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of Engineers
Little Rock District

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ARCHEOLOGY IN THE ARKANSAS RIVER VALLEY: A CULTURAL RESOURCES SURVEY IN THE CENTRAL ARKANSAS RIVER VALLEY

LAKE DARDANELLE AND OZARK LAKE, ARKANSAS

BY

W. J. BENNETT, JR., ANNE FRANCES GETTYS, AUBRA LEE, LAWSON SMITH, AND BEVERLY WATKINS

ARCHEOLOGICAL ASSESSMENT REPORT NO. 47

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An extensive reconnaissance level survey designed to locate and to describe cultural resources within selected areas of Lake Dardanelle and Ozark Lake, Arkansas, was conducted for the U.S. Army Corps of Engineers, Little Rock, by Archeological Assessments, Inc., in the summer and fall of 1985. This project examined some 5,797 acres within Lake Dardanelle and 4,290 acres in Ozark Lake. Lands investigated included all fee-owned land within Ozark Lake as well as all public use areas and selected segments of shoreline within Lake Dardanelle. The effort involved an extensive background and literature review, geomorphological

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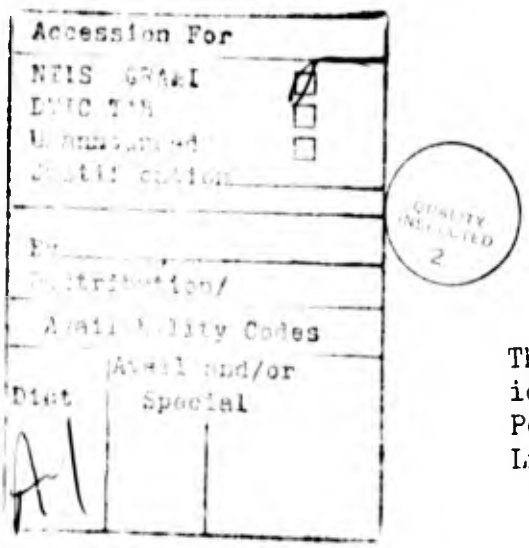

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ABSTRACT

An extensive reconnaissance level survey designed to locate and to describe cultural resources within selected areas of Lake Dardanelle and Ozark Lake, Arkansas, was conducted for the U. S. Army Corps of Engineers, Little Rock, by Archeological Assessments, Inc., in the summer and fall of 1985. This project examined some 5,797 acres within Lake Dardanelle and 4,290 acres in Ozark Lake. Lands investigated included all fee-owned land within Ozark Lake as well as all public use areas and selected segments of shoreline within Lake Dardanelle. The effort involved an extensive background and literature review, geomorphological reconnaissance, pedestrian survey, artifact analysis, and data synthesis. A total of 93 sites ranging in cultural affiliation from the Early Archaic Period to the Historic Period were examined. A discussion of site distribution within this portion of the Arkansas River Valley is presented.

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INTRODUCTION

Project Authorization

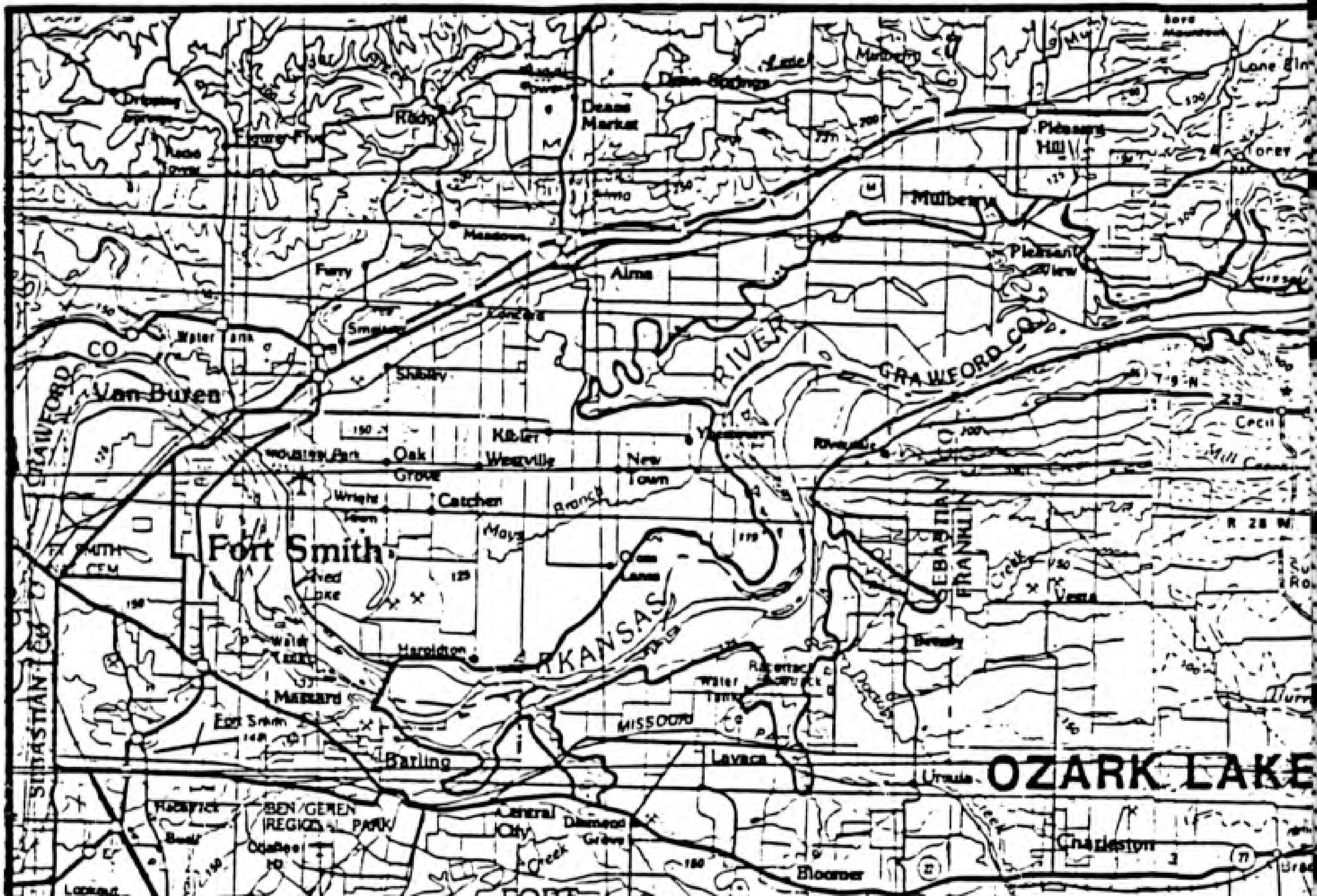
Under the authority of and in compliance with the National Historic Preservation Act of 1980 (Public Law 96-515) and other authorities the U. S. Army Engineering District, Little Rock, contracted with Archeological Assessments, Inc., for the performance of a reconnaissance level cultural resources survey within Lake Dardanelle and Ozark Lake, Arkansas. Work was authorized by Contract No. DACW03-84-D-0007, Order Numbers 0003 and 0004.

Project Area Location

The lands inspected for the presence of cultural resources which have surface manifestations or might be shallowly buried are situated in the federally-owned portions of the Arkansas River Valley in west-central Arkansas known as Lake Dardanelle and Ozark Lake. These two facilities comprise what is called the study area (Figure 1). Within these boundaries a total of 10,087 acres (5,797 within Lake Dardanelle and 4,290 within Ozark Lake) were examined on foot for the presence of cultural resources. Collectively, these areas are designated as the project area. They consist of all public use areas in both Lake Dardanelle and Ozark Lake, all of the fee-owned lands in Ozark Lake, and segments of the shoreline within Lake Dardanelle. The locations of the various parcels of land which comprise the project area are shown on appropriately marked USGS 7.5 minute quadrangle sheets submitted with this report.

Goals and Orientation

As originally planned, this effort was to be a rather traditional cultural resources survey of portions of the Lake Dardanelle facility. Since pre-inundation work in the area had been, by current standards, rather unsystematic and no further site locational or site evaluation work had been conducted within the facility since its construction, it was judged appropriate to initiate a data gathering effort in order to formulate a realistic and comprehensive cultural resource management program for this facility. The goals of this effort were to locate, describe, and evaluate previously unrecorded archeological sites in the areas examined. Results of this work were to be used to formulate management goals and directions for



Van Buren
CRAWFORD CO
Fort Smith
Alma
Mulberry
Pleasant View
Dean Springs
Oak Grove
Catcher
New Town
Barling
Lavaca
Charleston
OZARK LAKE
ARKANSAS
RIVER
FORT
CHAFFEE
MILITARY
RESERVATION
Backbone
Ridge
MOUNTAIN
Rye Hill
Greenwood
Hackett
Washburn
Montreal
Dayton
SEBASTIAN CO
LOGAN CO
Old Jenny Lind
Enterprise
Bonanza
Big Rock
Devils

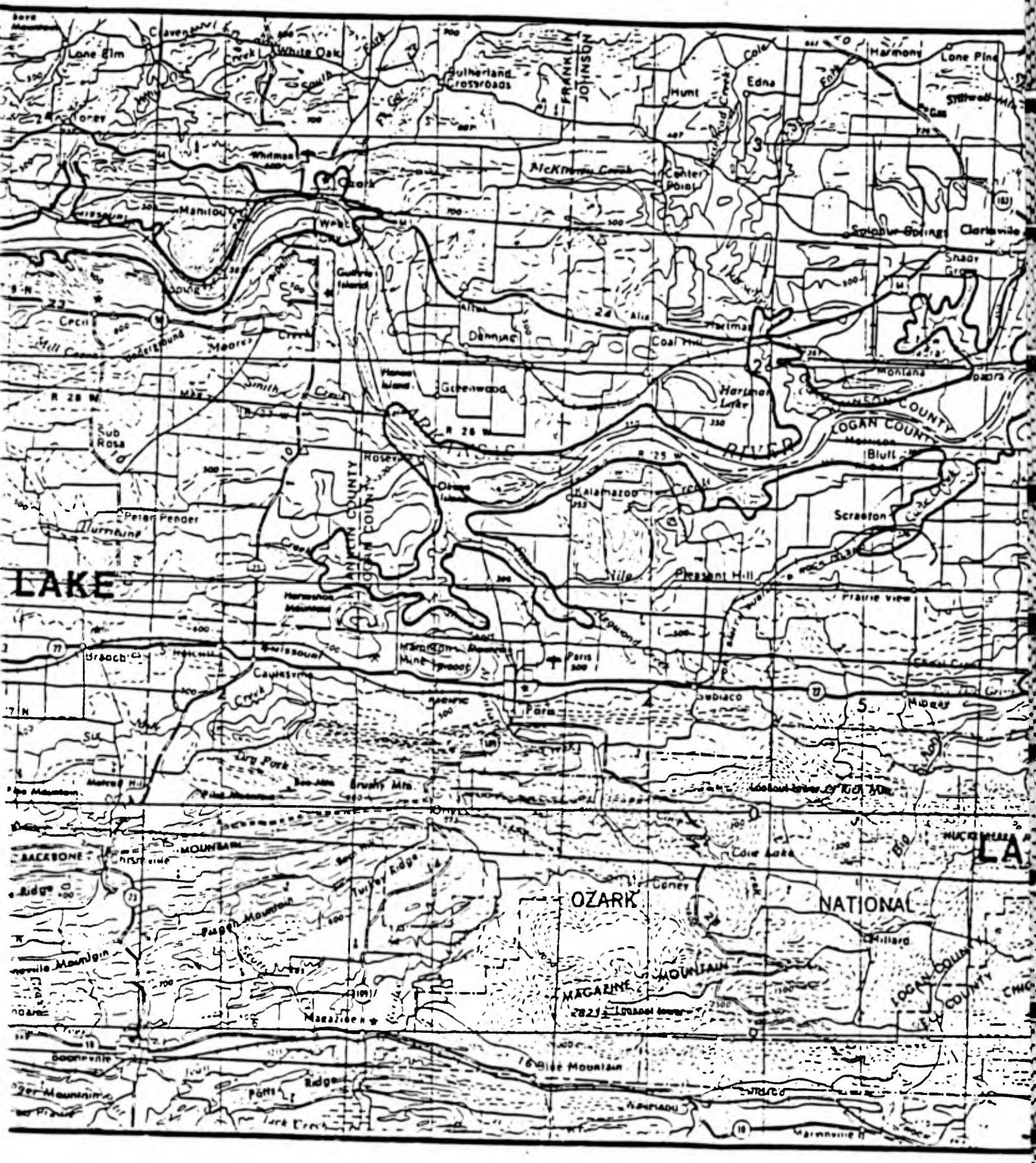
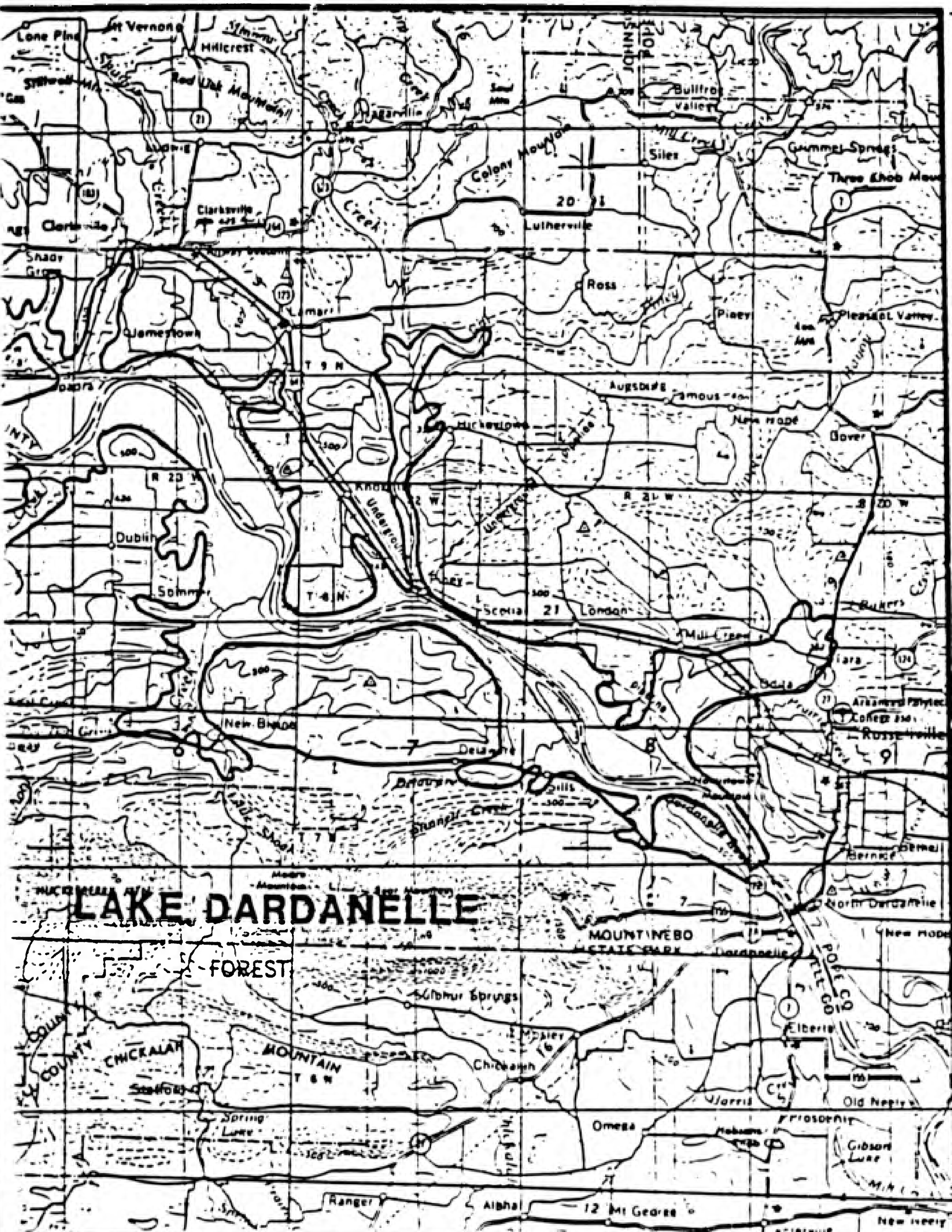


Figure 1. Lake Dardanelle and Ozark Lake Study Areas (after Smith 1986). Scale: 1 cm equals 4 miles, approximate


Lone Pine
Mt Vernon
Hillcrest
Red Oak Mountain
Clarksville
Jamestown
Lamar
Colony Mountain
Lutherville
Ross
Siloe
Bullfrog Valley
Gummer Springs
Piney
Pleasant Valley
T 9 N
Augsburg
Famous
New Hope
Dover
Hickeytown
R 20 W
R 21 W
Dublin
T 8 N
Scotia
21
London
Mill Creek
Russellville
Ouita
Arkansas Polytech College
New Blaine
Delaware
Dills
7
8
9
T 7 N
Bernice
North Dardanelle
LAKE DARDANELLE
MOUNT NEBO STATE PARK
Dardanelle
FOREST
POPE CO
Sulphur Springs
Mosley
Elberta
CHICKALAH MOUNTAIN
Chickalah
T 6 N
Old Neely
Spring Lake
Omega
Gibson Lake
Ranger
Mt George
New Neely

).

the development of a cultural resource management program for this facility. Because it was strongly suspected that our present knowledge concerning the number, nature, distribution, and condition of the cultural resources within Lake Dardanelle was, at best, partial and, at worst, misleading, our first task was to gather data which would aid in understanding how sites were distributed within the facility and to gain some insight into the factors affecting these sites and our ability to locate them. To this end it was determined that our traditional site locational and examination efforts would be greatly enhanced if we understood something about the environmental situation within the study area.

Since the study area was composed largely of a dynamic riverine environment it was decided that our analysis should begin with a geomorphological assessment of the landforms and landforming processes at work within the study area. This work was begun and, while the final report for this portion of the investigation was not completed until the spring of 1986, the basic field mapping of the various landforms was completed prior to the initiation of field work and this information was used in connection with a study of the archeological literature and records of the area and served as a guide in selecting areas to be examined. Further, these data, in the form of annotated USGS 7.5 minute quadrangle sheets, enabled the field crews to understand better those portions of the landscape which they were examining. Finally, this study provided the basis necessary to interpret the perceived distribution of cultural resources in the area and upon which to organize future site locational and data recovery efforts.

Before field work began in Lake Dardanelle funds became available for similar work in Ozark Lake. This made it possible to expand investigations to a rather long stretch of the Arkansas River Valley and so it was decided to treat these as a single investigation.

SUMMARY OF INVESTIGATIONS

Several research activities were conducted during this project. These included a records check and literature review, a geomorphological reconnaissance, an intensive pedestrian survey, laboratory identification of recovered materials, and an analysis of location and artifactual data.

Background and Literature Research

The investigations began with a review of records concerning previously recorded sites in the project area. This included the cultural resource files of the Little Rock District, the Arkansas Preservation Program, and the Office of the State Archeologist. Data regarding site location and description was provided via computer print-out from the Little Rock District to W. J. Bennett, Jr. who also conducted a review of the files of the Office of the State Archeologist. The records search at the Arkansas Preservation Program centered on gathering information regarding historic period sites, primarily standing structures. This was conducted by Beverly Watkins who also reviewed General Land Office maps for the project area.

A literature review was undertaken to synthesize data concerning previous archeological investigations in the area. Reports pertinent to the prehistoric periods represented in the Arkansas River Valley were examined by Anne Frances Gettys. Reports, documents, and articles pertinent to the historic period were reviewed and synthesized by Beverly Watkins.

These investigations revealed that a large number of the previously recorded sites in this region were situated in the modern Holocene floodplain of the Arkansas River and its major tributaries. This area is now underwater. However, information about the previously recorded sites was sufficient to indicate that there had been a long, and at times, intensive history of occupation in this portion of the valley.

Geomorphological Reconnaissance

This was performed by Lawson M. Smith, Geotechnical Laboratory, U. S. Army Engineer Waterways Experiment Station. It had 3 specific objectives:

(1) to delineate the major geomorphic features and processes in the area;

(2) to reconstruct, to the extent possible, the geomorphological evolution of the area; and,

(3) to estimate the occurrence and location of buried archeological sites in the project area.

The details of this effort are discussed below under the heading Geomorphological Reconnaissance: The Spatial Context.

Field Work

Pedestrian Survey. The pedestrian survey strategies were not the same in the two facilities. In Lake Dardanelle funds were not available to cover all of the fee-owned lands so some sort of sampling strategy had to be adopted. It was decided to conduct the pedestrian survey at Lake Dardanelle in two stages. In the first stage work concentrated on the public use areas because of the need to have these areas inventoried in prospect of possible future land-disturbing activities in those areas. After this was completed the data regarding site-landform correlations discovered within the public use areas was reviewed to determine how a sample for the remainder of the acreage could be chosen. Four pieces of information were crucial in determining the strategy for the second stage:

(1) The geomorphological reconnaissance indicated that most of the landforms within the present Arkansas River Valley (the Holocene floodplain) were not of sufficient age to contain archeological sites.

(2) The geomorphological reconnaissance had further indicated that the tributary valleys presented a complex clustering of landforms of various ages.

(3) Pre-inundation investigations had concentrated on the Holocene floodplain and only a few investigations had been carried out within the tributary valleys and along the upland slopes of the study area.

(4) Survey of the public use areas had shown a heavy presence of sites on the upland slopes and in the tributary valleys.

Considering these factors it was decided to concentrate investigations within the tributary valleys and the upland slopes but to also include some areas within the Holocene floodplain in order to at least spot-check those landforms judged to be of very recent age.

Because of the smaller size of the Lake Ozark portion of the study area it was possible to conduct field investigations on all of the fee-owned lands within that facility.

In summary this strategy resulted in the field inspection of large portions of the Arkansas River Valley including significant acreage within all of the various landforms present in the Holocene floodplain and tributary valleys of this reach of the river.

Field Work Procedures. The pedestrian survey was conducted from August 5 to September 27, 1985. Aubra L. Lee served as field supervisor. Field assistants included John D. Northcutt, Sylvia Kooren, Gemma Mehalchick, and Leslie Raymer. W. J. Bennett, Jr., and Mary Bennett also assisted in the examination of particular portions of the project area.

In order to facilitate record keeping and the comparison of data sets, Lake Dardanelle was divided into 24 distinct survey units. These units consisted of the dispersed public use areas and portions of 10 tributary valleys including Illinois Bayou, Delaware Creek, Shoal Creek, Cane Creek, Spadra Creek, Cabin Creek, Big Piney Creek, Horsehead Creek, Hogskin Creek, and Six Mile Creek. Ozark Lake was divided into 26 survey units including both public use areas and shoreline segments. The shoreline segments included lands along White Oak Creek, Mulberry River, Courthouse Slough, Frog Bayou, and Big Creek as well as along the main channel of the Arkansas River. The exact locations of the survey units are marked on 7.5 minute quadrangle sheets; data describing these units (landform, terrain, vegetation, condition, and the like) and the way in which they were examined are presented on the individual Survey Unit forms included with this report as Appendix I.

In general, the survey methods for the public use areas consisted of parallel transects using 25 m intervals between transects. Shovel testing was not conducted in the public use areas. Subsurface data was obtained from previously disturbed areas such as pipelines, drainage ditches, road cuts, and other project related occurrences. Most of the ground surface within these areas offered fair to good soil exposure due to the heavy public use.

Methods applied to non-public use areas included the walking of transects set at 25 m intervals but with the addition of shovel tests (30 cm in diameter, 30 cm deep) at 25 m intervals. Soil from these shovel tests was troweled to discover artifacts. Access to the survey units was accomplished by using both road and water transportation. Access by boat was the dominant mode of transportation along the shorelines.

When a site was located, either by surface expression or by the presence of artifacts in a shovel test, the shovel test interval was reduced to 10 m, with tests placed to determine the horizontal and vertical limits of each site. A select surface collection was made at each site in an attempt to collect a representative sample of artifact classes present. All materials encountered in shovel tests were collected. Artifacts were given proveniences that included survey unit number, site number, surface or subsurface, depth below ground surface, and shovel test number. Surface limits and locations of all shovel tests were plotted upon scale site maps. Arkansas Archeological Survey site forms have been completed and filed with the Little Rock District and the Office of the State Archeologist. A summary description of the physical characteristics of the sites first recorded during this effort is given in Table 1. A more detailed description of these sites and the artifacts recovered from them is given in Appendix II.

Architectural resources were also to be recorded where discovered. However, with the exception of the nearly collapsed building, 3SB96, none were encountered in the survey areas examined.

Table 1. Newly Recorded Sites: Physical Characteristics

Site	Type	Extent (m^2)	Depth (cm)	Quad
3CW642	Subsurface deposits	1000-4999	1 - 9	Alma
3CW643	Surface scatter	500 - 999	Unknown	Alma
3CW644	Surface scatter	1000-4999	Unknown	Alma
3CW645	Surface scatter	>10,000	1 - 9	Mulberry
3CW646	Surface scatter	1000-4999	1 - 9	Mulberry
3CW647	Surface scatter	10 - 99	1 - 9	Mulberry
3CW648	Surface scatter	1000-4999	1 - 9	Mulberry
3FR134	Surface scatter	Unknown	Unknown	Mulberry
3FR135	Foundation	Unknown	Unknown	Mulberry
3FR136	Surface scatter	Unknown	Unknown	Mulberry
3FR137	Surface scatter	Unknown	Unknown	Mulberry
3FR138	Subsurface deposits	>10,000	10 - 19	Mulberry
3FR140	Surface scatter	Unknown	20 - 29	Mulberry
3FR141	Surface scatter	5000-9999	1 - 9	Mulberry
3FR142	Surface scatter	1000-4999	1 - 9	Mulberry
3FR143	Surface scatter	10 - 99	1 - 9	Cecil
3FR144	Surface scatter	1000-4999	1 - 9	Cecil
3FR145	Surface scatter	10 - 99	Unknown	Cecil
3FR146	Subsurface deposits	5000-9999	Unknown	Cecil
3FR147	Surface scatter	>10,000	Unknown	Ozark
3FR148	Subsurface deposits	>10,000	30 - 50	Ozark
3FR149	Subsurface deposits	>10,000	30 - 50	Ozark
3FR150	Surface scatter	100 - 499	1 - 9	Ozark
3FR151	Subsurface deposits	1000-4999	30 - 50	Ozark
3FR153	Surface scatter	>10,000	1 - 9	Cecil
3FR154	Surface scatter	100 - 499	1 - 9	Cecil
3FR155	Subsurface deposits	1000-4999	10 - 19	Cecil
3FR156	Surface scatter	>10,000	Unknown	Cecil
3FR157	Surface scatter	>10,000	20 - 29	Mulberry
3JO034	Surface scatter	1000-4999	1 - 9	Clarksville
3JO048	Subsurface deposits	>10,000	10 - 19	Clarksville
3JO227	Surface scatter	1000-4999	Unknown	Clarksville
3JO228	Unspecified	1000-4999	Unknown	Clarksville
3JO229	Surface scatter	1000-4999	1 - 9	Clarksville
3JO230	Surface scatter	1000-4999	1 - 9	Clarksville
3JO231	Surface scatter	1000-4999	1 - 9	Clarksville
3JO232	Subsurface deposits	>10,000	50-100	Clarksville
3JO233	Surface scatter	1000-4999	1 - 9	Clarksville
3JO234	Surface scatter	1000-4999	1 - 9	Knoxville
3JO235	Surface scatter	1000-4999	1 - 9	Knoxville
3JO236	Surface scatter	1000-4999	1 - 9	Knoxville
3JO237	Surface scatter	100 - 499	1 - 9	Knoxville
3JO238	Subsurface deposits	1000-4999	10 - 19	Knoxville

Table 1. Newly Recorded Sites: Physical Characteristics (continued)

Site	Type	Extent (m^2)	Depth (cm)	Quad
3JO239	Surface scatter	1000-4999	1 - 9	Hartman
3JO240	Surface scatter	1000-4999	1 - 9	Hartman
3JO241	Surface scatter	1000-4999	1 - 9	Hartman
3LO011	Subsurface deposits	>10,000	1 - 9	Hartman
3LO012	Subsurface deposits	>10,000	50-100	Hartman
3LO126	Subsurface deposits	1000-4999	20 - 29	Delaware
3LO127	Surface scatter	1000-4999	1 - 9	Delaware
3LO128	Surface scatter	1000-4999	1 - 9	Delaware
3LO129	Surface scatter	1000-4999	1 - 9	Delaware
3LO130	Subsurface deposits	1000-4999	10 - 19	Delaware
3LO131	Surface scatter	1000-4999	Unknown	Delaware
3LO132	Surface scatter	1000-4999	1 - 9	New Blaine
3LO133	Surface scatter	100 - 499	1 - 9	New Blaine
3LO134	Surface scatter	1000-4999	10 - 19	New Blaine
3LO135	Surface scatter	1000-4999	1 - 9	New Blaine
3LO136	Surface scatter	1000-4999	1 - 9	New Blaine
3LO137	Surface scatter	1000-4999	1 - 9	Hartman
3LO138	Surface scatter	100 - 499	1 - 9	Hartman
3LO139	Surface scatter	1000-4999	Unknown	Hartman
3LO140	Surface scatter	1000-4999	1 - 9	Caulksville
3PP057	Surface scatter	1000-4999	1 - 9	Russellville west
3PP060	Surface scatter	1000-4999	1 - 9	Russellville west
3PP246	Surface scatter	1000-4999	1 - 9	Russellville west
3PP247	Subsurface deposits	500 - 999	10 - 19	Russellville west
3PP248	Surface scatter	1000-4999	1 - 9	Russellville west
3PP249	Unspecified	100 - 499	Unknown	Russellville west
3PP250	Subsurface deposits	5000-9999	Unknown	Russellville west
3PP251	Subsurface deposits	1000-4999	Unknown	Russellville west
3PP252	Surface scatter	1000-4999	1 - 9	Russellville west
3PP253	Subsurface deposits	500 - 999	10 - 19	Russellville west
3PP254	Subsurface deposits	1000-4999	20 - 29	Russellville west
3PP255	Subsurface deposits	1000-4999	20 - 29	Russellville west
3PP256	Unspecified	1000-4999	Unknown	Russellville west
3PP257	Surface scatter	1000-4999	1 - 9	Russellville west
3PP258	Subsurface deposits	1000-4999	30 - 50	Russellville west
3PP259	Subsurface deposits	1000-4999	20 - 29	Russellville west
3PP260	Subsurface deposits	1000-4999	20 - 29	Russellville west
3PP261	Surface scatter	1000-4999	1 - 9	Russellville west
3PP262	Subsurface deposits	1000-4999	30 - 50	Russellville west
3PP263	Surface scatter	100 - 499	Unknown	Russellville west
3PP264	Surface scatter	100 - 499	Unknown	Russellville west
3SB096	Structure	10 - 99	Unknown	Lavaca

Table 1. Newly Recorded Sites: Physical Characteristics (continued)

Site	Type	Extent (m^2)	Depth (cm)	Quad
3SB097	Surface scatter	10 - 99	1 - 9	Lavaca
3SB098	Surface scatter	Unknown	Unknown	Lavaca
3SB099	Surface scatter	1000-4999	1 - 9	Mulberry
3YE290	Surface scatter	100 - 499	Unknown	Delaware
3YE291	Surface scatter	10 - 99	Unknown	Delaware
3YE292	Surface scatter	100 - 499	Unknown	Delaware
3YE293	Surface scatter	1000-4999	Unknown	Delaware
3YE294	Surface scatter	1000-4999	Unknown	Delaware

Laboratory Analyses

All recovered artifacts were processed under the direction of Anne Frances Gettys. The artifacts were initially grouped into two categories: prehistoric and historic. Prehistoric lithic artifacts were then subdivided into artifacts, flakes, or debris. Prehistoric ceramics were analyzed for temper, decorative motifs, and temporal placement. Historic period artifacts were identified as to raw material class (ceramics, glass, metal) and described; also, an attempt was made to establish a chronological range for all the identifiable historic artifacts. The recovered artifacts have been placed with the University of Arkansas Museum for curation.

Data Analysis

Data related to site characteristics were placed into a computerized data base management system (dBaseII). These data included site number (state and field), quadrangle sheet location, landform type, cultural affiliation, nature of deposits, areal extent, depth, and site condition. This systematic approach was used to generate the tables presented below discussing site distribution and site evaluation. Data related to recovered artifacts were also entered into this system for subsequent manipulation for the interpretation of site distribution.

Data Synthesis

As our investigations progressed and we began to draw data together in order to evaluate our findings, it became increasingly clear that the only way we could begin to appreciate either the uniqueness and/or the commonality of the cultural resources present in the study area was by considering them within a variety of different contexts. To put it another way, we were forced to conclude that the most appropriate way to develop a management program for these sites was to consider them as gathered together into a multi-dimensional matrix. The following is a brief discussion of the four major elements which constitute the interpretive matrix which we believe is appropriate to these sites.

(1) Cultural resources exist within a temporal or chronological context. Archeological records were created at various times and until they are completely destroyed they will continually undergo modification.

(2) Because these sites were created and used by humans they also have a social context. Particular activities took place at sites and they played particular roles within the social, settlement, and subsistence systems of which they were a part. Further, because humans continue to use and inhabit the region, these archeological records continue to exist within a social context whose nature has important consequences for the modification, survival, or preservation of these resources.

(3) Cultural resources also exist within a spatial context. Sites were located on particular portions of particular landforms. Because of peculiarly human characteristics it is possible for us to think of the landscape at the time of site creation and/or use as static. It is also possible for us to regard the present landscape within which the site exists as static. However, these are illusions, phenomena of our perceptions. So the spatial contexts within which sites exist is dynamic. The environmental setting within which we note the site at the present time cannot be assumed to be that of the time of its creation and/or use. Further, it is important to note that the spatial contexts of sites is three dimensional. This is particularly crucial within the kind of riverine setting which characterizes the study area. Landform surfaces on which and within which sites were established are both degraded and aggraded. Thus it is crucial for us to recognize this three-dimensionality as we conceptualize the location of these sites in the present.

(4) Finally, it is helpful to consider that these sites exist within a management context. This context is composed of the total inventory of cultural resources within the study area, our judgment regarding the relative worth or importance of these resources (either individually or as groups), our assessment of the factors affecting this inventory, and the means we have at our disposal to manage these resources.

PREVIOUS ARCHEOLOGICAL RESEARCH: THE CONTEXT OF INVESTIGATIONS

Because the amount of archeological research with the federal boundaries of Lake Dardanelle and Ozark Lake has been very limited we have been forced to expand our focus to the larger region within which the study area is set. Thus our discussion of the prehistory of the area will draw upon work done in the Arkansas River Valley further to the west in Oklahoma as well as in other portions of the Valley and the Ozark and Ouachita Mountains. However, our discussion of previous investigations concentrates primarily on work done within or in the near vicinity of the study area. Previous research within the project area and its immediate vicinity is described in detail. Research at locations within the region but at some distance is summarized in Table 2. Figure 2 shows the general locations of a number of important projects.

In preparing this synthesis we have drawn upon a number of sources. Of particular importance is the work of Greengo (1957), Caldwell (1958), and Hoffman (1977a, 1977b, and 1977c). A State Plan for the Conservation of Archeological Resources in Arkansas (Davis 1982), a study jointly supported by federal and state funds to summarize what is known about Arkansas' cultural resources and to provide guidelines for their management, contains only a single page discussion of Arkansas River Valley prehistory and a short bibliography for the region.

Investigations within the Study Area

The earliest archeological work in the vicinity of the project area was Harrington's (1924) documentation of commercial grave robbery at Carden Bottom (Figure 2: 1) near Dardanelle. Harrington's artifact descriptions was the only published information regarding these late prehistoric and protohistoric cemeteries until very recently. Materials believed to have come from these sites, primarily in the University of Arkansas Museum collections, were the focus of a study done by Phyllis Marie Clancy (Clancy 1985). This work provides researchers with a considerable amount of new data regarding the ceramic forms in these collections.

Moorehead's (1931) study of the Arkansas River Valley offers generalized site and artifact descriptions, and a map of site locations along the Arkansas, Petit Jean, and Fourche La Fave Rivers.

In 1957, Lake Dardanelle (Figure 2: 12) was surveyed by Greengo (1957) who recorded 53 sites in and around the reservoir area. Site location investigations were largely dependent upon the willingness of local informants to divulge the location of well-known (and previously looted) sites. This study classified sites as rock shelters, workshop/camps, village or burial sites. Noteworthy tool classes are pottery, large and small points, hoes, pitted stones, daub, milling stones, scrapers, and drills. Points, decorated pottery, a celt, and hoes are illustrated.

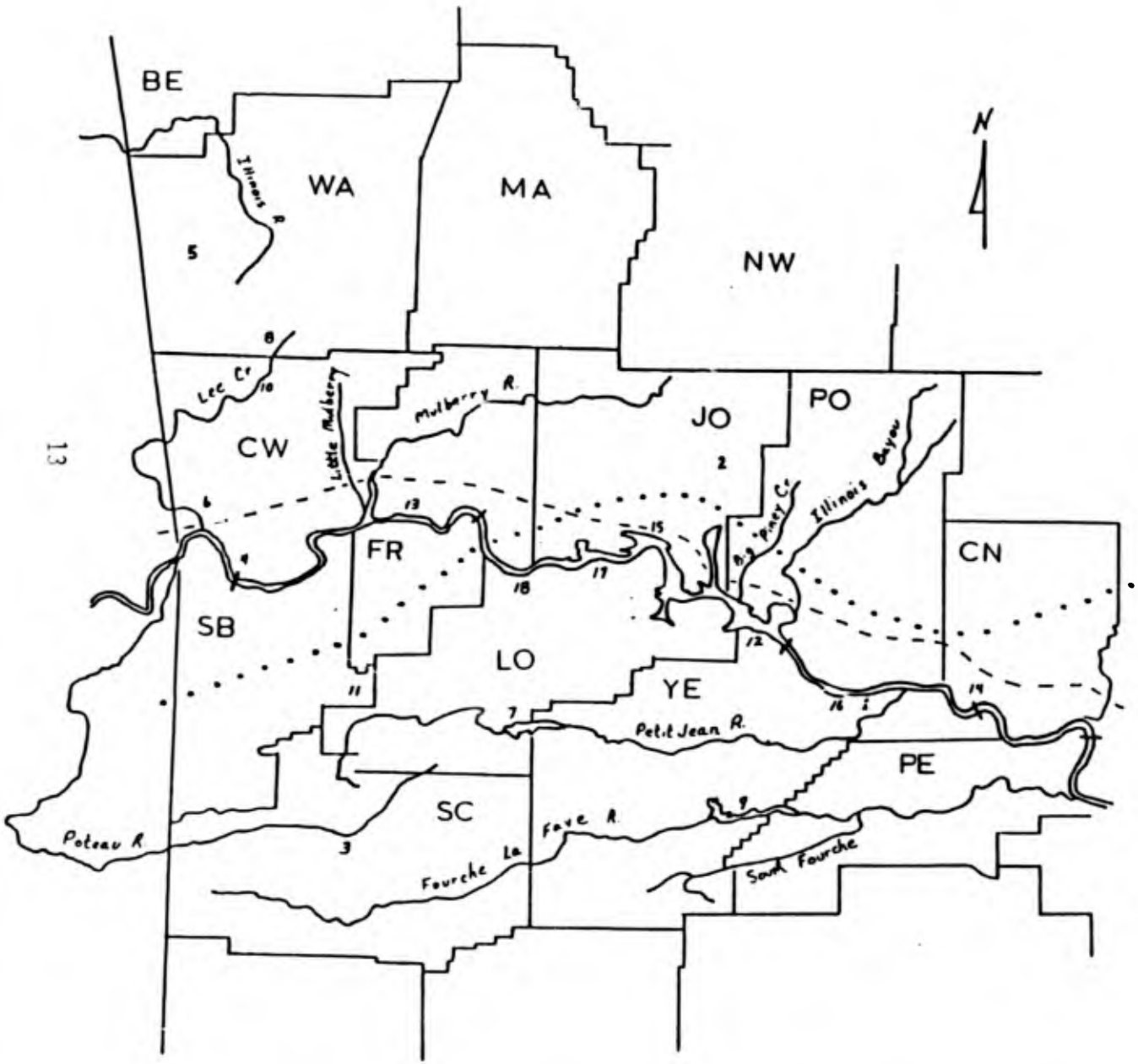
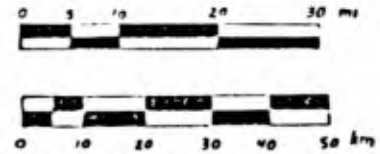


Figure 2. Archeological research in the Arkansas River drainage, western Arkansas.

1 = Carden Bottom
2 = Tom's Brook Shelter, 3JO1
3 = Poe site
4 = McClure site, 3CW34
5 = Lincoln Reservoir
6 = Van Buren water supply
7 = Blue Mountain Lake
8 = Devil's Den State Park
9 = Nimrod Lake
10 = Pine Mountain Reservoir
11 = Sliding Slab Shelter, 3SB29
12 = Dardanelle Reservoir
13 = Ozark Reservoir
14 = Point Remove Mound Group, 3CN4
15 = Spadra Trading Factory, 3JO33
16 = Holla Bend National Wildlife Refuge
17 = TXO Cedar Bottoms well
18 = TXO McDonald #1 Lateral pipeline
... Ozark Gas Transmission System pipeline
-- Interstate 40 highway

Scale



Greengo (1957: 18-21) conceptualized the Dardanelle Reservoir area as lying between two late prehistoric culture climaxes: the Mississippian to the east and the Caddoan to the west. Sites lacking pottery and middens were classified as Archaic stage.

Five of the sites recorded by Greengo were tested in 1958 (Caldwell 1958). During the same field season, 10 known sites were surface collected and two new sites were recorded. Caldwell's unpublished report of this work presents some inconveniences: 1) the illegibility of some tables in the available xerox copy, 2) the absence of artifact description tables for some sites, and 3) the apparently unfinished conclusions. However, as it is the only report of pre-construction excavations within Dardanelle Reservoir, its contribution is considerable.

All sites excavated by Caldwell had been previously disturbed by digging or collecting (Caldwell 1958: 2). The descriptions of the Skat Creek Shelter (3PP001) and the Hayes Creek site (3YE003) offer the best comparative information.

At Skat Creek, Caldwell (1958: 9-13) found ash and daub concentrations and one burial within the seven foot deep stratified deposit. Three components were proposed (Caldwell 1958: 26-27), based on the appearance of clay-tempered and shell-tempered pottery at 4.5 feet and 1.5 feet below surface, respectively.

The relatively small preceramic assemblage included two expanding stemmed points, a scraper, "blades", hammerstones, a mano, and "ovate knives." The lower ceramic assemblage included clay- and sand-grit-tempered pottery, contracting stemmed points, expanding stemmed points (both corner and side notched), numerous hammerstones and manos, bone, antler, and shell tools and ornaments. In the upper ceramic assemblage, both shell-tempered and clay-tempered pottery were found along with unspecified projectile points, an increasing number of pitted manos, and bone, shell, and antler tools.

Although the contexts Caldwell used were not ideal (excavation by arbitrary levels in a disturbed shelter), his results parallel those of later researchers in the co-occurrence of contracting stemmed points with clay-tempered pottery, the continued use of expanding stemmed forms, and the relatively late appearance of shell-tempered pottery. Interestingly, arrow points were apparently not found at Skat Creek Shelter.

At the Hayes Creek site (Caldwell 1958: 33-41) the 3.5 foot deep cultural deposit occurs on a natural terrace remnant where Hayes Creek Valley joins the Arkansas River Valley. A single Archaic component is inferred from a non-ceramic assemblage with mostly large expanding stemmed points and some contracting stemmed points. Five shell-tempered sherds from the plowzone were believed to have come from a vandalized late prehistoric cemetery to the north.

Limited information is provided for two other tested sites, Shoal Creek (3LO004) and Bennett (3PP020). The Shoal Creek site "was once exploited quite extensively by commercial diggers" (Caldwell 1958: 43) who probably concentrated on the shallow burials exposed by cultivation. A midden at least 1.3 feet deep was tested in 1958. Caldwell considered the midden to be badly mixed; certainly the recovered materials could represent all cultures from Early Archaic through Historic. The recovered material culture inventory included a Meserve or Dalton point base, a grooved axe, a notched sinker, expanding and contracting stemmed large points, milling slabs, incised pottery (interpreted as Caddoan), Neeley's Ferry Plain pottery, small corner notched and side notched points, and 19th and 20th century ceramics and glass (Caldwell 1958: 42-50).

The Bennett site midden, from 0.7 to 2.0 feet thick, yielded small triangular points, pottery resembling Baytown Plain, green bottle glass, and ironstone (Caldwell 1958: 51-53).

The fifth tested site, 3PP013, yielded no material culture although informants claimed that many artifacts had been found there in past years (Caldwell 1958: 54).

In his brief summary of surface collected sites, Caldwell (1958: 55-56) noted two mound sites. 3LO011 is a possible Woodland site with nine mounds and a village area. 3PP023 (not discussed in Greengo's survey report) consists of two mounds or erosional remnants where unspecified material culture was found.

Of the 45 unexcavated sites from which collections were present, only 14 had pottery (Caldwell 1958:55). As did many other archeologists in the 1950s, Caldwell and Greengo interpreted non-ceramic sites as preceramic; thus Archaic stage occupations are considered to be best represented. Most sites are located in the bottom lands or terraces of tributaries, not along the Arkansas River itself. Caldwell (1958: 8) remarked upon recent extensive land alteration in the Arkansas River floodplain which possibly washed away evidence for ceramic period occupations there.

Baytown-like ceramics in the Dardanelle Reservoir were interpreted (Caldwell 1958:60-61) as a local development, added onto a continuing Archaic lithic tool assemblage. Neeley's Ferry Plain ceramics, small points, and Caddoan-like ceramic decoration, however, were seen as evidence for more diverse, though poorly understood, outside influences during late prehistoric times.

Little Rock District Archeologist, Robert Dunn, was able to determine that artifact collections made by Greengo and Caldwell are presently housed in the Smithsonian Institution, Museum of Natural History. These are stored as three groups of material. Artifacts from sites 3LO001 - 013 have been registered using numbers 435286 - 435528. Artifacts from sites 3PP001 - 023 have been assigned numbers 435290 - 435889. Artifacts from sites 3YE001 - 006 have been assigned numbers 435850 - 436011.

The "ordinary" historic sites encountered in Dardanelle Reservoir received almost no attention. No work was done at the Dwight Mission site at the confluence of Illinois Bayou and the Arkansas River, a portion of which is presently preserved as a public use area. However, the prominent historic site of Fort Smith has been tested and excavated at least as early as 1958. Moore (1962) summarizes the initial attempts, sponsored by the National Park Service, to locate structures dating to the 1817 military occupation. Subsequent reports (Moore 1963a, 1963b) were not examined by the present authors.

In 1967, 59 sites were recorded and/or surface collected during a survey (Hoffman 1977b: 6) of Ozark Reservoir (Figure 2: 13) that included the upper end of Dardanelle Reservoir, which was not surveyed by Greengo and Caldwell. Also included is the McClure site (3CW034) near Lock and Dam 13, upstream from Ozark Lake. The McClure site (Figure 2: 4) had already been tested (McCartney 1963) following exposure of a prehistoric cemetery by a bulldozer. Further work consisting of controlled surface collection and/or excavation was accomplished at 7 other Ozark Lake sites from 1966 through 1969.

Besides providing brief site and material culture descriptions, Hoffman (1977b) reviewed previous work and culture complexes in the Ozark Lake area. He addressed the distribution of Webber's Falls siltstone (then thought to be argillite) in the survey area, and he also compared frequencies of hunting tools (projectile points) and plant processing tools (spades and manos) at upland and lowland sites. The Gober Complex was defined for Early Ceramic occupations and the McClure complex for the Late Ceramic. Archaic 3 (Late Archaic) components were inferred for 39 sites (Hoffman 1977b: 33); definable earlier components were absent.

In 1966, an excavation program at two sites (Myer 1977) was conducted in an attempt to document better the Late Ceramic stage occupation of the Ozark Reservoir area. The Crooked Creek site (3FR026) was interpreted as a Gober Complex midden with pits and a possible posthole. A Late Ceramic occupation was tentatively inferred from small stemmed points and shell-tempered pottery. The East Poping site (3FR030) is located on a long natural levee from which local collectors have recovered Late Ceramic stage material culture. However, the small amount of non-diagnostic material culture recovered by excavation at this locality is believed to have been redeposited by flooding.

In 1967, controlled surface collection was done to delineate functional or temporal differences within each of five sites (Hoffman 1977c). At the Spinach Patch site (3FR001), a dark midden area surrounding a lighter area could be defined on the cultivated surface. Material culture and human bone from 10 meter square collection areas supported the identification of the lighter area as a burial area (possibly a mound levelled by plowing). A garden area was defined on the predominance of argillite tools and debris.

Poor visibility hampered surface collection at the Wheelbarrow (3FR018), River Bank (3FR023), Mill Creek Mountain (3FR015), and Oliver (3FR005) sites. Thus only an estimation of the relative concentration of material across each site was possible.

In the spring of 1968, aerial photography was done for several sites (Hoffman 1977a; Printup 1977). Dark colored middens were visible at Spinach Patch and River Bank. Dark stains at the Natural Levee site (3FR033) were interpreted as possible features. Photographs of the Mill Creek Mountain, Daltonoid (3FR020), Wheelbarrow, and Oliver sites were inconclusive and the Bectum site (3FR040) was not located from the air.

At all stages of investigation, the Spinach Patch site was considered the most significant site in the project area, and in the summer and fall of 1968, the site was tested. Bond (1977b: 81-120) described Spinach Patch as an Early Ceramic site with a large rectangular midden area. A rectangular plaza, two circular burial mounds (one of which contained three burials), an arc of postholes, an ash concentration, and a rock concentration are defined within the midden. Most material culture occurs within the 10 and 20 cm plowzone, and the site has been collected and "potted" for many years by local collectors. Despite these factors, Bond concluded that the assemblage (including Gary, Scallorn, and expanding stemmed large points, clay-tempered pottery, and argillite spades or hoes) represented a single cultural component. The site was compared to published descriptions of Fourche Maline Focus sites in eastern Oklahoma.

The River Bank site (Bond 1977b: 120-137), excavated at the same time as Spinach Patch, had also been plowed and collected for years. Here a dark midden surrounded a light colored area interpreted as a possible mound. This was not demonstrated by testing, although a distinctive soil profile was found in the lighter area. The artifact inventory included Gary and Scallorn points, an argillite spade, and clay-tempered pottery. As with Spinach Patch, the River Bank site was considered to be an Early Ceramic, Gober Complex manifestation.

Hoffman (1968) reported a survey of Lock and Dam sites and public use areas between Little Rock and Fort Smith, exclusive of Dardanelle and Ozark Reservoirs. During this effort, 16 sites were recorded, 5 of which had been damaged or destroyed by construction related to the Navigation System. Hoffman also visited 4 sites outside the Navigation System including two within the present study area: Spadra Trading Factory (3JO033) and the Point Remove mound group (3CN004) downstream from Dardanelle. Of all sites discussed by Hoffman (1968), these two are the only ones in the present study area that have been excavated.

The largest of 5 mounds at Point Remove (Figure 2: 14) was tested in 1967 by the Arkansas Archeological Society. Davis (1967b) remarked upon the complex series of construction stages and the absence of burials in the mound.

Artifacts appropriate to an A.D. 1400-1600 occupation were found, and a nearby cemetery was believed to be associated with the mounds. However, outside of a few brief remarks in the Arkansas Archeological Society Newsletter, details of the findings of this effort are not available for study.

Spadra (Figure 2: 15) was reportedly (Dollar 1966) the location of a Federal Trading Factory that was established in 1819 as a part of the fur factory trading system and continued until 1822 when this entire system was abandoned by the United States Government. During test excavations in 1967 (Myer 1969: 177-241), artifacts relevant to an early 1800s occupation were found (along with later material and a significant number of Archaic style points, stone tools and debris), but no material culture could be tied definitely to the short-lived operation of the trading post. One or possibly two fireplace foundations, a stone slab concentration, and two depressions (untested) were not datable.

Further excavations at Spadra were conducted by William Westbury (Westbury 1971) in 1969. Work consisted of the excavation of 4 test pits of various sizes and was conducted over a 20 day period. The materials recovered consisted primarily of Historic period artifacts including ceramics, metal objects, coins (an 1832 dime and an 1825 coin of the Republic of Mexico), gun flints, and glass. Two large stone features, interpreted as foundations for hearths were excavated. Prehistoric period artifacts were also recovered. They included both arrow and dart points.

Also in 1969 a program of site location was undertaken at what is now the site of the Arkansas Power and Light Company's nuclear power plants west of the confluence of the Arkansas River and Illinois Bayou (Cole 1969). This consisted of a pedestrian survey with some site examination. Four prehistoric sites were discovered. These sites seem to fit the general description of lithic scatter. Materials recovered included several Archaic period dart points (3PP063, 3PP064), the base from what seemed to be a lanceolate point (3PP065), and an arrow point (3PP066). Excavations were not conducted at any of these sites.

As part of a more comprehensive environmental impact assessment of alternative flood control measures in the vicinity of Big Mulberry Creek a general reconnaissance of that area was undertaken in 1972. This was performed by John House (1972). This entailed a records check of sites in the vicinity and 6 days of site location activities. A total of 23 new sites were recorded. While some evidence of Archaic period occupation was noted the sites in the Mulberry River Basin seemed to cluster in the Late Prehistoric and Early Historic periods.

