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NATIONAL REGISTER OF HISTORIC PLACES SIGNIFICANCE TESTING
AT SIX SITES (2350: 459, 465, 471, 496, 497, AND 500)
IN THE CASTOR RIVER ENLARGEMENT PROJECT, STODDARD COUNTY, MISSOURI

by

Robert H. Lafferty III

Carol S. Spears

Michael C. Sierzchula

September 16, 1985

Report prepared by Mid-Continental Research Associates
for the Memphis District, Corps of Engineers in accordance with
Purchase Order No. DACW66-85-M-0444

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ABSTRACT

Archeological testing for National Register of Historic Places (NRHP) significance was conducted at six cultural resources in the Castor River Enlargement Project. These six sites were reported as prehistoric sites in the survey done by the late Iroquois Research Institute (IRI 1978). The Mid-Continental Research Associates testing program resulted in the identification of a previously unreported historic component at site 23S0465 and a more precise definition of components present at all of the other sites. Two of the sites (23S0465 and 23S0496) are significant in terms of the NRHP's criteria, and therefore eligible for listing on the National Register, and four sites are not significant (23S0459, 23S0471, 23S0497 and 23S0500). No further archeological work is recommended for the insignificant sites (23S0459, 23S0471, 23S0497, and 23S0500). The significant sites (23S0465 and 23S0496) should either be avoided or the impact mitigated by a data recover program before impact.

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CHAPTER 1

INTRODUCTION

by

Robert H. Lafferty III

The Castor River Testing Project (CRTP) was carried out by Mid-Continental Research Associates (MCRA) for the Memphis District, Corps of Engineers (COE). The purpose of the project was to test six cultural resources for significance in terms of the National Register of Historic Places (NRHP) Criteria specified in 36 CFR 60 (Federal Register 1976:1595). This will keep the COE in compliance with the Federal laws and regulations designed to protect these fragile and often subtle resources.

Important laws and regulations governing these tasks include: National Historic Preservation Act of 1966 (P. L. 89-665); The National Environment Policy Act of 1969; Executive Order 11593, "Protection and Enhancement of the Cultural Environment," (Federal Register 1971:3921); Preservation of Historic and Archeological Data, 1974 (P.L. 93-291); and the President's Advisory Council on Historic Preservation's "Procedures for the Protection of Historic and Cultural Properties (36 CFR 8, Part 800 [Federal Register 1976). These laws and regulations have been operationalized in Missouri (Weichman 1978a, 1978b) and mandate that archeological and historic properties be identified and tested before any project using federal funds are consummated and if significant properties are identified that a plan be developed to mitigate the project impacts. The CRTP tested six cultural resources identified in the Phase I survey and testing project conducted by Iroquois Research Institute (IRI 1978a). This report presents the activities carried out on the Phase II testing project, assesses the significance of the resources and makes recommendations to mitigate the impact on the significant resources.

PROJECT LOCATION

The Castor River Enlargement is located in the center of Stoddard County, Missouri (Figure 1). At this location the Castor River has cut through Crowley's Ridge joining the Western and Eastern Lowlands of the Mississippi River. This has resulted in a slow rate of incision and deposition, which have important implications for the nature of the archeological resources (Chapter 2). Crowley's ridge has been an important land transportation

INTRODUCTION

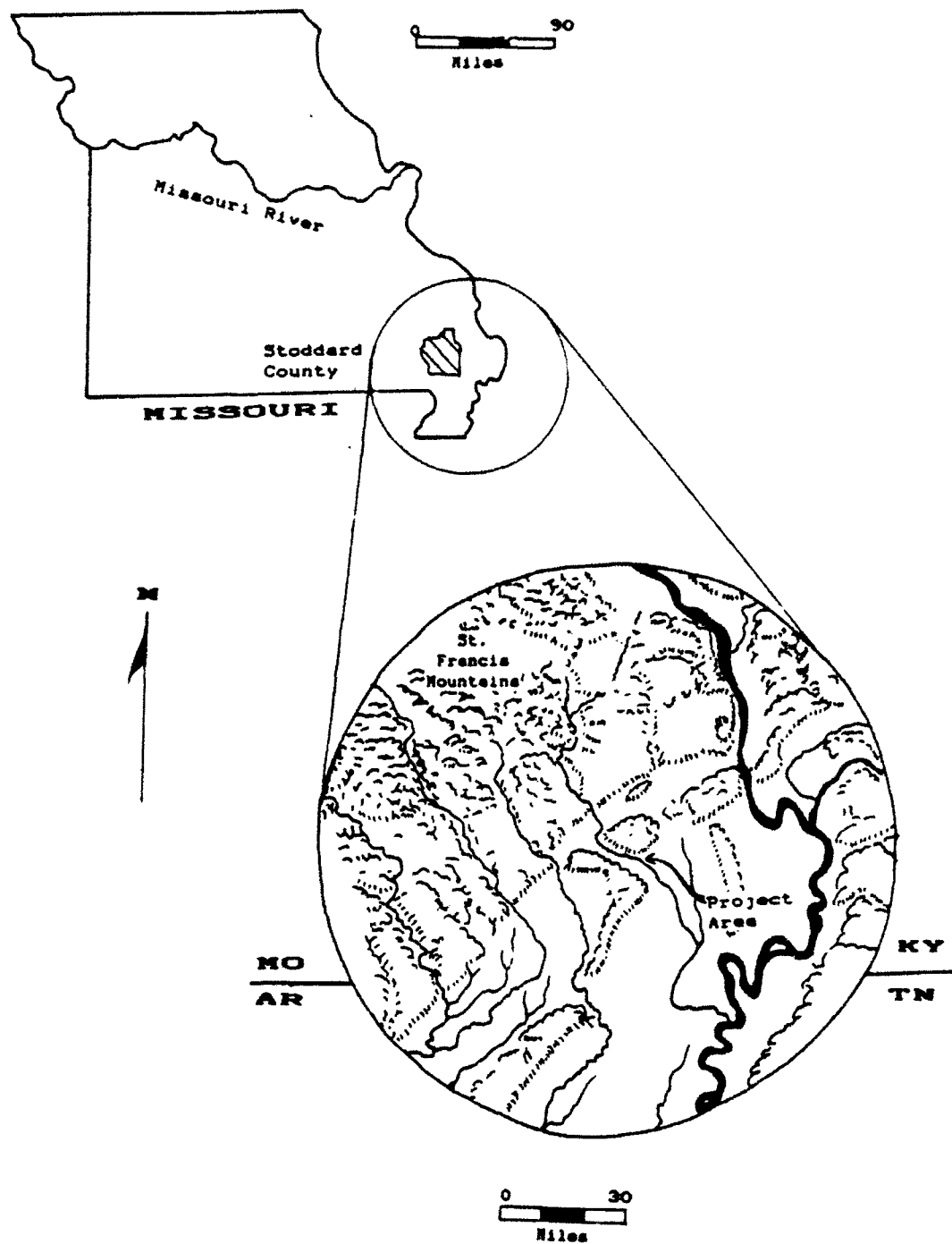


Figure 1. Project area location.

route for access to the Central Mississippi Valley (Lafferty et al 1985; Dekin et al 1978), and is an important source of lithics for the adjacent lowlands. The Castor River Gap, on the other hand was one of only three places where river channels have cut Crowley's Ridge (The closest is the St. Francis ca. 30 miles to the south on the Arkansas-Missouri border, and the other is the L'Anquille River at the south end of the ridge). These and other related factors makes the project area a very important transportation juncture with cultural and ecological borders being present at different times (Chapters 2 and 3). The unique lithic resource availability makes this location a priori important to the whole region (Chapters 2 and 3).

