	0	0	1	0	18	17	0	5	1	1	0	1	0	0	2	1	1	0	1	0	0	49
3LE146	LRP-6	736	Lee	125	1	0	0	2	1	15	9	5	6	3	2	3	4	0	0	0	0	1	0	0	0	0	177
3LE147	LRP-7	737	Lee	1	0	0	0	1	0	3	3	2	3	1	0	1	2	1	0	0	1	0	0	0	0	0	19
3LE148	LRP-8	738	Lee	0	0	0	0	3	0	0	1	0	1	3	2	2	7	0	0	0	0	0	0	1	0	0	20
3LE149	LRP-9	739	Lee	11	1	0	7	7	3	25	35	6	30	8	2	15	8	0	0	1	2	4	2	0	1	0	168
3LE150	LRP-10	740	Lee	0	0	0	0	0	0	5	0	3	0	0	0	2	1	0	0	1	0	0	0	0	0	0	12
3LE151	LRP-11	741	Lee	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3LE152	LRP-12	742	Lee	0	0	0	0	2	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5
3LE153	LRP-13	743	Lee	0	0	0	0	2	2	18	12	8	4	2	2	3	1	0	0	0	0	0	0	0	0	0	54
3LE154	LRP-14	744	Lee	0	0	0	0	0	1	6	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	13
3LE155	LRP-15	745	Lee	0	0	0	3	0	1	12	7	9	3	1	0	1	4	0	0	0	0	0	0	0	4	0	45
3LE156	LRP-16	746	Lee	0	0	0	7	1	0	3	4	12	1	0	0	1	0	0	0	0	4	0	1	0	1	0	35
3LE157	LRP-17	747	Lee	6	0	0	2	7	2	22	30	11	13	3	4	5	8	0	0	0	5	0	0	0	0	0	118
3LE158	LRP-18	748	Lee	27	14	0	4	15	27	83	28	73	29	11	1	4	5	0	2	0	2	1	1	3	0	0	330
3LE159	LRP-19	749	Lee	2	9	0	1	6	4	47	46	26	15	2	1	4	3	0	0	0	2	0	0	0	0	0	168
3LE160	LRP-20	750	Lee	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3LE161	LRP-21	751	Lee	0	0	0	0	0	3	7	7	3	7	1	0	0	1	1	0	0	0	1	0	0	0	0	31
3LE162	LRP-22	752	Lee	15	3	0	0	4	4	22	17	9	10	1	1	0	4	0	0	1	0	0	0	0	0	0	91
3LE164	LRP-24	754	Lee	16	8	0	1	3	8	34	26	37	13	5	0	0	1	0	0	0	5	0	0	0	1	0	158
3LE166	LRP-26	756	Lee	1	0	0	0	1	1	18	31	8	10	1	0	1	1	1	0	0	0	0	0	0	0	0	74
3LE167	LRP-27	757	Lee	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
3LE168	LRP-28	758	Lee	0	0	0	0	5	0	7	7	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	22
3LE169	LRP-29	759	Lee	0	0	0	0	3	4	29	27	3	6	2	1	1	3	0	0	0	2	0	0	0	0	0	81
3LE170	LRP-30	760	Lee	0	0	0	0	0	0	1	1	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	5
3LE171	LRP-31	761	Lee	0	0	0	2	0	0	8	10	4	2	2	0	0	1	1	0	2	0	0	1	2	0	0	35
3LE172	LRP-32	762	Lee	0	0	0	0	0	1	19	12	1	4	0	0	1	0	0	0	0	0	1	0	0	0	0	39
3LE173	LRP-33	763	Lee	0	9	0	0	0	7	30	31	16	9	2	4	3	2	2	0	0	4	0	0	0	0	0	119
3LE174	LRP-34	764	Lee	12	0	0	1	5	11	49	53	28	14	8	2	2	1	0	0	0	5	1	0	0	0	0	192
3LE175	LRP-35	765	Lee	690	17	11	4	5	40	269	377	71	20	8	4	3	7	2	0	1	84	3	1	3	2	1	1623
3LE176	LRP-36	766	Lee	17	0	0	0	0	7	24	31	6	1	0	0	1	2	1	0	0	0	0	0	0	0	0	90
3LE177	LRP-37	767	Lee	14	5	0	1	3	4	36	27	11	10	3	1	1	7	1	0	0	1	0	0	1	0	0	126
3LE178	LRP-38	768	Lee	0	0	0	0	0	0	2	5	1	2	1	0	0	0	1	0	0	1	0	0	0	0	0	13
3LE179	LRP-39	769	Lee	0	1	0	0	0	0	5	4	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	12
3LE180	LRP-40	770	Lee	0	0	0	1	2	2	11	12	2	1	3	0	0	2	0	1	0	0	1	0	0	0	0	38
3LE181	LRP-41	771	Lee	0	0	0	2	1	0	12	4	6	3	0	0	1	0	0	0	0	5	0	0	0	0	0	34
3LE182	LRP-42	772	Lee	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	3
3LE183	LRP-43	773	Lee	24	0	0	3	18	28	173	182	36	73	11	6	6	11	2	0	1	4	0	1	1	1	0	581
3LE184	LRP-44	774	Lee	0	0	0	4	18	15	158	137	36	45	13	4	3	1	1	0	0	6	3	0	0	2	0	446
3LE185	LRP-45	775	Lee	0	0	0	0	1	0	1	10	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	14
3LE186	LRP-46	776	Lee	0	5	0	0	0	2	6	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
3LE187	LRP-47	777	Lee	5	0	0	1	1	5	15	30	3	4	1	0	3	1	0	1	0	1	0	0	0	0	1	72
3LE188	LRP-48	778	Lee	0	0	0	0	1	0	8	7	1	2	0	1	0	0	0	0	0	1	0	0	0	0	0	21
3LE189	LRP-49	779	Lee	0	0	0	0	3	1	1	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	10
3LE190	LRP-50	780	Lee	0	0	0	0	2	1	15	27	7	2	0	0	7	4	3	0	0	6	0	0	0	0	0	74
3LE191	LRP-51	781	Lee	15	8	0	10	41	25	159	164	85	12	5	7	10	12	6	0	2	43	3	0	1	1	0	609
3LE192	LRP-52	782	Lee	0	0	0	1	6	16	126	132	17	29	3	1	2	2	1	0	1	1	0	0	0	0	0	338
3LE193	LRP-53	783	Lee	0	0	0	2	8	6	46	50	26	19	5	1	7	6	0	0	2	4	1	0	0	0	0	183
3LE194	LRP-54	784	Lee	0	0	0	0	1	0	10	10	3	1	0	1	1	2	1	0	0	3	0	0	0	0	0	33
3LE195	LRP-56	786	Lee	1	1	0	1	5	2	24	21	4	10	2	2	3	4	0	0	2	0	0	0	1	0	0	83
3LE196	LRP-57	787	Lee	0	0	0	0	0	0	6	5	3	5	0	0	1	2	3	0	0	0	3	0	0	0	0	28
3LE197	LRP-58	788	Lee	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3LE198	LRP-59	789	Lee	0	0	0	0	1	1	20	11	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	36
3LE199	LRP-60	790	Lee	0	1	0	0	0	1	2	4	1	4	1	0	1	0	1	0	0	1	0	0	0	0	0	17
3LE200	LRP-61	791	Lee	0	0	0	0	1	0	6	9	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
3LE201	LRP-62	792	Lee	3	0	0	2	1	0	6	2	6	0	1	0	0	0	0	0	0	0	0	0	0	0	0	21
3LE202	LRP-63	793	Lee	0	0	0	0	1	0	0	2	3	1	0	0	1	0	0	0	0	1	0	0	0	0	0	9
3LE203	LRP-64	794	Lee	0	0	0	0	0	0	5	1	0	2	1	1	1	1	0	0	0	0	0	0	0	0	0	12
3LE204	LRP-65	795	Lee	0	0	0	0	2	0	1	0	2	0	0	0	0	1	0	0	0	0	1	0	0	0	0	7

State Site Number	Project Site Number	Acc. No. 87-	County	Pottery Grog	Pottery Shell	Pottery Sand	Quarry Waste	Cores	Primary	Secondary	Interior	Shatter	Wear Ret.	Int. Ret	Thick Bifaces	Thin Bifaces	Dart Points	Unid. Points	Arrow Points	Adze/ Axe	FCR	HS	Abrader	Pitted Cobble	Unmod. Cobble	Grinding Basin	Grand Totals
3LE205	LRP-68	796	Lee	1	0	0	2	1	4	29	45	4	2	1	3	2	0	0	0	1	0	0	0	0	0	0	95
3LE206	LRP-69	799	Lee	7	0	0	1	5	14	47	39	26	18	2	4	4	15	6	2	2	6	4	0	1	3	1	209
3LE207	LRP-71	801	Lee	1	0	0	3	6	1	13	11	8	3	1	1	5	1	1	0	1	0	0	0	0	0	0	56
3LE208	LRP-72	802	Lee	0	0	0	1	3	3	20	22	13	3	1	1	2	2	1	0	0	0	2	0	0	1	0	75
3LE209	LRP-73	803	Lee	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3LE210	LRP-74	804	Lee	0	0	0	0	0	0	3	4	1	2	0	0	1	0	0	0	0	0	0	0	0	0	0	11
3LE211	LRP-75	805	Lee	0	0	0	0	0	0	4	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	6
3LE212	LRP-76	806	Lee	0	0	0	0	0	1	4	5	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	11
3LE213	LRP-82	812	Lee	0	0	0	1	1	5	16	21	10	5	0	0	1	2	0	0	0	7	0	0	0	0	0	69
3LE214	LRP-83	813	Lee	0	0	0	2	3	4	20	29	10	6	0	0	2	1	2	0	0	8	1	1	0	0	0	89
3LE215	LRP-84	814	Lee	0	0	0	1	0	2	20	17	0	1	1	0	1	1	1	0	0	3	0	0	0	0	0	48
3LE216	LRP-85	815	Lee	0	0	0	0	0	1	9	11	8	0	4	1	2	0	1	0	0	8	2	0	0	0	0	45
3LE217	LRP-86	816	Lee	0	0	0	0	0	1	4	7	0	1	0	0	0	1	0	0	0	3	0	0	0	0	0	17
3LE218	LRP-87	817	Lee	1	0	0	17	72	57	264	282	186	37	18	7	14	3	14	0	0	134	11	0	1	3	0	1121
3LE219	LRP-145	875	Lee	0	0	0	1	5	7	30	20	12	3	1	0	2	0	0	0	0	14	2	0	3	0	1	101
3LE220	LRP-182	912	Lee	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
3LE221	LRP-183	913	Lee	0	0	0	0	0	0	5	20	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	27
3LE222	LRP-184	914	Lee	0	0	0	1	0	0	8	14	2	1	0	1	1	0	0	0	0	3	0	0	0	0	0	31
3LE223	LRP-185	915	Lee	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3LE224	LRP-186	916	Lee	1	0	0	1	11	9	68	66	49	10	6	5	9	9	6	1	2	10	5	0	1	0	0	271
3LE225	LRP-187	917	Lee	12	0	0	0	1	0	7	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26
3LE226	LRP-188	918	Lee	6	0	0	0	1	3	29	20	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	61
3LE227	LRP-189	919	Lee	0	0	0	0	0	2	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	5
3LE228	LRP-190	920	Lee	20	0	0	0	2	0	8	4	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	39
3LE229	LRP-191	921	Lee	0	0	0	0	0	0	9	2	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	14
3LE230	LRP-192	922	Lee	1	0	0	0	0	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5
3LE231	LRP-193	923	Lee	0	0	0	2	1	0	3	4	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	12
3LE232	LRP-194	924	Lee	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	4
3LE233	LRP-195	925	Lee	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
3LE234	LRP-196	926	Lee	1	0	0	1	0	0	2	1	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	9
3LE235	LRP-197	927	Lee	0	0	0	0	1	0	0	2	1	0	1	0	0	0	0	0	0	1	0	0	0	0	0	6
3LE236	LRP-198	928	Lee	16	0	1	1	4	3	11	9	9	5	0	0	0	0	0	0	0	4	0	0	0	0	0	63
3LE237	LRP-199	929	Lee	24	0	0	0	1	5	11	4	1	6	0	1	3	0	0	0	0	6	1	0	0	0	0	63
3LE238	LRP-201	931	Lee	2	0	0	0	1	0	14	10	11	6	3	1	0	2	1	0	0	4	1	0	0	0	0	56
3LE239	LRP-210	943	Lee	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
3LE240	LRP-213	944	Lee	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3LE241	LRP-214	945	Lee	0	0	0	0	1	0	0	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	5
3LE242	LRP-215	947	Lee	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
3LE243	LRP-216	948	Lee	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3LE244	LRP-217	953	Lee	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2
3SF015	LRP-163	893	St. Fran.	1	0	0	0	0	1	0	3	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	7
3SF060	LRP-67	797	St. Fran.	0	0	0	0	2	2	7	9	5	4	1	0	0	1	0	0	0	2	1	0	0	0	0	34
3SF080	LRP-160	890	St. Fran.	5	0	0	3	6	8	29	20	27	15	6	0	4	1	1	0	0	4	3	0	0	0	0	130
3SF257	LRP-66	798	St. Fran.	0	0	0	0	1	4	20	10	4	4	1	0	1	0	0	0	0	2	0	0	0	0	0	47
3SF258	LRP-206	936	St. Fran.	0	0	0	1	1	1	14	22	0	5	2	0	0	1	0	0	0	1	0	0	0	0	0	48
3SF259	LRP-207	937	St. Fran.	0	0	0	1	0	2	23	34	18	10	3	1	0	2	0	0	0	0	4	0	1	0	0	99
3SF260	LRP-70	800	St. Fran.	4	0	0	1	2	0	12	12	0	1	2	0	0	0	0	0	0	8	0	0	1	0	0	43
3SF261	LRP-88	818	St. Fran.	0	0	0	1	3	1	5	5	7	1	1	0	0	0	0	0	0	4	1	0	0	0	0	29
3SF262	LRP-89	819	St. Fran.	0	0	0	0	1	1	26	20	11	9	1	1	2	0	4	1	0	5	0	0	0	0	0	82
3SF263	LRP-203	933	St. Fran.	33	2	0	0	0	12	161	117	54	4	2	0	4	0	0	0	0	86	0	0	0	0	0	475
3SF264	LRP-204	934	St. Fran.	0	0	0	0	1	1	12	7	5	2	2	0	0	0	1	0	0	0	0	0	0	0	0	31
3SF265	LRP-205	935	St. Fran.	0	0	0	0	1	0	7	3	0	0	0	0	1	0	0	0	1	2	0	0	0	0	1	16
3SF266	LRP-159	889	St. Fran.	1	0	0	0	1	1	8	9	4	10	3	0	2	0	0	0	0	13	0	0	1	0	0	53
3SF267	LRP-162	892	St. Fran.	1	0	0	0	0	2	14	7	5	1	0	0	0	0	0	0	0	7	0	0	0	0	0	37
3SF268	LRP-81	811	St. Fran.	0	0	0	0	3	2	11	13	4	1	1	0	2	1	0	0	0	2	1	0	1	0	0	42
3SF269	LRP-202	932	St. Fran.	0	0	0	3	7	8	21	31	27	22	7	1	3	0	0	0	0	13	0	0	0	1	0	144
3SF270	LRP-77	807	St. Fran.	0	0	0	16	119	108	786	969	308	283	68	16	59	79	23	0	10	156	6	3	2	8	0	3019
3SF271	LRP-78	808	St. Fran.	5	1	0	15	37	41	356	306	295	56	30	6	16	7	3	0	0	130	2	0	3	1	0	1310
3SF272	LRP-79	809	St. Fran.	0	0	0	0	1	1	14	17	4	1	0	0	0	0	0	0	0	2	1	0	0	0	0	41
3SF273	LRP-80	810	St. Fran.	0	0	0	5	52	191	1135	1423	375	359	32	12	23	19	10	0	1	612	7	0	1	5	0	4262
3CS012	LRP-181	911	Cross	0	0	0	0	3	1	14	12	11	1	0	0	2	0	1	0	0	3	0	0	0	0	0	48
3CS017	LRP-122	852	Cross	1	0	0	0	5	8	20	19	21	2	1	2	2	0	1	0	0	11	1	0	0	0	0	94
3CS018	LRP-129	859	Cross	2	0	0	0	2	0	13	13	10	1	0	0	0	1	0	0	0	4	1	0	0	0	0	47
3CS022	LRP-154	884	Cross	21	0	0	3	18	35	171	92	101	62	10	3	0	12	4	1	0	39	0	1	0	2	1	579
3CS046	LRP-131	861	Cross	44	1	0	11	53	74	352	147	245	69	7	4	9	10	3	0	1	469	8	3	2	2	0	1514

State Site Number	Project Site Number	Acc. No. 87-	County	Pottery			Quarry						Wear	Int.	Thick	Thin	Dart	Unid.	Arrow	Adze/				Pitted	Unmod.	Grinding	Grand
				Grog	Shell	Sand	Waste	Cores	Primary	Secondary	Interior	Shatter	Ret.	Ret.	Bifaces	Bifaces	Points	Points	Points	Axe	FCR	HS	Abrader	Cobble	Cobble	Basin	Totals
3CS047	LRP-130	880	Cross	1	0	0	1	1	0	4	1	3	0	0	0	0	2	0	1	0	1	1	0	0	0	0	16
3CS048	LRP-111	841	Cross	0	0	0	1	9	2	12	2	5	2	0	0	1	0	0	0	0	2	1	0	0	0	0	37
3CS049/229	LRP-123	853	Cross	8	0	0	3	10	6	55	18	37	10	2	0	4	2	1	0	2	28	3	0	1	1	1	192
3CS050	LRP-92	822	Cross	0	0	0	0	3	7	37	40	11	8	1	0	0	0	3	0	0	15	0	0	0	0	0	125
3CS051	LRP-91	821	Cross	0	0	0	1	2	3	5	9	11	4	1	1	1	0	1	0	0	1	0	0	1	0	0	41
3CS053	LRP-184	894	Cross	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	8
3CS053	LRP-174	904	Cross	0	0	0	2	6	4	17	7	13	6	2	1	1	1	0	0	0	7	0	0	0	0	0	67
3CS121	LRP-147	877	Cross	35	2	0	8	33	51	190	79	161	69	14	0	8	5	3	0	0	52	1	0	0	1	0	710
3CS176	LRP-96	826	Cross	0	0	0	0	0	0	0	2	3	0	0	0	1	0	0	0	0	1	0	0	0	0	0	7
3CS177	LRP-97	827	Cross	0	0	0	0	0	0	0	5	2	1	0	0	0	0	0	0	0	2	0	0	0	0	0	10
3CS178	LRP-98	828	Cross	0	0	0	0	1	1	8	5	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	18
3CS180	LRP-99	829	Cross	0	0	0	0	0	0	4	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
3CS181	LRP-100	830	Cross	0	0	0	0	0	0	6	3	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	12
3CS183	LRP-101	831	Cross	0	0	0	1	2	0	6	5	1	3	0	1	0	2	0	0	0	1	0	0	1	0	0	23
3CS184	LRP-175B	905	Cross	0	0	0	3	2	6	36	22	19	9	1	0	4	2	3	0	1	6	0	0	1	0	0	115
3CS185	LRP-176	906	Cross	0	0	0	0	1	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
3CS186	LRP-177	907	Cross	0	0	0	0	0	1	6	3	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	14
3CS187	LRP-178	908	Cross	0	0	0	0	0	7	10	5	14	6	4	0	3	0	1	0	0	4	0	0	0	0	0	54
3CS188	LRP-179	909	Cross	5	0	0	0	8	3	36	25	18	2	2	0	3	3	4	0	0	16	1	0	0	0	0	128
3CS189	LRP-180	910	Cross	0	0	0	1	4	2	21	20	9	4	1	0	1	0	2	0	0	7	0	0	0	1	1	74
3CS190	LRP-209	939	Cross	0	0	0	3	7	1	13	4	14	5	2	0	3	0	0	0	0	9	1	0	0	0	0	62
3CS191	LRP-218	954	Cross	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3CS192	LRP-102	832	Cross	0	0	0	0	0	0	1	6	6	3	0	0	0	0	0	0	0	3	0	0	0	0	0	19
3CS193	LRP-103	833	Cross	2	0	0	9	28	16	223	102	176	38	3	1	8	3	1	0	1	151	5	0	1	5	1	774
3CS194	LRP-104	834	Cross	3	0	0	0	3	3	55	51	19	9	0	2	2	0	0	0	0	11	0	0	0	0	0	158
3CS195	LRP-105	835	Cross	0	0	0	0	0	0	3	3	0	1	0	0	0	0	0	0	0	4	0	0	0	0	0	11
3CS196	LRP-106	836	Cross	0	0	0	0	3	0	3	0	2	0	0	0	1	0	0	0	0	4	0	0	0	0	0	13
3CS197	LRP-107	837	Cross	0	0	0	1	0	1	4	1	1	2	0	0	0	0	0	0	0	4	0	0	0	0	0	14
3CS198	LRP-108	838	Cross	0	0	0	1	0	2	9	5	5	2	0	0	0	0	0	0	0	1	0	0	0	0	0	25
3CS199	LRP-109	839	Cross	0	0	0	0	8	2	8	11	4	3	0	0	0	1	0	0	0	9	0	0	0	0	0	44
3CS200	LRP-110	840	Cross	0	0	0	1	0	2	2	8	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
3CS201	LRP-127	857	Cross	0	0	0	1	2	1	12	18	3	3	0	0	0	1	1	0	0	1	0	0	0	0	0	43
3CS202	LRP-128	858	Cross	1751	14	6	7	25	97	597	483	315	109	10	3	18	14	8	4	0	557	2	3	1	0	0	4024
3CS203	LRP-132	862	Cross	0	0	0	5	0	2	9	8	8	4	1	0	2	0	0	0	0	4	0	0	0	0	0	43
3CS204	LRP-222	962	Cross	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
3CS205	LRP-121	851	Cross	3	0	0	2	7	2	29	18	15	4	1	0	0	1	1	0	0	5	0	0	2	0	0	90
3CS206	LRP-126	856	Cross	10	0	0	0	1	0	5	2	5	0	0	0	0	0	0	0	0	4	0	0	0	0	0	27
3CS207	LRP-148	878	Cross	40	4	3	8	27	19	197	109	238	75	7	1	10	3	6	2	0	218	5	1	0	1	0	974
3CS208	LRP-149	879	Cross	0	0	0	1	1	1	4	7	9	2	0	0	2	1	0	0	0	2	0	0	0	1	0	31
3CS209	LRP-150	880	Cross	0	0	0	0	2	0	7	6	12	4	0	0	1	0	1	0	0	7	2	0	0	0	0	42
3CS210	LRP-151	881	Cross	0	0	0	1	5	0	18	2	6	0	3	0	2	0	0	0	0	6	3	0	1	0	0	47
3CS211	LRP-152	882	Cross	2	0	0	0	7	1	13	2	13	2	2	1	2	1	1	0	1	6	0	0	0	0	0	54
3CS212	LRP-153	883	Cross	0	0	0	0	2	0	3	1	3	2	0	0	0	0	0	0	0	3	0	0	0	0	0	14
3CS213	LRP-155	885	Cross	0	0	0	0	3	0	0	1	6	2	1	0	0	0	0	0	0	5	0	0	0	0	0	18
3CS214	LRP-158	886	Cross	0	0	0	0	0	0	0	0	0	0	2	0	1	2	0	0	0	1	0	0	0	0	0	6
3CS215	LRP-173	903	Cross	0	0	0	0	1	0	1	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	5
3CS216	LRP-219	957	Cross	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
3CS217	LRP-90	820	Cross	0	0	0	1	1	0	4	4	7	0	0	0	0	0	0	0	0	4	0	0	0	0	0	21
3CS218	LRP-93	823	Cross	0	0	0	0	0	0	4	2	3	3	0	0	1	2	0	0	0	3	0	1	0	0	0	19
3CS219	LRP-94	824	Cross	10	0	0	3	4	3	35	25	27	13	1	0	3	0	0	0	0	15	0	0	0	0	0	139
3CS220	LRP-95	825	Cross	1	0	0	2	2	2	8	5	6	1	0	0	2	0	0	0	0	1	1	0	0	0	0	31
3CS221	LRP-181	891	Cross	0	0	0	2	2	0	4	3	5	1	0	0	0	0	0	0	0	3	1	0	0	0	0	21
3CS222	LRP-165	895	Cross	0	0	0	0	0	0	6	10	4	3	1	0	0	0	0	0	0	11	0	0	1	0	0	36
3CS223	LRP-166	896	Cross	0	0	0	2	1	1	16	12	10	5	1	0	0	1	2	0	0	9	0	0	0	0	0	60
3CS224	LRP-167	897	Cross	0	0	0	1	1	0	8	4	10	3	0	0	0	0	1	0	0	9	0	0	0	0	0	37
3CS225	LRP-168	898	Cross	1	0	0	0	2	1	3	4	3	2	0	0	0	0	0	0	0	0	0	0	0	0	1	17
3CS226	LRP-169	899	Cross	0	0	0	2	2	0	14	11	6	4	0	0	0	0	0	0	0	3	0	0	0	0	0	42
3CS227	LRP-170	900	Cross	0	0	0	0	3	2	8	4	5	2	0	0	1	0	0	0	0	3	0	0	0	0	0	28
3CS228	LRP-221	961	Cross	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
3CS230	LRP-124	854	Cross	1	0	0	0	1	0	5	3	0	2	0	1	1	0	0	0	0	1	0	0	0	0	0	15
3CS231	LRP-125	855	Cross	0	0	0	1	1	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
3CS232	LRP-220	958	Cross	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
3PO017	LRP-212	942	Poinsett	0	0	0	1	3	7	47	41	26	24	10	1	3	1	0	0	0	29	0	0	1	0	0	194
3PO020	LRP-133	863	Poinsett	0	0	0	0	2	1	5	12	1	6	1	0	1	0	0	0	0	2	0	0	1	0	0	32
3PO097	LRP-137	867	Poinsett	0	0	0	0	1	0	6	7	2	0	1	0	1	0	0	0	0	3	0	0	0	0	0	21

State Site Number	Project Site Number	Acc. No. 87-	County	Pottery Grog	Pottery Shell	Pottery Sand	Quarry Waste	Cores	Primary	Secondary	Interior	Shatter	Wear Ret.	Int. Ret.	Thick Bifaces	Thin Bifaces	Dart Points	Unid. Points	Arrow Points	Adze/ Axe	FCR	HS	Abrader	Pitted Cobble	Unmod. Cobble	Grinding Basin	Grand Totals
3PO098	LRP-116	846	Poinsett	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
3PO146	LRP-117	847	Poinsett	0	0	0	0	6	2	25	29	12	6	1	1	0	0	2	0	0	12	0	0	0	0	0	96
3PO157	LRP-119	849	Poinsett	0	0	0	27	70	34	204	107	230	45	9	8	16	9	5	0	1	255	14	1	5	6	0	1046
3PO199	LRP-171	901	Poinsett	0	0	0	2	4	1	27	26	14	4	1	0	1	1	0	0	0	14	0	0	0	0	0	95
3PO201	LRP-172	902	Poinset	9	0	0	0	7	8	48	41	65	12	6	0	1	2	1	0	0	75	4	0	0	0	0	279
3PO203	LRP-135	865	Poinsett	79	4	0	3	16	34	198	112	118	38	6	2	6	4	0	0	0	265	3	1	0	2	0	893
3PO204	LRP-146	876	Poinsett	0	0	0	1	1	0	11	9	3	0	0	0	1	1	0	0	0	3	0	0	0	0	0	30
3PO318	LRP-144	874	Poinsett	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3PO516	LRP-115	845	Poinsett	0	0	0	0	1	1	9	12	6	3	0	0	0	0	0	0	0	3	0	0	0	0	0	35
3PO519	LRP-118	848	Poinsett	0	0	0	5	17	18	80	46	61	17	2	3	2	3	0	0	0	86	5	0	0	4	0	349
3PO520	LRP-120	850	Poinsett	0	0	0	0	3	0	14	6	8	1	2	2	0	1	1	0	0	4	2	1	0	1	0	46
3PO521	LRP-136	866	Poinsett	0	0	0	0	0	0	2	1	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	7
3PO522	LRP-138	868	Poinsett	2	0	0	2	5	11	90	60	38	13	1	0	0	3	0	0	0	101	0	0	0	1	0	331
3PO523	LRP-139	869	Poinsett	0	0	0	2	0	0	11	6	5	1	1	1	1	0	0	0	0	4	2	0	0	0	0	34
3PO524	LRP-140	870	Poinsett	0	0	0	0	1	1	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
3PO525	LRP-141	871	Poinsett	42	18	11	15	50	129	881	654	574	116	8	15	27	9	10	2	2	1538	6	2	1	5	0	4113
3PO526	LRP-142	872	Poinsett	0	0	0	0	0	0	4	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
3PO527	LRP-143	873	Poinsett	0	0	0	0	1	0	8	5	1	1	1	0	0	0	0	0	0	3	0	0	0	0	0	18
3PO528	LRP-157	887	Poinsett	0	0	0	0	6	3	45	24	15	6	6	1	6	5	1	0	1	15	0	0	0	0	0	134
3PO530	LRP-112	842	Poinsett	0	1	0	0	9	5	37	36	12	6	0	1	2	1	0	0	0	20	0	0	0	0	0	130
3PO531	LRP-113	843	Poinsett	0	0	0	0	3	4	30	11	14	4	2	0	0	0	0	0	0	7	1	0	0	0	0	76
3PO532	LRP-114	844	Poinsett	1	0	0	0	1	1	9	11	4	5	2	0	1	0	0	0	0	0	0	0	1	0	0	36
3PO533	LRP-134	864	Poinsett	0	0	0	2	2	6	42	48	7	7	2	0	3	0	3	0	0	14	0	0	0	0	0	136
				3234	134	32	300	1107	1435	9511	8622	5148	2339	496	180	478	409	187	18	48	5782	166	26	51	77	11	39791

State Site Number	Project Site Number	County	Clovis	Dalton	San Patrice	Hardin	Searcy	Hickory Ridge	Rice Lobed	Cache River	Eva-like	Big Creek	Burkett	Gary	Weems	Motley	Harrison Turkey-Tail	Marks-ville	Woodland Stemmed	Baytown Stemmed	Dickson	Steuben	Scallorn	Schugtown	Seruoyah	Madison	Nodena	Grand Totals
3LE002	LRP-200	Lee																										0
3LE024	LRP-211	Lee																										0
3LE101	LRP-55	Lee		1																								1
3LE141	LRP-1	Lee												2	1													3
3LE142	LRP-2	Lee		2																								2
3LE143	LRP-3	Lee		1														1										2
3LE144	LRP-4	Lee						2						1	1													4
3LE145	LRP-5	Lee													1													1
3LE146	LRP-6	Lee											1		1													2
3LE147	LRP-7	Lee										1																1
3LE148	LRP-8	Lee												3	2													5
3LE149	LRP-9	Lee												3	2				1									6
3LE150	LRP-10	Lee													1													1
3LE151	LRP-11	Lee																										0
3LE152	LRP-12	Lee																										0
3LE153	LRP-13	Lee													1													1
3LE154	LRP-14	Lee																										0
3LE155	LRP-15	Lee													3													3
3LE156	LRP-16	Lee																										0
3LE157	LRP-17	Lee						1						1	3				1									6
3LE158	LRP-18	Lee													2								1			1		4
3LE159	LRP-19	Lee										1			2													3
3LE160	LRP-20	Lee																										0
3LE161	LRP-21	Lee											1															1
3LE162	LRP-22	Lee				1							1		1							1						4
3LE164	LRP-24	Lee																										0
3LE166	LRP-26	Lee																										0
3LE167	LRP-27	Lee																										0
3LE168	LRP-28	Lee									1																	1
3LE169	LRP-29	Lee													3													3
3LE170	LRP-30	Lee										1																1
3LE171	LRP-31	Lee																				1						1
3LE172	LRP-32	Lee				1																						1
3LE173	LRP-33	Lee													1													1
3LE174	LRP-34	Lee											1															1
3LE175	LRP-35	Lee		2									1	1	2									1				7
3LE176	LRP-36	Lee																										0
3LE177	LRP-37	Lee										3							1									4
3LE178	LRP-38	Lee																										0
3LE179	LRP-39	Lee																										0
3LE180	LRP-40	Lee													1											1		2
3LE181	LRP-41	Lee																										0
3LE182	LRP-42	Lee											1															1
3LE183	LRP-43	Lee											1		2				1	2		1						7
3LE184	LRP-44	Lee																	1									1
3LE185	LRP-45	Lee																										0
3LE186	LRP-46	Lee																										0
3LE187	LRP-47	Lee													1											1		2
3LE188	LRP-48	Lee																										0
3LE189	LRP-49	Lee																										0
3LE190	LRP-50	Lee			1			1			1																	3
3LE191	LRP-51	Lee				1						3	1	3	1						1		1					11
3LE192	LRP-52	Lee												1	1													2
3LE193	LRP-53	Lee									2	1	1					1										5
3LE194	LRP-54	Lee		1											1													2
3LE195	LRP-56	Lee																										0
3LE196	LRP-57	Lee												1														1
3LE197	LRP-58	Lee																										0
3LE198	LRP-59	Lee																										0
3LE199	LRP-60	Lee																										0
3LE200	LRP-61	Lee																										0
3LE201	LRP-62	Lee																										0