In the later 1970s and early 1980s a number of small projects related either to the installation of public facilities such as sewer lines and/or waste water treatment facilities were undertaken. These included a survey of a proposed Arkansas Game and Fish Commission fish hatchery along Jones Branch

in Johnson County. This involved the on-site examination of 121 acres during a single field day. Three lithic scatters with no chronologically diagnostic materials were recorded.

Three municipalities sponsored site location and evaluation activities that were directly within or in the near vicinity of the project area. The earliest of these was a survey for the city of Paris in Logan County (Brooks 1976c). During this 1 day survey a single site was recorded containing a number of waste flakes and some bifacially worked tool fragments.

The next such effort was the Coal Hill Waste Water Project (Jones 1979) which examined 4 sites within an 18 acre project zone and along 1.2 miles of proposed pipeline route. These included 2 lithic scatters (3JO079, 3JO080), an historic cemetery (3JO084), and 1 prehistoric period site from which a rectangular stemmed projectile point (Marshall type) was recovered (3JO021).

Two archeological projects were undertaken in conjunction with the building of a wastewater treatment facility for the city of Alma. The first was a survey by Robert Cande (1981) which examined 2.5 miles of project pipeline route and a 45 acre block of land. The report of this work states that 2 sites (3CW198 and 3CW199) were reported and that 3CW199 was recommended for formal evaluation for significance. However, in a report of the testing of site 3CW202 for the city of Alma, Trubowitz (1982) indicates that this site had been discovered by Cande (1981). Also the records of the Arkansas Archeological Survey indicate that several other sites, i. e. 3CW201 and 3CW210 were recorded by Cande. Thus it is not clear, at the present time, exactly what was accomplished in the 1981 survey or if a second survey was conducted. Fortunately, the report of the testing of 3CW202 is detailed and we have adequate information about the investigations conducted there and their results. The site was subjected to an intensive controlled surface collection and a number of test units were excavated. It was concluded that the site was of Late Archaic cultural affiliation and the suggestion was offered that this could be a workshop for the processing of cobbles from the Arkansas River terrace.

Site location activities were also undertaken for the city of Clarksville (Swanda 1981; Zahn 1985) in connection with the installation of sewer facilities. In the 1981 investigations a total of 30 acres of plant site, a number of small (few 10's of meter square) pump stations, and 10.3 miles of proposed pipeline route were examined by two archeologists over 2 days. The only site examined was the previously recorded site 3JO024. Three separate areas of concentration were identified within what was judged to be a potentially significant site. Recovered artifacts included glass and metal fragments as well as chronologically undiagnostic lithic debris. This site was avoided by construction and no further investigations were conducted here. Zahn (1985) reports the examination of two very small (approx. 5 miles) pipeline routes in the Cedar Hill subdivision of Clarksville. This effort recorded 1 site, 3JO144, which consisted of chronologically undiagnostic lithic waste.

Oil and gas exploration efforts have also involved archeological investigations within and near to the project area. The most extensive of these was the work done in connection with the construction of the Ozark Gas Transmission System. A survey of the initial proposed route of this 160+ mile route through the Arkansas River Valley region was completed by Archeological Research Associates of Tulsa, Oklahoma (Swidler and Shelley 1980). This involved a pedestrian survey of the proposed route which encountered a total of 61 archeological sites (16 prehistoric and 45 historic). This stage of the investigation included an attempt to develop a predictive model for prehistoric site location within the region using data derived from soils surveys (Imhoff 1980). Because of decisions to relocate portions of the route a second pedestrian survey was undertaken to examine previously uninvestigated segments of the route (Moore and Hays 1981). This effort recorded an additional 20 sites and examined 11 previously recorded sites.

At some point in the construction effort the cultural resource management firm of Heartfield, Price and Greene, Inc. of Monroe, Louisiana, took over cultural resource management activities for this delivery system. Work by this firm to date has included the testing of a number of the recorded sites, the examination of numerous lateral, collection pipeline routes (Heartfield, Price and Greene 1983, 1985a, 1985b; Madden 1983, 1984, 1985a, 1985b), and data recovery from sites 3JO089, 3PP050, and 3PP105 (Heartfield, Madden and Price 1985).

A number of very small investigations related to the installation of oil or gas wells and short pipelines have been conducted in the area. These include Dunn (1984a, 1984b), McLellan (1985a, 1985b), and King (1985); all of which report no sites within the areas examined.

Pertinent Regional Research

As mentioned above, Moorehead's (1931) summary of Arkansas River archeology includes general information for sites along the Petit Jean and Fourche La Fave Rivers. Another important set of investigations were undertaken downstream from Dardanelle in the vicinity of Conway, Arkansas. This consisted of a program of survey, site evaluation, and data recovery conducted by the Arkansas Archeological Survey under the sponsorship of the US Army Engineer District, Little Rock (Santeford and Martin 1980; Santeford, Martin, and Hemmings 1983; Hemmings and House 1984).

Other early research was accomplished at the opposite end of the project area. In the 1930s, the University of Arkansas sponsored surveys and rockshelter excavations in northwest Arkansas (see Trubowitz 1980:2-5 for a description of this mostly unpublished work).

Of the numerous other reported projects on Arkansas River tributaries, many are related to reservoir construction and management of public lands. Other studies were done in response to construction by utility companies and

private industry. These projects are summarized in Table 2 in chronological order of the manuscript or publication date. When a report was not examined, the source of the reference is provided. The map (Figure 2) shows the locations of projects described in the table, either by county or stream drainage, or by number for more specific location.

More than half of the projects listed in Table 2 are surveys. However, excavated sites on tributaries have made substantive contributions to area prehistory. Tom's Brook Shelter and Sliding Slab Shelter are two examples, and these sites are discussed in some detail below.

Reference should also be made to research currently ongoing by Charles Hudson regarding the route of the DeSoto expedition within Arkansas (Hudson 1985). In this work Hudson is suggesting that the River of the Cayas, suggested by the DeSoto Commission to be the Ouachita River, is to be identified with the Arkansas River and that DeSoto may have traveled into at least the eastern end of our project area. This view, however, has been vigorously challenged (Dickinson 1986).

Finally, it is important to note the studies of Michael Hoffman which attempt to integrate archeological, linguistic, and ethnological data concerning the protohistorical populations of the Arkansas River Valley, especially the Quapaw (Hoffman 1977d, 1983, 1985).

Table 2. Regional Research

Reference	Description of Investigations*
Moorehead 1931	general site and artifact descriptions with map of sites along Petit Jean and Fourche La Fave Rivers
Dellinger 1932	field notes, bluff shelter survey including Lee Creek (cited by Trubowitz 1980)
Henbest 1934	field notes, bluff shelter survey including Lee Creek (cited by Trubowitz 1980)
Dellinger 1936	baby cradles from shelters including sites in Crawford County
Dellinger and Dickinson 1942	ceramics from shelters including sites in Crawford County
Bartlett 1960, 1963	excavation at Tom's Brook Shelter, 3JO001 [2]
Bonds 1960a	glass point found along Illinois Bayou, Pope County
Bonds 1960b	historically reused? boatstone found along Big Piney Creek
Cleland 1960, 1965, n.d.	faunal analysis for shelters on Lee Creek (cited by Trubowitz 1980)
McGimsey 1960	excavation at Tom's Brook Shelter, 3JO001 [2]
Cleavenger 1963	excavation at Tom's Brook Shelter, 3JO001 [2] (cited by Sabo, Waddell, and House 1982)
Bartlett 1964	radiocarbon dates from Tom's Brook Shelter, 3JO001 [2]
Scholtz 1965	interstate highway survey including Crawford, Franklin, and Johnson Counties
Dickson 1969	survey of Lincoln Reservoir [5], Washington County
H.A. Davis 1970	excavation at Poe site [3], Scott County

* square brackets [ ] indicate map number, Figure 2.

Table 2. Regional Research (continued)

Reference	Description of Investigations
Scholtz 1970, 1975	basketry from Ozark bluff shelters, including Crawford, Washington, and Johnson Counties
Baker 1974a	survey of Flat Rock Creek watershed, Crawford County (cited by Trubowitz 1980)
Baker 1974b	survey of Upper Petit Jean watershed (cited by Padgett 1978)
Flenniken 1974a, 1974b	surveys in South Fourche La Fave drainage (cited by Leatherman 1980)
Rolingson 1974	survey of Upper Petit Jean watershed (cited by Padgett 1978)
Wolfman 1974	survey in South Fourche La Fave drainage (cited by Leatherman 1980)
Rolingson 1975	survey for Bekaert Steel Wire Corporation, Crawford County (cited by Trubowitz 1980)
Taylor 1975	pipeline survey, Crawford County (cited by Trubowitz 1980)
Brooks 1976a	survey of Ouachita National Forest tracts, Perry County (cited by Leatherman 1980)
Brooks 1976b	survey in Little Mulberry Creek watershed, Crawford County (cited by Trubowitz 1980)
Downing, Husted, and Jurney 1976	summary of lithics, ceramics, and human remains from 1934 Lee Creek shelter excavations (cited by Trubowitz 1980)
Imhoff 1976	survey of U.S. Forest Service tracts, Yell County (cited by Leatherman 1980)

Table 2. Regional Research (continued)

Reference	Description of Investigations
Imhoff and Mathis 1976	survey of U.S. Forest Service tracts, Perry County (cited by Leatherman 1980)
Padgett 1976	survey in Poteau River watershed, Scott County
Padgett, Mathis, and Wogaman 1976	testing of bluff shelter in Upper Petit Jean River watershed (cited by Padgett 1978)
Raab 1976	survey of Pine Mountain Reservoir [10], Lee Creek, Crawford County
Bond 1977a	Gober Complex artifact study (cited by Trubowitz 1980)
Blaylock 1977	survey of Crawford County Industrial Park (cited by Trubowitz 1980)
Flenniken and Taylor 1977	survey and test excavation, Van Buren Water Supply project, Lee Creek, Crawford County [6]
Bennett and Caffey 1978	survey in Holla Bend National Wildlife Refuge
Padgett 1978	survey of Blue Mountain Lake drawdown, and National Reservoir Inundation Study experiment [7]
Commonwealth Associates 1979	surveys in Flat Rock Creek and Vache Grasse Creek watersheds, Crawford and Sebastian Counties (cited by Trubowitz 1980)
Fritz and Raab 1979	survey of Devil's Den State Park [8], Crawford County (cited by Sabo, Waddell, and House 1982)
Leatherman 1980	survey of Nimrod Lake [9] drawdown, Yell and Perry Counties
Scholtz 1980	basketry from 3CW7, Lee Creek drainage
Trubowitz 1980	test excavation in Pine Mountain Reservoir [10]

Table 2. Regional Research (continued)

Reference	Description of Investigations
Santeford and Martin 1980 Santeford, Martin and Hemmings 1983 Hemmings and House 1984	survey, testing, and data recovery in the Conway Water Supply area
Harden et al. 1981	excavation at Sliding Slab Shelter, 3SB029 [11]
Heartfield, Price, and Greene 1981	survey of Petit Jean Planning Unit, Ouachita National Forest, Yell, Logan, and Scott Counties
Sabo, Waddell, and House 1982	inventory and overview of Ozark and St. Francis National Forests, including Benton, Washington, Crawford, Franklin, Johnson, Pope, Conway, Logan and Yell Counties
Spears 1984	surveys on lower Lee Creek, Crawford County
Klinger and Imhoff 1985	test excavation on lower Lee Creek, Crawford County
Clancy 1985	analysis of ceramics from the Carden Bottoms vicinity [1]

CULTURE HISTORY: THE CHRONOLOGICAL AND SOCIAL CONTEXTS

As part of the Arkansas River Valley the project area is located within what has been defined by Frank Schambach as the Trans-Mississippi South archeological region (Schambach et al. 1982). In general the culture-historical framework used to interpret the past occupation of the region is the same five-fold structure used elsewhere in the Eastern Woodlands: Paleo-Indian, Archaic, Woodland, Mississippian, and Historic. An exception to this structure is that often researchers interpret the transition between the Paleo-Indian and the Archaic periods (marked in the area primarily by Dalton points and tools) as a separate socio-chronological unit. The following paragraphs summarize the culture sequence currently used to describe and date the various cultural components in the study area. Wherever possible, we have emphasized well-controlled excavations with radiocarbon dates, using information from eastern Oklahoma where it seemed helpful. The dates listed for these periods are only approximations.

Because by far the greatest amount of previous archeological investigation has been carried on in the western end of the project area and the Oklahoma portion of the Arkansas River Valley, the archeological context for those portions of the region is much better documented than the eastern portions. Thus the presentation which follows is, quite naturally, colored by the discussions present in that literature. This is particularly the case in the discussion of the Woodland and Mississippian periods. There is no doubt that the residents of the western portions of our project area, certainly Ozark Lake, are those commonly discussed in the literature as Fourche Maline (Woodland) and Caddo (Mississippian). However, it is not at all certain how far the eastern boundary of these groups extended down river or how far west cultural groups from the Lower Mississippi Valley extended up river. In our view, it is quite likely that the "frontier," if that is the proper word, for a variety of groups during these two cultural periods was at or very near the present towns of Dardanelle and Russellville. Analysis of materials collected by Greengo and Caldwell would certainly help to clarify this situation. However, until further investigations on these collections and sites in the area are conducted this issue must be considered problematical.

In developing this discussion we examined the records of 289 sites within or very near the project area; 186 in the Lake Dardanelle area and 103 in the Ozark Lake area. Table 3 gives a serial listing of the cultural affiliation of all of these sites and the landforms upon which they are located. This form of presentation was used here so that readers and users of this report could easily find this information about specific sites. In the cases of previously recorded sites we accepted the investigator's determination of cultural affiliation. For sites recorded during this effort cultural affilation was based on recovered artifacts. The landform designations were taken from the maps provided in Smith (1986) and included in this volume as Figures 11 - 27. Sites visited during this project, whether previously

recorded or newly discovered, are marked with an *. Table 4 gives a listing of the cultural and chronologically diagnostic material recovered from these sites and Figures 3 - 9 illustrate a number of these items.

Many of these sites contain components from more than one culture-historical period. Thus, as these sites are discussed in the following culture-historical units, readers will find sites mentioned under more than one culture-historical period.

In constructing this chapter we have used information from all 289 of these sites in addition to sites elsewhere in the region. However, we also felt that it was important to determine which of these actually fell within the project area. That is, we wanted to be able to say which sites were the responsibility of the Little Rock District. In many cases it was not possible to make this determination with confidence. Nevertheless, it is our present judgment that of this total there are 124 recorded sites in Lake Dardanelle and 71 in Ozark Lake.

Table 3. Recorded Sites: Cultural Affiliation and Landforms

Site	Cultural Affiliation	Type	Landform
3CW013	Archaic Woodland	Unspecified	Arkansas River Undifferentiated Floodplain-Natural Levee
3CW014	Archaic	Surface Scatter	Arkansas River Undifferentiated Floodplain-Natural Levee
3CW015	Archaic	Surface Scatter	Unknown
3CW016	Archaic	Surface Scatter	Unknown
3CW021	Archaic Woodland	Surface Scatter	Undifferentiated Tributary Floodplain
3CW022	Woodland	Surface Scatter	Undifferentiated Tributary Floodplain
3CW023	Unknown	Unspecified	Undifferentiated Tributary Floodplain
3CW024	Unknown	Unspecified	Undifferentiated Tributary Floodplain (?)
3CW026	Archaic	Surface Scatter	Arkansas River Point Bar-Natural Levee
3CW027	Unknown	Unspecified	Unknown
3CW028	Archaic Woodland	Unspecified	Unknown
3CW029	Archaic	Unspecified	Unknown
3CW031	Woodland Mississippian	Surface Scatter	Arkansas River Point Bar
3CW032	Archaic Mississippian	Surface Scatter	Arkansas River Point Bar-Natural Levee
3CW034	Mississippian	Surface Scatter	Unknown
3CW053	Unknown	Surface Scatter	Unknown
3CW054	Archaic	Surface Scatter	Arkansas River Point Bar-Natural Levee
3CW055	Archaic	Isolated Find	Upland?
3CW056*	Archaic	Surface Scatter	Upland?
3CW057	Archaic	Surface Scatter	Upland?
3CW058	Archaic Woodland Mississippian	Surface Scatter	Arkansas River Point Bar-Natural Levee
3CW059	Archaic Mississippian	Surface Scatter	Arkansas River Undifferentiated Floodplain-Natural Levee
3CW060	Unknown	Unspecified	Arkansas River Point Bar

Table 3. Recorded Sites: Cultural Affiliation and Landforms (continued)

Site	Cultural Affiliation	Type	Landform
3CW061	Archaic Woodland	Surface Scatter	Arkansas River Point Bar-Natural Levee
3CW062	Archaic	Surface Scatter	Unknown
3CW063	Archaic Woodland	Surface Scatter	Tributary Alluvial Fan
3CW064*	Archaic	Surface Scatter	Upland
3CW076	Woodland	Unspecified	Unknown
3CW077	Woodland	Unspecified	Arkansas River Point Bar-Natural Levee
3CW154	Unknown	Unspecified	Unknown
3CW198	Archaic Woodland Mississippian	Unspecified	Unknown
3CW199	Unknown	Unspecified	Undifferentiated Tributary Floodplan (?)
3CW200	Unknown	Unspecified	Unknown
3CW202	Archaic	Unspecified	Unknown
3CW210	Archaic Woodland	Unspecified	Unknown
3CW642*	Unknown Historic	Subsurface Deposits	Upland Slope
3CW643*	Unknown Historic	Surface Scatter	Arkansas River Point Bar-Natural Levee
3CW644*	Historic	Surface Scatter	Undifferentiated Tributary Floodplain
3CW645*	Unknown Historic	Surface Scatter	Arkansas River Undifferentiated Floodplain-Natural Levee
3CW646*	Unknown	Surface Scatter	Undifferentiated Tributary Floodplain
3CW647*	Unknown	Surface Scatter	Upland
3CW648*	Unknown	Surface Scatter	Upland
3FR001	Woodland Mississippian	Subsurface Deposits	Tributary Alluvial Fan
3FR002	Archaic Woodland	Surface Scatter	Tributary Alluvial Fan
3FR003*	Archaic	Surface Scatter	Undifferentiated Tributary Floodplain-Natural Levee
3FR004	Archaic Woodland	Surface Scatter	Undifferentiated Tributary Floodplain-Natural Levee

Table 3. Recorded Sites: Cultural Affiliation and Landforms (continued)

Site	Cultural Affiliation	Type	Landform
3FR005	Archaic Woodland Mississippian	Surface Scatter	Arkansas River Lateral Bar-Natural Levee
3FR006	Woodland Mississippian	Unspecified	Unknown
3FR009	Woodland	Unspecified	Unknown
3FR015	Woodland	Surface Scatter	Arkansas River Lateral Bar-Natural Levee/ Upland Slope
3FR016	Archaic	Surface Scatter	Upland Slope
3FR017	Unknown	Surface Scatter	Tributary Alluvial Fan
3FR018	Archaic	Surface Scatter	Undifferentiated Tributary Floodplain-Natural Levee
3FR019	Archaic	Surface Scatter	Undifferentiated Tributary Floodplain
3FR020	Archaic	Surface Scatter	Undifferentiated Tributary Floodplain
3FR021	Archaic	Surface Scatter	Tributary Alluvial Fan
3FR022	Unknown	Surface Scatter	Tributary Alluvial Fan
3FR023	Woodland	Surface Scatter	Arkansas River Lateral Bar-Natural Levee
3FR024	Woodland	Surface Scatter	Undifferentiated Tributary Floodplain-Natural Levee
3FR025	Unknown	Surface Scatter	Upland
3FR026	Unknown	Surface Scatter	Unknown
3FR027	Unknown	Surface Scatter	Unknown
3FR029	Mississippian	Surface Scatter	Arkansas River Point Bar-Natural Levee
3FR030	Mississippian	Surface Scatter	Arkansas River Point Bar-Natural Levee
3FR031	Unknown	Surface Scatter	Arkansas River Point Bar-Natural Levee
3FR034	Unknown	Unspecified	Unknown
3FR036	Archaic	Unspecified	Unknown
3FR038	Unknown	Surface Scatter	Arkansas River Lateral Bar-Natural Levee
3FR039	Archaic	Surface Scatter	Upland Slope
3FR040	Woodland	Surface Scatter	Arkansas River Lateral Bar-Natural Levee

Table 3. Recorded Sites: Cultural Affiliation and Landforms (continued)

Site	Cultural Affiliation	Type	Landform
3FR045	Woodland Mississippian Historic	Unspecified	Unknown
3FR077	Historic	Unspecified	Unknown
3FR078	Unknown	Unspecified	Unknown
3FR092	Unknown	Unspecified	Unknown
3FR095	Unknown	Unspecified	Unknown
3FR096	Unknown	Unspecified	Unknown
3FR098	Unknown	Unspecified	Unknown
3FR099	Unknown	Isolated Find	Unknown
3FR134*	Unknown	Surface Scatter	Upland
3FR135*	Historic	Foundation	Upland
3FR136*	Unknown	Surface Scatter	Upland
3FR137*	Unknown	Surface Scatter	Upland Slope
3FR138*	Unknown Historic	Subsurface Deposits	Upland Slope
3FR140*	Unknown	Surface Scatter	Undifferentiated Tributary Floodplain-Natural Levee
3FR141*	Unknown	Surface Scatter	Undifferentiated Tributary Floodplain
3FR142*	Unknown Historic	Surface Scatter	Undifferentiated Tributary Floodplain-Natural Levee
3FR143*	Unknown	Surface Scatter	Upland
3FR144*	Unknown	Surface Scatter	Undifferentiated Tributary Floodplain
3FR145*	Unknown	Surface Scatter	Upland
3FR146*	Unknown	Subsurface Deposits	Upland
3FR147*	Unknown	Surface Scatter	Arkansas River Point Bar-Natural Levee
3FR148*	Unknown	Subsurface Deposits	Arkansas River Point Bar
3FR149*	Unknown	Subsurface Deposits	Arkansas River Point Bar
3FR150*	Historic	Surface Scatter	Arkansas River Point Bar
3FR151*	Unknown	Subsurface Deposits	Arkansas River Point Bar
3FR153*	Unknown	Surface Scatter	Undifferentiated Tributary Floodplain/ Upland Slope(?)
3FR154*	Unknown	Surface Scatter	Tributary Terrace
3FR155*	Unknown	Subsurface Deposits	Upland Slope

Table 3. Recorded Sites: Cultural Affiliation and Landforms (continued)

Site	Cultural Affiliation	Type	Landform
3FR156*	Unknown Historic	Surface Scatter	Tributary Terrace/Undifferentiated Tributary Floodplain
3FR157*	Unknown	Surface Scatter	Arkansas River Lateral Bar
3JC002	Woodland	Surface Scatter	Tributary Terrace
3JC003	Unknown	Surface Scatter	Undifferentiated Tributary Floodplain
3JC004	Unknown	Surface Scatter	Undifferentiated Tributary Floodplain
3JC005	Woodland Mississippian	Surface Scatter	Tributary Terrace
3JC006	Woodland Mississippian	Surface Scatter	Undifferentiated Tributary Floodplain
3JC007	Archaic Woodland	Surface Scatter	Unknown
3JC008	Woodland Mississippian	Surface Scatter	Undifferentiated Tributary Floodplain
3JC009	Unknown	Surface Scatter	Undifferentiated Tributary Floodplain
3JC010	Unknown	Surface Scatter	Undifferentiated Tributary Floodplain
3JC011	Unknown	Surface Scatter	Tributary Terrace/Undifferentiated Tributary Floodplain
3JC012	Archaic	Subsurface Deposits	Upland Slope
3JC013	Unknown	Surface Scatter	Arkansas River Terrace/ Tributary Terrace
3JC014	Unknown	Unspecified	Undifferentiated Tributary Floodplain
3JC016	Unknown	Unspecified	Undifferentiated Tributary Floodplain
3JC019	Archaic	Unspecified	Unknown
3JC020	Archaic Woodland	Unspecified	Unknown
3JC021	Archaic	Unspecified	Unknown
3JC022	Archaic	Unspecified	Unknown
3JC024	Unknown		Upland Slope
3JC026	Archaic Woodland	Unspecified	Unknown
3JC027	Archaic	Unspecified	Unknown

Table 3. Recorded Sites: Cultural Affiliation and Landforms (continued)

Site	Cultural Affiliation	Type	Landform
3JO028	Unknown	Bluff Shelter	Upland Slope
3JO033	Archaic Woodland Mississippian Historic	Surface Scatter	Tributary Terrace
3JO034*	Unknown Archaic	Surface Scatter	Tributary Terrace/ Upland Slope
3JO035	Unknown	Unspecified	Unknown
3JO037	Unknown	Surface Scatter	Upland Slope
3JC038	Unknown	Surface Scatter	Upland Slope
3JO040	Historic	Pittsburg Factory	Undifferentiated Tributary Floodplain
3JO045	Unknown	Surface Scatter	Undifferentiated Tributary Floodplain
3JO046	Unknown	Surface Scatter	Upland Slope
3JO047	Unknown	Surface Scatter	Upland Slope
3JO048*	Woodland	Subsurface Deposits	Tributary Terrace
3JO058	Archaic	Unspecified	Arkansas River Lateral Bar/Arkansas River Terrace
3JO059	Woodland Mississippian	Unspecified	Upland Slope
3JC079	Unknown	Unspecified	Unknown
3JO080	Unknown	Unspecified	Unknown
3JO081	Unknown	Unspecified	Unknown
3JO082	Unknown	Unspecified	Unknown
3JO084	Historic	Cemetery	Unknown
3JO101	Archaic	Unspecified	Arkansas River Terrace
3JO102	Historic	Cemetery	Upland Slope
3JO119	Unknown	Unspecified	Upland Slope
3JO120	Unknown Historic	Unspecified	Upland Slope
3JO121	Unknown	Unspecified	Upland Slope
3JO126	Unknown Historic	Unspecified	Upland Slope
3JO128	Unknown Historic	Unspecified	Undifferentiated Tributary Floodplain
3JO139	Historic	Unspecified	Tributary Terrace/ Upland Slope
3JO140	Unknown Historic	Structure	Upland Slope

Table 3. Recorded Sites: Cultural Affiliation and Landforms (continued)

Site	Cultural Affiliation	Type	Landform
3JO227*	Unknown	Surface Scatter	Tributary Terrace
3JO228*	Unknown	Unspecified	Tributary Terrace
3JO229*	Unknown	Surface Scatter	Tributary Terrace
3JO230*	Unknown	Surface Scatter	Tributary Terrace
3JO231*	Unknown	Surface Scatter	Tributary Terrace
3JO232*	Archaic	Subsurface Deposits	Tributary Terrace
3JO233*	Unknown	Surface Scatter	Tributary Terrace
3JO234*	Archaic	Surface Scatter	Upland Slope
3JO235*	Unknown	Surface Scatter	Upland Slope
3JO236*	Unknown	Surface Scatter	Upland Slope
3JO237*	Unknown	Surface Scatter	Tributary Terrace
3JO238*	Unknown	Subsurface Deposits	Tributary Terrace
3JO239*	Unknown	Surface Scatter	Tributary Terrace
3JO240*	Mississippian	Surface Scatter	Tributary Terrace
3JO241*	Unknown	Surface Scatter	Tributary Terrace
3LO001	Unknown	Surface Scatter	Tributary Terrace
3LO002	Archaic Woodland Mississippian	Surface Scatter	Upland Slope
3LO003	Unknown	Surface Scatter	Arkansas River Terrace
3LO004	Archaic Woodland Mississippian	Surface Scatter	Tributary Terrace/ Upland Slope
3LO005	Woodland Mississippian	Surface Scatter	Arkansas River Terrace
3LO006	Archaic Woodland Mississippian	Surface Scatter	Tributary Terrace/ Undifferentiated Tributary Floodplain
3LO007	Unknown	Surface Scatter	Undifferentiated Tributary Floodplain
3LO008	Unknown	Surface Scatter	Arkansas River Terrace
3LO009	Woodland Mississippian	Surface Scatter	Undifferentiated Tributary Floodplain
3LO010	Unknown	Surface Scatter	Undifferentiated Tributary Floodplain
3LO011*	Archaic Woodland Mississippian	Subsurface Deposits	Arkansas River Terrace
3LO012*	Archaic Woodland Mississippian	Subsurface Deposits	Undifferentiated Tributary Floodplain-Natural Levee

Table 3. Recorded Sites: Cultural Affiliation and Landforms (continued)

Site	Cultural Affiliation	Type	Landform
3LO025	Mississippian	Unspecified	Unknown
3LO027	Unknown		Unknown
3LO028	Unknown	Bluff Shelter	Upland Slope
3LO029	Unknown	Petroglyphs	Tributary Terrace
3LO031	Unknown	Surface Scatter	Undifferentiated Tributary Floodplain
3LO032	Historic	Surface Scatter	Tributary Terrace
3LO033	Woodland	Unspecified	Arkansas River Terrace
3LO034	Archaic	Unspecified	Undifferentiated Tributary Floodplain
3LO035	Unknown	Unspecified	Tributary Terrace
3LO036	Unknown	Unspecified	Unknown
3LO097	Archaic Historic	Unspecified	Unknown
3LO098	Woodland Mississippian	Unspecified	Unknown
3LO099	Woodland Mississippian	Unspecified	Unknown
3LO105	Historic	Unspecified	Upland Slope
3LO126*	Unknown	Subsurface Deposits	Upland Slope
3LO127*	Unknown	Surface Scatter	Upland Slope
3LO128*	Unknown	Surface Scatter	Upland Slope
3LO129*	Unknown	Surface Scatter	Upland Slope
3LO130*	Unknown	Subsurface Deposits	Upland Slope
3LO131*	Unknown Historic	Surface Scatter	Upland Slope
3LO132*	Unknown Historic	Surface Scatter	Undifferentiated Tributary Floodplain
3LO133*	Unknown	Surface Scatter	Undifferentiated Tributary Floodplain
3LO134*	Archaic	Surface Scatter	Undifferentiated Tributary Floodplain
3LO135*	Unknown	Surface Scatter	Tributary Terrace
3LO136*	Archaic	Surface Scatter	Undifferentiated Tributary Floodplain
3LO137*	Unknown	Surface Scatter	Arkansas River Terrace
3LO138*	Unknown	Surface Scatter	Arkansas River Terrace
3LO139*	Unknown	Surface Scatter	Upland Slope
3LO140*	Unknown	Surface Scatter	Undifferentiated Tributary Floodplain

Table 3. Recorded Sites: Cultural Affiliation and Landforms (continued)

Site	Cultural Affiliation	Type	Landform
3PP001	Woodland	Bluff Shelter	Upland Slope
3PP002	Unknown	Surface Scatter	Tributary Point Bar
3PP003	Unknown	Surface Scatter	Undifferentiated Tributary Floodplain
3PP004	Unknown	Surface Scatter	Tributary Point Bar
3PP005	Unknown	Surface Scatter	Tributary Point Bar
3PP006	Unknown	Surface Scatter	Tributary Point Bar
3PP007	Woodland Mississippian	Surface Scatter	Tributary Point Bar
3PP008	Woodland Mississippian	Surface Scatter	Tributary Point Bar
3PP009	Unknown	Surface Scatter	Tributary Point Bar
3PP010	Unknown	Surface Scatter	Undifferentiated Tributary Floodplain
3PP011	Unknown	Surface Scatter	Undifferentiated Tributary Floodplain
3PP012	Unknown	Surface Scatter	Undifferentiated Tributary Floodplain
3PP013	Unknown	Surface Scatter	Unknown
3PP014	Unknown	Surface Scatter	Undifferentiated Tributary Floodplain-Natural Levee
3PP015	Woodland Mississippian	Surface Scatter	Undifferentiated Tributary Floodplain
3PP016	Unknown	Surface Scatter	Tributary Point Bar
3PP018	Woodland Mississippian	Surface Scatter	Tributary Point Bar
3PP019	Unknown	Surface Scatter	Tributary Point Bar
3PP020	Mississippian Historic	Surface Scatter	Undifferentiated Tributary Floodplain-Natural Levee
3PP022	Unknown Historic	Surface Scatter	Undifferentiated Tributary Floodplain-Natural Levee
3PP034	Mississippian	Mound	Arkansas River Point Bar
3PP044	Unknown	Unspecified	Arkansas River Terrace
3PP045	Unknown	Surface Scatter	Upland Slope
3PP057*	Unknown	Surface Scatter	Upland Slope
3PP058	Historic	Surface Scatter	Upland Slope
3PP059	Unknown	Surface Scatter	Upland Slope

Table 3. Recorded Sites: Cultural Affiliation and Landforms (continued)

Site	Cultural Affiliation	Type	Landform
3PP060*	Unknown Historic	Surface Scatter	Upland Slope
3PP062	Unknown	Surface Scatter	Arkansas River Terrace
3PP066	Unknown		Unknown
3PP067	Woodland Mississippian	Surface Scatter	Arkansas River Point Bar-Natural Levee
3PP068	Woodland Mississippian Historic	Surface Scatter	Arkansas River Point Bar-Natural Levee
3PP069	Woodland Mississippian Historic	Surface Scatter	Arkansas River Point Bar-Natural Levee
3PP070	Woodland	Surface Scatter	Arkansas River Point Bar-Natural Levee
3PP112	Unknown	Isolated Find	Upland Slope
3PP113	Unknown	Mine Shaft, Rock Cairn	Upland Slope
3PP114	Unknown	Unspecified	Upland Slope
3PP115	Unknown	Unspecified	Upland Slope
3PP116	Unknown	Unspecified	Tributary Alluvial Fan
3PP246*	Unknown	Surface Scatter	Upland Slope
3PP247*	Unknown	Subsurface Deposits	Upland Slope
3PP248*	Unknown	Surface Scatter	Upland Slope
3PP249*	Unknown Mississippian	Unspecified	Upland Slope
3PP250*	Unknown	Subsurface Deposits	Upland Slope
3PP251*	Unknown Historic	Subsurface Deposits	Upland Slope
3PP252*	Unknown	Surface Scatter	Tributary Terrace
3PP253*	Unknown	Subsurface Deposits	Tributary Terrace
3PP254*	Unknown	Subsurface Deposits	Tributary Terrace
3PP255*	Unknown	Subsurface Deposits	Tributary Terrace
3PP256*	Unknown	Unspecified	Undifferentiated Tributary Floodplain
3PP257*	Unknown Historic	Surface Scatter	Upland Slope
3PP258*	Unknown	Subsurface Deposits	Tributary Alluvial Fan
3PP259*	Unknown	Subsurface Deposits	Tributary Alluvial Fan
3PP260*	Unknown	Subsurface Deposits	Tributary Alluvial Fan
3PP261*	Unknown	Surface Scatter	Tributary Alluvial Fan
3PP262*	Woodland Mississippian	Subsurface Deposits	Tributary Alluvial Fan

Table 3. Recorded Sites: Cultural Affiliation and Landforms (continued)

Site	Cultural Affiliation	Type	Landform
3PP263*	Unknown	Surface Scatter	Upland Slope
3PP264*	Unknown	Surface Scatter	Upland Slope
3SB001	Archaic Woodland Mississippian	Surface Scatter	Unknown
3SB002	Unknown	Surface Scatter	Unknown
3SB006	Woodland	Surface Scatter	Unknown
3SB007	Archaic	Surface Scatter	Unknown
3SB008	Archaic	Surface Scatter	Undifferentiated Tributary Floodplain
3SB009	Unknown	Unspecified	Arkansas River Point Bar-Natural Levee
3SB011	Unknown	Surface Scatter	Unknown
3SB012	Unknown	Surface Scatter	Unknown
3SB058	Unknown	Unspecified	Unknown
3SB084	Historic	Unspecified	Unknown
3SB096*	Historic	Structure	Upland
3SB097*	Unknown	Surface Scatter	Undifferentiated Tributary Floodplain
3SB098*	Unknown	Surface Scatter	Upland
3SB099*	Unknown	Surface Scatter	Upland Slope
3YE003	Mississippian	Surface Scatter	Arkansas River Lateral Bar/Arkansas River Terrace
3YE004	Mississippian	Surface Scatter	Undifferentiated Tributary Floodplain
3YE005	Unknown	Surface Scatter	Undifferentiated Tributary Floodplain
3YE006	Mississippian	Surface Scatter	Tributary Terrace
3YE020	Unknown	Surface Scatter	Arkansas River Terrace
3YE242	Unknown	Unspecified	Tributary Terrace
3YE261	Unknown	Shelter	Upland Slope
3YE262	Unknown	Shelter	Upland Slope
3YE290*	Unknown	Surface Scatter	Upland Slope
3YE291*	Unknown	Surface Scatter	Upland Slope
3YE292*	Unknown	Surface Scatter	Upland Slope
3YE293*	Unknown	Surface Scatter	Upland Slope
3YE294*	Unknown Historic	Surface Scatter	Upland Slope

Pre-Paleo-Indian Periods (30,000 BC (?) - ca 12,000/10,000 BC)

Culture history summaries commonly begin with Paleo-Indian as the earliest recognized manifestation of human occupation of North America. Based on data from outside Arkansas, Schambach et al. (1982:26-31) conjecture that it is theoretically possible for at least two cultural periods, called the Preprojectile Point Period and the Prefluted Point Period to be represented in southwest Arkansas. The Preprojectile Point Period, may be represented only by assemblages with lithic debris and nondiagnostic stone tools manufactured by percussion. The undated Prefluted Point Period is suggested to contain similar percussion tools and debris, with the addition of "carefully prepared bifacial tools and hafted implements" (Schambach et al 1982: 30). In the absence of diagnostic artifacts for these periods, sites would be recognized and relatively dated by geomorphological and paleontological evidence. Because so little is known about these postulated occupations, no speculations can be offered concerning resource use, types of settlement, or social organization.

Paleo-Indian Period (12,000/10,000 BC - 8,000/7,000 BC)

These components are recognized by lanceolate, often fluted, projectile points which are sometimes found in association with extinct mammal remains. Paleo-Indian economy is believed to have been dependent on the hunting of large extinct mammals, although plant resources were undoubtedly exploited too.

The mobility of the quarry would have mandated seasonal movements with camps located near grazing spots, water holes or other kill sites, or (especially in winter) meat storage facilities. It is assumed that populations must have been highly mobile to function efficiently in this type of economy. From ethnographic information, highly mobile population groups are generally small bands consisting of one or a few nuclear families. Occasional larger aggregations of people for processing an abundant resource, such as harvesting seasonally available wild plants or butchering bison at a mass kill site, seem plausible.

No Paleo-Indian components are known from the study area. Hoffman (1969:39) notes documented fluted points in amateur archeologists' collections for the Arkansas drainage of southwest Arkansas. Davis (1967a: 2) illustrates a Clovis point found in a creek bank in Logan County. Data recovery efforts at site 3JO089 north of the project area has produced two dart point fragments which are illustrated as possible Clovis points (Heartfield, Madden and Price 1985: Figure 2-4:e; 2-5:g) but the illustrations are not sufficiently clear to permit independent judgment regarding this chronological placement.

Archaic Period (8,000/7,000 BC - 1,000/500 BC)

The Archaic stage is commonly believed to begin as a change in economic focus resulting from changing climate. In general, Archaic stage components are believed to represent more localized adaptations to hunting and gathering territories. This localization is seen in the greater variety of tool forms over the continent as a whole during this period.

Archaic economies are believed to have been based on smaller, non-herd animals and on seasonally available vegetable resources. If territories were truly smaller than in Paleo-Indian times, locations might have been visited more regularly in a more predictable sequence of seasonal site use.

Beginning with the Archaic Period, archeologists recognize a distinction between base camps (possibly semi-permanent residences where a variety of activities took place) and special use sites (used temporarily for processing of one of a few specific resources, most of which would be consumed or used elsewhere). As with the Paleo-Indian Period, this strategy could have been efficiently used by small groups, probably based on kinship. Larger gatherings during part of the year could have been feasible.

Midden sites, first recognizable during the Archaic Period, attest to intensive site use over a relatively long period, or by a large group of people, or both. It has been postulated (Anderson 1952; Fowler 1971:123-124) that Archaic middens would have been ideal environments for hybridized wild food plants, and that cultivation was the logical result of this initially unintentional encouragement of species. Cultivation of native species is recognized (Fowler 1971; Yarnell 1971) for Late Archaic occupations in the Mississippi drainage, although no such evidence is known for contemporary components within the study area.

Both open and rock shelter sites in the Lake Dardanelle and Ozark Lake area contain Archaic Period components. No site has yielded evidence for structures.

Early and Middle Archaic assemblages are rare in the study area. In the Arkansas River drainage of eastern Oklahoma, the Packard site (34MY066) contained a hearth which was radiocarbon dated 7656 B.C. ± 193 (R-1070/4; Wyckoff 1964:103). Levels associated with the hearth contained Agate Basin and Big Sandy points as well as a chipped axe, cores, knives, and a hafted scraper.

Published reports are available for two rock shelter sites in the Arkansas River drainage of western Arkansas where stratified remains of Archaic through Late Prehistoric occupations are seen. These are Tom's Brook (3JC001; Bartlett 1963) and Sliding Slab (3SB029; Harden et al 1981).

At Tom's Brook Shelter, Bartlett (1963: 34-37) used point and ceramic types from arbitrary six inch levels in a deposit more than 8.5 feet deep. He

divides the occupations into four complexes, using Marshall's (1958) sequence at Table Rock Reservoir in the Ozarks of southwest Missouri. Two of these complexes are Archaic.

The Early Nonceramic Complex contains Big Sandy, Johnson, Stone Square Stemmed, and Uvalde points, hafted scrapers, expanding stem drills, and flake knives. The Late Nonceramic Complex is marked by a decrease in Big Sandy points and the occurrence of Williams, Bulverde, Marcos, Ellis, and Ensor point types. Flake knives, biconvex scrapers, expanding stem drills, utilized flakes and pebble hammerstones are also found (Bartlett 1963:34-35).

McGimsey (1963) suggests that a substage (Archaic 1) containing Breckenridge points would predate the Early Nonceramic Complex, based on Wood's (1963) work at Breckenridge Shelter in the White River drainage. McGimsey's Archaic 2 and 3 substages correspond to the Early and Late Nonceramic Complexes, respectively.

The name "Tom's Brook" has been applied to a Middle Archaic culture or phase in southwest Arkansas, but it is best understood from deep midden contexts along the Ouachita River (Schambach 1970: 384-385; Schambach et al. 1982: 50-53). No components are recognized in the northern Ouachita Mountains. The diagnostic artifact, the Johnson point, was defined (Bartlett 1963:28) at Tom's Brook Shelter. It occurs throughout western Arkansas (Perino 1968:40).

At Sliding Slab Shelter, in the upper Petit Jean River drainage, authors Harden and Rohrbaugh offer different interpretations of the culture history represented by ten assemblages. The only sealed deposit, Assemblage 1, is ascribed to the Middle Archaic by Rohrbaugh (Harden et al. 1981:158) based on four radiocarbon dates ranging from 2710 to 1610 B.C. Harden points out that Assemblage 1 resembles the Late Archaic Wister Phase (discussed below) in the predominance of large corner notched points (Harden et al. 1981:119-120). However, Wister Phase components in the Poteau River drainage have been radiocarbon dated between 1500 B.C. and A.D. 1 (Galm and Flynn 1978:155), obviously later than the dates from Sliding Slab's Assemblage 1.

To complicate the matter further, the lowest levels at the Scott site (34LF011) in the Poteau drainage have been tentatively designated as a Middle Archaic component, based on radiocarbon dates ranging from 2820 to 1285 B.C. (Galm and Flynn 1978:79, 155). Nine straight stemmed and eight contracting stemmed points were found in these levels (Galm and Flynn 1978:110). Clearly, regionality or locality may have as much influence on point style preferences as does chronology.

The best defined Late Archaic manifestation for the study area is the Wister Phase in the Poteau drainage of eastern Oklahoma (Galm 1978:72-74; Bell 1980a:119; Galm and Flynn 1978:155-156). Large points are mostly corner

notched with expanding stems, as in Bartlett's (1963:35) Late Nonceramic Complex. Other artifacts include drills, modified flakes, manos, and hammerstones (Galm 1978:73). Radiocarbon dates from five sites indicate a range from 1500 B.C. to A.D. 1 (Galm 1978:37; Galm and Flynn 1978:77-82; Bell 1980a:117).

Assemblage 2 at Sliding Slab Shelter is considered a Wister Phase manifestation with radiocarbon dates between 1650 and 60 B.C. (Harden et al. 1981:121, 158). Contracting stemmed (8), expanding stemmed (8), and parallel stemmed (2) large points occur together in this assemblage. As mentioned above, the chronological and spatial relationships between these point styles remains undefined for the study area.

As mentioned above, Trubowitz (1982) conducted investigations at 3CW202 which he judged to be a Late Archaic workshop. This identification rests on six rectangular stemmed or corner notched points resembling the Castroville, Williams, and Marcos types (Trubowitz 1982: 35, 36). No evidence of stratified deposits was detected at the site. The primary activity identified was the reduction of river cobbles and the site was interpreted as a special activity site.

In the Lake Dardanelle area there are 14 sites from which artifacts dating from the Archaic Period have been recovered. In the Ozark Lake area there are at least 24 sites of this period. A number of sites yielded artifacts which could be considered Archaic or Woodland. There are 9 sites in the Lake Dardanelle area to which this applies. In Ozark Lake there are 12 such sites. The following is a listing of these sites.

	Archaic	Archaic/Woodland
Lake Dardanelle	3JO012	3JO007
	3JO019	3JO020
	3JO021	3JO026
	3JO022	3JO033
	3JO027	3LO002
	3JO034*	3LO004
	3JO058	3LO006
	3JO101	3LO011*
	3JO232*	3LO012*
	3JO234*	
	3LO034	
	3LO097	
	3LO134*	
	3LO136*	

	Archaic	Archaic/Woodland
Ozark Lake	3CW014	3CW013
	3CW015	3CW021
	3CW016	3CW028
	3CW026	3CW058
	3CW029	3CW061
	3CW032	3CW063
	3CW054	3CW198
	3CW055	3CW210
	3CW056*	3FR002
	3CW057	3FR004
	3CW059	3FR005
	3CW062	3SB001
	3CW064*	
	3CW202	
	3FR003*	
	3FR016	
	3FR018	
	3FR019	
	3FR020	
	3FR021	
	3FR036	
	3FR039	
	3SB007	
	3SB008	

The Woodland Period (1,000/500 BC - AD 600/900)

In other parts of the Mississippi River drainage, Woodland Period components contain evidence for increasing dependence on cultivated plant food (including imported cultigens such as corn). An increasingly sedentary lifestyle can be inferred from dependence on cultivated plants. Additionally, cooperation of relatively large populations is inferred from elaborate systems of mound burial.

There is no direct evidence for either elaborate burial systems or agriculture in the Lake Dardanelle and Ozark Lake area (although a gardening area is inferred at the Spinach Patch site from concentration of siltstone tools and flakes in one part of the site; see discussion below). Woodland Period components in the study area are identified by the presence of plain clay- or sand-tempered pottery with large points, especially Gary points. Middens, burials, post molds indicating structures, trash or storage pits, and fire-cracked rock concentrations have been found at open sites; Woodland components have also been defined in rock shelter deposits.

Three names have been used in discussing Woodland Period sites in west central Arkansas: Early Ceramic Complex, Gober Complex, and Fourche Maline

Phase. The first term, Early Ceramic Complex, was used for the levels in which plain clay-tempered pottery first appeared at Tom's Brook Shelter (Bartlett 1963:35). Gary points are the most common type, although Williams, Bulverde, and Marcos points are found in these levels. Flake knives, utilized flakes, scrapers, and manos are also attributed to the Early Ceramic occupation.

Other early ceramic components in the study area have been assigned to the Gober Complex (Hoffman 1977b:33-41). Diagnostic artifact classes are rectangular spades, Gary points with narrow pointed stems, and clay-tempered plain and incised pottery. The Spinach Patch site (3FR001), which is considered a single component Gober Complex site, also yielded large corner notched points (including Ellis and Edgewood types), a significant number of Scallorn points, bifaces, choppers, cores, a stemmed argillite spade, hammerstones, manos, a boatstone fragment, bone debris, shell beads, and daub (Bond 1977b:90-91, 96-116). At the Gasfield site (3FR009), single examples of red filmed, dentate stamped, and punctated pottery, as well as a pottery platform pipe, may also belong to this period (Hoffman 1977b:40).

Gober Complex sites are found on natural levees or eroded terraces (Hoffman 1977b:33). The Spinach Patch site shows evidence for a midden/habitation area, a plaza, a burial mound with one semi-flexed and two unidentified burials, a double arc of post molds, and a gardening area (Bond 1977b:86-88; Hoffman 1977a:74-76, 1977c:65). Oval, basin-shaped pits were excavated at another Gober Complex site, the Crooked Creek site (3FR026; Myer 1977:48).

Schambach classifies the Gober Complex as "one or more regional phases of Fourche Maline culture ... probably dating to the middle Fourche Maline period" between 100 B.C. and A.D. 500 (Schambach 1982:138, 188-189). However, Schambach's Fourche Maline sequence is best defined for the Ouachita River in southwest Arkansas, and there are important regional differences in Fourche Maline manifestations. For example, Bell (1980a:114) points out that burials are commonly extended in southwest Arkansas Fourche Maline, but flexed in eastern Oklahoma. Because of their geographical proximity, Gober Complex components should resemble eastern Oklahoma Fourche Maline Phase components more than those in southwest Arkansas.

With this in mind, it is interesting to note that no digging implements were found at the Curtis Lake site (34LF005a), where Galm (1978:74-76) defined the Fourche Maline Phase. Few hoes were found at the Scott (34LF011) and Wann (34LF027) sites in Fourche Maline Phase components (Galm and Flynn 1978:189, 254). Thus, although horticulture may be inferred from the Gober Complex spades, it has not been demonstrated for the Wister Valley Fourche Maline Phase.

Radiocarbon dates for the Fourche Maline Phase at Curtis Lake, Scott, and Wann range from 200 B.C. through A.D. 1000 (Galm 1978:37; Galm and Flynn 1978:77-82, 156). Gary points and Williams Plain pottery are considered diagnostic (Galm 1978:74). However, the presence of Gary points in earlier

dated assemblages (see Archaic Period above) shows that the Gary type by itself is not definitive.

The Poe site, in the Poteau River Drainage, is identified as a single component Woodland site with possible ties to Poverty Point based on a collection of baked clay balls attributed to the site (Schambach et al. 1982:63-64). From a dark midden ranging up to 80 cm below surface, excavators recovered numerous dart points (mostly Gary type), thick clay tempered pottery, some decorated pottery, a double bitted axe, and a large quantity of fire-cracked rock. One burial, circular trash pits, and possible post molds are reported (H.A. Davis 1970: 3-4). The site seems to resemble the Fourche Maline Phase and the Gober Complex.

Sliding Slab Shelter contains one or more Fourche Maline Phase components (Harden et al. 1981:123-132, 158-160). The authors' disagreement on whether Assemblages 4 through 9 are Fourche Maline or Caddoan is based on different interpretations of ceramic types and on the overlap in acceptable radiocarbon dates for these stages (Harden et al. 1981:160-166). All assemblages include grog-tempered pottery and large contracting and expanding stemmed points. Small points appear in the upper strata, but Harden considers shell-tempered pottery in these strata to be intrusive (Harden et al 1981:123-133).

In the present study, sites were assigned to the Woodland Period primarily on the presence of Gary points and plain, clay, or grog-tempered pottery (Williams Plain). If the site had both Gary points and Williams Plain pottery or if it had Williams Plain pottery it was assigned to the Woodland Period. Sites from which only Gary points were reported are more of a problem. However, we have also classified these as Woodland.

A total of 21 sites with Woodland components have been identified in the Lake Dardanelle area. A total of 13 sites with Woodland components have been identified in the Ozark Lake area. These sites are listed below. Sites which could be either Archaic or Woodland in cultural affiliation were listed at the close of the section on the Archaic Period.

Lake Dardanelle	Ozark Lake
3JO002	3CW022
3JO005	3CW031
3JO006	3CW076
3JO008	3CW077
3JO048*	3FR001
3JO059	3FR006
3LO005	3FR009
3LO009	3FR015
3LO033	3FR023
3LO098	3FR024

Lake Dardanelle	Ozark Lake
3LO099	3FR040
3PP001	3FR045
3PP007	3SB006
3PP008	
3PP015	
3PP018	
3PP067	
3PP068	
3PP069	
3PP070	
3PP262*	

Mississippian Period (AD 600/900 - AD 1541/1650)

In western Arkansas, Bartlett's (1963:37) Late Ceramic Complex probably contained Caddoan material culture as well as earlier and possibly later artifacts. Scallorn and Fresno arrow points and shell-tempered pottery are considered diagnostic. Other artifacts include Gary and Williams points, expanding stem drills, scrapers, utilized flakes, manos, slab metates, and boatstones. A flexed burial with no associated material culture is also attributed to this latest occupation of Tom's Brook Shelter.

The McClure Complex was defined (Hoffman 1977b:41-43) from a large cemetery and possible habitation site in the Arkansas River bottom of Crawford County, Arkansas (McCartney 1963; Hoffman 1977b:31-32). Arrow points (Fresno, Reed, and unnamed triangular forms) and predominantly shell-tempered pottery were found on the surface and in disturbed graves. Large points have not been found at this single component site and Hoffman (1977b:41) attributes their presence in other Late Ceramic components to mixing of deposits.