PROJECT HISTORY

The Purchase Order was issued on 14 January 1985 with the intended purpose of beginning field work within 10 days. Unfortunately the weather was unseasonably cold and severe with flooding in all lowland areas of the Bootheill. This precluded the possibility of conducting field work. The severe weather delayed the commencement of the field work until 6 March 1985. The first field party was directed by Dr. Robert H. Lafferty III and Ms. Carol S. Spears with the assistance of Mr. L. Michael Chapman and Ms. Barbara Lisle. Work consisted of surface inspection of all sites and subsurface excavations and mapping on sites 23S0496 and 23S0459. We were rained out on 10 March 1985 and once again heavy rains flooded rivers and delayed continued field work until 23 May 1985. On 24 May Mr. Michael C. Sierzchula and Mr Michael Chapman carried out investigation at 23S0459 and 23S0471. On 25 May they were joined by Dr. Lafferty and Ms. Margaret Jernigan and site 23S0497, 23S0465 and 23S0500 were investigated over the next three days. The work done on these sites is described in Chapter 4.

The laboratory analysis and processing of the artifacts was conducted between 31 May 1985 and 7 June 1985. This was done by Ms. Kathleen Hess, Mr. M. C. Sierzchula, Mr. D. S. Warden, Mr. M. Chapman and Mr. Paul Bauman. Mr. Sierzchula was primarily responsible for the lithic analysis and Ms. Hess in consultation with Dr. Lafferty and Ms. Spears identified the ceramics. The artifacts were processed according to the curation standards of the Division of American Archeology, University of Missouri, Columbia who will curate the artifacts and records for the United States Government. The methods and results of this analysis are presented in Chapter 4.

The Records Review was conducted on May 30 and 31 by Ms. Kathleen M. Hess. Records at the Missouri Archeological Survey and the Office of the State Archeologist were consulted to determine the state of knowledge in the region. An effort was made to find early maps of the area depicting early roads and houses in

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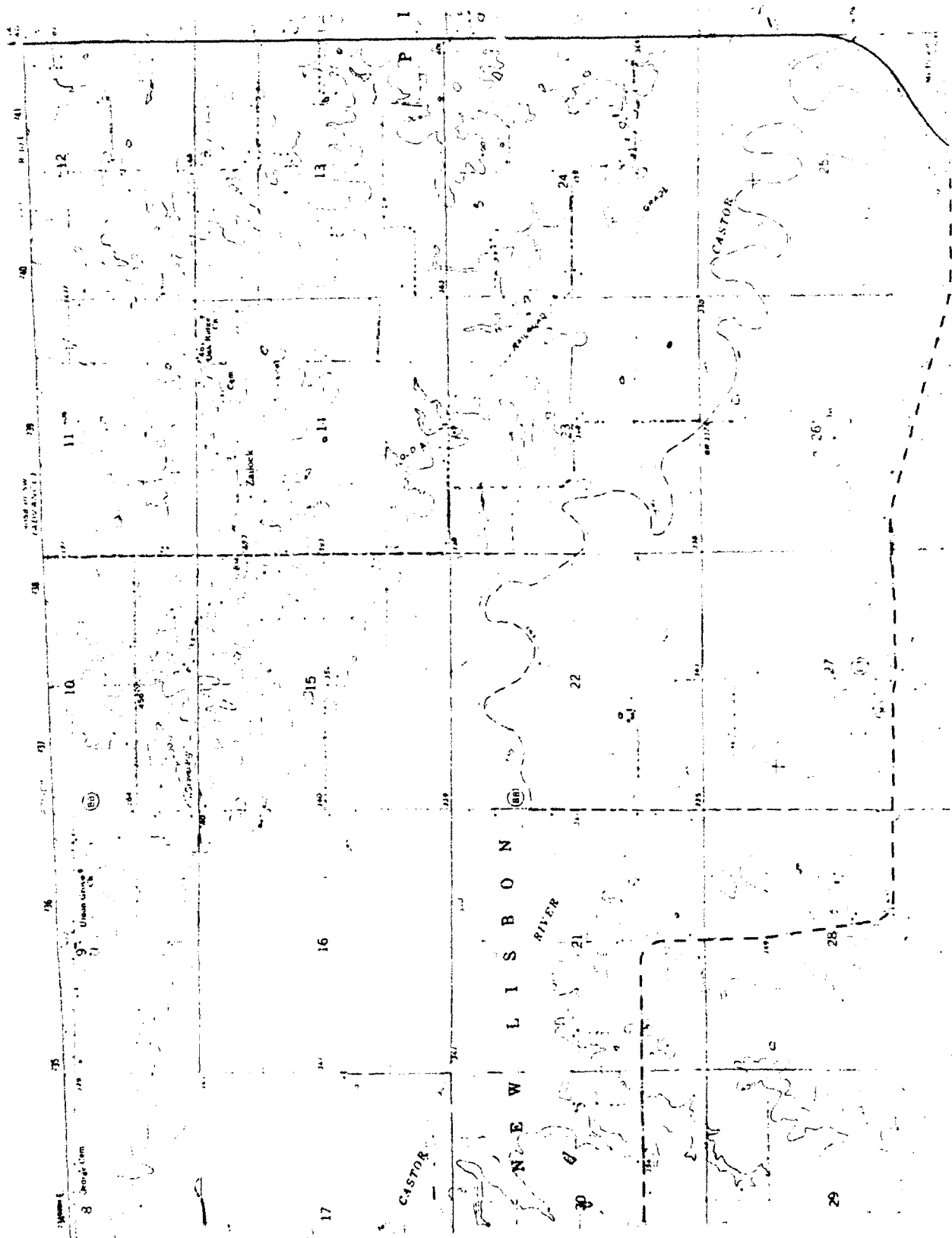


Figure 2. United States Geological Survey 7.5' Bloomfield Quadrangle map of the project area

INTRODUCTION

order to determine the age of the log cabin at site 2380465 which was not on the USGS Quadrangle (Figure 2)!

CHAPTER 2

ENVIRONMENT

by

Robert H. Lafferty III

The environment of the Castor River Enlargement Project is one of the most unusual depositional environments the author has ever encountered. This is because the headwaters of the Castor River are located above the western lowlands of the Mississippi River which is nearly as low laying as the discharge point in the Mississippi River (Figure 3). Before cutting Crowley's Ridge the larger sediments (i.e., sand) are deposited in the Advance Lowlands. This makes the sediments available for deposition particularly fine grained in the Castor Gap. Moreover, the major source area for sediments -- the Advance Lowlands -- are composed of fine sediments making the depositional regime very fine grained.