State Site Number	Project Site Number	County	Clovis	Dalton	San Patrice	Hardin	Searcy	Hickory Ridge	Rice Lobed	Cache River	Eva-like	Big Creek	Burkett	Gary	Weems	Motley	Harrison Turkey-Tail	Marks-ville	Woodland Stemmed	Baytown Stemmed	Dickson	Steuben	Scallorn	Schugtown	Sequoyah	Madison	Nodena	Grand Totals
3LE202	LRP-63	Lee																										0
3LE203	LRP-64	Lee																										0
3LE204	LRP-65	Lee													1													1
3LE205	LRP-66	Lee																										0
3LE206	LRP-69	Lee				2					1	2	1	1	2					1	1							11
3LE207	LRP-71	Lee														1												1
3LE208	LRP-72	Lee												1														1
3LE209	LRP-73	Lee																										0
3LE210	LRP-74	Lee																										0
3LE211	LRP-75	Lee																										0
3LE212	LRP-76	Lee																										0
3LE213	LRP-82	Lee								1	1																	2
3LE214	LRP-83	Lee																										0
3LE215	LRP-84	Lee													1													1
3LE216	LRP-85	Lee																										0
3LE217	LRP-86	Lee											1															1
3LE218	LRP-87	Lee		1										1														2
3LE219	LRP-145	Lee																										0
3LE220	LRP-182	Lee																										0
3LE221	LRP-183	Lee																										0
3LE222	LRP-184	Lee																										0
3LE223	LRP-185	Lee																										0
3LE224	LRP-186	Lee				3								1	5												1	10
3LE225	LRP-187	Lee																										0
3LE226	LRP-188	Lee																										0
3LE227	LRP-189	Lee																										0
3LE228	LRP-190	Lee																										0
3LE229	LRP-191	Lee																										0
3LE230	LRP-192	Lee																										0
3LE231	LRP-193	Lee																										0
3LE232	LRP-194	Lee																										0
3LE233	LRP-195	Lee																										0
3LE234	LRP-196	Lee																										0
3LE235	LRP-197	Lee																										0
3LE236	LRP-198	Lee																										0
3LE237	LRP-199	Lee																										0
3LE238	LRP-201	Lee																										0
3LE239	LRP-210	Lee													1													1
3LE240	LRP-213	Lee																										0
3LE241	LRP-214	Lee											1															1
3LE242	LRP-215	Lee																				1						1
3LE243	LRP-216	Lee																										0
3LE244	LRP-217	Lee				1																						1
3SF015	LRP-163	St. Fran.																										0
3SF060	LRP-67	St. Fran.				1																						1
3SF080	LRP-160	St. Fran.																										0
3SF257	LRP-68	St. Fran.																										0
3SF258	LRP-206	St. Fran.																										0
3SF259	LRP-207	St. Fran.																										0
3SF260	LRP-70	St. Fran.																										0
3SF261	LRP-88	St. Fran.																										0
3SF262	LRP-89	St. Fran.																										0
3SF263	LRP-203	St. Fran.																										0
3SF264	LRP-204	St. Fran.																										0
3SF265	LRP-205	St. Fran.																										0
3SF266	LRP-159	St. Fran.																										0
3SF267	LRP-162	St. Fran.																										0
3SF268	LRP-81	St. Fran.																										0
3SF269	LRP-202	St. Fran.																										0
3SF270	LRP-77	St. Fran.	1	2	2	3		2			1	7	6	13	19		1					2						59
3SF271	LRP-78	St. Fran.		1								1	2							1								5
3SF272	LRP-79	St. Fran.																										0

Stat Site Number	Project Site Number	County	Clovis	Dalton	San Patrice	Hardin	Searcy	Hickory Ridge	Rice Lobed	Cache River	Eva-like	Big Creek	Burkett	Gary	Weems	Motley	Harrison Turkey-Tail	Marks-ville	Woodland Stemmed	Baytown Stemmed	Dickson	Steuben	Scallorn	Schugtown	Sequoyah	Madison	Nodena	Grand Totals
3SF273	LRP-80	St. Fran.						1					2	4	2													9
3CS012	LRP-181	Cross																										0
3CS017	LRP-122	Cross																										0
3CS018	LRP-129	Cross																										0
3CS022	LRP-154	Cross				1					1			3	1			1				1						8
3CS046	LRP-131	Cross				1									1			3										5
3CS047	LRP-130	Cross												1									1					2
3CS048	LRP-111	Cross																										0
3CS049/229	LRP-123	Cross		1																								1
3CS080	LRP-92	Cross																										0
3CS081	LRP-91	Cross																										0
3CS083	LRP-164	Cross																										0
3CS093	LRP-174	Cross																										0
3CS121	LRP-147	Cross												1						1								2
3CS176	LRP-96	Cross																										0
3CS177	LRP-97	Cross																										0
3CS179	LRP-98	Cross																										0
3CS180	LRP-99	Cross																										0
3CS181	LRP-100	Cross																										0
3CS183	LRP-101	Cross										1																1
3CS184	LRP-175B	Cross		1										1														2
3CS185	LRP-176	Cross																										0
3CS186	LRP-177	Cross																										0
3CS187	LRP-178	Cross																										0
3CS188	LRP-179	Cross					1							1														2
3CS189	LRP-180	Cross																										0
3CS190	LRP-209	Cross																										0
3CS191	LRP-218	Cross																										0
3CS192	LRP-102	Cross													1													1
3CS193	LRP-103	Cross		1									1		2													4
3CS194	LRP-104	Cross																										0
3CS195	LRP-105	Cross																										0
3CS196	LRP-106	Cross																										0
3CS197	LRP-107	Cross																										0
3CS198	LRP-108	Cross																										0
3CS199	LRP-109	Cross																										0
3CS200	LRP-110	Cross																										0
3CS201	LRP-127	Cross				1																						1
3CS202	LRP-128	Cross		2				1	1						1								3	1				9
3CS203	LRP-132	Cross																										0
3CS204	LRP-222	Cross		1										1														2
3CS205	L...P-121	Cross		1																								1
3CS206	LRP-126	Cross																										0
3CS207	LRP-148	Cross												1									1					2
3CS208	LRP-149	Cross						1																				1
3CS209	LRP-150	Cross																										0
3CS210	LRP-151	Cross																										0
3CS211	LRP-152	Cross																										0
3CS212	LRP-153	Cross																										0
3CS213	LRP-155	Cross																										0
3CS214	LRP-156	Cross																										0
3CS215	LRP-173	Cross																										0
3CS216	LRP-219	Cross																										0
3CS217	LRP-90	Cross																										0
3CS218	LRP-93	Cross																										0
3CS219	LRP-94	Cross																										0
3CS220	LRP-95	Cross																										0
3CS221	LRP-161	Cross																										0
3CS222	LRP-165	Cross																										0
3CS223	LRP-166	Cross																										0
3CS224	LRP-167	Cross																										0
3CS225	LRP-168	Cross																										0

L'ANGUILLE RIVER BASIN: DIAGNOSTIC PROJECTILE POINTS BY SITE

State Site Number	Project Site Number	County	Clovis	Dalton	San Patrice	Hardin	Searcy	Hickory Ridge	Rice Lobed	Cache River	Eva-like	Big Creek	Burkett	Gary	Weems	Motley	Harrison Turkey-Tail	Marks-ville	Woodland Stemmed	Baytown Stemmed	Dickson	Steuben	Scallorn	Schugtown	Sequoyah	Madison	Nodena	Grand Totals
3CS226	LRP-169	Cross																										0
3CS227	LRP-170	Cross																										0
3CS228	LRP-221	Cross																								1		1
3CS230	LRP-124	Cross																										0
3CS231	LRP-125	Cross																										0
3CS232	LRP-220	Cross																				1						1
3PO017	LRP-212	Poinsett																										0
3PO020	LRP-133	Poinsett																										0
3PO097	LRP-137	Poinsett																										0
3PO098	LRP-118	Poinsett																										0
3PO148	LRP-117	Poinsett																										0
3PO157	LRP-119	Poinsett		1								1	1	2	1													6
3PO199	LRP-171	Poinsett																										0
3PO201	LRP-172	Poinsett																										0
3PO203	LRP-135	Poinsett													1													1
3PO204	LRP-146	Poinsett																										0
3PO318	LRP-144	Poinsett																										0
3PO518	LRP-115	Poinsett																										0
3PO519	LRP-118	Poinsett																					1					1
3PO520	LRP-120	Poinsett										1																1
3PO521	LRP-136	Poinsett													1													1
3PO522	LRP-138	Poinsett													1													1
3PO523	LRP-139	Poinsett																										0
3PO524	LRP-140	Poinsett																										0
3PO525	LRP-141	Poinsett								1		1	1	3	2							1		1				10
3PO526	LRP-142	Poinsett																										0
3PO527	LRP-143	Poinsett																										0
3PO528	LRP-157	Poinsett		1		1		1					1	1														5
3PO530	LRP-112	Poinsett												1														1
3PO531	LRP-113	Poinsett																										0
3PO532	LRP-114	Poinsett																										0
3PO533	LRP-134	Poinsett																										0
	Grand Totals		1	20	3	17	1	10	1	2	8	24	26	53	77	1	1	6	5	6	2	9	7	3	1	3	1	288

L'ANGUILLE RIVER PROJECT PREHISTORIC LITHIC RAW MATERIALS

State Site Number	Project Site Number	Acc. No. 87-	County	Crowleys Ridge Chert	ITA Crowleys Ridge	Pitkin Chert	Chert Breccia	White Chert	Quart-zite	Banded Chert	Other Unk.	Gray Chert	Novac-ulite	Grand Totals
3LE002	LRP-200	930	Lee	12	7	0	0	0	1	0	0	0	0	20
3LE024	LRP-211	941	Lee	34	3	0	0	0	1	2	0	0	0	40
3LE101	LRP-55	785	Lee	7	1	0	1	0	1	0	0	0	0	10
3LE141	LRP-1	731	Lee	359	111	11	0	1	7	26	3	12	2	532
3LE142	LRP-2	732	Lee	54	42	4	0	0	1	5	0	0	0	106
3LE143	LRP-3	733	Lee	82	21	3	0	0	0	8	0	3	0	117
3LE144	LRP-4	734	Lee	251	126	7	5	3	12	16	4	0	0	424
3LE145	LRP-5	735	Lee	34	7	0	0	0	1	4	0	0	0	46
3LE146	LRP-6	736	Lee	38	3	1	0	1	0	6	0	1	0	50
3LE147	LRP-7	737	Lee	9	4	0	0	1	0	2	1	0	0	17
3LE148	LRP-8	738	Lee	14	3	0	0	2	0	1	0	0	0	20
3LE149	LRP-9	739	Lee	107	31	1	0	0	1	6	2	0	0	148
3LE150	LRP-10	740	Lee	8	3	0	0	0	0	1	0	0	0	12
3LE151	LRP-11	741	Lee	0	0	0	0	0	0	0	0	0	0	0
3LE152	LRP-12	742	Lee	5	0	0	0	0	0	0	0	0	0	5
3LE153	LRP-13	743	Lee	36	11	0	0	0	2	4	1	0	0	54
3LE154	LRP-14	744	Lee	9	2	0	0	0	0	2	0	0	0	13
3LE155	LRP-15	745	Lee	30	6	1	0	0	1	2	1	0	0	41
3LE156	LRP-16	746	Lee	23	5	0	0	0	1	0	0	0	0	29
3LE157	LRP-17	747	Lee	84	6	4	2	0	4	5	0	2	0	107
3LE158	LRP-18	748	Lee	196	54	0	1	1	11	14	1	0	3	281
3LE159	LRP-19	749	Lee	103	37	1	0	0	2	10	1	0	0	154
3LE160	LRP-20	750	Lee	2	0	0	0	0	0	0	0	0	0	2
3LE161	LRP-21	751	Lee	24	2	0	1	0	0	1	2	0	0	30
3LE162	LRP-22	752	Lee	48	13	0	1	2	5	3	1	0	0	73
3LE164	LRP-24	754	Lee	82	30	1	0	4	1	6	4	1	0	129
3LE166	LRP-26	756	Lee	58	5	0	0	0	1	6	3	0	0	73
3LE167	LRP-27	757	Lee	2	0	0	0	1	0	0	0	0	0	3
3LE168	LRP-28	758	Lee	15	3	0	0	2	0	0	3	0	0	23
3LE169	LRP-29	759	Lee	70	3	0	0	0	1	3	0	2	0	79
3LE170	LRP-30	760	Lee	3	0	1	0	0	0	1	0	0	0	5
3LE171	LRP-31	761	Lee	25	3	0	0	1	0	3	0	0	0	32
3LE172	LRP-32	762	Lee	22	8	0	3	0	0	5	0	0	0	38
3LE173	LRP-33	763	Lee	70	24	3	0	2	4	1	1	1	0	106
3LE174	LRP-34	764	Lee	97	63	2	0	0	3	7	2	0	0	174
3LE175	LRP-35	765	Lee	469	264	13	0	13	14	20	17	7	2	819
3LE176	LRP-36	766	Lee	51	13	1	0	3	3	0	0	1	1	73
3LE177	LRP-37	767	Lee	60	35	2	1	1	2	2	0	1	1	105
3LE178	LRP-38	768	Lee	2	6	1	0	1	0	2	0	0	0	12
3LE179	LRP-39	769	Lee	5	5	0	0	0	0	1	0	0	0	11
3LE180	LRP-40	770	Lee	27	3	3	0	1	1	1	0	0	0	36
3LE181	LRP-41	771	Lee	17	6	0	0	2	3	1	0	0	0	29
3LE182	LRP-42	772	Lee	3	0	0	0	0	0	0	0	0	0	3
3LE183	LRP-43	773	Lee	364	108	5	4	9	18	26	6	4	6	550
3LE184	LRP-44	774	Lee	317	78	2	7	3	8	17	0	3	0	435
3LE185	LRP-45	775	Lee	11	0	1	0	1	0	1	0	0	0	14
3LE186	LRP-46	776	Lee	6	2	0	0	1	1	0	0	0	0	10
3LE187	LRP-47	777	Lee	48	8	0	1	4	1	2	0	1	0	65
3LE188	LRP-48	778	Lee	15	3	0	0	1	0	1	0	0	0	20
3LE189	LRP-49	779	Lee	8	0	1	0	1	0	0	0	0	0	10
3LE190	LRP-50	780	Lee	32	19	10	0	3	0	1	0	2	1	68
3LE191	LRP-51	781	Lee	361	73	23	9	16	17	25	3	5	4	536
3LE192	LRP-52	782	Lee	272	37	3	0	1	8	12	2	1	1	337
3LE193	LRP-53	783	Lee	105	39	9	0	2	8	11	1	3	0	178
3LE194	LRP-54	784	Lee	18	6	0	0	1	0	4	0	0	1	30
3LE195	LRP-56	786	Lee	61	8	4	0	1	1	2	2	1	0	80
3LE196	LRP-57	787	Lee	13	7	1	0	1	0	1	1	1	0	25
3LE197	LRP-58	788	Lee	0	1	0	0	0	0	0	0	0	0	1
3LE198	LRP-59	789	Lee	29	6	0	0	0	0	1	0	0	0	36
3LE199	LRP-60	790	Lee	9	4	0	0	1	0	1	0	0	0	15
3LE200	LRP-61	791	Lee	14	3	0	0	0	0	0	0	0	0	17
3LE201	LRP-62	792	Lee	10	5	0	0	0	1	1	0	0	0	17
3LE202	LRP-63	793	Lee	5	1	0	1	0	0	1	0	0	0	8
3LE203	LRP-64	794	Lee	10	1	0	1	0	0	0	0	0	0	12
3LE204	LRP-65	795	Lee	5	1	0	0	0	0	0	0	0	0	6
3LE205	LRP-66	796	Lee	81	8	1	2	1	1	1	0	0	0	95
3LE206	LRP-69	799	Lee	134	30	7	1	3	3	4	1	1	2	186
3LE207	LRP-71	801	Lee	41	10	0	0	2	3	1	0	0	0	57
3LE208	LRP-72	802	Lee	66	3	1	0	0	2	2	0	2	0	76
3LE209	LRP-73	803	Lee	0	0	0	0	0	0	0	0	0	0	0
3LE210	LRP-74	804	Lee	7	1	0	0	0	2	0	1	0	0	11
3LE211	LRP-75	805	Lee	4	2	0	0	0	0	0	0	0	0	6
3LE212	LRP-76	806	Lee	7	3	1	0	0	0	0	0	0	0	11
3LE213	LRP-82	812	Lee	37	19	0	0	1	2	1	2	0	[illegible]	62

L'ANGUILLE RIVER PROJECT PREHISTORIC LITHIC RAW MATERIALS

State Site Number	Project Site Number	Acc. No. 87-	County	Crowleys Ridge Chert	ITA Crowleys Ridge	Pitkin Chert	Chert Breccia	White Chert	Quart-zite	Banded Chert	Other Unk.	Gray Chert	Novac-ulite	Grand Totals
3LE214	LRP-83	813	Lee	52	23	2	0	0	1	1	0	0	0	79
3LE215	LRP-84	814	Lee	34	3	0	4	0	0	4	0	0	0	45
3LE216	LRP-85	815	Lee	27	4	1	1	0	0	2	0	0	0	35
3LE217	LRP-86	816	Lee	13	1	0	0	0	0	0	0	0	0	14
3LE218	LRP-87	817	Lee	593	257	15	13	6	33	43	4	5	2	971
3LE219	LRP-145	875	Lee	40	30	1	1	0	5	4	0	0	0	81
3LE220	LRP-182	912	Lee	3	0	0	0	0	0	0	0	0	0	3
3LE221	LRP-183	913	Lee	22	3	1	0	0	0	1	0	0	0	27
3LE222	LRP-184	914	Lee	26	2	0	0	0	0	0	0	0	0	28
3LE223	LRP-185	915	Lee	1	0	0	0	0	0	0	0	0	0	1
3LE224	LRP-186	916	Lee	146	73	8	2	1	8	16	0	0	0	254
3LE225	LRP-187	917	Lee	9	1	0	0	1	0	2	1	0	0	14
3LE226	LRP-188	918	Lee	37	15	0	0	0	2	1	0	0	0	55
3LE227	LRP-189	919	Lee	5	0	0	0	0	0	0	0	0	0	5
3LE228	LRP-190	920	Lee	16	2	0	0	1	0	0	0	0	0	19
3LE229	LRP-191	921	Lee	7	6	0	0	0	0	0	0	0	0	13
3LE230	LRP-192	922	Lee	3	0	0	0	0	1	0	0	0	0	4
3LE231	LRP-193	923	Lee	7	3	0	0	2	0	0	0	0	0	12
3LE232	LRP-194	924	Lee	2	1	0	0	0	0	0	0	0	0	3
3LE233	LRP-195	925	Lee	2	0	0	0	0	0	0	0	0	0	2
3LE234	LRP-196	926	Lee	3	2	0	0	0	1	0	0	0	0	6
3LE235	LRP-197	927	Lee	4	0	0	0	1	0	0	0	0	0	5
3LE236	LRP-198	928	Lee	28	9	1	0	0	2	2	0	0	0	42
3LE237	LRP-199	929	Lee	22	6	0	0	0	1	2	0	0	1	32
3LE238	LRP-201	931	Lee	29	12	2	0	0	2	2	1	0	1	49
3LE239	LRP-210	943	Lee	1	0	0	0	0	0	0	0	0	0	1
3LE240	LRP-213	944	Lee	1	0	0	0	0	0	0	0	0	0	1
3LE241	LRP-214	945	Lee	5	0	0	0	0	0	0	0	0	0	5
3LE242	LRP-215	947	Lee	0	0	1	0	0	0	0	0	0	0	1
3LE243	LRP-216	948	Lee	1	0	0	0	0	0	0	0	0	0	1
3LE244	LRP-217	953	Lee	1	0	0	0	0	0	0	0	1	0	2
3SF015	LRP-163	893	St. Fran.	5	0	0	0	0	0	1	0	0	0	6
3SF060	LRP-67	797	St. Fran.	17	6	3	0	0	0	4	1	0	0	31
3SF080	LRP-160B	890	St. Fran.	58	41	1	2	0	9	6	0	1	0	118
3SF257	LRP-68	798	St. Fran.	34	7	2	0	0	0	2	0	0	0	45
3SF258	LRP-206	936	St. Fran.	41	4	0	0	0	0	1	1	0	0	47
3SF259	LRP-207	937	St. Fran.	68	19	1	0	0	1	5	1	0	0	95
3SF260	LRP-70	800	St. Fran.	10	14	2	0	0	1	2	0	1	0	30
3SF261	LRP-88	818	St. Fran.	14	6	1	0	1	1	1	0	0	0	24
3SF262	LRP-89	819	St. Fran.	50	16	2	2	2	3	1	1	0	0	77
3SF263	LRP-203	933	St. Fran.	189	133	0	0	3	10	19	0	0	0	354
3SF264	LRP-204	934	St. Fran.	15	11	0	0	0	0	5	0	0	0	31
3SF265	LRP-205	935	St. Fran.	6	2	0	0	0	1	4	0	0	0	13
3SF266	LRP-159	889	St. Fran.	26	7	1	0	0	2	2	0	0	0	38
3SF267	LRP-162	892	St. Fran.	25	2	0	0	0	0	2	0	0	0	29
3SF268	LRP-81	811	St. Fran.	28	4	1	0	1	0	3	0	0	1	38
3SF269	LRP-202	932	St. Fran.	61	55	0	0	0	6	8	0	0	0	130
3SF270	LRP-77	807	St. Fran.	2047	455	100	17	10	63	137	11	4	1	2845
3SF271	LRP-78	808	St. Fran.	623	395	33	7	2	45	55	3	1	2	1166
3SF272	LRP-79	809	St. Fran.	32	6	0	0	0	0	0	0	0	0	38
3SF273	LRP-80	810	St. Fran.	2600	758	122	6	3	78	64	17	4	4	3656
3CS012	LRP-161	911	Cross	24	16	1	0	0	4	0	0	0	0	45
3CS017	LRP-122	852	Cross	46	25	4	0	2	3	0	0	1	0	81
3CS018	LRP-129	859	Cross	17	21	0	0	0	0	2	0	0	0	40
3CS022	LRP-154	884	Cross	223	196	5	2	4	41	31	2	9	2	515
3CS046	LRP-131	861	Cross	455	350	16	0	3	101	51	1	8	1	986
3CS047	LRP-130	860	Cross	9	3	0	0	1	0	0	0	0	0	13
3CS048	LRP-111	841	Cross	18	7	1	0	0	3	5	0	0	0	34
3CS049/229	LRP-123	853	Cross	78	42	2	1	5	9	10	1	3	0	151
3CS080	LRP-92	822	Cross	59	35	3	0	5	1	7	0	0	0	110
3CS081	LRP-91	821	Cross	28	7	0	0	0	0	3	0	1	0	39
3CS083	LRP-164	894	Cross	1	2	0	0	0	0	0	0	0	0	3
3CS093	LRP-174	904	Cross	40	8	1	1	2	6	2	0	0	0	60
3CS121	LRP-147	877	Cross	366	138	14	0	4	52	30	4	9	0	617
3CS176	LRP-96	826	Cross	4	0	0	0	2	0	0	0	0	0	6
3CS177	LRP-97	827	Cross	6	1	0	0	0	1	0	0	0	0	8
3CS179	LRP-98	828	Cross	10	2	0	0	0	0	1	0	0	0	13
3CS180	LRP-99	829	Cross	4	2	1	0	0	0	0	0	0	0	7
3CS181	LRP-100	830	Cross	7	4	0	0	1	0	0	0	0	0	12
3CS183	LRP-101	831	Cross	15	4	0	1	0	1	0	0	0	0	21
3CS184	LRP-175B	905	Cross	70	21	3	0	1	7	5	1	0	0	108
3CS185	LRP-176	906	Cross	1	2	0	0	0	1	1	0	0	0	5
3CS186	LRP-177	907	Cross	10	0	0	0	0	3	1	0	0	0	14
3CS187	LRP-178	908	Cross	32	13	0	0	0	2	3	0	0	0	50

L'ANGUILLE RIVER PROJECT PREHISTORIC LITHIC RAW MATERIALS

State Site Number	Project Site Number	Acc. No. 87-	County	Crowleys Ridge Chert	ITA Crowleys Ridge	Pitkin Chert	Chert Breccia	White Chert	Quartzite	Banded Chert	Other Unk.	Gray Chert	Novaculite	Grand Totals
3CS188	LRP-179	909	Cross	53	29	3	1	0	6	13	1	1	0	107
3CS189	LRP-180	910	Cross	35	15	1	0	0	2	3	4	5	0	65
3CS190	LRP-209	939	Cross	28	12	0	0	1	5	5	0	1	0	52
3CS191	LRP-218	954	Cross	1	0	0	0	0	0	1	0	0	0	2
3CS192	LRP-102	832	Cross	12	1	1	0	0	0	1	1	0	0	16
3CS193	LRP-103	833	Cross	307	202	4	1	10	55	27	0	3	0	609
3CS194	LRP-104	834	Cross	75	47	3	0	5	6	7	0	1	0	144
3CS195	LRP-105	835	Cross	2	2	0	0	1	1	1	0	0	0	7
3CS196	LRP-106	836	Cross	5	2	0	0	0	1	1	0	0	0	9
3CS197	LRP-107	837	Cross	7	2	0	0	0	0	1	0	0	0	10
3CS198	LRP-108	838	Cross	13	6	0	1	1	3	0	0	0	0	24
3CS199	LRP-109	839	Cross	17	9	0	0	1	7	1	0	0	0	35
3CS200	LRP-110	840	Cross	10	3	0	1	0	0	0	0	0	0	14
3CS201	LRP-127	857	Cross	17	10	1	0	10	3	1	0	0	0	42
3CS202	LRP-128	858	Cross	696	732	32	1	11	95	93	9	20	3	1692
3CS203	LRP-132	862	Cross	24	9	0	0	2	0	2	1	1	0	39
3CS204	LRP-222	960	Cross	0	0	1	0	0	0	0	0	0	0	1
3CS205	LRP-121	851	Cross	45	24	3	0	0	3	4	1	0	0	80
3CS206	LRP-126	856	Cross	5	4	1	1	0	1	1	0	0	0	13
3CS207	LRP-148	878	Cross	363	256	15	2	0	33	27	3	3	0	702
3CS208	LRP-149	879	Cross	8	17	0	0	1	0	1	1	0	0	28
3CS209	LRP-150	880	Cross	20	8	0	0	0	0	5	0	0	0	33
3CS210	LRP-151	881	Cross	20	8	2	0	0	1	6	0	0	0	37
3CS211	LRP-152	882	Cross	22	10	3	0	1	4	6	0	0	0	46
3CS212	LRP-153	883	Cross	7	3	0	0	0	0	1	0	0	0	11
3CS213	LRP-155	885	Cross	10	1	0	0	0	1	1	0	0	0	13
3CS214	LRP-156	886	Cross	2	1	0	0	0	0	2	0	0	0	5
3CS215	LRP-173	903	Cross	2	2	1	0	0	0	0	0	0	0	5
3CS216	LRP-219	957	Cross	0	0	1	0	0	0	0	0	0	0	1
3CS217	LRP-90	820	Cross	4	9	1	0	0	1	2	0	0	0	17
3CS218	LRP-93	823	Cross	5	5	1	0	0	1	0	0	3	0	15
3CS219	LRP-94	824	Cross	58	38	0	2	2	6	7	1	0	0	114
3CS220	LRP-95	825	Cross	15	9	1	0	0	2	1	0	0	0	28
3CS221	LRP-161	891	Cross	13	3	0	0	1	0	0	0	0	0	17
3CS222	LRP-165	895	Cross	9	10	1	0	2	1	0	1	0	0	24
3CS223	LRP-166	896	Cross	29	14	0	0	1	1	3	1	2	0	51
3CS224	LRP-167	897	Cross	15	7	1	0	0	1	1	1	1	1	28
3CS225	LRP-168	898	Cross	6	4	1	1	1	1	1	0	0	0	15
3CS226	LRP-169	899	Cross	20	13	1	0	1	3	1	1	0	0	40
3CS227	LRP-170	900	Cross	15	7	0	0	0	0	2	0	0	1	25
3CS228	LRP-221	959	Cross	1	0	0	0	0	0	0	0	0	0	1
3CS230	LRP-124	854	Cross	7	4	1	0	0	0	1	0	0	0	13
3CS231	LRP-125	855	Cross	3	1	0	0	0	1	1	0	0	0	6
3CS232	LRP-220	958	Cross	1	0	0	0	0	0	0	0	0	0	1
3PO017	LRP-212	942	Poinsett	97	51	2	0	2	4	9	0	0	0	165
3PO020	LRP-133	863	Poinsett	14	10	0	0	4	0	1	0	0	0	29
3PO097	LRP-137	867	Poinsett	13	3	1	0	0	0	0	0	1	0	18
3PO098	LRP-116	846	Poinsett	1	1	0	0	0	0	0	0	0	0	2
3PO148	LRP-117	847	Poinsett	43	29	0	1	2	6	3	0	0	0	84
3PO157	LRP-119	849	Poinsett	403	224	14	0	3	78	33	3	9	0	767
3PO199	LRP-171	901	Poinsett	45	24	3	0	0	2	7	0	0	0	81
3PO201	LRP-172	902	Poinset	68	89	0	0	3	17	12	1	1	0	191
3PO203	LRP-135	865	Poinsett	237	216	4	2	0	54	17	1	7	0	538
3PO204	LRP-146	876	Poinsett	10	10	2	0	0	2	1	2	0	0	27
3PO318	LRP-144	874	Poinsett	0	2	0	0	0	0	0	0	0	0	2
3PO518	LRP-115	845	Poinsett	16	11	0	0	2	2	0	0	1	0	32
3PO519	LRP-118	848	Poinsett	128	92	1	0	2	19	9	0	3	0	254
3PO520	LRP-120	850	Poinsett	25	10	1	0	0	1	1	0	0	0	38
3PO521	LRP-136	866	Poinsett	5	1	0	0	0	1	0	0	0	0	7
3PO522	LRP-138	868	Poinsett	105	82	8	0	1	17	12	0	2	0	227
3PO523	LRP-139	869	Poinsett	15	10	0	0	1	2	0	0	0	0	28
3PO524	LRP-140	870	Poinsett	3	1	0	0	0	0	2	0	0	0	6
3PO525	LRP-141	871	Poinsett	1293	994	20	1	6	129	36	4	7	0	2490
3PO526	LRP-142	872	Poinsett	3	1	0	0	0	1	2	0	0	0	7
3PO527	LRP-143	873	Poinsett	7	5	0	0	2	0	0	1	0	0	15
3PO528	LRP-157	887	Poinsett	73	25	4	1	1	7	8	0	0	0	119
3PO530	LRP-112	842	Poinsett	58	26	0	0	14	6	5	0	0	0	109
3PO531	LRP-113	843	Poinsett	32	26	1	1	2	3	5	0	0	0	70
3PO532	LRP-114	844	Poinsett	20	9	1	1	1	0	2	0	0	0	34
3PO533	LRP-134	864	Poinsett	60	35	5	0	12	7	3	0	0	0	122
	Grand Totals			18130	8274	628	119	269	1274	1246	154	175	44	30313

APPENDIX III.