Ceramic decoration at the McClure site resembles that in the Carden Bottoms Complex (Hoffman 1977b: 5-6, 43), first described by Harrington in 1924 for an area downstream from Dardanelle Lock and Dam. In describing material culture from vandalized graves, Harrington (1924:86-88) noted pottery with engraved and painted decoration, unstemmed arrow points, flint knives, axes, soapstone beads, stone discs, bone and antler tools, and conch shell ornaments. Harrington ascribed the assemblage to a mixture of Caddo and Quapaw culture. Clancy (1985) also identified a variety of ceramic types belonging to these groups in the Carden Bottoms material.

A Mississippian period occupation was noted at the Alexander site in Conway County. This was identified primarily by the presence of a number of shell-tempered sherds. Unfortunately this inventory was not sufficient in either number or quality to identify more specifically the cultural affiliation of this group (Hemmings and House 1984: 118).

As noted by Rohrbaugh (Harden et al. 1981:12), Caddoan occupations in the Arkansas River Valley have been explored in greater detail in eastern Oklahoma than in western Arkansas, partly due to the large amount of published WPA and contract research in this area. Sequences applied to this area include Gibson and Fulton Aspects (Krieger 1946), Caddo I-V (E.M. Davis 1970:40-52), and Harlan, Spiro, and Fort Coffee Phases (Brown, Bell, and Wyckoff 1978). Most recently, Wyckoff (1980) uses radiocarbon dates from features representing 14 components at 11 village and ceremonial sites to propose four periods of Caddoan occupation in eastern Oklahoma. The periods are characterized by changing frequencies of pottery and small point styles and assemblages from 209 other sites are cross-dated into the sequence. Within this framework, Wyckoff investigates changes in settlement pattern, resource use, and technology.

Generally, Periods I and II (A.D. 650 to 1200) showed evidence for population growth, expanding settlement area, and development of a complex social-political system involving mound construction at community centers (Wyckoff 1980:519-520). Ceremonial sites with several different mound types are believed to have been organized into a hierarchy of sociopolitical centers serving the Arkansas River portion of the Caddoan area. Change through time can be seen in the spatial distribution and apparent rank of the centers (Brown, Bell, and Wyckoff 1978: 185-193).

In Arkansas, the only two mound centers in the vicinity of the study area are Cavanaugh mound near Fort Smith and the Point Remove mound group near Morrilton (Davis 1967b). The place of these two centers in the proposed hierarchy is unknown.

Between A.D. 1200 and 1550 (Period III and IV), people apparently withdrew from northern and western fringes of the Caddoan area in Oklahoma, probably in response to the Pacific Climatic episode which made summer rainfall more unpredictable in these areas. Ceremonial centers in the Arkansas River Valley and southern Ozarks flourished, then declined (Wyckoff 1980:520-530).

Despite these important changes, Caddoans in all periods lived in small unfortified hamlets. Continuity is also seen in the Caddoans' dependence on agriculture in addition to foraging (Wyckoff 1980:513-514). Structures, pits, and burials are found at residential sites up to 10 hectares in size on or adjacent to arable land (Brown, Bell, and Wyckoff 1978:178-179, 183). Rock shelter occupations could have been either processing sites or permanent habitations. Temporary hunting camps and quarries are also recognized. In Periods III and IV, temporary camps were more common in the northern and western areas, and bison were apparently more important in the economy (Wyckoff 1980:522).

While, as we indicated above, it is quite likely that the very eastern end of the project area contains sites of Quapaw or proto-Quapaw affiliation we cannot, on present, evidence identify any of the recorded sites in this way.

A total of 30 Mississippian Period components are currently identified for the Lake Dardanelle. Thirteen such components are identified for the Ozark Lake area.

Lake Dardanelle	Ozark Lake
3JO005	3CW031
3JO006	3CW032
3JO008	3CW034
3JO033	3CW038
3JO059	3CW059
3JO240*	3CW198
3LO002	3FR001
3LO004	3FR005
3LO005	3FR006
3LO006	3FR029
3LO009	3FR039
3LO011*	3FR045
3LO012*	3SB001
3LO025	
3LO098	
3LO099	
3PP007	
3PP008	
3PP015	
3PP018	
3PP020	
3PP034	
3PP067	
3PP068	
3PP069	
3PP249*	
3PP262*	
3YE003	
3YE004	
3YE006	

Historic Period (AD 1541 - present)

While Hudson (1985) has recently raised the possibility that Europeans were in our study area as early as the middle of the 16th century it is not until much later that sustained European presence is made in the area. The establishment of Arkansas Post in 1686 marked the beginning of trade between the French and the Indians along the Arkansas River. Over the next hundred years traders and trappers became familiar with the rich lands and abundant game along the river. By the late 1700s a regular trading point had been established at or near Cadron Creek and the Spanish had made land grants as far up the river as the present Franklin County (General Land Office

1831:T9N R26W). By the time the United States purchased Louisiana in 1803 there were settlements as far upstream as Dardanelle (Smith 1974:7-8; Ross 1957:3-4).

Treaties which had earlier restricted the Osage Indians to northwest Arkansas were overturned in 1808 when that tribe sold their lands and moved to Indian Territory (Oklahoma). This opened the western part of the Arkansas River Valley to European settlers and within a few years there were farms all along the river (Smith 1974:9).

Keeping close to the river, or navigable creeks, for ease of transportation the settlement on Big Mulberry Creek was typical. The thirty families that lived there came from Kentucky and Tennessee by way of Arkansas Post. They grew corn and Irish potatoes and supplemented their diet with game, fish, and honey. Hides of bear, deer, beaver, and otter, as well as bear oil and beeswax, were traded to obtain other items such as cloth, dishes, and coffee (Williams et al. 1984:18-19).

Pressure from European settlers on Cherokee lands in Georgia and North Carolina caused some of the Indians to move to Arkansas. There they established farms, planted crops, and hunted. Some of their hunting encroached on lands used by the Osage and tension between the two tribes mounted. Despite an attempt to effect a compromise in 1816, tension continued to grow between the Cherokee and the Osage (Gabler 1960:31-33). This tension, as well as the growing number of European settlers, led in 1817 to the building of a military post on the frontier to keep the peace. A survey party headed by Major Stephen H. Long chose Belle Point as the site for the fort, which was named Camp Smith. Major William Bradford arrived at the site on Christmas Day 1817 to begin construction (Bearss and Gibson 1969:3-19). Nearby settlers provided the soldiers with buffalo meat in exchange for flour (Williams et al. 1984:18).

In the same year a treaty was made with the Cherokee Indians guaranteeing them land in Arkansas equal to land they would cede to the United States in Georgia and North Carolina. This new Cherokee reservation was to include the lands between the Arkansas and White Rivers, west of a line from the mouth of Point Remove Creek on the Arkansas River to Shield's Ferry on the White River. Part of the agreement was that any white settlers on this tract would have to move and many of them abandoned their farms and moved south of the Arkansas River (Williams et al. 1984:19). Some of the Cherokees arriving from Georgia then took over the abandoned improvements (Dale 1949:96-97).

By the time Thomas Nuttall visited the area in April 1819, he found both banks of the river lined with Cherokee farms. Nuttall described the houses as "decently furnished" and the farms "well fenced and stocked with cattle" (Nuttall 1821:123, 138; Vaulx 1946:174). The Indians also continued to hunt and trade with traders operating from Arkansas Post and Cadron. In an effort to control this trade, the government established a factory at Spadra

Bluff in 1819. In 1821 this post shipped 22,265 pounds of deer skins as well as numerous other pelts. Despite its success, the factory was closed in 1822 when the factory system was abolished (Morris 1969:40-46). As discussed above this site (3JO033) was investigated by Westbury (1971).

With the growth of the Cherokee settlements along the Arkansas River and the influx of emigrants from the east, Tol-on-tus-ky, the chief of the Arkansas Cherokees, requested the American Board of Commissioners for Foreign Missions to establish a mission among his people. Cephas Washburn and Alfred Finney were chosen for this project. In July 1820, they bought land on Illinois Bayou that had a cabin and began growing crops. The site was on a rise with a spring and had good farming land and a mill site nearby. Named Dwight Mission in honor of Timothy Dwight, the ex-president of Yale, construction of new buildings began in August 1820. The first worship service was held in May 1821 and attracted blacks and whites as well as Cherokees. The mission opened a school in 1822 and by May of that year the enrollment had reached 50 (Jones 1944:125-132; Arkansas Democrat 16 April 1933).

The mission continued to grow and prosper. By 1824 it had over 25 buildings at the original site as well as a mill that had been built on a nearby creek (Washburn 1824; General Land Office 1838:T8N R21W). The school had become so large that a second school was begun to serve the settlement along Mulberry Creek (Boston Missionary Herald March 1829). Continuing pressure from white settlers, however, led the Cherokees to surrender their Arkansas land for a new grant in Oklahoma, and Dwight Mission moved west to a new location in 1828 (Dale 1949:97; Jones 1944:135; Littlefield and Underhill 1972:168-171). The buildings on Illinois Bayou were taken over in 1830 by Aaron W. Lyon for a school but it had closed by 1834 (Moffatt 1953:97-98).

While the Cherokee controlled the north bank of the Arkansas River, both European and Cherokee settlements grew along the south bank (James 1823:vol. 2 pp. 263-268). Arkansas had become a territory in 1819 and new counties were formed as quickly as there were enough people in an area to warrant one. Crawford County was formed in 1820 on the western edge of Arkansas south of the Arkansas River. The county seat was established at Crawford Court House in what is now Franklin County (Hempstead 1890:892; General Land Office 1826: T9N R26W). (This site is within the River Ridge Public Use Area and has been recorded as site 3FR138.) The lands north of the river were added to the original county after the Cherokee removal (Goodspeed 1889:488).

When the new treaty removing the Cherokee to Oklahoma was concluded, European settlers rushed into the reservation area to buy or claim farms, mills, and orchards established by the Indians (Littlefield and Underhill 1972:167-168). As surveys of this area were completed the prime lands along the river and up the major creek valleys were quickly claimed. Settlements were established north of the river on Illinois Bayou, White Oak Creek, Mulberry Creek, and Frog Bayou. Pope County was formed in 1829 and Johnson

County in 1833 (Goodspeed 1889:488-489; Hempstead 1890:946, 1008). Ozark was founded in 1835 by David Walker and Archibald Yell in anticipation of the formation of Franklin County (Lemke 1954:278-279; Powell 1985). South of the river the settlement at McLain's Bottoms changed its name to Roseville, in honor of Horace Boardman Rose, and Yell County was formed in 1840 (Field 1951:328; Hempstead 1890:1051).

This burst of settlement was part of a cycle which had its roots in the cotton states of the Southeast. As land became less productive and more expensive many people headed west to find a better life. When Texas was opened to American settlers, the lure was especially strong, and many people headed for Texas passed through Little Rock. At the same time the removal of the Indians, the building of a military road from Little Rock to Fort Smith, and availability of steamboats for trade and transportation made the Arkansas River Valley very attractive to emigrants (Walz 1958:320; Vaught 1958:251).

The need to send supplies to Fort Smith encouraged the growth of steamboat traffic on the Arkansas River. The first boat to reach that post was the Robert Thompson in 1822. By 1828 regular service had been established from New Orleans (Brown 1942:346, 348). Soon the boats would stop at any settlement that had a landing; and the landings became focal points for settlers. Ozark was typical. Originally a ferry site, in 1835 Samuel Evans built a warehouse and a store at the landing. Walker and Yell laid out a town around the landing which became the county seat of the newly formed Franklin County in 1837. Evans became postmaster and county clerk as well as the agent for inland merchants in Madison and Carroll Counties. Ozark was such an important transshipping point that a road was built from there to Huntsville (Lemke 1954:278-282; Powell 1985).

By the 1840s settlement was moving out of the main river valley and up the smaller creeks (General Land Office 1826-1840; Watkins 1980:49-53). A typical farm had 30-35 acres, a hewn log house often with a stone chimney, and a barn and other outbuildings. Many families had orchards of peach or apple trees in addition to the land they had in crops. Some farmers had their own grist mills (Salt Springs Papers:11, 18, 19, 20, 21, 22).

As tensions mounted which led to the Civil War, northwest Arkansas was a Unionist stronghold. From the time of the battle at Pea Ridge in March 1862 until the fall of Little Rock in September 1863, the Arkansas River Valley was a contested area subject to raids from both Union and Confederate forces. Battles or skirmishes were fought at Van Buren, Ozark, Clarksville, Dover, Norristown, and Dardanelle. After the fall of Little Rock, Federal forces occupied the northern half of the state and the area was relatively peaceful, although there were still occasional raids (Ferguson 1962:80, 255-256; Eno n.d.:271-305).

The Arkansas River Valley suffered the same political disruption during the Reconstruction period as the rest of the state (see Reynolds 1908) but most

of the attention on the area focused instead on economic issues, especially railroad building. As early as the 1850s plans were made to build a railroad from Little Rock to Fort Smith as an extension of the railroad being built from Memphis to Little Rock. Despite a generous federal land grant, funds were short and construction did not begin until 1869. Once begun, construction proceeded rapidly, with regular train service to Lewisburg beginning in November 1870. The railroad reached Russellville in 1873 and Van Buren in 1876 (Thompson 1976:187-230; Hull 1969:133; Eno n.d.:437). The route roughly followed the route of the old military road, passing close to, but not through, many of the riverbank settlements.

The completion of the railroad brought about significant changes in the Arkansas River Valley. Steamboat trade continued, but hampered as it was by the unpredictable nature of river levels, the boats soon lost customers to the much more dependable railroad. Merchants who were transferring goods from the railroad to the landings soon found it easier to move their businesses to the railroad. Over a period of years whole towns moved inland from the riverbank: Lewisburg moved to Morrilton; Pittsburg moved to Knoxville.

New towns were also formed, e.g., Conway, Altus, Alma. As an incentive to construction, the Little Rock & Fort Smith Railroad Company had received a large grant of land from the federal government (Little Rock & Fort Smith Railway 1882?). As track was laid the company pushed a vigorous campaign to attract settlers to buy this land. Agents were sent to Europe and to major port cities to attract emigrants and brochures were printed in several languages. Special emphasis was given to attracting German and Swiss emigrants because they were believed to be industrious and well suited to the type of small farms the area supported. Because these efforts began at about the same time as the Franco-Prussian War and at a time of religious persecution in Germany, many German Catholics were attracted to Arkansas. The railroad in turn donated lands to establish the monastery at Subiaco to help the new emigrants feel at home by assuring priests for their churches (Oechsle 1930:2-7). The new settlers brought many new customs to the area, including the cultivation of grapes for the production of wine (Oechsle 1930:9).

As the population along the railroad grew other changes also took place. Logan County, originally named Sarber County, was formed south of the river in 1871 (Logan 1954:93-94, 96). Educational institutions were established (Meriwether 1976). Industries developed to serve the railroad and be served by it. In particular coal mining became an important part of the economy of Johnson County in the 1870s and of the counties south of the river in the 1880s (Branner 1942:81-83).

Despite the shift in population the river was neither abandoned nor neglected. Attempts had been made as early as 1835 to improve navigation by the removal of snags (Vance 1970:61). With the establishment of the Little Rock District of the Corps of Engineers in 1881 the problems of navigation

on the river began to receive constant, if underfunded, attention. An effort to establish a 5-foot channel above Little Rock in the 1890s was destroyed by the flood of 1898. Attention turned instead to bank stabilization and flood control (Clay 1979:7-10). The great Mississippi River flood of 1927 affected the Arkansas River Valley all the way to Fort Smith (Daniel 1977:85). Efforts by the Arkansas Valley Association, an organization of those interested in flood control, power generation, navigation, and irrigation, introduced in Congress a number of proposals for work on the river but were unable to get them passed. It was only after World War II that the Corps of Engineers received the support it needed to tame the Arkansas River. Under the Rivers and Harbors Act of 1946 construction was begun on a system of locks and dams that in 1971 became known as the McClellan-Kerr Navigation System (Clay 1979:25, 66-85).

The stretch of the Arkansas River Valley between Dardanelle and Fort Smith has retained its diversified economy (see Johnson 1941:56-69). The agricultural areas produce a variety of crops ranging from cotton to grapes, including substantial quantities of soybeans as well as some rice. Some mining of coal and other minerals continues, while Interstate 40 now follows the route of the old military road bringing tourists into the area.

Historic Period components were noted at 23 sites in Lake Dardanelle and 13 sites in Ozark Lake

Lake Dardanelle	Ozark Lake
3JO033	3CW642*
3JO040	3CW643*
3JO084	3CW644*
3JO102	3CW645*
3JO120	3FR045
3JO126	3FR077
3JO128	3FR135*
3JO139	3FR138*
3JO140	3FR142*
3LO032	3FR150*
3LO097	3FR156*
3LO105	3SB084
3LO131*	3SB096
3LO132*	
3PP020	
3PP022	
3PP058	
3PP060*	
3PP068	
3PP069	
3PP251*	
3PP257*	
3YE294*	

Rock Art

Finally, we believe that a special kind of site present in the region should be mentioned here even though we cannot place them chronologically. Rock art sites occur in Crawford, Franklin, Johnson, Pope, Yell, and Conway Counties (Fritz and Ray 1982). The recorded aboriginal petroglyphs and pictographs have often been vandalized by more recent carving and painting. Most rock art in the Eastern Woodlands is attributed to the Mississippian Period, although Woodland and Protohistoric examples probably occur in the study area. Both Plains and Caddoan influences are seen in the rock art of the Arkansas River Valley of western Arkansas (Fritz and Ray 1982:273).

TABLE 4. CHRONOLOGICALLY DIAGNOSTIC MATERIALS

Site/Artifacts	Date Range*	Reference
3CW054		
Cary point type	Gary: Archaic and pottery making cultures, 2000 B.C. to A.D. 1000, possibly A.D. 1500 or 1600	Bell 1958:28
Sponge decorated whiteware	1830-1900+ 1850-1890	Derven 1980:136
Purpled glass	Pre-1915	Kendrick 1966:57
Milk glass lid liner	Glass lid under zinc cap developed in 1868-1869	Munsey 1970:146 Toulouse 1969:430
Earthenware with cream (Bristol) glaze on one side; dark brown (Albany) glaze on the other	1890-Present 1890-1930	Derven 1980:141
3CW064		
Net sinker	Archaic thru Early Caddoan	Bell 1980b:135
Gary point type	Gary: Archaic and pottery making cultures, 2000 B.C. to A.D. 1000, possibly A.D. 1500 or 1600	Bell 1958:28
Castroville or Calf Creek point type fragment	Castroville: 4000 B.C. to A.D. 1000 Calf Creek: 3000 B.C. to 5000 B.C.	Bell 1960:14 Perino 1968:14
Repousse rim on whiteware	1820-1900+ 1860-1900	Derven 1980:135
Hand painted earthenware (small delicate design)	1820-1900 1860-1900	Derven 1980:132
3CW642 (OL 5-1)		
Marshall point type	Marshall: 3000 or 4000 B.C. to A.D. 1000	Bell 1958:44
Flow Blue earthenware	1840-1860	Derven 1980:138

TABLE 4. CHRONOLOGICALLY DIAGNOSTIC MATERIALS
(continued)

Site/Artifacts	Date Range*	Reference
3CW644 (OL 5-3)		
Purpled glass	Pre-1915	Kendrick 1966:57
Screw top jar fragment	Post 1924	Wallis 1979:63
Earthenware with salt glazed exterior; dark dark brown (Albany) interior	1830-1915 1830-1870	Derven 1980:141
Decalcomania on whiteware	1845-Present 1860+	Derven 1980:138
3CW645 (OL 3-1)		
Adena (?) point type	Adena: 800 B.C. to A.D. 800	Bell 1958:4
Earthenware glazed dark brown (Albany) on both sides	1870-1900+	Derven 1980:141
Whiteware with makers mark	(Unidentified)	
Purpled glass bottle neck with hand finished rim	Purpled: Pre-1915 Hand finished rim: Pre-1920	Kendrick 1966:57 Meigh 1960:7
Purpled glass	Pre-1915	Kendrick 1966:57
3CW648 (OL 22-3)		
Net sinker	Archaic through Early Caddoan	Bell 1980b:40-43
3FR136 (OL 18-4)		
Earthenware glazed dark brown (Albany) on interior and exterior	1870-1900+	Derven 1980:141
Purpled glass	Pre-1915	Kendrick 1966:57

TABLE 4. CHRONOLOGICALLY DIAGNOSTIC MATERIALS
(continued)

Site/Artifacts	Date Range*	Reference
3FR138 (OL20-1)		
Earthenware glazed dark brown (Albany) on interior, cream (Bristol) on exterior	1890-Present 1890-1930	Derven 1980:141
Hand painted whiteware (pattern unidentified)	1790-1860 1820-1860	Derven 1980:132
Annular decorated whiteware	1830-1900+	Derven 1980:133
3FR140 (OL 3-2)		
Reed (?) point type	Reed: A.D. 500 to A.D. 1500	Bell 1958:76
Clay and sand-tempered pottery	Ceramic stage	
3FR142 (OL 3-4)		
Earthenware glazed dark brown (Albany) on both sides	1870-1900+	Derven 1980:141
Purpled glass	Pre-1915	Kendrick 1966:57
Earthenware with salt glazed exterior; dark brown (Albany) interior	1830-1915+ 1830-1870	Derven 1980:142
Sponge decorated whiteware	1830-1900+ 1850-1890	Derven 1980:136
3FR148 (OL 1-1)		
Clay- and sand-tempered pottery (untyped)	Ceramic stage	
3FR149 (OL 1-2)		
Bonham point type	Bonham: A.D. 800 to A.D. 1200	Bell 1960:10
3FR150 (OL 1-3)		
Hand painted whiteware (delicate floral design)	1820-1900 1860-1900	Derven 1980:132

TABLE 4. CHRONOLOGICALLY DIAGNOSTIC MATERIALS
(continued)

Site/Artifacts	Date Range*	Reference
3FR156 (OL 2-5)		
Palmillas (?) point type	Palmillas: Archaic or later(?)	Bell 1960:74
Big Sandy point type	Big Sandy: 500 B.C. to A.D. 1	Bell 1960:8
Williams point type	Williams: 4000 B.C. to A.D. 1000	Bell 1960:96
3FR157 (OL 18-6)		
Williams point type	Williams: 4000 B.C. to A.D. 1000	Bell 1960:96
Big Sandy (?) point type	Big Sandy: 5000 B.C. to A.D. 1	Bell 1960:8
Transfer on whiteware (tan or off white transfer)	1780-Present 1800-1860+	Derven 1980:138
3JO048 (LD 13-1)		
Gary point type	Gary: Archaic and pottery making cultures, 2000 B.C. to A.D. 1000, possibly A.D. 1500 or 1600	Bell 1958:28
Ellis or Ensor point type	Ellis: 1000 B.C. (or earlier) to A.D. 500 or 1000	Bell 1960:32
	Ensor: 1000 or 2000 B.C. to A.D. 500 or 1000	Bell 1960:34
Ensor point type	Ensor: 1000 or 2000 B.C. to A.D. 500 or 1000	Bell 1960:34
3JO234 (LD 14-1)		
Gary point type	Gary: Archaic and pottery making cultures, 2000 B.C. to A.D. 1000, possibly A.D. 1500 or 1600	Bell 1958:28
3JO241 (LD 18-2)		
Reed point type	Reed: A.D. 500 to A.D. 1500	Bell 1958:76

TABLE 4. CHRONOLOGICALLY DIAGNOSTIC MATERIALS
(continued)

Site/Artifacts	Date Range*	Reference
3LO012 (LD 9-3)		
Shell-tempered pottery (Notched rim sherd)	Late Ceramic	Scholtz 1969:57
3LO131 (LD 7-6)		
Repousse rim on whiteware	1820-1900+ 1860-1900	Derven 1980:135
Transfer print on whiteware (red)	1780-Present 1800-1860+	Derven 1980:138
Milk glass lid liner (embossed NUINE)	Glass lid under zinc cap developed in 1868-1869	Munsey 1970:146 Toulouse 1969:430
3LO132 (LD 8-1)		
Square nail	Pre-1902	Lees 1977:103
3LO134 (LD 8-3)		
Gary point type	Gary: Archaic and pottery making cultures,, 2000 B.C. to A.D. 1000, possibly A.D. 1500 or 1600	Bell 1958:28
3LO136 (LD 8-5)		
Gary point type	Gary: Archaic and pottery making cultures, 2000 B.C. to A.D. 1000, possibly A.D. 1500 or 1600	Bell 1958:28
3LO137 (LD 9-1)		
Earthenware with dark brown (Albany) glaze on one side and cream (Bristol) on the other (interior/exterior undistinguishable)	1890-Present 1890-1930	Derven 1980:141
3PP060 (LD 1-3)		
Shell edge whiteware	1830+ - 1860	Derven 1980:129
3PP246 (LD 1-1)		
Clay and shell-tempered pottery	Mississippian A.D. 900 to historic context	McClurkan 1969:33 Anonymous 1969:29

TABLE 4. CHRONOLOGICALLY DIAGNOSTIC MATERIALS
(continued)

Site/Artifacts	Date Range*	Reference
[illegible] (LD 3-2)		
Alternately beveled tool (Harahay Knife Fragment?)	A.D. 1100-1500	Bell 1960:11
3PP251 (LD 3-4)		
Gary point type	Gary: Archaic and pottery making cultures, 2000 B.C. to A.D. 1000, possibly A.D. 1500 or 1600	Bell 1958:28
Floral decalcomania on whiteware	1845-Present 1860+	Derven 1980:142
Earthenware with dark brown (Albany) glaze on interior and unidentified exterior	1830-Present	Derven 1980:142
Milk glass lid liner (embossed BOYD)	Glass lid under zinc cap developed in 1868-1869	Munsey 1970:146 Toulouse 1969:430
Clear screw top bottle fragment	Post-1924	Wallis 1979:63
3PP257 (LD 4-2)		
Transfer print on whiteware (purple print)	1780-Present 1800-1860+	Derven 1980:138
Milk glass lid liner (embossed NUINE)	Glass lid under zinc cap developed in 1868-1869	Munsey 1970:146 Toulouse 1969:430
3PP261 (LD 4-6)		
Gary point type	Gary: Archaic and pottery making cultures, 2000 B.C. to A.D. 1000, possibly A.D. 1500 or 1600	Bell 1958:28

TABLE 4. CHRONOLOGICALLY DIAGNOSTIC MATERIALS
(continued)

Site/Artifacts	Date Range*	Reference
3PP262 (LD 4-7)		
Clay-tempered pottery	Ceramic stage	
Shell-tempered pottery	Late Ceramic	Scholtz 1969:57
3SB099 (OL 9-1)		
Transfer on whiteware	1780-Present 1800-1860+	Derven 1980:138
3YE292 (LD 5-3)		
Earthenware glazed dark brown (Albany) on interior and cream (Bristol) on exterior	1890-Present 1890-1930	Derven 1980:141
Purpled glass	Pre-1915	Kendrick 1966:57
3YE294 (LD 5-5)		
Flow blue whiteware	1840-1860	Derven 1980:138
Hand- painted whiteware (unidentified pattern)	1790-1900	Derven 1980:132
Hand- painted whiteware (bold, large, probably floral pattern)	1790-1860 1820-1860	Derven 1980:132
Purpled glass	Pre-1915	Kendrick 1966:57
Shell edge whiteware	1830+ - 1860	Derven 1980:129
Transfer printed whiteware	1780-Present 1800-1860+	Derven 1980:138

* Dates underlined are Derven's best estimate for chronological range.

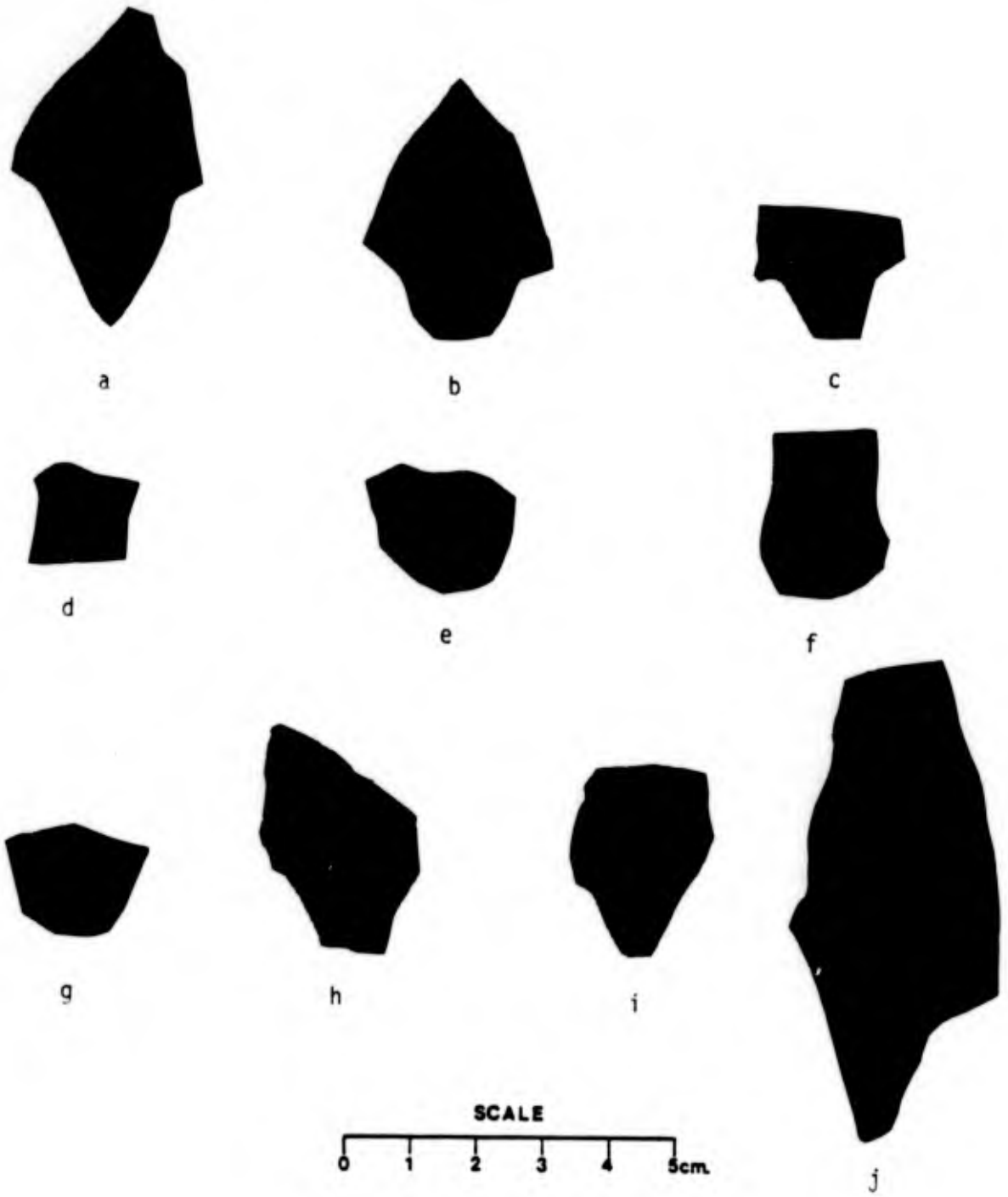


Figure 3. Lithic Artifacts
a, b - Gary points; c - Gary point stem fragment; d,e - rectangular stem fragment; f - rectangular stem worked into a bunt; g - reworked midsection or point stem; h - contracting stem (point preform); i - Gary point fragment; j - Gary point.
3LO134 (a-b); 3LO136 (c); 3PP252 (d-e); 3PP250 (f); 3PP263 (g); 3PP249 (h); 3PP261 (i); 3PP251 (j)

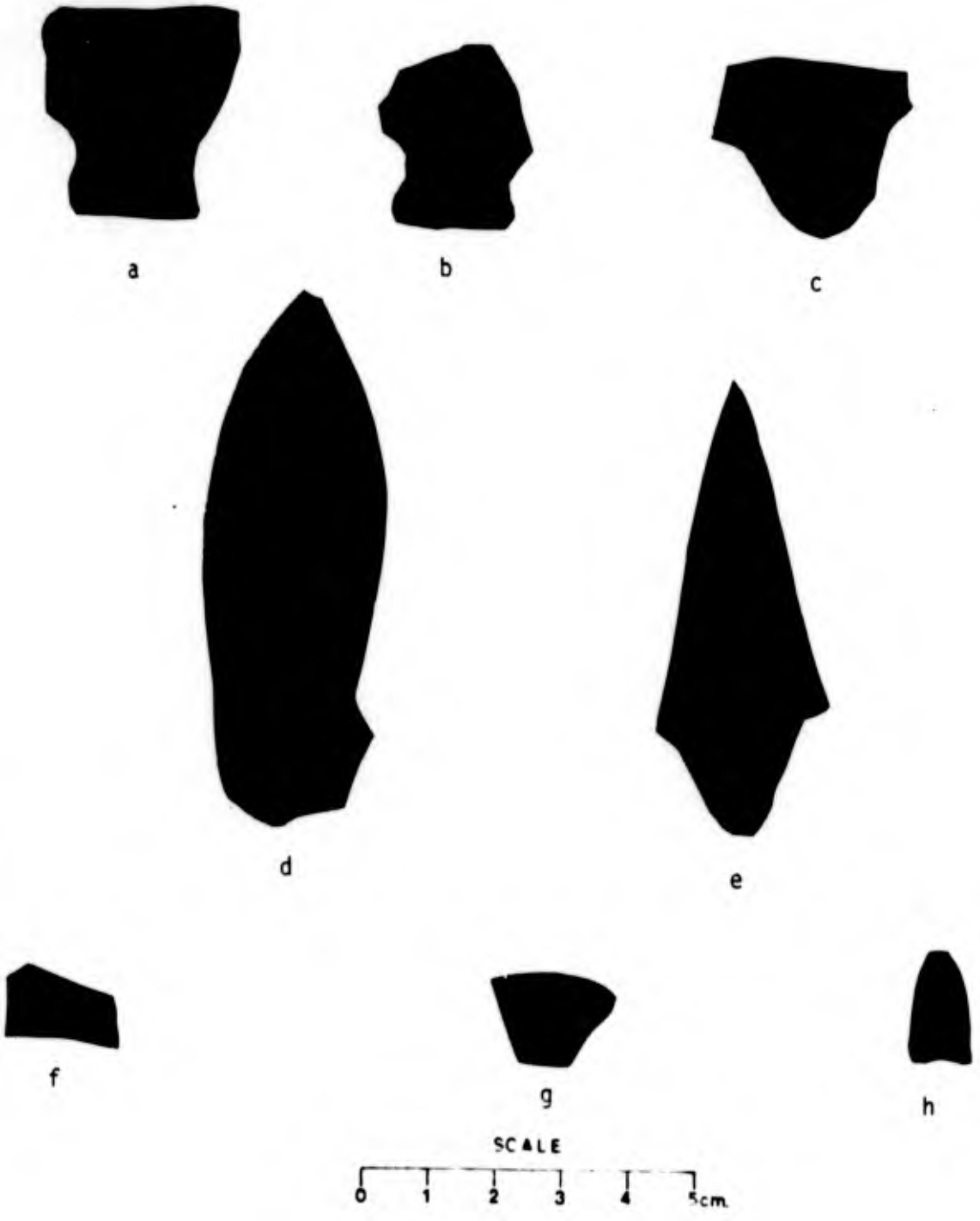


Figure 4. Lithic Artifacts
a - Ensor? point; b - Ensor point; c - Cary point fragment; d - Plainview point; e - Cary point (heat fractured); f - point stem fragment; g - point stem; h - Reed point.
3JC228 (a-b); 3JC048 (c); 3JC034 (d); 3JC234 (e); 3JC230 (f); 3JC240 (g); 3JC241 (h)

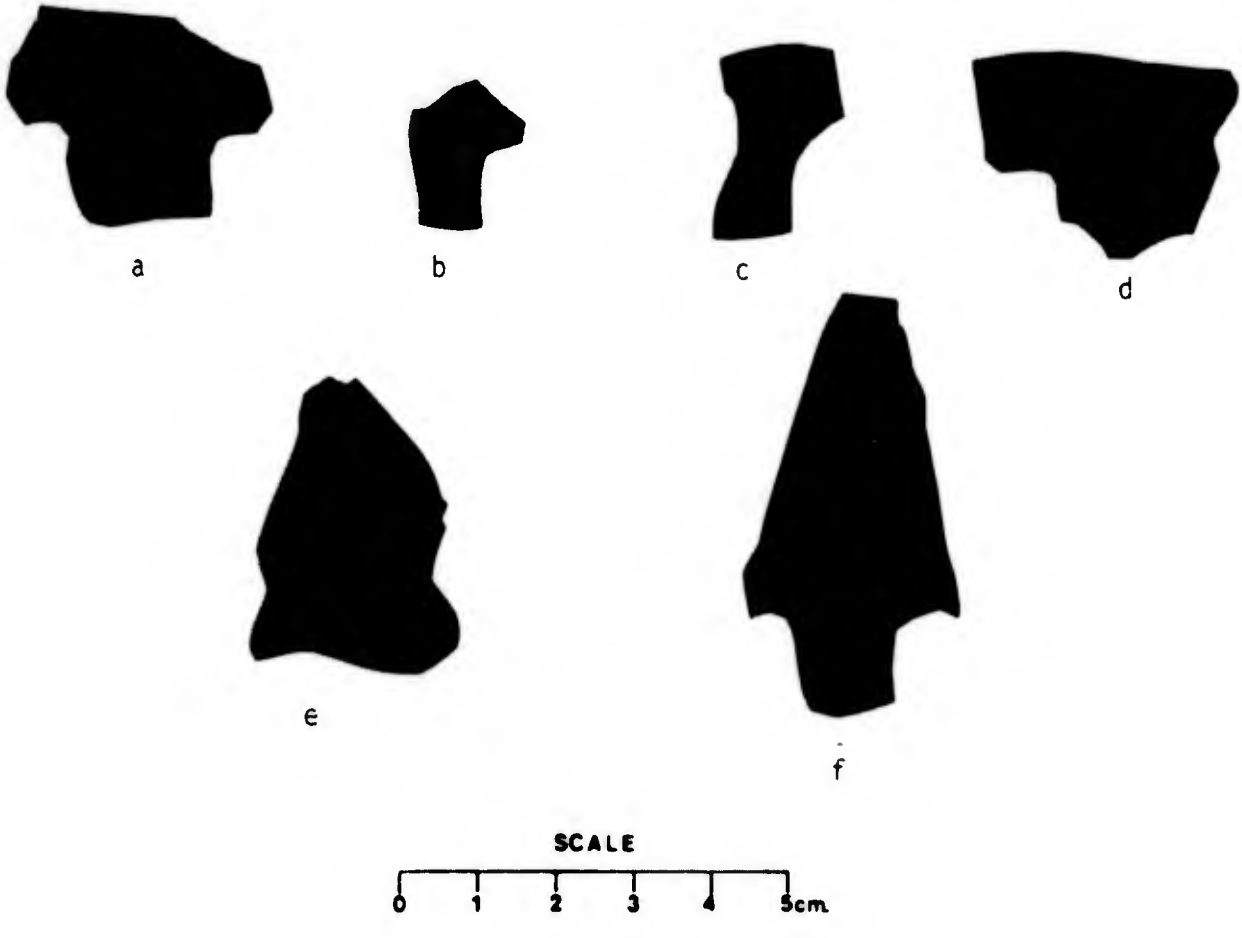


Figure 5. Lithic Artifacts
a - Williams point fragment; b,c - unidentified stem/shoulder point fragments; d - Palmillas point fragment; e - Big Sandy point fragment; f - contracting stem point with slight shoulder
3FR156 (a - f)

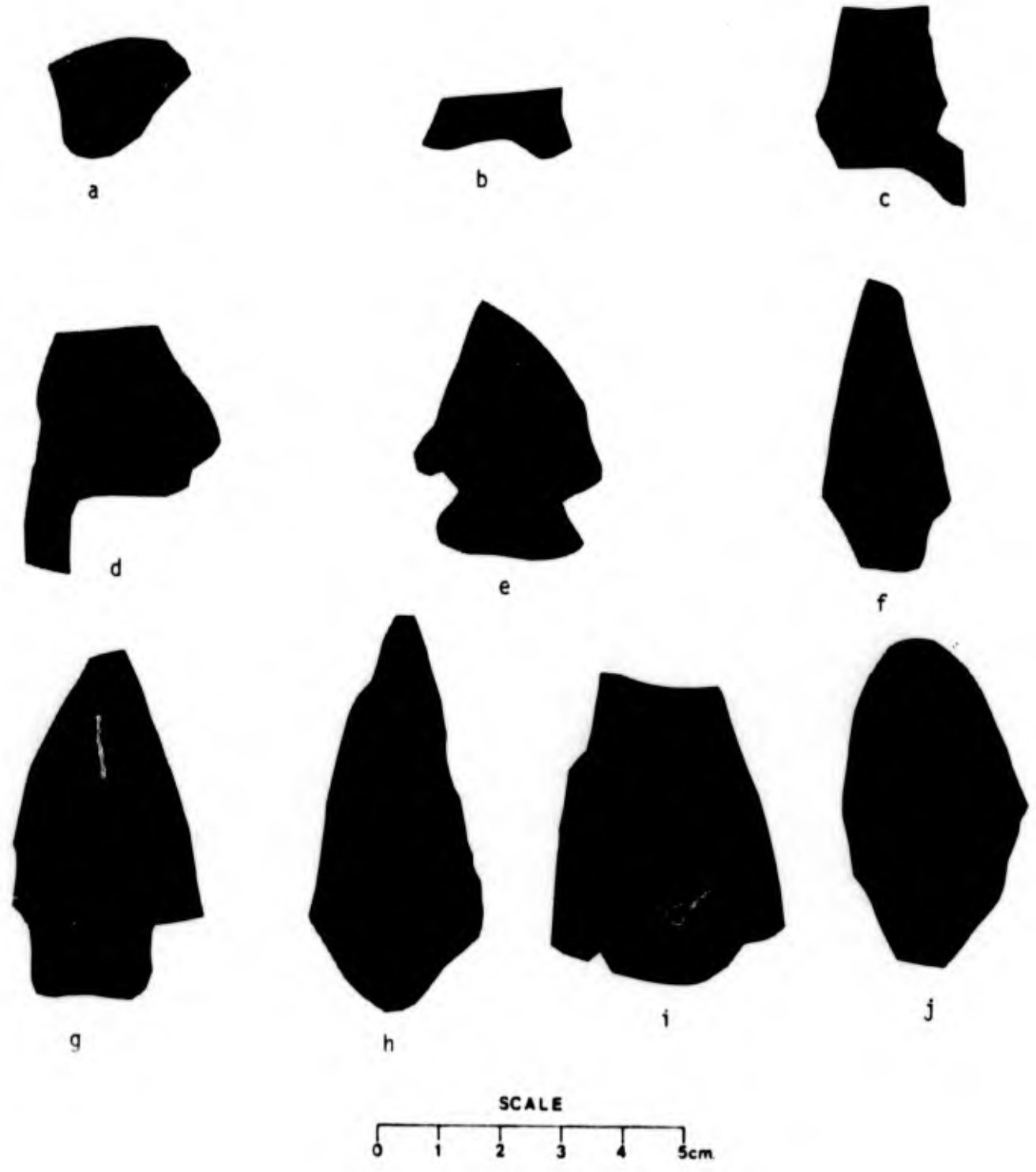


Figure 6. Lithic Artifacts
a - point stem; b - concave point base; c - Big Sandy point; d - Calf Creek or Castroville point; e - Williams point; f - Cary point; g - Marshall point; h - Cary point; i - unidentified point; j - Adena point
3SB099 (a); 3FR157 (b,c); 3CW064 (d,f,i); 3FR157 (e); 3CW642 (g); 3CW054 (h); 3CW645 (j)

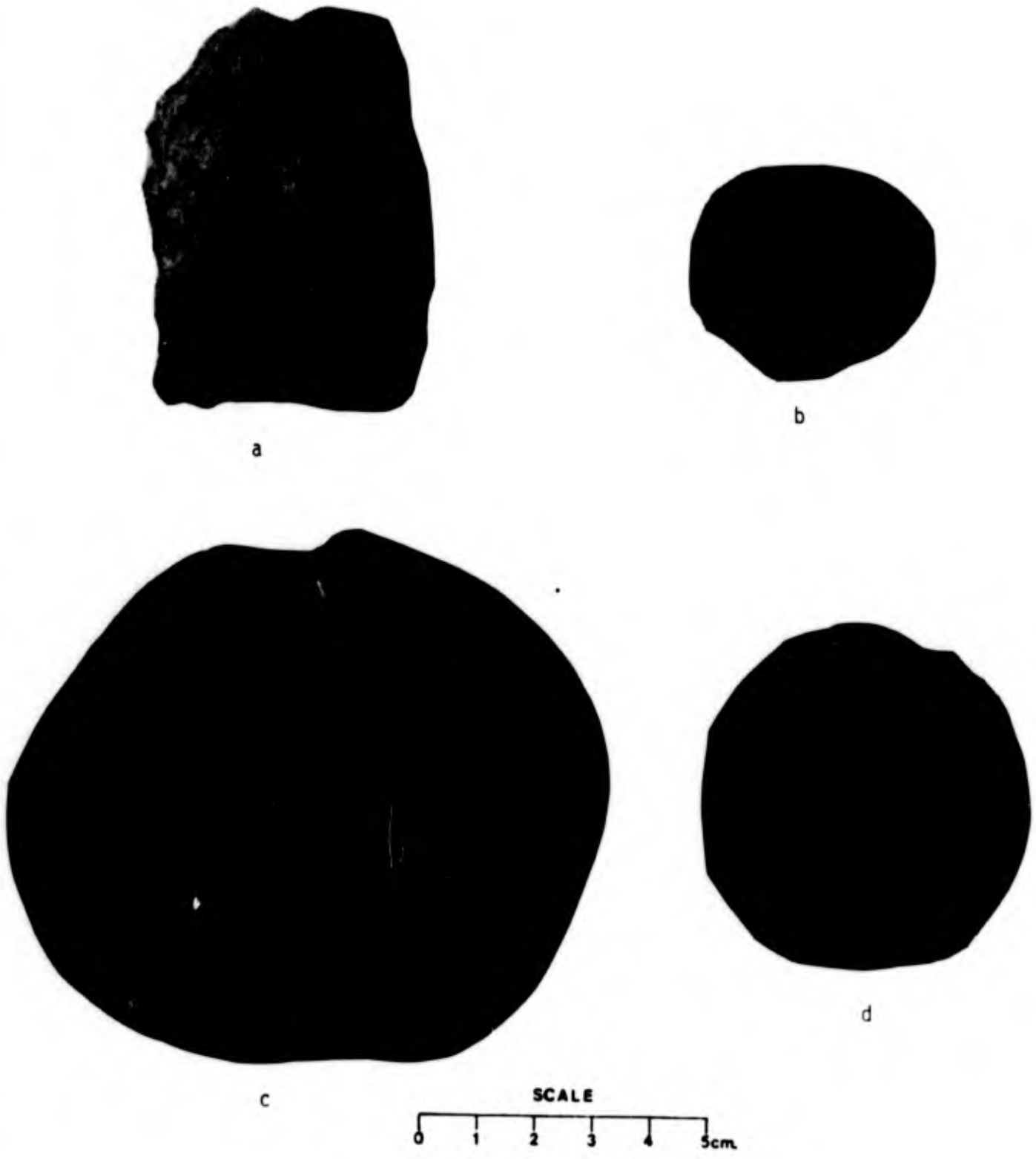


Figure 7. Lithic Artifacts
a - Large biface; b,c - Net sinkers; d - c circular biface
3CW054 (a); 3CW064 (b); 3CW648 (c); 3FR157 (d)

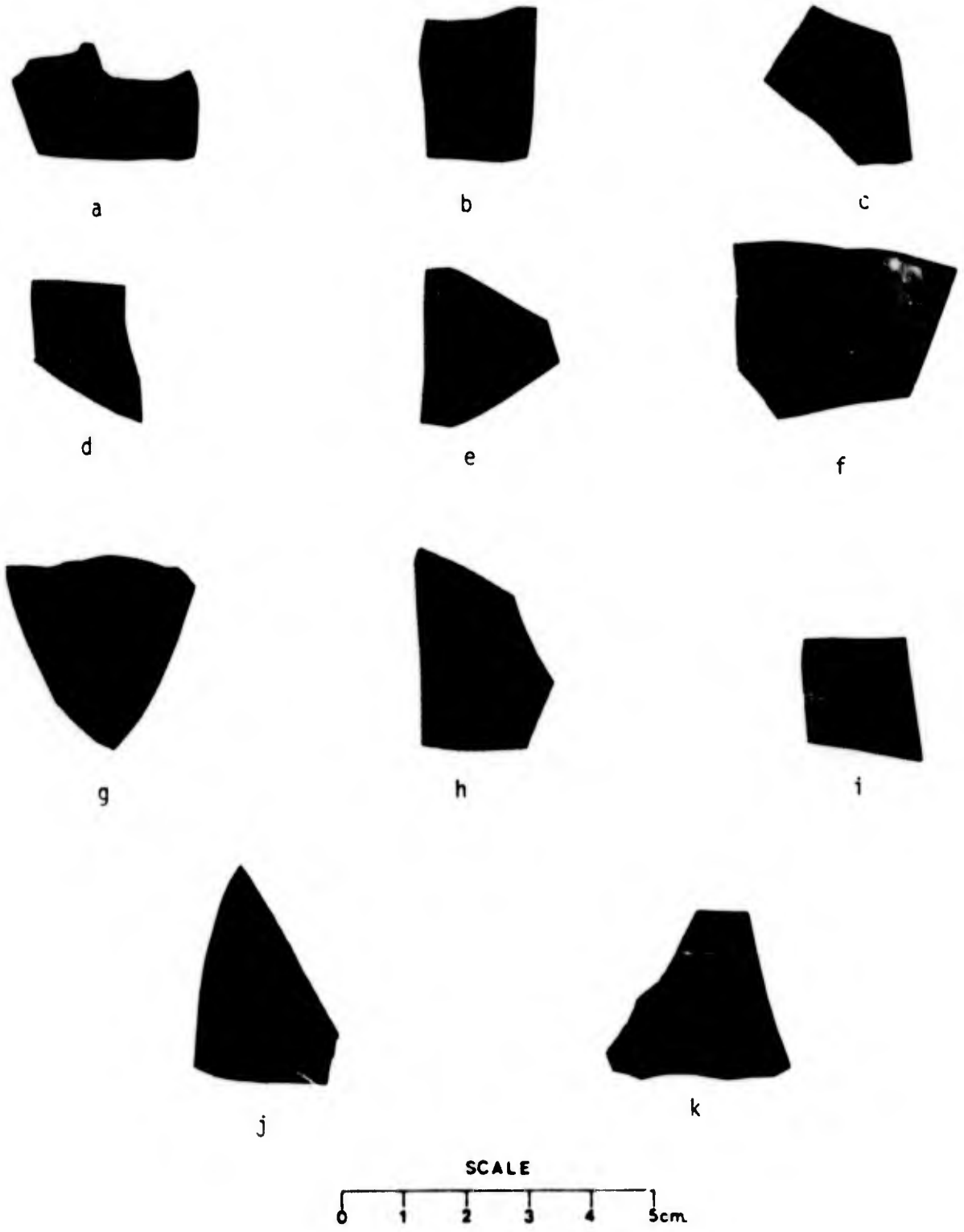


Figure 8. Historic Period Ceramics
a - clay pipe fragment; b,c - Sponge printed whiteware sherds; d,e - Albany/Bristol earthenware sherds with transfers; f,g - Repousse rims on whiteware; h - Floral design on whiteware (decalcomania); i,j - unidentified whiteware with maker's marks; k - transfer 3FR142 (a-c); 3FR148 (d-e); 3CW064 (f-g); 3CW644 (h); 3CW645 (i,j); 3SB099 (k)

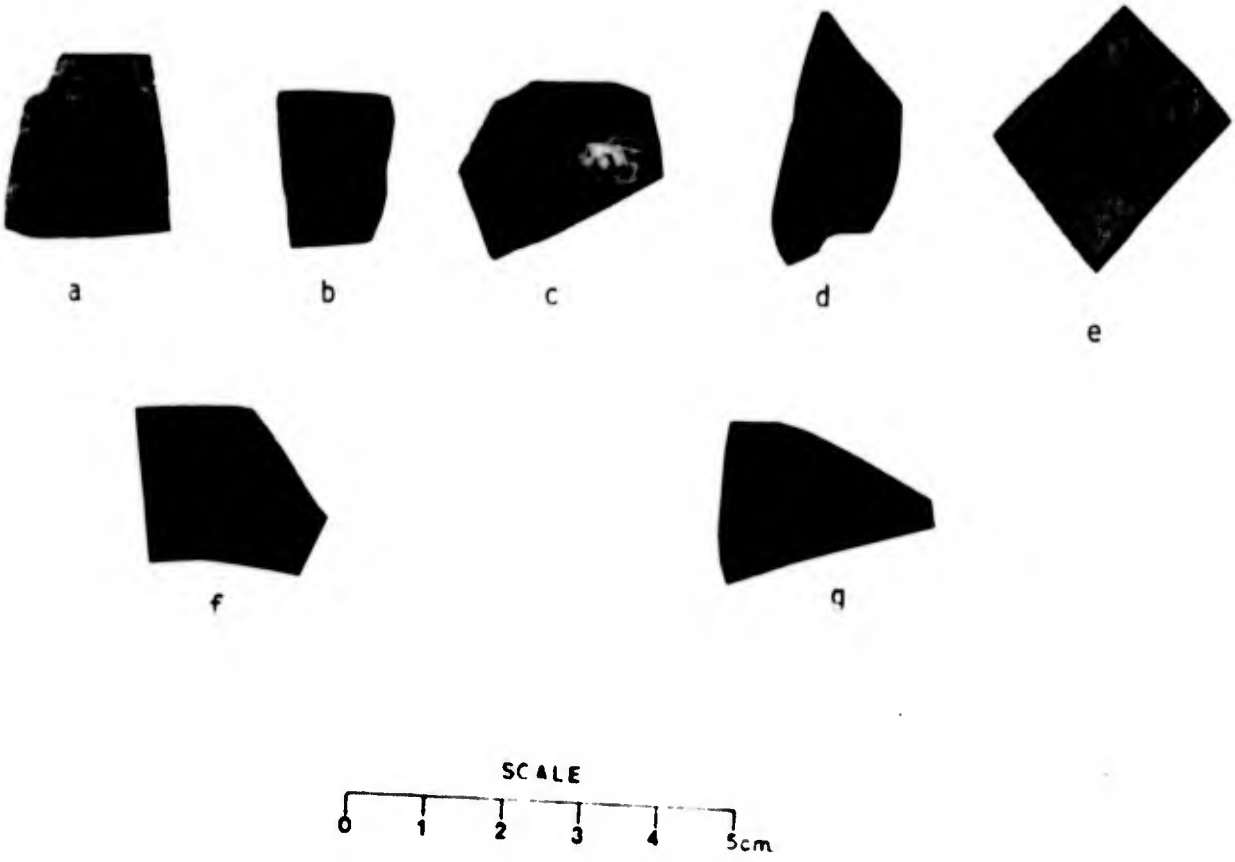


Figure 9. Historic Period Ceramics
a - Flow blue body sherd; b - Red transfer on whiteware body sherd; c - Flow blue rim sherd; d - Blue transfer on interior and exterior of body sherd; e- Whiteware with maker's mark; f - White porcelain with blue transfer; g - Blue shell edge earthenware rim sherd. 3YE294 (a-d); 3YE292 (e); 3LO131 (f); 3PP060 (g)

GEOMORPHOLOGICAL RECONNAISSANCE: THE SPATIAL CONTEXT

Introduction

The following discussion of the landforms and geomorphic processes within the study area is, with the exception of some minor editing, a reproduction of Smith (1986).