PHYSIOGRAPHIC ENVIRONMENT

The Castor River Enlargement project area is located in the Castor River Gap which is incised into Crowley's Ridge. The gap joins the Western and Eastern Lowland Physiographic region which is part of the Central Mississippi River Valley (Figure 2-1; Morse and Morse 1983). This portion of the Mississippian Embayment is a deeply incised canyon, which has alluviated since the beginning of the Holocene. The Mississippi valley is 80 miles wide at the project area and is divided roughly in half by Crowley's Ridge (Medford 1972:69). The Castor Gap is 1-2 miles wide and cuts 15 miles through Crowley's Ridge. The Castor River has its headwaters in the St Francis Mountains 45 miles to the northwest.

The Mississippi River has formed the structure of the environment first by carving this great valley and more recently, by depositing nearly a mile of fine grained alluvium within its confining rock walls. The alluvium is largely rock and stone free with the largest common sediment size being sands deposited in the alluvial levees. This has resulted in the formation of some of the best and most extensive agricultural land in the world, which have virtually no hard rocks or minerals. Prehistorically, and even today, rocks and minerals had to be imported from the surrounding regions, especially Crowley's Ridge.

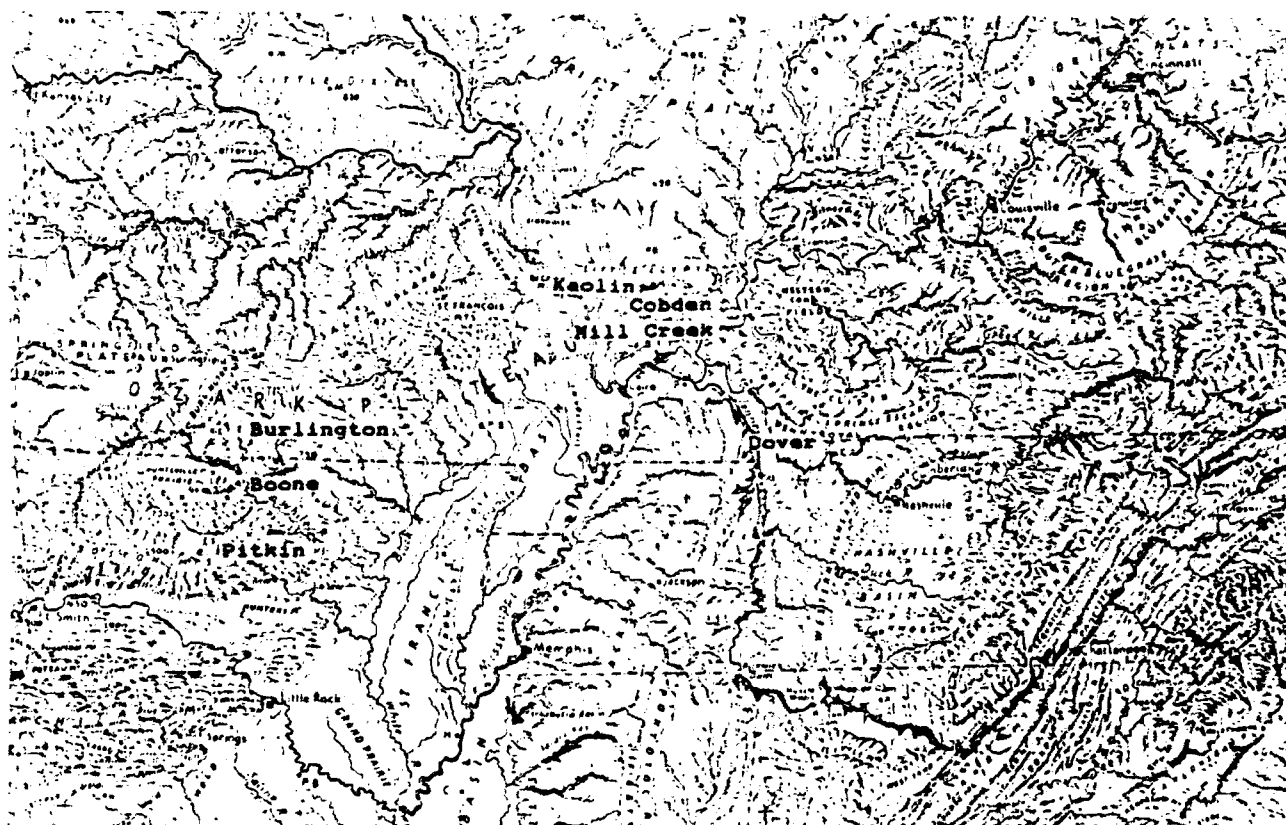


Figure 3. Central Mississippi River Valley Physiography and major important lithic sources (After Raletz 1978).

Crowley's Ridge was laid down in Pliocene times as terraces of the Mississippi River and the Ohio River. At that time the Ohio River had not been captured by the Mississippi and occupied the Eastern Lowlands. The terraces overlay limestone which is visible as weathered limestone spires in a few road cuts. These terraces were laid down by rapidly moving water and contain many cobbles of virtually every kind of hard grained stone occurring in the whole Mississippi Basin. These were important resources for the stone age peoples of the lowlands.

The Mississippi River has also structured and continues to structure the transportation environment. The dominant direction of its movement from north to south has resulted in making resources upstream more accessible than those to the east or especially to the west. For example, in order to cross the valley at 36 degrees north latitude one must traverse three major rivers in addition to the Mississippi itself: the St. Francis, the Cache and the Black, all former channels of the Mississippi River in post Pleistocene times. In pre-automobile times, this was a tedious overland journey of 80 miles which involved crossing many bodies of water. This contrasts with 100 miles of floating downhill on the surface of the river. The river is still a major transportation artery for the central part of the continent and in earlier times was the only way to easily traverse this lowland region. In the 1840-43 period when the General Land Office (GLO) maps were made, all of the mapped settlements in the project area were positioned along the river.

The central Mississippi River valley is incised into the Ozark and Cumberland Plateaus. These coordinate proveniences were uplifted from the south by a tectonic plate movement from the southeast which pushed up the Ouachita Mountains and split the lower part of the Ozark-Cumberland plateau. At the time of this tectonic event, ca. 100 million years ago, these plateaus were inland seas with beachlines along the present course of the Boston Mountains in Central Arkansas and Sand Mountain/Walden Ridge in Alabama and Tennessee. These ancient sea beds are today limestones filled with many different kinds of cherts. While these cherts come from several different formations there is a great deal of variation within formations which is made more confusing by the tendency for these formations to have different names in different states. For example The Boone, Burlington and Ft. Payne "formations" are different names applied to the same formation in Arkansas, Missouri and Tennessee (respectively). There is a great deal of variation present within this structure and more formations than the above contain usable cherts. Figure 2-2 shows the source area of some of the more important lithic resources. Some of these have well known source areas, such as Dover, Mill Creek, Crescent and Illinois Hornstone. Other lithic resources occur over large areas; and/or do not have known quarries, though they may exist (Butler and May 1984).