FINAL REPORT OF PALYNOLOGICAL AND PLANT-MACROFOSSIL ANALYSIS, HOOD LAKE, POINSETT COUNTY, ARKANSAS: PALYNOLOGICAL AND PLANT MACROFOSSIL DATA

by

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HOOD LAKE, POINSETT COUNTY, ARKANSAS

Fossil Pollen and Spore Assemblages, 42 samples (three with poor preservation), each 1 cc of sediment with 1 tablet of exotic *Eucalyptus* pollen grains [16,180 grains per tablet] added

TAXA	DEPTH (cm)											
	5	30	60	90	99	115	120	125	130	135	140	145
TREES:												
Abies (fir)	0	0	0	0	0	0	0	0	0	0	0	0
Acer (maple)												
A. negundo (boxelder)	0	0	0	0	0	0	0	0	0	0	0	0
A. rubrum (red maple)	1	0	0	1	3	4	3	2	1	1	2	0
A. saccharum (sugar maple)	0	2	0	5	0	0	7	0	3	0	3	1
A. saccharinum (silver maple)	2	0	1	0	0	1	0	0	0	1	1	0
Betula (birch)	3	1	3	1	1	0	1	0	0	1	0	3
Carpinus/Ostrya type (hornbeam)	2	2	1	1	4	0	0	0	0	0	1	1
Carya (hickory)	17	9	1	16	20	12	12	12	18	15	25	19
Castanea (chestnut)	0	0	0	1	0	0	0	0	0	0	1	0
Celtis/Machura type (hackberry)	0	1	2	2	2	0	0	0	2	2	0	1
Cornus alternifolia type (alternate-leaved dogwood)	0	0	0	0	0	0	0	0	0	0	0	0
Cornus florida (flowering dogwood)	0	0	0	0	0	0	0	0	0	0	0	0
Cupressaceae (cedar family)	13	25	11	8	8	7	16	9	10	10	1	12
Diospyros virginiana (persimmon)	0	0	0	0	0	1	0	0	0	0	0	0
Fagus grandifolia (beech)	0	0	0	0	0	0	0	0	0	1	0	1

TAXA	DEPTH (cm)											
	5	30	60	90	99	115	120	125	130	135	140	145
Fraxinus (ash)												
F. quadrangulata-nigra type												
(blue ash-black ash)	5	5	7	14	16	10	48	9	10	4	11	6
F. pennsylvanica-americana type												
(green ash-white ash)	7	7	3	2	14	3	3	10	6	4	3	2
F. C_3stp	2	1	2	9	22	18	8	43	35	14	7	10
F. undifferentiated	1	0	1	9	20	15	15	9	6	7	10	6
Ilex type (holly)	1	0	0	0	0	0	0	0	0	0	0	0
Juglans (walnut)												
J. cinerea (butternut)	0	0	0	1	4	6	0	0	1	0	5	1
J. nigra (walnut)	0	3	1	0	0	0	0	0	0	0	1	0
J. undifferentiated	0	1	0	0	0	0	0	0	0	0	0	0
Liquidambar styraciflua (sweetgum)	3	2	2	5	15	20	6	6	8	6	11	4
Liriodendron tulipifera (tuliptree)	0	0	0	0	0	0	0	0	0	0	0	0
Morus (mulberry)	0	6	3	0	0	0	0	0	0	0	0	0
Myrica type (bayberry)	0	1	0	0	0	0	0	0	0	0	0	0
Nyssa (tupelogum)	22	13	4	0	0	0	0	0	0	1	0	0
Oxydendrum arboreum (sourwood)	0	0	0	0	0	0	0	0	0	0	0	0
Picea (spruce)	0	0	0	0	0	0	0	0	0	0	0	0
Pinus (pine)												
P. Diploxylon (Southern pine)	4	5	6	10	13	10	7	7	4	1	7	7
P. undifferentiated	2	4	4	9	8	4	4	3.5	4.5	12	4.5	8

TAXA	DEPTH (cm)											
	5	30	60	90	99	115	120	125	130	135	140	145
Planera aquatica (planer tree)	5	5	0	15	13	11	2	7	17	21	1	33
Platanus occidentalis (sycamore)	0	2	5	0	1	2	1	2	0	0	1	0
Populus deltoides type (cottonwood)	0	0	1	0	0	0	0	1	0	0	0	0
Quercus (oak)	140	122	167	207	241	169	167	170	181	205	182	178
Rhus (sumac)												
R. copallinum (winged sumac)	4	0	0	0	0	0	1	0	0	0	0	0
R. undifferentiated	0	0	0	0	0	0	0	0	0	0	0	0
Salix (willow)	54	65	42	4	3	4	6	1	0	1	7	0
Taxodium distichum (bald cypress)	1	1	2	1	0	0	3	0	0	0	1	1
Ulmus (elm)	11	15	22	13	8	6	15	13	10	4	19	2
Viburnum (haw)												
V. acerifolium type (arrow wood)	0	0	0	1	0	0	0	0	0	0	1	0
V. lentago type (sheepberry)	3	2	1	0	10	10	0	9	3	2	0	5
TOTAL ARBOREAL POLLEN	304	300	301	336	426	313	325	313.5	319.5	313	305.5	301
SHRUBS:												
Alnus rugosa type (speckled alder)	0	0	1	0	0	1	0	0	0	0	0	0
Cephalanthus occidentalis (buttonbush)	19	43	23	52	123	80	55	86	117	144	121	133
Corylus (hazelnut)	0	0	0	0	0	1	0	0	0	0	0	0
Lonicera (honeysuckle)	0	0	0	0	0	0	0	0	0	0	0	0
Rhamnus type (buckthorn)	0	0	0	0	0	0	0	1	0	0	0	0
Rubus (blackberry)	0	0	3	0	3	0	0	0	2	1	0	0
Sambucus (elderberry)	0	1	1	1	0	2	2	0	0	1	1	0

TAXA	DEPTH (cm)											
	5	30	60	90	99	115	120	125	130	135	140	145
Spiraea type (meadow sweet)	0	0	0	0	0	0	0	0	0	0	0	0
VINES:												
Rhus radicans (poison ivy)	0	0	0	0	0	0	0	1	0	0	0	1
Smilax (greenbriar)	0	0	0	0	0	0	0	0	0	2	0	2
Vitis (grape)	2	3	2	1	1	0	0	2	0	1	0	0
NONAQUATIC HERBS:												
Caryophyllaceae (pink family)	0	0	0	0	0	0	0	0	0	0	0	0
Chenopodiaceae/Amaranthaceae (goosefoot/amaranth families)	3	8	4	1	0	0	0	0	0	0	0	0
Compositae (composites)												
Ambrosia type (ragweed)	20	69	77	3	4	8	4	10	12	16	6	17
Artemisia (sage)	1	0	1	0	0	0	0	0	0	0	0	0
Bidens type (beggar ticks)	0	0	0	0	0	0	0	0	0	6	0	2
Cirsium/Carduus type (thistle)	0	0	0	0	0	0	0	0	0	0	0	0
Helianthus type (sunflower)	0	0	0	0	0	0	0	0	2	1	0	0
Iva ciliata type (marsh elder)	0	5	3	0	0	0	0	0	3	0	7	1
Senecio type (ragwort)	1	1	7	43	128	46	62	59	92	53	28	63
Tubuliflorae undifferentiated	12	48	32	14	8	14	5	23	3	6	16	2
Xanthium (cocklebur)	0	2	0	0	0	0	1	0	1	0	0	0
Liguliflorae (dandelion group)	0	0	0	0	0	0	0	0	0	0	0	0
Cruciferae (mustard family)	0	0	0	0	0	1	0	0	0	0	0	0

TAXA	DEPTH (cm)											
	5	30	60	90	99	115	120	125	130	135	140	145
Cyperaceae (sedge)	6	10	26	20	11	7	15	4	6	15	9	8
Gramineae (true wild grass)	13	14	9	1	5	3	3	9	3	12	6	7
Hypoxis hirsuta (star-grass)	0	0	0	0	0	0	0	0	0	0	0	0
Mentha type (mint)	0	0	0	0	0	0	0	0	0	0	0	0
Plantago (plantain)												
P. lanceolata (plantain)	1	4	2	1	0	0	0	0	0	0	0	0
P. undifferentiated	0	0	0	0	0	0	0	0	0	0	0	0
Proboscidea louisiana (unicorn plant)	0	0	0	0	0	0	0	0	0	0	0	0
Rumex (dock)	1	1	0	0	0	0	0	0	0	0	0	0
Thalictrum (meadow rue)	0	0	0	0	0	0	0	0	0	0	0	0
Umbelliferae (parsley family)	2	0	0	0	0	3	0	1	0	1	0	1
Urtica (nettle)	0	0	0	0	0	0	0	0	0	0	0	0
FERNS & FERN ALLIES:												
Botrychium (grape fern)												
B. dissectum (grape fern)	0	0	1	0	0	0	0	0	0	0	0	0
B. lanceolatum (grape fern)	0	1	0	0	0	0	0	0	0	0	0	0
B. undifferentiated	0	0	0	1	0	0	0	0	0	0	0	0
Dryopteris type (shield fern)	1	0	0	0	0	0	0	1	0	0	0	0
Osmunda												
O. cinnamomea (cinnamon fern)	0	0	0	0	0	0	0	1	0	0	0	0
O. regalis type (royal fern)	0	0	0	0	0	0	0	0	0	0	0	0
Polypodium virginianum (polypody fern)	0	0	0	0	0	0	0	0	0	1	0	2

TAXA	DEPTH (cm)											
	5	30	60	90	99	115	120	125	130	135	140	145
Pteridium aquilinum (bracken fern)	0	0	0	1	0	0	0	0	0	0	0	0
Trilete fern spores undifferentiated	0	0	0	0	0	0	0	0	0	0	0	0
UNKNOWN POLLEN GRAINS AND SPORES	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL POLLEN GRAINS & SPORES (TREES, SHRUBS, UPLAND HERBS, VINES, FERNS & FERN ALLIES, AND UNKNOWNS)	386	510	493	475	709	479	472	511.5	560.5	573	499.5	540
AQUATIC PLANTS:												
Isoetes (quillwort)	2	7	0	0	0	2	0	0	0	1	1	1
Myriophyllum (water milfoil)												
M. alterniflorum (water milfoil)	0	0	0	0	0	0	0	0	0	0	0	0
M. exalbescens type (water milfoil)	0	0	0	0	0	0	0	0	0	0	0	0
Nuphar (yellow water lily)	1	0	0	0	0	0	0	0	0	2	0	1
Nymphaea (water lily)	0	0	0	0	0	0	0	0	0	2	0	0
Polygonum hydropiper type (smartweed)	2	0	0	0	1	1	0	0	2	6	1	1
Potamogeton (pondweed)												
P. Coleogeton (pondweed)	0	0	0	3	4	1	0	3	2	1	1	1
P. Eupotamogeton (pondweed)	0	0	0	0	3	5	0	0	1	0	0	0
Sagittaria (arrowhead)	1	0	0	0	0	0	0	3	0	2	0	0
Sparganium type (bur reed)	0	0	0	0	0	0	0	0	0	1	0	3

TAXA	DEPTH (cm)											
	5	30	60	90	99	115	120	125	130	135	140	145
Typha latifolia (cattail)	0	0	0	0	0	0	0	0	0	0	0	0
INDETERMINABLE GRAINS	2	9	2	6	12	9	12	7	4	8	3	3
EXOTIC POLLEN:												
Number of *Eucalyptus* pills added to sample	1	1	1	1	1	1	1	1	1	1	1	1
Number of *Eucalyptus* pollen grains tallied	239	367	371	34	24	36	44	37	33	36	50	25

Fossil Pollen and Spore Assemblages, 42 samples (three with poor preservation), each 1 cc of sediment with 1 tablet of exotic *Eucalyptus* pollen grains [16,180 grains per tablet] added

TAXA	DEPTH (cm)											
	150	155	160	180	185	205	210	215	220	230	235	240
TREES:												
Abies (fir)	0	0	0	0	0	0	0	0	0	0	0	0
Acer (maple)												
A. negundo (boxelder)	7	5	0	0	3	0	0	0	0	0	0	3
A. rubrum (red maple)	2	1	2	1	1	1	0	4	0	0	1	3
A. saccharum (sugar maple)	0	1	1	3	0	0	2	0	2	0	0	1
A. saccharinum (silver maple)	0	0	2	3	0	0	0	1	0	0	2	0
Betula (birch)	0	0	0	0	0	0	0	0	0	0	0	1
Carpinus/Ostrya type (hornbeam)	0	0	0	0	0	2	1	0	0	0	1	0
Carya (hickory)	26	29	14	37	15	43	28	30	22	27	35	43
Castanea (chestnut)	0	0	0	0	0	0	0	0	0	0	0	0
Celtis/Maclura type (hackberry)	0	0	0	0	1	1	2	0	0	3	2	2
Cornus alternifolia type (alternate-leaved dogwood)	0	0	0	0	0	0	0	0	0	0	0	0
Cornus florida (flowering dogwood)	0	0	0	0	0	0	0	0	0	0	0	0
Cupressaceae (cedar family)	10	6	4	5	6	3	7	3	5	1	5	4
Diospyros virginiana (persimmon)	0	0	0	0	1	0	0	0	0	0	0	0
Fagus grandifolia (beech)	0	0	0	0	0	0	0	0	0	0	0	0

TAXA	DEPTH (cm)											
	150	155	160	180	185	205	210	215	220	230	235	240
Fraxinus (ash)												
F. quadrangulata-nigra type												
(blue ash-black ash)	16	5	3	0	3	2	1	0	4	3	5	0
F. pennsylvanica-americana type												
(green ash-white ash)	4	1	8	8	9	4	8	4	4	4	3	5
F. C_3stp	21	18	24	1	27	8	5	14	2	14	5	1
F. undifferentiated	0	6	5	6	3	3	8	2	3	8	7	4
Ilex type (holly)	0	0	0	0	0	0	0	0	1	0	0	0
Juglans (walnut)												
J. cinerea (butternut)	0	2	0	0	0	0	2	0	2	0	0	3
J. nigra (walnut)	0	0	0	0	1	1	0	0	0	0	0	0
J. undifferentiated	0	0	0	0	0	0	0	0	0	0	0	0
Liquidambar styraciflua (sweetgum)	4	5	4	4	3	6	3	1	4	6	1	3
Liriodendron tulipifera (tuliptree)	0	0	0	0	0	0	0	0	0	0	0	0
Morus (mulberry)	0	0	0	0	0	0	0	1	0	0	0	0
Myrica type (bayberry)	0	0	0	0	0	0	0	0	0	0	0	0
Nyssa (tupelogum)	0	0	0	0	0	0	0	0	0	0	0	0
Oxydendrum arboreum (sourwood)	0	0	0	0	0	0	0	0	0	0	0	0
Picea (spruce)	0	0	0	0	0	0	0	0	0	0	0	0
Pinus (pine)												
P. Diploxylon (Southern pine)	6	1	4	3	2	1	1	1	3	1	2	0
P. undifferentiated	3.5	2	5	1	1	0.5	0	2.5	1.5	0	0	1

TAXA	DEPTH (cm)											
	150	155	160	180	185	205	210	215	220	230	235	240
Planera aquatica (planer tree)	15	10	17	3	21	9	6	6	8	6	12	0
Platanus occidentalis (sycamore)	0	0	0	1	8	1	0	4	2	3	2	0
Populus deltoides type (cottonwood)	0	0	0	0	1	0	0	0	0	0	0	0
Quercus (oak)	213	227	203	202	199	180	182	210	225	198	193	200
Rhus (sumac)												
R. copallinum (winged sumac)	0	0	0	0	0	0	0	0	1	0	0	0
R. undifferentiated	0	0	0	0	0	0	0	0	0	0	0	1
Salix (willow)	12	6	5	22	6	27	31	7	7	23	23	18
Taxodium distichum (bald cypress)	1	0	0	1	0	1	5	1	3	4	1	0
Ulmus (elm)	7	3	5	7	3	10	9	6	9	14	8	12
Viburnum (haw)												
V. acerifolium type (arrow wood)	0	0	0	1	0	0	1	0	0	1	0	0
V. lentago type (sheepberry)	3	4	0	0	3	2	0	3	3	0	5	0
TOTAL ARBOREAL POLLEN	350.5	332	306	309	317	306.5	302	300.5	311.5	316	313	305
SHRUBS:												
Alnus rugosa type (speckled alder)	1	1	0	0	1	0	0	0	0	1	1	0
Cephalanthus occidentalis (buttonbush)	155	116	173	33	92	46	14	41	37	31	51	20
Corylus (hazelnut)	0	0	0	0	0	0	0	0	0	0	0	0
Lonicera (honeysuckle)	0	0	0	0	0	0	0	0	0	0	0	0
Rhamnus type (buckthorn)	0	0	0	0	0	0	0	0	0	0	0	0
Rubus (blackberry)	1	0	2	0	1	2	0	0	2	3	0	1
Sambucus (elderberry)	0	0	0	5	4	0	1	0	0	1	0	4

TAXA	DEPTH (cm)											
	150	155	160	180	185	205	210	215	220	230	235	240
Spiraea type (meadow sweet)	0	0	0	1	0	0	0	0	0	0	0	0
VINES:												
Rhus radicans (poison ivy)	0	0	0	2	1	0	0	0	0	1	0	0
Smilax (greenbriar)	0	0	0	0	1	0	0	3	0	0	0	0
Vitis (grape)	1	0	0	4	3	4	15	5	4	6	10	10
NONAQUATIC HERBS:												
Caryophyllaceae (pink family)	1	1	0	0	0	1	0	0	0	0	0	0
Chenopodiaceae/Amaranthaceae (goosefoot/amaranth families)	0	0	0	0	0	5	0	1	2	2	9	8
Compositae (composites)												
Ambrosia type (ragweed)	5	4	3	7	1	18	15	9	11	22	24	14
Artemisia (sage)	0	0	0	1	0	0	0	0	0	0	0	0
Bidens type (beggar ticks)	0	0	0	0	0	0	0	1	0	0	1	0
Cirsium/Carduus type (thistle)	0	0	0	0	0	0	0	0	0	0	0	0
Helianthus type (sunflower)	0	0	0	0	0	0	0	0	0	0	0	0
Iva ciliata type (marsh elder)	0	0	0	0	1	3	3	0	0	3	5	3
Senecio type (ragwort)	104	29	1	2	1	0	1	2	4	1	5	0
Tubuliflorae undifferentiated	0	0	1	4	1	8	2	3	1	8	4	4
Xanthium (cocklebur)	0	0	0	0	0	0	0	0	0	0	0	0
Liguliflorae (dandelion group)	0	0	0	0	0	0	0	0	0	0	0	0
Cruciferae (mustard family)	0	0	0	0	0	0	0	0	0	0	0	0

TAXA	DEPTH (cm)											
	150	155	160	180	185	205	210	215	220	230	235	240
Cyperaceae (sedge)	6	4	10	13	8	11	13	18	7	15	15	13
Gramineae (true wild grass)	1	3	6	3	1	21	5	9	12	5	4	5
Hypoxis hirsuta (star-grass)	0	0	0	0	0	0	0	0	0	0	0	0
Mentha type (mint)	0	0	0	0	0	0	0	0	1	0	0	0
Plantago (plantain)												
P. lanceolata (plantain)	0	0	0	0	0	0	0	0	0	0	0	0
P. undifferentiated	0	0	0	0	0	2	0	0	0	0	0	0
Proboscidea louisiana (unicorn plant)	0	0	0	0	0	0	0	14	0	0	0	0
Rumex (dock)	0	0	0	0	0	0	0	0	0	0	0	0
Thalictrum (meadow rue)	0	0	0	0	0	0	0	0	0	0	0	0
Umbelliferae (parsley family)	0	0	0	0	0	1	0	0	0	0	1	0
Urtica (nettle)	0	0	0	1	0	2	0	1	0	0	0	0
FERNS & FERN ALLIES:												
Botrychium (grape fern)												
B. dissectum (grape fern)	0	0	0	0	0	0	0	0	0	0	0	0
B. lanceolatum (grape fern)	0	0	0	0	0	0	0	0	0	0	0	0
B. undifferentiated	0	0	0	0	0	0	0	0	0	1	0	0
Dryopteris type (shield fern)	0	0	0	0	0	0	0	0	0	0	0	1
Osmunda												
O. cinnamomea (cinnamon fern)	0	0	0	0	1	0	0	1	0	0	0	0
O. regalis type (royal fern)	0	0	0	0	0	0	0	0	0	0	0	0
Polypodium virginianum (polypody fern)	1	0	2	0	1	0	0	1	0	0	0	0

TAXA	DEPTH (cm)											
	150	155	160	180	185	205	210	215	220	230	235	240
Pteridium aquilinum (bracken fern)	0	0	0	0	0	0	0	0	0	0	0	0
Trilete fern spores undifferentiated	0	0	0	0	0	0	0	0	0	0	0	0
UNKNOWN POLLEN GRAINS AND SPORES	0	0	0	0	0	0	0	1	0	0	0	0
TOTAL POLLEN GRAINS & SPORES (TREES, SHRUBS, UPLAND HERBS, VINES, FERNS & FERN ALLIES, AND UNKNOWNS)	626.5	490	504	385	435	430.5	371	411.5	394.5	416	443	388
AQUATIC PLANTS:												
Isoetes (quillwort)	0	0	1	1	1	28	15	17	15	19	32	32
Myriophyllum (water milfoil)												
M. alterniflorum (water milfoil)	0	0	0	0	0	0	0	0	0	0	0	0
M. exalbescens type (water milfoil)	0	0	0	1	0	0	0	0	0	0	0	0
Nuphar (yellow water lily)	0	0	0	0	0	0	0	0	0	0	0	0
Nymphaea (water lily)	0	0	0	0	0	0	0	0	0	0	0	0
Polygonum hydropiper type (smartweed)	1	2	1	0	3	1	0	2	0	4	3	3
Potamogeton (pondweed)												
P. Coleogeton (pondweed)	2	0	0	0	2	0	0	0	0	0	0	1
P. Eupotamogeton (pondweed)	1	0	0	0	0	0	0	0	0	0	0	0
Sagittaria (arrowhead)	0	0	0	0	0	0	0	0	0	0	0	0
Sparganium type (bur reed)	0	0	0	0	0	0	0	2	0	0	0	0

TAXA	DEPTH (cm)											
	150	155	160	180	185	205	210	215	220	230	235	240
Typha latifolia (cattail)	0	0	0	0	0	0	0	0	0	0	0	0
INDETERMINABLE GRAINS	0	5	2	0	4	3	6	3	0	5	2	2
EXOTIC POLLEN:												
Number of *Eucalyptus* pills added to sample	1	1	1	1	1	1	1	1	1	1	1	1
Number of *Eucalyptus* pollen grains tallied	21	25	32	43	25	55	50	263	67	66	58	53

HOOD LAKE, POINSETT COUNTY, ARKANSAS

Fossil Pollen and Spore Assemblages, 42 samples (three with poor preservation), each 1 cc of sediment with 1 tablet of exotic *Eucalyptus* pollen grains [16,180 grains per tablet] added

TAXA	DEPTH (cm)											
	245	250	255	260	265	270	275	280	285	290	295	300
Abies (fir)	0	0	0	0	0	0	0	0	0	0	0	0
Acer (maple)												
A. negundo (boxelder)	3	1	2	2	0	0	0	0	0	0	2	0
A. rubrum (red maple)	0	0	2	1	0	0	0	1	1	0	0	0
A. saccharum (sugar maple)	1	3	0	0	0	0	1	2	0	0	0	0
A. saccharinum (silver maple)	0	0	0	0	0	0	0	0	0	0	0	0
Betula (birch)	0	1	0	0	9	+	39	0	4	0	8	0
Carpinus/Ostrya type (hornbeam)	1	0	0	0	1	0	3	1	0	0	1	0
Carya (hickory)	36	45	30	26	51	0	17	20	16	0	13	0
Castanea (chestnut)	0	0	0	0	1	0	0	0	0	0	0	0
Celtis/Maclura type (hackberry)	1	0	0	0	0	0	1	0	0	0	0	0
Cornus alternifolia type (alternate-leaved dogwood)	0	0	0	0	0	0	2	0	0	0	0	0
Cornus florida (flowering dogwood)	0	0	0	0	0	0	0	0	1	0	0	0
Cupressaceae (cedar family)	2	2	0	4	4	0	4	1	17	0	3	+
Diospyros virginiana (persimmon)	0	0	0	0	0	0	0	0	1	0	0	0
Fagus grandifolia (beech)	0	0	1	1	0	0	0	0	0	0	0	0

TAXA	DEPTH (cm)											
	245	250	255	260	265	270	275	280	285	290	295	300
Fraxinus (ash)												
F. quadrangulata-nigra type												
(blue ash-black ash)	4	0	8	2	1	0	3	13	5	0	1	0
F. pennsylvanica-americana type												
(green ash-white ash)	5	9	6	7	0	0	0	4	5	0	0	0
F. C_3stp	6	4	2	16	12	0	10	11	6	+	6	+
F. undifferentiated	2	4	6	10	9	+	7	8	19	0	1	0
Ilex type (holly)	2	0	1	1	0	0	0	0	0	0	0	0
Juglans (walnut)												
J. cinerea (butternut)	0	1	0	1	0	0	0	1	0	+	0	0
J. nigra (walnut)	0	0	0	0	1	0	0	0	0	0	0	0
J. undifferentiated	0	0	0	0	0	0	0	0	1	0	0	0
Liquidambar styraciflua (sweetgum)	2	1	6	2	0	0	0	4	2	0	0	0
Liriodendron tulipifera (tuliptree)	0	0	0	0	0	0	0	0	0	0	0	0
Morus (mulberry)	0	0	0	0	0	0	0	0	0	0	0	0
Myrica type (bayberry)	0	0	0	0	0	0	0	0	0	0	0	0
Nyssa (tupelogum)	0	0	0	0	0	0	0	1	4	0	0	+
Oxydendrum arboreum (sourwood)	0	0	4	0	0	0	0	0	0	0	0	0
Picea (spruce)	0	0	0	0	0	0	1.5	0	1	0	0	0
Pinus (pine)												
P. Diploxylon (Southern pine)	0	1	0	0	2	+	2	12	4	0	3	+
P. undifferentiated	0.5	0	0.5	0	4	0	1	3.5	7	0	3	+

TAXA	DEPTH (cm)											
	245	250	255	260	265	270	275	280	285	290	295	300
Planera aquatica (planer tree)	18	12	5	2	0	0	0	13	6	0	2	0
Platanus occidentalis (sycamore)	2	3	1	2	0	0	1	0	3	0	0	0
Populus deltoides type (cottonwood)	0	1	0	0	0	0	0	0	0	0	0	0
Quercus (oak)	199	165	210	196	76	+	42	205	158	0	60	+
Rhus (sumac)												
R. copallinum (winged sumac)	0	0	0	0	0	0	0	0	0	0	0	0
R. undifferentiated	0	0	0	0	0	0	0	0	0	0	0	0
Salix (willow)	6	66	29	15	15	0	3	4	22	0	3	+
Taxodium distichum (bald cypress)	2	0	1	3	0	0	0	0	1	0	0	0
Ulmus (elm)	21	5	10	6	4	+	1	4	19	+	3	0
Viburnum (haw)												
V. acerifolium type (arrow wood)	0	0	0	1	0	0	0	0	0	0	0	0
V. lentago type (sheepberry)	0	5	8	6	0	0	0	2	0	0	0	0
TOTAL ARBOREAL POLLEN	313.5	329	332.5	304	190	10	137	310.5	303	3	109	10.5
SHRUBS:												
Alnus rugosa type (speckled alder)	0	0	0	0	1	0	0	1	0	0	1	+
Cephalanthus occidentalis (buttonbush)	45	25	19	35	13	+	0	46	31	0	5	0
Corylus (hazelnut)	0	0	0	0	0	0	1	0	0	0	2	0
Lonicera (honeysuckle)	0	0	0	0	0	0	0	0	0	0	0	0
Rhamnus type (buckthorn)	0	0	0	0	0	0	0	0	0	0	0	0
Rubus (blackberry)	0	0	1	0	7	+	31	2	4	0	36	0
Sambucus (elderberry)	0	0	0	1	0	0	0	0	0	0	0	0

TAXA	DEPTH (cm)											
	245	250	255	260	265	270	275	280	285	290	295	300
Spiraea type (meadow sweet)	0	0	0	0	0	0	0	0	0	0	0	0
VINES:												
Rhus radicans (poison ivy)	0	1	0	0	0	0	0	1	2	0	0	0
Smilax (greenbriar)	0	0	0	0	0	0	1	0	4	0	0	0
Vitis (grape)	4	69	10	5	9	0	0	2	0	0	4	0
NONAQUATIC HERBS:												
Caryophyllaceae (pink family)	0	0	0	0	0	0	0	0	0	0	0	0
Chenopodiaceae/Amaranthaceae (goosefoot/amaranth families)	4	3	28	57	23	0	6	1	1	+	10	+
Compositae (composites)												
Ambrosia type (ragweed)	17	27	27	26	19	+	22	10	14	+	25	+
Artemisia (sage)	1	2	1	0	0	0	0	1	3	0	2	0
Bidens type (beggar ticks)	0	0	1	2	1	0	6	1	13	0	6	0
Cirsium/Carduus type (thistle)	0	0	0	0	0	0	0	0	0	0	0	0
Helianthus type (sunflower)	0	0	0	0	0	0	0	0	0	0	0	0
Iva ciliata type (marsh elder)	3	1	3	3	4	0	0	1	1	0	0	0
Senecio type (ragwort)	6	2	1	1	4	0	7	36	6	+	44	0
Tubuliflorae undifferentiated	8	3	3	7	21	+	11	8	24	+	18	0
Xanthium (cocklebur)	1	1	0	0	1	0	0	0	1	0	0	0
Liguliflorae (dandelion group)	0	0	0	0	0	+	0	0	0	0	0	0
Cruciferae (mustard family)	0	0	0	0	0	0	0	0	0	0	0	0

TAXA	DEPTH (cm)											
	245	250	255	260	265	270	275	280	285	290	295	300
Cyperaceae (sedge)	6	3	12	21	124	+	72	7	32	+	23	+
Gramineae (true wild grass)	5	3	6	6	87	+	198	16	22	+	214	+
Hypoxis hirsuta (star-grass)	0	0	0	0	0	0	0	0	0	0	0	0
Mentha type (mint)	0	0	0	0	0	0	0	0	0	0	0	0
Plantago (plantain)												
P. lanceolata (plantain)	0	0	0	0	0	0	0	0	0	0	0	0
P. undifferentiated	0	0	0	0	0	0	0	0	0	0	0	0
Proboscidea louisiana (unicorn plant)	0	0	0	0	0	0	0	0	0	0	0	0
Rumex (dock)	0	0	0	0	0	0	0	0	0	0	0	0
Thalictrum (meadow rue)	0	0	0	0	0	0	1	0	0	0	0	0
Umbelliferae (parsley family)	0	0	0	0	0	0	1	1	0	0	0	0
Urtica (nettle)	0	0	0	0	0	0	0	0	0	0	0	0
FERNS & FERN ALLIES:												
Botrychium (grape fern)												
B. dissectum (grape fern)	0	0	0	0	0	0	0	0	0	0	0	0
B. lanceolatum (grape fern)	0	0	0	0	0	0	0	0	0	0	0	0
B. undifferentiated												
Dryopteris type (shield fern)	0	0	0	0	0	0	0	0	0	0	0	0
Osmunda												
O. cinnamomea (cinnamon fern)	0	0	0	1	2	0	1	0	0	0	0	0
O. regalis type (royal fern)	0	0	0	0	2	0	7	0	2	0	0	0
Polypodium virginianum (polypody fern)	0	0	0	0	0	0	0	0	0	0	0	0

TAXA	DEPTH (cm)											
	245	250	255	260	265	270	275	280	285	290	295	300
Pteridium aquilinum (bracken fern)	0	0	0	0	0	0	2	0	0	0	1	0
Trilete fern spores undifferentiated	0	0	0	0	0	0	1	0	0	0	0	0
UNKNOWN POLLEN GRAINS AND SPORES	0	0	0	1	0	0	0	1	0	0	0	0
TOTAL POLLEN GRAINS & SPORES (TREES, SHRUBS, UPLAND HERBS, VINES, FERNS & FERN ALLIES, AND UNKNOWNS)	413.5	469	424.5	470	508	52	506	445.5	463	48	500	45.5
AQUATIC PLANTS:												
Isoetes (quillwort)	17	10	36	25	10	0	0	1	6	0	2	0
Myriophyllum (water milfoil)												
M. alterniflorum (water milfoil)	0	0	0	0	1	0	0	0	0	0	0	0
M. exalbescens type (water milfoil)	0	0	0	0	0	+	1	0	2	0	0	0
Nuphar (yellow water lily)	0	0	0	0	0	0	0	0	0	0	0	0
Nymphaea (water lily)	0	1	2	1	0	0	0	0	0	0	0	0
Polygonum hydropiper type (smartweed)	0	3	2	3	2	0	4	1	3	0	2	0
Potamogeton (pondweed)												
P. Coleogeton (pondweed)	0	0	0	1	3	0	3	2	6	0	6	+
P. Eupotamogeton (pondweed)	0	0	0	0	1	0	2	0	1	0	0	0
Sagittaria (arrowhead)	1	2	1	2	0	0	3	0	0	0	3	0
Sparganium type (bur reed)	0	0	0	0	0	0	0	0	0	0	0	0

TAXA	DEPTH (cm)											
	245	250	255	260	265	270	275	280	285	290	295	300
Typha latifolia (cattail)	0	0	0	0	0	0	0	0	0	0	0	0
INDETERMINABLE GRAINS	1	2	3	6	3	+	10	8	8	0	2	+
EXOTIC POLLEN:												
Number of *Eucalyptus* pills added to sample	1	1	1	1	1	1	1	1	1	1	1	1
Number of *Eucalyptus* pollen grains tallied	106	53	62	85	903	130	590	220	1603	70	1079	338

HOOD LAKE, POINSETT COUNTY, ARKANSAS

Fossil Pollen and Spore Assemblages, 42 samples (three with poor preservation), each 1 cc of sediment with 1 tablet of exotic *Eucalyptus* pollen grains [16,180 grains per tablet] added

TAXA	DEPTH (cm)					
	305	310	315	320	325	330
Abies (fir)	1	0	0	0	0	0
Acer (maple)						
A. negundo (boxelder)	1	2	0	0	0	1
A. rubrum (red maple)	0	0	1	0	0	0
A. saccharum (sugar maple)	0	1	0	1	0	0
A. saccharinum (silver maple)	0	1	0	0	0	0
Betula (birch)	14	16	8	10	6	20
Carpinus/Ostrya type (hornbeam)	3	0	0	1	2	10
Carya (hickory)	9	5	4	14	42	14
Castanea (chestnut)	0	0	0	0	0	0
Celtis/Maclura type (hackberry)	1	1	0	1	0	0
Cornus alternifolia type (alternate-leaved dogwood)	2	0	0	0	0	0
Cornus florida (flowering dogwood)	0	0	0	0	0	0
Cupressaceae (cedar family)	6	7	4	8	4	8
Diospyros virginiana (persimmon)	0	0	0	0	0	0
Fagus grandifolia (beech)	0	1	0	0	1	0

TAXA	DEPTH (cm)					
	305	310	315	320	325	330
Fraxinus (ash)						
F. quadrangulata-nigra type						
(blue ash-black ash)	0	1	0	9	3	0
F. pennsylvanica-americana type						
(green ash-white ash)	0	1	2	2	2	3
F. C_3stp	4	2	9	7	5	1
F. undifferentiated	4	5	1	4	5	9
Ilex type (holly)	0	0	0	0	0	0
Juglans (walnut)						
J. cinerea (butternut)	0	0	1	1	0	1
J. nigra (walnut)	0	0	0	2	1	0
J. undifferentiated	0	0	0	0	4	0
Liquidambar styraciflua (sweetgum)	0	0	0	0	0	0
Liriodendron tulipifera (tuliptree)	C	0	0	0	0	1
Morus (mulberry)	0	0	0	0	0	0
Myrica type (bayberry)	0	0	0	0	0	0
Nyssa (tupelogum)	0	0	0	0	0	0
Oxydendrum arboreum (sourwood)	0	0	0	0	0	0
Picea (spruce)	1	1	2	3.5	2.5	3
Pinus (pine)						
P. Diploxylon (Southern pine)	2	3	2.5	2	6	2
P. undifferentiated	3	1	0.5	2	3	0.5