Background. A geomorphological reconnaissance of the Lake Dardanelle and Ozark Lake project areas on the Arkansas River, Arkansas, was conducted by the US Army Engineer Waterways Experiment Station (WES) at the request of the US Army Engineer District, Little Rock. The purpose of the investigation was to provide a geomorphological foundation for use in the planning and execution of subsequent cultural resource surveys in the Lake Dardanelle and Ozark Lake project areas. Specific objectives of the study were: (1) delineation of the major geomorphic features and processes of the area; (2) reconstruction, to the extent possible, of the geomorphological evolution of the area; and (3) estimation of the occurrence and location of buried archeological sites in the project area. Due to a substantial limitation in time and funds available for the project, only a reconnaissance level study was conducted. However, results of this should be of significant value in the subsequent planning and execution of cultural resource investigations in the Lake Dardanelle and Ozark Lake project areas.

Study Areas. The Lake Dardanelle project areas, for the purpose of this investigation, include the area of Lake Dardanelle and adjacent lands to an elevation of 360 feet mean sea level (msl), as indicated on 1:24,000 scale US Geological Survey (USGS) topographic quadrangles of the area. Lake Dardanelle extends upstream from Dardanelle Lock and Dam (river mile 205.5) near Dardanelle, Arkansas, to Ozark Lock and Dam (river mile 256.8) at Ozark, Arkansas a distance of 51.3 river miles. Lake Dardanelle covers a surface area of 34,300 acres at a conservation pool level of 338 feet amsl in parts of Franklin, Johnson, Yell, Pope, and Logan counties. An additional approximate 10,000 acres of adjacent land is included in the study area. At Dardanelle Lock and Dam, the total drainage area of the Arkansas River and its tributaries is 153,703 square miles.

The Ozark Lake project area includes Ozark Lake and adjacent lands to an elevation of 390 feet amsl as indicated on 1:24,000 scale USGS topographic quadrangles. Ozark Lake extends upstream from Ozark-Jeta Taylor Lock and Dam to Lock and Dam 13 (river mile 292.8), a distance of 16.1 river miles. Ozark Lake covers a surface area of 10,600 acres at a conservation pool level of 370 feet amsl in parts of Franklin, Crawford, and Sebastian counties. Approximately 18,000 additional acres of adjacent land is included in the project area.

Situated in the Arkansas Valley District of the Ouachita Mountains physiographic province, the study areas consist of parts of the alluvial valley of the Arkansas River and the lower valleys of its principal tributaries in the region, including Sixmile Creek, Horsehead Creek, Cane Creek, Spadra Creek, Big Shoal Creek, Big Piney Creek, Delaware Creek, and Illinois Bayou in Lake Dardanelle and White Oak Creek, Little Mulberry Creek, Mulberry River, Frog Bayou, and Big Creek in Ozark Lake (Figure 1). In the study areas, the Arkansas River flows in a general east-southeast direction through a relatively narrow valley eroded into Pennsylvanian sandstone and shale formations. The width of the Arkansas River alluvial valley varies from less than one mile at Dardanelle Lock and Dam and Ozark-Jeta Taylor Lock and Dam to approximately 5 miles near Coal Hill, Arkansas, and is strongly controlled by the highly complex geologic structure and lithologic variability of the area. Landforms of the area are profoundly influenced by the occurrence of a number of east-west trending anticlines and synclines (whose local relief may be as much as 1600 feet), numerous faults, and a substantial variability in the erosional resistance of the geologic formations of the area. In the vicinity of Coal Hill and Mulberry, the Arkansas River has been successful in widening its valley due to the occurrence of less resistant geologic strata and a general lack of large-scale structural constrictions such as anticlinal ridges. The effect of local lithology and structure on valley development is also evident in the tributary valleys, such as Big Piney, Big Shoal, and White Oak Creeks, whose valley widths vary considerably due to local geologic structure and lithology.

Methods of Investigation

Geomorphological Data. Data used in the geomorphological investigation of the Lake Dardanelle and Ozark Lake project areas were obtained from previously published reports, maps, and charts, and field observations. Several published geologic studies of the area contained valuable information used in the compilation of the geomorphological maps (Haley 1961, 1968; Haley and Hendricks 1971; Merewether 1971; Merewether and Haley 1960, 1969). Geologic maps at the scale of 1:24,000 contained in these reports were used to map the distribution of certain geomorphic features, including rock outcrops and Arkansas River terraces in some locations. Soil maps contained in county soil bulletins were also examined for information useful in the discrimination of various geomorphic features (Soil Conservation Service 1971, 1977, 1980, 1981; Deeter 1915). Primary definition and delineation of geomorphic features was achieved through the interpretation of black and white aerial photography taken in 1940, 1958, 1967, and 1984. Topographic data were obtained from eighteen 1:24,000 scale USGS topographic quadrangles of the area, a recent (1984) 1:100,000 scale USGS metric topographic map (Russellville, Arkansas) and three early USGS 1:125,000 scale topographic quadrangles (Fort Smith, Magazine Mountain and Dardanelle) published in 1890.

Geomorphological Mapping Procedure. Geomorphic features of the project areas were defined using the geologic, pedologic, topographic, and photographic data in combination and were delineated on the seventeen 1:24,000 quadrangles (Figure 10). These quadrangle sheets appear as Figures 11 - 27 (Smith 1986: Plates 1 - 17). Due to the limited amount of time available for geomorphic mapping and the quality of the aerial photography, only the major landforms were delineated. For example, Arkansas River point bars were identified, but the ridges and swales which comprise the point bar were not. In the tributary valleys, with the exception of Illinois Bayou Valley, floodplains were mapped as undifferentiated since the aerial photography was not of sufficient quality to allow the identification of all of the fluvial landforms which occur in the tributary valleys. However, abandoned tributary channels and courses, where visible, were identified in the tributary valleys.

Upon completion of the preliminary geomorphic maps of the study areas, field reconnaissance of the Lake Dardanelle and Ozark Lake area was conducted. The objectives of the field reconnaissance were (1) to check the accuracy of the geomorphic maps; (2) to identify small scale features which were visible on the topographic maps or aerial photographs, such as low terraces on the tributary floodplains; (3) to examine the shallow stratigraphy of locations having a potential for buried archeological sites; and (4) to examine the pedogenic horizons of area landforms to estimate their general age and geomorphic stability. Field reconnaissance of the two areas was limited to sites accessible by 4-wheel drive vehicle or by boat due to the short period of time available for the reconnaissance and the large areas to be covered. The existence of numerous roads and boatdocks in the Lake Dardanelle study area enabled the reconnaissance effort to cover much of the terrestrial area by vehicle and all of the major tributaries and a significant part of the river by boat. At several sites in the Lake Dardanelle area, shallow subsurface samples were obtained with a hydraulic soil sampling machine which were useful in identifying geomorphic processes and potential areas of buried sites.

The field reconnaissance of Ozark Lake was hampered by flood conditions on the major tributaries and high flow on the Arkansas River, making boating unsafe. Consequently, no reconnaissance by boat was conducted in the Ozark Lake area. Many local roads were also blocked by floodwater, substantially limiting access to the project area. However, several important field observations were still possible in the Ozark Lake area, and in some instances, floodwaters accentuated landform boundaries.

Field observations made in the study areas were used to modify the geomorphic maps where necessary. Data derived during the field reconnaissance were then combined with existing geologic, soils, and topographic information (including the geomorphic maps of this study) and archeological data to develop the framework of a geomorphological chronology of the study areas and to estimate the potential location of buried cultural resources. The major geomorphic features of the Lake Dardanelle and Ozark

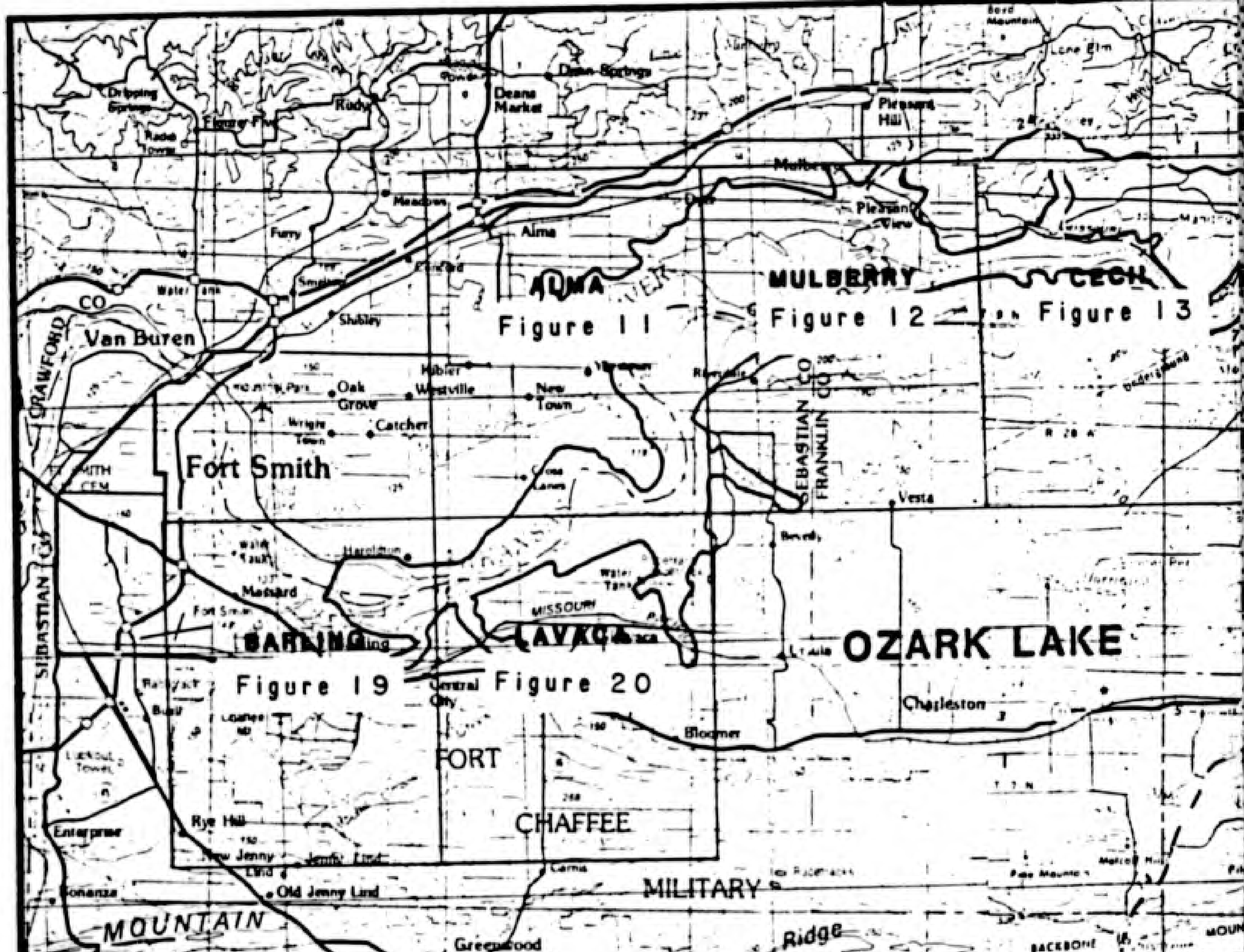


Figure 11
Figure 12
Figure 13
Figure 19
Figure 20
ALMA
MULBERRY
CECIL
BARLING
LAVACA
OZARK LAKE
Fort Smith
Van Buren
CRAWFORD CO
SEBASTIAN CO
SEBASTIAN CO
FRANKLIN CO
FORT
CHAFFEE
MILITARY
RESERVATION
MOUNTAIN
Backbone
Ridge
White Oak Mountains
Devils
SEBASTIAN CO
LOGAN CO
Charleston
Greenwood
Bloomer
Massard
Catcher
Oak Grove
Westville
New Town
Alma
Dean Springs
Deans Market
Rudy
Dripping Springs
Furry
Shibley
Pleasant Hill
Pleasant View
Lone Elm
Vesta
Rye Hill
Enterprise
Bonanza
Old Jenny Lind
Hackett
Excelsior
Oakview Farm
Washburn
Witcherville
Montreal
Dayton
Crossroads
Barber
Booneville Mountain
Pine Ridge
Boninger Mountain
Central City

Figure 10.

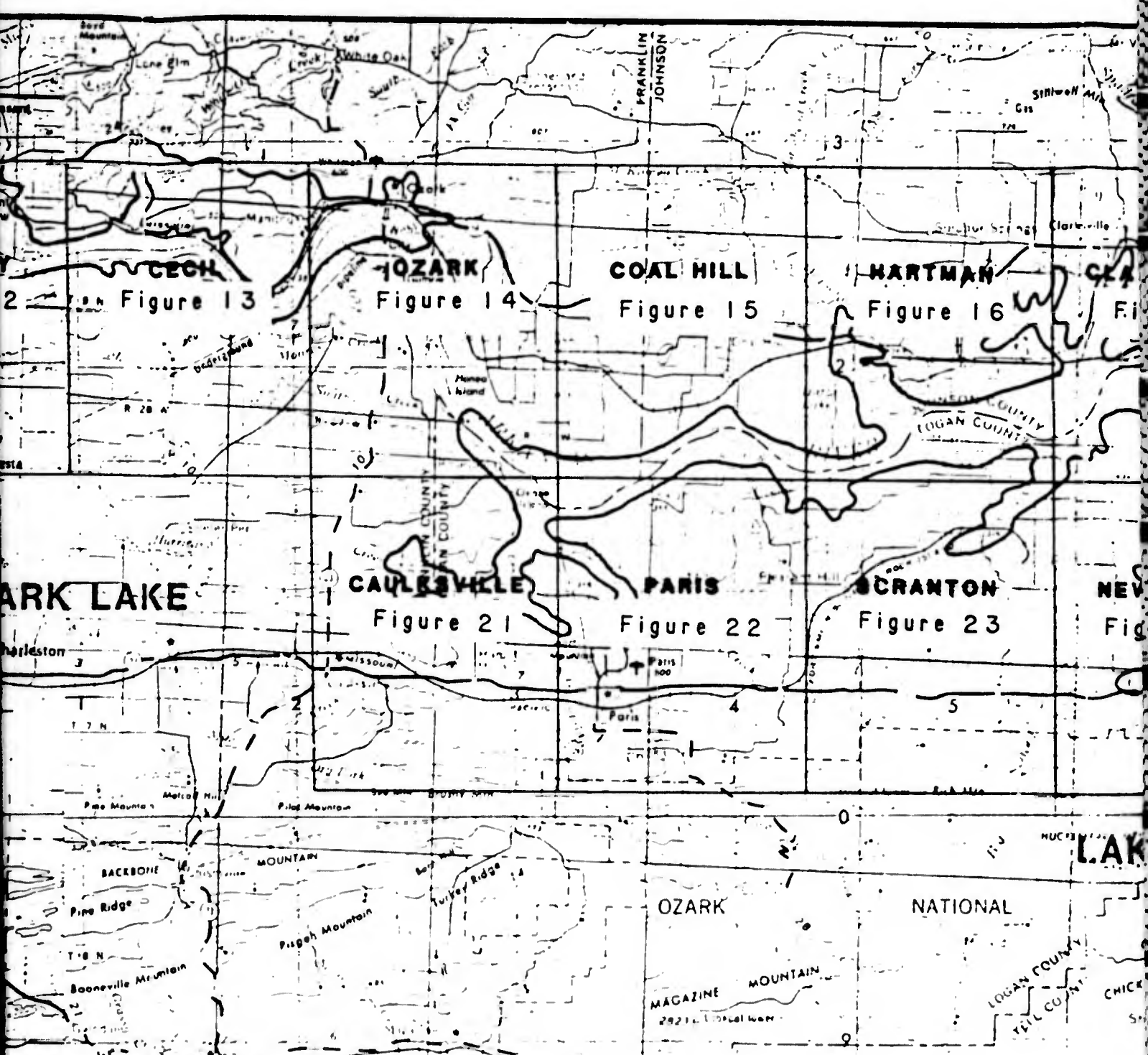
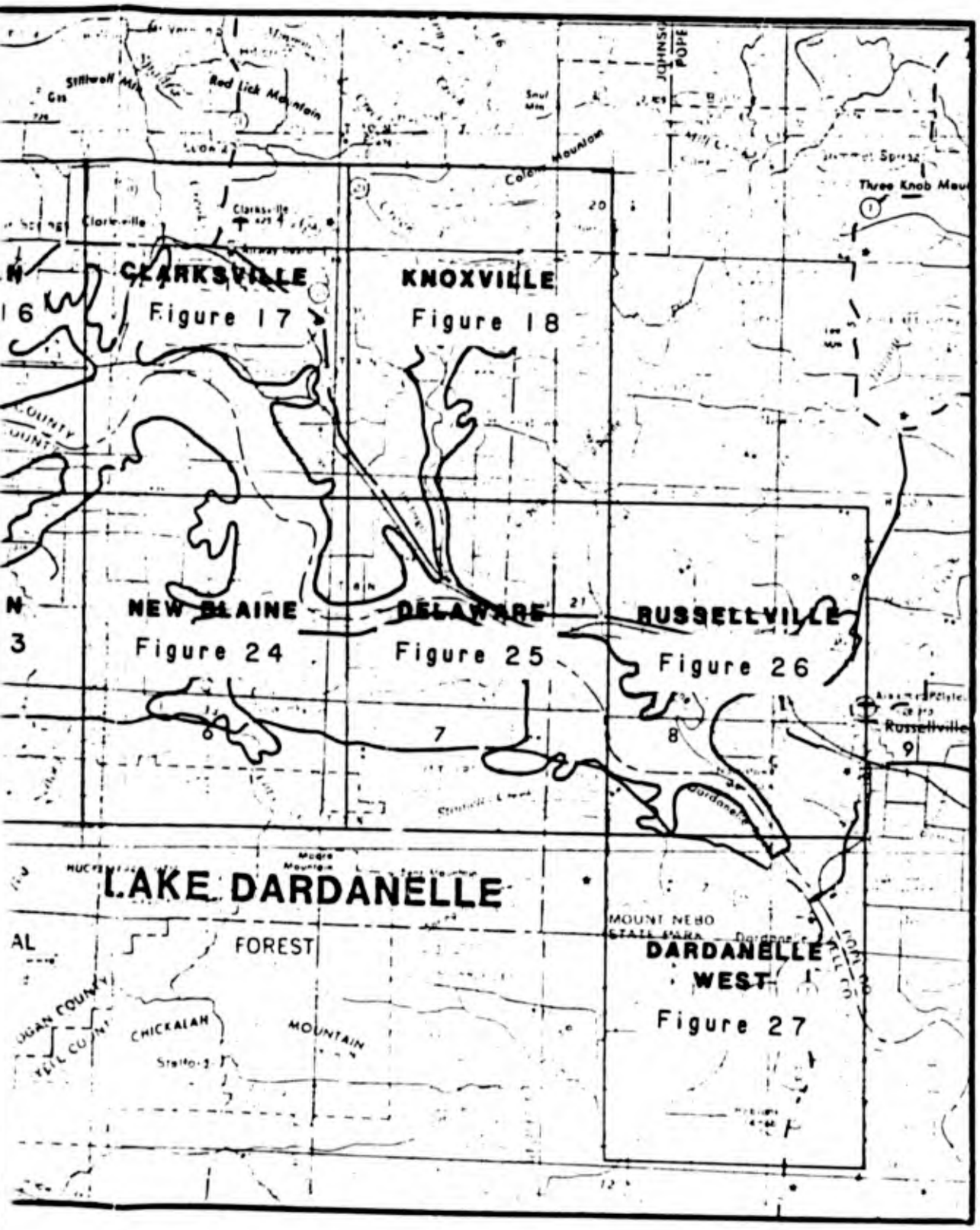


Figure 10. Index to Geomorphic Maps (Smith 1986: Figure 2).


CLARKSVILLE
Figure 17
KNOXVILLE
Figure 18
NEW BLAINE
Figure 24
DELAWARE
Figure 25
RUSSELLVILLE
Figure 26
LAKE DARDANELLE
FOREST
DARDANELLE
WEST
Figure 27
MOUNT NEBO
STATE PARK
CHICKALAH
MOUNTAIN
Clarksville
Russellville

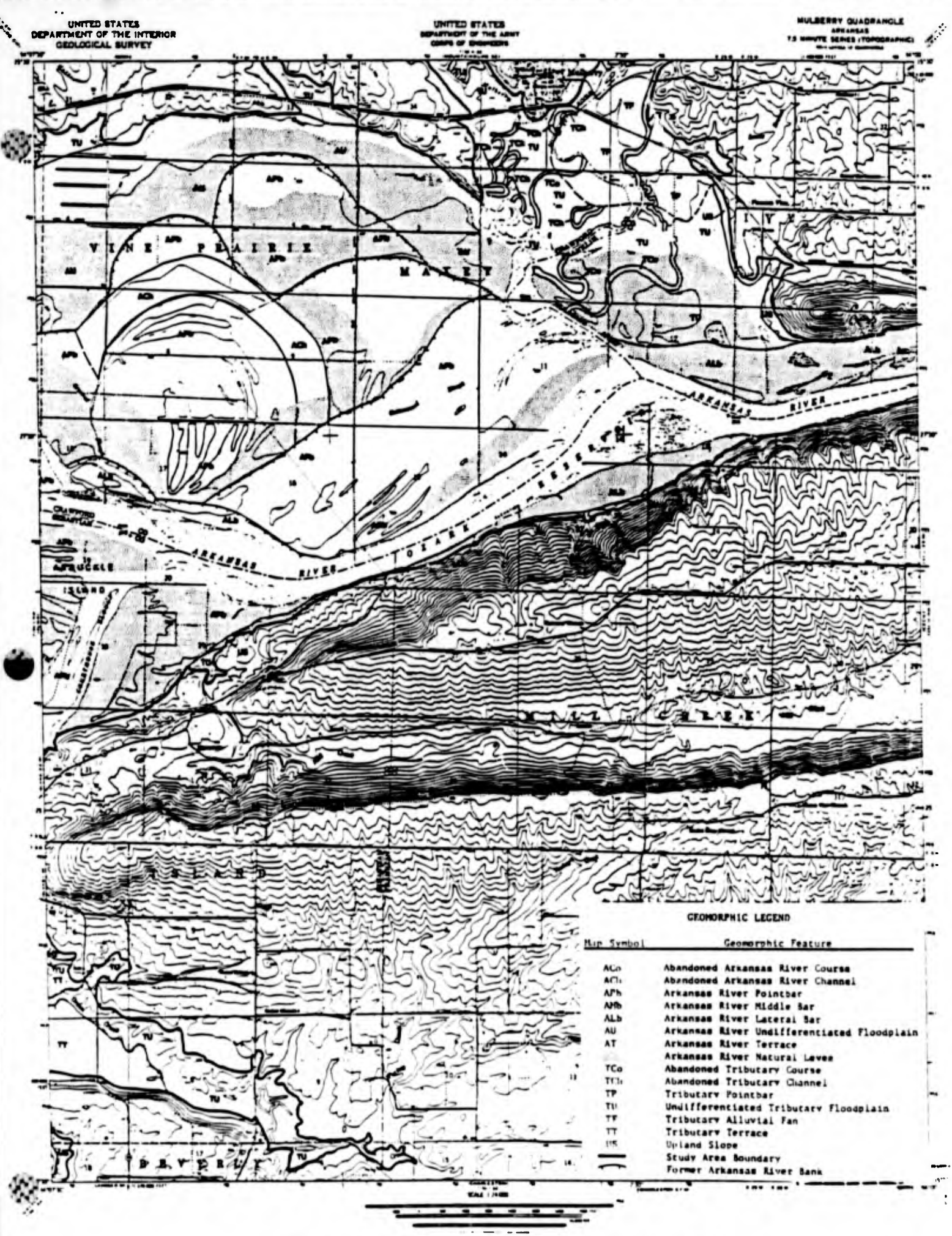


Figure 11. Alma Quadrangle (Smith 1986: Plate 1).

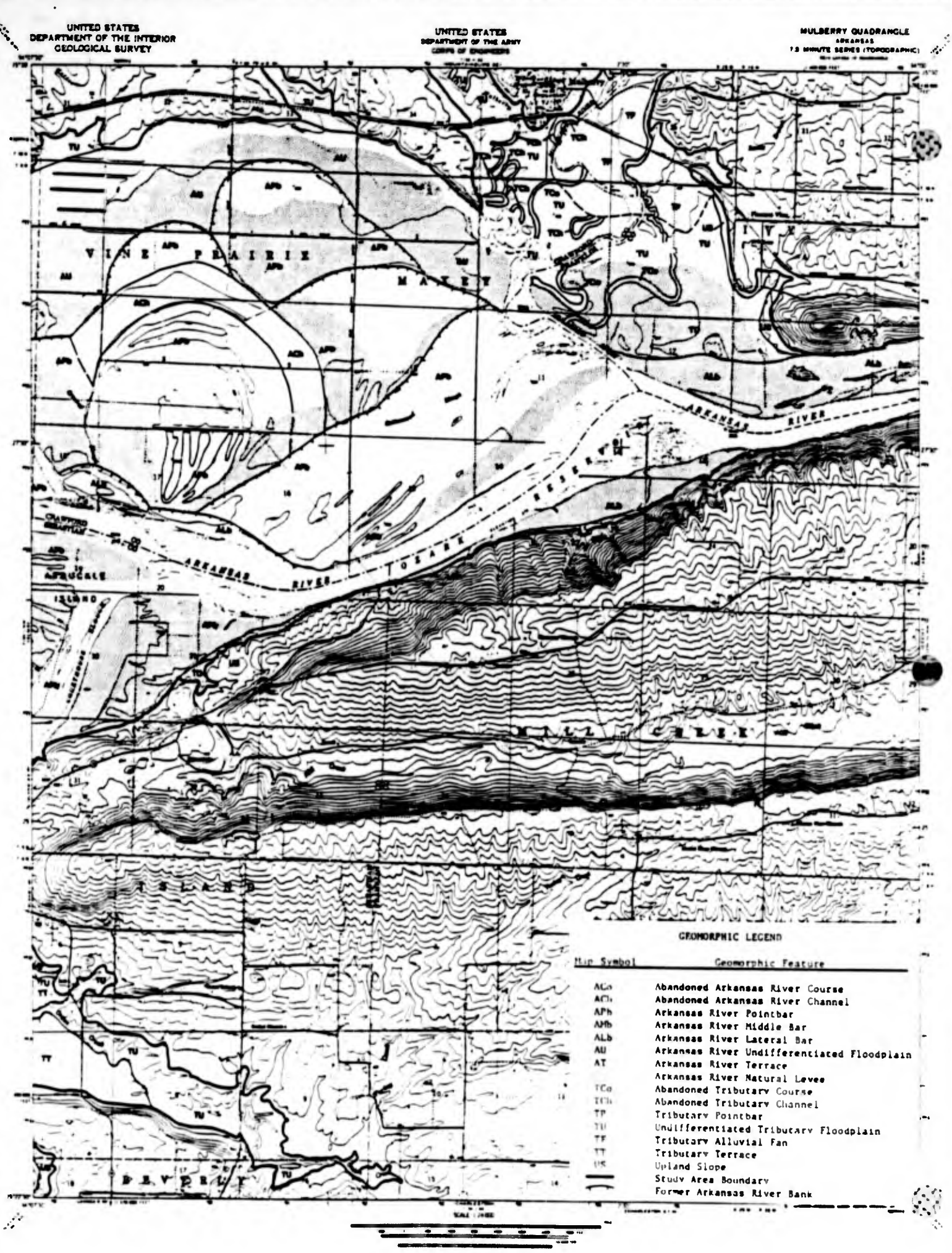


Figure 12. Mulberry Quadrangle (Smith 1986: Plate 2).

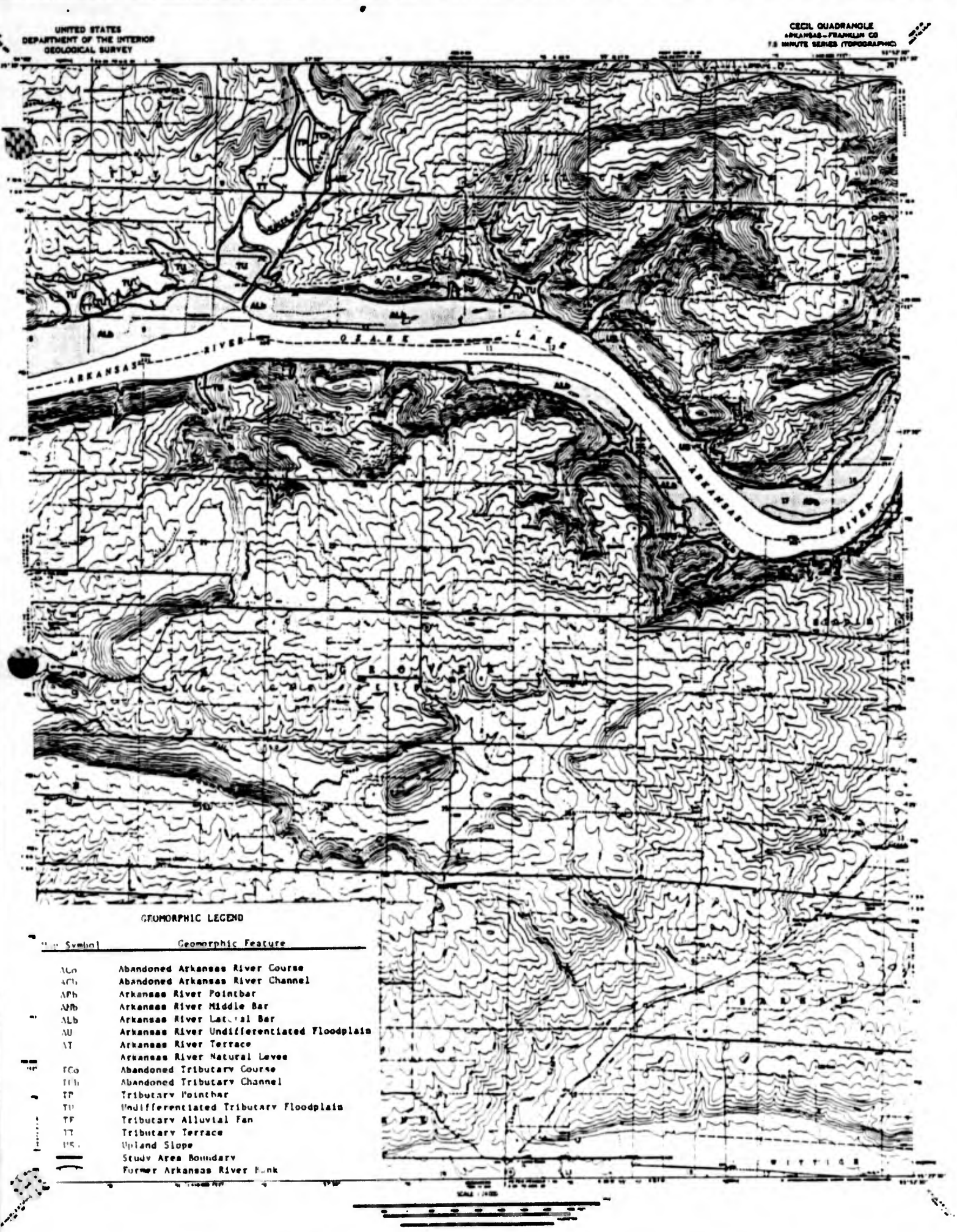


Figure 13. Cecil Quadrangle (Smith 1986: Plate 3).

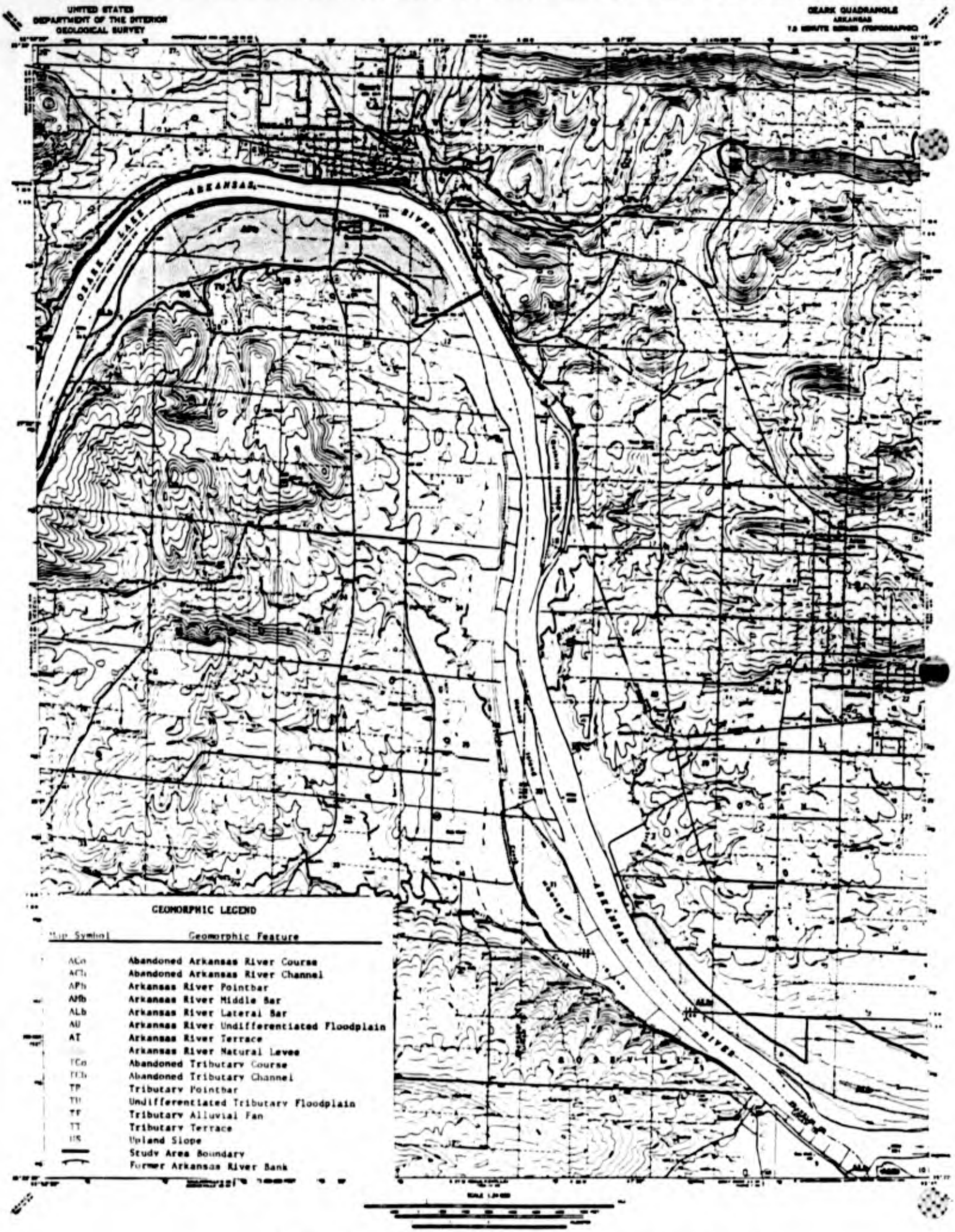


Figure 14. Ozark Quadrangle (Smith 1986: Plate 4).

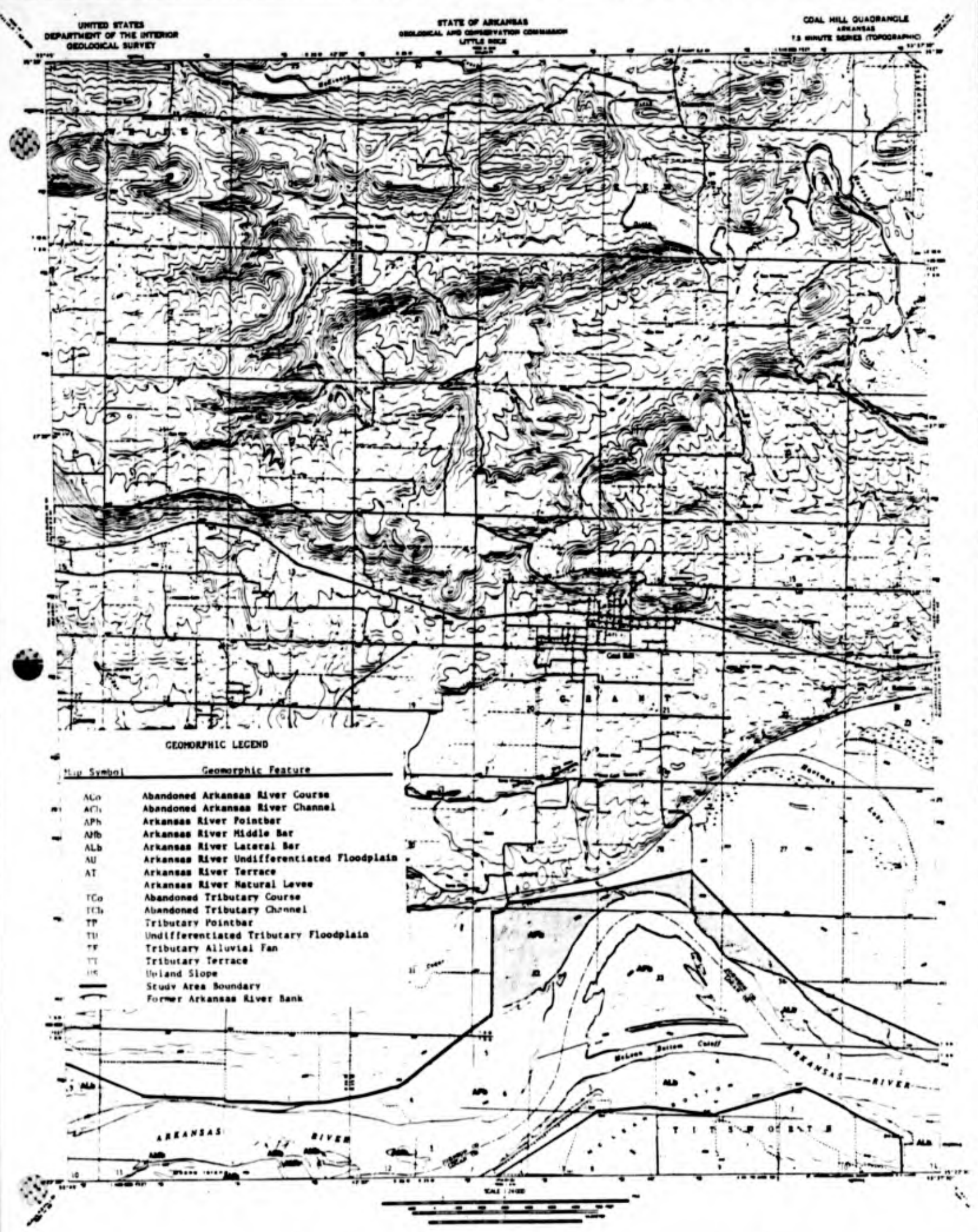


Figure 15. Coal Hill Quadrangle (Smith 1986: Plate 5).

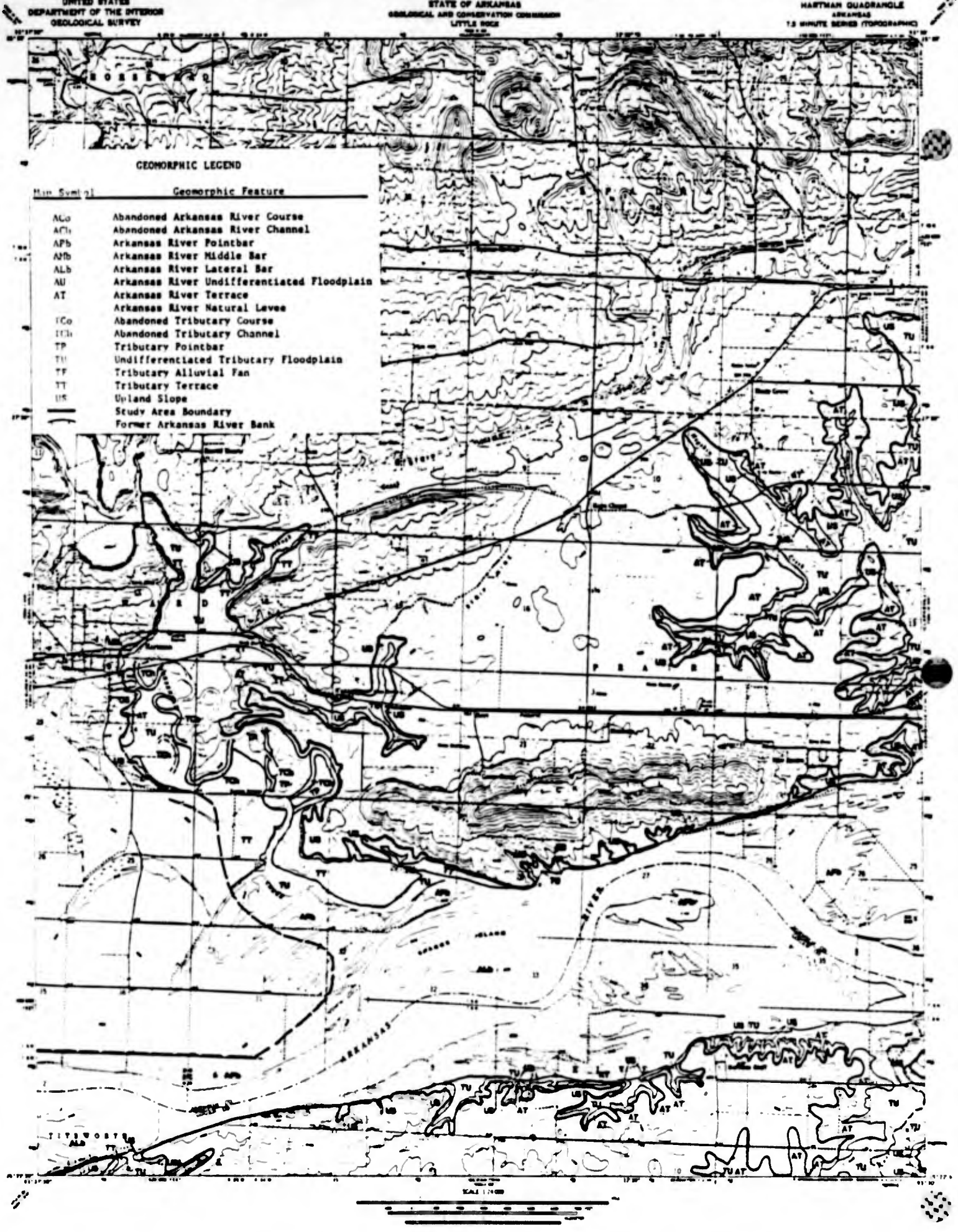


Figure 16. Hartman Quadrangle (Smith 1986: Plate 6).

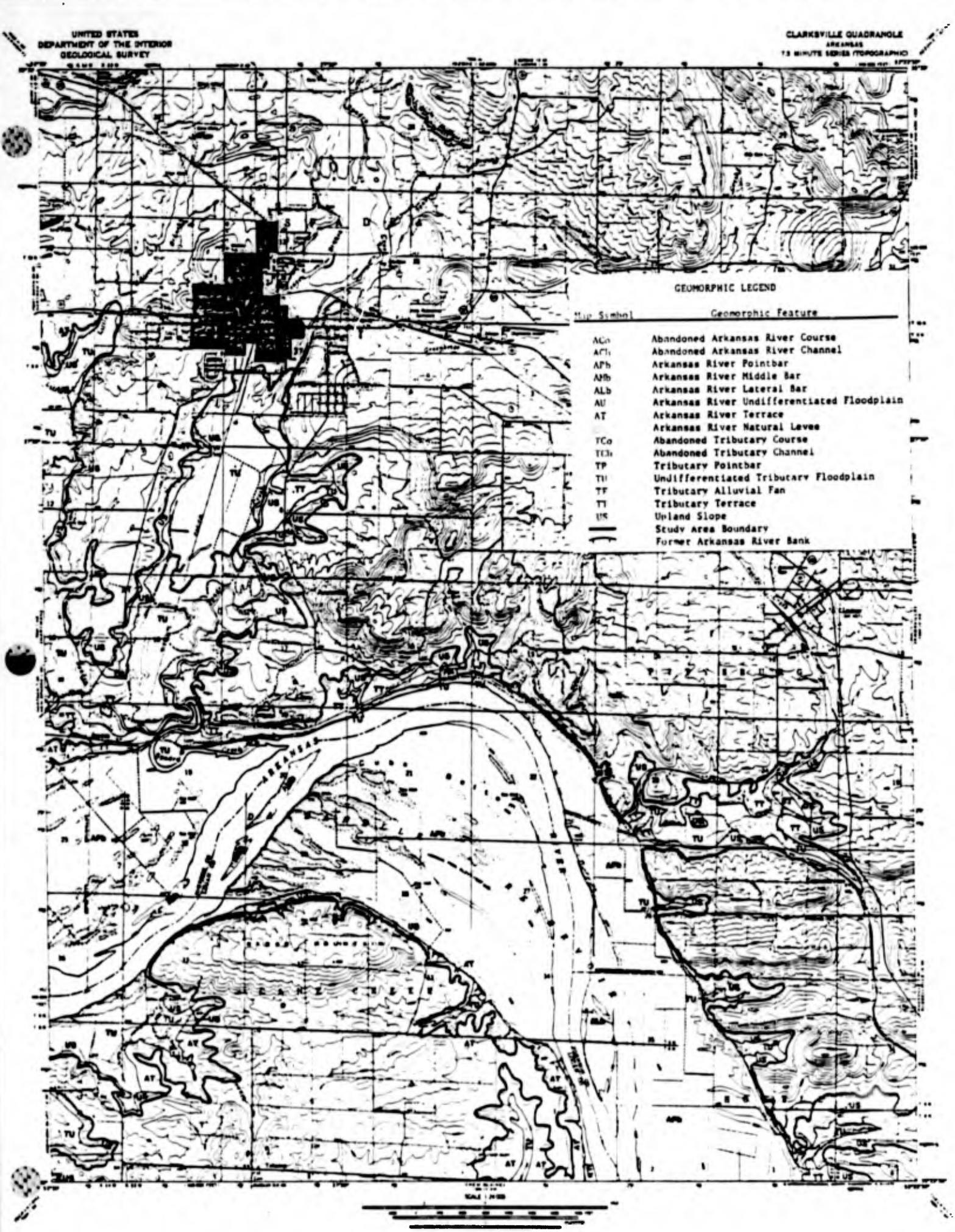


Figure 17. Clarksville Ouadrangle (Smith 1986: Plate 7).

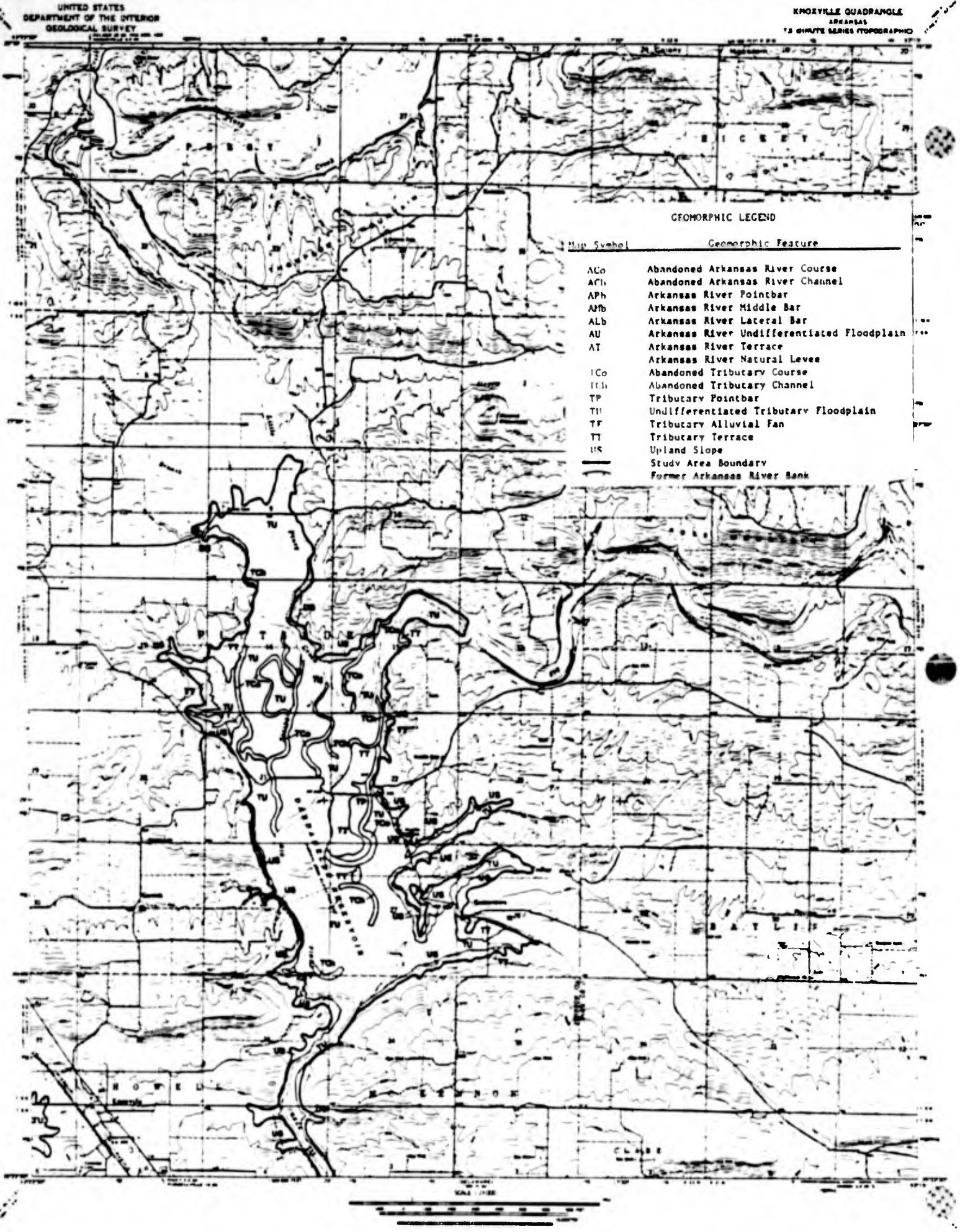


Figure 18. Knoxville Quadrangle (Smith 1986: Plate 8).