Making the identification of these lithic resources more complex is the presence of Tertiary gravel beds around the edges of the Mississippian Embayment and on Crowley's Ridge. Crowley's

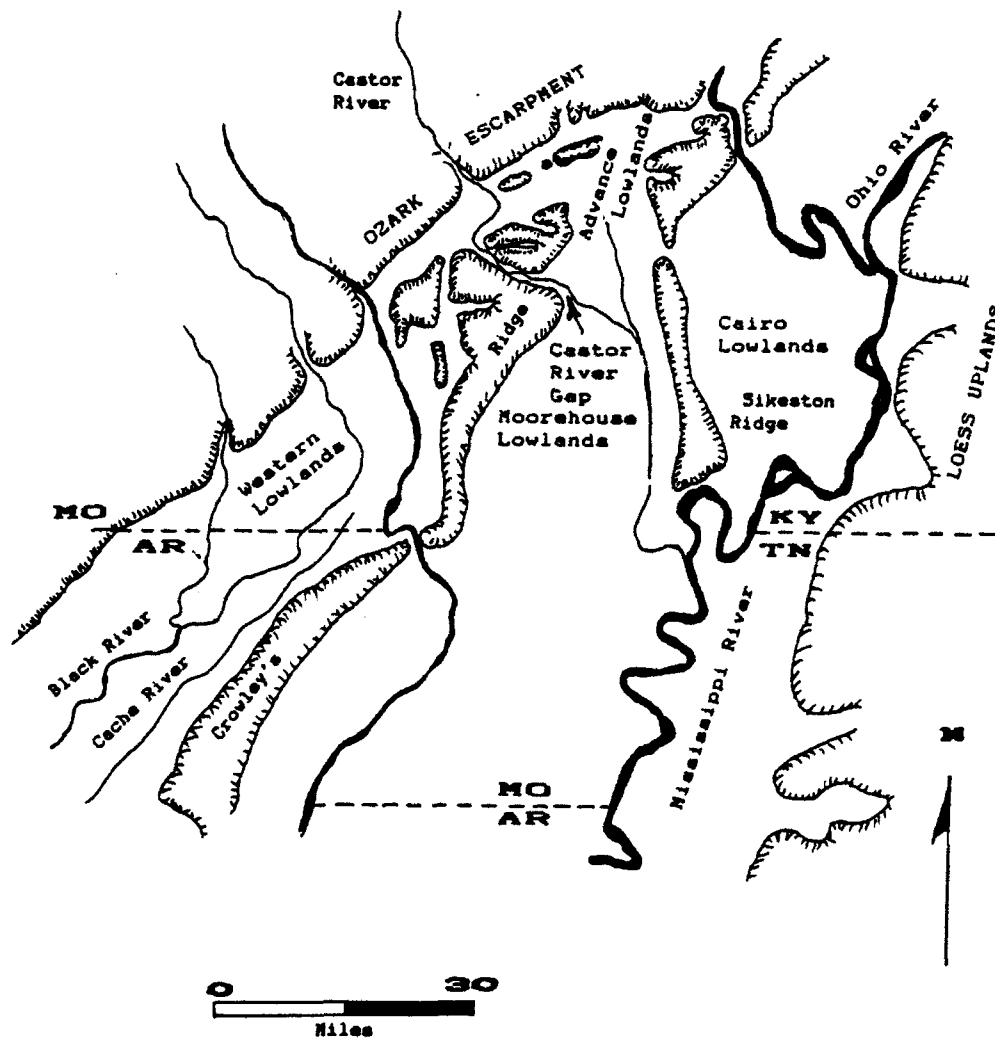


Figure 4. Major Landforms in the Central Mississippi Valley area.

Ridge is perhaps the most important of these because it occurs in the center of this stoneless plain. This deposit was laid down in Pliocene times when the river gradient was steeper than it is today. This deposit has virtually every heavy hard kind of mineral which occurs in the Mississippi River Basin. Prehistoric sites on the edge of the western lowlands, even those situated directly on the Grandglaise Terrace show a marked preference for the lithics found in the Ozarks over those of the terrace (eg. 3IN17, Lafferty et al 1981). Much of the gravel deposits adjacent to the Mississippi Valley to the east are covered with Loess deposits up to 200 feet thick. Investigations have shown that as one approaches Crowley's Ridge from both the east and the west there is a marked increase in the occurrence of cobble chert on prehistoric sites (Shaw 1981). This is generally true even though through time there are documented changes in the prehistoric utilization of different lithic resources (Hemmings 1982; Lafferty 1984). Crowley's Ridge is currently the main source of gravel for both the Eastern and Western Lowlands. The rather intensive modern day use of gravel sometimes makes the identification of aboriginal tools from "gravel crusher produced artifacts" difficult. Since the Castor River was one of only three rivers to cut through Crowley's Ridge we would expect this to be a major lithic source area. Because it was and still is navigable by small craft, and because the river abuts against the ridge and erodes the gravel deposits, these are more accessible than at other smaller streams which have their source on the ridge.

One important class of lithic resources were the volcanic materials, particularly the basalts (for axes) which were obtained in the St. Francis Mountains. Also of importance from this quarter were rhyolite and orthoquartzite which were used for various tools. The Castor River has its source in these deposits and the presence of both of these kinds of resources is to be expected on archeological sites.

When De Soto and his men, reached the Great River in 1541, they looked upon a great transportation artery which stretched from the Gulf of Mexico to the heart of the continent. However, it was navigated and controlled by Native Americans with fleets of dugout canoes that were both to harass and assist the Spanish over the next several years. As they looked from the bluffs over the swampland of virgin forest, they never suspected that they were gazing upon both the graveyard and salvation of their expedition. Most of the next two months found the Spaniards slogging through one of the most difficult swamps encountered in the entire expedition, the St. Francis Sunk Lands (Morse 1981; Hudson 1984). However, the expedition was continually drawn back to the Great River and the high chiefdom cultures, which the Spanish dominated using the techniques used so effectively against the Aztecs and the Inca. The swampy lowlands impeded the expedition particularly when traversing from east to west. As the Spanish reached the Grand Glacis terraces on the Ozark Escarpment, they encountered the great Toltec - Cahokia road (which would later be sequentially known as the Natchitoches Trace, the southwest Military road and currently US 67). This important road was on

ENVIRONMENT

tractable ground with the swampy lowlands to the east and the more dissected plateau to the west. The expedition's speed doubled once they were on it. In the end, after many more side trips and high adventures, the hard pressed expedition made its escape down the Great River in boats constructed with nails forged from their weapons. They were harassed by the Indians in large fleets of canoes all the way to the Gulf of Mexico.