TAXA	DEPTH (cm)					
	305	310	315	320	325	330
Planera aquatica (planer tree)	0	0	0	0	0	0
Platanus occidentalis (sycamore)	0	0	1	2	1	0
Populus deltoides type (cottonwood)	0	0	0	1	0	0
Quercus (oak)	30	35	38	56	68	77
Rhus (sumac)						
R. copallinum (winged sumac)	0	0	0	0	0	0
R. undifferentiated	0	0	0	0	0	0
Salix (willow)	1	9	3	3	3	3
Taxodium distichum (bald cypress)	0	1	0	0	1	2
Ulmus (elm)	1	8	1	6	6	11
Viburnum (haw)						
V. acerifolium type (arrow wood)	1	0	0	0	0	0
V. lentago type (sheepberry)	0	0	0	0	0	0
TOTAL ARBOREAL POLLEN	84	101	78	135.5	165.5	166.5
SHRUBS:						
Alnus rugosa type (speckled alder)	1	1	0	1	2	1
Cephalanthus occidentalis (buttonbush)	0	0	0	0	0	0
Corylus (hazelnut)	1	1	1	3	1	1
Lonicera (honeysuckle)	0	0	0	0	0	1
Rhamnus type (buckthorn)	0	0	0	0	0	0
Rubus (blackberry)	9	1	2	2	0	0
Sambucus (elderberry)	0	0	0	0	0	0

TAXA	DEPTH (cm)					
	305	310	315	320	325	330
Spiraea type (meadow sweet)	0	0	0	0	0	0
VINES:						
Rhus radicans (poison ivy)	0	0	1	0	0	1
Smilax (greenbriar)	0	3	0	0	0	0
Vitis (grape)	1	0	0	0	0	4
NONAQUATIC HERBS:						
Caryophyllaceae (pink family)	0	0	0	0	0	1
Chenopodiaceae/Amaranthaceae (goosefoot/amaranth families)	5	1	2	5	24	25
Compositae (composites)						
Ambrosia type (ragweed)	12	18	18	73	41	1
Artemisia (sage)	1	1	2	0	1	2
Bidens type (beggar ticks)	0	4	2	8	3	3
Cirsium/Carduus type (thistle)	0	0	0	0	0	1
Helianthus type (sunflower)	0	0	0	0	0	0
Iva ciliata type (marsh elder)	0	1	0	0	0	0
Senecio type (ragwort)	0	1	1	2	0	0
Tubuliflorae undifferentiated	7	10	9	10	3	5
Xanthium (cocklebur)	0	1	0	0	0	0
Liguliflorae (dandelion group)	0	0	0	0	0	0
Cruciferae (mustard family)	0	0	0	0	0	0

TAXA	DEPTH (cm)					
	305	310	315	320	325	330
Cyperaceae (sedge)	27	26	35	34	54	56
Gramineae (true wild grass)	349	336	354	222	208	239
Hypoxis hirsuta (star-grass)	0	0	0	1	0	0
Mentha type (mint)	0	0	0	0	0	1
Plantago (plantain)						
P. lanceolata (plantain)	0	0	0	0	0	0
P. undifferentiated	0	0	0	0	0	0
Proboscidea louisiana (unicorn plant)	0	0	0	0	0	0
Rumex (dock)	0	0	0	0	0	0
Thalictrum (meadow rue)	0	0	0	0	0	1
Umbelliferae (parsley family)	0	0	0	0	0	0
Urtica (nettle)	0	0	0	0	0	0
FERNS & FERN ALLIES:						
Botrychium (grape fern)						
B. dissectum (grape fern)	0	0	0	0	0	0
B. lanceolatum (grape fern)	0	0	0	0	0	0
B. undifferentiated	1	0	0	0	0	0
Dryopteris type (shield fern)	1	1	0	0	0	0
Osmunda						
O. cinnamomea (cinnamon fern)	0	0	0	1	0	0
O. regalis type (royal fern)	1	0	0	0	0	0
Polypodium virginianum (polypody fern)	0	0	0	0	0	0

TAXA	DEPTH (cm)					
	305	310	315	320	325	330
Pteridium aquilinum (bracken fern)	1	2	0	4	2	0
Trilete fern spores undifferentiated	0	3	0	0	1	1
UNKNOWN POLLEN GRAINS AND SPORES	0	0	0	0	0	0
TOTAL POLLEN GRAINS & SPORES (TREES, SHRUBS, UPLAND HERBS, VINES, FERNS & FERN ALLIES, AND UNKNOWNS)	501	512	505	501.5	507.5	508.5
AQUATIC PLANTS:						
Isoetes (quillwort)	0	0	0	0	0	0
Myriophyllum (water milfoil)						
M. alterniflorum (water milfoil)	0	1	0	0	0	0
M. exalbescens type (water milfoil)	0	0	0	1	0	0
Nuphar (yellow water lily)	0	0	1	0	2	0
Nymphaea (water lily)	0	0	0	0	0	0
Polygonum hydropiper type (smartweed)	0	2	0	0	0	0
Potamogeton (pondweed)						
P. Coleogeton (pondweed)	10	7	5	2	2	1
P. Eupotamogeton (pondweed)	0	6	0	3	0	0
Sagittaria (arrowhead)	1	1	1	1	1	4
Sparganium type (bur reed)	0	0	1	0	0	0

TAXA	DEPTH (cm)					
	305	310	315	320	325	330
Typha latifolia (cattail)	0	0	0	0	4	0
INDETERMINABLE GRAINS	1	2	7	4	5	5
EXOTIC POLLEN:						
Number of *Eucalyptus* pills added to sample	1	1	1	1	1	1
Number of *Eucalyptus* pollen grains tallied	1183	921	949	1919	954	412

HOOD LAKE, POINSETT COUNTY, ARKANSAS

Plant Macrofossil Assemblages, 16 samples, numbers of seeds, fruits, or other identifiable fragments per 100 cm^3 of sediment.

Abundance Code: 0 = absent; 1+ = very sparse; 2+ = sparse; 3+ = common; 4+ = abundant; 5+ = very abundant

TAXA	DEPTH INTERVAL (cm)											
	0-5	115-120	130-135	140-145	150-155	175-180	200-205	215-220	225-230	245-250	265-270	285-290
Depth Midpoint (cm)	0	117.5	132.5	142.5	152.5	177.5	202.5	217.5	227.5	247.5	267.5	287.5
Age (yr B.P.)	0	502	1166	1906	2647	3524	4034	4821	5608	6931	8018	9054
Organic debris	1+	2+	2+	3+	2+	5+	5+	5+	4+	5+	2+	2+
Wood fragments	1+	1+	2+	2+	2+	4+	4+	5+	4+	5+	1+	2+
Insect fragments	0	1+	1+	3+	1+	2+	3+	3+	2+	2+	1+	2+
TREES:												
Betula nigra (river birch)	0	0	0	0	0	0	0	0	0	1	0	0
Carya (hickory)	0	0	0	0	0	0	0	1	0	5	0	0
Gleditsia aquatica (water locust)	0	0	0	0	0	0	0	0	1	0	0	0
Ilex vomitoria (yaupon)	0	0	0	0	0	0	0	0	1	0	0	0
Platanus occidentalis (sycamore)	0	0	0	0	0	0	1	0	0	0	0	0
Quercus (oak)	0	0	2	0	1	10	6	10	5	9	0	0
SUBTOTAL	0	0	2	0	1	10	7	11	7	15	0	0

TAXA	DEPTH INTERVAL (cm)											
	0-5	115-120	130-135	140-145	150-155	175-180	200-205	215-220	225-230	245-250	265-270	285-290
Depth Midpoint (cm)	0	117.5	132.5	142.5	152.5	177.5	202.5	217.5	227.5	247.5	267.5	287.5
Age (yr B.P.)	0	502	1166	1906	2647	3524	4034	4821	5608	6931	8018	9054
SHRUBS & VINES:												
Cephalanthus occidentalis (buttonbush)	6	0	0	6	2	6	8	0	6	1	0	0
Rubus (bramble; blackberry)	0	0	0	1	0	1	0	1	0	0	0	0
Vitis (grape)	0	0	0	0	0	1	0	1	0	1	1	0
SUBTOTAL	6	0	0	7	2	8	8	2	6	2	1	0
HERBS:												
Acalypha rhomboidea (three-seeded mercury)	0	0	0	0	0	0	0	0	0	1	1	0
Caryophyllaceae (pink family)	0	0	0	0	0	0	0	0	0	0	0	0
Chenopodium (goosefoot)	0	0	0	0	0	0	0	0	0	0	0	0
Cicuta maculata (water hemlock)	0	0	0	0	0	0	0	1	1	0	0	0
Cyperus strigosus type (sedge)	0	0	0	0	0	0	0	0	0	0	0	0
Eupatorium perfoliatum (boneset)	0	10	9	8	14	0	0	0	0	0	2	1
Galium (bedstraw)	0	0	0	1	0	0	0	0	0	0	0	1
Gramineae (grass family)	1	0	0	0	0	0	0	0	0	0	0	0
Hypericum virginicum type (St. John's-wort)	0	0	0	1	0	0	0	0	0	0	0	0
Juncus (rush)	0	0	1	3	0	1	0	1	0	7	0	2
Polygonum (knotweed)												
P. arifolium (tear-thumb)	0	0	0	0	0	0	0	0	0	0	0	0

TAXA	DEPTH INTERVAL (cm)											
	0-5	115-120	130-135	140-145	150-155	175-180	200-205	215-220	225-230	245-250	265-270	285-290
Depth Midpoint (cm)	0	117.5	132.5	142.5	152.5	177.5	202.5	217.5	227.5	247.5	267.5	287.5
Age (yr B.P.)	0	502	1166	1906	2647	3524	4034	4821	5608	6931	8018	9054
P. aviculare type (knotweed)	1	1	3	6	0	8	15	32	4	1	0	0
P. coccineum type (water smartweed)	0	0	0	0	0	0	0	0	0	0	0	0
P. sagittatum type (tear-thumb)	0	0	0	0	0	0	0	0	0	0	0	0
P. scandens type (false buckwheat)	0	0	2	1	0	0	0	0	0	0	0	0
Scirpus (bulrush)												
S. americanus type (three square)	0	0	0	0	0	0	1	0	0	1	0	1
S. cyperinus type (bulrush)	0	0	0	0	0	0	0	1	0	0	0	0
S. validus type (great bulrush)	0	1	2	1	0	1	1	3	2	1	0	0
Verbascum blattaria (moth mullein)	0	0	0	0	0	0	1	1	0	0	0	0
Verbena urticifolia (white vervain)	0	0	0	0	0	0	0	0	0	0	1	0
Viola (violet)	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	2	12	17	21	14	10	18	39	7	11	4	5
OBLIGATE AQUATICS:												
Alismaceae (water plantain family)	0	0	0	0	0	0	0	0	0	0	0	0
Brasenia schreberi (water-shield)	0	0	2	0	0	2	0	0	0	1	0	1
Ceratophyllum (coontail)												
C. demersum (coontail)	0	0	0	0	0	0	1	1	0	0	0	0
C. echinatum (coontail)	0	0	1	2	0	1	0	0	0	0	0	0

TAXA	DEPTH INTERVAL (cm)											
	0-5	115-120	130-135	140-145	150-155	175-180	200-205	215-220	225-230	245-250	265-270	285-290
Depth Midpoint (cm)	0	117.5	132.5	142.5	152.5	177.5	202.5	217.5	227.5	247.5	267.5	287.5
Age (yr B.P.)	0	502	1166	1906	2647	3524	4034	4821	5608	6931	8018	9054
Chara (stonewort)	0	0	1	0	0	0	3	0	0	2	0	9
Isoetes melanopoda (quillwort)	1	2	4	1	9	18	10	15	11	1	0	0
Myriophyllum heterophyllum type (water milfoil)	0	0	0	0	0	0	0	0	0	0	0	0
Najas gracillima (naiad)	0	0	1	0	0	4	5	1	2	2	0	2
Potamogeton (pondweed)	0	0	0	1	0	0	1	5	1	1	5	5
Proserpinaca pectinata type (mermaid-weed)	0	0	0	2	0	6	0	0	0	1	0	0
Ruppia maritima (ditch grass)	0	4	0	0	0	0	0	0	0	0	0	0
Sparganium americanum (burweed)	0	0	2	2	0	2	1	1	1	7	0	0
Typha (cattail)	0	0	0	0	0	0	0	0	0	0	0	1
SUBTOTAL	1	6	11	8	9	33	21	23	15	15	5	18
TOTAL SPECIMENS	9	18	30	36	26	61	54	75	35	43	10	23

HOOD LAKE, POINSETT COUNTY, ARKANSAS

Plant Macrofossil Assemblages, 16 samples, numbers of seeds, fruits, or other identifiable fragments per 100 cm^3 of sediment.

Abundance Code: 0 = absent; 1+ = very sparse; 2+ = sparse; 3+ = common; 4+ = abundant; 5+ = very abundant

TAXA	DEPTH INTERVAL (cm)			
	290-295	305-310	310-315	315-320
Depth Midpoint (cm)	292.5	307.5	312.5	317.5
Age (yr B.P.)	9313	10,091	10,350	10,609
Organic debris	2+	3+	3+	3+
Wood fragments	2+	2+	2+	2+
Insect fragments	2+	1+	2+	3+
TREES:				
Betula nigra (river birch)	0	0	0	0
Carya (hickory)	0	0	0	0
Gleditsia aquatica (water locust)	0	0	0	0
Ilex vomitoria (yaupon)	0	0	0	0
Platanus occidentalis (sycamore)	0	0	0	0
Quercus (oak)	0	0	0	0
SUBTOTAL	0	0	0	0

TAXA	DEPTH INTERVAL (cm)			
	290-295	305-310	310-315	315-320
Depth Midpoint (cm)	292.5	307.5	312.5	317.5
Age (yr B.P.)	9313	10,091	10,350	10,609
SHRUBS & VINES:				
Cephalanthus occidentalis (buttonbush)	0	0	0	0
Rubus (bramble; blackberry)	0	0	0	0
Vitis (grape)	0	0	0	0
SUBTOTAL	0	0	0	0
HERBS:				
Acalypha rhomboidea (three-seeded mercury)	2	2	2	2
Caryophyllaceae (pink family)	0	0	1	0
Chenopodium (goosefoot)	0	0	1	0
Cicuta maculata (water hemlock)	0	0	0	0
Cyperus strigosus type (sedge)	0	2	1	1
Eupatorium perfoliatum (boneset)	2	0	1	2
Galium (bedstraw)	0	2	1	0
Gramineae (grass family)	0	1	5	2
Hypericum virginicum type (St. John's-wort)	0	0	0	0
Juncus (rush)	0	1	0	3
Polygonum (knotweed)				
P. arifolium (tear-thumb)	0	2	0	1

TAXA	DEPTH INTERVAL (cm)			
	290-295	305-310	310-315	315-320
Depth Midpoint (cm)	292.5	307.5	312.5	317.5
Age (yr B.P.)	9313	10,091	10,350	10,609
P. aviculare type (knotweed)	1	1	0	2
P. coccineum type (water smartweed)	2	0	0	0
P. sagittatum type (tear-thumb)	0	0	1	0
P. scandens type (false buckwheat)	0	0	0	0
Scirpus (bulrush)				
S. americanus type (three square)	2	2	6	10
S. cyperinus type (bulrush)	0	3	0	0
S. validus type (great bulrush)	0	0	0	0
Verbascum blattaria (moth mullein)	0	0	0	0
Verbena urticifolia (white vervain)	1	0	0	0
Viola (violet)	0	0	0	1
SUBTOTAL	10	16	19	24
OBLIGATE AQUATICS:				
Alismaceae (water plantain family)	0	1	0	0
Brasenia schreberi (water-shield)	1	1	0	0
Ceratophyllum (coontail)				
C. demersum (coontail)	0	0	0	0
C. echinatum (coontail)	0	0	0	0

TAXA	DEPTH INTERVAL (cm)			
	290-295	305-310	310-315	315-320
Depth Midpoint (cm)	292.5	307.5	312.5	317.5
Age (yr B.P.)	9313	10,091	10,350	10,609
Chara (stonewort)	2	11	14	11
Isoetes melanopoda (quillwort)	0	0	0	0
Myriophyllum heterophyllum type (water milfoil)	1	0	0	0
Najas gracillima (naiad)	7	29	45	38
Potamogeton (pondweed)	27	19	40	26
Proserpinaca pectinata type (mermaid-weed)	0	0	0	0
Ruppia maritima (ditch grass)	0	0	0	0
Sparganium americanum (burweed)	0	0	0	0
Typha (cattail)	0	0	0	0
SUBTOTAL	38	61	99	75
TOTAL SPECIMENS	48	77	118	99

APPENDIX IV.

SOILS AND LANDSCAPES ALONG THE L'ANGUILLE RIVER IN ARKANSAS

by

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INTRODUCTION

The L'Anguille River study area includes portions of Poinsett, Cross, Lee, and St. Francis counties in east central Arkansas. This area between Crowley's Ridge and the Ozark Plateau is known as the Western Lowlands of Arkansas. Saucier (1981) shows the sediment in the Western Lowlands to be Wisconsin stage Pleistocene sediments. Soils on the terraces west of Crowley's Ridge are generally considered to have formed from loess, while those in the floodplains are developed in alluvial sediments originating from the loessial upland (Gray and Catlett, 1966; Gray, 1977). Rutledge et al. (1985) confirmed the loessial characteristics of the parent material for the soils occurring on the upper terrace in the Western Lowlands.

The objectives of this pedological study of the archaeological sites along the L'Anguille River were (1) characterizie the soil morphology and landscapes of th major archaeological sites identified, (2) determine the physical and chemical characteristics of several profiles representing the major soils in the study area, and (3) develop the pedologic chronology associated with the major archaeological sites.

METHODS

Soil morphologic characteristics were determined by describing soil cores obtained by using a 3-inch bucket auger or by excavations when they were available. Methods used in describing the soils are given by Foss et al. (1985). Particle size analysis was determined by sieving and hydrometer methods. Soil pH was determine by the glass electrode using a 1:1 soil water ratio. Chemical analyses were determined by methods described by Bandel et al. (1969).

RESULTS AND DISCUSSION

Soil Morphology

Table 1 gives the profile descriptions of those sites investigated along the L'Anguille River. The profiles described at Site 77 show typical soils developed on the lower terrace or floodplain of the L'Anguille River. Profiles 1 and 2 had moderately developed argillic B horizons, grayish colors and highly mottled horizons indicating impeded drainage, and the soils had silty textures. Carbonate concretions were noted at 110-160 cm in profile 2. This soil was mapped a Zachary silt loam, while soils mapped to the south on a higher terrace were mapped mainly as Calloway or Loring. Both the Calloway and Loring have fragipans.

Site 80 was in a similar landscape position as Site 77. Profile 1 at Site 80 (Table 1) was silty, highly mottled, and had a weak to moderate argillic horizon. Profile 2, located downslope from Profile 1, had an accumulation of sediment (45 cm) over a 2Btg horizon. This sediment is believed to have eroded during the agricultural activity the past century or more.

Sites 35 and 36 were located on the higher terrace above the L'Anguille River floodplain and lower terrace. The soils developed on this site were silty, strongly leached, moderately well drained, and had well developed argillic horizon (Table 1). Soils in the area were mapped as Loring silt loam, although a fragipan was not noted in the excavation provided.

Table 1 Descriptions of soils occurring in the L'Anguille River area.

Horizon	Depth cm	Color	Mottling	Texture	Remarks
Site 77 St. Francis County					
Profile 1					
Ap	0-20	10YR 3/3,4/3	f2f 10YR 5/6,5/8	sil	
E	20-30	10YR 6/2	c2f 10YR 5/8	sil	
Btg1	30-60	2.5Y 4/2	c1p 7.5YR 4/6 f2d 10YR 7/1	sicl	
Btg2	60-85	2.5Y 5/2 10YR 5/6	f1d 7.5YR 3/2	sicl	charcoal
BC	85-160	10YR 6/2	m2d 10YR 5/6,5/4	sil	nodules, black. slightly calc.
Comments: coarse calcareous fragments at 135 cm; calcareous					
Profile 2					
Ap	0-30	10YR 4/3	c2f 10YR 5/6	sil	
Btg1	30-40	2.5Y 4/2-5/2	c2d 10YR 5/6	sicl	clay films few, thin
Btg2	40-80	2.5Y 5/2,5/4	m2d 10YR 5/6,5/8	sicl	clay films few, thin
BC	80-110	2.5Y 5/2,5/4	m2d 10YR 5/8,5/6	sil	
C	110-160	2.5Y 5/2, 6/2	m2d	sil	concretions
Comments: weakly calc. in C; concretions 3-5 cm in diameter; 1.5% slope; poorly drained to somewhat poor					
Site 80 St. Francis County					
Profile 1					
Ap1	0-6	10YR 4/3	None	sil	
Ap2	6-30	10YR 5/3	m2d 7.5YR 5/8 2.5Y 6/2	sicl	
B2t	30-55	10YR 5/2	m2d 7.5YR 4/6 f1d 10YR 7/2	sil	clay skins thin
BC	55-70	10YR 6/2,5/6	c2d 7.5YR 4/6	sil	
C1	70-140	2.5Y 6/2	c2d 10YR 5/6	sil	Mn coatings carb. conc.
C2	140-160	2.5Y 6/2	m2d 10YR 4/6	sil	Mn coatings

Comments: weakly calc. at 90 cm; somewhat poorly drained

Profile 2

Ap	0-15	10YR 4/3	c1d 7.5YR 4/6	sil	
Btg	15-35	2.5Y 4/2	m2p 7.5YR 4/6	sicl	
BC	35-45	2.5Y 5/2	m3p 7.5YR 5/6	sil	
2Btg	45-100	5Y 5/1	f1f 2.5Y 5/4	sicl	
2BC	100-120	5Y 5/1	m2d 2.5Y 5/2 10YR 5/4	sicl	Mn coatings carb. conc.
2C	120-160	5Y 5/1	c1f 2.5Y 4/2	sicl	

Comments: Some carbonate stringers at 120 cm; weakly calc at 100 cm

Site 35 Lee County

Profile 1

Ap1	0-8	10YR 3/2	None	sil	1fgr, mfr
Ap2	8-29	7.5YR 3/2	None	sil	1fsbk, mfr
Bt1	29-55	7.5YR 4/4	None	sicl	2mpr, mfr
Bt2	55-110	7.5YR 4/4	None	sicl	2mpr, mfr
BC	110-160	7.5YR 4/4	None	sil	
C1	160-230	10YR 4/4	c1f 10YR 6/3	sil	
C2	230-300	10YR 4/4	m1f 10YR 6/2	sil	

Comments: Plow zone questionable, with plowing not practiced for a decade or more; 1% East; loess; leached to 3 meters+

Site 36 Lee County

Similar to Site 35; Ap2 10YR 4/3, lighter color than site 35; Bt is similar to site 35

Site 39 Lee County

Ap	0-10	10YR 4/2,4/3	f1f 10YR 4/6	c	
Btg1	10-40	10YR 5/2	m2d 7.5YR 4/4	c	
Btg2	40-100	2.5Y 5/2	m2d 7.5YR 4/6	c	
BCg	100-130	2.5Y 6/2	f1p 7.5YR 4/6	sicl	sl. calc
Cg	130-150	2.5Y 6/2	f1d 10YR 4/4	sl	

Comments: few calc. concretions at 130 cm; weakly calc at 100 cm; 1st terrace level, similar to profiles 77

Site 43 Lee County

Ap1	0-7	10YR 4/3		sil
Ap2	7-17	10YR 4/4		sil
Bt	17-65+	7.5YR 5/4		sicl

Comments: Coatings of 7.5YR 5/4 in Bt; some Mn stains

Site 19 Lee County

Ap	0-15	10YR 3/3	f1f 10YR 4/4	sic
AB	15-40	10YR 5/3, 5/4	m2d 10YR 5/8	sic
Bwg	40-60	10YR 5/3,6/3	m2d 7.5YR 5/8, 10YR 5/8	sicl
BC	60-90	2.5Y 6/2	m2p 7.5YR 5/8	sicl
C1	90-110	2.5Y 6/2	m2p 7.5YR 5/8	sil
C2	110-160	2.5Y 6/2	f2f 2.5Y 5/6	sil
C3	160-220	2.5Y 6/2	c2d 10YR 4/6	sil
C4	220-260	2.5Y 6/2	m2f 10YR 5/3, c2d 10YR 5/6	sil

Comments: High organic matter in small band from 90-110 cm

Site 70 Lee County
Profile 1

Ap	0-15	10YR 4/3	c1d 10YR 5/6	sic
AB	15-40	2.5Y 5/2	m2d 10YR 4/6, m2f 2.5Y 4/4	sic
Bwg1	40-80	2.5Y 5/2	m2d 10YR 4/6	sicl
BC	80-95	2.5Y 6/2	m3f 2.5Y 5/4, c2d 10YR 4/6	sicl/cl
C1	95-120	2.5Y 5/2	m3f 2.5Y 5/4	sil
C2	120-155	2.5Y 5/4	m2f	vfsl

			2.5Y 5/2	
C3	155-260	2.5Y 5/2, 2.5Y 5/4	f1d 10YR 4/4	vfsl

Comments: 31% slope, south; poorly drained; stratified zone 155-260 cm with some silt loam layers

Profile 2

A	0-20	10YR 4/3		sic
AB	20-30			sic
Bwg1	35-80	10YR 5/1, m1d 7.5YR 4/6	f1d 10YR 8/1	c
Bwg2	80--130	2.5Y 4/2	c1p 7.5YR 5/6	c
2Ab	130-140	10YR 3/1	f1d 10YR 4/6	c
2Bw	140-160	2.5Y 4/2	m2d 7.5YR 4/6	c

Comments: Buried A horizon; few fine carbonate stringers from 140-160 cm; low bench terrace position

Site 26 Lee County

Ap	0-10	10YR 3/3, 4/3		sicl
AB	10-30	10YR 4/3	m2d 7.5YR 4/6	sic
Btg	30-60	2.5Y 5/2	m2d 7.5YR 4/6	sic
BC	60-90	2.5Y 5/2	m2d 7.5YR 4/6 10YR 5/8	sicl
C1	90-130	2.5Y 5/2-6/2	c2d 10YR 5/8	sil
C2	130-160	2.5Y 6/2	c2d 10YR 5/6	sil-vfsl

Comments: Similar to earlier sites; many artifacts present

Site 183 Lee County

Oc	loose leaves & twigs				
A1	0-10	10YR 3/3		lt. Sicl	
E	10-30	10YR 5/2	m2f 10YR 5/4, c2d 7.5YR 5/6	lt. sicl	
Bt	30-90	2.5Y 5/4	m2f 10 YR 5/2, c2d 7.5 Yr 5/6	sicl	clay skins thin, disc.

BC1	90-130	10 YR 5/4	m2f 10 YR 5/2, c1d 7.5YR 5/6	sil
BC2	130-160	10 YR 5/4	m2f 10 YR 5/7, c1d 7.5YR 5/6	sil

Comments:

Bridge Site 1

Ap	0-7	10 YR 4/3		sil
Bt1	7-40	7.5YR 4/4	2mpr 7.5YR 3/4	sicl
Bt2	40-60	7.5YR4/4	2mpr	sicl

Site 3

Ap	0-7	10YR 5/2	c2d 10Yr 5/8	sic
Bwg	7-30	2.5Y 5/2	c2p 7.5YR 5/8	sic
BC	30-50	2.5Y 5/2-6/2	c2y 7.5YR 5/8	sicl
C1	50-70	2.5Y 6/2	c2p 7.5YR 5/8	sicl
C2	70-130	2.5Y 6/2	m2p 5YR 4/8	sicl
C3	130-160	7.5YR 4/6,3/4 5YR 4/6 2.5Y 5/2		sicl

Comments:

Site 39 was located on the lower terrace and floodplain of the L'Anguille River. The profile described in this landscape was clayey in the upper meter. The soil was mapped with the Alligator series; these soils are described as poorly drained and developed in clayey sediments.

Sites 19 and 70 were located on a broad terrace north of the L'Anguille River east of Marianna. The area is mapped with the Earle series which is described as a somewhat poorly drained soil developed in clayey sediments over coarser textured sediments (Gray, 1977). The description in Table 1 is similar to the modal description of the Earle series. Profile 2, on a small bench terrace, had a distinct buried Ab horizons at 130 to 140 cm.

Table 2 shows the characteristics of the major soils mapped in the study area. In general, soils on the higher terrace have fragipan and argillic horizons with well to somewhat poorly drained conditions. Those soils on the lower terrace or floodplain are generally poorly drained and have either cambic or argillic horizons.

Table 2 Characteristics of soils mapped in the study area (Gray, 1977).

Soil Series	Classification	Position	Diagnostic Horizon	Drainage	Parent Material
Loring	Typic Fragiudalfs	Terrace	Fragipan Argillic	Mod. Well	Loess
Calloway	Glossaquic Fragiudalfs	Terrace	Fragipan Argillic	Somewhat Poor	Loess
Memphis	Typic Hapludalfs	Terrace	Agrillic	Well	Loess
Alligator	Vertic Haplaquepts	Low Terrace	Cambic	Poorly	Alluvium
Earle	Vertic Haplaquepts	Low Terrace	Cambic	Somewhat Poor	Alluvium
Zachary	Typic Albaqualfs	Low Terrace	Argillic	Poorly	Alluvium

Laboratory Analyses

Table 3 gives the particle size distribution for three profiles representing the major soils and landscapes in the study area. Profile 2, Site 77, is typical of soils on the lower terrace developed in alluvium derived from loess. This poorly drained soil has an argillic horizon from 30 to 80 cm. The sand content is less than 4% throughout the profile. No major lithologic or pedologic discontinuity was observed in the profile.

Profile 1 at Site 35 is typical of soils dervied from loess on the upper terrace. This soil has a moderately developed argillic horizon from 29 to 110 cm, with the clay content in the argillic 2X the amount in the Ap1. No major lithologic or pedologic discontinuity was evident in the profile.

The profile sampled at site 19 showed a major lithologic discontinuity at 90 cm. This correlates with the higher organic matter band noted in the morphologic discription at 90 to 110 cm. The discontinuity is apparent in the sand and silt fractions, with the 90 to 110 cm horizon having nearly 10% less sand and approximately 11% greater silt than the horizon above.

The soil pH's of profiles at sites 77 and 35 were slightly acid to neutral. The soil at Site 19 was strongly acid throughout much of the profile. The magnesium and calcium contents of the profiles were quite high; this probably reflects the initial high base status of the loessial material. The high content of phosphorus in the profile

Table 3 Particle size distribution of profiles samples along the L'Anguille River

Profile	Depth cm	Sands					sand	silt	clay
		vc	c	m	f	vf			
Profile 1	0-30	0	0.2	0.4	0.4	0.6	1.6	68.0	30.4
Site 77	30-40	0.4	0.4	0.2	tr	0.8	1.8	60.0	38.2
	40-80	0	0.2	0.2	0.4	0.8	1.6	66.0	32.4
	80-110	1.0	1.0	0.8	0.2	0.6	3.6	67.2	29.2
	110-160	1.0	0.6	0.8	0.2	1.0	3.6	74.8	21.6
Profile 1	0-8	1.2	1.0	1.0	3.0	3.2	9.4	81.0	9.6
Site 35	8-29	0	0.4	1.0	0.6	1.8	3.8	78.8	17.4
	29-55	0	tr	0.6	0.6	0.8	2.0	73.0	25.0
	55-110	0	tr	0.8	0.6	0.8	2.2	72.0	25.8
	110-160	0	tr	0.4	0.6	1.2	2.2	76.2	21.6
	160-230	0	tr	0.4	0.4	0.8	1.6	81.4	17.0
	230-300	0	0	0.2	0.4	1.4	2.0	84.2	13.8
Profile 1	0-15	1.0	1.2	1.4	4.2	14.8	22.6	53.6	23.8
Site 19	15-40	0	0.6	0.8	1.6	28.6	31.6	40.2	28.2
	40-60	0	0.8	0.2	2.8	37.2	41.0	34.2	24.8
	60-90	0	0.2	0.8	0.8	26.8	28.6	49.4	22.0
	90-110	0	1.0	0.4	0.6	17.4	19.4	61.0	19.6
	110-160	0.6	0.2	0.6	0.6	14.6	16.6	63.8	19.6
	160-220	0	0.2	0.2	0.6	14.4	15.4	64.8	19.8
	220-260	0	0.4	0.2	0.8	13.6	15.0	65.0	20.0

Table 4 Chemical properties of soils along the L'Anguille River in Arkansas.

Profile	Depth cm	pH	Extractable Ions ppm				Organic
			Mg	P205	K20	Ca	Matter %
Profile 1	0-30	4.9	300+	34	29	2196	0.7
Site 77	30-40	6.4	300+	56	19	3000+	0.6
	40-80	6.5	300+	166	15	3000+	0.5
	80-110	6.6	300+	392	30	3000+	0.3
	110-160	7.1	300+	498	20	3000+	0.2
Profile 1	0-8	6.0	300+	750+	420	3000+	2.7
Site 35	8-29	6.5	162	750+	92	3000+	1.3
	29-55	6.7	166	363	72	3000+	0.7
	55-110	7.0	231	488	79	3000+	0.5
	110-160	6.7	248	477	138	3000+	0.4
	160-230	6.5	227	631	124	3000+	0.4
	230-300	6.4	244	750+	131	3000+	0.3
Profile 1	0-15	6.1	300+	103	262	3000+	2.5
Site 19	15-40	5.6	300+	48	200	2448	0.9
	40-60	5.4	300+	58	195	1918	0.5
	60-90	5.5	300+	93	167	1866	0.5
	90-110	5.5	300+	92	140	1711	0.5
	110-160	5.5	300+	168	112	1785	0.4
	160-220	5.8	300+	349	106	2364	0.4
	220-260	5.9	300+	455	106	2606	0.4

at Site 35 could have resulted partially from fertilization, but the high levels probably resulted from some additional source. The heavy activity of early man could also play a role. The high phosphorus level in the C horizon (230-300 cm) indicates the parent material had a substantial amount of native phosphorus.