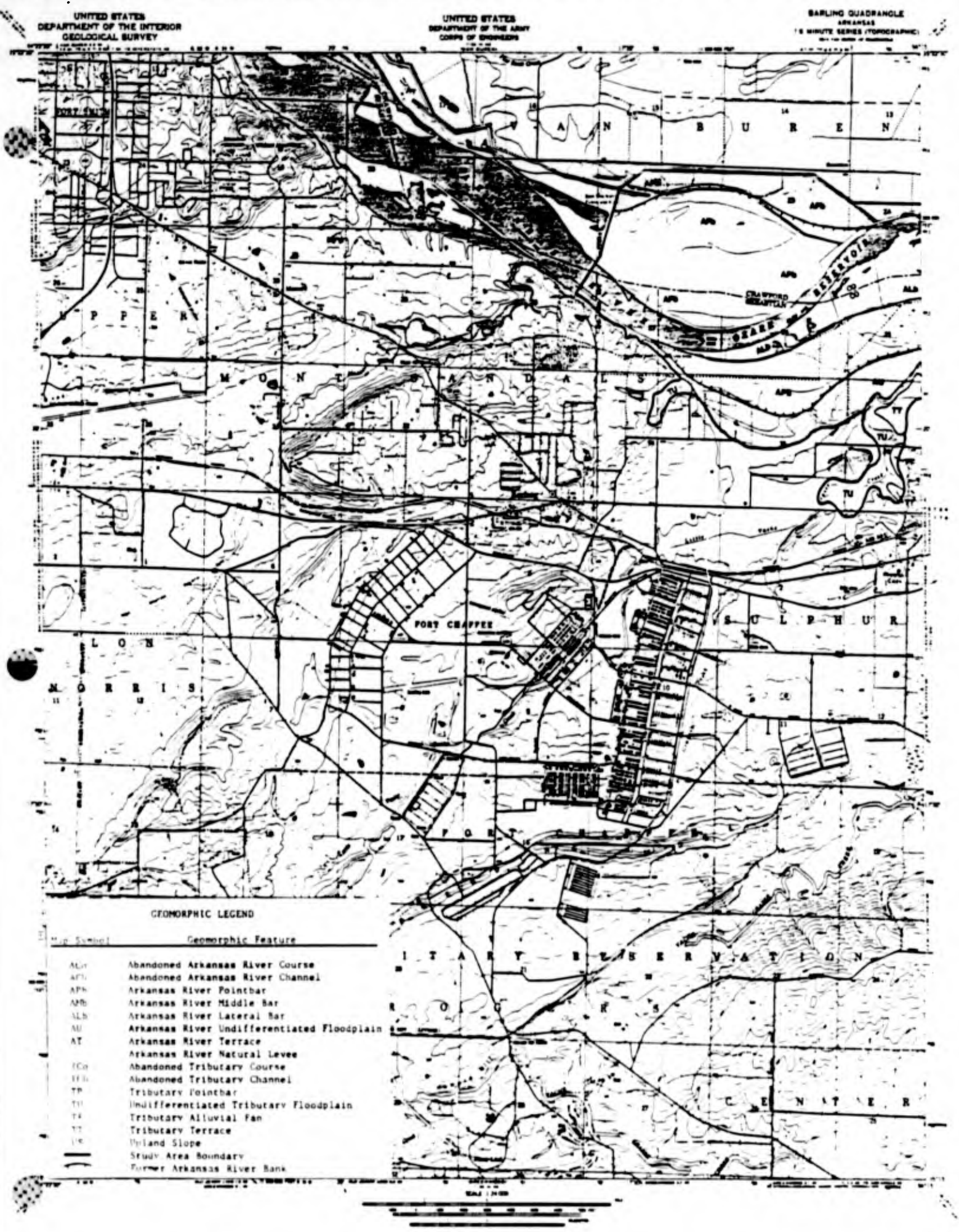


Figure 19. Barling Quadrangle (Smith 1986: Plate 9).

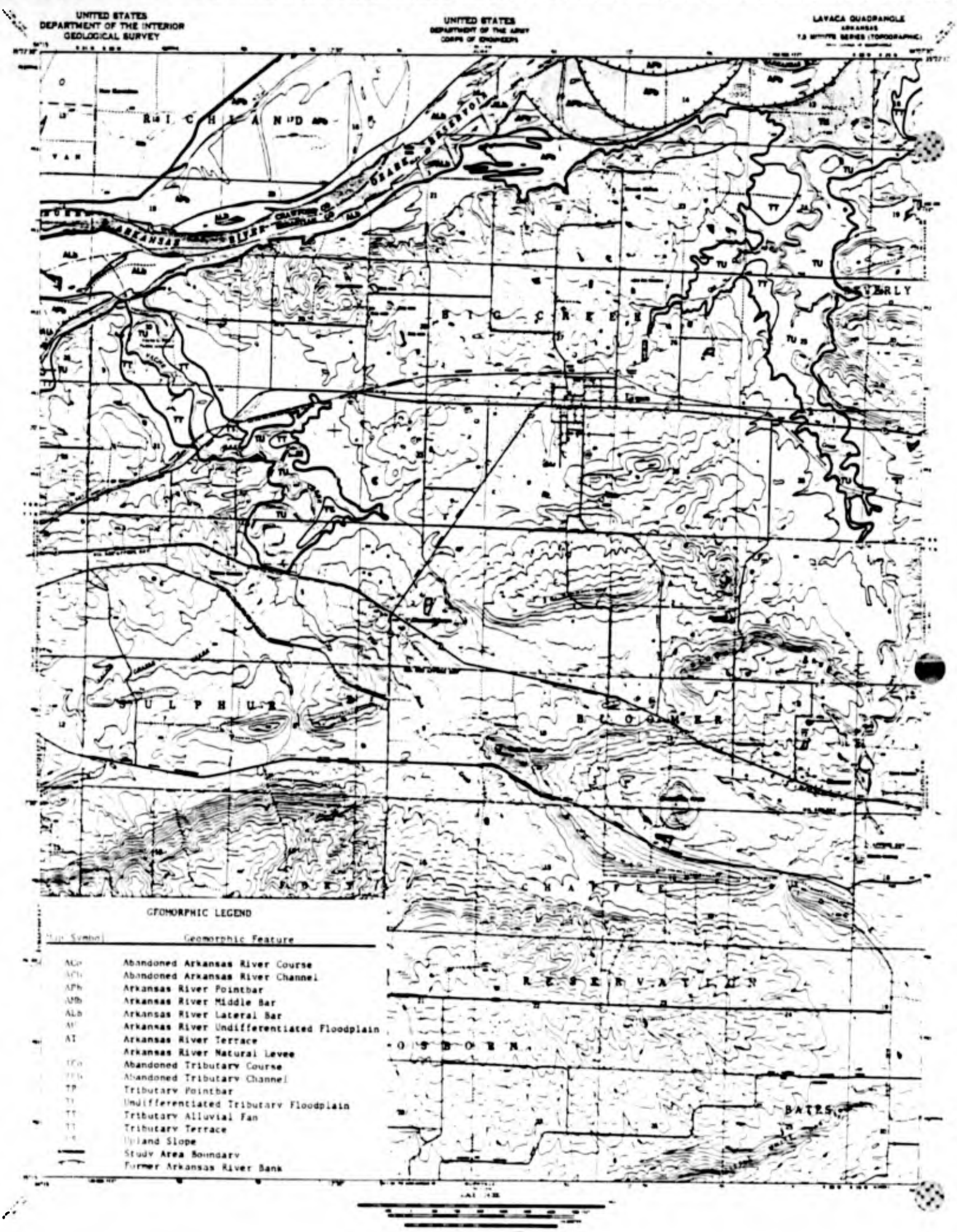


Figure 20. Lavaca Quadrangle (Smith 1986: Plate 10).

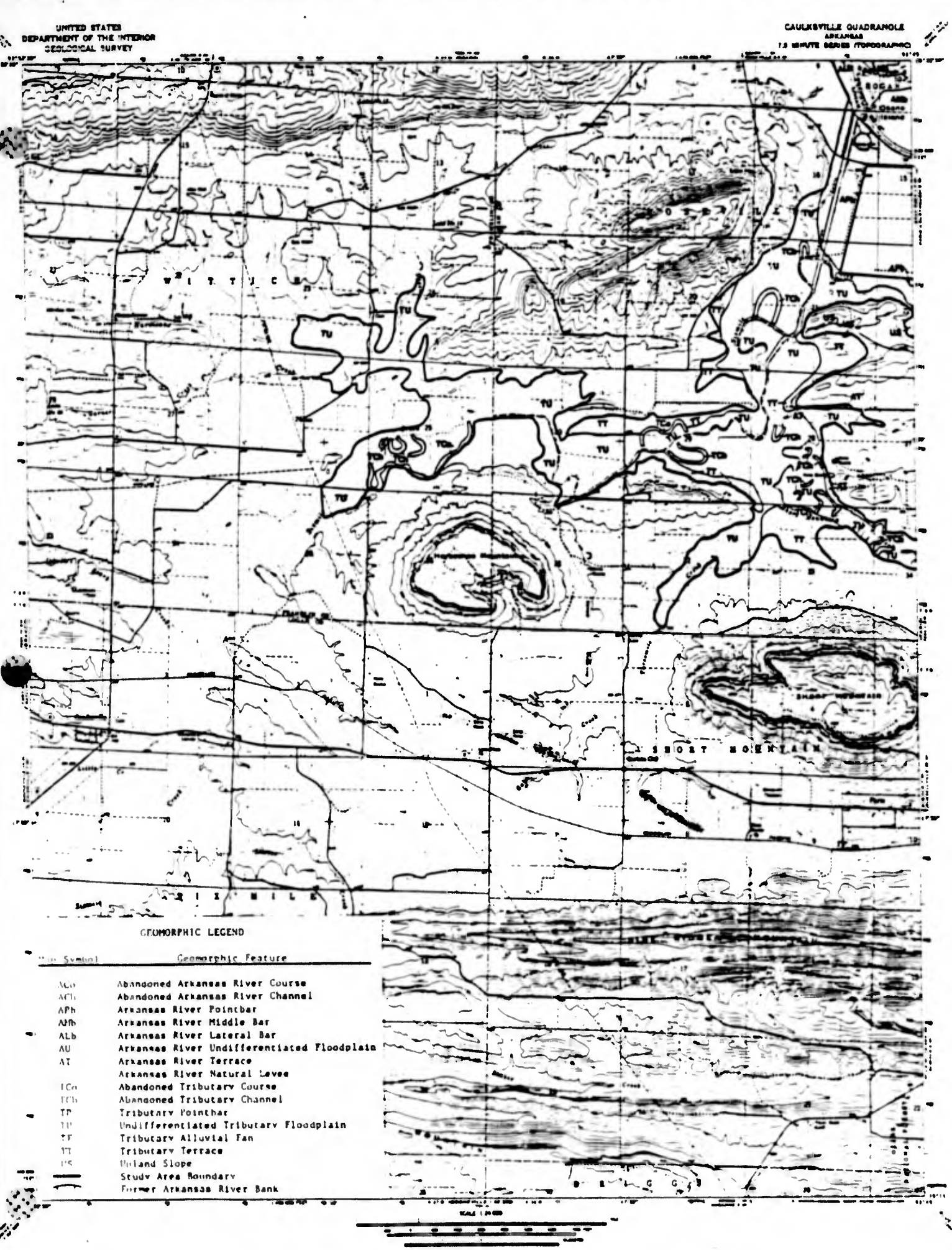


Figure 21. Caulksville Quadrangle (Smith 1986: Plate 11).

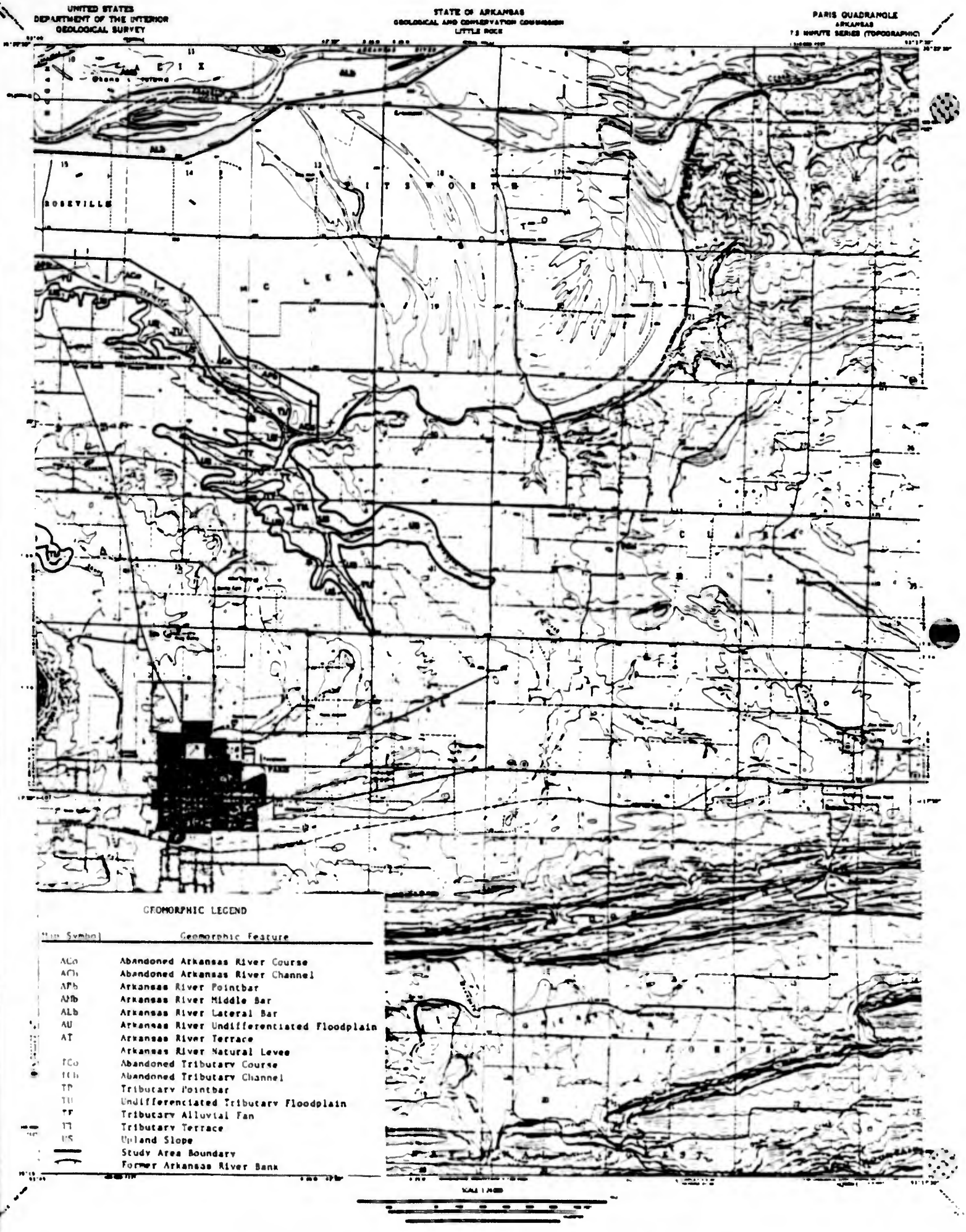


Figure 22. Paris Quadrangle (Smith 1986: Plate 12)

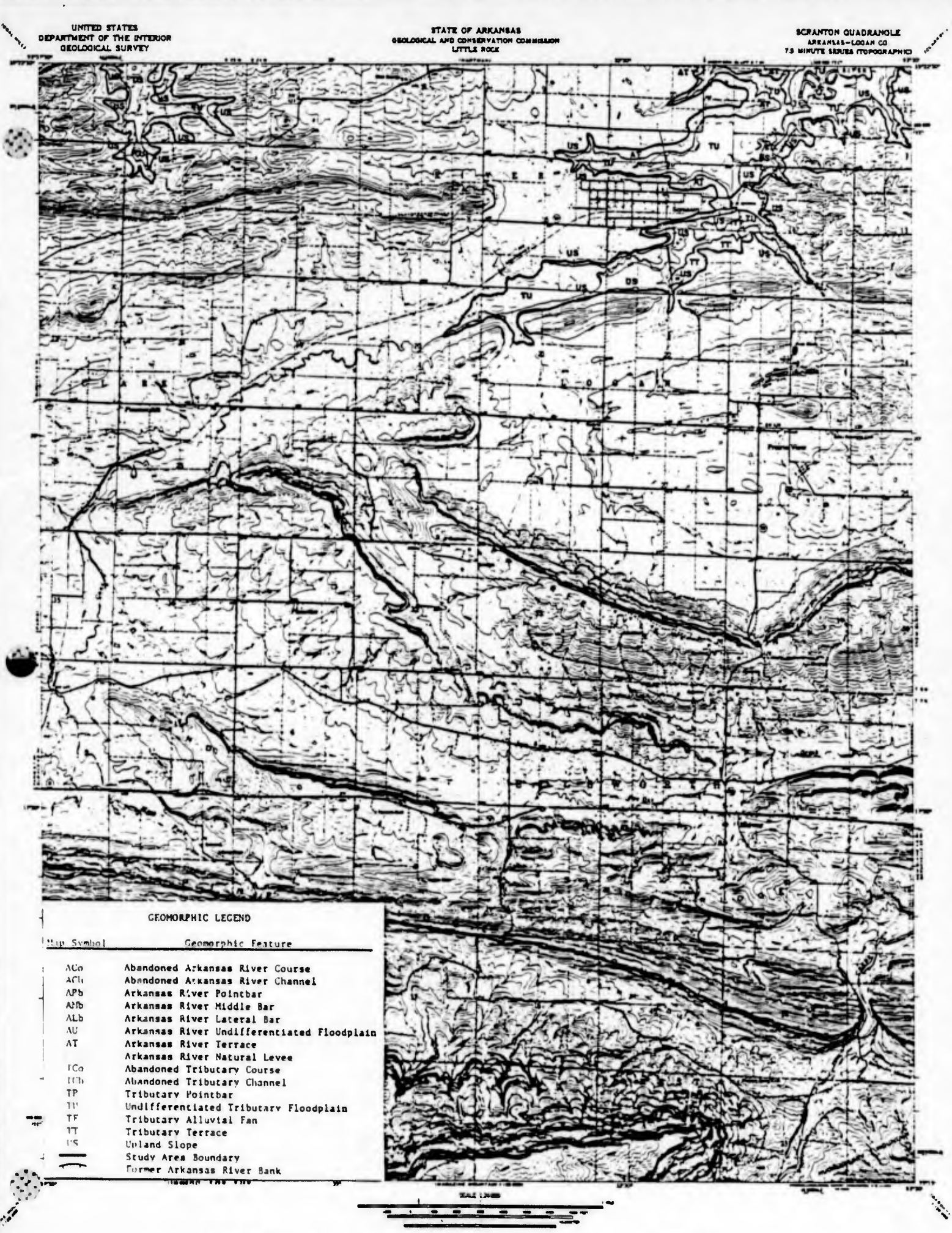


Figure 23. Scranton Quadrangle (Smith 1986: Plate 13).

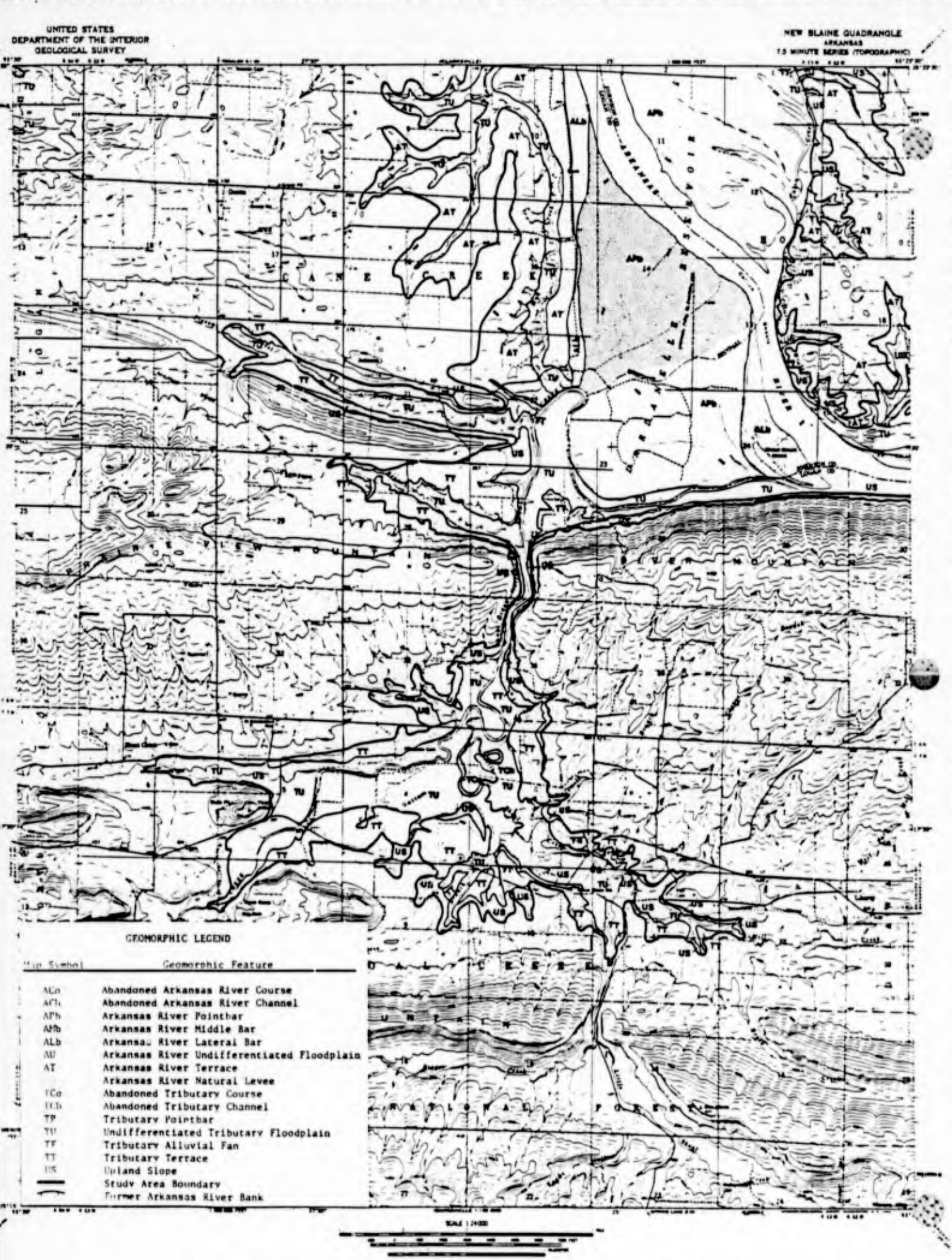


Figure 24. New Blaine Quadrangle (Smith 1986: Plate 14).

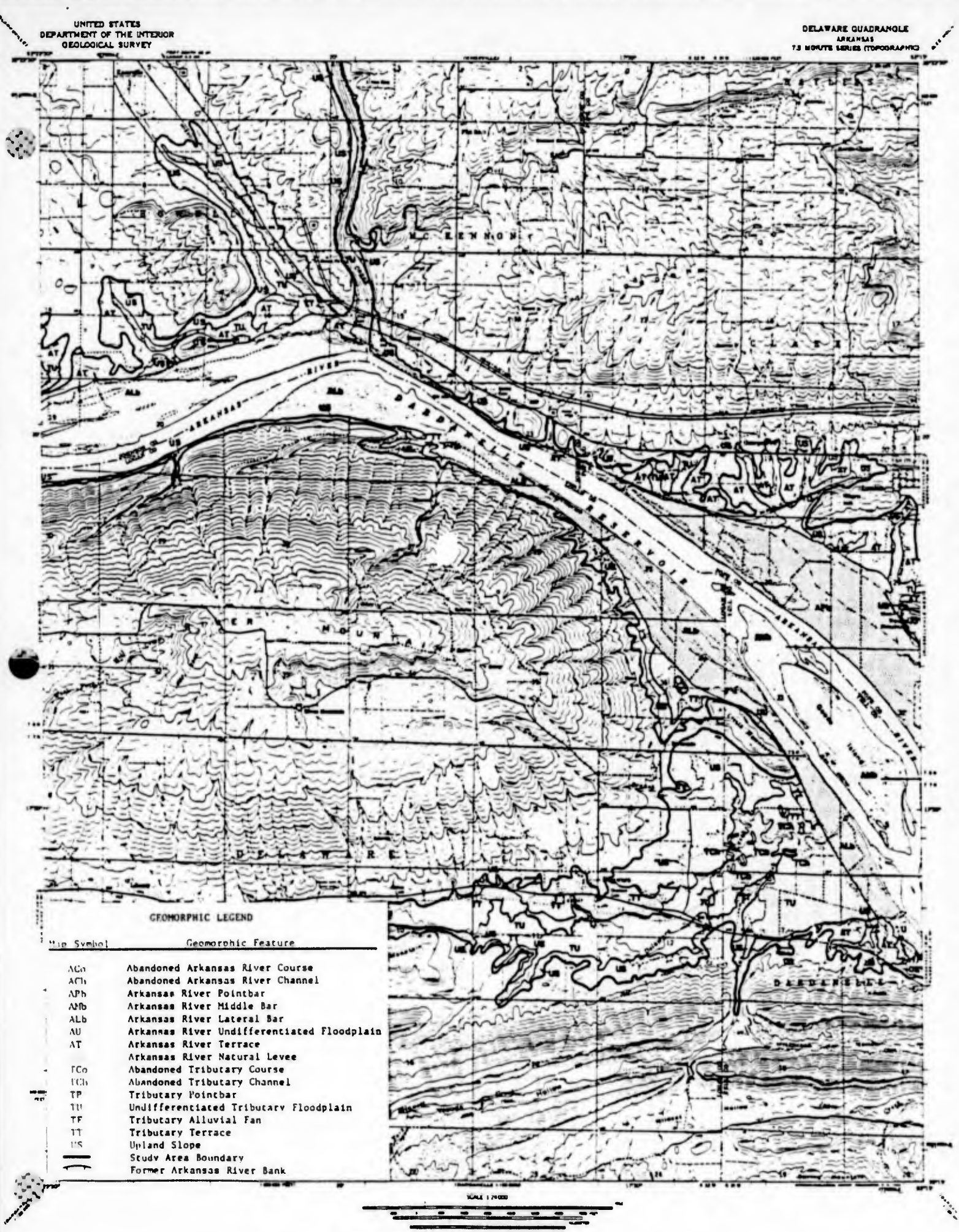


Figure 25. Delaware Quadrangle (Smith 1986: Plate 15).

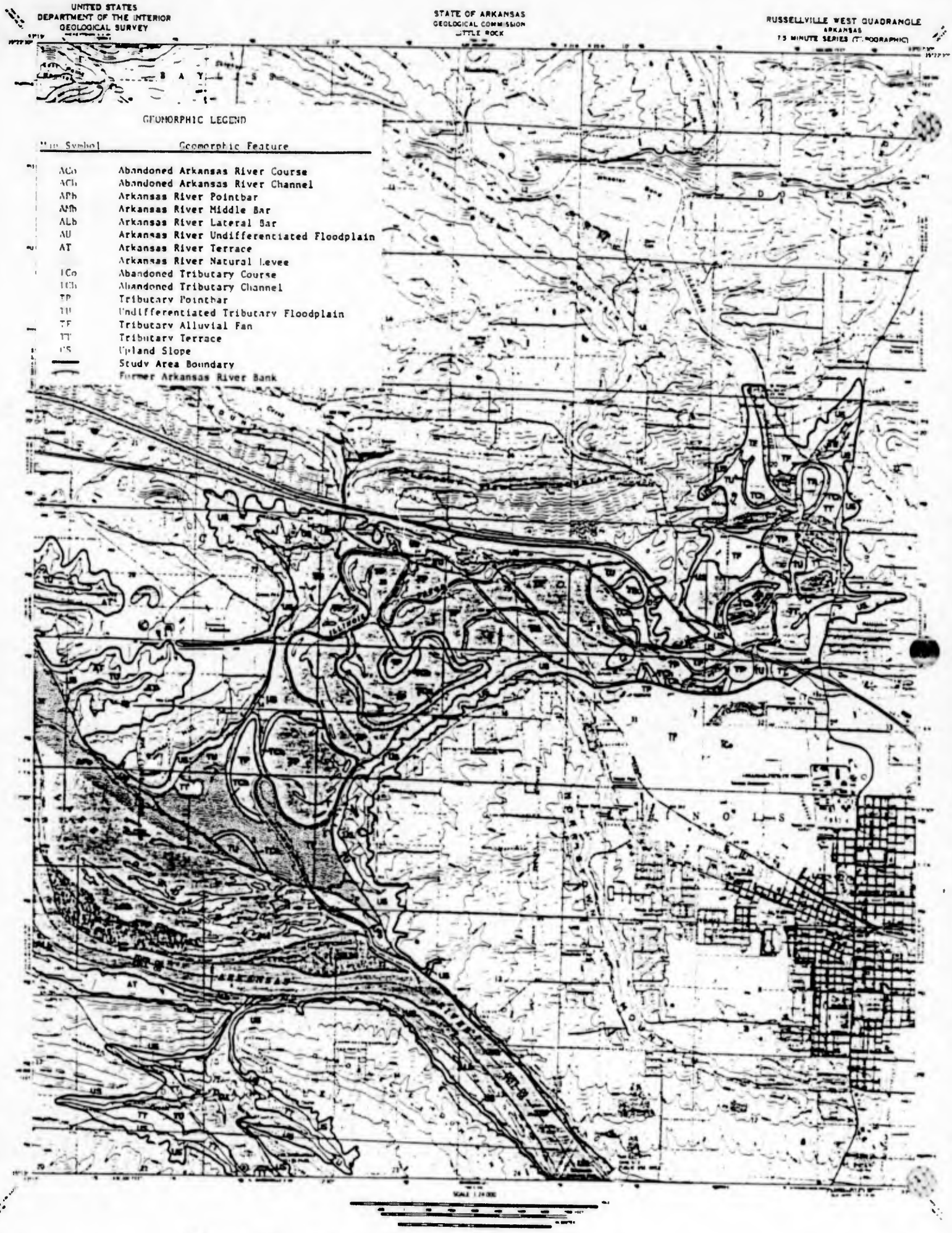


Figure 26. Russellville West Quadrangle (Smith 1986: Plate 16).

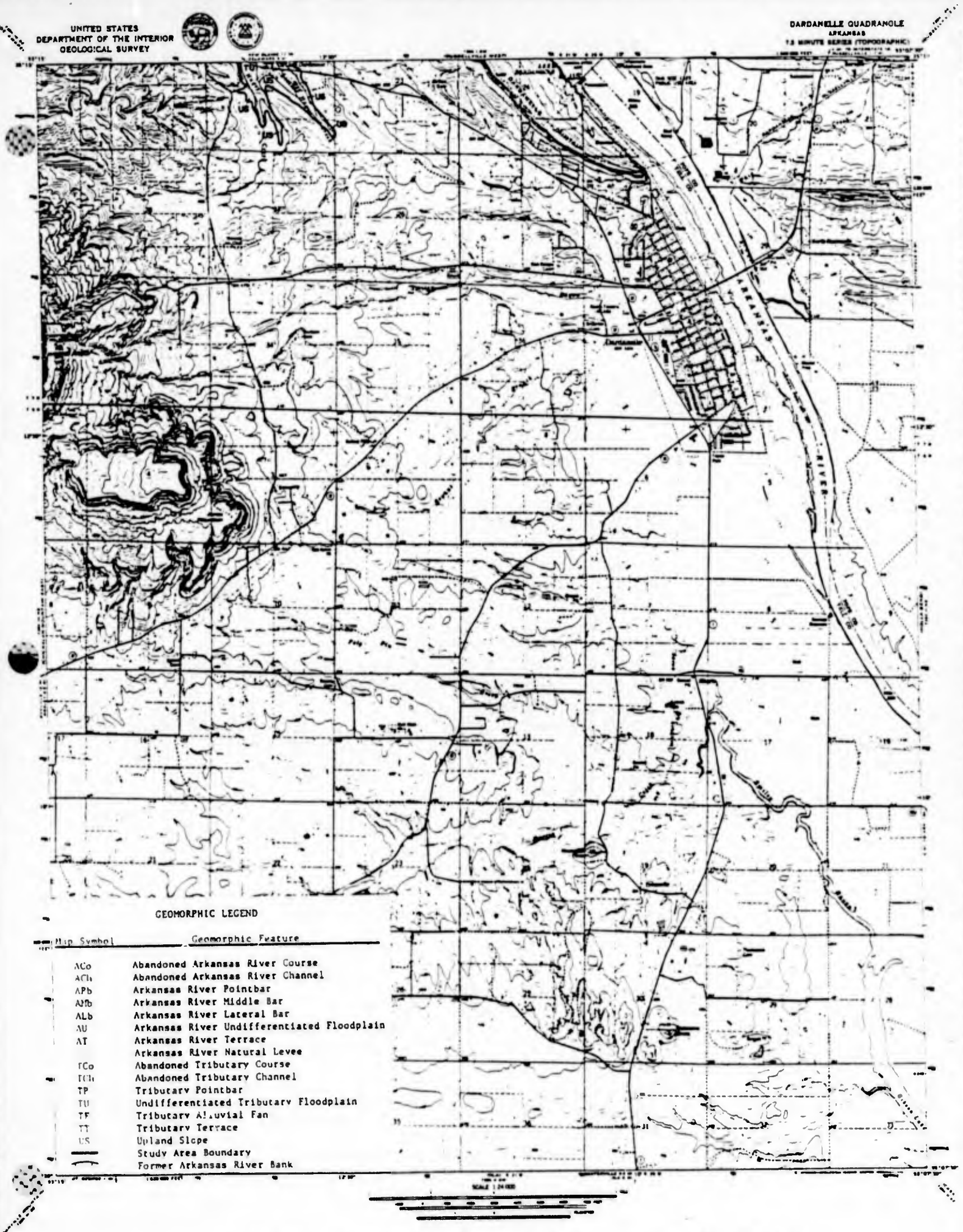


Figure 27. Dardanelle West Quadrangel (Smith 1986: Plate 17).

Lake study areas are shown on a series of geomorphic maps (Figures 11 - 27; Smith 1986: Plates 1 - 17). In the following paragraphs, the origin and characteristics of the geomorphic features identified on the geomorphic maps are discussed.

Description of Geomorphic Features. Sixteen types of geomorphic features were mapped in the study area. These geomorphic features are grouped as being formed by the Arkansas River or by tributary streams. Arkansas River features have an "A" prefix in the map symbol (i.e. "ACo" for an abandoned Arkansas River course); tributary features have a "T" prefix in the map symbol (i.e. "TCo" for an abandoned tributary course). Fluvial geomorphic features formed by the Arkansas River and the larger tributaries are similar in origin, however dissimilar in scale. For this reason similar types of geomorphic features, such as Arkansas River point bars and tributary point bars are discussed under a single heading.

Point bar (APb, TP). Streams migrate laterally to satisfy an equilibrium relationship between its various flow conditions, type and amount of sediment load, bed and bank materials, and the sinuosity of its channel. Channel migration occurs as the outside bank, or "cut bank" is eroded and a lateral sandbar is deposited against the inside bank. As migration progresses, the inside of the meander becomes a series of ridges (relict lateral bars) and swales (resulting troughs between the ridges). Collectively the series of ridges and swales comprise the point bar landform that frequently dominates the landscape of an alluvial valley formed by an actively meandering stream. Point bar deposits are as thick as the total depth of the channel that formed them and fine upward texturally from the maximum size of the bedload material through sand, silt, and often clay (at the top of the deposit). The sand and gravel substratum is deposited through lateral accretion (channel migration) and the silt and clay topstratum is the product of vertical (overbank) accretion.

Point bar deposits make up the majority of the Arkansas River Valley alluvium in the study area. Arkansas River point bar deposition is well illustrated inside of a large meander of the Arkansas River adjacent to Morrison Bluff (Figure 16) and Cuba Bottom north of Ragon Mountain (Figure 17). Much of the alluvium in the larger areas of tributary valleys is also probably point bar deposition, although large areas of tributary valleys are wrapped as undifferentiated tributary floodplain. In the largest tributary, Illinois Bayou, tributary point bar deposits were discriminated in obvious locations.

Lateral bar (ALb). Lateral bars were wrapped adjacent to the Arkansas River channel. Lateral bars are longitudinal lobes of sandy sediment formed on the edge of the channel, often on the leading edge of a point bar. Although lateral bars are usually part of a larger single point bar, they were discriminated in this study as being recent (primarily historic) deposits of the Arkansas River, which may be attached to much older point bar deposits. No lateral bar deposits were delineated in tributary valleys.

Middle bar (AMb). Like lateral bars, middle bars of the Arkansas River are the result of historic sedimentation. Middle bars in the Arkansas River are surrounded by river channel and are formed when local channel geometry or decreased channel slope causes a decrease in sediment transport capacity, resulting in channel aggradation. Many middle bars are ephemeral features, existing for only a few years until they are subsequently destroyed by a local resurgence of sediment transport capacity. Occasionally, middle bars will grow high enough to permit the establishment of vegetation and then become islands, such as the case of Okane Island (Figures 14, 15, 17, and 18).

Abandoned channel (ACh, TCh). Individual loops of actively meandering channels are often cut off during periods of flood. Natural cutoffs usually occur in two ways. A highly sinuous channel may cut off a single loop by cutting through its narrow neck and plugging the "arms" of the abandoned channel with its bedload material (usually sand). The result is a highly arcuate, completely recurved lake, almost totally removed hydraulically from the active channel. Abandoned channels may also form when the main flow path is diverted through a prominent swale on the point bar (described below) during high flow stages, which then becomes the main flow channel. The old main flow channel is gradually abandoned as the stream migrates away from it. However, the "chute cut" abandoned channel fills much more rapidly (receiving flow during high stages and sedimentation during flood recession) than the "neck cut" abandoned channel (which may remain as a lake for several thousand years). Abandoned channels ultimately are filled predominantly with fine-grained sediment; chute cutoffs are filled with fine sand, silt, and clay while neck cutoffs are filled primarily with clay and silt.

Numerous small abandoned tributary channels occur in the valleys of the larger tributaries in the study area. Abandoned channels of the Arkansas River are mapped in the Vine Prairie and Richland township areas of the Ozark Lake study area.

Abandoned course (ACo, TCo). Similar to the abandoned channel is the abandoned course, a relict channel segment which contains several to many connected meanders. The major difference between the two is the mode of abandonment. Unlike the abandoned channel, the abandoned course is formed when the main flow path is diverted through the streambank to a completely new position on the floodplain creating a new "meander belt" (consisting of a channel and its adjacent abandoned channels). The process is known as channel avulsion and may happen gradually or in response to a single flood. Channel avulsions usually occur gradually as an increasing amount of flow is diverted through the new, more hydraulic efficient channel and the old channel is progressively filled with sand, silt, and clay.

Short segments of abandoned tributary courses are common in the larger tributary valleys, such as Mulberry River (Figure 12), Horsehead Creek (Figure 16), Big Piney Creek (Figure 18), Big Shoal Creek (Figure 14), and

Illinois Bayou (Figure 26). An abandoned Arkansas River course occurs along the southern edge of McLean Bottom in the present location of a reach of Sixmile Creek (Figure 11).

Undifferentiated floodplain (AU, TU). Much of the area in tributary valleys and in the Arkansas Valley in the Vine Prairie area is classified as "undifferentiated floodplain." This geomorphic feature is probably 80 to 90 percent point bar subdued or buried by relatively thick vertical accretion deposits of silt and clay. The remaining 10 to 20 percent of undifferentiated floodplain is most likely backswamp, comprised totally of vertical accretion deposits of clay with silt deposited behind the meander belt of the active stream during floods. Backswamps are broad, flat basin areas lower in elevation than the adjacent "mature" meander belt ridges and are usually the locus of new channels formed during a channel avulsion.

Natural levees (dot pattern). Natural levees are formed when the streambank is overtopped during flood stages and sediment suspended in the flood flow is deposited overbank immediately adjacent to the channel. The resulting landform is a low, wedge-shaped ridge paralleling the channel, with its maximum height being adjacent to the outside of a meander. Natural levees in the Arkansas River Valley are well developed, most likely due to a generous supply of silt and fine sand in the sediment load of the Arkansas River in this region. Natural levee deposits are not discriminated in the tributary valleys due to the scale of the geomorphic maps; however, most of the present and abandoned tributary courses and channels have thin (1-2 feet) natural levee deposits next to them.

Tributary alluvial fan (TF). Where tributary streams exit upland areas of steep valleys and flow out into large open areas such as broad alluvial plains, they rapidly lose stream energy due to a decreased channel slope, a change in hydraulic geometry of the channel, or a loss of discharge through streambed infiltration. The result of the loss of stream energy is sediment deposition and the development of a fan-shaped wedge of alluvium which is thickest at the point where the stream exits the uplands. Small tributary fans occur throughout the study area where small streams exit the uplands and flow out onto the Arkansas River floodplain or the floodplains of the larger tributaries. With the exception of one fan, all of the tributary fans are too small to be mapped at the scale of 1:24,000. The exception is the large tributary fan formed by Illinois Bayou as it exits a narrow gorge and enters its broad alluvial valley in the SW1/4 of Section 17, T8N, R20W, about four miles north of Russellville, AR (Figure 16). The Illinois Bayou fan slopes downstream from an elevation of approximately 353 feet amsl at the fan head to 341 feet amsl at the toe of the fan.

Terrace (AT, TT). Terraces in alluvial valleys are former floodplain surfaces which have been abandoned when the local channel goes through a cycle of bed erosion and subsequent creation of a new floodplain at a lower level. Terraces may form as a result of the local stream responding to a major external factor (i.e., drop in local base level) or they may be the

product of the natural geomorphic evolution of a stream system in the absence of major changes in external variables affecting stream behavior. Terraces are common in most alluvial valleys of several thousand years age or older.

Six separate terrace levels of the Arkansas River were identified in the Arkansas Valley in and adjacent to the study area, ranging in elevation from 260 to 15 feet above the active floodplain. Only the lowest Arkansas River terrace occurs extensively in the study area in the vicinity of the mouth of Big Shoal Creek (Sections 10, 15, and 22, T8N, R23W; Figure 14). Smaller areas of Arkansas River terrace representing low hillslopes eroded into higher terrace levels also occur within the study area, as illustrated by the mapped "AT" in the NW1/4 Section 19, T8N, R22W (Figure 14). These geomorphic features (erosional hillslopes on the edge of high Arkansas River terraces) are similar in active erosional processes to areas mapped as upland slope (US).

Many terrace levels have been observed in the tributary valleys. As many as six terrace levels may exist in some of the larger tributary valleys. The higher (greater than 12 feet above the modern floodplain) terraces are most likely at least as old as late Pleistocene (late Wisconsinan). Numerous low terraces also exist, as observed in the field, in the areas mapped as undifferentiated tributary floodplain (TU), but, due to their scale, are not identified on the geomorphic maps. These low tributary terraces, ranging in elevation from 2 to 12 feet above the modern floodplain, were formed during the Holocene (last 12,000 years). As a rule, the higher the terrace is above the modern floodplain, the greater its age.

Upland slope (US). The alluvial valleys of the Arkansas River and its tributaries are bounded by valley walls eroded into the local Pennsylvanian rock. Where these valley walls are exposed in the study areas, they are mapped as Upland slope (US), meaning the geomorphic feature is a surface formed by erosion of Pennsylvanian formations. Upland slope areas, as mapped, have a wide range of local slope, from gentle (2-3%) to vertical. On the more gentle slopes (less than 15%), these surfaces are usually covered by a well developed residual soil developed in the host rock (typically sandstone or shale). This residual soil is characterized by its well developed pedogenic horizons and yellowish-orange color. A large area originally mapped as tributary terrace near Delaware, Arkansas (Section 1, T7N, R22W; Figure 15) was observed in the field as actually a low gentle erosional slope (US) developed in Pennsylvanian sandstone. Local rock outcrops in tributary valleys (SE1/4, SE1/4, Section 23, T9N, R23W; Figure 17) are also mapped as upland slope.

Former Arkansas River Bank. Progressive lateral migration of the Arkansas River throughout at least the last half of the Holocene has resulted in the formation of a number of low crescent-shaped ridges bounded on the convex side by thick belts of natural levee deposits. These ridges, usually two to four meters (six to twelve feet) high and 1.5 to 2.5 km (1.0-1.5 miles)

long, represent the outside banks of former Arkansas River meanders. The thick adjacent natural levee deposits suggest a period of temporary channel stability on the order of 50-500 years as the natural levee grew in height and width. These broad ridges are steep on the concave (inside) and gentle on the convex (outside) flanks, and are considerably larger, higher, and less numerous than the many pointbar ridges which are the dominant landform of the Arkansas River floodplain. Several well developed former Arkansas River Banks are delineated on the Lavaca quadrangle sheet (Figure 20) near the mouth of Big Creek.

Geomorphic Development of the Study Area

Introduction. Geomorphic features in the Arkansas River Valley indicate that the Arkansas River has been in the general location of the present channel for many (hundreds) thousands of years, certainly much longer than it is likely that native Americans have inhabited the area. The presence of high Arkansas River terraces at five levels above the historic floodplain all identify former time periods in the gradual erosive formation of the Arkansas River Valley. The weathering (pedogenic) horizons in the Arkansas River terraces suggest their increasing antiquity with elevation, with even the lowest terrace (15 feet above the historic floodplain) containing a mature soil, suggestive of possibly 10,000-12,000 years of age. A similar geomorphic history is evident in the tributary valleys on a smaller scale. In the following section a brief discussion is presented on the apparent geomorphic history of the Ozark Lake-Lake Dardanelle study area. This discussion is based on the consideration of the geomorphic and chronometric data available. Geomorphic data are derived from Figures 11 - 27 and field observations. Chronometric data are taken from archeological site occurrences of various ages, field observations of soil horizons, and historic maps.

Geomorphic Development of the Arkansas River Floodplain. Confinement of the Arkansas River by steep valley walls of erosion resistant geologic strata within a relatively narrow valley has resulted in the frequent reworking of floodplain landforms by the meandering Arkansas River. Examination and comparison of historic maps and aerial photographs, the occurrence of archeological sites, and the "recent" appearance of landforms in the field all indicate that much of the existing Arkansas River floodplain within the study area has formed within historic times. As previously mentioned, all of the areas mapped as lateral bar or middle bar are almost certainly historic in age. Many point bar areas are also historic, including areas on Figures 11, 12, 15, 16, 17, 24, and 26.

The only areas of prehistoric landforms within the Arkansas River floodplain in the Lake Dardanelle study area are (1) areas mapped as point bar in sections 27, 28, 29, 32, 33, 34, and 35, T9N, R25W (Figure 15) and (2) the area mapped as natural levee over point bar adjacent to the left descending bank northeast of Goose Island (Figures 25 and 26). Only these two areas

within the Arkansas River floodplain in the Lake Dardanelle study area appear to have escaped reworking by the Arkansas River in historic times. Area (1) mentioned above could be on the order of 3,000-4,000 years old, and area (2) as much as 2,000 years old.

In the Ozark Lake study area several areas of prehistoric landforms exist within the Arkansas River floodplain. The most extensive area consists of the area north of the Arkansas River in the floodplain from the mouth of Frog Bayou east (down-river) to the mouth of Mulberry River (Figures 11 and 12). Broad areas of natural levees adjacent to the modern Arkansas River, former Arkansas River banks, and a large abandoned Arkansas River channel appear to be areas of high probability of site occurrence in this portion of the Ozark Lake Area. Lateral migration of the Arkansas River in the reach from Mulberry River downstream to Ozark appears to have been minimal during at least the last several hundred (probably 1000-2000) years (Figures 13 and 14). Consequently the probability of site occurrence on the natural levees overlying lateral bars and point bars is high, and the potential location of buried sites within the natural levee deposits is significant. Most other areas in the Arkansas River floodplain in the Ozark Lake study area are historic to very late prehistoric in age.

Former floodplain levels of the Arkansas River (terraces) are also important potential areas of prehistoric cultural resource occurrence. Several separate Arkansas River terraces were identified in the vicinity of the study areas, however, only the lowest terraces were identified in the vicinity of the study areas. The lowest Arkansas River terrace is probably late Wisconsinan to early Holocene in age, based on its position and elevation relative to the historic floodplain, the degree of dissection of its surface by local streams, and the moderate maturity of the surficial pedogenic profile. Fisk (1944) stated that the Arkansas River was charged with substantial amounts of glacial outwash during the late Pleistocene, forming a large alluvial fan where it entered the Mississippi River alluvial valley. However, the lack of broad low terraces in the Arkansas Valley and extensive accordant backwater terraces in the tributary valleys suggest minor influence of glacial outwash in the late Pleistocene and early Holocene history of the Arkansas River Valley. Considering the relatively small percentage of the Arkansas River Basin which was directly influenced by Pleistocene glaciation, the apparent absence of substantial amounts of glacial outwash in the Arkansas River Valley is not surprising.

Most of the landforms of the tributary valleys are of sufficient age to have archeological sites on them, especially the various terrace levels of the tributaries. These tributary terraces indicate the complex late Pleistocene and Holocene histories of the tributary valleys. In the next paragraphs, the apparent geomorphic history of the major tributary valleys is presented.

Geomorphic Development of Tributary Valleys. The geomorphic evolution of the tributaries of the Arkansas River is largely influenced by the actions of the Arkansas River. Major changes in stream regime in the Arkansas River

are translated through the tributaries in like manner. Aggradation of the Arkansas River will cause concomitant aggradation in the tributaries as the local base level is elevated. Correspondingly, incision by the Arkansas River will cause a lowering of local base level and incision by the tributary streams. Therefore, it is important to understand the geomorphic evolution of tributary streams when investigating the history of the main channel, and vice versa.

The major tributary valleys of the Arkansas River in the Lake Dardanelle study area (Sixmile Creek, Horsehead Creek, Cane Creek, Spadra Creek, Big Shoal Creek, Big Piney Creek, Delaware Creek, and Illinois Bayou) and Vache Grasse Creek, Big Creek, Frog Bayou, Mulberry Creek, Onion Creek, and White Oak Creek in the Ozark Lake study area all exhibit well developed alluvial valleys with adjacent terraces, indicating their geomorphic development over a period of time which dates well back into the Pleistocene. Like the Arkansas River, the tributary streams are also profoundly influenced by local lithologic and structural controls, however the tributaries have been successful in eroding their valleys in some areas to the point where a broad floodplain and several terraces have been formed. All of the trunk channels of the tributary streams have evolved to the meandering phase, in most cases meandering freely in their alluvial valleys. Abandoned channels and courses are common in all of the tributary valleys, except Spadra Creek Valley and Onion Creek, which probably contain these alluvial features, but their delineation was not possible due to the scale of the aerial photography and the contour interval of the topographic map.

The existence of several low terraces varying in elevation from 2 to 12 feet above the historic floodplains of the tributary valleys indicates the complex nature of the geomorphic development of the tributary valleys throughout the Holocene. Detailed geomorphological investigations of the tributary valleys might reveal a commonality in the geomorphic history of the tributaries which would most likely be a product of a common response of the tributaries to geomorphic activity of the Arkansas River. Conversely, detailed studies might also indicate that the tributaries are "out of phase" with each other, responding differently to the geomorphic activity of the Arkansas River. This complex response of the tributary streams is common in nature, and can be explained by the natural episodic adjustment of stream systems to geomorphic thresholds, such as the abandonment of a stream course of channel, or the development of tributary fans.

Since detailed geomorphological investigations were not conducted of the tributary valleys, it is not known if the tributaries are in or out of phase with respect to each other. However, from an examination of the geomorphic maps and consideration of field observations in all of the tributary valleys, several general statements can be made regarding the apparent geomorphic development of the tributary valleys.

a. The tributary valleys are much more stable geomorphologically than the Arkansas River Valley in the study area.

b. The tributary streams would have been more sensitive to Holocene climatic change/variability then the Arkansas River, but the response of the tributaries, while probably similar in result, would not necessarily have occurred simultaneously throughout the study area.

c. The low terraces in the tributary valleys are most likely the product of the local complex geomorphic evolution of the tributary valley and are probably not correlative among the tributary valleys.

d. The higher tributary terraces at about 15-20 feet above the historic floodplains of the tributaries are quite possibly correlative within the study area and possibly correlative with the lowest Arkansas River terrace.

e. All of the tributary streams have probably been in the meandering phase for at least the last 3,000 years, as indicated by the distribution of archeological sites. Some of the abandoned tributary channels and courses are 2,000-3,000 years old.

f. Several feet of vertical accretion of sediment is common in the floodplains of the tributary valleys. Much of this surficial sediment could be less than 200 years in age.

g. Areas of natural levee formation are not as well defined in the tributary valleys as they are in the Arkansas River floodplain. Vertical accretion of sediment is more uniformly distributed in the tributary valleys than in the Arkansas River floodplain, and less concentrated along present channels and abandoned channels and courses.

h. More abandoned channels and courses occur in the tributary valleys than are shown on the geomorphic maps, especially in the lower reaches of the tributary valleys where they may be masked by natural levees of the Arkansas River.

Significance Of Arkansas River Valley Geomorphology To Cultural Resource Investigations

Use of Geomorphological Data in Cultural Resource Investigations. The purpose of this investigation was to provide a geomorphological foundation for use in the planning and execution of subsequent cultural resource surveys in the Lake Dardanelle and Ozark Lake project areas. In keeping with this purpose, it is useful to consider the various uses of

geomorphological data in cultural resource investigations. Geomorphological investigations conducted in support of future cultural resource investigations should produce results which would be useful in providing:

a. Geomorphological information which will be of use in predicting site occurrence and extent.

b. Guidance for the location of areas or features which are likely to contain buried sites.

c. Guidance for the location of areas or features which are likely to contain sites of specific age or cultural component.

d. Geomorphological information useful in predicting the probability of site destruction by natural geomorphic processes.

e. A landscape/landform (or geomorphic feature) classification and delineation necessary to establish site-landscape/landform associations.

f. Paleoenvironmental data critical to the evaluation of the cultural resources of a region.

The third objective of this investigation pertains to letter (b) above, however, all of the uses stated above will be discussed briefly in terms of the geomorphological study of the Lake Dardanelle and Ozark Lake project areas.