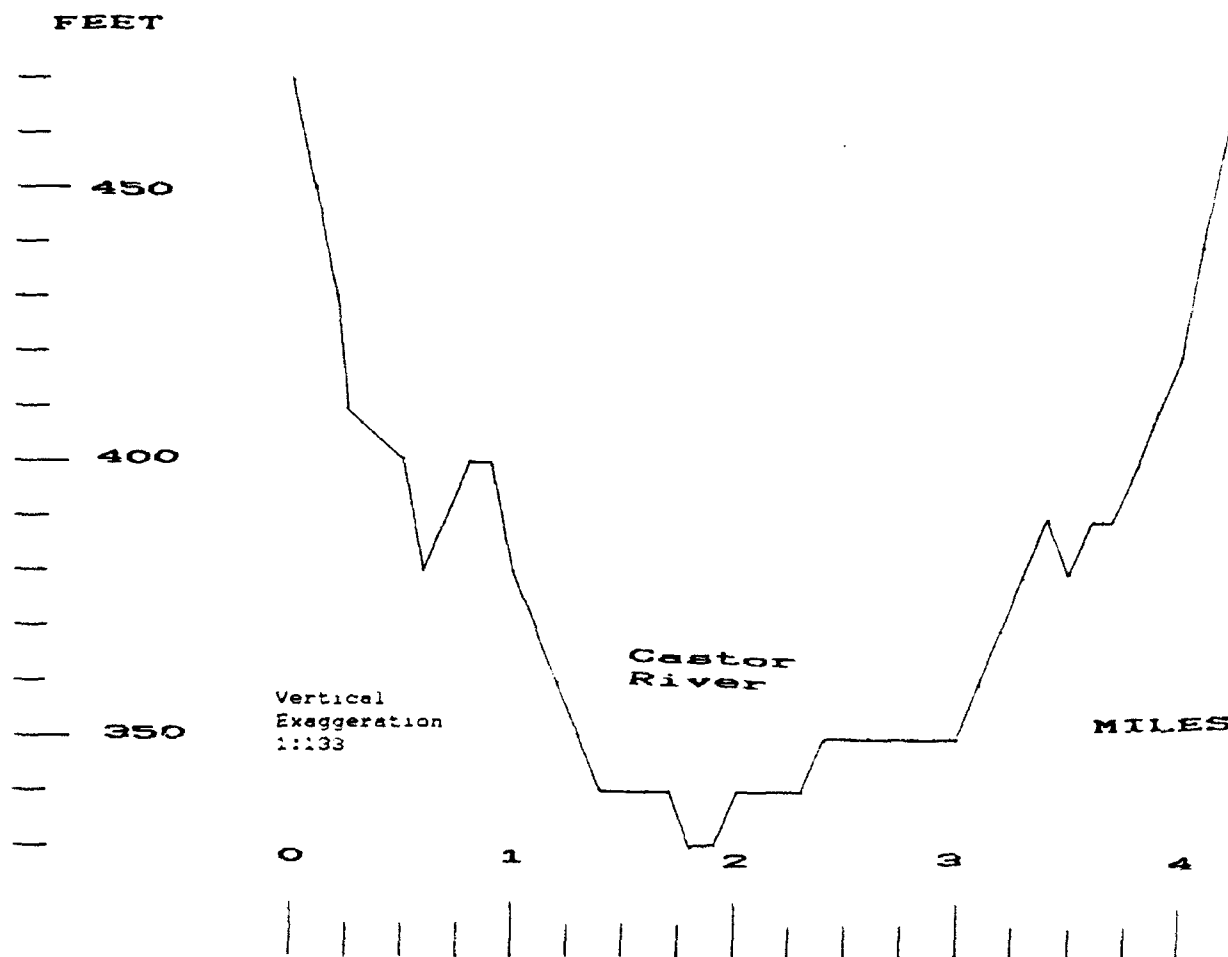


Figure 5. Physiographic cross section of the Castor River Gap.

The early Euro-American penetration into this area followed Crowley's Ridge into the center of the Lower Mississippi Valley (Dekin et al 1978). This was also the route of the first railroad into the valley from St. Louis. Therefore, the physiography of the Central Mississippi River has to a large extent dictated the nature of life in this environment. Transportation was much easier by water though sometimes longer on the rivers, particularly the Mississippi. Overland travel was easiest by going around the lowlands or down Crowley's Ridge. That is, humans (*Homo sapiens*) did not penetrate or live in this environment unless they were equipped with boats, lines and other tools with which to deal with an aquatic environment. This lowland forest was rich in plants, animals and contained some of the most productive soils on the continent. Too, there were a great profusion of mineral resources to be had in and about the nearby uplands.

The structure of the regional physiography makes the project location a cross road of a major north-south overland route and the only east-west water route in this part of the valley. It has important lithic resources which were necessary for importations to the lowlands during prehistoric times and these were probably more available here naturally than at most areas on Crowley's Ridge because of the higher erosion rate by the river.

The Castor Gap physiography is the result of the erosion of the Pliocene period Crowley's Ridge deposits and subsequent deposition in the valley. The Castor River has incised over 200 feet into Crowley's Ridge (Figure 5). Fisk (1944) mapped most of the valley floor as Relict Braided Surface. A very interesting feature of this valley is that there are no mappable higher terraces than this, and all of the more recent alluviation has taken place on this surface where it abuts against the river.

SOILS

The Relict Braided Surface was laid down about 10,000 years ago by loads carried from the glacial meltwater from the Wisconsin glaciation (cf. Saucier 1974; Morse and Morse 1983). These are fine grained deposits deposited in slow moving water of an estuary. In the Castor River Gap the size of this surface (covering ca 90% of the valley floor, Figure 2) and flatness (some sections have less than 10 feet of relief over them and appear landleveled) are evidence that this has been a relatively stable surface for a long period of time.

The soils in this surface (Mapped by the Soil Conservation Service as Crowley silt loam) are grey gleyed clays. These have very shallow plowzones (8-12 cm) except where they are near the present course of the river. Also, coarser grained silts have been deposited on top of them. The plowzones are browner than the subsoils. Many of the test units excavated in this project contained significant quantities of iron concretions (bog iron) which form under periodically water logged conditions. In several of our test units these were greater than 1/4 inch in diameter!