The organic matter of the profiles showed a gradual decrease with depth; this pattern is consistent with most soils in the region. The profile at Site 19 maintains a relatively high organic content even at a depth of 100 cm; this is probably related to the alluvial processes where surface additions may take place prior to additional deposition of sediment.

APPENDIX V

ARKANSAS ARCHEOLOGICAL SURVEY COMPUTERIZED SITE SURVEY FORM

by

Keith Bracknell
Garrow & Associates, Inc.

ARKANSAS ARCHEOLOGICAL SURVEY

SITE SURVEY FORM ☐ Supplement

Date S. S. No. Assigned: _____ State Site No. _____

Date S. S. No. Reassigned: _____ Project/Reporter's Site No. LRP-002

Site Name(s) No site name assigned during this project.

County Lee

Site Visited By (name/address) David G. Anderson, Garrow & Associates, Inc., 4000 DeKalb Technology Parkway, Suite 375, Atlanta, GA 30340 Date 6/10/87

Info Provided By (name/address) David G. Anderson, Garrow & Associates, Inc.

Form Filled Out By David G. Anderson Date 3/21/88

Project Name L'Anguille Channel Cleanout Survey Project No. DACW-87-C-0046

LOCATION OF SITE

(optional for recording in field)

1/4 Sections			Sec	Twnshp	Range
SE	NE	SW			

UTM Zone	Easting	Northing
15		

Instructions for Reaching Site (optional) (See attached USGS 7.5' map section, USDA county soil map aeriel section and 1''/200' project aerial for precise locational data and and nearest access routes).

USGS Quad (name, date, series) Marianna, 1984, 7.5' (Provisional)

Owner (name/address) U.S. Army Corps of Engineers, Memphis, Tennessee

Tenant (name/address) _____

DESCRIPTION OF SITE

☒ Prehistoric ☐ Contact Historic ☒ Historic ☐ Unknown

☐ Single Artifact
Artifact Scatter
- ☐ ≤ 100 Sq M
- ☒ > 100 Sq M
- ☐ Midden

☐ Mound/Mound Group

☐ Bluff Shelter
☐ Rock Art
☐ Lithic Quarry/Extraction
☐ Artifacts Exposed Only in Shovel Test/Test Excavation
☐ Artifacts Exposed Only in Highly Restricted Eroded Area

☐ Other _____

☐ Structure
☐ Archival

Cultural Affiliation(s) Prehistoric lithic scatter with minor accompanying recent historic debris. Two Dalton points recovered.

Archeological Phase Assignment(s) Late style Dalton point and Dalton base recycled into scraper found.

AAS SITE SURVEY FORM State Site No. _____

DESCRIPTION OF SITE

Site Description Narrative (Field Observations) The site is a surface artifact scatter located in a plowed field adjacent to and overlooking the main channel of the L'Anguille River. At the time of survey, the site had been recently plowed and rained on, offering excellent surface visibility. No footprints indicative of prior collecting this plowing cycle were observed. No crops had been planted.

Specific Topographic Setting Site is located on thick loess deposits cut by the river channel. The site area can be best described as on a bluff overlooking the river.

Soil Characteristics (Optional) LoD2 (Loring silt loam, 8-12 % slopes, eroded). Source: 1977 USDA Soil Conservation Service Soil Survey of Lee County, Arkansas.

Water Sources (types and distances) (optional) The main channel of the L'Anguille River is located due north of the site area through the treeline.

Other Environmental/Physiographic Factors (optional) Site is on a low knoll in the somewhat undulating terrain near the river margin.

AAS SITE SURVEY FORM

State Site No. _____

☐ Supplement

Project/Reporter's Site No. LRP-002

DESCRIPTION OF SITE

Site Features

NONSTRUCTURAL FEATURES	P/CH	H
☐ Midden	☐	☐
☐ Shell Midden	☐	☐
☐ Burials	☐	☐
☐ Visible Stratigraphy	☐	☐
Other Subsurface Features		
☐ _____	☐	☐
☐ _____	☐	☐
☐ Pictograph	☐	☐
☐ Petroglyph	☐	☐
Other Surface Features		
☐ _____	☐	☐
☐ _____	☐	☐

_____

_____

_____

UNKNOWN EARTHEN STRUCTURES

☐ _____

☐ _____

☐ _____

PREHISTORIC/CONTACT HISTORIC STRUCTURES

☐ Mounds _____ (#)
- ☐ Truncated _____ (#)
- ☐ Conical _____ (#)
- ☐ Other _____ (#)

☐ Other Earthworks

Other P/CH Structural Features

☐ N/A

☐ N/A

_____

_____

HISTORIC STRUCTURES

☐ Primary 0 (#)
- ☐ Standing-Abandoned 0 (#) ☐ Standing-In Use 0 (#)
- ☐ Fallen (in ruins and abandoned) 0 (#)

_____

the plowed field.

☐ Service 0 (#)
- ☐ Standing-Abandoned 0 (#) Standing-In Use 0 (#)
- ☐ Fallen (in ruins and abandoned) 0 (#)

_____

_____

☐ Chimney
☐ Well
Other Historic Structural Features

☐ N/A

☐ N/A

☐ No Extant Structure
- ☐ Archival Evidence _____
- ☐ Vegetative Evidence _____
- ☐ Other _____

Historic Site Function

☐ Domestic _____ ☐ Cemetary

☐ Commercial _____ ☐ Religious

☐ Manufacturing
- ☐ Craft _____
- ☐ Industrial _____

☐ Military _____

☐ Transportation and Communication _____

☐ Other _____

Nature of Deposit Loess deposits with extensive fine clay particles in the upper part of profile from recent alluviation. (Profile obtained from test unit excavated to to a depth of 21 cm in the eastern part of the artifact Depth 11 cm

Site Dimensions 3000 Total Sq M: 70 Meters X 60 Meters

☒ Complete ☐ Incomplete ☐ Unknown How Determined Controlled surface

Site Configuration _____

* P/CH Prehistoric/Contact Historic: H Historic

AAS SITE SURVEY FORM

State Site No._____

CONDITION OF SITE

Site Disturbances

- [X] Natural Causes
- [X] Scientific Excavation
- [ ] Nonscientific Excavation
- [X] Extensively Surface
- [ ] Construction
- [ ] Road/Highway
- [ ] Drainage Improvement/Channelization
- [X] Agriculture
- [ ] Clear Cut
- [ ] Land Leveled/Graded
- [ ] Periodically Inundated
- [ ] Indefinitely Inundated
- [ ] Buried Site
- [X] Redeposited Site
- [ ] Unknown
- [ ] Other _____

Vegetative Cover

- [X] Cultivated
  - [X] Plowed
  - [ ] Harvested
- [ ] Pasture
- [ ] Lawn
- [ ] Woods_____
- [ ] Swamp
- [ ] Orchard_____
- [ ] No Vegetation
- [ ] Other_____
- [ ] Unknown

Degree of Site Destruction

- [ ] Relatively Undistrbed
- [ ] Minor
- [ ] Moderate
- [ ] Major
- [ ] Totally Destroyed
- [X] Unknown

Est. of Ground Visibility

- [ ] Poor (0-25%)
- [ ] Fair (26-50%)
- [ ] Good(51-75%)
- [X] Excellent(76-100%)

Factors Affecting Artifact Visibility

No evidence for prior collection this season observed; field had been freshly plowed and had been well rained on.

Project Strategy

- [X] Transect
- [ ] Other Controlled Unit_____
- [ ] Other _____

On-Site Subsurface Investigations

- [ ] Shovel Test
- [X] Test Excavation
- [ ] Test Exc for Eligibility
- [ ] Extensive Excavation
- [ ] Auger Test
- [ ] Coring
- [ ] Metal Detector
- [ ] None
- [ ] Other_____

Sample Unit Designation: _____
(for regional surveys)

ARTIFACTS OBSERVED OR COLLECTED

Site Material Observations

	P/CH	H
[X] Lithics	X	
[ ] Ceramics		X
[ ] Metal		X
[ ] Human Skeletal Remains		
[ ] Shell		
[ ] Faunal Remains		
[ ] Floral Remains		
[ ] Other Perishables		
[ ] Building Materials		
[ ] Glass		X
[ ] Other Materials		

Additional Artifact Descriptions

Diagnostic artifacts recovered included:

Collection Method..... [ ] No Collection Made

	Acc #
[X] SURFACE	
[ ] Select	
[X] Controlled	87-732-1
[X] General (100%)	87-732-2 to 31

	Acc #
[X] SUBSURFACE	
[ ] Select	87-732-32
[ ] Controlled	
[ ] General (100%)	

COMMENTS (e.g. method, criteria, field collection time) A stratified systematic unaligned controlled surface collection procedure was employed. Thirty sample circles 6.68m in diameter were dispersed and collected, providing a 35.9 percent area sample of the site surface scatter. All visible artifacts were collected.

Material Concentraton(s) See artifact density/distribution maps in project report.

* P/CH Prehistoric/Contact Historic: H Historic

AAS SITE SURVEY FORM State Site No. _____

☐ Supplement Project/Reporter's Site No. LRP-002

Artifacts Retained by NonSurvey Personnel None known. Rush Harris of Forrest City says a Clovis came from this general area (since sold)

Previous Collections/Subsurface Investigations None known prior to the present project.

RECOMMENDATIONS

Recommendations Site is shallow and badly eroded, consisting of a thin plowzone resting of sterile loess deposits.

Potential National Register Status

☒ Not Eligible ☐ Eligible ☐ Undetermined

For Office Use Only

☐ Nominated Date _____ ☐ Accepted Date _____

☐ Not Accepted

Type of Nomination (give name) and comments _____

SITE INFORMATION SOURCES

☐ Informant

☐ Recorded Interview _____

Survey Personnel ☐ Visit ☐ Nonvisit

For the remaining Site Information Sources, record all sources checked for site information. Check the box only if positive results. If more than one source, indicate which ones were positive, which negative.

☐ GLO Date _____

☐ Archival Maps GLO site areas recorded as possible sites by AAS personnel for this county. No such site recorded for this location.

AAS SITE SURVEY FORM State Site No. _____

SITE INFORMATION SOURCES

☐ Other Maps USDA SCS maps, USGS quads examined for evidence of historic structures. None noted.

☐ Other Archival Sources _____

☐ Published References ☐ Limited Distribution Reports

Ford/Redfield Dalton project maps examined for possible sites in this area (Redfield 1971). None noted.

☐ Other Information Sources Records search performed with AAS prior to the present project indicated no sites were recorded at this location.

RECORDS GENERATED

☐ Burial/Skeleton Records ☒ Field Notes ☐ Excavation Level Forms

☒ Catalog Cards/Forms ☐ Feature Forms ☒ Artifact Analysis Forms

☒ Oversize Site Maps ☒ Profile Drawings

☐ Field Specimen Inventory Forms ☐ Other

☒ Specialized Analysis Forms/Reports (specify) Comprehensive artifact inventory/catalog generated for entire project artifact assemblage. (see attached sheets)

☒ Other Supplemental Data (specify) Original 1/5000 aerials with site locations and notes curated with project records.

☐ B/W Negative Numbers (contact prints) _____

☐ B/W Prints: Nos. Included _____

☐ Slide Numbers _____

☐ Other Photos/Slides from NonSurvey Personnel (type, source, numbers) Slides and black and white photographs curated with project records. Aerials shot of site area.

Accumulated Accession Numbers General surface collection: 87- 732-1. Controlled surface collection random sample circle units: 87-732-2 to 31. Test unit: 87-732-32. GS, TU sterile units.

AAS SITE SURVEY FORM State Site No. _____

☐ Supplement Date of Visit _____

ADDITIONAL SITE INFORMATION

Additional Comments on Topography, Water Sources, Site Description, Recommendations, etc. (optional).

This site was found as part of field activities associated with the Memphis District, U.S. Army Corps of Engineers Contract DACW66-87-C-0046 for a Cultural Resources Survey and Geomorphic Examination of the L'Anguille River Channel Cleanout, Poinsett, Cross, St. Francis, and Lee Counties, Arkansas. The fieldwork was conducted during June and July 1987 under the direction of David G. Anderson (project Principal Investigator and field director), who was assisted by Timothy R. Pauketat and Preston Miracle. The project was an intensive pedestrian survey of all terrain within 100 m of the present main channel of the L'Anguille, on both sides of the river. At the time of survey the site area had been freshly plowed with sufficient rainfall to ensure excellent surface visibility. Site LRP-2's location is recorded on attached project blue line 1/5000 aerials, and on USDA County Soil Map aerials and USGS quad sheets. Controlled surface collections were made using 30 3.4m radii circles dispersed using a stratified systematic unaligned procedure. A minimum of 5 minutes was spent in every circle, and collection proceeded until no more artifacts could be found. A one meter test unit was opened. This unit was opened to a depth of one sterile 10 cm level below the artifact bearing levels. At site LRP-2 clay/loess was found below a thin 11cm plowzone. No artifacts were found in the unit. A permanent datum, consisting of a 30 inch piece of iron rebar, and marked with red flagging tape, was located in the woods line to the east of the site, and is located on the site map. All fill from shovel tests and test pits was dry screened through 1/4 inch mesh. All artifacts were examined by Anderson, with Phyllis A. Morse providing primary identification of prehistoric projectile pointsand unusual tools, and ceramics. A final report on the survey investigations is currently being prepared by David G. Anderson of Garrow & Associates, Inc. and will be submitted to the Memphis District.

APPENDIX VI.

ARCHAEOLOGICAL SITES EXAMINED DURING THE 1987 SURVEY, BY STATE AND PROJECT SITE NUMBER

by

David G. Anderson
Garrow & Associates, Inc.

L'ANGUILLE RIVER PROJECT: ALL SITES IN AND OUTSIDE OF RIGHT-OF-WAY, MILES 0 TO 90
SITES BY STATE SITE NUMBER ORDER

STATE SITE #	PROJECT SITE #	WITHIN R-OF-W	COUNTY	C.O.E. MAP #	U.S.G.S. QUAD	FIELDWORK C	G	ST	TP	Further Work at this site?
3LE024	211	No	Lee	NA	Soudan		1			No/Greer Md
3LE101	55	No	Lee	4	Marianna		1			No-avoid
3LE141	1	Yes	Lee	3	Marianna	1			1	Yes
3LE142	2	Yes	Lee	3	Marianna	1			1	No
3LE143	3	Yes	Lee	3	Marianna	1			1	No
3LE144	4	Yes	Lee	3	Marianna	1			1	Yes
3LE145	5	Yes	Lee	3	Marianna		1		1	No
3LE146	6	No	Lee	2	Marianna		1			No-avoid
3LE147	7	No	Lee	2	Marianna		1			No-avoid
3LE148	8	No	Lee	2	Marianna		1			No-avoid
3LE149	9	Yes	Lee	2	Marianna	1			1	Yes
3LE150	10	Yes	Lee	2	Marianna		1		1	No
3LE151	11	Yes	Lee	2	Marianna		1		*	No
3LE152	12	Yes	Lee	2	Marianna		1		1	No
3LE153	13	Yes	Lee	2	Marianna	1			1	No
3LE154	14	Yes	Lee	2	Marianna	1			1	No
3LE155	15	Yes	Lee	2	Marianna	1			1	Yes
3LE156	16	Yes	Lee	2	Marianna	1			1	No
3LE157	17	Yes	Lee	2	Marianna		1		1	Yes
3LE158	18	Yes	Lee	1	Soudan	1			1	Yes
3LE159	19	Yes	Lee	1	Soudan	1			1	Yes
3LE160	20	Yes	Lee	1	Soudan	1			*	No
3LE161	21	Yes	Lee	1, 2	Soudan	1			1	Yes
3LE162	22	Yes	Lee	1, 2	Marianna	1			1	Yes
3LE163	23	Yes	Lee	1, 2	Marianna	1			1	No
3LE164	24	Yes	Lee	1, 2	Marianna	1			1	Yes
3LE165	25	Yes	Lee	2	Marianna	1			*	No
3LE166	26	Yes	Lee	2	Marianna	1			1	Yes
3LE167	27	Yes	Lee	2	Marianna		1		*	No
3LE168	28	No	Lee	2	Marianna		1			No-avoid
3LE169	29	No	Lee	2	Marianna		1			No-avoid
3LE170	30	No	Lee	2	Marianna		1			No-avoid
3LE171	31	No	Lee	2	Marianna		1			No-avoid
3LE172	32	No	Lee	2	Marianna		1			No-avoid
3LE173	33	No	Lee	2, 3	Marianna		1			No-avoid
3LE174	34	No	Lee	2, 3	Marianna		1			No-avoid
3LE175	35	Yes	Lee	2, 3	Marianna	1			1	Yes
3LE176	36	Yes	Lee	2	Marianna	1			1	Yes
3LE177	37	Yes	Lee	2	Marianna	1			1	No
3LE178	38	No	Lee	2	Marianna		1			No-avoid
3LE179	39	Yes	Lee	2, 3	Marianna		1		1	No
3LE180	40	Yes	Lee	2, 3	Marianna	1			1	No
3LE181	41	No	Lee	2, 3	Marianna		1			No-avoid
3LE182	42	No	Lee	2, 3	Marianna		1			No-avoid
3LE183	43	Yes	Lee	2, 3	Marianna	1			1	Yes
3LE184	44	Yes	Lee	3	Marianna	1			1	Yes
3LE185	45	No	Lee	2	Marianna		1			No-avoid
3LE186	46	Yes	Lee	2	Marianna		1		*	No
3LE187	47	No	Lee	2	Marianna		1			No-avoid
3LE188	48	Yes	Lee	1, 2	Marianna		1		*	No

L'ANGUILLE RIVER PROJECT: ALL SITES IN AND OUTSIDE OF RIGHT-OF-WAY, MILES 0 TO 90
SITES BY STATE SITE NUMBER ORDER

STATE SITE #	PROJECT SITE #	WITHIN R-OF-W	COUNTY	C.O.E. MAP #	U.S.G.S. QUAD	FIELDWORK C	G	ST	TP	Further Work at this site?
3LE189	49	No	Lee	3	Marianna		1			No-avoid
3LE190	50	Yes	Lee	3	Marianna		1		1	No
3LE191	51	No	Lee	4	Marianna		1			No-avoid
3LE192	52	Yes	Lee	4	Marianna	1			1	No
3LE193	53	Yes	Lee	4	Marianna	1			1	No
3LE194	54	No	Lee	4	Marianna		1			No-avoid
3LE195	56	Yes	Lee	1	Soudan	1			1	No
3LE196	57	No	Lee	1	Soudan		1			No-avoid
3LE197	58	Yes	Lee	1	Soudan		1		1	No
3LE198	59	Yes	Lee	1	Soudan		1		1	No
3LE199	60	Yes	Lee	2	Marianna		1		*	No
3LE200	61	No	Lee	2	Marianna		1			No-avoid
3LE201	62	Yes	Lee	1	Soudan		1		1	Yes
3LE202	63	Yes	Lee	1	Soudan		1		1	No
3LE203	64	Yes	Lee	1	Soudan		1		1	No
3LE204	65	No	Lee	1	Soudan		1			No-avoid
3LE205	66	Yes	Lee	3	Marianna		1		1	Yes
3LE206	69	Yes	Lee	1	Soudan	1	1		1	Yes
3LE207	71	Yes	Lee	1	Soudan	1			1	No
3LE208	72	Yes	Lee	1	Soudan	1			1	No
3LE209	73	Yes	Lee	1	Soudan		1		*	No
3LE210	74	Yes	Lee	3	Marianna		1		1	No
3LE211	75	Yes	Lee	1	Soudan		1		1	No
3LE212	76	No	Lee	1	Soudan		1			No-avoid
3LE213	82	Yes	Lee	5	Haynes		1			1m test unit
3LE214	83	Yes	Lee	5	Haynes		1			1m test unit
3LE215	84	Yes	Lee	5	Haynes		1			1m test unit
3LE216	85	Yes	Lee	5	Haynes		1			1m test unit
3LE217	86	Yes	Lee	5	Haynes		1			1m test unit
3LE218	87	Yes	Lee	5	Haynes		1			1m test unit
3LE219	145	No	Lee	5	Haynes		1			No-avoid
3LE220	182	No	Lee	3	Marianna			1		No-avoid
3LE221	183	Yes	Lee	3	Marianna			1	1	Yes
3LE222	184	Yes	Lee	3	Marianna		1	1	1	Yes
3LE223	185	Yes	Lee	3	Marianna				1	No
3LE224	186	No	Lee	3	Marianna		1			No-avoid
3LE225	187	No	Lee	4	Marianna		1			No-avoid
3LE226	188	Yes	Lee	4	Marianna			1	1	Yes
3LE227	189	No	Lee	4	Marianna					No-avoid
3LE228	190	No	Lee	4	Marianna			1		No-avoid
3LE229	191	Yes	Lee	4	Marianna			1	1	Yes
3LE230	192	No	Lee	4	Marianna			1		No-avoid
3LE231	193	No	Lee	4	Marianna		1			No-avoid
3LE232	194	No	Lee	4	Marianna		1			No-avoid
3LE233	195	No	Lee	4	Marianna		1			No-avoid
3LE234	196	No	Lee	4	Marianna		1			No-avoid
3LE235	197	No	Lee	4	Marianna		1			No-avoid
3LE236	198	No	Lee	4	Marianna		1			No-avoid
3LE237	199	No	Lee	4	Marianna		1			No-avoid
3LE238	200	No	Lee	4	Marianna		1			No-avoid

L'ANGUILLE RIVER PROJECT: ALL SITES IN AND OUTSIDE OF RIGHT-OF-WAY, MILES 0 TO 90
SITES BY STATE SITE NUMBER ORDER

	STATE SITE #	PROJECT SITE #	WITHIN R-OF-W	COUNTY	C.O.E. MAP #	U.S.G.S. QUAD	FIELDWORK C	G	ST	TP	Further Work at this site?
	3LE239	201	No	Lee	4	Haynes		1			No-avoid
	3LE239	210/IF1	No	Lee	NA	Marianna		1			No-avoid
	3LE240	213/IF2	No	Lee	2	Marianna		1			No-avoid
	3LE241	214/IF3	No	Lee	2	Marianna		1			No-avoid
	3LE242	215/IF5	No	Lee	2	Marianna		1			No-avoid
	3LE243	216/IF6	Yes	Lee	2	Marianna		1			No
107	3LE244	217/IF11	No	Lee	2	Marianna		1			No-avoid
	3SF015	163	No	St. Francis	12	Hamlin		1			No-avoid
	3SF060	67	No	St. Francis	10	Forrest C		1			No-avoid
	3SF080	160	Yes	St. Francis	12, 13	Hamlin		1			1m test unit
	3SF257	68	Yes	St. Francis	10	Hawk/FC		1			1m test unit
	3SF258	206	No	St. Francis	10	Hawk/FC		1			No-avoid
	3SF260	70	Yes	St. Francis	11	Hawkins		1			1m test unit
	3SF261	88	Yes	St. Francis	9	Hawkins		1			1m test unit
	3SF262	89	No	St. Francis	9	Hawkins		1			No-avoid
	3SF263	203	Yes	St. Francis	10	Hawkins		1	1		1m test unit
	3SF264	204	Yes	St. Francis	10	Hawkins		1			1m test unit
	3SF265	205	Yes	St. Francis	10	Hawkins		1			1m test unit
	3SF266	159	Yes	St. Francis	12, 13	Hamlin		1			1m test unit
	3SF267	162	Yes	St. Francis	12	Hamlin		1			1m test unit
	3SF269	202	Yes	St. Francis	5	Haynes		1			1m test unit
	3SF269	207	Yes	St. Francis	10	Forrest C		1			1m test unit
	3SF270	77	Yes	St. Francis	8	Palestine	1				1m test unit
	3SF271	78	Yes	St. Francis	6, 7	Palestine	1				1m test unit
	3SF272	79	Yes	St. Francis	6, 7	Palestine	1				1m test unit
	3SF273	80	Yes	St. Francis	6, 7	Palestine	1				1m test unit
20	3SF268	81	Yes	St. Francis	6	Haynes		1			1m test unit
	3CS012	181	Yes	Cross	17, 18	Vanndale		1			1m test unit
	3CS017	122	Yes	Cross	16	Central		1			1m test unit
	3CS018	129	Yes	Cross	20	C.V. West		1			1m test unit
	3CS022	154	Yes	Cross	17	Central	1				1m test unit
	3CS046	131	Yes	Cross	20	C.V. West	1	1			1m test unit
	3CS047	130	No	Cross	20	C.V. West		1			No-avoid
	3CS048	111	Yes	Cross	21	C.V. West		1			1m test unit
	3CS049	123	Yes	Cross	16	Central		1			1m test unit
	3CS080	92	Yes	Cross	13, 14	Hamlin		1			1m test unit
	3CS081	91	Yes	Cross	13, 14	Hamlin		1			1m test unit
	3CS083	164	No	Cross	13	Hamlin		1			No-avoid
	3CS093	174	Yes	Cross	17	Vanndale		1			1m test unit
	3CS121	147	Yes	Cross	16	Central	1				1m test unit
	3CS176	96	Yes	Cross	18	Vanndale		1			1m test unit
	3CS176	176	Yes	Cross	17	Vanndale		1			1m test unit
	3CS177	97	Yes	Cross	18	Vanndale		1			1m test unit
	3CS179	98	Yes	Cross	18	Vanndale		1			1m test unit
	3CS180	99	Yes	Cross	18	Vanndale		1			1m test unit
	3CS181	100	Yes	Cross	18	Vanndale		1			1m test unit
	3CS183	101	Yes	Cross	18	Vanndale		1			1m test unit
	3CS184	175	Yes	Cross	17	Vanndale		1			1m test unit
	3CS186	177	No	Cross	17	Vanndale		1			No-avoid
	3CS187	178	No	Cross	17, 18	Vanndale		1			No-avoid

L'ANGUILLE RIVER PROJECT: ALL SITES IN AND OUTSIDE OF RIGHT-OF-WAY, MILES 0 TO 90
SITES BY STATE SITE NUMBER ORDER

STATE SITE #	PROJECT SITE #	WITHIN R-OF-W	COUNTY	C.O.E. MAP #	U.S.G.S. QUAD	FIELDWORK C	G	ST	TP	Further Work at this site?
3CS188	179	Yes	Cross	17, 18	Vanndale		1			1m test unit
3CS189	180	Yes	Cross	17, 18	Vanndale		1			1m test unit
3CS190	209	Yes	Cross	17	Vanndale		1			1m test unit
3CS191	218/IF12	No	Cross	18	Vanndale		1			No-avoid
3CS192	102	No	Cross	20, 21	C.V. West		1			No-avoid
3CS193	103	Yes	Cross	20, 21	C.V. West		1			1m test unit
3CS194	104	Yes	Cross	20, 21	C.V. West		1			1m test unit
3CS195	105	Yes	Cross	21	C.V. West		1			1m test unit
3CS196	106	Yes	Cross	21	C.V. West		1			1m test unit
3CS197	107	Yes	Cross	21	C.V. West		1			1m test unit
3CS198	108	Yes	Cross	21	C.V. West		1			1m test unit
3CS199	109	Yes	Cross	21	C.V. West		1			1m test unit
3CS200	110	Yes	Cross	21	C.V. West		1			1m test unit
3CS201	127	Yes	Cross	20	C.V. West		1			1m test unit
3CS202	128	Yes	Cross	20	C.V. West	1	1			1m test unit
3CS203	132	Yes	Cross	21	C.V.West		1			1m test unit
3CS204	222/IF20	No	Cross	20	C. V. West		1			No-avoid
3CS205	121	Yes	Cross	16	Central	1				1m test unit
3CS206	126	No	Cross	16	Central		1			No-avoid
3CS207	148	Yes	Cross	16	Central	1				1m test unit
3CS208	149	Yes	Cross	16	Central		1			1m test unit
3CS209	150	No	Cross	16	Central		1			No-avoid
3CS210	151	Yes	Cross	16	Central		1			1m test unit
3CS211	152	Yes	Cross	16	Central		1			1m test unit
3CS212	153	Yes	Cross	17	Central		1			1m test unit
3CS213	155	No	Cross	17	Central		1			No-avoid
3CS214	156	No	Cross	17	Central		1			No-avoid
3CS215	173	No	Cross	17	Central		1			No-avoid
3CS216	219/IF15	No	Cross	16	Central		1			No-avoid
3CS217	90	No	Cross	13, 14	Hamlin		1			No-avoid
3CS218	93	Yes	Cross	13, 14	Hamlin		1			1m test unit
3CS219	94	Yes	Cross	14	Hamlin		1			1m test unit
3CS220	95	Yes	Cross	14	Hamlin		1			1m test unit
3CS221	161	No	Cross	13	Hamlin		1			No-avoid
3CS222	165	Yes	Cross	14, 15	Hamlin		1			1m test unit
3CS223	166	Yes	Cross	15	Hamlin		1			1m test unit
3CS224	167	No	Cross	15	Hamlin		1			No-avoid
3CS225	168	No	Cross	15	Hamlin		1			No-avoid
3CS226	169	Yes	Cross	15	Hamlin		1			1m test unit
3CS227	170	No	Cross	15	Hamlin		1			No-avoid
3CS228	221/IF19	No	Cross	15	Hamlin		1			No-avoid
3CS230	124	No	Cross	16	Central		1			No-avoid
3CS231	125	No	Cross	16	Central		1			No-avoid
3CS232	220/IF16	No	Cross	16	Central		1			No-avoid
3PO017	212	No	Poinsett	NA	C. V. West		1			No-avoid
3PO020	133	Yes	Poinsett	21	C.V. West		1			1m test unit
3PO097	137	No	Poinsett	23	Powers S		1			No-avoid
3PO098	116	No	Poinsett	24	Powers S		1			No-avoid
3PO148	117	No	Poinsett	24	Powers S		1			No-avoid
3PO157	119	Yes	Poinsett	25	Powers S	1	1			1m test unit

L'ANGUILLE RIVER PROJECT: ALL SITES IN AND OUTSIDE OF RIGHT-OF-WAY, MILES 0 TO 90
SITES BY STATE SITE NUMBER ORDER

STATE SITE #	PROJECT SITE #	WITHIN R-OF-W	COUNTY	C.O.E. MAP #	U.S.G.S. QUAD	FIELDWORK C	G	ST	TP	Further Work at this site?
3PO199	171	No	Poinsett	23	Powers S		1			No-avoid
3PO201	172	Yes	Poinset	23	Powers S		1			1m test unit
3PO202	208	Yes	Poinsett	23	Powers S					1m test unit
3PO203	135	No	Poinsett	23	Powers S	1				No-avoid
3PO204	146	Yes	Poinsett	23	Powers S			1		1m test unit
3PO318	144	No	Poinsett	24	Powers S		1			No-avoid
3PO518	115	No	Poinsett	24	Powers S		1			No-avoid
3PO519	118	No	Poinsett	25	Powers S	1				No-avoid
3PO520	120	Yes	Poinsett	25	Powers S		1			1m test unit
3PO521	136	No	Poinsett	23	Powers S		1			No-avoid
3PO522	138	Yes	Poinsett	26	Powers S.	1				1m test unit
3PO523	139	Yes	Poinsett	26	Powers S		1			1m test unit
3PO524	140	Yes	Poinsett	26	Powers S		1			1m test unit
3PO525	141	Yes	Poinsett	26	Powers S	1	1			1m test unit
3PO526	142	Yes	Poinsett	26	Powers S		1			1m test unit
3PO527	143	Yes	Poinsett	26	Powers S		1			1m test unit
3PO528	157	No	Poinsett	26	Powers S		1			No-avoid
3PO529	158	No	Poinsett	26	Powers S		1			No-avoid
3PO530	112	No	Poinsett	21, 22	C.V. West		1			No-avoid
3PO531	113	Yes	Poinsett	21, 22	C.V. West		1			1m test unit
3PO532	114	No	Poinsett	21, 22	C.V. West		1			No-avoid
3PO533	134	Yes	Poinsett	21	C.V. West		1			1m test unit
						45	172	9	47	

C = controlled surface collection, stratified systematic unaligned sample
G = controlled surface collection, 100%, timed collection
ST = shovel testing
TP = 1 m test unit excavated to sterile