[Editor's note: Smith's discussion of site location (Smith 1986: 20-22) is not included in this chapter as it was based solely on previously recorded sites within Lake Dardanelle. Data from the field work and Ozark Lake has given us a much more complete data base from which to work. However, it is important to note that even with this partial data set Smith was able to state that within the Holocene portions of the study area, "the probability of locating archeologial sites is greatest on natural levees of the Arkansas River and in the tributary valleys, especially on tributary terraces" (Smith 1986: 22).]

Location of Buried Sites. Geomorphic processes which are responsible for burial of archeological sites are (1) vertical accretion (sedimentation) during floods; (2) alluvial fan deposition; and (3) colluvial deposition at the base of hillslopes. Vertical accretion is responsible for the formation of natural levees in the Arkansas River floodplain and broad floodplain sedimentation in the tributary valleys. Colluvial deposition has occurred at the base of hillslopes on the edge of the tributary valley floodplains and terraces. The large alluvial fan formed by Illinois Bayou may contain cultural strata which have been buried during vertical deposition on the fan. Natural levee deposits adjacent to stable reaches of the Arkansas River are also areas of high probability for site burial. Consequently,

areas which could possibly contain buried archeological sites include the Arkansas River natural levees, almost any of the better drained areas of the tributary floodplains, colluvial slopes at the base of upland slopes or terrace escarpments, and the Illinois Bayou alluvial fan.

Other Uses of the Geomorphological Data for Cultural Resource Investigations. The data and observations of this investigation will be useful to a subsequent cultural resource survey of the project area for the items mentioned in letters d-f above. Sufficient chronometric data are not available for the location of sites of specific age or cultural component with the exception that the amount of time available for site occupation increases with terrace elevation in the tributary valleys. The potential for site destruction is greatest in the Arkansas River floodplain where rapid lateral migration of the river has undoubtedly destroyed many archeological sites. Classification and delineation of geomorphic features on Figures 11 - 27 provides a basis for the establishment of site-geomorphic feature associations which will be valuable in the development of a cultural resource survey strategy. While the amount of data available for paleoenvironmental reconstruction of the study area was minimal due to the constraints of the investigation, the landscape/landform associations illustrated on the geomorphic maps present a foundation for the development of detailed paleoenvironmental data at a future time. [Editor's note: This marks the end of Smith 1986.]

Cultural Characteristics of the Landscape

In considering the distribution of sites and cultural components across the landscape we have used a data base of 233 sites (274 components) for which we could be reasonably certain about the nature of the landform on which they were located. The distribution of individual sites across these various landforms is given in serial form in Table 3 so that readers may easily determine the landform location of any particular site. These data are summarized in Table 5.

In interpreting these data we need to keep in mind that often artifacts were found scattered over two distinct landforms. Since field investigations were generally not sufficiently intense to determine if such a scattering was part of the original deposition or was due to later disturbance we have listed both landforms, e. g. 3JO011, Tributary Terrace/Undifferentiated Tributary Floodplain means that artifacts from this site occur on both landforms. No judgment is made as to whether the site was originally on the Terrace and later washed down into the Floodplain or if both areas were used prehistorically.

As we attempt to interpret the various levels of meaning the patterns of site distribution have, it is important to consider rigorously the rather simplistic observation that people live on surfaces. Archeological sites

are established on surfaces and will undergo modifications as those surfaces are modified. For the study area we have noted at least two different types of destructive processes. Stable surfaces, such as those on the uplands and the Arkansas River terraces, undergo destruction through erosion and deflation. Within the floodplains the surfaces may be completely destroyed through the destruction of entire landforms as the river (or tributary) reworks the valley in response to a number of factors. In this latter process surfaces (and landforms) are not only washed away, occasionally they are buried by vertical accretion. It is possible to view burial as a positive force acting to preserve archeological sites. For this reason we have begun our discussion in this section by grouping the various landscapes (with their sites) into three categories: uplands (including the Arkansas River terraces), tributary valleys, and the Holocene Arkansas River floodplain, in order to talk about the various forces at work modifying the archeological record of the study area.

Table 5. Overall Distribution of Sites

Landforms	Number of Sites
Unknown	57
Arkansas River Lateral Bar	1
Arkansas River Lateral Bar/Natural Levee	4
Arkansas River Lateral Bar/Natural Levee/Upland Slope	1
Arkansas River Lateral Bar/Arkansas River Terrace	2
Arkansas River Point Bar	7
Arkansas River Point Bar/Natural Levee	16
Arkansas River Terrace	11
Arkansas River Terrace/Tributary Terrace	1
Arkansas River Undifferentiated Floodplain/Natural Levee	4
Tributary Alluvial Fan	12
Tributary Terrace	28
Tributary Terrace/Undifferentiated Tributary Floodplain	3
Tributary Terrace/Upland Slope	3
Undifferentiated Tributary Floodplain	40
Undifferentiated Tributary Floodplain/Natural Levee	10
Undifferentiated Tributary Floodplain/Upland Slope (?)	1
Undifferentiated Tributary Floodplain (?)	2
Upland	13
Upland(?)	3
Upland Slope	60

The Uplands. Slightly over 30% of the sites in this data set (N=88) are located either wholly or partially on uplands (N=76) and the Arkansas River terraces (N=12). Characteristically these sites consist of small scatters of chronologically undiagnostic lithic waste (67 components). Only 5 sites yielded materials which indicated that they were occupied in more than 1 prehistoric cultural period (3JO059, 3LO002, 3LO004, 3LO005, 3LO011). However, artifacts belonging to all of the cultural periods recognized for the study area are found in both the uplands and the Arkansas River terraces. While many of the sites on the Arkansas river terraces have yielded ceramics (4 out of 14 sites [3LO005, 3LO011, 3LO033, 3YE003]), only 4 out of 76 sites in the uplands proper report ceramics (3LO001, 3LO002, 3LO004, 3JO059).

Tributary Valleys. As indicated above, the history of the working of the landforming processes active in the tributary valleys is rather complex and is likely to have been influenced significantly by local conditions. This makes it rather difficult to generalize about these as a unit. However, we do not as yet know enough about the situations prevailing in each separate instance to talk about them individually.

We can be certain that some site destruction through lateral migration has taken place within the modern floodplains of at least some of these tributaries. It was, therefore, somewhat surprising to find a total of 109 sites so situated. It is possible that closer inspection will place these sites onto presently undetected tributary terraces. At least 11 of these sites situated on the areas mapped as Undifferentiated Tributary Floodplain contained Archaic period artifacts. Perhaps it is significant that no Archaic period sites are located on recognized point bars of the tributary floodplains.

The surfaces of the older landforms in the tributary valleys, terraces (N=28) and fans (N=12), also had sites on them. Both of these landforms may be expected to contain buried sites (3PP262). This was documented for the alluvial fan formed by Illinois Bayou.

Arkansas River Floodplain. As detailed above, the Holocene floodplain of the Arkansas River has, in general, not been conducive to the preservation of archeological sites. While a total of 25 sites were found on the natural levees covering older lateral (N=5) and point (N=16) bars and in the undifferentiated (N=4) portions of the floodplain, these clearly cluster in a special type of locality. They are found at the confluence of the Arkansas River with major tributaries; in particular, those places where Frog Bayou, Mulberry River, White Oak Creek, and Illinois Bayou flow into the Arkansas River. It is quite possible that these older landforms have been protected by the deposition of sediment from the tributaries sufficient to counteract the eroding force of the Arkansas River. Sites in these localities yield Archaic as well as Fourche Maline and Caddoan Period artifacts. It is not known to what extent these localities may contain buried sites.

Landforms and Settlement

In our manipulation of the data collected during this effort it has been possible to attempt a correlation between a site's cultural affiliation and the landform(s) upon which it was located. These data are presented in Table 6 which summarizes the site occurrences by culture-historical period onto the larger divisions of the landscape and Table 7 which gives a more detailed listing of individual sites for those cases where both the landform and cultural affiliation are known.

As these data are not complete, contain numerous gaps, and, perhaps, some errors of assignment (both cultural affiliation and landform), we have not attempted to manipulate these data any further than the creation of these tables. It is anticipated that these tables will form the base upon which future study of the distribution of sites in the region may have changed (or remained constant) through time.

Table 6. Summary of Site/Landform Relationships

Landform	Cultural Affiliation					Sites	Components
	Unknown	Archaic	W'land	Miss	Hist		
Alb	2	1	4	1	0	6	8
Apb	8	5	8	9	3	23	33
Au	1	3	1	1	1	4	7
Tf	7	3	4	2	0	12	16
Tp	7	0	3	3	0	10	13
Tu	29	11	9	7	7	52	64
Tt	22	3	5	3	2	31	35
At	8	3	3	3	0	14	17
Us	59	11	4	4	16	78	94
Totals	143	40	41	33	29	233	274

Table 7. Site/Land Correlations through Time

Landform	Archaic	A/W	Woodland	Mississippian	Historic
Arkansas River Lateral Bar/Natural Levee		3FR005		3FR005	
			3FR023		
			3FR040		
Arkansas River Lateral Bar/Natural Levee/ Upland Slope			3FR015		
Arkansas River Lateral Bar/Arkansas River Terrace	3JO058			3YE003	
Arkansas River Point Bar			3CW031	3CW031	3FR150*
				3PP934	
Arkansas River Point Bar/ Natural Levee	3CW026				3CW643
	3CW032			3CW032	
	3CW054				
		3CW058		3CW058	
		3CW061			
			3CW077		
				3FR029	
				3FR030	
			3PP067	3PP067	
			3PP068	3PP068	
			3PP069	3PP069	3PP069
			3PP070		
Arkansas River Terrace	3JO101		3LO005	3LO005	
		3LO011*		3LO011*	
			3LO033		
Arkansas River Undifferentiated Floodplain/ Natural Levee		3CW013			3CW645*
	3CW014				
	3CW059			3CW059	
Tributary Alluvial Fan		3CW063			
			3FR001	3FR001	
		3FR002			
	3FR021				
			3PP262*	3PP262*	

Table 7. Site/Land Correlations through Time
(continued)

Landform	Archaic	A/W	Woodland	Mississippian	Historic
Tributary Point Bar			3PP07	3PP07	
			3PP08	3PP08	
			3PP018	3PP018	
Tributary Terrace			3JO002		3LO032
			3JO005	3JO005	
		3JO033		3JO033	
			3JO048*		
	3JO232*				
				3JO240*	
				3YE006	
Tributary Terrace/Undifferentiated Tributary Floodplain		3LO006		3LO006	
					3FR156*
Tributary Terrace/ Upland Slope	3JO034*				3JO139
		3LO004		3LO004	
Undifferentiated Tributary Floodplain		3CW021			3CW644*
			3CW022		3JO040
	3FR019				3LO132*
	3FR020				
			3JO006	3JO006	
			3JO008	3JO008	
			3LO009	3LO009	
	3LO034				
	3LO134*				
			3PP015	3PP015	
	3SB008				
				3YE004	
Undifferentiated Tributary Floodplain/ Natural Levee	3FR003*				3FR142*
	3FR004		3FR004		
	3FR018				
			3FR024		
		3LO012*			
				3PP020	3PP020
					3PP022
Upland	3CW064*				3FR135*
					3SB096*

Table 7. Site/Land Correlations through Time
(continued)

Landform	Archaic	A/W	Woodland	Mississippian	Historic
Upland (?)	3CW055				
	3CW056*				
	3CW057				
Upland Slope	3FR016				3CW642*
	3FR039				3FR138*
	3JO012				
			3JO059	3JO059	
					3JO102
					3JO120
					3JO126
					3JO140
	3JO234*				
		3LO002		3LO002	
					3LO105
					3LO131*
			3PP001		
					3PP058
					3PP060*
				3PP249*	
					3PP251*
					3PP257*
					3YE294*

RECOMMENDATIONS: THE MANAGEMENT CONTEXT

The following discussion regarding management directions are offered in a somewhat summarized and outline form. However, even though they are presented as separate activities it should be emphasized that they are parts of an integrated effort and that these various steps are highly interdependent.

Records Management

In working with the cultural resource files of the Little Rock District and the Arkansas Archeological Survey many discrepancies were discovered. The following is a summary of three of these problems:

(1) Site location - some sites listed by the Little Rock District were not plotted by the Arkansas Archeological Survey; some sites plotted by the Arkansas Archeological Survey did not turn up in the Little Rock District files; some sites were listed in the wrong facility; and the verbal locations and map locations did not always agree, to mention just a few problems.

(2) Site status - many of the sites listed by the Little Rock District as being owned by the Corps of Engineers are on lands outside the marked facility boundaries. Further, there is no distinction between fee-owned land and easement lands in the site records.

(3) Site description - in many cases the information about the cultural affiliation or other physical aspects of the site does not match with information in reports of work at the site. Some of this has to do with our at present better ability to place particular artifacts into cultural periods but much of this is related simply to incomplete reporting.

Clearly, much work needs to be done to bring the records up to a satisfactory level. Some of this has been done during this project and is reflected in our present data base but this task is by no means completed.

Collection Analysis

While there has been precious little in the way of systematic investigation at the sites within the project area there has been even less done in the way of extracting information from collections available for study. Materials recovered from the original survey and testing programs should be reexamined. There is no doubt that only a very small fraction of their interpretive value has been touched. This should be undertaken before any other extensive data recovery programs are initiated. It may be possible to answer questions about particular periods or aspects of the past use of the

region from materials already in hand. At the very least the study of these materials can sharpen our ability to frame appropriate questions for future research.

Site Location Activities

At the present all the fee-owned lands in Ozark Lake have been examined for surface manifestations of archeological sites and a large portion of Lake Dardanelle has also been examined. However, it is important that other such activities, guided by the geomorphological data presently in hand and gathered in the future, be undertaken. For Lake Dardanelle, it is recommended that such activities concentrate on the various tributary valleys and include additional geomorphological analyses. For Ozark Lake, we strongly recommend an examination of lands over which the Little Rock District presently holds easements. There is no question that a number of Archaic period sites, as yet unrecorded, exist in the easement lands between Frog Bayou and Mulberry River. A program designed to investigate the Archaic period settlement of the Arkansas River floodplain in that area would be most successful.

Site Evaluation

While this present survey visited and described a number of archeological sites in the project area there are several others, particularly in Lake Dardanelle, which have not been examined. These should be revisited as soon as possible.

In assessing site significance it is appropriate to reference the criteria suggested for use in considering the eligibility of a site or sites for inclusion in the National Register of Historic Places. These criteria are given in 36CFR60.6, the pertinent portion of which states, "The quality of significance in American history, achitecture, archeology, and culture is present in districts, sites, buildings, structures, and objects of State and local importance that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and ... (d) that have yielded or may be likely to yield, information important in prehistory or history."

While the evaulation of individual sites may involve numerous considerations there is no doubt that the most basic consideration involves the site's integrity (Davis 1982: B-12). In the case of archeological sites, integrity consists of intact deposits. While not all sites which still retain intact deposits are automatically eligible for nomination to the National Register of Historic Places, sites at which intact deposits are absent must exhibit a very special set of qualitites to be so considered.

Thus we offer as the beginning of the assessment process for the sites visited during this effort a judgement regarding the presence or absence of intact deposits at those sites. We placed each site into one of five

categories according to our assessment of the presence (or absence) of intact deposits at the site. These categories are (1) unable to estimate (unknown), (2) absent (not present), (3) unlikely, (4), and (5) present. Table 8 presents the results of this classification.

The second important consideration in forming an assessment of a site's significance is its ability to "yield information important in prehistory or history." To make a determination in this area it is important that such consideration be made using a carefully constructed research design for the region which identifies those areas in which contribution are especially needed. While Davis (1982) offers such a context for other parts of the state, there is, at the present, no comparable statement of the research needs and goals of this portion of the Arkansas River Valley. We recommend that a high priority be given to the construction of such a research design. Perhaps this could be done in the context of developing historic preservation programs for Lake Dardanelle and Ozark Lake. It is hoped that this study will constitute a substantial step in this direction.

Without such a study to serve as a guide recommendations for site evaluation must remain at the general level and we have formulated them using the following principles:

For sites at which the status of intact deposits is unknown (which includes a number of previously recorded sites not visited during this effort), investigations should be conducted to determine this status, unless other characteristics of the site lead us to believe that such an activity would be unproductive. Sites listed under this classification in Table 8 for which we do not recommend such work are sites 3CW643, 3CW644, 3CW647, 3FR134, 3FR135, 3JO227, 3JO228, 3LO126, 3LO131, 3PP249, 3PP250, 3PP251, 3PP253, 3PP254, and 3SB096. In our judgment, the disturbed conditions of these sites and the paucity of recovered materials make investigations at these sites appear unproductive. Only site 3FR157 should be so examined.

Sites at which it has been determined that no intact deposits exist should need no further evaluation unless there is a special reason to do so. We do not believe that any of the sites so listed in Table 8 possess such qualities.

All sites for which intact deposits are present should be formally evaluated unless there is an overwhelming reason to omit this. In regard to the very small amount of such work in the study area we recommend that all such sites listed in Table 8 be so tested. These include 3FR148, 3FR149, 3FR151, 3JO232, 3LO012, and 3PP255.

Sites at which intact deposits are judged likely to be present should be examined further to determine the exact extent of these deposits and the materials they contain. These include 3PP258, 3PP259, 3PP260, and 3PP262.

Table 8. Assessment of Intact Deposits for Newly Recorded Sites

Intact Deposits	Site	Type	Quad
Unable to estimate	3CW643	Surface scatter	Alma
	3CW644	Surface scatter	Alma
	3CW647	Surface scatter	Mulberry
	3FR134	Surface scatter	Mulberry
	3FR135	Foundation	Mulberry
	3FR157	Surface scatter	Mulberry
	3JO227	Surface scatter	Clarksville
	3JO228	Unspecified	Clarksville
	3LO126	Subsurface deposits	Delaware
	3LO131	Surface scatter	Delaware
	3PP249	Unspecified	Russellville west
	3PP250	Subsurface deposits	Russellville west
	3PP251	Subsurface deposits	Russellville west
	3PP253	Subsurface deposits	Russellville west
	3PP254	Subsurface deposits	Russellville west
	3SB096	Structure	Lavaca
None	3CW645	Surface scatter	Mulberry
	3CW648	Surface scatter	Mulberry
	3FR138	Subsurface deposits	Mulberry
	3FR140	Surface scatter	Mulberry
	3FR141	Surface scatter	Mulberry
	3FR142	Surface scatter	Mulberry
	3FR144	Surface scatter	Cecil
	3FR150	Surface scatter	Ozark
	3FR153	Surface scatter	Cecil
	3FR154	Surface scatter	Cecil
	3JO237	Surface scatter	Knoxville
	3PP246	Surface scatter	Russellville west
	3SB099	Surface scatter	Mulberry
Present	3FR148	Subsurface deposits	Ozark
	3FR149	Subsurface deposits	Ozark
	3FR151	Subsurface deposits	Ozark
	3JO232	Subsurface deposits	Clarksville
	3LC012	Subsurface deposits	Hartman
	3PP255	Subsurface deposits	Russellville west
Likely	3PP258	Subsurface deposits	Russellville west
	3PP259	Subsurface deposits	Russellville west
	3PP260	Subsurface deposits	Russellville west
	3PP262	Subsurface deposits	Russellville west

Table 8. Assessment of Intact Deposits for Newly Recorded Sites (continued)

Intact Deposits	Site	Type	Quad
Unlikely	3CW642	Subsurface deposits	Alma
	3CW646	Surface scatter	Mulberry
	3FR136	Surface scatter	Mulberry
	3FR137	Surface scatter	Mulberry
	3FR143	Surface scatter	Cecil
	3FR145	Surface scatter	Cecil
	3FR146	Subsurface deposits	Cecil
	3FR147	Surface scatter	Ozark
	3FR155	Subsurface deposits	Cecil
	3FR156	Surface scatter	Cecil
	3JO034	Surface scatter	Clarksville
	3JO048	Subsurface deposits	Clarksville
	3JO229	Surface scatter	Clarksville
	3JO230	Surface scatter	Clarksville
	3JO231	Surface scatter	Clarksville
	3JO233	Surface scatter	Clarksville
	3JO234	Surface scatter	Knoxville
	3JO235	Surface scatter	Knoxville
	3JO236	Surface scatter	Knoxville
	3JO238	Subsurface deposits	Knoxville
	3JO239	Surface scatter	Hartman
	3JO240	Surface scatter	Hartman
	3JO241	Surface scatter	Hartman
	3LO011	Subsurface deposits	Hartman
	3LO127	Surface scatter	Delaware
	3LO128	Surface scatter	Delaware
	3LO129	Surface scatter	Delaware
	3LO130	Subsurface deposits	Delaware
	3LO132	Surface scatter	New Blaine
	3LO133	Surface scatter	New Blaine
	3LO134	Surface scatter	New Blaine
	3LO135	Surface scatter	New Blaine
	3LO136	Surface scatter	New Blaine
	3LO137	Surface scatter	Hartman
	3LO138	Surface scatter	Hartman
	3LO139	Surface scatter	Hartman
	3LO140	Surface scatter	Caulksville
	3PP057	Surface scatter	Russellville west
	3PP060	Surface scatter	Russellville west
	3PP247	Subsurface deposits	Russellville west
	3PP248	Surface scatter	Russellville west
	3PP252	Surface scatter	Russellville west

Table 8. Assessment of Intact Deposits for Newly Recorded Sites (continued)

Intact Deposits	Site	Type	Quad
Unlikely (cont'd)	3PP256	Unspecified	Russellville west
	3PP257	Surface scatter	Russellville west
	3PP261	Surface scatter	Russellville west
	3PP263	Surface scatter	Russellville west
	3PP264	Surface scatter	Russellville west
	3SB097	Surface scatter	Lavaca
	3SB098	Surface scatter	Lavaca
	3YE290	Surface scatter	Delaware
	3YE291	Surface scatter	Delaware
	3YE292	Surface scatter	Delaware
	3YE293	Surface scatter	Delaware
	3YE294	Surface scatter	Delaware

Sites at which intact deposits are judged unlikely to be present should need no further evaluation except in special cases. No exceptions to this are noted in the sites so listed in Table 8.

Summary Description of Sites Recommended for Evaluation

The following is a brief summary description of those sites visited during this effort which we believe should be formally evaluated for nomination to the National Register of Historic Places. Detailed information about these sites is available in Appendix II of this volume and in the Arkansas Archeological Survey Site Forms on file with the Little Rock District and the Arkansas Archeological Survey:

3FR148 - The site is a large, linear site (200 x 50m) with deposits at least 50cm below surface. Ten of the 26 shovel tests placed in the site area were positive. The site is on a point bar of the Arkansas River. Cultural affiliation is listed as unknown. Recovered materials included modified flakes, ground stone fragments, fire-cracked rocks, and 1 piece of pottery suggesting either a Woodland or Mississippian occupation.

3FR149 - The site is a large, linear site (160 x 65m) with deposits at least 50cm deep. Nine out of 21 shovel tests were positive. The site is on a point bar of the Arkansas River. Cultural affiliation is presently unknown. Recovered materials include modified flakes, ground stone fragments, and a Bonham point.

3FR151 - The site is a rather small site (50 x 40m) with deposits at least 50cm deep. Three of 9 shovel tests were positive. The site is on a point bar of the Arkansas River. Cultural affiliation is presently unknown. Recovered materials include modified flakes.

3FR157 - This is an extensive site (300 x 75m) with subsurface deposits to about 30cm deep. The site is situated on an Arkansas River lateral bar but it is expected that this has simply covered a much older landform. Cultural affilation is listed as unknown. Recovered materials include modified flakes, biface fragments, ground stone fragments, and point fragments.

3JO232 - This is a large site (170 x 70m) with subsurface deposits to 50cm deep. Initial investigations suggest different areas of material concentration. Fourteen of the 29 shovel tests placed in the site area were positive. The site is on a tributary terrace. Cultural affilation is presumed to be Archaic. Materials recovered included chert flakes, biface fragments, and ground stone fragments.

3LO012 - This is a previously reported site greater than 10,000 sq. m. Cultural deposits extend to a depth of 1m. The site is located on a natural levee. Cultural affiliation includes Archaic, Woodland, and Mississippian use. Materials recovered by this effort included modified flakes, ground stone fragments, shell-tempered ceramics, and a few items of historic trash.

3PP255 - This is a rather small site (40 x 60m) which has a considerable amount of material and subsurface deposits. In the initial investigation a total of 29 shovel tests were placed within the site and 14 were positive. It is situated on a terrace of Illinois Bayou. Cultural affiliation is presently undetermined. Materials collected include modified chert flakes as well as ground and pecked quartzite and siltstone.

3PP258 - This is a rather small site (35 x 50m) with materials recovered to approximately 50cm. Of the 12 shovel tests placed in the site, 7 were positive. The site is on an alluvial fan of Illinois Bayou. Cultural affiliation is presently unknown. Recovered materials included modified flakes and a variety of ground and pecked siltstone.

3PP259 - This is a rather small site (25 x 60m) site with materials recovered to approximately 30cm deep. Half of the 8 shovel tests placed within the site area recovered materials. This site is on an alluvial fan of Illinois Bayou. Cultural affilation is presently unknown. Recovered materials included flakes and ground stone fragments.

3PP260 - This is a rather small site (50 x 70m) with subsurface deposits to over 25cm. Seven out of 13 shovel tests placed in the site yielded artifacts. The site is on an alluvial fan of Illinois Bayou. Cultural affiliation is presently unknown. Recovered materials included modified flakes and ground stone fragments

3PP262 - This is a rather small site (50 x 70m) with subsurface deposits to 50cm. Seven of the 18 shovel tests placed in the site area contained artifacts. The site is on an alluvial fan of Illinois Bayou. Cultural affiliation is thought to be Woodland and Mississippian. Recovered materials include modified flakes as well as shell and clay-tempered ceramics.

Project Impacts and Data Recovery

Partially because so much of the archeological record in this portion of the Arkansas River Valley was lost with the construction of the navigation facility it is important to develop a program of data recovery for the project area. It is our judgment that such a program should include such activities as listed above but should not be restricted to site location and evaluation efforts.

Future cultural resource surveys will call for the construction of a set of long range research goals with accompanying design so that the data potential of the sites can be used fully. Further, we would urge that such a program be undertaken without delay. Every site examined during this survey had been impacted to some degree by activities related to facility construction or use. Site destruction from both natural and human causes will continue. We regard as particularly vulnerable those known which

exist in the Arkansas River floodplain. The experience of the Tulsa District is enlightening in this regard. In 1985 the Tulsa District commissioned a study of a number of sites reported in 1977 (Miller 1977) which had been recommended for further investigation. Several of these have now been entirely destroyed. Further delay can be expected to lessen considerably the already depleted cultural resource base in this portion of the Arkansas River Valley.

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APPENDIX I

LAKE DARDANELLE SURVEY UNITS

SURVEY UNIT: 1

QUAD SHEET: Russellville West

TERRAIN: Upland slopes

VEGETATION: mixed hardwoods and pines; understory consists of short grasses and vines

SOIL DESCRIPTION(S): Profile 1: 0 - 4cm, tan sandy loam; 5 - 70cm, reddish brown sandy clay. Profile 2: 0 - 7cm, humus; 8 - 16cm, brown sandy loam; 17 - 56cm, reddish brown sandy clay

SITES RECORDED: 1-1 (3PP246), 1-2 (3PP247), 1-3 (3PP60)

ISOLATED FINDS: 0

GROUND VISIBILITY: ranges from poor outside developed park to good inside park area

SPECIAL HINDERANCES TO SITE LOCATION: short grass ground cover and park development

SPECIAL OBSERVATIONS: activity and development at park has caused erosion of top soil and caused large areas of exposed ground. Profiles were taken from ditches and newly dug drain lines

SURVEY STRATEGY: parallel transects at 25m intervals with shovel tests at 25m intervals; no shovel testing was done within the developed area

SURVEYOR(S): Lee, Northcutt, Kooren, Mehalchick DATE: 8/6/85
8/7/85

SURVEY UNIT: 2

QUAD SHEET: Russellville West

TERRAIN: Upland slope. Both sites in Ouita State Park on gently rolling low knolls.

VEGETATION: park area Ouita has many persimmon trees, cedar, and oak trees; low cut native grasses.

SOIL DESCRIPTION(S): 0 - 3cm, brown sandy loam; 4 cm-, reddish brown sandy clay loam.

SITES RECORDED: 3PP1 and 3PP57 (relocated) both in park area

ISOLATED FINDS: 0

GROUND VISIBILITY: averages 50% in Ouita State Park, surface covered in scattered leaves and grasses

SPECIAL HINDERANCES TO SITE LOCATION: disturbances in construction in state park, no shovel testing allowed

SPECIAL OBSERVATIONS: thin scatter of flakes in park area on both sites.

SURVEY STRATEGY: walking parallel transects 25 meters apart

SURVEYOR(S): Lee, Northcutt, Kooren, Mehalchick DATE: 8-7-85

SURVEY UNIT: 3

QUAD SHEET: Russellville West

TERRAIN: survey unit covered eroded upland slopes, terrace forms of Illinois Bayou. Also surveyed tributary undifferentiated floodplains

VEGETATION: mixed hardwoods and pines on slopes and uplands with heavy understory in smaller drainages

SOIL DESCRIPTION(S): sandy loams, sandy clay loams, and silt loams in floodplains

SITES RECORDED: 3-1 (3PP248), 3-2 (3PP249), 3-3 (3PP250), 3-4 (3PP251), 3-5 (3PP252), 3-6 (3PP253), 3-7 (3PP254), 3-8 (3PP255)

ISOLATED FINDS: 0

GROUND VISIBILITY: poor

SPECIAL HINDERANCES TO SITE LOCATION: short grass ground cover and heavy vegetation

SPECIAL OBSERVATIONS: none

SURVEY STRATEGY: parallel transects with 25 meters between surveyors and a shovel test interval of 25 meters

SURVEYOR(S): Lee, Northcutt, Kooren, Mehalchick DATE: 8-7-85
8-8-85
8-9-85

SURVEY UNIT: 4

QUAD SHEET: Russellville West

TERRAIN: landforms include upland slopes, tributary alluvial fans, undifferentiated tributary floodplain

VEGETATION: upperstory consists of oak, pine, cedar, elm, hickory, etc. Understory consists of short grass, vines, high grasses

SOIL DESCRIPTION(S): fine sandy loams, sandy clays, some silts in isolated areas

SITES RECORDED: 4-1 (3PP256), 4-2 (3PP257), 4-3 (3PP258), 4-4 (3PP259), 4-5 (3PP260), 4-6 (3PP261), 4-7 (3PP262)

ISOLATED FINDS: 0

GROUND VISIBILITY: poor

SPECIAL HINDERANCES TO SITE LOCATION: vegetation, city expansion, strip mining talus mounds

SPECIAL OBSERVATIONS: none

SURVEY STRATEGY: parallel transects with 25 meters between crew members, shovel test interval of 25 meters

SURVEYOR(S): Lee, Northcutt, Kooren, Mehalchick DATE: 8-10-85

SURVEY UNIT: 5

QUAD SHEET: Delaware and Dardanelle

TERRAIN: Developed upland slope within Delaware State Park

VEGETATION: Pine and mixed hardwoods, understory light and consists of short grasses

SOIL DESCRIPTION(S): 0-4cm, tan sandy loam; 4cm - , reddish yellow sandy clay

SITES RECORDED: 5-1 (3YE290), 5-2 (3YE291), 5-3 (3YE292), 5-4 (3YE293), 5-5 (3YE294), and 5-6 ( )

ISOLATED FINDS: 0

GROUND VISIBILITY: fair, 0 - 50%

SPECIAL HINDERANCES TO SITE LOCATION: park equipment

SPECIAL OBSERVATIONS: All of sites in survey unit have been heavily impacted by park development and also by resultant slope erosion. Sites have been deflated and are now surface lithic scatters.

SURVEY STRATEGY: parallel transects with 25 meters between surveyors. No shovel tests were completed in this park.

SURVEYOR(S): Northcutt and Kooren DATE: 8-13-85

SURVEY UNIT: 6

QUAD SHEET: Russellville West

TERRAIN: upland slope which has been developed for Old Post Road and Dam site west of parks

VEGETATION: remnant oaks, cedar, and pine; most of park covered by grass.

SOIL DESCRIPTION(S): 0-3cm, humus; 3-8cm, tan sandy loam; 9cm - , yellowish red sandy clay

SITES RECORDED: 6-1 (3PP263), 6-2 (3PP264)

ISOLATED FINDS: 0

GROUND VISIBILITY: poor

SPECIAL HINDERANCES TO SITE LOCATION: park development

SPECIAL OBSERVATIONS: Sites are located in area that had been "landscaped" which has severely impacted archeological contents.

SURVEY STRATEGY: parallel transects with 25 meters between surveyors. No shovel testing conducted within park confines.

SURVEYOR(S): Northcutt, Kooren, Mehalchick DATE: 8-14-85

SURVEY UNIT: 7

QUAD SHEET: Delaware

TERRAIN: upland slopes and tributary terraces

VEGETATION: planted pines, fallow pastureland, vegetated areas had oak, sweetgum, cedar, persimmon with dense understory near drainage

SOIL DESCRIPTION(S): In upland slope: 0-4cm, light brown sandy loam; 5-19cm, tan sandy loam with sandstone; 20-45cm, yellowish red sandy clay with sandstone. In floodplain: 0-6cm, white grey silt; 7-35cm, grey silt with FeMn concretions.

SITES RECORDED: 7-1 (3LO126), 7-2 (3LO127), 7-3 (3LO128), 7-4 (3LO129), 7-5 (3LO130), 7-6 (3LO131)

ISOLATED FINDS: 0

GROUND VISIBILITY: poor overall, grass ground cover varied by landowner, visibility better on eroded slope edges and bankline area

SPECIAL HINDERANCES TO SITE LOCATION: grasses on pasture and heavy understory vegetation in intermittent drainage - this consists of heavy briars, bloodweed, poison ivy, and grasses

SPECIAL OBSERVATIONS: area changed from 1962 to present, 1984 areals show new road orientation and new impact by building

SURVEY STRATEGY: parallel transects with 25 meter intervals between crew members, orientation was north-south, shovel test intervals of 25 meters

SURVEYOR(S): Lee, Northcutt, Kooren, Mehalchick DATE: 8-19-85

SURVEY UNIT: 8

QUAD SHEET: New Blaine

TERRAIN: unit covered both undifferentiated floodplain and eroded terrace of Shoal Creek

VEGETATION: Floodplain is in cultivation (soybeans). Terrace is wooded (pines/hardwoods) with light understory.

SOIL DESCRIPTION(S): In floodplain: 0-12cm, brown fine sandy loam; 13-24cm, light brown fine sandy loam; 25-40cm, yellow orange compacted sandy loam. In terrace: 0-7cm, grey silt; 8-25cm, white with yellow silt with rock.

SITES RECORDED: 8-1 (3LO132), 8-2 (3LO133), 8-3 (3LO134), 8-4 (3LO135), 8-5 (3LO136)

ISOLATED FINDS: 0

GROUND VISIBILITY: poor

SPECIAL HINDERANCES TO SITE LOCATION:

SPECIAL OBSERVATIONS: Sites in floodplain have been deflated to surface scatters. Terrace has also been impacted by sheet erosion.

SURVEY STRATEGY: parallel transects with 25 meters between surveyors. Shovel test interval of 25 meters.

SURVEYOR(S): Lee, Northcutt, Kooren, Mehalchick DATE: 8-20-85

SURVEY UNIT: 9

QUAD SHEET: Hartman

TERRAIN: unit covered undifferentiated floodplain of Cane Creek and old terrace of the Arkansas River

VEGETATION: soybeans and milo, fallow pasture, and cutover forest. Woods consist of pine and mixed hardwoods

SOIL DESCRIPTION(S): In floodplain: 0-9cm, brown sandy loam; 10-45cm, dark grey clay. In terrace: 0-6cm, plowzone; 7-30cm, white grey compact silt (some sandy loam) with rock. Site 9-3: 0-5cm, light brown sandy loam; 6-28cm, brown sandy loam; 29-50cm, dark grey brown sandy clay.

SITES RECORDED: 9-1 (3LO137), 9-2 (3LO12), 9-3 (3LO12), 9-4 (3LO138), 9-5 (3LO11)

ISOLATED FINDS: 0

GROUND VISIBILITY: poor

SPECIAL HINDERANCES TO SITE LOCATION:

SPECIAL OBSERVATIONS: All sites except 9-2 and 9-3, have been impacted by cultivation and subsequently deflated to surface. Impacts are less severe on 9-2 and 9-3 although 9-3 is being impacted by shoreline erosion.

SURVEY STRATEGY: parallel transects with 25 meters between surveyors. Shovel test interval of 25 meters.

SURVEYOR(S): Lee, Northcutt, Kooren, Mehalchick DATE: 8-21-85
8-22-85

SURVEY UNIT: 10

QUAD SHEET: Hartman

TERRAIN: developed upland slope within Cane Creek Park

VEGETATION: pine and mixed hardwoods with grass understory

SOIL DESCRIPTION(S): sandy loam underlain by sandy clay

SITES RECORDED: 10-1 (3LO139)

ISOLATED FINDS: 0

GROUND VISIBILITY: poor

SPECIAL HINDERANCES TO SITE LOCATION: park equipment

SPECIAL OBSERVATIONS:

SURVEY STRATEGY: parallel transects with 25 meters between surveyors. No shovel tests were conducted within park confines.

SURVEYOR(S): Lee, Northcutt, Kooren, Mehalchick DATE: 8-22-85

SURVEY UNIT: 11

QUAD SHEET: Clarksville

TERRAIN: undifferentiated floodplain of Spadra Creek

VEGETATION: fallow pastures, mixed pine and hardwood upperstory with light to heavy understory

SOIL DESCRIPTION(S): sandy loams and sandy clays

SITES RECORDED: none

ISOLATED FINDS: 0

GROUND VISIBILITY: poor

SPECIAL HINDERANCES TO SITE LOCATION: housing developments, wildlife refuge, and Interstate 40

SPECIAL OBSERVATIONS: Area has been heavily impacted since 1962. Municipal and private developments have encroached on floodplain.

SURVEY STRATEGY: parallel transects with 25 meters between surveyors. Shovel test interval of 25 meters.

SURVEYOR(S): Lee, Northcutt, Kooren, Mehalchick DATE:

SURVEY UNIT: 12

QUAD SHEET: Clarksville

TERRAIN: tributary terrace

VEGETATION: oak trees

SOIL DESCRIPTION(S): sandy/silty loam

SITES RECORDED: 12-1 (3JO227), 12-2 (3JO228), 12-3 (3JO229), 12-4 (3JO230), 12-5 (3JO231)

ISOLATED FINDS: 0

GROUND VISIBILITY: 40%

SPECIAL HINDERANCES TO SITE LOCATION: Spadra State Park, heavy leaf coverage

SPECIAL OBSERVATIONS: none

SURVEY STRATEGY: parallel transects, 25 meter interval, no testing

SURVEYOR(S): Kooren and Mehalchick DATE: 8-85

SURVEY UNIT: 13

QUAD SHEET: Clarksville

TERRAIN: consists of terraces and upland slopes of Cabin Creek drainage system. Terrace is both flat and relatively rolling, undulating, topography. Upland slopes range from undulating to steep

VEGETATION: major portion of terrace is cleared and now improved pasture. Cedars, pine, oaks, etc. remain near drainage and bankline

SOIL DESCRIPTION(S): sandy loams, silts loams, sandy clays

SITES RECORDED: 13-1 (3JO48), 13-2 (3JO232), 13-3 (3JO233)

ISOLATED FINDS: 0

GROUND VISIBILITY: 1%, only clear areas are near intermittent drainages and erosional banklines. Lot of pastureland on terrrace, wooded along drainages

SPECIAL HINDERANCES TO SITE LOCATION: pastureland grasses and heavily wooded tracts with heavy, viney understories

SPECIAL OBSERVATIONS: none

SURVEY STRATEGY: used parallel transects with 25 meters between surveyors, used shovel test interval of 25 meters between tests

SURVEYOR(S): Lee, Northcutt, Kooren, Mehalchick DATE: 8-25-85

SURVEY UNIT: 14

QUAD SHEET: Knoxville

TERRAIN: Survey unit covered eroded upland slopes, tributary floodplain and tributary terrace areas. Slopes are gentle and rolling. Present floodplain is restricted and relatively flat. Also surveyed Bee and Piney Bluffs.

VEGETATION: Mixed hardwoods and pine on upland slope and improved pastureland on floodplain and part of terrace.

SOIL DESCRIPTION(S): On terrace: 0-23cm, tan sandy loam with gravel; 24-70cm, yellow brown silty clay; 71-94cm, banded silts and clay; 95-103cm, yellow silty clay.

SITES RECORDED: 14-1 (3JO234), 14-2 (3JO235), 14-3 (3JO236), 14-4 (3JO237), 14-5 (3JO238)

ISOLATED FINDS: 0

GROUND VISIBILITY: generally poor to non-existent except in Big Piney Bay recreational area.

SPECIAL HINDERANCES TO SITE LOCATION: Heavy shoreline erosion.

SPECIAL OBSERVATIONS: upland slope area of park highly eroded; terrace edges on Bay are being heavily impacted by wave erosion. Bluff areas consisted of bedded shale. Sluffing of edges evident from downslope debris.

SURVEY STRATEGY: parallel transects with 25 meter intervals between surveyors, shovel test interval of 25 meters between tests

SURVEYOR(S): Lee, Northcutt, Kooren, Mehalchick DATE: 8-25-85
8-26-85

SURVEY UNIT: 15

QUAD SHEET: Delaware

TERRAIN: Tributary floodplain and upland slopes

VEGETATION: pine and oak

SOIL DESCRIPTION(S): none

SITES RECORDED: none

ISOLATED FINDS: 0

GROUND VISIBILITY: 10-15%

SPECIAL HINDERANCES TO SITE LOCATION: very dense pine needle coverage and localized areas of overgrown grass

SPECIAL OBSERVATIONS: In addition to poor visibility, 30-40% of the park is located on areas with much bedrock. This survey unit is Flat Rock Park

SURVEY STRATEGY: Parallel transects spaced 25 meters apart

SURVEYOR(S): Kooren and Mehalchick DATE:

SURVEY UNIT: 16

QUAD SHEET: Clarksville

TERRAIN: Tributary terrace

VEGETATION: Primary oak and pine with secondary pine and cedar

SOIL DESCRIPTION(S): silty loams

SITES RECORDED: 16-1 (3JO34), 16-2 (3JO34)

ISOLATED FINDS: Preform found on eroded tree line slope approximately 70 meters east of 16-2 and 5 meters north of the road.

GROUND VISIBILITY: 40%

SPECIAL HINDERANCES TO SITE LOCATION:

SPECIAL OBSERVATIONS:

SURVEY STRATEGY: parallel transects spaced 25 meters apart

SURVEYOR(S): Kooren and Mehalchick DATE:

SURVEY UNIT: 17

QUAD SHEET: Hartman

TERRAIN: Tributary terrace

VEGETATION: pine and oak with secondary cedars

SOIL DESCRIPTION(S): sandy, silty loam

SITES RECORDED: 17-1 (3JO239)

ISOLATED FINDS: none

GROUND VISIBILITY: 30%

SPECIAL HINDERANCES TO SITE LOCATION:

SPECIAL OBSERVATIONS: none

SURVEY STRATEGY: parallel transects 25 meters apart

SURVEYOR(S): Kooren and Mehalchick DATE:

SURVEY UNIT: 18

QUAD SHEET: Hartman

TERRAIN: Unit contained terrace of Horsehead Creek

VEGETATION: under cultivation - soybeans

SOIL DESCRIPTION(S): plowzone, silt and very compacted silt

SITES RECORDED: 18-1 (3JO240), 18-2 (3JO241)

ISOLATED FINDS: 0

GROUND VISIBILITY: poor

SPECIAL HINDERANCES TO SITE LOCATION:

SPECIAL OBSERVATIONS: Cultivation has deflated both sites to lithic surface scatters

SURVEY STRATEGY: parallel transects with 25 meters between surveyors. Shovel test interval of 25 meters.

SURVEYOR(S): Lee, Northcutt, Kooren, Mehalchick DATE: 8-28-85
9-03-85

SURVEY UNIT: 19

QUAD SHEET: Hartman

TERRAIN: undifferentiated floodplain of Hogskin Creek

VEGETATION: fallow pasture

SOIL DESCRIPTION(S): 0-8cm, brown sandy loam; 9-18cm, tan silt with FeMn concretions; 20-30cm, yellow orange compacted silty clay

SITES RECORDED: none

ISOLATED FINDS: 0

GROUND VISIBILITY: poor

SPECIAL HINDERANCES TO SITE LOCATION:

SPECIAL OBSERVATIONS:

SURVEY STRATEGY: parallel transects with 25 meters between surveyors. Shovel test interval of 25 meters.

SURVEYOR(S): Lee, Northcutt, Kooren, Mehalchick DATE: 9-4-85

SURVEY UNIT: 20

QUAD SHEET: Paris

TERRAIN: undifferentiated floodplain of Six-Mile Creek

VEGETATION: soybean and milo fields, fallow ground and remnant woods

SOIL DESCRIPTION(S): silt and sandy loams

SITES RECORDED: none

ISOLATED FINDS: 0

GROUND VISIBILITY: poor

SPECIAL HINDERANCES TO SITE LOCATION:

SPECIAL OBSERVATIONS: Some of survey area has been impacted by levee construction. Borrow pits were dug on creek side of levee. Cultivation has also impacted majority of area.

SURVEY STRATEGY: parallel transects with 25 meters between crew members. Shovel test intervals of 25 meters.

SURVEYOR(S): Lee, Northcutt, Kooren, Mehalchick DATE: 9-6-85

SURVEY UNIT: 21

QUAD SHEET: Coal Hill

TERRAIN: Arkansas point bar

VEGETATION: Cultivated with some fallow ground near bankline

SOIL DESCRIPTION(S): sandy loams

SITES RECORDED: none

ISOLATED FINDS: 0

GROUND VISIBILITY: poor

SPECIAL HINDERANCES TO SITE LOCATION:

SPECIAL OBSERVATIONS:

SURVEY STRATEGY: parallel transects with 25 meters between surveyors. Shovel test interval of 25 meters.

SURVEYOR(S): Lee, Northcutt, Kooren, Mehalchick DATE: 9-8-85

SURVEY UNIT: 22

QUAD SHEET: Coal Hill

TERRAIN: Arkansas River point bar

VEGETATION: heavily wooded with dense understory in places

SOIL DESCRIPTION(S): sandy loams

SITES RECORDED: none

ISOLATED FINDS: 0

GROUND VISIBILITY: poor

SPECIAL HINDERANCES TO SITE LOCATION: erosion of cut-off point bar

SPECIAL OBSERVATIONS: Point bar has undergone erosional period due to wave washing with subsequent redeposition from high water periods.

SURVEY STRATEGY: parallel transects with 25 meters between surveyors. Shovel test interval of 25 meters.

SURVEYOR(S): Lee, Northcutt, Kooren, Mehalchick DATE: 9-8-85

SURVEY UNIT: 23

QUAD SHEET: Caulksville

TERRAIN: unit covers Arkansas River point bar, undifferentiated tributary floodplain, tributary channels. All of unit was relatively flat with small low rises interspersed.

VEGETATION: some pine and hardwoods left. Most is under cultivation for soybeans and rice.

SOIL DESCRIPTION(S): 0-8cm, tan silty loam; 9-24cm, brown silty loam; 25-35cm, compacted, dark brown clay

SITES RECORDED: 23-1 (3LO140)

ISOLATED FINDS: 0

GROUND VISIBILITY: poor

SPECIAL HINDERANCES TO SITE LOCATION:

SPECIAL OBSERVATIONS: none

SURVEY STRATEGY: parallel transects with 25 meter interval between surveyors, shovel test

SURVEYOR(S): Lee, Northcutt, Kooren, Mehalchick DATE: 9-9-85
9-10-85
9-11-85

SURVEY UNIT: 24

QUAD SHEET: Caulksville

TERRAIN: Arkansas River point bar with natural levee deposits within O'Kane Park

VEGETATION: planted pines and grass

SOIL DESCRIPTION(S): silt

SITES RECORDED: none

ISOLATED FINDS: 0

GROUND VISIBILITY: poor

SPECIAL HINDERANCES TO SITE LOCATION: park equipment

SPECIAL OBSERVATIONS: development of park area and cultivation at edges of park have severely impacted natural landscape.

SURVEY STRATEGY: parallel transects with 25 meters between surveyors. Shovel test interval of 25 meters.

SURVEYOR(S): Lee, Northcutt, Kooren, Mehalchick DATE: 9-9-85

OZARK LAKE SURVEY UNITS

SURVEY UNIT: 1

QUAD SHEET: Ozark

TERRAIN: Point bar of Arkansas River

VEGETATION: under cultivation

SOIL DESCRIPTION(S): 0 - 10cm, plowzone; 11 - 50cm, sandy silt with precipitation band at 30cm

SITES RECORDED: 1-1 (3FR148), 1-2 (3FR149), 1-3 (3FR150), 1-4 (3FR151)

ISOLATED FINDS: 0

GROUND VISIBILITY: 40%

SPECIAL HINDERANCES TO SITE LOCATION:

SPECIAL OBSERVATIONS: None

SURVEY STRATEGY: 25 meter transects with shovel test interval of 25 meters

SURVEYOR(S): S. Kooren, G. Mehalchick, L. Raymer DATE: 9/15/85

SURVEY UNIT: 2

QUAD SHEET: Cecil

TERRAIN: Terrace

VEGETATION: Hardwoods, cedars

SOIL DESCRIPTION(S): Silty loams, mottled clays

SITES RECORDED: 2-1 (3FR153), 2-2 (3FR144), 2-3 (3FR154), 2-4 (3FR155), 2-5 (3FR156)

ISOLATED FINDS: 0

GROUND VISIBILITY: 40%

SPECIAL HINDERANCES TO SITE LOCATION: road construction

SPECIAL OBSERVATIONS: None

SURVEY STRATEGY: parallel transects, 25 meters apart; shovel test interval of 25 meters

SURVEYOR(S): Kooren, Mehalchick, Northcutt, Raymer DATE: 9/16/85

SURVEY UNIT: 3

QUAD SHEET: Mulberry

TERRAIN: Floodplain, terrace

VEGETATION: bean fields

SOIL DESCRIPTION(S): silts and clays

SITES RECORDED: 3-1 (3CW645), 3-2 (3FR140), 3-3 (3FR141), 3-4 (3FR142)

ISOLATED FINDS: 0

GROUND VISIBILITY: 40 - 50%

SPECIAL HINDERANCES TO SITE LOCATION:

SPECIAL OBSERVATIONS: None

SURVEY STRATEGY: Parallel transects spaced 25 meters apart; shovel test of 25 meters

SURVEYOR(S): Kooren, Mehalchick, Raymer, Northcutt, M. Bennett DATE: 9/22/85

SURVEY UNIT: 4

QUAD SHEET: Cecil

TERRAIN: Ranges from steep or sheer bluffs to terrace remnants

VEGETATION: Upperstory consists of Pine, mixed hardwoods, cedar; understory - small trees and briars

SOIL DESCRIPTION(S): silt loams with sandy loam cap where soil is present

SITES RECORDED: 0

ISOLATED FINDS: 0

GROUND VISIBILITY: Poor due to heavy ground cover or grasses in open areas

SPECIAL HINDERANCES TO SITE LOCATION: Shoreline erosion, agriculture

SPECIAL OBSERVATIONS: None

SURVEY STRATEGY: Parallel transects with 25 meters between surveyors and shovel test interval of 25 meters

SURVEYOR(S): Lee

DATE: 9/16/85
9/17/86

SURVEY UNIT: 5

QUAD SHEET: Alma

TERRAIN: Floodplain

VEGETATION: Large hickory, heavy forest, small oaks and cedars

SOIL DESCRIPTION(S): 0 - 3cm, humus layer; 4 - 8cm, tan silt; 9 - 20cm, mottled silt with manganese concretions

SITES RECORDED: 5-1 (3CW642), 5-2 (3CW643), 5-3 (3CW644)

ISOLATED FINDS: 0

GROUND VISIBILITY: 0 - 10%

SPECIAL HINDERANCES TO SITE LOCATION: None

SPECIAL OBSERVATIONS: None

SURVEY STRATEGY: 25 meter parallel transects, shovel tests every 25 meters

SURVEYOR(S): Kooren and Mehalchick DATE: 9/19/85

SURVEY UNIT: 6

QUAD SHEET: Alma

TERRAIN: Floodplain

VEGETATION: Crops, grasses

SOIL DESCRIPTION(S): Sands and silty loams

SITES RECORDED: 0

ISOLATED FINDS: 0

GROUND VISIBILITY: 10 - 20%

SPECIAL HINDERANCES TO SITE LOCATION: None

SPECIAL OBSERVATIONS: None

SURVEY STRATEGY: Parallel transects spaced 25 meters apart; shovel test interval of 25 meters

SURVEYOR(S): Northcutt and Lee DATE: 9/19/85

SURVEY UNIT: 7

QUAD SHEET: Mulberry

TERRAIN: Floodplain

VEGETATION: Crops, grasses, hardwoods

SOIL DESCRIPTION(S): sands and silty loams

SITES RECORDED: 0

ISOLATED FINDS: 0

GROUND VISIBILITY: 20%

SPECIAL HINDERANCES TO SITE LOCATION: None

SPECIAL OBSERVATIONS: None

SURVEY STRATEGY: Parallel transects spaced 25 meters apart; shovel test interval of 25 meters

SURVEYOR(S): Northcutt and Lee DATE: 9/19/85

SURVEY UNIT: 8

QUAD SHEET: Mulberry

TERRAIN: Floodplain

VEGETATION: Crops and grasses

SOIL DESCRIPTION(S): Sands and silty loams

SITES RECORDED: 0

ISOLATED FINDS: 0

GROUND VISIBILITY: 20%

SPECIAL HINDERANCES TO SITE LOCATION: None

SPECIAL OBSERVATIONS: None

SURVEY STRATEGY: Parallel transects spaced 25 meters apart; shovel test interval of 25 meters

SURVEYOR(S): Northcutt and Lee DATE: 9/20/85

SURVEY UNIT: 9

QUAD SHEET: Mulberry

TERRAIN: Floodplain

VEGETATION: Hardwoods, grasses

SOIL DESCRIPTION(S): sands and silty loams

SITES RECORDED: 9-1 (3SB99)

ISOLATED FINDS: 0

GROUND VISIBILITY: 10 - 20%

SPECIAL HINDERANCES TO SITE LOCATION: None

SPECIAL OBSERVATIONS: None

SURVEY STRATEGY: Parallel transects spaced 25 meters apart; shovel test interval of 25 meters

SURVEYOR(S): Lee and Northcutt DATE: 9/20/85

SURVEY UNIT: 10

QUAD SHEET: Mulberry

TERRAIN: Floodplain

VEGETATION: Crops and grasses

SOIL DESCRIPTION(S): sands and silty loams

SITES RECORDED: 0

ISOLATED FINDS: 0

GROUND VISIBILITY: 10 - 20%

SPECIAL HINDERANCES TO SITE LOCATION: None

SPECIAL OBSERVATIONS: None

SURVEY STRATEGY: 25 meter parallel transects, shovel tests every 25 meters

SURVEYOR(S): Lee and Northcutt DATE: 9/20/85

SURVEY UNIT: 11

QUAD SHEET: Alma

TERRAIN:

VEGETATION: bean fields, Johnson grass

SOIL DESCRIPTION(S): sandy loam and sandy silt

SITES RECORDED: 0

ISOLATED FINDS: 0

GROUND VISIBILITY: 5%

SPECIAL HINDERANCES TO SITE LOCATION: None

SPECIAL OBSERVATIONS: None

SURVEY STRATEGY: Parallel transects spaced 15 - 25 meters apart, depending on Corps boundaries.