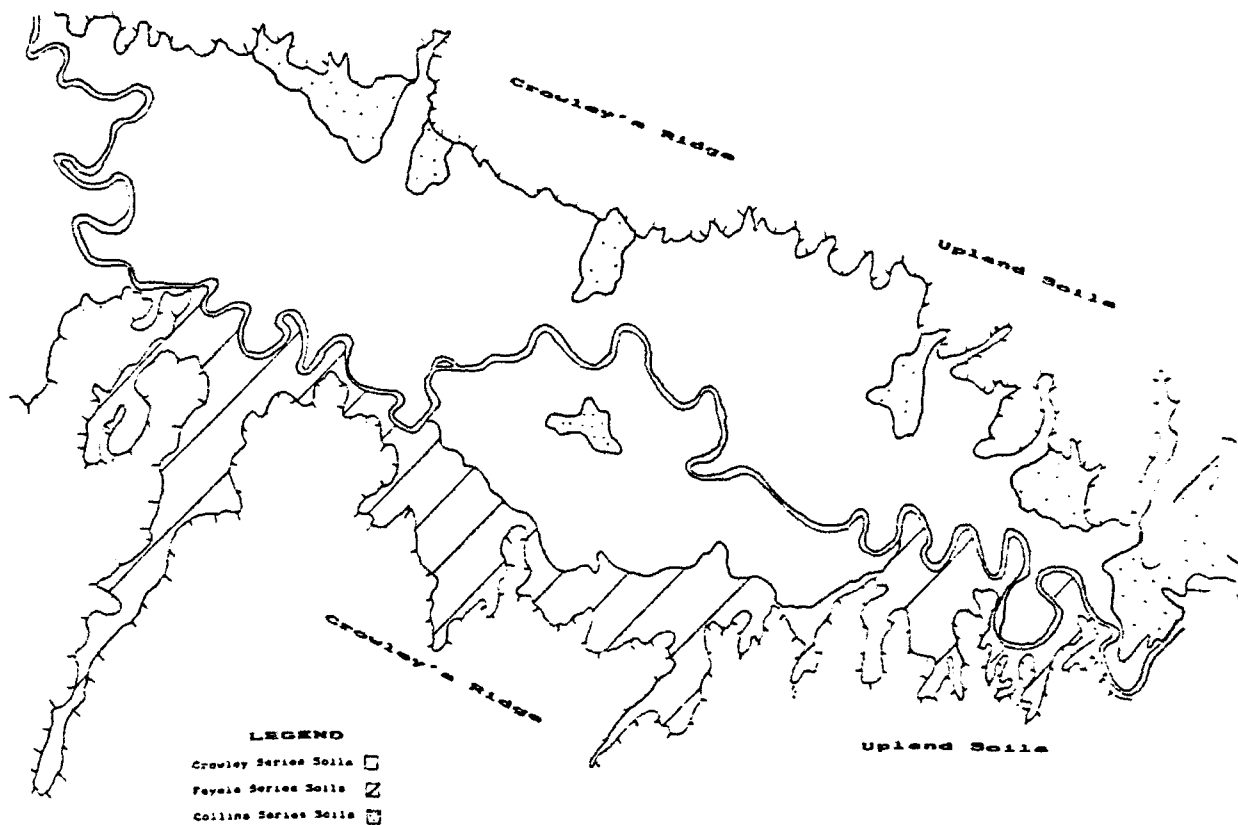


Figure 6. Generalized soils of the Central Castor Gap (Based on Soil Conservation Service Advance Map).

BIOTA

The Castor River Gap has more upland species of native plants and animals than do the surrounding lowlands (cf. Fehon 1975). The Castor River has incised 10 feet into the Relict Braided Surface. There are a few streams which have cut across the surface. Even in the more poorly drained locations, where today one sees standing water in the soybeans, prehistorically there would have been more water taken up by the canopy and roots of the trees. On several occasions during the March field work the author walked through well developed woods on this surface and found no standing water and the surface quite tractable despite water on the plowed field only 5 feet away. Therefore even though this surface has the appearance of a lowland surface it is not the floodplain of the river. Species composition in the three parcels of woods observed were typical of Oak-Hickory (*Carya* spp. = *Quercus* spp.) forest (Shelford 1963; Kuchler 1964) with a notable absence of Southern Floodplain species such as Bald Cypress (*Taxodium distichum*), which occurs along the river bank.

Crowley's Ridge possesses unique plant communities in the mid continent (Arkansas Natural Plan 1978). It is the western limit for certain eastern species such as the tulip popular (*Liriodendron tulipifera*) and Beech (*Fagus grandifolia*) (Harlow and Harrar 1968:284,365). The tulip popular was a preferred wood among the southeastern Indians for making the largest canoes (Lafferty 1977) and it would have been in high demand by the peoples of the Eastern and Western Lowlands where it did not grow.

In several conversations with local residents the author asked about flooding. No one remembered a flood in the valley. Mr. Charles Franklin Rampley who was 75 years old at the time of the interview, remembered the flood of 1929 and stated that it never got too high in this country. At the time of the interview we were standing at a log house lived in by his brother on the Relict Braided Surface.

There is considerable evidence that the environment has undergone substantial changes through the past 10,000 years (Cf. Delcourt et al 1980). Major changes involve the general warming with the retreat of the Wisconsin glaciers, a long period of dessication during the Middle Archaic period and since then wetter climates similar to the present. Morse and Morse (1983) have a detailed summary of these changes in the region.

Today the Castor River valley is on the edge of one of the great agricultural areas of the World -- the Mississippi River flood plain. The flat parts of the valleys have large fields of row crops growing on the white clays of the Relict Braided Surface. These abruptly abut against the orange upland soils of

ENVIRONMENT

Crowley's Ridge at the edges of the valley. This flat surface is broken by the Castor River supporting an edge forest of Cypress, Sycamore (Platanus occidentalis), White Oak (Quercus alba), Black Oak (Quercus velutina), and Poison Ivy (Rhus radicans). There are still a few hundred acres of flatland forest. The upland areas still support large amounts of forest interspersed with pastures which support cattle (Bos sp.).

Prehistorically this valley must have seemed like an upland heaven to the water logged lowlanders. Here there were lithics from which cutting edges could be made and a great diversity of plants and animals not easily found or seldom present in the swamps. The accessibility of these resources by lowlanders makes the Castor Gap a rare kind of environment which makes the archeological sites of regional importance to understanding the prehistoric procurement systems. This is especially true of the lithics which were the basic cutting edge of their technology.

CHAPTER 3

PREVIOUS RESEARCH

by

Robert H. Lafferty III

INTRODUCTION

Archeological research has been carried out in Stoddard and adjacent counties for nearly a century. As with much of the Mississippi Valley the earliest work was done by the Smithsonian Mound Exploration Project (Thomas 1894) which recorded the first site recorded in Stoddard County - the Rich Woods site, 23601. Since that time a great deal of work has been done in the Boothill region of the Central Mississippi Valley area (cf. Willey and Phillips 1958 for definitions of technical terms) which has resulted in several extensive syntheses of the region's prehistory (Mores and Morse 1983; Chapman 1975, 1980). In this chapter we summarize the archeological research which has taken place, summarize what is known of the prehistory of the region and limits in this data as it applies to the Castor River Gap locality. Finally we outline major research questions which are directly relatable to the data base recovered in this project.

PREVIOUS ARCHEOLOGICAL RESEARCH

The earliest professional archeological work in the region was the work carried out by the mound exploration project of the Smithsonian Institution. Thomas (1894) and his associates excavated at four sites in Stoddard County: Rich Woods, County Line, Peter Bess, and Lakeville. These were all Mississippi period sites located outside of the project area. This work was principally excavation in large mound sites, and identified the American Indians as the builders of the great earthworks of the east.

PREVIOUS RESEARCH

Table 1. Previous Archeological Investigations in the Castor River Gap and the adjacent areas.