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0

L'ANGUILLE RIVER PROJECT: ALL SITES IN AND OUTSIDE OF RIGHT-OF-WAY, MILES 0 TO 90
SITES BY PROJECT SITE NUMBER ORDER

STATE SITE #	PROJECT LRP #	WITHIN R-OF-W	COUNTY	C.O.E. MAP #	U.S.G.S. QUAD	FIELDWORK C	G	ST	TP	Further Work at this site?
3LE141	1	Yes	Lee	3	Marianna	1			1	Yes
3LE142	2	Yes	Lee	3	Marianna	1			1	No
3LE143	3	Yes	Lee	3	Marianna	1			1	No
3LE144	4	Yes	Lee	3	Marianna	1			1	Yes
3LE145	5	Yes	Lee	3	Marianna		1		1	No
3LE146	6	No	Lee	2	Marianna		1			No-avoid
3LE147	7	No	Lee	2	Marianna		1			No-avoid
3LE148	8	No	Lee	2	Marianna		1			No-avoid
3LE149	9	Yes	Lee	2	Marianna	1			1	Yes
3LE150	10	Yes	Lee	2	Marianna		1		1	No
3LE151	11	Yes	Lee	2	Marianna		1		*	No
3LE152	12	Yes	Lee	2	Marianna		1		1	No
3LE153	13	Yes	Lee	2	Marianna	1			1	No
3LE154	14	Yes	Lee	2	Marianna	1			1	No
3LE155	15	Yes	Lee	2	Marianna	1			1	Yes
3LE156	16	Yes	Lee	2	Marianna	1			1	No
3LE157	17	Yes	Lee	2	Marianna		1		1	Yes
3LE158	18	Yes	Lee	1	Soudan	1			1	Yes
3LE159	19	Yes	Lee	1	Soudan	1			1	Yes
3LE160	20	Yes	Lee	1	Soudan	1			*	No
3LE161	21	Yes	Lee	1, 2	Soudan	1			1	Yes
3LE162	22	Yes	Lee	1, 2	Marianna	1			1	Yes
3LE163	23	Yes	Lee	1, 2	Marianna	1			1	No
3LE164	24	Yes	Lee	1, 2	Marianna	1			1	Yes
3LE165	25	Yes	Lee	2	Marianna	1			*	No
3LE166	26	Yes	Lee	2	Marianna	1			1	Yes
3LE167	27	Yes	Lee	2	Marianna		1		*	No
3LE168	28	No	Lee	2	Marianna		1			No-avoid
3LE169	29	No	Lee	2	Marianna		1			No-avoid
3LE170	30	No	Lee	2	Marianna		1			No-avoid
3LE171	31	No	Lee	2	Marianna		1			No-avoid
3LE172	32	No	Lee	2	Marianna	1				No-avoid
3LE173	33	No	Lee	2, 3	Marianna		1			No-avoid
3LE174	34	No	Lee	2, 3	Marianna		1			No-avoid
3LE175	35	Yes	Lee	2, 3	Marianna	1			1	Yes
3LE176	36	Yes	Lee	2	Marianna	1			1	Yes
3LE177	37	Yes	Lee	2	Marianna	1			1	No
3LE178	38	No	Lee	2	Marianna		1			No-avoid
3LE179	39	Yes	Lee	2, 3	Marianna		1		1	No
3LE180	40	Yes	Lee	2, 3	Marianna	1			1	No
3LE181	41	No	Lee	2, 3	Marianna		1			No-avoid
3LE182	42	No	Lee	2, 3	Marianna		1			No-avoid
3LE183	43	Yes	Lee	2, 3	Marianna	1			1	Yes
3LE184	44	Yes	Lee	3	Marianna	1			1	Yes
3LE185	45	No	Lee	2	Marianna		1			No-avoid
3LE186	46	Yes	Lee	2	Marianna		1		*	No
3LE187	47	No	Lee	2	Marianna		1			No-avoid
3LE188	48	Yes	Lee	1, 2	Marianna		1		*	No
3LE189	49	No	Lee	3	Marianna		1			No-avoid
3LE190	50	Yes	Lee	3	Marianna		1		1	No

L'ANGUILLE RIVER PROJECT: ALL SITES IN AND OUTSIDE OF RIGHT-OF-WAY, MILES 0 TO 90
SITES BY PROJECT SITE NUMBER ORDER

STATE SITE #	PROJECT SITE #	WITHIN R-OF-W	COUNTY	C.O.E. MAP #	U.S.G.S. QUAD	FIELDWORK C	G	ST	TP	Further Work at this site?
3LE191	51	No	Lee	4	Marianna		1			No-avoid
3LE192	52	Yes	Lee	4	Marianna	1			1	No
3LE193	53	Yes	Lee	4	Marianna	1			1	No
3LE194	54	No	Lee	4	Marianna		1			No-avoid
3LE101	55	No	Lee	4	Marianna		1			No-avoid
3LE195	56	Yes	Lee	1	Soudan	1			1	No
3LE196	57	No	Lee	1	Soudan		1			No-avoid
3LE197	58	Yes	Lee	1	Soudan		1		1	No
3LE198	59	Yes	Lee	1	Soudan		1		1	No
3LE199	60	Yes	Lee	2	Marianna		1		*	No
3LE200	61	No	Lee	2	Marianna		1			No-avoid
3LE201	62	Yes	Lee	1	Soudan		1		1	Yes
3LE202	63	Yes	Lee	1	Soudan		1		1	No
3LE203	64	Yes	Lee	1	Soudan		1		1	No
3LE204	65	No	Lee	1	Soudan		1			No-avoid
3LE205	66	Yes	Lee	3	Marianna		1		1	Yes
3SF060	67	No	St. Fran.	10	Forrest C		1			No-avoid
3SF257	68	Yes	St. Fran.	10	Hawk/FC		1			1m test unit
3LE206	69	Yes	Lee	1	Soudan		1		1	Yes
3SF260	70	Yes	St. Fran.	11	Hawkins		1			1m test unit
3LE207	71	Yes	Lee	1	Soudan	1			1	No
3LE208	72	Yes	Lee	1	Soudan	1			1	No
3LE209	73	Yes	Lee	1	Soudan		1		*	No
3LE210	74	Yes	Lee	3	Marianna		1		1	No
3LE211	75	Yes	Lee	1	Soudan		1		1	No
3LE212	76	No	Lee	1	Soudan		1			No-avoid
3SF270	77	Yes	St. Fran.	8	Palestine	1				1m test unit
3SF271	78	Yes	St. Fran.	6, 7	Palestine	1				1m test unit
3SF272	79	Yes	St. Fran.	6, 7	Palestine	1				1m test unit
3SF273	80	Yes	St. Fran.	6, 7	Palestine	1				1m test unit
3SF268	81	Yes	St. Fran.	6	Haynes		1			1m test unit
3LE213	82	Yes	Lee	5	Haynes		1			1m test unit
3LE214	83	Yes	Lee	5	Haynes		1			1m test unit
3LE215	84	Yes	Lee	5	Haynes		1			1m test unit
3LE216	85	Yes	Lee	5	Haynes		1			1m test unit
3LE217	86	Yes	Lee	5	Haynes		1			1m test unit
3LE218	87	Yes	Lee	5	Haynes		1			1m test unit
3SF261	88	Yes	St. Fran.	9	Hawkins		1			1m test unit
3SF262	89	No	St. Fran.	9	Hawkins		1			No-avoid
3CS217	90	No	Cross	13, 14	Hamlin		1			No-avoid
3CS081	91	Yes	Cross	13, 14	Hamlin		1			1m test unit
3CS080	92	Yes	Cross	13, 14	Hamlin		1			1m test unit
3CS218	93	Yes	Cross	13, 14	Hamlin		1			1m test unit
3CS219	94	Yes	Cross	14	Hamlin		1			1m test unit
3CS220	95	Yes	Cross	14	Hamlin		1			1m test unit
3CS176	96	Yes	Cross	18	Vanndale		1			1m test unit
3CS177	97	Yes	Cross	18	Vanndale		1			1m test unit
3CS179	98	Yes	Cross	18	Vanndale		1			1m test unit
3CS180	99	Yes	Cross	18	Vanndale		1			1m test unit
3CS181	100	Yes	Cross	18	Vanndale		1			1m test unit

L'ANGUILLE RIVER PROJECT: ALL SITES IN AND OUTSIDE OF RIGHT-OF-WAY. MILES 0 TO 90
SITES BY PROJECT SITE NUMBER ORDER

STATE SITE #	PROJECT SITE #	WITHIN R-OF-W	COUNTY	C.O.E. MAP #	U.S.G.S. QUAD	FIELDWORK C	G	ST	TP	Further Work at this site?
3CS183	101	Yes	Cross	18	Vanndale		1			1m test unit
3CS192	102	No	Cross	20, 21	C.V. West		1			No-avoid
3CS193	103	Yes	Cross	20, 21	C.V. West		1			1m test unit
3CS194	104	Yes	Cross	20, 21	C.V. West		1			1m test unit
3CS195	105	Yes	Cross	21	C.V. West		1			1m test unit
3CS196	106	Yes	Cross	21	C.V. West		1			1m test unit
3CS197	107	Yes	Cross	21	C.V. West		1			1m test unit
3CS198	108	Yes	Cross	21	C.V. West		1			1m test unit
3CS199	109	Yes	Cross	21	C.V. West		1			1m test unit
3CS200	110	Yes	Cross	21	C.V. West		1			1m test unit
3CS048	111	Yes	Cross	21	C.V. West		1			1m test unit
3PO530	112	No	Poinsett	21, 22	C.V. West		1			No-avoid
3PO531	113	Yes	Poinsett	21, 22	C.V. West		1			1m test unit
3PO532	114	No	Poinsett	21, 22	C.V. West		1			No-avoid
3PO518	115	No	Poinsett	24	Powers S		1			No-avoid
3PO098	116	No	Poinsett	24	Powers S		1			No-avoid
3PO148	117	No	Poinsett	24	Powers S		1			No-avoid
3PO519	118	No	Poinsett	25	Powers S	1				No-avoid
3PO157	119	Yes	Poinsett	25	Powers S	1	1			1m test unit
3PO520	120	Yes	Poinsett	25	Powers S		1			1m test unit
3CS205	121	Yes	Cross	16	Central	1				1m test unit
3CS017	122	Yes	Cross	16	Central		1			1m test unit
3CS049	123	Yes	Cross	16	Central		1			1m test unit
3CS2xx	124	No	Cross	16	Central		1			No-avoid
3CS2xx	125	No	Cross	16	Central		1			No-avoid
3CS206	126	No	Cross	16	Central		1			No-avoid
3CS201	127	Yes	Cross	20	C.V. West		1			1m test unit
3CS202	128	Yes	Cross	20	C.V. West	1	1			1m test unit
3CS018	129	Yes	Cross	20	C.V. West		1			1m test unit
3CS047	130	No	Cross	20	C.V. West		1			No-avoid
3CS046	131	Yes	Cross	20	C.V. West	1	1			1m test unit
3CS203	132	Yes	Cross	21	C.V.West		1			1m test unit
3PO020	133	Yes	Poinsett	21	C.V. West		1			1m test unit
3PO533	134	Yes	Poinsett	21	C.V. West		1			1m test unit
3PO203	135	No	Poinsett	23	Powers S	1				No-avoid
3PO521	136	No	Poinsett	23	Powers S		1			No-avoid
3PO097	137	No	Poinsett	23	Powers S		1			No-avoid
3PO522	138	Yes	Poinsett	26	Powers S.	1				1m test unit
3PO523	139	Yes	Poinsett	26	Powers S		1			1m test unit
3PO524	140	Yes	Poinsett	26	Powers S		1			1m test unit
3PO525	141	Yes	Poinsett	26	Powers S	1	1			1m test unit
3PO526	142	Yes	Poinsett	26	Powers S		1			1m test unit
3PO527	143	Yes	Poinsett	26	Powers S		1			1m test unit
3PO318	144	No	Poinsett	24	Powers S		1			No-avoid
3LE219	145	No	Lee	5	Haynes		1			No-avoid
3PO204	146	Yes	Poinsett	23	Powers S			1		1m test unit
3CS121	147	Yes	Cross	16	Central	1				1m test unit
3CS207	148	Yes	Cross	16	Central	1				1m test unit
3CS208	149	Yes	Cross	16	Central		1			1m test unit
3CS209	150	No	Cross	16	Central		1			No-avoid

L'ANGUILLE RIVER PROJECT: ALL SITES IN AND OUTSIDE OF RIGHT-OF-WAY, MILES 0 TO 90
SITES BY PROJECT SITE NUMBER ORDER

STATE SITE #	PROJECT SITE #	WITHIN R-OF-W	COUNTY	C.O.E. MAP #	U.S.G.S. QUAD	FIELDWORK C	G	ST	TP	Further Work at this site?
3CS210	151	Yes	Cross	16	Central		1			1m test unit
3CS211	152	Yes	Cross	16	Central		1			1m test unit
3CS212	153	Yes	Cross	17	Central		1			1m test unit
3CS022	154	Yes	Cross	17	Central	1				1m test unit
3CS213	155	No	Cross	17	Central		1			No-avoid
3CS214	156	No	Cross	17	Central		1			No-avoid
3PO528	157	No	Poinsett	26	Powers S		1			No-avoid
3PO529	158	No	Poinsett	26	Powers S		1			No-avoid
3SF266	159	Yes	St. Fran.	12, 13	Hamlin		1			1m test unit
3CS221	160	Yes	St. Fran.	12, 13	Hamlin		1			1m test unit
3CS221	161	No	Cross	13	Hamlin		1			No-avoid
3SF267	162	Yes	St. Fran.	12	Hamlin		1			1m test unit
3SF015	163	No	St. Fran.	12	Hamlin		1			No-avoid
3CS083	164	No	Cross	13	Hamlin		1			No-avoid
3CS222	165	Yes	Cross	14, 15	Hamlin		1			1m test unit
3CS223	166	Yes	Cross	15	Hamlin		1			1m test unit
3CS224	167	No	Cross	15	Hamlin		1			No-avoid
3CS225	168	No	Cross	15	Hamlin		1			No-avoid
3CS226	169	Yes	Cross	15	Hamlin		1			1m test unit
3CS227	170	No	Cross	15	Hamlin		1			No-avoid
3PO199	171	No	Poinsett	23	Powers S		1			No-avoid
3PO201	172	Yes	Poinset	23	Powers S		1			1m test unit
3CS215	173	No	Cross	17	Central		1			No-avoid
3CS093	174	Yes	Cross	17	Vanndale		1			1m test unit
3CS184	175	Yes	Cross	17	Vanndale		1			1m test unit
3CS176	176	Yes	Cross	17	Vanndale		1			1m test unit
3CS186	177	No	Cross	17	Vanndale		1			No-avoid
3CS187	178	No	Cross	17, 18	Vanndale		1			No-avoid
3CS188	179	Yes	Cross	17, 18	Vanndale		1			1m test unit
3CS189	180	Yes	Cross	17, 18	Vanndale		1			1m test unit
3CS012	181	Yes	Cross	17, 18	Vanndale		1			1m test unit
3LE220	182	No	Lee	3	Marianna			1		No-avoid
3LE221	183	Yes	Lee	3	Marianna			1	1	Yes
3LE222	184	Yes	Lee	3	Marianna		1	1	1	Yes
3LE223	185	Yes	Lee	3	Marianna				1	No
3LE224	186	No	Lee	3	Marianna		1			No-avoid
3LE225	187	No	Lee	4	Marianna		1			No-avoid
3LE226	188	Yes	Lee	4	Marianna			1	1	Yes
3LE227	189	No	Lee	4	Marianna		1			No-avoid
3LE228	190	No	Lee	4	Marianna			1		No-avoid
3LE229	191	Yes	Lee	4	Marianna			1	1	Yes
3LE230	192	No	Lee	4	Marianna			1		No-avoid
3LE231	193	No	Lee	4	Marianna		1			No-avoid
3LE232	194	No	Lee	4	Marianna		1			No-avoid
3LE233	195	No	Lee	4	Marianna		1			No-avoid
3LE234	196	No	Lee	4	Marianna		1			No-avoid
3LE235	197	No	Lee	4	Marianna		1			No-avoid
3LE236	198	No	Lee	4	Marianna		1			No-avoid
3LE237	199	No	Lee	4	Marianna		1			No-avoid
3LE002	200	No	Lee	4	Marianna		1			No-avoid

L'ANGUILLE RIVER PROJECT: ALL SITES IN AND OUTSIDE OF RIGHT-OF-WAY, MILES 0 TO 90
SITES BY PROJECT SITE NUMBER ORDER

STATE SITE #	PROJECT SITE #	WITHIN R-OF-W	COUNTY	C.O.E. MAP #	U.S.G.S. QUAD	FIELDWORK C	G	ST	TP	Further Work at this site?
3LE238	201	No	Lee	4	Haynes		1			No-avoid
3SF269	202	Yes	St. Fran.	5	Haynes		1			1m test unit
3SF263	203	Yes	St. Fran.	10	Hawkins		1	1		1m test unit
3SF264	204	Yes	St. Fran.	10	Hawkins		1			1m test unit
3SF265	205	Yes	St. Fran.	10	Hawkins		1			1m test unit
3SF258	206	No	St. Fran.	10	Hawk/FC		1			No-avoid
3SF269	207	Yes	St. Fran.	10	Forrest C		1			1m test unit
3PO202	208	Yes	Poinsett	23	Powers S					1m test unit
3CS190	209	Yes	Cross	17	Vanndale		1			1m test unit
3LE239	210/IF1	No	Lee	NA	Marianna		1			
3LE024	211	No	Lee	NA	Soudan		1			
3PO017	212	No	Poinsett	NA	C. V. West		1			
3LE240	213/IF2	No	Lee	2	Marianna		1			No-avoid
3LE241	214/IF3	No	Lee	2	Marianna		1			No-avoid
3LE242	215/IF5	No	Lee	2	Marianna		1			No-avoid
3LE243	216/IF6	Yes	Lee	2	Marianna		1			No
3LE244	217/IF11	No	Lee	2	Marianna		1			No-avoid
3CS191	218/IF12	No	Cross	18	Vanndale		1			No-avoid
3CS216	219/IF15	No	Cross	16	Central		1			No-avoid
3CS2xx	220/IF16	No	Cross	16	Central		1			No-avoid
3CS228	221/IF19	No	Cross	15	Hamlin		1			No-avoid
3CS204	222/IF20	No	Cross	20	C. V. West		1			No-avoid
						45	172	9	47	

C = controlled surface collection,
stratified systematic unaligned sample
G = controlled surface collection,
100%, timed collection
ST = shovel testing
TP = 1 m test unit excavated to sterile

APPENDIX VII

PROJECT SCOPE OF WORK

by

Memphis District
U.S. Army Corps of Engineers

SECTION C

Description/Specifications/Scope of Work

Archeological Intensive Survey and Geomorphic Study of the L'Anguille River Channel Cleanout, Poinsett, Cross, Lee, and St. Francis Counties, Arkansas.

C-1. GENERAL.

C-1.1. The Contractor shall conduct a background and literature search, an intensive survey investigation, a geomorphic study, and initial site testing along the L'Anguille River in Poinsett, Cross, Lee, and St. Francis Counties, Arkansas. Reports of these investigations shall be submitted. These tasks are in partial fulfillment of the Memphis District's obligations under the National Historic Preservation Act of 1966 (P.L. 89-665), as amended; the National Environment Policy Act of 1969 (P.L. 91-190); Executive Order 11593, "Protection and Enhancement of Cultural Environment," 13 May 1971 (36 CFR Part 800); Preservation of Historic and Archeological Data, 1974 (P.L. 93-291), as amended; and the Advisory Council on Historic Preservation, "Procedures for the Protection of Historic and Cultural Properties" (36 CFR Part 800).

C-1.2. Personnel Standards.

a. The Contractor shall utilize a systematic, interdisciplinary approach to conduct the study. Specialized knowledge and skills will be used during the course of the study to include expertise in archeology, history, architecture, geology and other disciplines as required to fulfill requirements of this Scope of Work. Techniques and methodologies used for the study shall be representative of the state of current professional knowledge and development.

b. The following minimal experiential and academic standards shall apply to personnel involved in investigations described in this Scope of Work:

(1) Archeological Project Directors or Principal Investigator(s) (PI). Individuals in charge of an archeological project or research investigation contract, in addition to meeting the appropriate standards for archeologist, must have a publication record that demonstrates extensive experience in successful field project formulation, execution and technical monograph reporting. It is mandatory that at least one individual acting as Principal Investigator or Project Director under this contract have demonstrated competence and ongoing interest in comparable cultural resources or archeological research in the Northeast Arkansas Region. Extensive prior research experience as Principal Investigator or Project Director in immediately adjacent areas will also satisfy this requirement. The requirement may also be satisfied by utilizing consulting Co-principal Investigators averaging no less than 24 paid hours per month for the duration of contract activities. Changes in any Project Director or Principal Investigator must be approved by the Contracting Officer. The Contracting

Officer may require suitable professional references to obtain estimates regarding the adequacy of prior work.

(2) Archeologist. The minimum formal qualifications for individuals practicing archeology as a profession are a B.A. or B.S. degree from an accredited college or university, followed by a minimum of two years of successful graduate study or equivalent with concentration in anthropology and specialization in archeology and at least two summer field schools or their equivalent under the supervision of archeologists of recognized competence. A Master's thesis or its equivalent in research and publication is highly recommended, as is the M.A. degree.

(3) Architectural Historian. The minimum professional qualifications in architectural history are a graduate degree in architectural history, historic preservation, or closely related fields, with course work in American architectural history; or a bachelor's degree in architectural history, historic preservation, or closely related field plus one of the following:

(a) At least two years full-time experience in research, writing, or teaching in American history or restoration architecture with an academic institution, historical organization or agency, museum, or other professional institution; or

(b) Substantial contribution through research and publication to the body of scholarly knowledge in the field of American architectural history.

(4) Other Professional Personnel. All other personnel utilized for their special knowledge and expertise must have a B.A. or B.S. degree from an accredited college or university, followed by a minimum of two years of successful graduate study with concentration in appropriate study and a publication record demonstrating competing in the field of study.

(5) Other Supervisory Personnel. Persons in any supervisory position must hold a B.A., B.S. or M.A. degree with a concentration in the appropriate field of study and a minimum of 2 years of field and laboratory experience in tasks similar to those to be performed under this contract.

(6) Crew Members and Lab Workers. All crew members and lab workers must have prior experience compatible with the tasks to be performed under this contract. An academic background in the appropriate field of study is highly recommended.

c. All operations shall be conducted under the supervision of qualified professionals in the discipline appropriate to the data that is to be discovered, described or analyzed. Vitae of personnel involved in project activities may be required by the Contracting Officer at anytime during the period of service of this contract.

C-1.3. The Contractor shall designate in writing the name or names of the Principal Investigator(s). Participation time of the Principal Investigator(s) shall average a minimum of 50 hours per month during the period of service of this contract. In the event of controversy or court challenge, the Principal Investigator shall be available to testify with respect to report findings. The additional services and expenses would be at Government expense, per paragraph 1.8 below.

C-1.4. The Contractor shall keep standard field records which may be reviewed by the Contracting Officer. These records shall include field notes, appropriate state site survey forms and any other cultural resource forms and/or records, field maps and photographs necessary to successfully implement requirements of this Scope of Work.

C-1.5. To conduct the field investigation, the Contractor will obtain all necessary permits, licenses; and approvals from all local, state and Federal authorities. Should it become necessary in the performance of the work and services of the Contractor to secure the right of ingress and egress to perform any of the work required herein on properties not owned or controlled by the Government, the Contractor shall secure the consent of the owner, his representative, or agent, prior to effecting entry on such property.

C-1.6. Innovative approaches to data location, collection, description and analysis, consistent with other provisions of this contract and the cultural resources requirements of the Memphis District, are encouraged.

C-1.7. No mechanical power equipment other than that referenced in paragraph C-4.5 shall be utilized in any cultural resource activity without specific written permission of the Contracting Officer.

C-1.8. The Contractor shall furnish expert personnel to attend conferences and furnish testimony in any judicial proceedings involving the archeological and historical study, evaluation, analysis and report. When required, arrangements for these services and payment therefor will be made by representatives of either the Corps of Engineers or the Department of Justice.

C-1.9. The Contractor, prior to the acceptance of the final report, shall not release any sketch, photograph, report or other material of any nature obtained or prepared under this contract without specific written approval of the Contracting Officer.

C-1.10. The extent and character of the work to be accomplished by the Contractor shall be subject to the general supervision, direction, control and approval of the Contracting Officer. The Contracting Officer may have a representative of the Government present during any or all phases of Scope of Work requirements.

C-1.11. The Contractor shall obtain Corps of Engineers Safety Manual (EM 385 -1-1) and comply with all appropriate provisions. Particular attention is directed to safety requirements relating to the deep excavation of soils.

C-1.12. There will be two categories of meetings between Contractor and Contracting Officer: (1) scheduled formal conferences to review contract performance, and (2) informal, unscheduled meetings for clarification, assistance, coordination and discussion. The initial meeting shall be held prior to the beginning of field work. Category (1) meetings will be scheduled by the Contracting Officer and will be held at the most convenient location, to be chosen by the Contracting Officer. This may sometimes be on the project site, but generally will be at the office of the Contracting Officer.

C-2. STUDY AREA.

C-2.1. The location of the proposed channel cleanout for the L'Anguille River project begins near Marianna, Arkansas. The project is 95 miles long. Mile 0.0 is located at the Junction of Madison-Marianna Diversion ditch and the L'Anguille River. Mile 95 is at the Junction of the L'Anguille River and Arkansas Highway 14 (approximately 7.5 miles east of Waldenburg, Arkansas). Work on the project should start at mile 0.0 and proceed to mile 95. The survey right-of-way will be on both sides of the river extending 300 feet landward from top bank on each side. The project is located in cross, Lee, Poinsett, and St. Francis counties and may be located on the Parkplace, Marianna, Wynne, Weinner, and Vandale Topographic maps. See attached general map, page C-19. Subsurface testing (1m x 1m units) will be conducted only on sites found within the reach, beginning with the start of mile 0.0 and ending at the start of mile 16.0. Sites found within the reach between mile 16.0 and 95.0 will not be tested with 1m x 1m subsurface units.

C-3. DEFINITIONS.

C-3.1. "Cultural resources" are defined to include any building, site, district, structure, object, data, or other material relating to the history, architecture, archeology, or culture of an area.

C-3.2. "Background and Literature Search" is defined as a comprehensive examination of existing literature and records for the purpose of inferring the potential presence and character of cultural resources in the study area. The examination may also serve as collateral information to field data in evaluating the eligibility of cultural resources for inclusion in the National Register of Historic Places or in ameliorating losses of significant data in such resources.

C-3.3. "Intensive Survey" is defined as a comprehensive, systematic, and detailed on-the-ground survey of an area, of sufficient intensity to determine the number, types, extent and distribution of cultural resources present and their relationship to project features.

C-3.4. "Mitigation" is defined as the amelioration of losses of significant prehistoric, historic, or architectural resources which will be accomplished through preplanned actions to avoid, preserve, protect, or minimize adverse

effect upon such resources or to recover a representative sample of the data they contain by implementation of scientific research and other professional techniques and procedures. Mitigation of losses of cultural resources includes, but is not limited to, such measures as: (1) recovery and preservation of an adequate sample of archeological data to allow for analysis and published interpretation of the cultural and environmental conditions prevailing at the time(s) the area was utilized by man; (2) recording, through architectural quality photographs and/or measured drawings of buildings, structures, districts, sites and objects and deposition of such documentation in the Library of Congress as a part of the National Architectural and Engineering Record; (3) relocation of buildings, structures and objects; (4) modification of plans or authorized projects to provide for preservation of resources in place; (5) reduction or elimination of impacts by engineering solutions to avoid mechanical effects of wave wash, scour, sedimentation and related processes and the effects of saturation.

C-3.5. "Reconnaissance" is defined as an on-the-ground examination of selected portions of the study area, and related analysis adequate to assess the general nature of resources in the overall study area and the probable impact on resources of alternate plans under consideration. Normally reconnaissance will involve the intensive examination of not more than 15 percent of the total proposed impact area.

C-3.6. "Significance" is attributable to those cultural resources of historical, architectural, or archeological value when such properties are included in or have been determined by the Secretary of the Interior to be eligible for inclusion in the National Register of Historic Places after evaluation against the criteria contained in 36 CFR 63.

C-3.7. "Testing" is defined as the systematic removal of the scientific, prehistoric, historic, and/or archeological data that provide an archeological or architectural property with its research or data value. Testing may include controlled surface survey, shovel testing, profiling, and limited subsurface test excavations of the properties to be affected for purposes of research planning, the development of specific plans for research activities, excavation, preparation of notes and records, and other forms of physical removal of data and the material analysis of such data and material, preparation of reports on such data and material and dissemination of reports and other products of the research. Subsurface testing shall not proceed to the level of mitigation.

C-3.8. "Analysis" is the systematic examination of material data, environmental data, ethnographic data, written records, or other data which may be prerequisite to adequately evaluating those qualities which contribute to their significance.

C-4. GENERAL PERFORMANCE SPECIFICATIONS.

C-4.1. Research Design.

Survey and testing will be conducted within the framework of a regional research design including, where appropriate, questions discussed in the State Plan. All typological units not generated in these investigation, shall be adequately referenced. It should be noted that artifactual typologies constructed for other areas may or may not be suitable for use in the study area. It is, therefore, of great importance that considerable effort be spent in recording and describing artifactual characteristics treated as diagnostic in this study as well as explicit reasons for assigning (or not assigning) specific artifacts to various classificatory units.

C-4.2. Background and Literature Search.

a. This task shall include an examination of the historic and prehistoric environmental setting and cultural background of the study area and shall be of sufficient magnitude to achieve a detailed understanding of the overall cultural and environmental context of the study area. It is axiomatic that the background and literature search shall normally precede the initiation of all fieldwork.

b. Information and data for the literature search shall be obtained, as appropriate, from the following sources: (1) Scholarly reports - books, journals, theses, dissertations and unpublished papers; (2) Official Records - Federal, state, county and local levels, property deeds, public works and other regulatory department records and maps; (3) Libraries and Museums - both regional and local libraries, historical societies, universities, and museums; (4) Other repositories - such as private collections, papers, photographs, etc.; (5) Archeological site files at local universities, the State Historic Preservation Office, the office of the State Archeologist; (6) Consultation with qualified professionals familiar with the cultural resources in the area, as well as consultation with professionals in associated areas such as history, sedimentology, geomorphology, agronomy, and ethnology.

c. The Contractor shall include as an appendix to the draft and final reports, written evidence of all consultation and any subsequent responses(s), including the dates of such consultation and communications.

d. The background and literature search shall be performed in such a manner as to facilitate the construction of predictive statements (to be included in the study report) concerning the probable quantity, character, and distribution of cultural resources within the project area. In addition, information obtained in the background and literature search should be of such scope and detail as to serve as an adequate data base for subsequent field work and analysis in the study area undertaken for the purpose of discerning the character, distribution and significance of specific identified cultural resources.

e. In order to accomplish the objectives described in paragraph C-4.2.d., it will be necessary to attempt to establish a relationship between landforms and the patterns of their utilization by successive groups of human

inhabitants. This task should involve defining and describing various zones of the study area with specific reference to such variables as past topography, potential food resources, soils, geology, and river channel history.

C-4.3. Intensive Survey.

a. Intensive survey shall include the on-the-ground examination of the study areas described in paragraph C-2.

b. Unless excellent ground visability and other conditions conducive to the observation of cultural evidence occurs, shovel test pits, or comparable subsurface excavation units, shall be installed at intervals no greater than 30 meters throughout the study area. Note that auger samples, probes, and coring tools will not be considered comparable subsurface units. Shovel test pits shall be minimally 30 x 30 centimeters in size and extend to a minimum depth of 50 centimeters. Unit fill material shall be screened using 1/4" mesh hardware cloth. Additional shovel test pits shall be excavated in areas judged by the Principal Investigator to display a high potential for the presence of cultural resources. If, during the course of intensive survey activities, areas are encountered in which disturbance or other factors clearly and decisively preclude the possible presence of significant cultural resources, the Contractor shall carefully examine and document the nature and extent of the factors and then proceed with survey activities in the remainder of the study area. Documentation and justification of such action shall appear in the survey report. The location of all shovel test units and surface observations shall be recorded.

c. When cultural remains are encountered, horizontal site boundaries shall be derived by the use of surface observation procedures (including controlled surface collection procedures described in Paragraph C-4.4.a. below) in such a manner as to allow precise location of site boundaries on Government project drawings and 7.5 minute U.S.G.S. quad maps when available. Methods used to establish site boundaries shall be discussed in the survey report together with the probable accuracy of the boundaries. The Contractor shall establish a datum at the discovered cultural loci which shall be precisely related to the site boundaries as well as to a permanent reference point (in terms of azimuth and distance) by means of a transit level. If possible, the permanent reference point used shall appear on Government blueline (project) drawings and/or 7.5 minute U.S.G.S. quad maps. If no permanent landmark is available, a permanent datum shall be established in a secure location for use as a reference point. The permanent datum shall be precisely plotted and shown on U.S.G.S. quad maps and project drawings. All descriptions of site location shall refer to the location of the primary site datum.

d. All standing buildings and structures (other than those patently modern, i.e., less than 50 years old) shall be recorded and described. For a building to be considered "standing" it must retain four walls and at least a skeletal roof structure. A building or structure found in the field to be

partially or totally collapsed will be considered an archeological site. In these cases, data concerning construction materials and techniques and floor plan, if discernible, must be collected. The Contractor shall supply preliminary information concerning the suitability of a structure or building for relocation and restoration (structural soundness for example).

C-4.4. Testing Activities.

a. Initial Site Testing.

(1) Surface collection of the site area shall be accomplished in order to obtain data representative of total site surface content. Both historic and prehistoric items shall be collected. The Contractor shall carefully note and record descriptions of surface conditions of the site including ground cover and the suitability of soil surfaces for detecting cultural items (ex: recent rainfall, standing water or mud). If ground surfaces are not highly conducive to surface collection, screened shovel tests units shall be used to augment surface collection procedures. It should be noted, however, that such units should be substituted for total surface collection only where the presence of ground cover requires such techniques.

(2) Care should be taken to avoid bias in collecting certain classes of data or artifact types to the exclusion of others (ex: debitage or faunal remains) so as to insure that collections accurately reflect both the full range and the relative proportions of data classes present (ex: the proportion of debitage to finished implements or types of implements to each other). Such a collecting strategy shall require the total collection of quadrat or other sample units in sufficient quantities to reasonably assure that sample data are representative of such descrete site subareas as may exist. Since the number and placement of such sample units will depend, in part, on the subjective evaluation of intrasite variability, and the amount of ground cover, the Contractor shall describe the rationale for the number and distribution of collection units. In the event that the Contractor utilizes systematic sampling procedures in obtaining representative surface samples, care should be taken to avoid periodicity in recovered data. No individual sample unit type used in surface data collection shall exceed 36 square meters in area. Unless a smaller fraction is approved by the Contracting Officer, surface collected areas shall constitute no less than 25 percent of total site areas. Detailed results of controlled surface collections shall be graphically depicted in plan view in the report of investigations.

(3) The Contractor shall undertake (in addition and subsequent to sample surface collecting) a general site collection in order to increase the sample size of certain classes of data which the Principal Investigator may deem prerequisite to an adequate site-specific and intersite evaluation of data.

(4) As an alternative to surface collecting procedures discussed above, where surface visability is excellent, the Contractor may collect all visable artifacts. If such a procedure is undertaken, the precise provenience of all individual artifacts shall be related to the primary site datum by means of a transit level.