SURVEYOR(S): Kooren and Mehalchick DATE: 9/21/85

SURVEY UNIT: 12

QUAD SHEET: Alma

TERRAIN: Floodplain

VEGETATION: Crops and grasses

SOIL DESCRIPTION(S): sands and silty loams

SITES RECORDED: 0

ISOLATED FINDS: 0

GROUND VISIBILITY: 20%

SPECIAL HINDERANCES TO SITE LOCATION: None

SPECIAL OBSERVATIONS: None

SURVEY STRATEGY: Parallel transects spaced 25 meters apart; shovel test interval of 25 meters

SURVEYOR(S): Lee and Northcutt DATE: 9/21/85

SURVEY UNIT: 13

QUAD SHEET: Alma

TERRAIN: Floodplain

VEGETATION: Crops

SOIL DESCRIPTION(S): Silty loams

SITES RECORDED: 0

ISOLATED FINDS: 0

GROUND VISIBILITY: 30%

SPECIAL HINDERANCES TO SITE LOCATION: None

SPECIAL OBSERVATIONS: None

SURVEY STRATEGY: Parallel transects spaced 25 meters apart; shovel test interval of 25 meters

SURVEYOR(S): Lee and Northcutt DATE: 9/21/85

SURVEY UNIT: 14

QUAD SHEET: Alma

TERRAIN:

VEGETATION: Hardwoods

SOIL DESCRIPTION(S):

SITES RECORDED: 0

ISOLATED FINDS: 0

GROUND VISIBILITY: 10%

SPECIAL HINDERANCES TO SITE LOCATION: None

SPECIAL OBSERVATIONS: None

SURVEY STRATEGY: Parallel transects spaced 25 meters apart; shovel test interval of 25 meters

SURVEYOR(S): Lee and Northcutt DATE: 9/21/85

SURVEY UNIT: 15

QUAD SHEET: Alma

TERRAIN:

VEGETATION: Hardwoods

SOIL DESCRIPTION(S):

SITES RECORDED: 0

ISOLATED FINDS: 0

GROUND VISIBILITY: 10%

SPECIAL HINDERANCES TO SITE LOCATION: None

SPECIAL OBSERVATIONS: None

SURVEY STRATEGY: Parallel transects spaced 25 meters apart; shovel test interval of 25 meters

SURVEYOR(S): Lee and Northcutt DATE: 9/21/85

SURVEY UNIT: 16

QUAD SHEET: Alma and Lavaca

TERRAIN:

VEGETATION: Hardwoods and crops

SOIL DESCRIPTION(S): Silty loams and clayey silt

SITES RECORDED: 0

ISOLATED FINDS: 0

GROUND VISIBILITY: 30 - 40%

SPECIAL HINDERANCES TO SITE LOCATION: None

SPECIAL OBSERVATIONS: None

SURVEY STRATEGY: Parallel transects spaced 25 meters apart; shovel test interval of 25 meters

SURVEYOR(S): Kooren and Mehalchick DATE: 9/22/85

SURVEY UNIT: 17

QUAD SHEET: Alma and Lavaca

TERRAIN:

VEGETATION: Hardwoods, crops

SOIL DESCRIPTION(S): Silty loams and clayey silts

SITES RECORDED: 0

ISOLATED FINDS: 0

GROUND VISIBILITY: 30%

SPECIAL HINDERANCES TO SITE LOCATION: None

SPECIAL OBSERVATIONS: None

SURVEY STRATEGY: Parallel transects spaced 25 meters apart; shovel test interval of 25 meters

SURVEYOR(S): Lee and Northcutt DATE: 9/22/85

SURVEY UNIT: 18

QUAD SHEET: Mulberry

TERRAIN: Upper area very steep; area by creek is flat

VEGETATION: Uplands - mature hardwoods, bean fields; wetlands - heavy brush

SOIL DESCRIPTION(S):

SITES RECORDED: OL18-1 (3FR134), OL18-2 (this was a series of bluff shelters from which no materials were collected and no state site number assigned), OL18-3 (3FR135), OL18-4 (3FR136), OL18-5 (3FR137), OL18-6 (3FR157)

ISOLATED FINDS: 0

GROUND VISIBILITY: 80% in bean fields; 0 - 10% in woods

SPECIAL HINDERANCES TO SITE LOCATION: None

SPECIAL OBSERVATIONS: Area contained very different landforms and vegetation types

SURVEY STRATEGY: Parallel transects spaced 25 meters apart; shovel test interval of 25 meters

SURVEYOR(S): M. and J. Bennett, S. Kooren, L. Raymer DATE: 9/13/85

SURVEY UNIT: 19

QUAD SHEET: Alma

TERRAIN: some steep sides, a few flat areas

VEGETATION: grass, trees, mixed hardwoods, heavy understory

SOIL DESCRIPTION(S): Cut Bank - 0 - 25cm, light brown very fine sandy loam, compact; 26 - 40cm, light brown very fine sand; 41 - 50cm, darker sand, very fine sand, some organic (?). Higher Slopes - 0-15cm, very pale brown silt and very fine sand, compact; 16cm-, reddish clay in polygonal form - residual soil

SITES RECORDED: There were two previously recorded sites - 3CW56 and 3CW64 - relocated 3CW56 and added 9 collection areas to 3CW64

ISOLATED FINDS: 0

GROUND VISIBILITY: 0 - 20%

SPECIAL HINDERANCES TO SITE LOCATION: None

SPECIAL OBSERVATIONS: We lumped the materials into 3CW64

SURVEY STRATEGY: Ped transects of 25 meters in intervals, shovel tests at same intervals

SURVEYOR(S): M. and J. Bennett, L. Raymer DATE: 9/09/85

SURVEY UNIT: 20

QUAD SHEET: Mulberry

TERRAIN: Slopes very steep - deep gullies, level along the park

VEGETATION: on slopes, mature hardwoods and cedars - heavy understory, briars, and grasses in planned developed area

SOIL DESCRIPTION(S): Some places very shallow 5 - 7cm of plowing, gray soil over stones; At site, on flat area, deeper; it could be a terrasoil of RR #1

SITES RECORDED: River Ridge 1 (3FR138)

ISOLATED FINDS: 0

GROUND VISIBILITY: in undeveloped area, 0%; in developed area, 10 25%

SPECIAL HINDERANCES TO SITE LOCATION: None

SPECIAL OBSERVATIONS: None

SURVEY STRATEGY: Ped transects of 25 meters in intervals; shovel tests at same intervals

SURVEYOR(S): M. and J. Bennett, Raymer, Mehalchick DATE: 9/12/85

SURVEY UNIT: 21

QUAD SHEET: Cecil

TERRAIN: Very steep hillsides, narrow ridge fingers, small level area by creek

VEGETATION: Mature hardwoods

SOIL DESCRIPTION(S): On hill side - red silt, 0 - 20cm

SITES RECORDED: WO-1 (3FR145), WO-2 (3FR146)

ISOLATED FINDS: 0

GROUND VISIBILITY: 0 - 10%

SPECIAL HINDERANCES TO SITE LOCATION: None

SPECIAL OBSERVATIONS: Found a long, drylaid stone wall at eastern end of area along the creek; no materials other than very recent debris

SURVEY STRATEGY: Ped transects of 25 meters in intervals; shovel tests at same intervals

SURVEYOR(S): M. and J. Bennett, L. Raymer DATE: 9/10/85

SURVEY UNIT: 22

QUAD SHEET: Mulberry

TERRAIN: flat with one slope

VEGETATION: mixed hardwoods, cedar, heavy understory, vines and greenbriars

SOIL DESCRIPTION(S): On area by creek - thick clay with desiccation cracks; some places covered by a few centimeters of silt

SITES RECORDED: VPC-1 (3CW646), VPC-2 (3CW647), VPC-3 (3CW648)

ISOLATED FINDS: 0

GROUND VISIBILITY: 0%, in underdeveloped area; 25 - 50%, in oak

SPECIAL HINDERANCES TO SITE LOCATION: None

SPECIAL OBSERVATIONS: Intense understory, some areas have grown up in thick weeds and grasses; if western area is developed, it should be examined after vegetation is removed

SURVEY STRATEGY: Ped transects of 25 meters in intervals; shovel tests at same intervals

SURVEYOR(S): M. and J. Bennett, L. Raymer DATE: 9/10/85

SURVEY UNIT: 23

QUAD SHEET: Mountainburg SE

TERRAIN: Flat

VEGETATION: Cleared for park, mostly grass, some trees and brush along edge

SOIL DESCRIPTION(S): 0 - 15cm, light brown silt; 16cm - , reddish clay, some clay

SITES RECORDED: 0

ISOLATED FINDS: 0

GROUND VISIBILITY: 0 - 20%

SPECIAL HINDERANCES TO SITE LOCATION: None

SPECIAL OBSERVATIONS: 3CW16 is recorded on the north side of Hwy. 64

SURVEY STRATEGY: Transects spaced at 25 meters - only a few shovel tests.

SURVEYOR(S): M. and J. Bennett, L. Raymer DATE: 9/09/85

SURVEY UNIT: 24

QUAD SHEET: Cecil

TERRAIN: Generally steep slopes with a few level benches, flat in developed area

VEGETATION: mature hardwoods and cedar

SOIL DESCRIPTION(S): 0 - 10cm, red silt mixed with sandstone; 11cm - , stones

SITES RECORDED: Citadel Bluff 1 (3FR143)

ISOLATED FINDS: 0

GROUND VISIBILITY: 0% in undeveloped area; 10 - 25% in developed area

SPECIAL HINDERANCES TO SITE LOCATION: None

SPECIAL OBSERVATIONS: Series of bluff shelters along the river - all of which were examined. No artifacts, no signs of petroglyphs. Previously recorded 3FR25 is recorded in the park. Perhaps this is incorrect - of H'77, p. 14, 15. Found old road with some cleared area in Picnic area #2.

SURVEY STRATEGY: Ped transects of 25 meters in intervals; shovel tests at same intervals

SURVEYOR(S): M. and J. Bennett, Raymer, Mehalchick DATE: 9/12/85

SURVEY UNIT: 25

QUAD SHEET: Lavaca

TERRAIN: flat bottoms in undeveloped portion of park; bluff in the northeast portion

VEGETATION: Heavy weeds, scrub and grass along with bottom land hardwoods

SOIL DESCRIPTION(S): Bottom: 0 - 4cm, humus; 5 - 30cm, brown sandy loam. Near borrow areas: 0 - 8cm, dark brown clayey sand; 9 - 27cm, pale brown silt; 28cm-, red clay

SITES RECORDED: VG-1 (3SB98), VG-2 (3SB96), VG-3 (3SB97)

ISOLATED FINDS: 0

GROUND VISIBILITY: 50% in develope areas; 0 - 10% in undeveloped area

SPECIAL HINDERANCES TO SITE LOCATION: None

SPECIAL OBSERVATIONS: Seems as if the creek bed cuts back and forth through the undeveloped area

SURVEY STRATEGY: Transects set at 25 meter intervals along the creek route with shovel test every 25 meters. No shovel testing in developed area.

SURVEYOR(S): M. and J. Bennett, L. Raymer DATE: 9/11/85

SURVEY UNIT: 26

QUAD SHEET: Ozark

TERRAIN: level

VEGETATION: grasses

SOIL DESCRIPTION(S): silt

SITES RECORDED: 26-1 (3FR147)

ISOLATED FINDS: 0

GROUND VISIBILITY: 40% on site 26-1, 10% elsewhere

SPECIAL HINDERANCES TO SITE LOCATION: None

SPECIAL OBSERVATIONS: None

SURVEY STRATEGY: 25 meter transects, checking all bare spots. No shovel testing within park.

SURVEYOR(S): Kooren, Mehalchick, Raymer DATE: 9/14/85

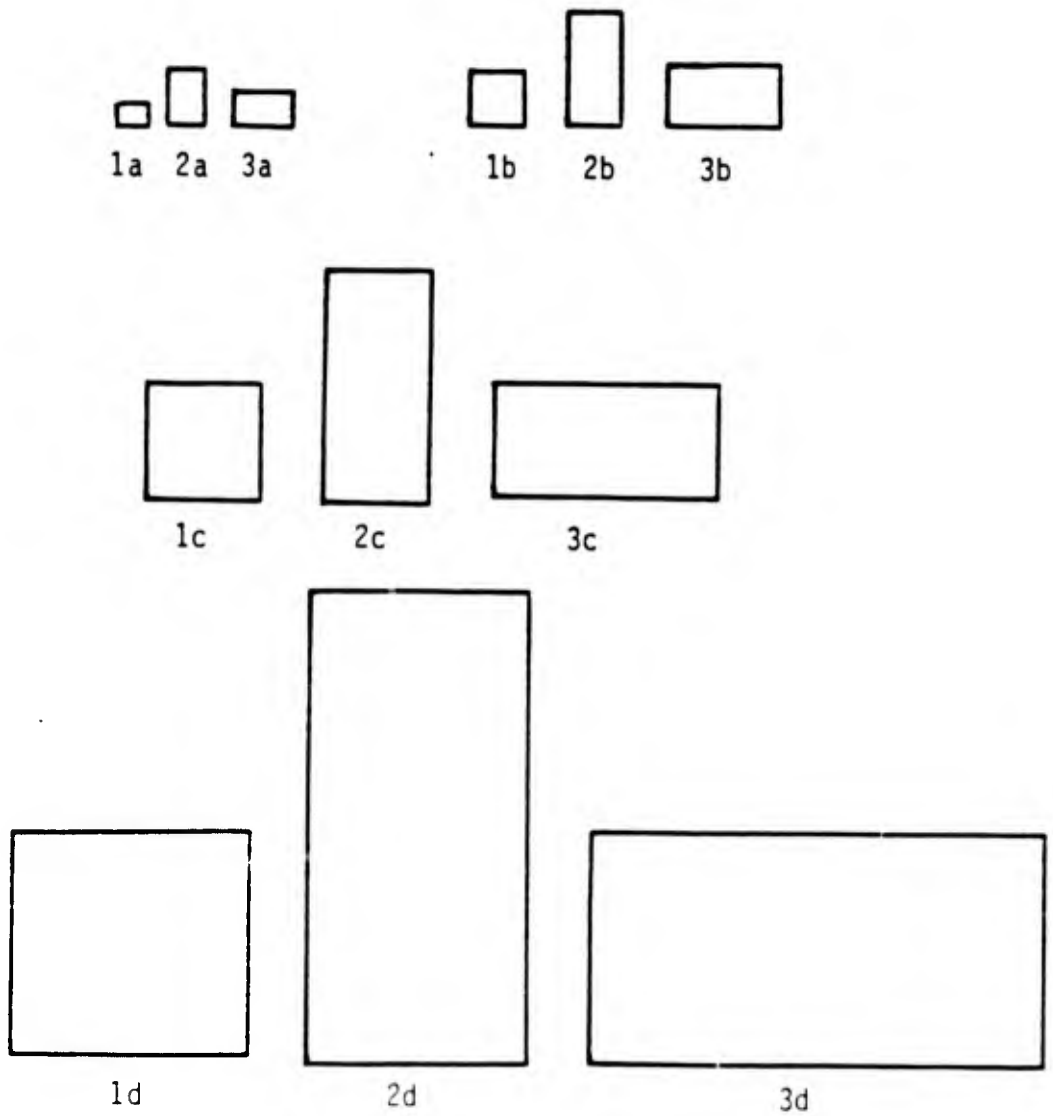
APPENDIX II

SITE SUMMARIES

Appendix II

List of Abbreviations and Flake Size Chart

a = absent
bipolr flk = bipolar flake
drp = dorsal ridge as a platform
grd = ground
hf = heat fractured
ht = heat treated
mod = modified
p = present
pc = present, cortex
pf = present, faceted
pq = present, quarry
ps = present, stream
pu = present, undetermined
pw = present, worn
polish = polished
splt peble = split pebble



Platforms placed at top

List of Abbreviations
(continued)

Landform Classes

Landform Class	Abbreviation
Abandoned Arkansas River Course	ACo
Arkansas River Point Bar	Apb
Arkansas River Middle Bar	Amp
Arkansas River Lateral Bar	Alb
Arkansas River Terrace	At
Arkansas River Undifferentiated Floodplain	Au
Arkansas River Natural Levee	-n
Abandoned Tributary Course	TCo
Abandoned Tributary Channel	TCh
Tributary Point Bar	Tp
Undifferentiated Tributary Floodplain	Tu
Tributary Alluvial Fan	Tf
Tributary Terrace	Tt
Upland Slope	us

STATE NUMBER = 3CW032

QUAD SHEET: Mulberry
SITE TYPE: Surface scatter
LANDFORM: Apb-n
CULTURAL AFFILIATION: Archaic
Mississippian
EXTENT: Unknown
DEPTH TO STERILE: Unknown
INTACT DEPOSITS: unable to est.
PREVIOUS DISTURBANCE: Unknown
AMOUNT OF DISTURBANCE: Unknown
SOIL TYPE(S):
REMARKS:

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	drill or point tip
1	chert	biface fragment

STATE NUMBER = 3CW054

QUAD SHEET: Alma
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Archaic
DEPTH TO STERILE: Unknown
PREVIOUS DISTURBANCE: Unknown
SOIL TYPE(S):
REMARKS:

LANDFORM: Apb-n
EXTENT: >10,000m
INTACT DEPOSITS: likely
AMOUNT OF DISTURBANCE: Unknown

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
4	chert	-	a	a	
1	chert	-	a	a	mod
1	quartzite	-	p	a	
1	quartzite	3d	p	pu	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	Gary ? point
1	chert	biface, broken end

HISTORIC ARTIFACTS

NUMBER	DESCRIPTION
1	Albany/Bristol earthenwre
1	Albany/Salt earthenware
1	earthen.w/molded decoratn
1	hand painted sherd
1	purpled vessel glass frag
1	purpled vessel rim glass
1	canning jar lid liner frg
1	brick fragment

STATE NUMBER = 3CW056

QUAD SHEET: Alma
SITE TYPE: Surface scatter
LANDFORM: upland?
CULTURAL AFFILIATION: Archaic
EXTENT: Unknown
DEPTH TO STERILE: Unknown
INTACT DEPOSITS: unable to est.
PREVIOUS DISTURBANCE: Unknown
AMOUNT OF DISTURBANCE: Unknown
SOIL TYPE(S): Leadvale silt loam, 1 to 3% slopes
Enders gravelly fine sandy loam, 8 to 20% slopes
REMARKS:

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	siltstone	1 side burned, ground

STATE NUMBER = 3CW064

QUAD SHEET: Alma
SITE TYPE: Surface scatter
LANDFORM: upland
CULTURAL AFFILIATION: Archaic
EXTENT: Unknown
DEPTH TO STERILE: Unknown
INTACT DEPOSITS: unable to est.
PREVIOUS DISTURBANCE: Unknown
AMOUNT OF DISTURBANCE: Unknown
SOIL TYPE(S): Muskogee silt loam, 3 to 8% slopes
Leadvale silt loam, 1 to 3% slopes
Roxana silt loam, occasionally flooded
REMARKS:

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	projectile point, broken
1	chert	pebble w/edge mod,flks rm
1	chert	Castroville/Calf Creek pt
1	chert	Gary point, broken
1	chert	pebble w/ flakes removed
1	chert	split stream pebble
1	quartzite	pebble w/chips removed
2	quartzite	hammerstone, pecked
1	quartzite	pecked & flaked pebble
1	quartzite	large flake used as core
1	quartzite	hammerstone, pecked
2	quartzite	pebble w/ flakes removed
1	siltstone/quartzite	net weight
1	siltstone/quartzite	possibly ground pebble
1	siltstone/quartzite	hammerstone,broken,battrd
1	siltstone/quartzite	pecked pebble, broken
1	siltstone	possible ground stone
1	siltstone	1 side pecked, ground, hf

HISTORIC ARTIFACTS

NUMBER	DESCRIPTION
1	white earthenware rim shd
1	white earthenware rim shd
1	white porcelain w/design
2	hand painted earthenware
1	bone or plastic spoon frg

3CW064

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	a	a	
1	chert/novaculite	-	a	a	
1	chert/novaculite	-	a	a	
2	chert/novaculite	-	a	a	
1	chert/novaculite	-	a	ps	
1	chert/novaculite	-	a	ps	
1	chert/novaculite	2b	p	a	
2	chert	-	a	a	
1	chert	-	a	a	
1	chert	-	a	a	mod,hf
7	chert	-	a	a	
1	chert	-	a	a	hf
1	chert	-	a	a	mod
1	chert	-	a	ps	
1	chert	-	a	ps	
1	chert	-	a	ps	hf
10	chert	-	a	ps	
2	chert	-	p	a	
1	chert	-	p	a	
2	chert	-	p	ps	
2	chert	-	p	ps	
3	chert	-	p	ps	
6	chert	-	p	ps	
1	chert	-	pc	ps	hf
1	chert	-	pc	ps	
1	chert	1b	p	a	
1	chert	1c	pc	ps	
1	chert	2b	pc	ps	
2	quartzite	-	a	a	
1	quartzite	-	a	a	hf
3	quartzite	-	a	a	
8	quartzite	-	a	a	
1	quartzite	-	a	a	hf
1	quartzite	-	a	a	
1	quartzite	-	a	ps	
2	quartzite	-	p	a	
2	quartzite	-	p	a	
1	quartzite	-	p	ps	
1	quartzite	-	p	ps	
1	quartzite	-	pc	ps	hf
1	quartzite	-	pc	ps	
1	quartzite	3c	pc	ps	

STATE NUMBER = 3CW642

QUAD SHEET: Alma
SITE TYPE: Subsurface deposits
CULTURAL AFFILIATION: Unknown
Historic
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Inundated
LANDFORM: us
EXTENT: 1000-4999m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Slight
SOIL TYPE(S): Enders gravelly fine sandy loam, 8 to 20% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert	-	a	a	
1	chert	-	p	a	
1	chert	-	p	a	hf
1	quartzite	-	a	ps	
1	quartzite	-	pf,pw	a	
1	quartzite	2d	p	a	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	pebble, flaked battered
1	chert	point, Marshall?
1	chert	biface fragment, chipped

HISTORIC ARTIFACTS

NUMBER	DESCRIPTION
2	rim sherds, flow blue trn
1	flow blue earthenware shd

STATE NUMBER = 3CW643

QUAD SHEET: Alma
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
Historic
DEPTH TO STERILE: Unknown
PREVIOUS DISTURBANCE: Plowing
Other
SOIL TYPE(S): Roxana silt loam
REMARKS:

LANDFORM: Apb-n
EXTENT: 500 - 999m

INTACT DEPOSITS: unable to est.
AMOUNT OF DISTURBANCE: Moderate

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
2	chert	-	pc	ps	
1	chert	-	pf	ps	
1	chert	2c	pf	ps	
1	chert	3c	p	ps	
1	unidentified	-	a	a	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	biface frag, sides chippd

HISTORIC ARTIFACTS

NUMBER	DESCRIPTION
1	white glazed rim sherd
1	earthenware sherd, white
1	blue-green vesel fragment

STATE NUMBER = 3CW644

QUAD SHEET: Alma
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Historic
DEPTH TO STERILE: Unknown
PREVIOUS DISTURBANCE: Plowing
SOIL TYPE(S): Roellen silty clay loam
REMARKS:

LANDFORM: tu
EXTENT: 1000-4999m
INTACT DEPOSITS: unable to est.
AMOUNT OF DISTURBANCE: Slight

HISTORIC ARTIFACTS

NUMBER	DESCRIPTION
1	piece, white w/floral dsn
1	white earthenwre rim shrd
1	blue earthenware sherd
1	earthenware,Albany glazed
1	purpled molded glass frag
1	purpled glass fragment
1	blue-green rim sherd
1	blue-green glass,neck/rim
1	clear screw top jar frag

STATE NUMBER = 3CW645

QUAD SHEET: Mulberry
SITE TYPE: Surface scatter
LANDFORM: Au-n
CULTURAL AFFILIATION: Unknown
Historic
EXTENT: >10,000m
DEPTH TO STERILE: 1 - 9cm
INTACT DEPOSITS: none
PREVIOUS DISTURBANCE: Plowing
AMOUNT OF DISTURBANCE: Moderate
SOIL TYPE(S): Roellen silty clay loam
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	a	ps	
2	chert/novaculite	-	p	a	
1	chert/novaculite	1c	p	a	
2	chert	-	a	a	
1	chert	-	a	a	hf, mod
8	chert	-	a	ps	
2	chert	-	p	a	
1	chert	-	p	pq	
4	chert	-	p	ps	
1	chert	1b	p	a	
3	chert	1c	p	ps	
1	chert	3b	p	ps	
1	quartzite	-	a	a	
1	quartzite	-	p	a	
1	quartzite	2c	p	a	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	biface, worked & broken
1	chert	biface w/pebble cortex
1	chert	biface stem, broken
1	siltstone/quartzite	pebble, pecked

HISTORIC ARTIFACTS

3CW645

NUMBER	DESCRIPTION
1	earthenware,Albany glazed
1	earthenware,Albany/grn gl
1	earthenware,Albany/Bristl
1	white earthenware w/trans
1	white earthen.w/makers mk
1	purpled glass neck
1	purpled glass vessel frag
2	purpled glass vessel frag
1	blue bottle glass frag
1	earthenware w/white glaze
1	earthenware w/white glaze
1	white piece from sm.vessl
1	white earthen. plate foot

STATE NUMBER = 3CW646

QUAD SHEET: Mulberry
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Other
SOIL TYPE(S): Roellen silty clay loam
REMARKS:

LANDFORM: tu
EXTENT: 1000-4999m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Major

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	p	a	
4	chert	-	a	a	
2	chert	-	a	a	hf
1	chert	-	a	ps	
1	chert	-	p	a	
1	chert	-	pc	ps	
1	chert	ld	p	ps	drp
1	chert	ld	pc	ps	

STATE NUMBER = 3CW647

QUAD SHEET: Mulberry
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Construction
Other
LANDFORM: upland
EXTENT: 10 - 99m
INTACT DEPOSITS: unable to est.
AMOUNT OF DISTURBANCE: Major
SOIL TYPE(S): Leadvale silt loam, 3 to 8% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert	-	a	a	
1	chert	-	p	a	
1	quartzite	-	a	a	
1	quartzite	-	p	a	

STATE NUMBER = 3CW648

QUAD SHEET: Mulberry
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 1 - 9cm
LANDFORM: upland
EXTENT: 1000-4999m
INTACT DEPOSITS: none
PREVIOUS DISTURBANCE: Construction
AMOUNT OF DISTURBANCE: Major
SOIL TYPE(S): Leadvale silt loam, 3 to 8% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	a	a	
1	chert/novaculite	-	p	a	
1	chert	-	a	a	hf
2	chert	-	a	ps	
1	chert	-	p	a	
2	chert	-	p	ps	
1	chert	-	pc	ps	
1	chert	-	pf	a	hf
1	chert	1c	pc	ps	
1	chert	3b	p	ps	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	quartzite	net sinker w/worn areas

HISTORIC ARTIFACTS

NUMBER	DESCRIPTION
1	white plain rim sherd/trn

STATE NUMBER = 3FR134

QUAD SHEET: Mulberry
SITE TYPE: Surface scatter
LANDFORM: upland
CULTURAL AFFILIATION: Unknown
EXTENT: Unknown
DEPTH TO STERILE: Unknown
INTACT DEPOSITS: unable to est.
PREVIOUS DISTURBANCE: Inundated
AMOUNT OF DISTURBANCE: Unknown
SOIL TYPE(S): Enders-Mountainburg association, steep
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert	-	a	a	mod
1	chert	-	a	ps	

STATE NUMBER = 3FR136

QUAD SHEET: Mulberry
SITE TYPE: Surface scatter
LANDFORM: upland
CULTURAL AFFILIATION: Unknown
EXTENT: Unknown
DEPTH TO STERILE: Unknown
INTACT DEPOSITS: unlikely
PREVIOUS DISTURBANCE: Construction
Other
AMOUNT OF DISTURBANCE: Major
SOIL TYPE(S): Mckamie silt loam, 3 to 8% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	p	a	
6	chert	-	a	a	
2	chert	-	a	ps	
1	chert	-	a	ps	mod
1	chert	-	a	ps	hf
1	chert	-	p	a	mod
1	chert	-	p	a	mod
1	chert	-	p	ps	mod
1	chert	-	p	ps	
1	chert	-	p	pu	
1	chert	1b	p	a	
1	chert	1d	p	ps	mod
1	chert	1d	p	ps	
1	chert	2c	p	ps	
1	chert	2c	p	pu	
1	quartzite	-	a	a	
1	quartzite	-	a	a	mod
1	quartzite	-	a	ps	
1	quartzite	1d	pf,pw	a	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert/novaculite	thin biface tip
1	chert	stem? w/bifacial flaking
1	chert	broken biface fragment
1	chert	pebble w/flakes removed
1	quartzite	core flakes removed
1	quartzite	possible biface fragment

HISTORIC ARTIFACTS

3FR136

NUMBER	DESCRIPTION
1	earthenware,Albany glazed
1	earthenware,white glazed
1	horseshoe fragment w/nail
2	purpled glass,poss. base
2	purpled vessel glass
2	dark purpled vessel glass
1	black/brown burned glass

STATE NUMBER = 3FR137

QUAD SHEET: Mulberry
SITE TYPE: Surface scatter
LANDFORM: us
CULTURAL AFFILIATION: Unknown
EXTENT: Unknown
DEPTH TO STERILE: Unknown
INTACT DEPOSITS: unlikely
PREVIOUS DISTURBANCE: Clear cut
AMOUNT OF DISTURBANCE: Moderate
SOIL TYPE(S): Mckamie silt loam, 3 to 8% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
3	chert	-	a	a	
1	chert	-	a	ps	hf,drp
1	chert	-	a	ps	
2	chert	-	p	a	
2	chert	-	p	ps	
1	chert	-	p	ps	hf?
2	chert	-	p	ps	
2	chert	-	pc	ps	
1	chert	1d	p	ps	mod
1	chert	2c	pw	a	mod
2	quartzite	-	a	a	
3	quartzite	-	p	a	
1	quartzite	-	pf	a	
1	quartzite	-	pf,pw	a	hf

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	point tip
1	chert	biface fragment,flaked,pc
1	chert	pebble w/flks removed.pc
1	quartzite	bifacially flaked tool
1	quartzite	biface fragment
1	siltstone	tabular used as hammer

STATE NUMBER = 3FR138

QUAD SHEET: Mulberry
SITE TYPE: Subsurface deposits
CULTURAL AFFILIATION: Unknown
Historic
DEPTH TO STERILE: 10 - 19cm
PREVIOUS DISTURBANCE: Construction
Other
LANDFORM: us
EXTENT: >10,000m
INTACT DEPOSITS: none
AMOUNT OF DISTURBANCE: Major
SOIL TYPE(S): Muskogee silt loam, 1 to 3% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
6	chert/novaculite	-	a	a	
1	chert/novaculite	-	a	ps	
2	chert/novaculite	-	p	a	mod
1	chert/novaculite	-	pc	ps	
2	chert	-	a	a	
7	chert	-	a	a	
1	chert	-	a	a	hf
4	chert	-	a	ps	
1	chert	-	a	ps	mod
1	chert	-	a	ps	
6	chert	-	p	a	
1	chert	-	p	ps	hf
3	chert	-	p	ps	
1	chert	-	pc	cs	mod
4	chert	-	pc	ps	
1	chert	-	pc	ps	
1	chert	-	pf	a	
1	chert	-	pf	a	
1	chert	1b	p	a	
1	chert	1c	p	a	
1	chert	1c	p	ps	mod
1	chert	1c	p	ps	mod
1	chert	1c	pf	ps	
1	chert	1d	p	ps	mod
1	chert	2c	pf	ps	
1	chert	3a	p	a	
1	chert	3c	p	ps	
2	unidentified	-	p	ps	

LITHIC ARTIFACTS

3FR138

NUMBER	MATERIAL	DESCRIPTION
1	chert	biface fragment, hf
2	chert	pebble w/flakes removed
1	quartzite	battered pebble, hf
1	quartzite	pecked & ground pebble

HISTORIC ARTIFACTS

NUMBER	DESCRIPTION
2	earthenware,Albany/Bristl
1	hand painted rim sherd
4	white earthen.w/1 rim shd
1	white earthen.w/brn bands
1	clear glass, base sherd?
2	flat clear glass, window?

STATE NUMBER = 3FR140

QUAD SHEET: Mulberry
SITE TYPE: Surface scatter LANDFORM: tu-n
CULTURAL AFFILIATION: Unknown EXTENT: Unknown
DEPTH TO STERILE: 20 - 29cm INTACT DEPOSITS: none
PREVIOUS DISTURBANCE: Shore Erosion AMOUNT OF DISTURBANCE: Major
SOIL TYPE(S): Moreland silty clay loam
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert	-	a	a	hf
1	chert	-	pc	ps	
1	quartzite	-	a	a	
2	quartzite	-	a	ps	
1	quartzite	-	p	a	
1	quartzite	-	p	pu	
2	quartzite	-	pf	a	
1	quartzite	1d	pc	ps	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	possible Reed point
1	siltstone/quartzite	ground stone fragment

PREHISTORIC CERAMICS

NUMBER	TEMPER	DESCRIPTION
2	clay/shell	plain body sherds

STATE NUMBER = 3FR141

QUAD SHEET: Mulberry
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Plowing
SOIL TYPE(S): Moreland silty clay loam
REMARKS:

LANDFORM: tu
EXTENT: 5000-9999m
INTACT DEPOSITS: none
AMOUNT OF DISTURBANCE: Major

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	a	a	mod
1	chert/novaculite	-	a	a	
1	chert/novaculite	-	p	a	
2	chert/novaculite	-	pf	a	
8	chert	-	a	a	
1	chert	-	a	ps	
1	chert	-	a	ps	mod
2	chert	-	p	a	
2	chert	-	pf	a	
1	chert	1c	p	ps	
1	chert	1c	pc	ps	
1	chert	3b	pc	ps	
4	quartzite	-	a	a	
2	quartzite	-	a	a	mod
1	quartzite	-	a	ps	
1	quartzite	-	p	a	
2	quartzite	-	pf	a	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	point stem
1	chert	biface w/pebble cortex
1	chert	biface pebble, flaked
1	chert	biface w/stream cortex
1	chert	pebble, flaked, hf
1	quartzite	pebble used as hammer
1	quartzite	biface flake pebble,battd
1	siltstone	ground stone

STATE NUMBER = 3FR142

QUAD SHEET: Mulberry
SITE TYPE: Surface scatter
LANDFORM: tu-n
CULTURAL AFFILIATION: Unknown
Historic
EXTENT: 1000-4999m
DEPTH TO STERILE: 1 - 9cm
INTACT DEPOSITS: none
PREVIOUS DISTURBANCE: Plowing
AMOUNT OF DISTURBANCE: Major
SOIL TYPE(S): Moreland silty clay loam
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert	-	a	a	
1	chert	-	p	a	mod
1	chert	-	pc	ps	
1	chert	-	pf	a	mod
1	quartzite	-	a	a	
1	quartzite	-	pf	a	mod

HISTORIC ARTIFACTS

NUMBER	DESCRIPTION
1	base sherd, Albany glazed
1	base sherd, Albany glazed
1	sherd, Albany glazed
3	body sherds,Albany glazed
2	body sherds, badly burned
2	plate foot sherds, white
1	base of cup/bowl, white
3	body sherds, white glazed
2	rim sherds,white glazed
1	base sherd, makers mark
2	body sherds, gray-brown
1	nail, bent and broken
2	oval pieces of iron
1	purpled glass fragment
1	blue-green glass rim sher
1	blue-green glass fragment
1	blue-green glass base shd
1	amber vessel fragment
1	clay pipe neck fragment
1	rim sherd,red sponge prnt
1	body sherd,yellw-grn spng
1	body sherd,blue-grn spnge
1	body sherd,blue sponged

STATE NUMBER = 3FR143

QUAD SHEET: Cecil
SITE TYPE: Surface scatter
LANDFORM: upland
CULTURAL AFFILIATION: Unknown
EXTENT: 10 - 99m
DEPTH TO STERILE: 1 - 9cm
INTACT DEPOSITS: unlikely
PREVIOUS DISTURBANCE: Other
AMOUNT OF DISTURBANCE: Major
SOIL TYPE(S): Allen-Holston association, very steep
Allen-Enders association, rolling
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert	-	a	a	

HISTORIC ARTIFACTS

NUMBER	DESCRIPTION
2	small pieces gray plastic

STATE NUMBER = 3FR144

QUAD SHEET: Cecil
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Other
SOIL TYPE(S): Iberia clay
REMARKS:

LANDFORM: tu
EXTENT: 1000-4999m
INTACT DEPOSITS: none
AMOUNT OF DISTURBANCE: Major

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
3	chert/novaculite	-	a	a	
2	chert/novaculite	-	p	a	
1	chert/novaculite	-	pf	a	
2	chert	-	a	a	
1	chert	-	pf	a	

STATE NUMBER = 3FR145

QUAD SHEET: Cecil
SITE TYPE: Surface scatter
LANDFORM: upland
CULTURAL AFFILIATION: Unknown
EXTENT: 10 - 99m
DEPTH TO STERILE: Unknown
INTACT DEPOSITS: unlikely
PREVIOUS DISTURBANCE: Unknown
AMOUNT OF DISTURBANCE: Unknown
SOIL TYPE(S): Mountainburg stony fine sandy loam, 1 to 12% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
2	chert/novaculite	-	a	a	
1	chert	-	pf	a	

STATE NUMBER = 3FR146

QUAD SHEET: Cecil
SITE TYPE: Subsurface deposits
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: Unknown
PREVIOUS DISTURBANCE: Unknown
LANDFORM: upland
EXTENT: 5000-9999m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Unknown
SOIL TYPE(S): Linker fine sandy loam, 3 to 8% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	a	a	
2	chert/novaculite	-	p	a	
2	chert	-	a	a	
2	chert	-	a	a	hf
1	chert	-	a	a	mod
1	chert	-	a	pu	mod
1	chert	-	p	a	drp
2	chert	-	p	a	
1	chert	-	pf	a	
1	chert	1c	p	ps	
4	quartzite	-	a	a	
1	quartzite	-	a	a	
1	quartzite	-	p	a	
1	quartzite	1b	p	a	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	biface on tabular pebble

STATE NUMBER = 3FR147

QUAD SHEET: Ozark
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: Unknown
PREVIOUS DISTURBANCE: Construction
Other
LANDFORM: Apb-n
EXTENT: >10,000m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Major
SOIL TYPE(S): Bruno loamy fine sand
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	a	a	
1	chert/novaculite	1a	p	a	
1	chert/novaculite	1c	pc	ps	
1	chert	-	a	a	
1	chert	-	a	ps	
1	chert	-	p	ps	
1	chert	1c	a	a	mod
1	chert	1c	p	ps	
1	chert	1c	pc	ps	
1	chert	1c	pc	ps	mod
1	chert	3b	a	a	mod
1	quartzite	-	a	a	
1	quartzite	-	a	ps	grd+polish

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert/novaculite	biface, broken
1	chert	point tip, broken

STATE NUMBER = 3FR148

QUAD SHEET: Ozark
SITE TYPE: Subsurface deposits
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 30 - 50cm
PREVIOUS DISTURBANCE: Plowing
SOIL TYPE(S): Bruno loamy fine sand
REMARKS:

LANDFORM: Apb
EXTENT: >10,000m
INTACT DEPOSITS: present
AMOUNT OF DISTURBANCE: Moderate

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert	-	a	a	
3	chert	-	a	a	hf
1	chert	-	a	a	
1	chert	-	a	a	hf
1	chert	-	a	a	
1	chert	-	a	a	mod
1	chert	-	a	ps	mod
2	chert	-	a	ps	
1	chert	-	a	ps	dsp
2	chert	-	a	ps	
1	chert	-	a	ps	
1	chert	-	a	ps	
1	chert	-	a	ps	
1	chert	-	p	a	
1	chert	-	p	ps	mod
1	chert	-	p	ps	
2	chert	-	p	ps	hf
4	chert	-	pc	ps	
3	chert	-	pc	ps	
1	chert	-	pc	ps	
1	chert	1b	p	a	
1	chert	1c	pc	ps	mod
1	chert	1c	pc	ps	
1	chert	1c	pc	ps	drp
1	chert	1d	pc	ps	
1	chert	2c	p	ps	
1	quartzite	-	a	a	
1	quartzite	-	p	a	
2	quartzite	-	p	a	
1	quartzite	-	p	a	
2	quartzite	-	p	ps	
1	quartzite	-	pf,pw	a	

LITHIC ARTIFACTS

3FR148

NUMBER	MATERIAL	DESCRIPTION
1	chert	pebble, flaked
1	chert	pebble
2	quartzite	grnd & polshd tool, flake

PREHISTORIC CERAMICS

NUMBER	TEMPER	DESCRIPTION
1	clay/shell	plain body sherd

STATE NUMBER = 3FR149

QUAD SHEET: Ozark
SITE TYPE: Subsurface deposits
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 30 - 50cm
PREVIOUS DISTURBANCE: Plowing
SOIL TYPE(S): Bruno loamy fine sand
REMARKS:

LANDFORM: Apb
EXTENT: >10,000m
INTACT DEPOSITS: present
AMOUNT OF DISTURBANCE: Moderate

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	a	a	mod
1	chert/novaculite	-	a	ps	
1	chert/novaculite	-	p	a	
1	chert/novaculite	-	p	a	
1	chert	-	a	a	mod
1	chert	-	a	a	
1	chert	-	a	a	mod
3	chert	-	a	a	
2	chert	-	a	a	
2	chert	-	a	a	
1	chert	-	a	a	
2	chert	-	a	a	
1	chert	-	a	a	hf
2	chert	-	a	ps	
1	chert	-	a	ps	
1	chert	-	a	ps	hf
1	chert	-	a	ps	
1	chert	-	a	ps	
1	chert	-	a	ps	mod
1	chert	-	a	ps	
3	chert	-	a	ps	
1	chert	-	a	ps	mod
6	chert	-	a	ps	
1	chert	-	a	ps	mod
2	chert	-	a	ps	
1	chert	-	a	pu	hf
2	chert	-	p	a	
1	chert	-	p	a	
2	chert	-	p	a	
1	chert	-	p	ps	
1	chert	-	p	ps	
1	chert	-	pc	ps	
1	chert	-	pc	ps	mod
2	chert	-	pc	ps	
2	chert	-	pc	ps	
2	chert	-	pc	ps	
1	chert	-	pc	ps	mod
2	chert	-	pc	ps	
1	chert	-	pc	ps	mod

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1	chert	-	pc	ps	
2	chert	-	pc	ps	
1	chert	-	pf	ps	
1	chert	1b	p	a	
1	chert	1b	p	ps	
1	chert	1b	pc	ps	
1	chert	1c	a	ps	
1	chert	1c	p	a	
1	chert	1c	pc	ps	
1	chert	1c	pc	ps	mod
1	chert	1c	pc	ps	
1	chert	1c	pc	ps	mod
1	chert	1c	pc	ps	
1	chert	1d	pc	ps	
1	chert	2b	p	a	
1	chert	3b	pc	ps	
1	chert	3b	pc	ps	mod
1	chert	3c	a	ps	mod
1	quartzite	-	a	a	
1	quartzite	-	a	a	mod
1	quartzite	-	a	a	
1	quartzite	-	a	a	hf
1	quartzite	-	a	pu	
1	quartzite	-	p	a	
1	quartzite	1c	p	pu	hf
1	unidentified	-	pc	ps	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	point, Bonham
1	chert	pebble w/flakes removed
1	unidentified	pebble , flaked hf

STATE NUMBER = 3FR150

QUAD SHEET: Ozark
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Historic
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Plowing
SOIL TYPE(S): Bruno loamy fine sand
REMARKS:

LANDFORM: Apb
EXTENT: 100 - 499m
INTACT DEPOSITS: none
AMOUNT OF DISTURBANCE: Moderate

HISTORIC ARTIFACTS

NUMBER	DESCRIPTION
1	earthenware white rim shd
1	white glazed w/floral dsg
1	earthenware base sherd
1	blue glass fragment
2	burned glass fragments

STATE NUMBER = 3FR151

QUAD SHEET: Ozark
SITE TYPE: Subsurface deposits
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 30 - 50cm
PREVIOUS DISTURBANCE: Plowing
SOIL TYPE(S): Bruno loamy fine sand
REMARKS:

LANDFORM: Apb
EXTENT: 1000-4999m
INTACT DEPOSITS: present
AMOUNT OF DISTURBANCE: Moderate

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	a	a	hf
1	chert	-	a	a	mod
1	chert	-	a	a	
1	chert	-	a	ps	
1	chert	-	a	ps	hf
1	chert	-	a	ps	
1	chert	-	p	ps	
2	chert	-	pc	ps	
1	chert	-	pf	a	drp (F,W)
1	chert	1c	pc	ps	
1	quartzite	-	a	a	

STATE NUMBER = 3FR153

QUAD SHEET: Cecil
SITE TYPE: Surface scatter LANDFORM: tu/us?
CULTURAL AFFILIATION: Unknown EXTENT: >10,000m
DEPTH TO STERILE: 1 - 9cm INTACT DEPOSITS: none
PREVIOUS DISTURBANCE: Construction AMOUNT OF DISTURBANCE: Moderate
SOIL TYPE(S): Mountainburg stony fine sandy loam, 1 to 12% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
2	chert/novaculite	-	a	a	
1	chert/novaculite	-	p	pu	
1	chert	-	a	a	hf, mod
2	chert	-	a	a	
1	chert	-	a	a	mod
1	chert	-	a	ps	
2	chert	-	a	ps	mod
1	chert	-	a	ps	hf
5	chert	-	p	a	
1	chert	-	p	a	mod
2	chert	-	p	ps	
2	chert	-	p	ps	mod
1	chert	-	p	ps	hf
3	chert	-	pc	ps	
1	chert	-	pc	ps	mod
3	chert	-	pf	ps	mod
2	chert	-	pf	ps	
1	chert	-	pf	ps	hf, mod
1	chert	-	pw	ps	
1	chert	lc	a	a	mod
1	chert	lc	p	a	mod
1	chert	lc	pf	ps	mod
1	quartzite	-	a	a	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	biface edge fragment
1	chert	biface edge fragment
1	chert	biface fragment
1	chert	biface midsection, hf
1	chert	biface pebble, hf, w/cort
2	chert	biface pebble, w/cortex
1	chert	biface, chipped
1	chert	pebble frag w/hf & scars

STATE NUMBER = 3FR154

QUAD SHEET: Cecil
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Other
SOIL TYPE(S): Iberia clay
REMARKS:

LANDFORM: tt
EXTENT: 100 - 499m
INTACT DEPOSITS: none
AMOUNT OF DISTURBANCE: Slight

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert	-	a	a	
1	chert	-	a	ps	hf
1	chert	-	p	pq	
2	chert	-	p	ps	
1	chert	lc	p	ps	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	pebble w/flakes removed

STATE NUMBER = 3FR155

QUAD SHEET: Cecil
SITE TYPE: Subsurface deposits
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 10 - 19cm
PREVIOUS DISTURBANCE: Plowing
LANDFORM: us
EXTENT: 1000-4999m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Slight
SOIL TYPE(S): Mountainburg gravelly fine sandy loam, 3 to 8% slopes
Mountainburg stony fine sandy loam, 1 to 12% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	a	ps	
1	chert/novaculite	-	a	ps	
2	chert/novaculite	-	p	a	
1	chert/novaculite	-	pf	a	
1	chert/novaculite	2b	pf	a	
4	chert	-	a	a	
1	chert	-	a	a	hf
1	chert	-	a	a	
1	chert	-	a	ps	hf
1	chert	-	a	ps	mod
4	chert	-	a	ps	
1	chert	-	a	ps	mod
1	chert	-	a	ps	
4	chert	-	p	a	
2	chert	-	p	a	hf
1	chert	-	p	a	hf
1	chert	-	p	a	
2	chert	-	p	ps	
2	chert	-	p	ps	mod
1	chert	-	p	pu	
2	chert	-	pc	ps	mod
1	chert	-	pc	ps	
1	chert	-	pf	a	
1	chert	1b	pf	a	
1	chert	1c	p	ps	mod
1	chert	1c	p	ps	
1	quartzite	-	a	a	
2	quartzite	-	p	a	

STATE NUMBER = 3FR156

QUAD SHEET: Cecil
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
Historic
DEPTH TO STERILE: Unknown
PREVIOUS DISTURBANCE: Unknown
SOIL TYPE(S): Mckamie silt loam, 3 to 8% slopes
REMARKS:

LANDFORM: tt/tu
EXTENT: >10,000m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Moderate

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
6	chert/novaculite	-	a	a	
4	chert/novaculite	-	p	a	
1	chert/novaculite	-	p	ps	
5	chert	-	a	a	
2	chert	-	a	a	hf
1	chert	-	a	a	mod
2	chert	-	a	ps	mod
9	chert	-	a	ps	
1	chert	-	a	pu	hf
2	chert	-	p	a	
1	chert	-	p	a	mod
6	chert	-	p	ps	
1	chert	-	p	pu	hf
1	chert	-	pc	pu	
1	chert	-	pc	pu	hf
3	chert	-	pf	a	
1	chert	-	pf,pw	ps	
1	chert	1c	p	a	mod
1	chert	1c	pc	ps	
2	chert	1c	pf	ps	
1	chert	1c	pf	ps	tool bifac
1	chert	2c	pf	a	
5	quartzite	-	a	a	
2	quartzite	-	p	a	
1	quartzite	-	pc	ps	
2	quartzite	-	pc	pu	
2	quartzite	-	pf	a	
1	quartzite	-	pf	pu	
1	quartzite	1d	pf	a	

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LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	biface edge fragment
4	chert	biface edge fragments
1	chert	biface edgefragment, hf
1	chert	biface pebble, chipped
1	chert	biface point frag, notchd
1	chert	pebble w/flaked & cortex
1	chert	point tip
1	chert	point tip, broken
1	chert	stem & shoulder fragment
1	chert	stem frag,small shoulder
1	chert	stem fragment
1	chert	stem shoulder fragment
1	quartzite	biface edge fragment
1	quartzite	point stem and shoulder
1	quartzite	point tip
1	quartzite	und point stem and sholdr

HISTORIC ARTIFACTS

NUMBER	DESCRIPTION
1	earthenware rim,white glz
1	earthenware w/blue glaze

STATE NUMBER = 3FR157

QUAD SHEET: Mulberry
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 20 - 29cm
PREVIOUS DISTURBANCE: Plowing
Other
LANDFORM: Alb
EXTENT: >10,000m
INTACT DEPOSITS: unable to est.
AMOUNT OF DISTURBANCE: Slight
SOIL TYPE(S): Morganfield very fine sandy loam
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	a	a	mod
2	chert/novaculite	-	a	a	
1	chert	-	a	a	mod
3	chert	-	a	a	
1	chert	-	a	a	
3	chert	-	a	ps	
2	chert	-	a	ps	
8	chert	-	p	a	
1	chert	-	p	ps	
3	chert	-	p	ps	
1	chert	-	p	ps	dsb
1	chert	-	pc	ps	
2	chert	-	pc	ps	
1	chert	-	pf	ps	
1	chert	1c	p	ps	
1	chert	1c	p	ps	
1	chert	1c	pc	ps	
1	chert	2c	p	ps	drp
1	chert	2c	pf	ps	
1	quartzite	-	a	a	
1	quartzite	-	a	a	hf
1	quartzite	-	a	a	mod
2	quartzite	-	a	a	
1	quartzite	-	a	ps	hf
2	quartzite	-	p	a	
1	quartzite	-	p	a	hf
1	quartzite	-	p	a	mod

LITHIC ARTIFACTS

3FR157

NUMBER	MATERIAL	DESCRIPTION
1	chert	Williams point, broken
1	chert	"core" pebble w/flks rmvd
1	chert	bifacially flaked pebble
1	chert	biface fragment w/peb cor
1	chert	point frag,stem & shouldr
1	chert	biface fragment
1	chert	biface fragment w/cortex
1	quartzite	point tip
1	quartzite	pebble, battered on edges
1	quartzite	bifacially chipped stone
1	quartzite	biface fragment, point?
1	quartzite	pebble frag w/flks removd
1	quartzite	pebble w/flakes removed
1	siltstone	tabular chunk w/peckd end
1	siltstone	possible ground stone/dbr

STATE NUMBER = 3JC034

QUAD SHEET: Clarksville
SITE TYPE: Surface scatter
LANDFORM: tt/us
CULTURAL AFFILIATION: Unknown
Archaic
EXTENT: 1000-4999m
DEPTH TO STERILE: 1 - 9cm
INTACT DEPOSITS: unlikely
PREVIOUS DISTURBANCE: Clear cut
Construction
AMOUNT OF DISTURBANCE: Major
SOIL TYPE(S): Leadvale silt loam, 1 to 3% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
3	chert/novaculite	-	a	a	
1	chert/novaculite	-	p	pu	
1	chert/novaculite	-	pf	a	
3	chert	-	a	a	
1	chert	-	a	a	hf
3	chert	-	a	ps	
2	chert	-	a	ps	
2	chert	-	p	a	mod
1	chert	-	p	a	
1	chert	-	p	ps	
1	chert	-	pf	a	
1	chert	-	pf,pc	ps	
1	chert	2b	p	a	
1	chert	2c	p	ps	mod
1	chert/novaculite	1c	p	ps	mod
3	chert	-	a	a	
2	chert	-	a	ps	
1	chert	-	a	ps	hf
1	chert	-	a	pu	
1	chert	-	p	a	
1	chert	-	p	ps	
2	chert	-	pc	ps	
1	chert	-	pf	a	
1	chert	-	pf	ps	
1	chert	2b	p	pu	

LITHIC ARTIFACTS

3JO034

NUMBER	MATERIAL	DESCRIPTION
1	chert	biface pebble
1	chert	midsection

STATE NUMBER = 3JO048

QUAD SHEET: Clarksville
SITE TYPE: Subsurface deposits
CULTURAL AFFILIATION: Woodland
DEPTH TO STERILE: 10 - 19cm
PREVIOUS DISTURBANCE: Clear cut
Shore Erosion
Construction
LANDFORM: tt
EXTENT: >10,000m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Major
SOIL TYPE(S): Mckamie silt loam, 3 to 8% slopes
Nella-Enders association, rolling
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	a	a	
1	chert/novaculite	1c	a	pu	mod
1	chert	-	a	a	mod
1	chert	-	a	a	hf
3	chert	-	a	a	
1	chert	-	a	a	
1	chert	-	a	a	hf
1	chert	-	a	a	
1	chert	-	a	pu	
1	chert	-	a	pu	hf
1	chert	-	p	a	
1	chert	-	p	a	mod
1	chert	-	p	ps	
1	chert	-	pc	ps	mod
1	chert	-	pc	ps	
1	chert	-	pf	a	mod
1	chert	1b	p	a	
1	chert	1c	pf,pc	ps	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	biface, hf
1	chert	biface fragment
1	chert	point stem, Gary
1	chert	biface, shoulder

STATE NUMBER = 3JO227

QUAD SHEET: Clarksville
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: Unknown
PREVIOUS DISTURBANCE: Construction
SOIL TYPE(S): Mckamie silt loam, 3 to 8% slopes
REMARKS:

LANDFORM: tt
EXTENT: 1000-4999m
INTACT DEPOSITS: unable to est.
AMOUNT OF DISTURBANCE: Major

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert	-	a	a	
1	chert	-	a	ps	
1	chert	-	pf	a	
1	chert	lc	p	a	mod
1	chert	lc	pf	ps	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	fragment w/scars

STATE NUMBER = 3JO228

QUAD SHEET: Clarksville
SITE TYPE: Unspecified
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: Unknown
PREVIOUS DISTURBANCE: Clear cut
Construction
LANDFORM: tt
EXTENT: 1000-4999m
INTACT DEPOSITS: unable to est.
AMOUNT OF DISTURBANCE: Major
SOIL TYPE(S): Mckamie silt loam, 3 to 8% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
3	chert/novaculite	-	a	a	
1	chert/novaculite	-	p	a	
1	chert	-	a	a	mod, hf
1	chert	-	a	a	mod
2	chert	-	a	a	hf
2	chert	-	a	a	
1	chert	-	a	a	mod tool
2	chert	-	p	a	
1	chert	-	p	ps	
2	chert	-	pf	a	
1	chert	2b	p	ps	
1	chert	2b	pf	a	mod
1	chert	2c	pf	a	
1	chert	3b	p	a	
1	chert	3c	pf,pw	ps	mod
1	quartzite	-	a	a	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	fragment
1	chert	point stem fragment
1	chert	biface flake, tool
1	chert	stem point
1	chert	stem point, Ensor?