Investigator	Location and Contribution
Potter 1880	Excavation and mapping at Lilbourn
Thomas 1894	Mound exploration in many of the large mound sites in SE Missouri, 4 in Stoddard Co (SO).
Fowke 1910	Mound excavation in the Morehouse Lowlands.
Moore 1916	Excavation of large sites along the Mississippi and Black River.
Adams and Walker 1942	Survey of New Madrid County
Walker and Adams 1946	Excavation of houses and palisade at the Mathews site
Phillips, Ford, and Griffin 1951	Mapped and sampled selected sites in SE Missouri, Lower Mississippi Valley Survey (LMVS), proposed ceramic chronology - ~7 SO.
S. Williams 1954	Survey and excavation at several major sites in SE Missouri, original definition of several Woodland and Mississippi phases
Chapman and Anderson 1955	Excavation at the Campbell site, phase definition of Middle
J. Williams 1964	Synthesis of fortified Indian villages in S. E. Missouri
Marshall 1965	Survey along I55 route, located and tested many sites east of Stoddard Co.
J. Williams 1968	Salvage of sites in connection with land leveling, Little River Lowlands
Hopgood 1969	Site survey Little River Lowlands
Redfield 1971	Dalton survey in Arkansas and Missouri Morehouse Lowlands
Schiffer & House 1975	Cache River survey

 Table 1 (Continued). Previous Archeological Investigations

<u>Reference</u>	<u>Location and Contribution</u>
Price et al 1975	Little Black River Survey
Kraker 1977	Mingo National Wildlife Refuge survey, NW 90
Newsom 1977	Cultural Resources Survey, Advance Ind. Park
Chapman et al. 1977	Investigations at Lilbourn, Sikeston Ridge
Greer 1978	Cultural Resources survey, Pipeline ca. 7 miles SE of project area
Cole 1978	Cultural Resources survey, Advance City park
LeeDecker 1978	Cultural Resources Survey, Wappapello to Crowleys ridge
Martin 1978	Cultural Resources Survey, Bell City Rotary Park
I. R. I. 1978	Cultural Resources Survey and testing, Castor River Enlargement project.
Dekin et al 1978	Cultural resources overview and predictive model, St. Francis Basin
Gilmore 1979	Cultural Resources Survey, Mingo National Wildlife Refuge
McNeil 1980	Testing site 2380441
LeeDecker 1980	Cultural Resources Survey, Ditch 24 enlargement
Klinger et al 1981	Cultural Resources survey and testing of sites in Bootheel and on Castor River
McNeil 1982	Cultural Resources Survey, Dudley Bridge and Lick Creek
J. Price 1984	Testing Shell Lake Site, Lake Wappapello
McNeil 1984	Cultural Resources survey, Mingo Ditch Scour Repair
Chapman 1975, 1980	Synthesis of archeology of Missouri
Morse and Morse 1983	Synthesis of Central Mississippi Valley pre-history

PREVIOUS RESEARCH

Most of the early work was concerned with the collection of specimens for museums (e.g., Potter 1880; Moore 1916; Fowke 1910). Some of this data was used to define the great ceramic traditions in the eastern United States (Holmes 1903), including the Mississippian. Many of these original conceptualizations are still the basis on which our current chronologies are structured (eg. Ford and Willey 1941; Griffin 1952; Chapman 1952, 1980).

There was a hiatus in the archeological work in the region until the 1940's when Adams and Walker began doing the first modern archeological work for the University of Missouri (Adams and Walker 1942; Walker and Adams 1946). Beginning in 1939 the Lower Mississippi Valley Survey conducted a number of test excavations at many of the large sites in the region (Phillips, Ford, and Griffin 1951; S. Williams 1954). This work has continued to the present in different parts of the valley (e.g., Phillips 1970; S. Williams 1984). This project has produced definitions of many of the ceramic types in the Lower Mississippi Valley area and produced the first phase definitions for many of the archeological manifestations known in the latter part of the archeological record, particularly the Barnes, Baytown, and Mississippian traditions of the north (S. Williams 1954).

Beginning in the 1960's there has been an increase in the tempo and scope of archeological work carried out in the Bootheel region. This has included a large number of survey and testing project carried out with respect to proposed Federally funded projects (Marshall 1965; Williams 1968; Hopgood 1969; Krakker 1977; Gilmore 1979; IRI 1978, Dekin et al 1978, C. Price 1976, 1979,, 1980; J. Price 1976a, 1976b, 1978; Greer 1978; LeeDecker 1979; Price, Morrow and Price 1978; Price and Price 1980; Sjoberg 1976; McNeil 1980, 1981, 1984; Klinger et al 1981). These projects are generally referred to as Cultural Resources Management studies and have greatly expanded the number of known sites from all periods of time. These projects have also produced a large body of data on the variation present on a range of different sites and have greatly expand our knowledge of this area.

Along with these small scale archeological projects there was a continuation of the large scale excavation projects carried out in the region. Major excavations at Snodgrass site (Price 1973, 1978; Price and Griffin 1979), Lilbourn (Chapman et al 1977; Cottier 1977a, 1977b; Cottier and Southard 1977), and Zebree (Morse and Morse 1980) have greatly expanded our understanding of the Mississippian cultures. It has resulted in the definition of the temporal/ spatial borders between different Woodland and Mississippian manifestations, and resulted in definitions of assemblages. Several major syntheses have resulted (Chapman 1975, 1980; Morse 1982a, 1982b; Morse and Morse 1983) which provide up to date summaries and interpretations of the work which has been carried out in the region.

STATUS OF REGIONAL KNOWLEDGE

The above and other work in adjacent regions has resulted in the definition of the broad pattern of cultural history and prehistory in the region; this, however, is still very sketchy with very few Archaic and Woodland sites having been excavated. This has seriously constrained our understanding of settlement systems. Therefore, while this may be a fairly well known region in respect to the Mississippi period, much more work needs to be done before the basic contents and definitions of many archeological units in space and time are adequate (cf. Morse 1982a). Presently we have a few key diagnostic types associated with some cultural units; however, the range of the artifact assemblages variations, chronological and spatial boundaries are not yet defined, nor are the ranges of site types known for any of the defined units. The adequate definition and resolution of these fundamental questions and problems are necessary before we can begin to reconstruct and use the data for understanding more abstract cultural processes as is possible in better known archeological areas such as the American Southwest. These fundamental problems will be the basis for arguing significance or non significance of the sites discovered in terms of Criterion d of the NRHP criteria (36 CFR 60). The cultural resources tested in this project are interpreted temporally and spatially in terms of what is known of the archeological record.

The Paleo-Indian period (10,000-8,500 B.C.) is known in the region from scattered projectile point finds over most of the area. These include nine Clovis and Clovis like points (Chapman 1975:93). No intact sites have yet been identified from this period, and the basal deposits of the major bluff shelters thus far excavated in the nearby Ozark Mountains have contained Dalton period assemblages. Lanceolate points are known from bluff shelters and high terraces (Sabo et al 1982:54) which may represent different kinds of activities or extractive sites as they have been shown to have been in other parts of the country. For the present any Paleo-Indian site in the region is probably significant.

The Dalton period (8,500-7,500 B.C.) is fairly well known in the Ozarks with modern controlled excavations from Rogers, Albertson, Tom's Brook, and Breckenridge Shelters (McMillian 1971, Kay 1980; Dickson 1982; Logan 1952; Bartlett 1963, 1964; Wood 1963; Thomas 1969). Adjacent areas of the Lower Mississippi Valley have produced some of the better known Dalton components and sites in the central continent. These include the Sloan site (Morse 1973) and the Brand site (Goodyear 1974). These and other more limited or specialized excavations and analysis have resulted in the identification of a number of important Dalton tools (ie. Dalton points with a number of resharpening stages, a distinctive adze, spokeshaves and several varieties of unifacial scrapers, stone abraders, bone awls and needles, mortars, grinding stones and pestals. At least three different site types have been excavated: the bluff shelters which were seasonal habitation sites, a butchering station (the Brand Site) and a

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cemetery (Sloan site). Presently we do not have the other part(s) of the seasonal pattern which should be present in the region, nor have any specialized activity sites been excavated. Dalton sites are known in a number of locations, especially on the edge of the Relict Braided Surface, on Crowley's Ridge, and the edge of the Ozark Escarpment. Given the present resource base there are a number of important questions which have been posed concerning this early widespread adaptation to this environment (Price and Krakker 1975; Morse 1982a).