5) Unless it can be conclusively demonstrated that no significant subsurface cultural resources occur at a site, the Contractor shall install in each appropriate site a minimum of one 1 X 1 meter subsurface test unit to determine the general nature of subsurface deposits. Subsurface testing (1m x 1m units) will be conducted only on sites found within the reach, beginning with the start of mile 0.0 and ending at the start of mile 16.0. Sites found within the reach between mile 16.0 and 95.0 will not be tested with 1m x 1m subsurface units.

(6) Subsurface test units (other than shovel cut units) shall be excavated in levels no greater than 10 centimeters. Where cultural zonation or plow disturbance is present however, excavated materials shall be removed by zones (and in 10 cm. levels within zones where possible). Subsurface test units shall extend to a depth of at least 20 centimeters below artifact bearing soils. A portion of each test unit, measured from one corner (of a minimum 30 X 30 centimeters), shall be excavated to a depth of 40 centimeters below artifact bearing soils. All excavated material (including plow zone material) shall be screened using a minimum of 1/4" hardware cloth. Representative profile drawings shall be made of excavated unit. Subsequent to preparation of profile drawings for each test unit, the unit shall be backfilled and compacted to provide reasonable pedestrian safety.

(7) Stringent horizontal spatial control of testing shall be maintained by relating the location of all collection and test units to the primary site datum either by means of a grid system (including those used in controlled surface collection) or by azimuth and distance.

(8) Other types of subsurface units may, at the Contractor's option, be utilized in addition to those units required by this Scope of Work.

(9) Cultural Resource Recording and Numbering. For each archeological site or architectural property recorded during the survey, the Contractor shall complete and submit the standard Arkansas archeological site or architectural property survey form, respectively. The Contractor shall be responsible for reproducing or obtaining a sufficient quantity of these forms to meet the needs of the project. The Contractor shall be responsible for coordinating with the appropriate state agency to obtain state site-file numbers for each archeological site and architectural property recorded.

(10) If field activities specified in this section result in adequate data to evaluate the significance of specific cultural resources in terms of National Register of Historic Place criteria, the Contractor shall undertake such evaluation. If initial testing does not produce sufficient data for such evaluation, recommendations shall be made (as stipulated in Section C-4.4b.) for additional testing to procure adequate data for determination of eligibility to the National Register of Historic Places.

b. Additional Investigations.

(1) Additional subsurface test units maybe required at many loci. The proposed number and distribution of such test units shall be recommended by the Principal Investigator on a site specific basis. This recommendation shall be made based on such variables as site size and potential intrasite variability, including, physiographic and geomorphic characteristics of the loci which may suggest variability in the presence or distribution of subsurface cultural deposits. The Contractor shall detail the rationale(s) for the placement and numbers of proposed test units in the management summary and report of field activities. Additional reporting requirements, examination of background literature and examination of standing buildings and structures may also be required at some sites. The exact nature of additional examination, the schedule, and the price of the work shall be negotiated with the Contracting Officer, and if an agreement is reached, a Change Order shall be issued prior to conduct of the work. Additional investigations will provide a data base of sufficient nature to allow determination of site eligibility to the National Register of Historic Places consistent with C-5.3.j.12) and (3) of this Scope of Work.

(2) In order to accurately relate a site to research domains, (i.e. assess significance or insignificance), a variety of data gathering techniques may be required to insure recovery of the various types of data which may be present at the site. These techniques may include radiocarbon dating, flotation and excavation of cultural features. When appropriate, these types of data gathering activities should be integral elements of the testing strategy.

C-4.5. Geomorphological Study.

The Contractor shall undertake geomorphic examinations of the study area in order to determine the probability of the presence of significant subsurface cultural resources and the likely location and nature of those resources. The study shall focus on data relating to the age and nature of of soil deposits in the study area and the implications of those data regarding the probable presence, location, age and nature of significant cultural resources associated with these soils.

(1) The Contractor shall obtain sufficient field samples attributable to various temporal horizons to insure statistically reliable data for a minimum of two (2) palynological columns collected in such a manner as to allow taxa to be interpreted in paleoecological and paleoclimatic terms. Biostratigraphic chronological data shall be established by means of geomorphic and radiocarbon analysis. Obtaining suitable samples allowing the definition of continuous paleoenvironmental sequences during the full temporal range of human occupation of the study area shall be a prime consideration in the selection of sampling locations. Analysis of collected data shall be undertaken to supply a data base for the determination of the potential types and significance of buried cultural resources in the study area.

(2) The Contractor shall utilize hand excavation, power excavation and power coring equipment, as appropriate, to insure adequate depth and penetration of soils in the collection of data required for all investigative purposed described in paragraph C-4.5 of this Scope of Work.

(3) Investigations shall not include soils which are known to predate possible human occupation. All sampling areas shall be such as to yield data applicable to study areas.

(4) Investigations shall include carefully reasoned and documented recommendations and conclusions concerning:

a. the potential of the study area to contain buried significant cultural resources.

b. specific areas likely to contain significant cultural deposits and those unlikely to contain such deposits.

c. the likely nature of buried cultural deposits in the study area.

d. the need or lack of need for deep archeological testing in the study area.

e. if appropriate, a sampling plan for deep archeological testing including the numbers, type and location of proposed deep testing units.

(5) Although limited geological field observations and testing will be necessary to obtain data, it is not anticipated that extensive subsurface testing will be required. If additional deep archeological testing is deemed necessary by the Contractor, the number, placement, techniques, time requirements and cost to the Government of such testing shall be negotiated with the Contracting Officer, and if an agreement is reached, a Change Order shall be issued prior to the conduct of the work.

C-4.6. Laboratory Processing, Analysis, and Preservation.

All cultural materials recovered will be cleaned and stored in deterioration resistant containers suitable for long term curation. Diagnostic artifacts will be labeled and catalogued individually. A diagnostic artifact is defined herein as any object which contributes individually to the needs of analysis required by this Scope of Work or the research design. All other artifacts recovered must minimally be placed in labeled, deterioration resistant containers, and the items catalogued. The Contractor shall describe and analyze all cultural materials recovered in accordance with current professional standards. Artifactual and non-artifactual analysis shall be of an adequate level and nature to fulfill the requirements of this Scope of Work. All recovered cultural items shall be catalogued in a manner consistent with Arkansas state requirements. The Contractor shall consult with appropriate state officials as soon as possible following the conclusion of field work in order to obtain information (ex: accession numbers) prerequisite to such cataloging procedures.

C-4.7. Curation.

Efforts to insure the permanent curation of properly cataloged cultural resources materials and project documentation in an appropriate institution shall be considered an integral part of the requirements of this Scope of Work. The Contractor shall pay all cost of the preparation and permanent

curation of records and artifacts. An arrangement for curation shall be confirmed by the Contractor, subject to the approval of the Contracting Officer, prior to the acceptance of the final report.

C-5. GENERAL REPORT REQUIREMENTS.

C-5.1. The primary purpose of the cultural resources report is to serve as a planning tool which aids the Government in meeting its obligations to preserve and protect our cultural heritage. The report will be in the form of a comprehensive, scholarly document that not only fulfills mandated legal requirements but also serves as a scientific reference for future cultural resources studies. As such, the report's content must be not only descriptive but also analytic in nature.

C-5.2. Upon completion of all field investigation and research, the Contractor shall prepare a report detailing the work accomplished, the results, and recommendations for each project area. Copies of the draft and final reports of investigation shall be submitted in a form suitable for publication and be prepared in a format reflecting contemporary organizational and illustrative standards for current professional archeological journals. The final report shall be typed on standard size 8-1/2" x 11" bond paper with pages numbered and with page margins one inch at top, bottom, and sides. Photographs, plans, maps, drawings and text shall be clean and clear. The final report shall be bound in a high quality professional type binding. The project title shall appear on the front cover.

C-5.3. The report shall include, but not necessarily be limited to, the following sections and items:

a. Title Page. The title page should provide the following information; the type of task undertaken, the study areas and cultural resources which were assessed; the location (county and state), the date of the report; the contract number; the name of the author(s) and/or the Principal Investigator; and the agency for which the report is being prepared. If a report has been authored by someone other than the Principal Investigator, the Principal Investigator must at least prepare a foreword describing the overall research context of the report, the significance of the work, and any other related background circumstances relating to the manner in which the work was undertaken.

b. Abstract. an abstract suitable for publication in an abstract journal shall be prepared and shall consist of a brief, quotable summary useful for informing the technically-oriented professional public of what the author considers to be the contributions of the investigation to knowledge.

c. Table of Contents.

d. Introduction. This section shall include the purpose of the report, a description of the proposed project, a map of the general area, a project

map, and the dates during which the investigations were conducted. The introduction shall also contain the name of the institution where recovered materials and documents will be curated.

e. Environmental Context. This section shall contain, but not be limited to, a discussion of probable past floral, faunal, and climatic characteristics of the project area. Since data in this section may be used in the evaluation of specific cultural resource significance, it is imperative that the quantity and quality of environmental data be sufficient to allow subsequent detailed analysis of the relationship between past cultural activities and environmental variables.

f. Previous Research. This section shall describe previous research which may be useful in deriving or interpreting relevant background data, problem domains, or research questions and in providing a context in which to examine the probability of occurrence and significance of cultural resources in the study area.

g. Literature Search and Personal Interviews. This section shall discuss the results of the literature search, including specific data sources, and personal interviews which were conducted during the course of investigations.

i. Survey, Testing and Analytical Methods. This section shall contain an explicit discussion of the research design, and shall demonstrate how environmental data, previous research data, the literature search and personal interviews have been utilized in constructing the strategy. Specific research domains and questions as well as methodological strategies employed to address those questions should be included where possible.

j. Recommendations.

(1) This section should contain, where possible, assessments of the eligibility of specific cultural properties in the study area for inclusion in the National Register of Historic Places.

(2) Significance should be discussed explicitly in terms of previous regional and local research and relevant problem domains. Statements concerning significance shall contain a detailed, well-reasoned argument for the property's research potential in contributing to the understanding of cultural patterns, processes or activities important to the history or prehistory of the locality, region or nation, or other criteria of significance. Conclusions concerning insignificance likewise, shall be fully documented and contain detailed and well-reasoned arguments as to why the property fails to display adequate research potential or other characteristics adequate to meet National Register criteria of significance. For example, conclusions concerning significance or insignificance relating solely to the lack of contextual integrity due to plow disturbance or the lack of subsurface deposits will be considered inadequate. Where appropriate, due consideration should be given to the data potential of such variables as site functional

characteristics, horizontal intersite or intrasite spatial patterning of data and the importance of the site as a representative systemic element in the patterning of human behavior. All report conclusions and recommendations shall be logically and explicitly derived from data discussed in the report.

(3) The significance or insignificance of cultural resources can be determined adequately only within the context of the most recent available local and regional data base. Consequently the evaluation of specific individual cultural loci examined during the course of contract activities shall relate these resources not only to previously known cultural data but also to a synthesized interrelated corpus of data including those data generated in the present study.

(4) Where appropriate, the Contractor shall provide alternative mitigation measures for significant resources which will be adversely impacted. Data will be provided to support the need for mitigation and the relative merits of each mitigation design will be discussed. Preservation of significant cultural resources is nearly always considered preferable to recovery of data through excavation. When a significant site can be preserved for an amount reasonably comparable to, or less than the amount required to recover the data, full consideration shall be given to this course of action.

k. References (American Antiquity Style).

l. Appendices (Maps, Correspondence, etc.). A copy of this Scope of Work and, when stipulated by the Contracting Officer, review comments shall be included as appendices to the final report of investigations.

C-5.4. The above items do not necessarily have to be discrete sections; however, they should be readily discernible to the reader.

C-5.5. In order to prevent potential damage to cultural resources, no information shall appear in the body of the report which would reveal precise resource location. All maps which indicate or imply precise site locations shall be included in reports as a readily removable appendix (e.g. envelope).

C-5.6. No logo or other such organizational designation shall appear in any part of the report (including tables or figures) other than the title page.

C-5.7. Unless specifically otherwise authorized by the Contracting Officer, all reports shall utilize permanent site numbers assigned by the state in which the study occurs.

C-5.8. All appropriate information (including typologies and other classificatory units) not generated in these contract activities shall be suitably referenced.

C-5.9. Reports shall contain site specific maps. Site maps shall indicate site datum(s), location of data collection units (including shovel cuts, subsurface test units and surface collection units), site boundaries in relation to proposed project activities, site grid systems (where appropriate), and such other items as the Contractor may deem appropriate to the purposes of this contract.

C-5.10. Information shall be presented in textual, tabular, and graphic forms, whichever are most appropriate, effective and advantageous to communicate necessary information. All tables, figures and maps appearing in the report shall be of publishable quality.

C-5.11. Any abbreviated phrases used in the text shall be spelled out when the phrase first occurs in the text. For example use "State Historic Preservation Officer (SHPO)" in the initial reference and thereafter "SHPO" may be used.

C-5.12. The first time the common name of a biological species is used it should be followed by the scientific name.

C-5.13. In addition to street addresses or property names, sites shall be located on the Universal Transverse Mercator (UTM) grid.

C-5.14. Generally, all measurements should be metric.

C-5.15. As appropriate, diagnostic and/or unique artifacts, cultural resources or their contexts shall be shown by drawings or photographs.

C-5.16. Black and white photographs are preferred except when color changes are important for understanding the data being presented. No instant type photographs may be used.

C-5.17. Negatives of all black and white photographs and/or color slides of all places included in the final report shall be submitted to the Contracting Officer.

C-6. SUBMITTALS.

C-6.1. An extensive management summary shall be submitted, in accordance with the schedule in paragraph C-7.1, to the Contracting Officer within 14 days of the completion of survey and initial testing. The management summary shall describe survey and initial testing methods and the data yielded by those methods. Where survey data, initial testing data and other sources of data are adequate, the Contractor shall evaluate cultural resources identified during survey activities in terms of eligibility for inclusion in the National Register of Historic Places. The evaluation shall be consistent with requirements in paragraph C-5.3.j. of this Scope of Work. Where inadequate data exist for such an evaluation, the Contractor shall recommend specific additional studies, as described in paragraph C-4.4.b. of this Scope of Work, necessary to obtain adequate data for such National

Register evaluation. The management summary shall include project maps showing boundaries of discovered cultural resources relative to project rights-of-way. The management summary shall also contain recommendations, based on geomorphic and other data, concerning the need for deep cultural resources testing and the type, numbers and locations of needed deep test units.

C-6.2. The Contractor shall submit 4 copies of the draft report and one unboun original and 25 copies with high quality professional binding, of the final report which include appropriate revisions in response to the Contracting Officer's comments.

C-6.3. The Contractor shall submit under separate cover 4 copies of appropriate 15' quadrangle maps (7.5' when available) or other site drawings which show exact boundaries of all cultural resources within the project area and their relationship to project features.

C-6.4. The Contractor shall submit to the Contracting Officer completed National Register forms including photographs, maps, and drawings in accordance with the National Register Program, if any sites inventoried during the survey are found to meet the criteria of eligibility for nomination and for determination of significance. The completed National Register forms shall be submitted with the final report.

C-6.5. At any time during the period of service of this contract, upon the written request of the Contracting Officer, the Contractor shall submit, within 15 calendar days, any portion or all field records described in paragraph C-1.4 without additional cost to the Government.

C-6.6. When cultural resources are located during intensive survey activities, the Contractor shall supply the appropriate State Historic Preservation Office with completed site forms, survey report summary sheets, maps or other forms as appropriate. Blank forms may be obtained from the State Historic Preservation Office. Copies of such completed forms and maps shall be submitted to the Contracting Officer within 30 calendar days of the end of fieldwork.

C-6-7. The Contractor shall prepare and submit with the final report, a site card for each identified resource or aggregate resource. These site cards do not replace state approved prehistoric, historic, or architectural forms or Contractor designed forms. These 5 X 8 inch cards shall be color-coded. White cards shall be used for prehistoric sites, blue cards for historic sites, green for architectural sites and yellow cards for potentially significant sites. Sites fitting two or more categories will have two or more appropriate cards. This site card shall contain th following information, to the degree permitted by the type of study authorized:

a. Site number

b. Site name

c. Location: section, township, and UTM coordinates (for procedures in determining UTM coordinates, refer to How to Complete National Register Forms, National Register Program, Volume 2.

d. County and state

e. Quad maps

f. Date of record

g. Description of site

h. condition of site

i. Test excavation results

j. Typical artifacts

k. Chronological position (if known)

l. Relation to project

m. Previous studies and present contract number

n. Additional remarks

C-6.8. Documentation. The Contractor shall submit detailed monthly progress reports to the Contracting Officer by the 7th day of every month for the duration of the contract. These reports will contain an accurate account of all field work, laboratory procedures and results in sufficient detail to allow monitoring of project progress.

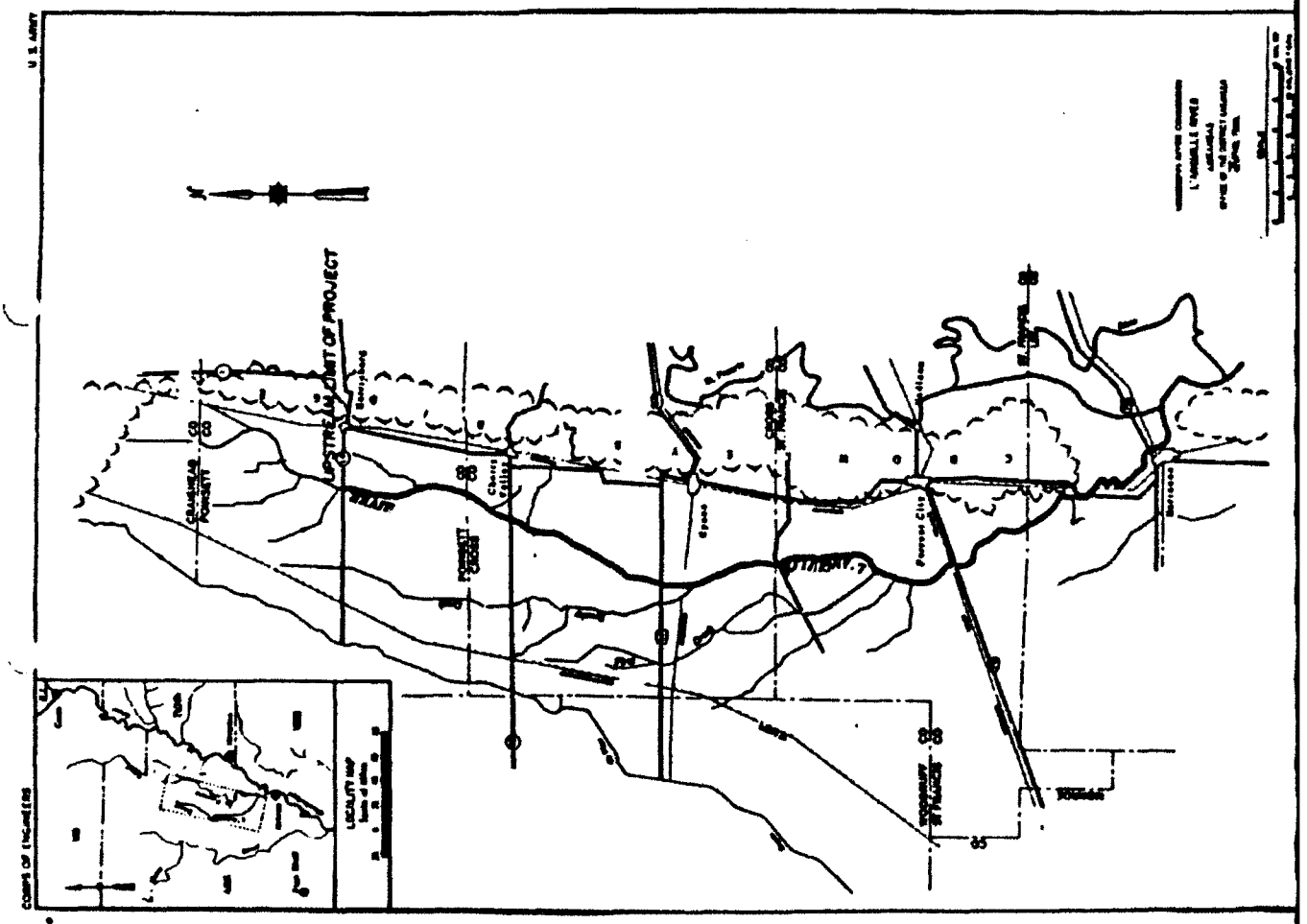
C-7. SCHEDULE.

C-7.1. The Contractor shall, unless delayed due to causes beyond his control and without his fault or negligence, complete all work and services under this contract within the following time limitations.

Activity	Completion Time (In calendar days beginning with acknowledged date of receipt of notice to proceed)
Begin Survey/Initial Testing Fieldwork	20
Submittal Management Summary	286
Submittal of Draft Report of Investigations	689

Submittal of Final Report of Investigations	776

C-7.2. The Contractor shall make any required corrections after review by the Contracting Officer. The Contracting Officer may defer Government review comments pending receipt of review comments from the State Historic Preservation Officer or other reviewing agencies. More than one series of draft report corrections may be required. In the event that the government review period is exceeded and upon request of the Contractor, the contract period will be extended automatically on a calendar day for day basis. Such extension shall be granted at no additional cost to the Government.

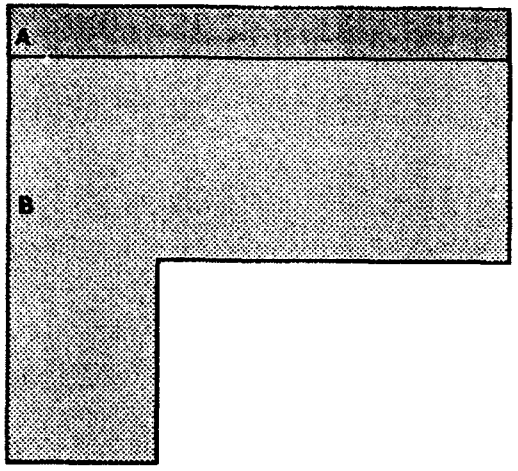


APPENDIX VIII

SOIL PROFILES FROM TESTED SITES

by

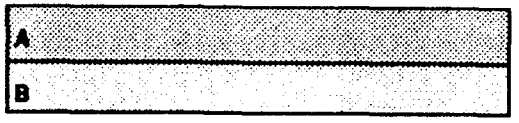
David G. Anderson
Garrow & Associates, Inc.



Site 3LE141 (LRP-001) West Wall Profile

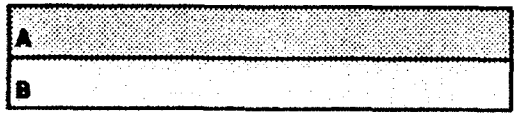
Horizon	Depth	Description	Texture	Color
A	0-10 cm	Disk/plowzone (loose)	Silt	10YR4/3
B	10-90 cm	Subplowzone (slightly mottled)	Silt-clay loess	10YR3/4
		Mottling consists of small black flecks (manganese dioxide?) that increase in incidence below 30 cm.		

Note: The soil profile from this unit was examined by the project soil scientist (Appendix IV, 'Bridge Site 1' Profile).



Site 3LE142 (LRP-002) East Wall Profile

Horizon	Depth	Description	Texture	Color
A	0-11 cm	Disk/plowzone (loose)	Silt-clay	10YR5/4
B	11-21 cm	Subplowzone (compact, mottled)	Silt-clay loess	10YR6/3
		Mottling 10YR5/6. Clay dominates the subplowzone deposits.		

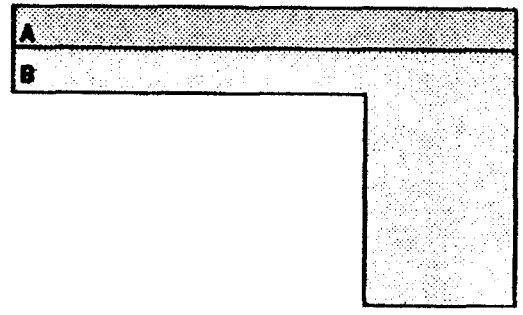


Site 3LE143 (LRP-003) East Wall Profile

Horizon	Depth	Description	Texture	Color
A	0-10 cm	Disk/plowzone (loose)	Silt-clay	10YR6/3
B	10-20 cm	Subplowzone (compact, mottled)	Silt-clay loess	10YR6/6
		Mottling 10YR6/2. Clay dominates the subplowzone deposits.		

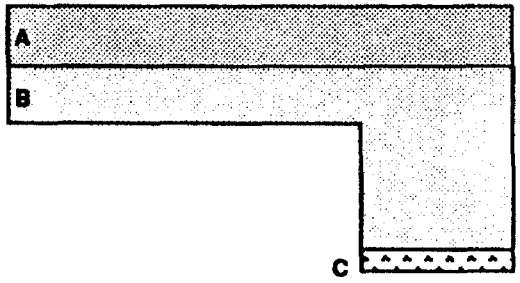
Note: The soil profile from this unit was examined by the project soil scientist (Appendix IV, Site 3 Profile).





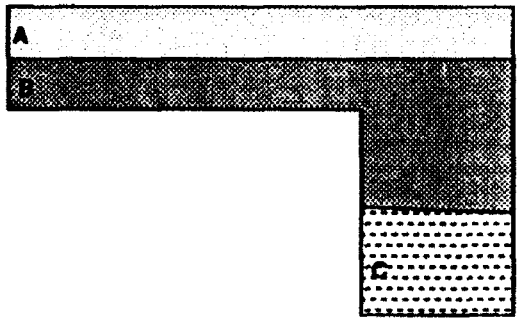
Site 3LE144 (LRP-004) North Wall Profile

Horizon	Depth	Description	Texture	Color
A	0-8 cm	Disk/plowzone (loose)	Silt-clay loess	10YR5/4
B	8-58 cm	Subplowzone (compact, mottled)	Silt-clay loess	10YR6/6
		Mottling includes gray silt-clay (10YR7/2). Charcoal flecks occasionally noted below the plowzone.		



Site 3LE145 (LRP-005) South Wall Profile

Horizon	Depth	Description	Texture	Color
A	0-12 cm	Disk/plowzone (loose)	Silt-clay loess	10YR5/4
B	12-48 cm	Subplowzone (compact)	Silt-clay loess	10YR6/6
C	48->52 cm	B-Horizon (compact, mottled)	Silt clay loess	10YR6/6
		Mottling includes orange silt clay.		



Site 3LE149 (LRP-009) North Wall Profile

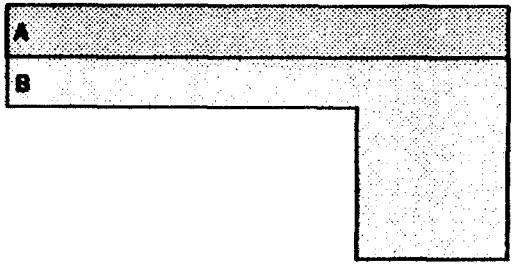
Horizon	Depth	Description	Texture	Color
A	0-10 cm	Disk/plowzone (loose)	Silt-clay	10YR6/3
B	10-40 cm	Subplowzone (compact)	Silt-clay loess	10YR3/2
C	40-60 cm	B-Horizon (compact)	Sandy-silt/clay	10YR6/4
		B/C Interface is sharp and pronounced (old point-bar deposit overlain by loess?)		





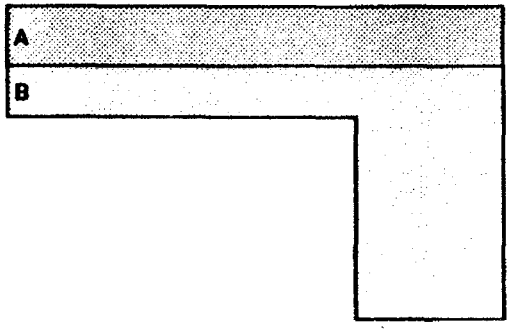
Site 3LE150 (LRP-010) East Wall Profile

Horizon	Depth	Description	Texture	Color
A	0-10 cm	Disk/plowzone (loose)	Silt-clay	10YR5/4
B	10->30 cm	Subplowzone (compact)	Clay-silt	10YR7/2
		Dark gray compact clay.		



Site 3LE152 (LRP-012) East Wall Profile

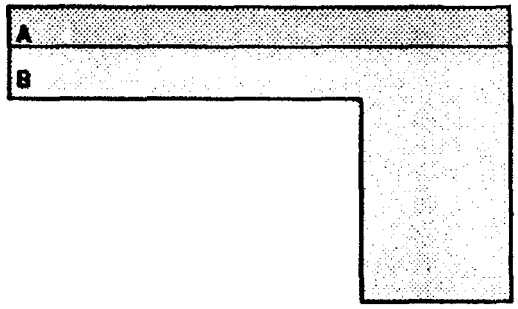
Horizon	Depth	Description	Texture	Color
A	0-10 cm	Disk/plowzone (loose)	Silt-clay	10YR5/4
B	10->50 cm	Subplowzone (compact)	Clay-silt	10YR7/2
		Gray clay w/iron oxide mottles (10YR6/8).		



Site 3LE153 (LRP-013) North Wall Profile

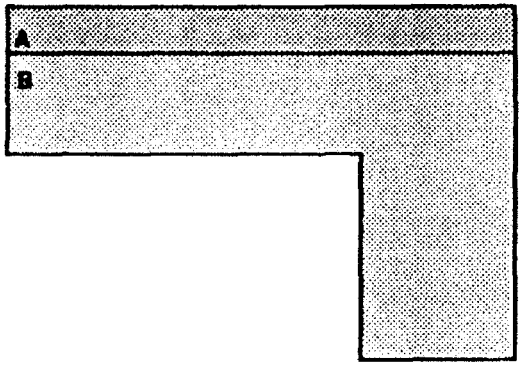
Horizon	Depth	Description	Texture	Color
A	0-12 cm	Disk/plowzone (loose)	Silt-clay	10YR5/4
B	12-62 cm	Subplowzone (compact)	Clay-silt	10YR7/2
		Gray clay w/iron oxide mottles (10YR6/8).		





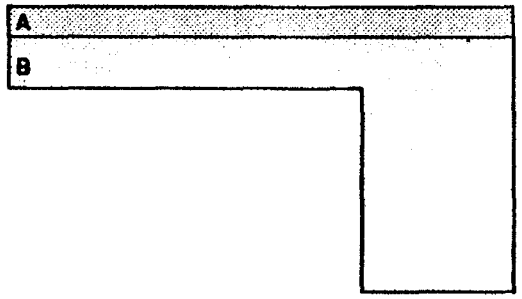
Site 3LE154 (LRP-014) South Wall Profile

Horizon	Depth	Description	Texture	Color
A	0-8 cm	Disk/plowzone (loose)	Silt-clay	10YR5/4
B	8-58 cm	Subplowzone (compact)	Silt-clay loess	10YR7/2
		Gray clay w/iron oxide mottles (10YR6/8).		



Site 3LE155 (LRP-015) West Wall Profile

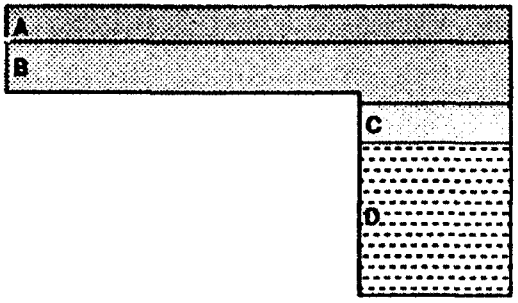
Horizon	Depth	Description	Texture	Color
A	0-9 cm	Disk/plowzone (loose)	Silt-clay	10YR5/4
B	9-69 cm	Subplowzone (compact)	Clay-silt	10YR7/2
		Gray clay w/iron oxide mottles (10YR6/8).		



Site 3LE156 (LRP-016) West Wall Profile

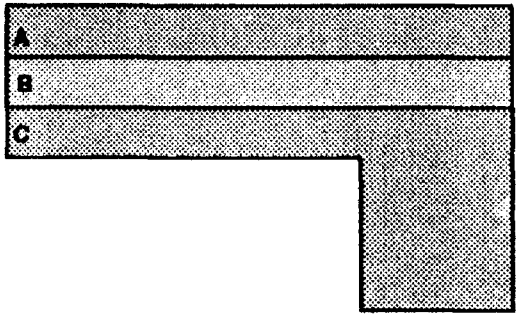
Horizon	Depth	Description	Texture	Color
A	0-6 cm	Disk/plowzone (loose)	Silt-clay	10YR5/4
B	6-56 cm	Subplowzone (compact)	Clay-silt	10YR7/2
		Gray clay w/iron oxide mottles (10YR6/8).		