STATE NUMBER = 3JO229

QUAD SHEET: Clarksville
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Construction
SOIL TYPE(S): Mckamie silt loam, 3 to 8% slopes
REMARKS:

LANDFORM: tt
EXTENT: 1000-4999m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Major

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	a	a	
1	chert/novaculite	-	a	a	mod
1	chert/novaculite	-	a	ps	
2	chert	-	a	a	
2	chert	-	pc	ps	
2	chert	-	pf	ps	
1	chert	2b	p	pu	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	biface w/cortex

STATE NUMBER = 3JO230

QUAD SHEET: Clarksville
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Clear cut
Construction
LANDFORM: tt
EXTENT: 1000-4999m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Major
SOIL TYPE(S): Mckamie silt loam, 3 to 8% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
3	chert/novaculite	-	a	a	
1	chert/novaculite	-	p	a	
1	chert/novaculite	-	pf	a	
1	chert/novaculite	2b	p	pu	
2	chert	-	a	a	mod
1	chert	-	a	a	
4	chert	-	a	ps	
1	chert	-	a	pu	
1	chert	-	p	a	
1	chert	-	p	ps	
1	chert	-	pf	a	mod
1	chert	1b	p	ps	
1	chert	2b	p	a	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert/novaculite	point stem fragment
1	chert	pebble, scar and modified
1	chert	biface pebble

STATE NUMBER = 3JO231

QUAD SHEET: Clarksville
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Construction
SOIL TYPE(S): Mckamie silt loam, 3 to 8% slopes
REMARKS:

LANDFORM: tt
EXTENT: 1000-4999m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Major

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
6	chert/novaculite	-	a	a	
1	chert/novaculite	-	a	a	hf
1	chert	-	a	a	mod
1	chert	-	a	ps	mod
1	chert	-	a	ps	hf
3	chert	-	a	ps	
1	chert	-	a	pu	
2	chert	-	p	ps	
1	chert	-	pc	ps	
1	chert	-	pf	ps	
1	chert	lc	a	a	drp

STATE NUMBER = 3JO232

QUAD SHEET: Clarksville
SITE TYPE: Subsurface deposits
CULTURAL AFFILIATION: Archaic
DEPTH TO STERILE: 50 - 100cm
PREVIOUS DISTURBANCE: Plowing
LANDFORM: tt
EXTENT: >10,000m
INTACT DEPOSITS: present
AMOUNT OF DISTURBANCE: Slight
SOIL TYPE(S): Nella-Mountainburg association, rolling
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	a	a	
2	chert/novaculite	-	a	a	
1	chert/novaculite	1a	p	a	
1	chert/novaculite	2a	p	a	
3	chert	-	a	a	
1	chert	-	a	a	hf
1	chert	-	a	a	
2	chert	-	a	a	
2	chert	-	a	a	hf
4	chert	-	a	a	
3	chert	-	a	ps	
2	chert	-	p	a	
2	chert	-	p	ps	
1	chert	-	pc	ps	
1	chert	-	pf	ps	
1	chert	1b	p	ps	
1	chert	1b	p	ps	
1	chert	1c	p	pu	
1	chert	1c	pc	ps	
1	chert	1c	pc	ps	
1	chert	1d	p	ps	
1	chert	2b	p	ps	
1	chert	2b	pc	ps	
1	chert	3a	pf	a	bipolr flk
1	chert	3b	p	a	
1	chert	3b	p	ps	
1	chert	3b	pc	ps	

LITHIC ARTIFACTS

3JO232

NUMBER	MATERIAL	DESCRIPTION
1	chert	biface point, shoulder
1	chert	biface pebble w/cortex
1	chert	fragment w/flake scars
2	siltstone/quartzite	poss. ground stone frag
1	siltstone	poss. ground stone frag

STATE NUMBER = 3JO233

QUAD SHEET: Clarksville
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Clear cut
Construction
LANDFORM: tt
EXTENT: 1000-4999m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Major
SOIL TYPE(S): Linker fine sandy loam, 3 to 8% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert	-	a	a	mod
1	chert	-	a	a	ht, mod
1	chert	-	a	ps	
1	chert	-	pc	ps	mod
1	chert	lc	a	a	hf, mod
1	chert	lc	p	ps	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	point end
1	chert	biface stem or end

STATE NUMBER = 3JO234

QUAD SHEET: Knoxville
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Archaic
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Clear cut
Construction
LANDFORM: us
EXTENT: 1000-4999m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Major
SOIL TYPE(S): Mountainburg stony fine sandy loam, 1 to 12% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	2b	a	a	bipolr flk
2	chert	-	a	a	mod
2	chert	-	a	a	
3	chert	-	a	ps	
2	chert	-	a	ps	mod
1	chert	-	a	ps	hf, mod
1	chert	-	a	pu	mod
2	chert	-	p	a	mod
1	chert	-	p	a	hf
2	chert	-	p	a	
1	chert	-	p	ps	
1	chert	-	pf	pu	drp, mod
1	chert	-	pf,pc	ps	
1	chert	1b	p	a	
1	chert	1c	a	a	mod
1	chert	1c	p	a	
1	chert	1c	p	a	drp
1	chert	1c	pf	ps	bipolr flk
1	chert	1d	pc	ps	
1	chert	2b	p	ps	bipolr flk
1	chert	2c	p	ps	mod
1	quartzite	-	a	pu	drp

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	point, Gary, hf
1	chert	pebble w/ scars, hf

STATE NUMBER = 3JO235

QUAD SHEET: Knoxville
SITE TYPE: Surface scatter
LANDFORM: us
CULTURAL AFFILIATION: Unknown
EXTENT: 1000-4999m
DEPTH TO STERILE: 1 - 9cm
INTACT DEPOSITS: unlikely
PREVIOUS DISTURBANCE: Construction
AMOUNT OF DISTURBANCE: Major
SOIL TYPE(S): Mountainburg stony fine sandy loam, 1 to 12% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
2	chert/novaculite	-	a	a	
1	chert/novaculite	-	a	a	mod
3	chert	-	a	a	mod
4	chert	-	a	a	
4	chert	-	a	ps	mod
4	chert	-	a	ps	
2	chert	-	p	a	
2	chert	-	pc	ps	
1	chert	-	pf	ps	
1	chert	1c	pf	ps	
1	chert	2c	p	ps	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	siltstone	possibly pecked

STATE NUMBER = 3JO236

QUAD SHEET: Knoxville
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Clear cut
Construction
LANDFORM: us
EXTENT: 1000-4999m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Major
SOIL TYPE(S): Mountainburg stony fine sandy loam, 1 to 12% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	p	a	
1	chert/novaculite	-	pf	a	
1	chert	-	a	a	mod
2	chert	-	a	a	
1	chert	-	a	a	
1	chert	-	a	ps	drp
1	chert	-	p	ps	
1	chert	-	pc	ps	bipolr flk
1	chert	lb	p	a	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert/novaculite	point tip
1	chert	fragment w/scars, hf
1	chert	biface frag, modified
1	chert	fragment w/modified edge

STATE NUMBER = 3JO237

QUAD SHEET: Knoxville
SITE TYPE: Surface scatter LANDFORM: tt
CULTURAL AFFILIATION: Unknown EXTENT: 100 - 499m
DEPTH TO STERILE: 1 - 9cm INTACT DEPOSITS: none
PREVIOUS DISTURBANCE: Shore Erosion AMOUNT OF DISTURBANCE: Major
SOIL TYPE(S): Shubuta gravelly fine sandy loam, moderately steep PH
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
3	chert/novaculite	-	a	a	
1	chert/novaculite	-	p	a	mod
5	chert	-	a	a	
1	chert	-	a	a	hf
1	chert	-	a	ps	
1	chert	-	p	ps	

STATE NUMBER = 3JO238

QUAD SHEET: Knoxville
SITE TYPE: Subsurface deposits
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 10 - 19cm
PREVIOUS DISTURBANCE: Clear cut
LANDFORM: tt
EXTENT: 1000-4999m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Major
SOIL TYPE(S): Mountainburg gravelly fine sandy loam, 3 to 12% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert	-	a	a	hf
1	chert	-	a	a	mod
1	chert	-	a	a	
1	chert	-	a	ps	
1	chert	-	p	a	
1	chert	-	pf	a	
1	chert	2b	p	pu	
1	chert	2b	pf	a	
1	chert	2b	pf	ps	

STATE NUMBER = 3JO239

QUAD SHEET: Hartman
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Construction
LANDFORM: tt
EXTENT: 1000-4999m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Major
SOIL TYPE(S): Nella-Enders association, steep
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
4	chert/novaculite	-	a	a	
1	chert/novaculite	-	pf	a	
3	chert	-	a	a	
1	chert	-	a	a	mod
1	chert	-	pc	ps	

STATE NUMBER = 3JO240

QUAD SHEET: Hartman
SITE TYPE: Surface scatter LANDFORM: tt
CULTURAL AFFILIATION: Mississippian EXTENT: 1000-4999m
DEPTH TO STERILE: 1 - 9cm INTACT DEPOSITS: unlikely
PREVIOUS DISTURBANCE: Plowing AMOUNT OF DISTURBANCE: Major
Construction
SOIL TYPE(S): Mckamie silt loam, 3 to 8% slopes
Morganfield silt loam
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	a	a	
1	chert/novaculite	1b	p	a	
3	chert	-	a	a	
1	chert	-	a	ps	
1	chert	-	a	pu	hf

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	point stem

STATE NUMBER = 3JO241

QUAD SHEET: Hartman
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Plowing
SOIL TYPE(S): Mckamie silt loam, 3 to 8% slopes
REMARKS:

LANDFORM: tt
EXTENT: 1000-4999m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Major

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
2	chert/novaculite	-	a	a	
1	chert/novaculite	1b	pf	a	
3	chert	-	a	a	
1	chert	-	a	ps	
3	chert	-	a	ps	
1	chert	-	a	ps	hf
1	chert	-	a	pu	
6	chert	-	p	a	
1	chert	-	p	pu	hf
1	chert	-	pc	ps	
1	chert	-	pf	a	
1	chert	1b	p	a	
1	chert	1c	p	ps	
1	chert	1c	pc	ps	mod
1	chert	2b	p	ps	
1	chert	2b	pc	pu	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert/novaculite	point, Reed
1	siltstone/quartzite	chunk, scarred

STATE NUMBER = 3LO011

QUAD SHEET: Hartman
SITE TYPE: Subsurface deposits
CULTURAL AFFILIATION: Archaic
Woodland
Mississippian
LANDFORM: At
EXTENT: >10,000m
DEPTH TO STERILE: 1 - 9cm
INTACT DEPOSITS: unlikely
PREVIOUS DISTURBANCE: Clear cut
Plowing
Vandalism
AMOUNT OF DISTURBANCE: Major
SOIL TYPE(S): Muskogee silt loam, 1 to 3% slopes
Mckamie silt loam, 3 to 8% slopes
REMARKS: Mounds

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
• 1	chert/novaculite	-	a	a	
1	chert/novaculite	-	p	a	
1	chert/novaculite	-	pf	a	
1	chert/novaculite	2a	pf	a	
1	chert/novaculite	3a	a	a	
1	chert	-	a	a	
1	chert	-	a	a	
1	chert	-	a	ps	
1	chert	-	a	pu	hf
1	chert	1c	p	ps	mod

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	siltstone/quartzite	cupstone, pecked & ground

STATE NUMBER = 3LO012

QUAD SHEET: Hartman
SITE TYPE: Subsurface deposits
CULTURAL AFFILIATION: Archaic
Woodland
Mississippian
LANDFORM: tu-n
EXTENT: >10,000m
DEPTH TO STERILE: 50 - 100cm
INTACT DEPOSITS: present
PREVIOUS DISTURBANCE: Clear cut
Plowing
Shore Erosion
Construction
AMOUNT OF DISTURBANCE: Moderate
SOIL TYPE(S): Roxana silt loam, 0 to 1% slopes
Roellen silty clay, 0 to 1% slopes
Mckamie silt loam, 3 to 8% slopes
REMARKS: priv.coll.exts

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
2	chert/novaculite	-	a	a	
3	chert/novaculite	-	p	a	
1	chert/novaculite	-	p	a	
1	chert/novaculite	-	p	a	
3	chert	-	a	a	
1	chert	-	a	a	
1	chert	-	a	a	
2	chert	-	a	ps	
1	chert	-	a	ps	
1	chert	-	p	a	
1	chert	-	p	a	
1	chert	-	p	ps	mod
1	chert	-	p	ps	
1	chert	-	p	ps	
1	chert	-	pc	ps	
1	chert	-	pf	a	
1	chert	-	pf	ps	
1	chert	-	pf	pu	
1	chert	1d	pc	ps	hf
1	chert	1d	pc	ps	mod
1	chert	2b	pc	ps	mod
1	chert	2c	pf	ps	mod
1	chert	3b	pc	ps	
1	chert	3c	p	ps	mod

3LO012

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	a	a	
1	chert/novaculite	-	pf	a	
1	chert	-	a	a	
1	chert	-	a	a	
2	chert	-	a	a	
1	chert	-	a	a	hf
1	chert	-	a	a	hf, mod
1	chert	-	a	ps	
1	chert	-	a	ps	
2	chert	-	a	ps	
1	chert	-	a	pu	
1	chert	-	p	a	mod
1	chert	-	p	a	
1	chert	-	p	a	
1	chert	-	p	a	
1	chert	-	pc	ps	
1	chert	-	pf	a	
1	chert	-	pf	ps	
1	chert	-	pw	pu	
1	chert	1b	p	a	
1	chert	1c	p	ps	
1	chert	1c	p	ps	
1	chert	1c	pc	ps	
1	chert	2b	p	pu	
1	chert	2b	pc	ps	
1	chert	3b	p	a	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
2	chert	biface pebble
1	chert	biface pebble, hf
1	quartzite	cupstone, pecked, ground?

PREHISTORIC CERAMICS

NUMBER	TEMPER	DESCRIPTION
1	shell	body sherd,shell leached
1	shell	notched rim sherd, gray
1	shell	body sherd, shell leached

HISTORIC ARTIFACTS

3LO012

NUMBER	DESCRIPTION
1	earthenware,white glazed
1	whiteware body sherd
1	earthenware body sherd
1	clear window glass sherd

STATE NUMBER = 3LO126

QUAD SHEET: Delaware
SITE TYPE: Subsurface deposits
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 20 - 29cm
PREVIOUS DISTURBANCE: Clear cut
SOIL TYPE(S): Cane fine sandy loam, 3 to 8% slopes
Leadvale silt loam, 1 to 3% slopes
REMARKS:

LANDFORM: us
EXTENT: 1000-4999m
INTACT DEPOSITS: unable to est.
AMOUNT OF DISTURBANCE: Moderate

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	a	a	
1	chert/novaculite	-	a	a	
3	chert	-	a	a	
2	chert	-	a	a	
1	chert	-	a	a	
1	chert	-	a	a	
1	chert	-	a	a	mod
2	chert	-	a	a	
2	chert	-	a	a	hf
3	chert	-	a	a	
1	chert	-	a	ps	hf
1	chert	-	a	ps	hf
1	chert	-	a	ps	
1	chert	-	a	ps	hf, mod
1	chert	-	a	ps	
1	chert	-	p	a	
1	chert	-	p	a	
3	chert	-	p	a	
1	chert	-	p	ps	
1	chert	-	p	ps	
1	chert	-	pc	ps	
1	chert	lc	p	ps	
1	chert	lc	p	pu	
1	chert	lc	pf,pc	pu	mod

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	biface pebble

HISTORIC ARTIFACTS

3LO126

NUMBER	DESCRIPTION
4	clear vessel glass frags
1	clear glass, window frag?

STATE NUMBER = 3LO127

QUAD SHEET: Delaware
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Clear cut
Plowing
LANDFORM: us
EXTENT: 1000-4999m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Major
SOIL TYPE(S): Cane fine sandy loam, 3 to 8% slopes
Leadvale silt loam, 1 to 3% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert	-	a	a	mod
1	chert	-	a	a	
1	chert	-	a	ps	mod
1	chert	-	a	ps	
1	chert	-	p	ps	drp
1	chert	-	pc	ps	hf, drp
1	chert	-	pf	a	mod, hf
1	chert	-	pf	a	
1	chert	1c	a	ps	
1	chert	1d	p	pu	
1	chert	2d	pc	ps	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	heat spall, mod, w/cortex
2	chert	pebble fragment, scarred
1	chert	point midsection
1	chert	point tip or stem?
1	quartzite	biface fragment
1	siltstone/quartzite	pecked & possibly ground

STATE NUMBER = 3LO128

QUAD SHEET: Delaware
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Clear cut
SOIL TYPE(S): Cane fine sandy loam, 3 to 8% slopes
Leadvale silt loam, 1 to 3% slopes
REMARKS:

LANDFORM: us
EXTENT: 1000-4999m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Major

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	a	a	
1	chert	-	pf	a	hf
1	chert	2b	pc	ps	

STATE NUMBER = 3LO129

QUAD SHEET: Delaware
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Clear cut
SOIL TYPE(S): Cane fine sandy loam, 3 to 8% slopes
Leadvale silt loam, 1 to 3% slopes
REMARKS:

LANDFORM: us
EXTENT: 1000-4999m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Moderate

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert	-	a	a	mod

STATE NUMBER = 3LO130

QUAD SHEET: Delaware
SITE TYPE: Subsurface deposits
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 10 - 19cm
PREVIOUS DISTURBANCE: Clear cut
Construction
LANDFORM: us
EXTENT: 1000-4999m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Major
SOIL TYPE(S): Cane fine sandy loam, 3 to 8% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert	-	a	a	
1	chert	-	a	pu	
1	chert	-	p	ps	
1	chert	2c	pc	ps	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	biface fragment, hf

STATE NUMBER = 3LO131

QUAD SHEET: Delaware
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
Historic
DEPTH TO STERILE: Unknown
PREVIOUS DISTURBANCE: Plowing
SOIL TYPE(S): Cane fine sandy loam, 3 to 8% slopes
REMARKS:

LANDFORM: us
EXTENT: 1000-4999m
INTACT DEPOSITS: unable to est.
AMOUNT OF DISTURBANCE: Unknown

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert	-	a	a	hf

HISTORIC ARTIFACTS

NUMBER	DESCRIPTION
1	white rim sherd, molded
1	white earthenware body sh
1	porcelain rim sherd, blue
1	body sherd matching above
1	milk white canning lid
1	brown glass base sherd

STATE NUMBER = 3LO132

QUAD SHEET: New Blaine
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
Historic
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Plowing
SOIL TYPE(S): Spadra silt loam, occasionally flooded
REMARKS:

LANDFORM: tu
EXTENT: 1000-4999m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Moderate

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	a	a	
1	chert/novaculite	-	a	a	hf
2	chert/novaculite	-	pf,p	a	
1	chert/novaculite	1b	p	a	
4	chert	-	a	a	
1	chert	-	a	a	
1	chert	-	a	a	hf,gizzdst
2	chert	-	a	ps	
1	chert	-	p	ps	
1	chert	-	p	ps	mod
1	chert	-	pc	ps	
1	chert	-	pc	ps	mod
1	chert	-	pf	a	
1	chert	1b	p	a	
2	chert	1b	p	ps	
1	chert	1c	pc	ps	
1	chert	3b	pf,pc	ps	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	siltstone/quartzite	pebble, poss. grnd & pckd
1	siltstone/quartzite	chunk, poss. grnd & pckd

HISTORIC ARTIFACTS

NUMBER	DESCRIPTION
1	white glazed body sherd
1	square nail

STATE NUMBER = 3LO134

QUAD SHEET: New Blaine
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Archaic
DEPTH TO STERILE: 10 - 19cm
PREVIOUS DISTURBANCE: Clear cut
Plowing
LANDFORM: tu
EXTENT: 1000-4999m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Major
SOIL TYPE(S): Barling silt loam, occasionally flooded
Spadra silt loam, occasionally flooded
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	a	a	
1	chert/novaculite	-	a	ps	
1	chert/novaculite	-	p	a	
1	chert/novaculite	-	pf	a	
1	chert/novaculite	1b	p	a	
1	chert	-	a	a	drp
3	chert	-	a	a	
3	chert	-	a	ps	
1	chert	-	a	ps	
2	chert	-	p	a	
2	chert	-	p	ps	
1	chert	-	p	pu	
2	chert	-	pc	ps	
1	chert	-	pc	pu	
1	chert	-	pf	a	
1	chert	1b	p	ps	
1	chert	1c	p	ps	
1	chert	1c	pc	ps	
1	chert	1c	pc	ps	mod
1	chert	2b	pc	ps	mod
1	chert	3c	p	ps	
1	quartzite	-	p	a	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	pebble, flakes removed
1	chert	pebble, flake scars
1	chert	biface edge
2	chert	points (Gary)
1	quartzite	fragment, modified
1	siltstone	ground and pecked frag

STATE NUMBER = 3LO135

QUAD SHEET: New Blaine
SITE TYPE: Surface scatter LANDFORM: tt
CULTURAL AFFILIATION: Unknown EXTENT: 1000-4999m
DEPTH TO STERILE: 1 - 9cm INTACT DEPOSITS: unlikely
PREVIOUS DISTURBANCE: Construction AMOUNT OF DISTURBANCE: Major
SOIL TYPE(S): Spadra silt loam, occasionally flooded
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert	-	a	a	
1	chert	-	a	ps	
1	chert	-	p	a	
1	chert	-	pf,pc	ps	
1	chert	1b	p	ps	
1	chert	3b	pcf&w	ps	

STATE NUMBER = 3LO136

QUAD SHEET: New Blaine
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Archaic
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Plowing
SOIL TYPE(S): Spadra silt loam, occasionally flooded
REMARKS:

LANDFORM: tu
EXTENT: 1000-4999m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Major

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert	-	a	a	
1	chert	-	a	a	hf
1	chert	-	p	a	
1	chert	lc	p	a	
1	chert	lc	pc	ps	mod

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	point stem (Gary)

STATE NUMBER = 3LO137

QUAD SHEET: Hartman
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Plowing
Construction
LANDFORM: At
EXTENT: 1000-4999m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Major
SOIL TYPE(S): Mckamie silt loam, 3 to 8% slopes
Roellen silty clay, 0 to 1% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
2	chert/novaculite	-	a	a	
1	chert/novaculite	-	a	a	mod
1	chert/novaculite	2a	p	a	
2	chert	-	a	a	hf
1	chert	-	a	a	mod
1	chert	-	a	a	
2	chert	-	a	ps	mod
3	chert	-	a	ps	
3	chert	-	a	ps	hf
1	chert	-	p	a	
1	chert	-	pc	ps	
2	chert	-	pf	a	
1	chert	1b	p	ps	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	biface point tip

HISTORIC ARTIFACTS

NUMBER	DESCRIPTION
1	earthenware,Albany/Bristl

STATE NUMBER = 3LO138

QUAD SHEET: Hartman
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Clear cut
SOIL TYPE(S): Mckamie silt loam, 3 to 8% slopes
REMARKS:

LANDFORM: At
EXTENT: 100 - 499m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Major

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
2	chert/novaculite	-	a	a	
1	chert	-	a	a	
1	chert	-	a	a	hf
2	chert	-	a	a	
1	chert	-	a	a	hf
1	chert	-	a	ps	
1	chert	-	p	a	
1	chert	-	p	ps	
1	chert	-	pc	ps	
1	chert	-	pf	ps	
1	chert	lc	p	ps	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	siltstone/quartzite	cupstone, pecked & ground

STATE NUMBER = 3LO139

QUAD SHEET: Hartman
SITE TYPE: Surface scatter LANDFORM: us
CULTURAL AFFILIATION: Unknown EXTENT: 1000-4999m
DEPTH TO STERILE: Unknown INTACT DEPOSITS: unlikely
PREVIOUS DISTURBANCE: Construction AMOUNT OF DISTURBANCE: Slight
SOIL TYPE(S): Linker fine sandy loam, 3 to 8% slopes
Mountainburg gravelly fine sandy loam, 3 to 8% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
2	chert/novaculite	-	a	a	
1	chert	-	a	a	hf
2	chert	-	a	ps	hf
2	chert	-	a	ps	
1	chert	-	a	pu	mod
2	chert	-	p	a	
1	chert	-	p	ps	mod
1	chert	-	p	ps	
2	chert	-	pf	a	
1	chert	-	pw	ps	
3	chert	lc	p	ps	
1	chert	lc	pf	a	
2	chert	lc	pf	ps	

STATE NUMBER = 3LO140

QUAD SHEET: Caulksville
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Clear cut
Plowing
LANDFORM: tu
EXTENT: 1000-4999m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Major
SOIL TYPE(S): Barling silt loam, occasionally flooded
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	a	a	
2	chert	-	a	a	
1	chert	-	a	ps	
1	chert	-	p	ps	
1	chert	-	pf	ps	
1	chert	1b	pf	a	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	point midsection
1	quartzite	pebble, pecked and ground

HISTORIC ARTIFACTS

NUMBER	DESCRIPTION
1	clear vessel glass

STATE NUMBER = 3PP057

QUAD SHEET: Russellville west
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Clear cut
Construction
LANDFORM: us
EXTENT: 1000-4999m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Major
SOIL TYPE(S): Mountainburg stony fine sandy loam, 12 to 65% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	a	a	mod
1	chert/novaculite	-	p	a	
1	chert	-	a	a	hf, mod
2	chert	-	a	a	
2	chert	-	a	a	mod
1	chert	-	pw	a	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
2	chert	point tips

STATE NUMBER = 3PP060

QUAD SHEET: Russellville west
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
Historic
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Construction
SOIL TYPE(S): Mckamie very fine sandy loam, 3 to 8% slopes
REMARKS:

LANDFORM: us
EXTENT: 1000-4999m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Moderate

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	a	a	hf
1	chert	-	a	a	
1	chert	-	a	a	hf
1	chert	-	a	ps	
1	chert	-	p	a	
1	chert	-	p	a	mod
1	chert	-	pf	ps	
1	chert	2c	pf	a	hf
1	novaculite	-	a	a	mod

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert/novaculite	biface fragment
1	chert	pebble fragment
2	chert	pebble fragment, scarred
1	chert	biface fragment
1	chert	chunk, modified
1	novaculite	biface point tip

HISTORIC ARTIFACTS

NUMBER	DESCRIPTION
1	earthenware body sherd
1	blue shell edge rim sherd

STATE NUMBER = 3PP246

QUAD SHEET: Russellville west
SITE TYPE: Surface scatter LANDFORM: us
CULTURAL AFFILIATION: Unknown EXTENT: 1000-4999m
DEPTH TO STERILE: 1 - 9cm INTACT DEPOSITS: none
PREVIOUS DISTURBANCE: Construction AMOUNT OF DISTURBANCE: Moderate
SOIL TYPE(S): Mckamie very fine sandy loam, 3 to 8% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	a	a	
1	chert/novaculite	-	a	a	mod
1	chert/novaculite	-	p	a	mod
7	chert	-	a	a	
1	chert	-	a	a	mod
1	chert	-	a	a	hf
2	chert	-	a	ps	
2	chert	-	p	a	
3	chert	-	p	ps	
3	chert	-	pc	ps	
3	chert	-	pf	a	
1	chert	lb	pf	ps	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	biface fragment
1	chert	flaked pebble
1	chert	biface end

PREHISTORIC CERAMICS

NUMBER	TEMPER	DESCRIPTION
1	clay/shell	plain body sherd

STATE NUMBER = 3PP248

QUAD SHEET: Russellville west
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Clear cut
Construction
LANDFORM: us
EXTENT: 1000-4999m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Moderate
SOIL TYPE(S): Mountainburg stony fine sandy loam, 12 to 65% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
2	chert	-	a	ps	
1	chert	-	pc	ps	mod
1	chert	-	pc	pu	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert/novaculite	biface stem?
1	chert	flaked pebble

HISTORIC ARTIFACTS

NUMBER	DESCRIPTION
1	white glazed body sherd

STATE NUMBER = 3PP249

QUAD SHEET: Russellville west
SITE TYPE: Unspecified
LANDFORM: us
CULTURAL AFFILIATION: Unknown
Mississippian
EXTENT: 100 - 499m
DEPTH TO STERILE: Unknown
INTACT DEPOSITS: unable to est.
PREVIOUS DISTURBANCE: Clear cut
Plowing
AMOUNT OF DISTURBANCE: Unknown
SOIL TYPE(S): Mountainburg stony fine sandy loam, 12 to 65% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
2	chert/novaculite	-	a	a	mod
1	chert/novaculite	-	a	ps	
1	chert/novaculite	-	p	a	
1	chert/novaculite	1b	p	a	
1	chert	-	a	a	mod
1	chert	-	a	a	hf
1	chert	-	pf	a	
1	chert	1c	a	ps	mod
1	chert	1c	p	ps	
1	quartzite	-	a	ps	
1	quartzite	-	p	a	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert/novaculite	fragment of tool (knife)
1	chert	point midsection
1	chert	point midsection, ht
2	chert	pebble, flake scars
1	chert	biface fragment, modified
1	chert	biface fragment
1	chert	stem point
1	chert	biface fragment, ht

HISTORIC ARTIFACTS

NUMBER	DESCRIPTION
1	earthenware rim, whte glz

STATE NUMBER = 3PP250

QUAD SHEET: Russellville west
SITE TYPE: Subsurface deposits
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: Unknown
PREVIOUS DISTURBANCE: Clear cut
Plowing
LANDFORM: us
EXTENT: 5000-9999m
INTACT DEPOSITS: unable to est.
AMOUNT OF DISTURBANCE: Moderate
SOIL TYPE(S): Mountainburg stony fine sandy loam, 12 to 65% slopes
Leadvale silt loam, 1 to 3% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
2	chert/novaculite	-	a	a	
3	chert/novaculite	-	p	a	
1	chert	-	a	a	
2	chert	-	a	a	hf
1	chert	-	a	a	mod, hf
2	chert	-	a	ps	hf
1	chert	-	p	a	hf
1	chert	-	pc,pf	ps	
1	chert	-	pf	ps	mod

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
2	chert	biface fragment
1	chert	stem
1	chert	biface fragment, reworked

STATE NUMBER = 3PP251

QUAD SHEET: Russellville west
SITE TYPE: Subsurface deposits
CULTURAL AFFILIATION: Unknown
Historic
LANDFORM: us
EXTENT: 1000-4999m
DEPTH TO STERILE: Unknown
INTACT DEPOSITS: unable to est.
PREVIOUS DISTURBANCE: Clear cut
Plowing
AMOUNT OF DISTURBANCE: Unknown
SOIL TYPE(S): Mountainburg stony fine sandy loam, 12 to 65% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert	-	a	ps	mod
1	chert	-	p	a	
1	chert	1d	a	ps	bipolar fl
1	chert	2c	a	ps	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert/novaculite	point fragment
1	chert	flaked pebble, scars
1	chert	Gary point
1	chert	flaked pebble, modified
1	chert	point midsection
1	chert	flake pebble
1	chert	chunk, ht
1	chert	biface with cortex

HISTORIC ARTIFACTS

3PP251

NUMBER	DESCRIPTION
1	earthenware, Albany? base
1	white earthenware ft ring
1	white semi-Vitreous sherd
1	white earthenware, decal
1	snuff can lid?
1	spoon/fork handle
1	screw top bottle neck
1	white milk canning lid
1	grn/brn bottle neck frag
1	blue vessel fragment
1	clr.vessel frag, embossed

STATE NUMBER = 3PP252

QUAD SHEET: Russellville west
SITE TYPE: Surface scatter
LANDFORM: tt
CULTURAL AFFILIATION: Unknown
EXTENT: 1000-4999m
DEPTH TO STERILE: 1 - 9cm
INTACT DEPOSITS: unlikely
PREVIOUS DISTURBANCE: Construction
Other
AMOUNT OF DISTURBANCE: Major
SOIL TYPE(S): Pickwick silt loam, 1 to 3% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
2	chert/novaculite	-	a	a	
2	chert/novaculite	-	p	a	
1	chert/novaculite	-	pf	a	
1	chert	-	a	a	
1	chert	-	a	a	mod
1	chert	-	a	ps	
1	chert	-	pf	pq	
1	chert	-	pf	ps	hf
1	chert	2c	pc	ps	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	point fragment
1	chert	biface fragment
1	chert	biface fragment, reworked

STATE NUMBER = 3PP253

QUAD SHEET: Russellville west
SITE TYPE: Subsurface deposits
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 10 - 19cm
PREVIOUS DISTURBANCE: Clear cut
Plowing
LANDFORM: tt
EXTENT: 500 - 999m
INTACT DEPOSITS: unable to est.
AMOUNT OF DISTURBANCE: Moderate
SOIL TYPE(S): Pickwick silt loam, 1 to 3% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	a	a	hf
1	chert	-	a	ps	
1	chert	lc	a	ps	mod
1	quartzite	-	p	a	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	biface fragment
1	chert	biface tool end

STATE NUMBER = 3PP254

QUAD SHEET: Russellville west
SITE TYPE: Subsurface deposits
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 20 - 29cm
PREVIOUS DISTURBANCE: Clear cut
Plowing
LANDFORM: tt
EXTENT: 1000-4999m
INTACT DEPOSITS: unable to est.
AMOUNT OF DISTURBANCE: Moderate
SOIL TYPE(S): Pickwick silt loam, 1 to 3% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	a	a	hf
1	chert	-	a	a	hf
1	chert	-	a	a	hf
1	chert	-	a	a	
1	chert	-	a	a	hf
1	chert	-	a	ps	
1	chert	-	p	a	mod

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	point tip
1	siltstone	chunk, pecked ?

STATE NUMBER = 3PP255

QUAD SHEET: Russellville west
SITE TYPE: Subsurface deposits
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 20 - 29cm
PREVIOUS DISTURBANCE: Clear cut
Plowing
LANDFORM: tt
EXTENT: 1000-4999m
INTACT DEPOSITS: present
AMOUNT OF DISTURBANCE: Moderate
SOIL TYPE(S): Pickwick silt loam, 1 to 3% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	a	a	
1	chert/novaculite	-	p	a	mod
1	chert	-	a	a	
1	chert	-	a	a	mod
1	chert	-	a	a	mod
1	chert	-	a	ps	
1	chert	-	p	a	
1	chert	-	p	a	
1	chert	-	p	a	
1	chert	-	pf	ps	
1	chert	lc	p	ps	
1	quartzite	-	a	a	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	siltstone/quartzite	pebble, pecked and ground
1	siltstone/quartzite	pebble, ground
1	siltstone	ground and pecked

STATE NUMBER = 3PP256

QUAD SHEET: Russellville west
SITE TYPE: Unspecified
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: Unknown
PREVIOUS DISTURBANCE: Other
SOIL TYPE(S): Taft silt loam, 0 to 2% slopes
REMARKS: borrow pit

LANDFORM: tu
EXTENT: 1000-4999m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Major

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
2	chert/novaculite	-	a	a	
1	chert/novaculite	-	p	a	
1	chert/novaculite	1b	p	a	
3	chert	-	a	a	
1	chert	-	a	ps	hf
1	chert	-	a	ps	
3	chert	-	p	a	
5	chert	-	pf	a	
1	chert	-	pf	ps	
1	chert	1c	pf	ps	
1	chert	2b	pf	a	mod
1	chert	2b	pf	pu	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
2	chert	biface ends
1	siltstone/quartzite	ground stone?
1	siltstone/quartzite	mano w/ pecking

STATE NUMBER = 3PP257

QUAD SHEET: Russellville west
SITE TYPE: Surface scatter
LANDFORM: us
CULTURAL AFFILIATION: Unknown
Historic
EXTENT: 1000-4999m
DEPTH TO STERILE: 1 - 9cm
INTACT DEPOSITS: unlikely
PREVIOUS DISTURBANCE: Clear cut
Construction
AMOUNT OF DISTURBANCE: Moderate
SOIL TYPE(S): Mountainburg stony fine sandy loam, 12 to 65% slopes
Nella gravelly fine sandy loam, 3 to 8% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	a	ps	
1	chert/novaculite	-	pf	a	
1	chert/novaculite	-	pf	a	mod
1	chert	-	a	a	
1	chert	-	a	a	hf
1	chert	-	p	a	
2	chert	-	p	ps	
1	chert	-	pf,pw	ps	
1	chert	1b	pf	a	
1	chert	1b	pf	pu	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	biface fragment
1	chert	biface stem

HISTORIC ARTIFACTS

NUMBER	DESCRIPTION
1	earthenware w/prple trans
1	milk whte canning lid frg

STATE NUMBER = 3PP258

QUAD SHEET: Russellville west
SITE TYPE: Subsurface deposits
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 30 - 50cm
PREVIOUS DISTURBANCE: Clear cut
SOIL TYPE(S): Spadra loam, occasionally flooded
REMARKS:

LANDFORM: tf
EXTENT: 1000-4999m
INTACT DEPOSITS: likely
AMOUNT OF DISTURBANCE: Slight

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert	-	a	a	mod
1	chert	-	a	ps	
1	chert	-	a	ps	mod
2	chert	-	p	ps	
1	chert	1b	p	a	
1	chert	2b	pc	ps	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	siltstone	cupstone, anvil?
1	siltstone	battered
1	siltstone	pecked and ground stone
1	siltstone	ground stone?

STATE NUMBER = 3PP259

QUAD SHEET: Russellville west
SITE TYPE: Subsurface deposits
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 20 - 29cm
PREVIOUS DISTURBANCE: Clear cut
SOIL TYPE(S): Spadra loam, occasionally flooded
REMARKS:

LANDFORM: tf
EXTENT: 1000-4999m
INTACT DEPOSITS: likely
AMOUNT OF DISTURBANCE: Slight

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert	-	a	a	
1	chert	-	p	a	
1	chert	-	p	ps	hf

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
2	siltstone	ground?
1	siltstone	mano frag, peck & ground
2	siltstone	ground?

STATE NUMBER = 3PP260

QUAD SHEET: Russellville west
SITE TYPE: Subsurface deposits LANDFORM: tf
CULTURAL AFFILIATION: Unknown EXTENT: 1000-4999m
DEPTH TO STERILE: 20 - 29cm INTACT DEPOSITS: likely
PREVIOUS DISTURBANCE: Construction AMOUNT OF DISTURBANCE: Slight
SOIL TYPE(S): Spadra loam, occasionally flooded
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert	-	a	a	
1	chert	-	a	a	
1	chert	-	a	a	hf
1	chert	-	a	a	mod
1	chert	-	a	a	mod
1	chert	-	a	a	
1	chert	-	a	ps	mod
1	chert	-	a	ps	
1	chert	-	p	a	
1	chert	-	pf	ps	
1	chert	2a	p	a	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	siltstone	ground stone fragment
1	siltstone	ground and pecked ?
1	siltstone	ground stone fragment
1	siltstone	ground stone fragment ?
1	siltstone	ground stone fragment

STATE NUMBER = 3PP261

QUAD SHEET: Russellville west
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Clear cut
Construction
LANDFORM: tf
EXTENT: 1000-4999m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Major
SOIL TYPE(S): Enders stony fine sandy loam, 12 to 45% slopes
Mountainburg stony fine sandy loam, 12 to 65% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert	-	a	ps	mod
1	chert	-	p	ps	
1	chert	-	pf	a	
1	chert	lc	p	a	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	biface stem point, Gary

STATE NUMBER = 3PP262

QUAD SHEET: Russellville west
SITE TYPE: Subsurface deposits LANDFORM: tf
CULTURAL AFFILIATION: Woodland EXTENT: 1000-4999m
Mississippian
DEPTH TO STERILE: 30 - 50cm INTACT DEPOSITS: likely
PREVIOUS DISTURBANCE: Clear cut AMOUNT OF DISTURBANCE: Slight
SOIL TYPE(S): Spadra loam, occasionally flooded
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert	-	a	ps	
1	chert	-	a	pu	mod
1	chert	-	pc	pu	hf
1	chert	-	pf	a	

PREHISTORIC CERAMICS

NUMBER	TEMPER	DESCRIPTION
1	clay	body sherd
1	shell	body sherd, shell leached

STATE NUMBER = 3PP263

QUAD SHEET: Russellville west
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: Unknown
PREVIOUS DISTURBANCE: Clear cut
Construction
LANDFORM: us
EXTENT: 100 - 499m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Moderate
SOIL TYPE(S): Mountainburg gravelly fine sandy loam, 3 to 8% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	p	a	
2	chert	-	a	a	
1	chert	-	a	a	hf
1	chert	-	a	pu	
1	quartzite	-	pc	ps	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	point stem/midsection

STATE NUMBER = 3PP264

QUAD SHEET: Russellville west
SITE TYPE: Surface scatter
LANDFORM: us
CULTURAL AFFILIATION: Unknown
EXTENT: 100 - 499m
DEPTH TO STERILE: Unknown
INTACT DEPOSITS: unlikely
PREVIOUS DISTURBANCE: Clear cut
AMOUNT OF DISTURBANCE: Slight
SOIL TYPE(S): Mountainburg gravelly fine sandy loam, 3 to 8% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	a	a	
1	chert/novaculite	-	a	a	
1	chert/novaculite	-	p	a	
1	chert/novaculite	1b	p	a	
1	chert/novaculite	2b	p	a	
1	chert	-	a	a	mod
1	chert	-	a	a	
1	chert	-	a	ps	hf
1	chert	-	p	ps	
1	chert	-	pc	pu	mod

STATE NUMBER = 3SB096

QUAD SHEET: Lavaca
SITE TYPE: Other
CULTURAL AFFILIATION: Historic
DEPTH TO STERILE: Unknown
PREVIOUS DISTURBANCE: Other
LANDFORM: upland
EXTENT: 10 - 99m
INTACT DEPOSITS: unable to est.
AMOUNT OF DISTURBANCE: Major
SOIL TYPE(S): Enders silt loam, 8 to 12% slopes
REMARKS: structure

STATE NUMBER = 3SB097

QUAD SHEET: Lavaca
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: 1 - 9cm
PREVIOUS DISTURBANCE: Construction
SOIL TYPE(S): Severn silt loam
REMARKS:

LANDFORM: tu
EXTENT: 10 - 99m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Major

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	a	ps	
1	chert/novaculite	-	p	a	
1	chert	ld	a	ps	mod

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	pebble w/edge mod.
1	unidentified	pebble w/edge mod.

STATE NUMBER = 3SB098

QUAD SHEET: Lavaca
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: Unknown
PREVIOUS DISTURBANCE: Other
LANDFORM: upland
EXTENT: Unknown
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Major
SOIL TYPE(S): Enders silt loam, 8 to 12% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
2	chert/novaculite	-	a	a	
1	chert/novaculite	-	p	a	
1	chert/novaculite	2b	pc	ps	
6	chert	-	a	a	
2	chert	-	a	ps	
1	chert	-	a	ps	mod
2	chert	-	pc	ps	
1	chert	-	pc	ps	mod
1	chert	-	pc	ps	
1	chert	-	pf	a	
1	chert	1d	p	ps	mod
1	chert	2c	pc	ps	
1	chert	3b	p	ps	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	biface tool fragment

STATE NUMBER = 3SB099

QUAD SHEET: Mulberry
SITE TYPE: Surface scatter LANDFORM: us
CULTURAL AFFILIATION: Unknown EXTENT: 1000-4999m
DEPTH TO STERILE: 1 - 9cm INTACT DEPOSITS: none
PREVIOUS DISTURBANCE: Construction AMOUNT OF DISTURBANCE: Major
Other
SOIL TYPE(S): Mountainburg sandy loam, 3 to 12% slopes
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	a	ps	
1	chert	-	a	a	
1	chert	-	a	a	hf
1	chert	-	a	ps	
1	chert	-	p	ps	mod
1	chert	-	p	ps	hf, mod

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	biface, broken
1	chert	point stem ?

HISTORIC ARTIFACTS

NUMBER	DESCRIPTION
1	earthenware,blue transfer

STATE NUMBER = 3YE290

QUAD SHEET: Delaware
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: Unknown
PREVIOUS DISTURBANCE: Clear cut
Construction
LANDFORM: us
EXTENT: 100 - 499m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Moderate
SOIL TYPE(S):
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	p	a	
1	chert/novaculite	-	pf	a	
6	chert	-	a	a	
1	chert	-	a	a	hf
4	chert	-	a	ps	
3	chert	-	p	a	
2	chert	-	pc	ps	
1	chert	-	pc,pf	ps	
1	chert	-	pf	a	
2	chert	-	pf	ps	
1	chert	lc	p	ps	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	biface pebble

STATE NUMBER = 3YE291

QUAD SHEET: Delaware
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: Unknown
PREVIOUS DISTURBANCE: Clear cut
Construction
LANDFORM: us
EXTENT: 10 - 99m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Moderate
SOIL TYPE(S):
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert	-	a	a	
2	chert	-	a	ps	
1	chert	-	p	ps	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert/novaculite	biface fragment

STATE NUMBER = 3YE292

QUAD SHEET: Delaware
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: Unknown
PREVIOUS DISTURBANCE: Clear cut
Construction
LANDFORM: us
EXTENT: 100 - 499m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Moderate
SOIL TYPE(S):
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
4	chert	-	a	ps	
1	chert	-	a	ps	mod
1	chert	-	a	pu	
1	chert	-	p	ps	
1	chert	1b	p	pu	
1	chert	1b	pf	a	
2	chert	1b	pf	ps	

HISTORIC ARTIFACTS

NUMBER	DESCRIPTION
1	white earth. w/makers mrk
1	white earthenware rim
1	earthenware,Albany/Bristl
1	white earthen. hndle atch

STATE NUMBER = 3YE293

QUAD SHEET: Delaware
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
DEPTH TO STERILE: Unknown
PREVIOUS DISTURBANCE: Clear cut
Construction
LANDFORM: us
EXTENT: 1000-4999m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Moderate
SOIL TYPE(S):
REMARKS:

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert/novaculite	-	a	pu	
1	chert/novaculite	-	p	a	
2	chert	-	a	a	mod
9	chert	-	a	a	
5	chert	-	a	a	hf
11	chert	-	a	ps	
1	chert	-	a	pu	hf
1	chert	-	a	pu	
3	chert	-	p	a	
1	chert	-	p	a	hf
3	chert	-	p	ps	
1	chert	-	p	pu	
1	chert	-	pf	a	
2	chert	-	pf	ps	
1	chert	1b	p	a	
1	chert	1c	p	a	
1	chert	1c	pf	ps	
1	chert	2b	a	ps	mod
1	chert	2b	p	a	
1	chert	2b	p	ps	drp,bplrfl
1	chert	2c	p	ps	
1	chert	2c	pc	ps	drp,mdtool
1	chert	2c	pf	a	
1	chert	2c	pf	ps	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert/novaculite	biface fragment
1	chert	pebble fragment
1	chert	biface pebble w/cortex
1	chert	biface flake, modified

STATE NUMBER = 3YE294

QUAD SHEET: Delaware
SITE TYPE: Surface scatter
CULTURAL AFFILIATION: Unknown
Historic
DEPTH TO STERILE: Unknown
PREVIOUS DISTURBANCE: Clear cut
Construction
SOIL TYPE(S):
REMARKS:

LANDFORM: us
EXTENT: 1000-4999m
INTACT DEPOSITS: unlikely
AMOUNT OF DISTURBANCE: Moderate

FLAKES RECOVERED

NUMBER	MATERIAL	SIZE	PLATFORM	CORTEX	NOTES
1	chert	-	a	a	mod
2	chert	-	a	a	
1	chert	-	a	a	hf
4	chert	-	a	ps	mod
1	chert	-	a	ps	hf
2	chert	-	a	ps	
1	chert	-	a	pu	
1	chert	-	a	pu	hf
1	chert	-	p	ps	
2	chert	-	pc	ps	
1	chert	-	pc	pu	mod
2	chert	-	pf	a	

LITHIC ARTIFACTS

NUMBER	MATERIAL	DESCRIPTION
1	chert	point tip
1	chert	biface fragment

HISTORIC ARTIFACTS

3YE294

NUMBER	DESCRIPTION
1	flow blue body sherd
2	hand painted body sherd
1	shell edge fragment
1	white earthen. w/red tran
1	white earthen. w/blue trn
1	white earthen. w/blue trn
1	white earthenware sherd
2	purpled glass body sherds
1	brown glass body sherd