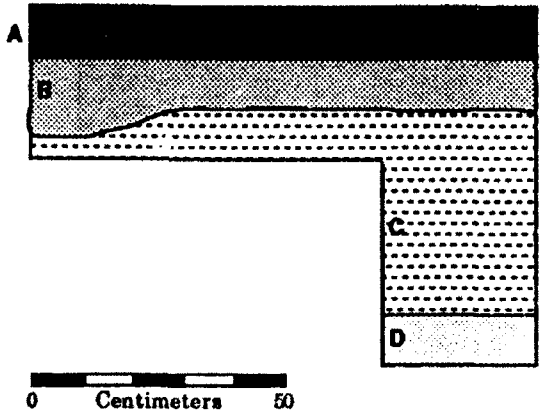
Site 3LE157 (LRP-017) North Wall Profile

Horizon	Depth	Description	Texture	Color
A	0-7 cm	Disk/plowzone (loose)	Silt-clay	10YR4/3
B	7-19 cm	Old plowzone (compact)	Silt-clay	10YR5/4
C	19-27 cm	Subplowzone (mottled) Mottling 10YR5/4.	Clay-silt	10YR6/2
D	27-57 cm	B-Horizon	Silt-loam	10YR6/4



Site 3LE158 (LRP-018) South Wall Profile

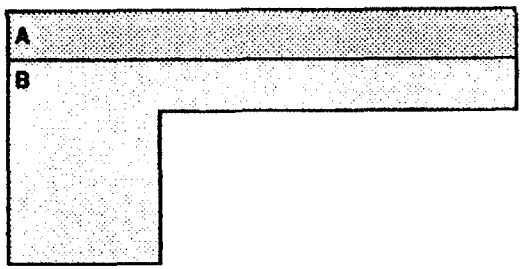
Horizon	Depth	Description	Texture	Color
A	0-10 cm	Disk/plowzone (loose)	Silt-clay	10YR4/3
B	10-20 cm	Subplowzone (compact)	Silt-clay	10YR5/6
C	20-60 cm	B-Horizon (compact) B/C Interface indistinct; soil progressively sandier with increasing depth.	Sandy clay-loam	10YR4/3



Site 3LE159 (LRP-019) West Wall Profile

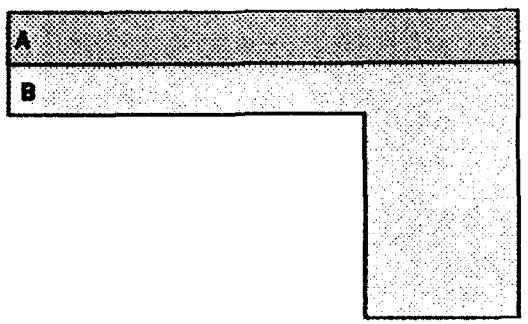
Horizon	Depth	Description	Texture	Color
A	0-10 cm	Disk/plowzone (loose)	Silt-clay loam	10YR3/3
B	10-20 cm	Old plowzone (compact) Charcoal flecks and historic debris present; possible feature in SW corner.	Silt-clay loam	10YR5/3
C	20-60 cm	Subplowzone (mottled B-Horizon) Mottling 7.5YR5/8.	Sandy loam	10YR5/3
D	60-70 cm	B-Horizon (compact)	Silt-loam	10YR7/6

Note: The soil profile from this unit was examined by the project soil scientist (Appendix IV, Site 19 Profile).



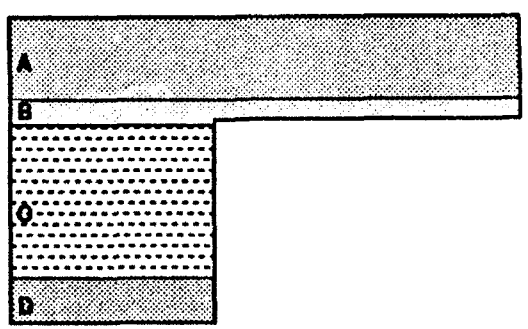
Site 3LE161 (LRP-021) East Wall Profile

Horizon	Depth	Description	Texture	Color
A	0-10 cm	Disk/plowzone (loose)	Silt-clay loess	10YR5/4
B	10-50 cm	Subplowzone (compact, mottled) Mottling 10YR7/2.	Silt-clay loess	10YR5/6



Site 3LE162 (LRP-022) North Wall Profile

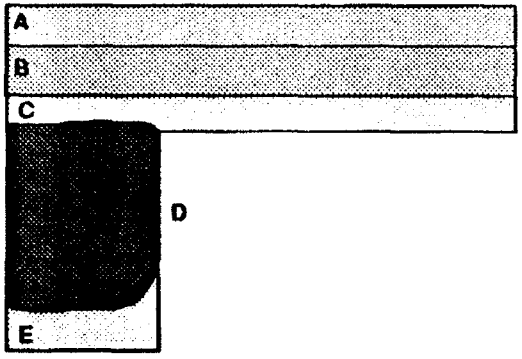
Horizon	Depth	Description	Texture	Color
A	0-10 cm	Disk/plowzone (loose)	Silt-clay loess	10YR5/4
B	10-60 cm	Subplowzone (compact, mottled) Mottling 10YR7/2.	Silt-clay loess	10YR6/6



Site 3LE163 (LRP-023) North Wall Profile

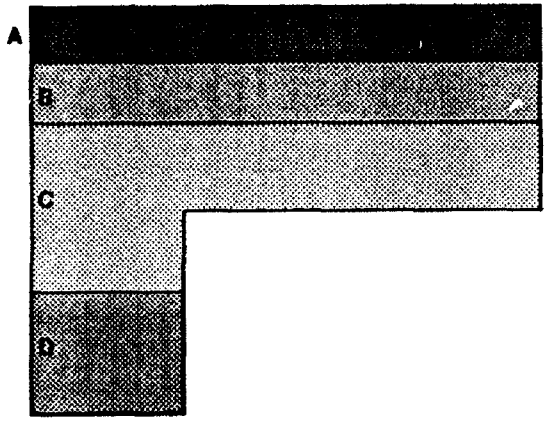
Horizon	Depth	Description	Texture	Color
A	0-16 cm	Disk/plowzone (loose)	Silt-clay	10YR6/4
B	16-21 cm	Waterlain sands (bedded)	Sand	10YR6/6
C	21-51 cm	Dense historic dump/midden	Silt-clay	10YR3/3
D	51-60 cm	Submidden loess (compact)	Silt-clay	10YR6/2





Site 3LE164 (LRP-024) East Wall Profile

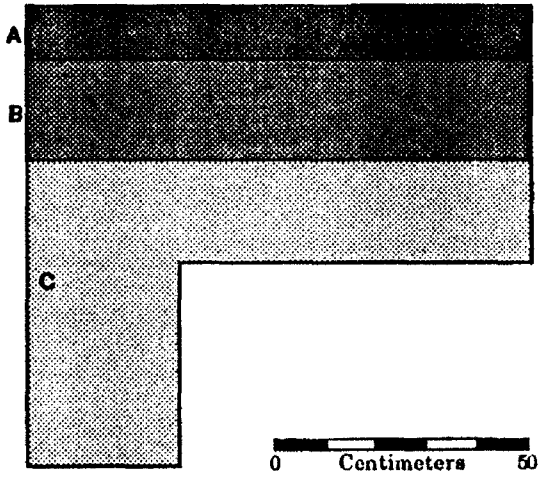
Horizon	Depth	Description	Texture	Color
A	0-8 cm	Disk/plowzone (loose)	Silt-clay loess	10YR5/4
B	8-18 cm	Old plowzone (compact)	Silt-clay loess	10YR4/4
C	18-25 cm	Subplowzone (compact B)	Silt-clay loess	10YR6/6
D	25-60 cm	Feature (well defined, pit?)	Silt-clay	10YR3/2
E	60-68 cm	B-Horizon (compact)	Silt-clay loess	10YR6/6



Site 3LE166 (LRP-026) South Wall Profile

Horizon	Depth	Description	Texture	Color
A	0-11 cm	Disk/plowzone (loose)	Silt-clay loess	10YR3/3
B	11-23 cm	Old plowzone (compact)	Silt-clay loess	10YR4/3
C	23-56 cm	Subplowzone (mottled B-Horizon) Mottling 2.5YR5/2.	Silt-clay loess	7.5YR4/6
D	56->70 cm	B-Horizon (compact, mottled) (C/D Interface indistinct)	Silt-loess	10YR7/6

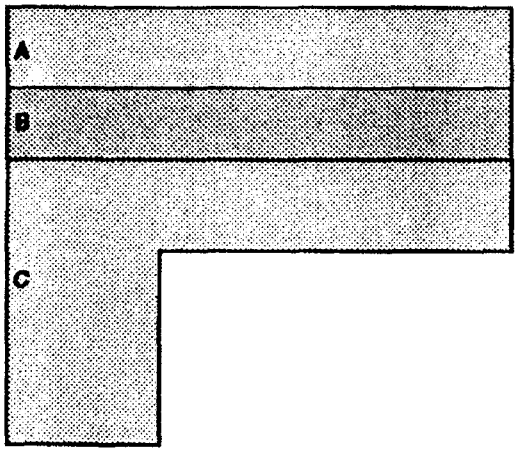
Note: The soil profile from this unit was examined by the project soil scientist (Appendix IV, Site 26 Profile).



Site 3LE175 (LRP-035) North Wall Profile

Horizon	Depth	Description	Texture	Color
A	0-10 cm	Disk/plowzone (loose)	Silt	10YR3/2
B	10-30 cm	Midden zone (plow disturbed)	Silt	10YR4/3
C	30-90 cm	Subplowzone (compact B-Horizon) Mottling 7.5 YR4/4.	Silt-clay loess	10YR5/6

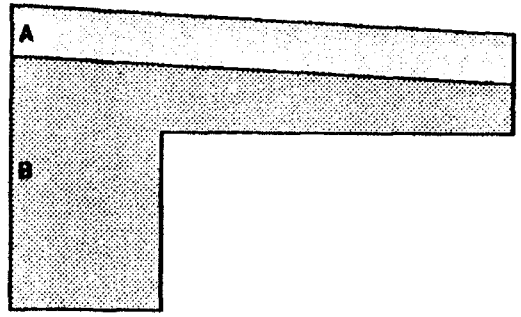
Note: The soil profile from this unit was examined by the project soil scientist (Appendix IV, Site 35 Profile).



Site 3LE176 (LRP-036) North Wall Profile

Horizon	Depth	Description	Texture	Color
A	0-16 cm	Disk/plowzone (loose)	Silt	10YR5/3
B	16-30 cm	Old plowzone (compact) Faint midden level?	Silt-clay	10YR4/3
C	30-86 cm	Subplowzone (compact B-Horizon)	Silt-clay loess	7.5YR5/8

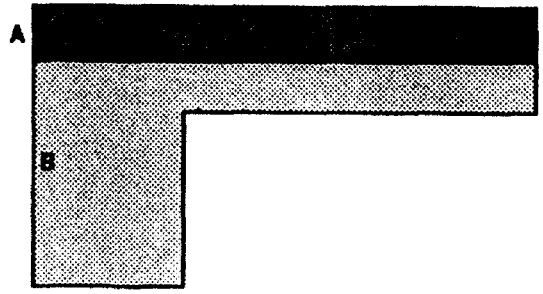
Note: The soil profile from this unit was examined by the project soil scientist (Appendix IV, Site 36 Profile).



Site 3LE177 (LRP-037) West Wall Profile

Horizon	Depth	Description	Texture	Color
A	0-10 cm	Disk/plowzone (loose)	Silt-clay loess	10YR6/6
B	10-65 cm	Subplowzone (compact B-Horizon) Mottling (10YR5/6) infrequent.	Silt-clay loess	10YR4/4

Note: Unit is on a steep slope.

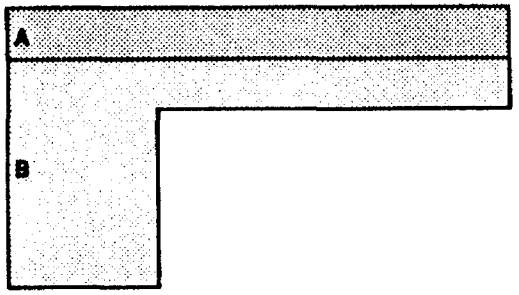


Site 3LE179 (LRP-039) North Wall Profile

Horizon	Depth	Description	Texture	Color
A	0-11 cm	Disk/plowzone (loose)	Clay-loam	10YR3/3
B	11-55 cm	Subplowzone (compact B-Horizon) Mottling 10YR5/8.	Clay	10YR5/1

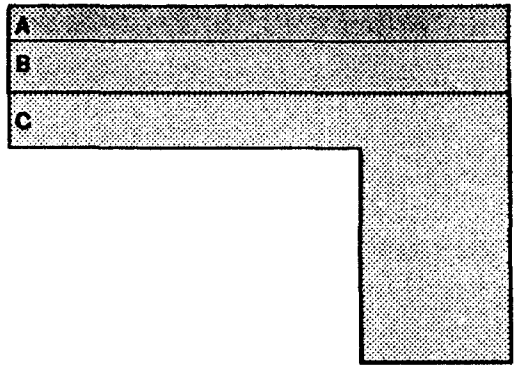
Note: The soil profile from this unit was examined by the project soil scientist (Appendix IV, Site 39 Profile).





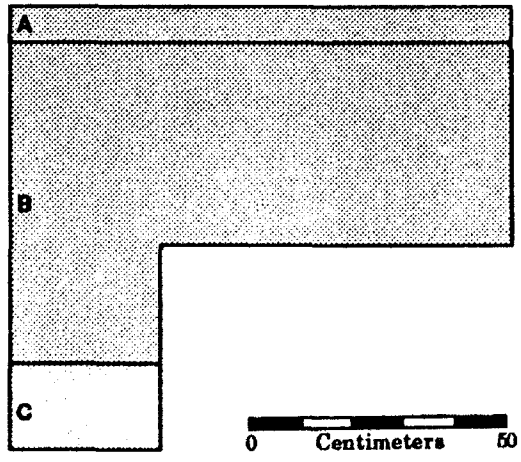
Site 3LE180 (LRP-040) West Wall Profile

Horizon	Depth	Description	Texture	Color
A	0-10 cm	Disk/plowzone (loose)	Silt-clay loess	10YR5/6
B	10-55 cm	Subplowzone (compact B, mottled) Mottling includes gray silt-clay (10YR7/2).	Silt-clay loess	10YR6/3



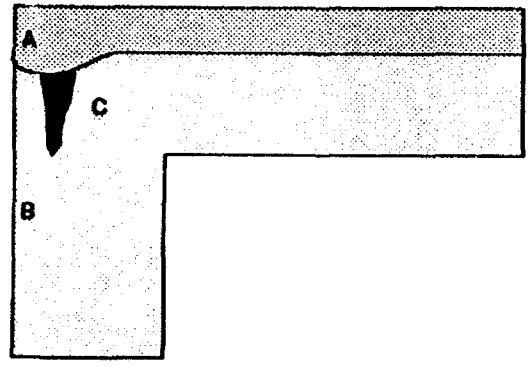
Site 3LE183 (LRP-043) West Wall Profile

Horizon	Depth	Description	Texture	Color
A	0-7 cm	Disk/plowzone (loose)	Silt-clay loess	10YR4/3
B	7-17 cm	Subplowzone (compact B-Horizon)	Silt-clay loess	10YR4/4
C	17-70 cm	B-Horizon (compact)	Silt-clay loess	10YR5/4



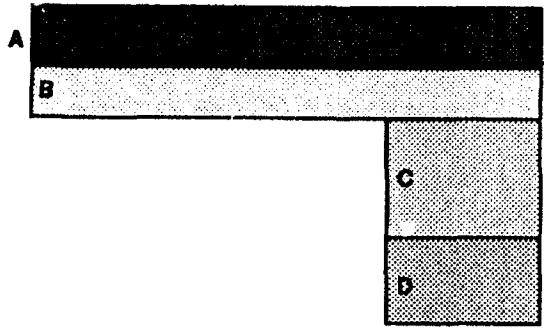
Site 3LE184 (LRP-044) East Wall Profile

Horizon	Depth	Description	Texture	Color
A	0-7 cm	Disk/plowzone (loose)	Silt-clay loess	10YR5/4
B	7-70 cm	Subplowzone (compact B, mottled)	Silt-clay loess	7.5YR5/4
C	70-87 cm	B-Horizon (compact, mottled) Mottling includes gray silt-clay (10YR7/2).	Silt-clay loess	10YR6/6



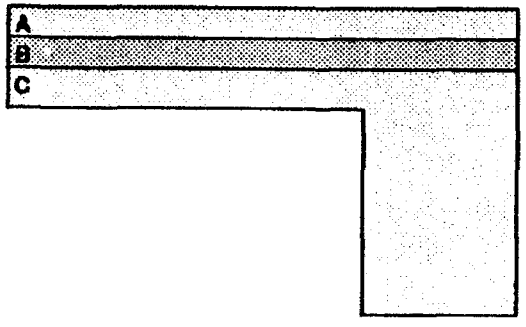
Site 3LE190 (LRP-050) North Wall Profile

Horizon	Depth	Description	Texture	Color
A	0-9 cm	Disk/plowzone (loose)	Silt-clay loess	10YR5/4
B	9-69 cm	Subplowzone (compact B)	Silt-clay loess	10YR6/6
C	15-30 cm	Burned tree root (non-cultural)	Silt-clay loess	10YR2/1



Site 3LE192 (LRP-052) North Wall Profile

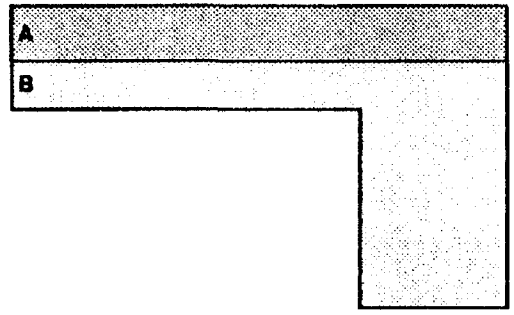
Horizon	Depth	Description	Texture	Color
A	0-12 cm	Disk/plowzone (loose)	Silt-clay	10YR3/3
B	12-22 cm	Old plowzone (compact) A/B Interface sharp, pronounced.	Silt-clay	10YR6/3
C	22-45 cm	Subplowzone (compact B, mottled) Mottling includes gray silt-clay (10YR7/2).	Silt-clay	10YR5/8
D	45-62 cm	B-Horizon (compact,mottled) Mottling includes brown clay (10YR5/6)	Clay	10YR5/1



Site 3LE193 (LRP-053) East Wall Profile

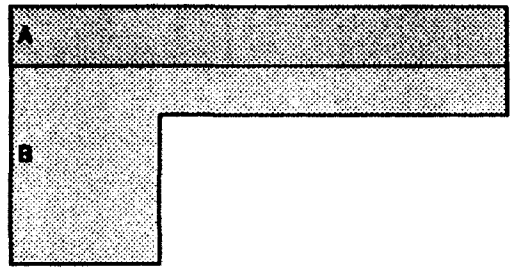
Horizon	Depth	Description	Texture	Color
A	0-6 cm	Disk/plowzone (loose)	Silt-clay	10YR6/4
B	6-12 cm	Old plowzone (compact)	Silt-clay	10YR5/4
C	12-60 cm	Subplowzone (compact B, mottled) Mottling consists of black flecks of iron and manganese concretions.	Clayey-silt	10YR6/6





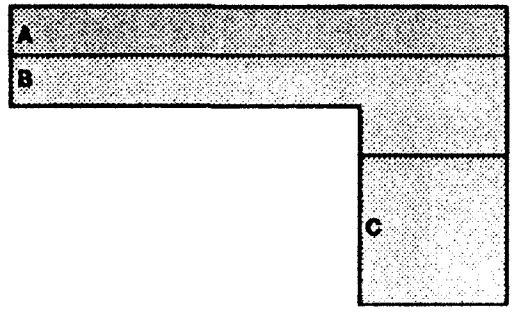
Site 3LE195 (LRP-056) North Wall Profile

Horizon	Depth	Description	Texture	Color
A	0-11 cm	Disk/plowzone (loose)	Silt-clay	10YR4/4
B	11-61 cm	Subplowzone (compact B, mottled) Mottling 10YR5/3	Silt-clay	10YR6/6



Site 3LE197 (LRP-058) North Wall Profile

Horizon	Depth	Description	Texture	Color
A	0-12 cm	Disk/plowzone (loose)	Silt-clay	10YR4/4
B	12-52 cm	Subplowzone (compact B, mottled) (12-22cm looks disturbed - old plowzone?)	Silt-clay	10YR5/6



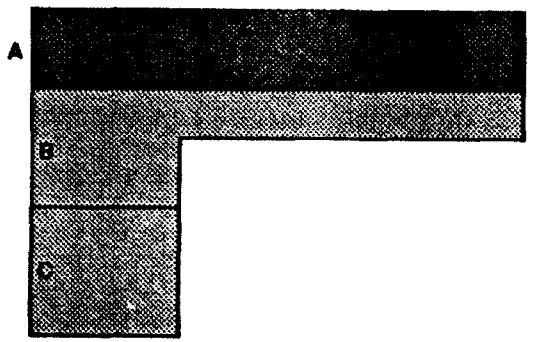
Site 3LE198 (LRP-059) North Wall Profile

Horizon	Depth	Description	Texture	Color
A	0-10 cm	Disk/plowzone (loose)	Silt-clay	10YR4/4
B	10-30 cm	Subplowzone (compact B, mottled) Mottling 10YR5/3.	Silt-clay	10YR5/6
C	30-60 cm	B-Horizon (compact) B/C Interface indistinct.	Silt-clay	10YR5/6

0 Centimeters 50

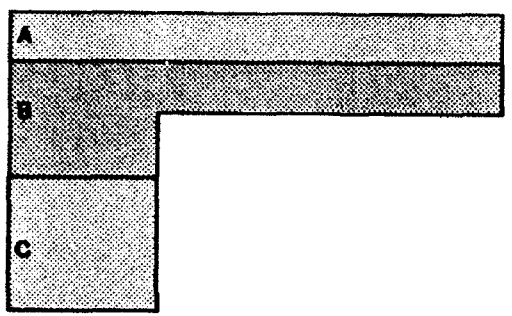
ARKANSAS

L'Anguille River Survey Project



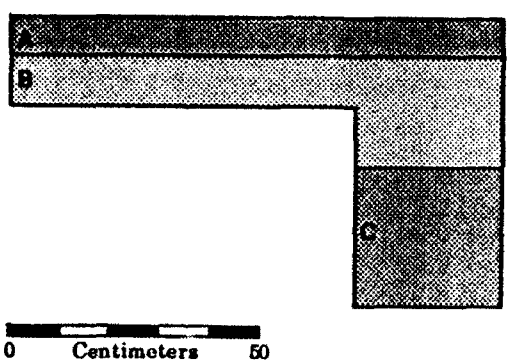
Site 3LE201 (LRP-062) East Wall Profile

Horizon	Depth	Description	Texture	Color
A	0-16 cm	Disk/plowzone (loose)	Silt-loam	10YR3/4
B	16-40 cm	Subplowzone (compact)	Silt-clay	10YR4/8
C	40-66 cm	B-Horizon (compact) B/C Interface indistinct.	Clay loam	10YR4/2



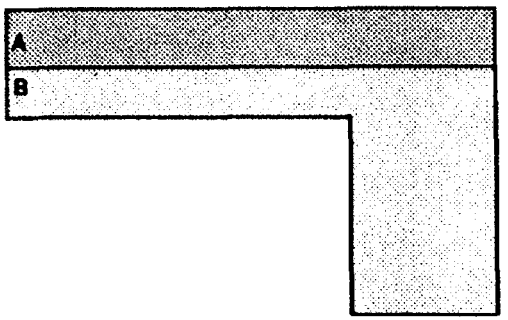
Site 3LE202 (LRP-063) North Wall Profile

Horizon	Depth	Description	Texture	Color
A	0-10 cm	Disk/plowzone (loose)	Silt-loam	10YR5/3
B	10-33 cm	Subplowzone (compact B, mottled) Mottling 10YR5/3.	Silt-clay	10YR4/3
C	33-60 cm	B-Horizon (compact, mottled) Mottling 10YR4/3; B/C Interface indistinct.	Silt-clay	10YR5/3



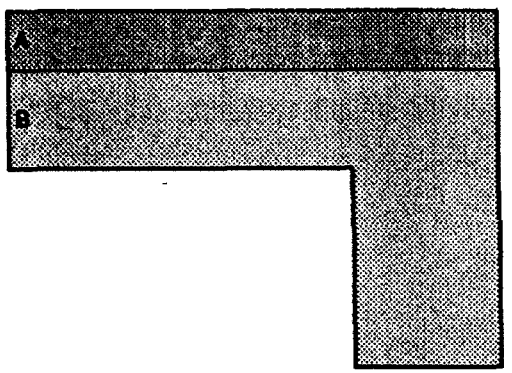
Site 3LE203 (LRP-064) East Wall Profile

Horizon	Depth	Description	Texture	Color
A	0-8 cm	Disk/plowzone (loose)	Silt-loam	10YR4/3
B	8-30 cm	Subplowzone (compact B, mottled) Mottling 10YR3/4.	Silt-clay	10YR4/4
C	30-58 cm	B-Horizon (compact, mottled) Mottling 10YR4/6; B/C Interface indistinct.	Silt-clay	10YR4/3



Site 3LE205 (LRP-066) South Wall Profile

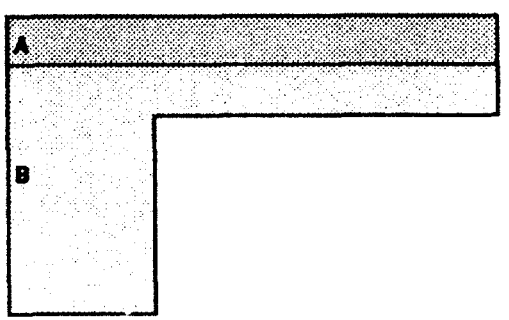
Horizon	Depth	Description	Texture	Color
A	0-12 cm	Disk/plowzone (loose)	Silt-clay	10YR5/3
B	12-62 cm	Subplowzone (compact B, mottled) Mottling 10YR5/3. Root disturbance widespread.	Silt-clay	10YR6/2



Site 3LE206 (LRP-069D) West Wall Profile

Horizon	Depth	Description	Texture	Color
A	0-12 cm	Disk/plowzone (loose)	Silt-clay	10YR4/3
B	12-72 cm	Subplowzone (compact B, mottled) Mottling 10YR4/3.	Silt-clay	2.5Y5/2

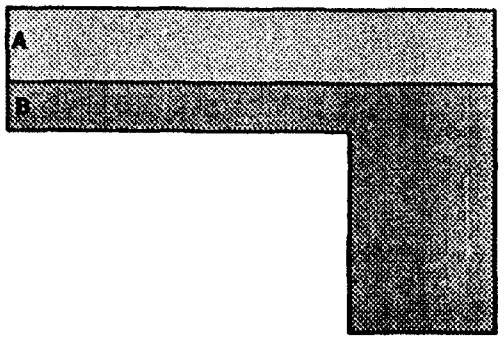
Note: The soil profile in the vicinity of this unit, and on the lower terrace ca. 15 m south, was examined by the project soil scientist (Appendix IV, Site 70 Profiles 1 and 2).



Site 3LE207 (LRP-071) North Wall Profile

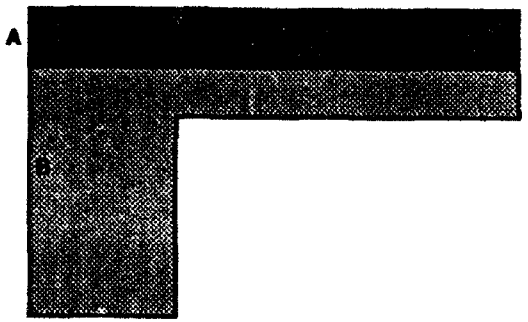
Horizon	Depth	Description	Texture	Color
A	0-10 cm	Disk/plowzone (loose)	Silt-loam	10YR5/3
B	10-60 cm	Subplowzone (compact B, mottled) Mottling 10YR5/6.	Silt-clay	10YR6/2





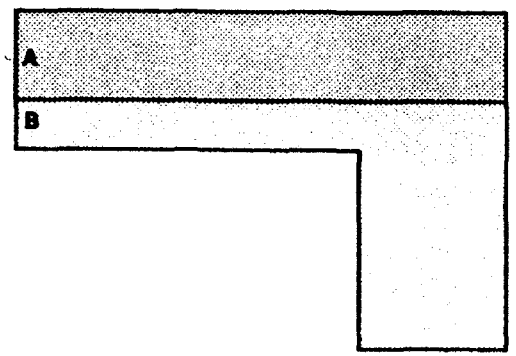
Site 3LE208 (LRP-072) North Wall Profile

Horizon	Depth	Description	Texture	Color
A	0-15 cm	Disk/plowzone (loose)	Silt-loam	10YR5/3
B	15-65 cm	Subplowzone (compact B, mottled) Mottling 10YR5/2.	Silt-clay	10YR4/4



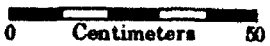
Site 3LE210 (LRP-074) South Wall Profile

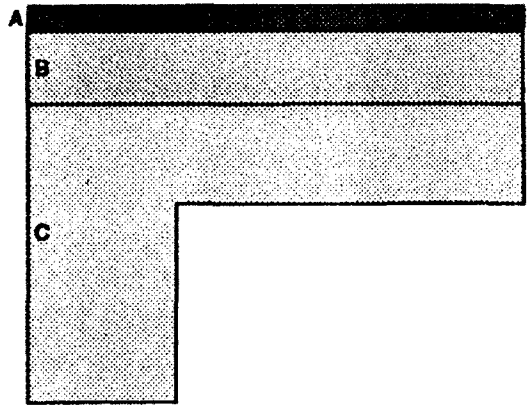
Horizon	Depth	Description	Texture	Color
A	0-12 cm	Disk/plowzone (loose)	Silt-loam	10YR3/3
B	12-62 cm	Subplowzone (compact B, mottled) Mottling 10YR5/2.	Silt-clay	10YR4/2



Site 3LE211 (LRP-075) North Wall Profile

Horizon	Depth	Description	Texture	Color
A	0-18 cm	Disk/plowzone (loose)	Silt-loam	10YR4/3
B	18-68 cm	Subplowzone (compact B, mottled) Mottling 10YR5/4.	Silt-clay	10YR6/2

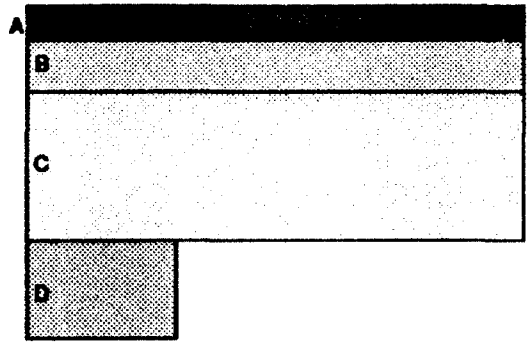




Site 3LE221 (LRP-183) East Wall Profile

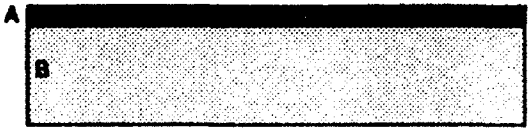
Horizon	Depth	Description	Texture	Color
A	0-5 cm	Humus zone (loose)	Silt-clay	10YR3/3
B	5-20 cm	B/E Horizon (compact B, mottled) Mottling 7.5YR5/6.	Silt-clay loess	10YR5/2
C	20-80 cm	B-Horizon (compact, mottled) Mottling 10YR5/2, 7.5 YR5/6.	Silt-clay loess	2.5Y5/4

Note: The soil profile in the vicinity of this unit was examined by the project soil scientist (Appendix IV, Site 183 Profile).



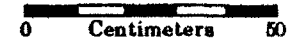
Site 3LE222 (LRP-184) Northwest Wall Profile

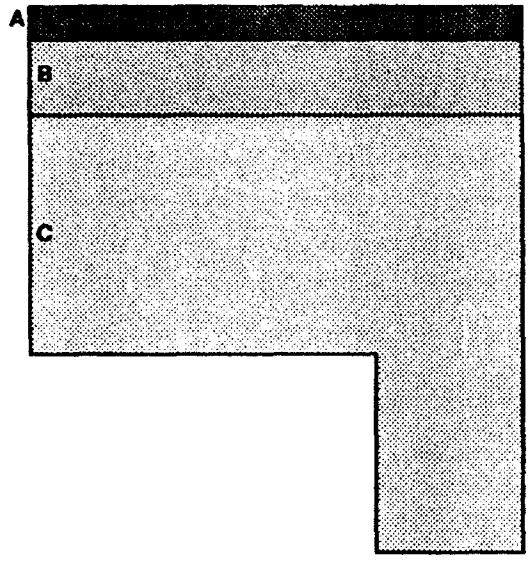
Horizon	Depth	Description	Texture	Color
A	0-7 cm	Humus zone (loose)	Silt-clay	10YR3/3
B	7-17 cm	Sandy loess (flood deposits?) Iron oxide mottling present.	Sand-silt	10YR6/2
C	17-47 cm	B-Horizon (compact)	Silt-clay loess	10YR7/2
D	47-67 cm	B-Horizon (compact)	Silt-clay loess	7.5YR5/6



Site 3LE223 (LRP-185) North Wall Profile

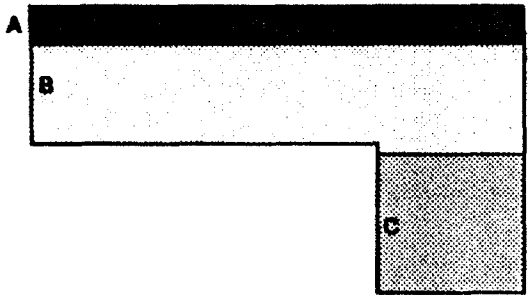
Horizon	Depth	Description	Texture	Color
A	0-4 cm	Disk/plowzone (loose)	Silt-clay	10YR3/3
B	4-24 cm	Subplowzone (compact, mottled) Mottling 10YR3/1.	Clay	2.5Y5/2





Site 3LE226 (LRP-188) North Wall Profile

Horizon	Depth	Description	Texture	Color
A	0-7 cm	Humus zone (loose)	Silt-clay	10YR3/3
B	7-22 cm	Disturbed humus/A (loose)	Silt-clay	10YR5/3
		A/B Interface indistinct; disturbance from logging.		
C	22-110 cm	B-Horizon (compact)	Silt-clay loess	10YR5/6



Site 3LE229 (LRP-191) North Wall Profile

Horizon	Depth	Description	Texture	Color
A	0-8 cm	Humus zone (loose)	Silt-clay	10YR3/3
B	8-30 cm	B-Horizon (compact)	Silt-clay loess	10YR6/4
C	30-58 cm	B-Horizon (compact)	Silt-clay loess	5YR4/4