The Early to Middle Archaic periods (7,500 - 3,000 B.C.) are best known from bluff shelter excavations in the Ozarks (Rogers, Jakie's, Calf Creek, Albertson, Breckenridge and Tom's Brook Shelters). During this long period a large number of different projectile point types were produced (ie. Rice Lobed, Big Sandy, White River Archaic, Hidden Valley Stemmed, Hardin Barbed, Searcy, Rice Lanceolate, Jakie Stemmed, and Johnson). No controlled excavations have been done at any Early or Middle Archaic site in southeast Missouri or northeast Arkansas (Chapman 1975:152). There are no radiocarbon dates for any of the Archaic period from southeast Missouri (Dekin et al 1978:78-79; Chapman 1980:234-238). The Middle Archaic archeological components are rare to absent in the Central Mississippi Valley (Morse and Morse 1983). Therefore, much of what we know of the archeological manifestations of this period is based on work in other regions, which has been extrapolated to the Mississippi Valley based on surface finds of similar artifacts. At present phases have not been defined.

The Late Archaic (3,000 B.C. - ~500 B.C.) appears to be a continuing adaptation to the wetter conditions in following the dry Hypsithermal. This corresponds to the sub-Boreal climatic episode (Sabo et al 1982). The lithic technologies appear to run without interruption through these periods with ceramics added about the beginning of the present era. Major excavations of these components have taken place at Poverty Point, and Jaketown in Louisiana and Mississippi (Ford, Phillips and Haag 1955, Webb 1968). A fairly large number of Late Archaic sites are known in eastern Arkansas and Missouri but none have been systematically excavated in the Boothill region (Chapman 1975:177-179, 224). Major point types include Big Creek, Delhi, Pandale, Gary and Uvalde points. Other tools include triangular bifaces, manos, grinding basins, grooved axes, atlatl parts and a variety of tools carried over from the earlier periods such as scrapers, perforators, drills, knives and spokeshaves. Excavations at the Phillips Spring site has documented the presence of tropical cultigens (squash and gourd) by ~2,200 B.C. (Kay et al 1980). The assemblages recovered in the bluff shelters from this time period indicate that there was a change in the use from general occupation to specialized hunting/butchering stations (Sabo et al 1982:63). There are some indications of increasing sedentariness in this period; however, the range of site types have not been defined. Late Archaic artifacts are well known from the region with artifacts usually present on any large multicomponent site. Our understanding of this period is limited to excavations from a

few sites (Morse and Morse 1983; Lafferty 1981). At present we do not know the spatial limits of any phases (which have not been defined), nor do we have any control over variation in site types and assemblages.

Early Woodland (500 B.C. (?) - 150 B.C.). During this period there appears to have been a continuation of the lithic traditions from the previous period with an addition of pottery. As with the previous period this is a very poorly known archeological period with no radiocarbon dates for the early or beginning portions of the sequence. The beginning of the period is not firmly established and the termination is based on the appearance of Middle Woodland ceramics dated at the Burkett site (Williams 1974:21). The original definition of the Tchula period was made by Phillips, Ford and Griffin (1951:431-436). In the intervening time a fair amount of work has been done on woodland sites. Chapman concludes that we are not yet able to separate the Early Woodland assemblages from the components preceding and following. At present there is considerable question if there is an Early Woodland period in S. E. Missouri (Chapman 1980:16-18). Recent work in northeast Arkansas has identified ceramics which appear to be stylistically from this time period (Morse and Morse 1983) and J. Price (personal communication) has identified a similar series of artifacts in the Boothill region. The ceramics from these assemblages include sand tempered ware with bosses raised with punctations from the interior similar to the Alexander Series in the Lower Tennessee Valley and the Crab Orchard Ceramics in the southern Midwest. Other artifacts include bi-conical "Poverty Point objects" and Hickory Ridge projectile points.

Middle-Late Woodland periods (150 B.C. - A.D. 850) was a period of change. There is evidence of participation in the "Hopewell Interaction Sphere" (Dentate and zone stamped pottery, exotic shell; Ford 1963) and horticulture is increasing (corn, hoe chips and farmsteads). There is some mound construction indicating greater social complexity. Typical artifacts include Snyder, Steuben, Dickson and Waubesa projectile points, and an increasing number of pottery types (cf. Rolingson 1984; Phillips 1970; Morse and Morse 1983). In the Late Woodland there is an apparent population explosion as evidenced by a great number of sites with plain grog tempered pottery in the east and Barnes sand tempered pottery in the west of the Bootheel (Morse and Morse 1983; Chapman 1980). There is some evidence of architecture (cf. Morse and Morse 1983; Spears 1978) in this period as well as mound center construction (Rolingson 1984). There are a number of large open sites which have not been excavated. There appears therefore to be a rather large bias in what we know about this important period toward the spectacular mound centers. There is still a great deal which is not understood about the cultural sequence and changes which came about during this important period. The Late Woodland in this area has been suggested as the underlying precursor to the Mississippian which came crashing into the area with the introduction (Invention ?; cf. Price and

PREVIOUS RESEARCH

Price 1981) of shell tempered pottery and the introduction of the bow and arrow around A. D. 850.

The Mississippi period (A.D. 850-1650) is known from the earliest investigations in the region (Thomas 1894; Holmes 1903; Moore 1916), and still has been the most intensively investigated portion of the prehistoric record in northeast Arkansas and southeast Missouri (Chapman 1980; Morse and Morse 1983; Morse 1982; Morse 1981; House 1982). There has been enough work done that the spatial limits of phases have been defined (cf. Chapman 1980; Morse and Morse 1983; Morse 1981). During this period the native societies reached their height of development with fortified towns, organized warfare, more highly developed social organization, corn, bean squash agriculture and extensive trade networks. The bow and arrow is common and there is a highly developed ceramic technology (cf. Lafferty 1977; Morse and Morse 1980; Smith 1978). This was abruptly terminated by the DeSoto entrada in the mid 16th century (Hudson 1984; Morse and Morse 1983) which probably passed very close to the project area.

Historic Period (1673-present). After the DeSoto expedition the area was not visited until the French opened the Mississippi valley in the last quarter of the 17th century. The Indian societies were a mere skeleton of their former glory and the population a fraction of those described by the DeSoto Chronicles.

During the French occupation most of the settlements were restricted to the major river courses with trappers and hunters living isolated lives in the head waters of the many smaller creeks and rivers.

The Euro-American occupation proceeded overland down Crowley's Ridge and spread out from the rivers. Major ports were established at Helena at the tip of Crowley's Ridge. One of the first towns established in Stoddard county was Bloomfield which was platted in 1824 as the county seat. It was located on the Helena-Wittsburg road down Crowley's ridge (Dekin et al 1978).

CHAPTER 4

TESTING AND ANALYTICAL METHODS

by

Carol S. Spears and Michael C. Sierzchula

INTRODUCTION

The Castor River Enlargement project involved the testing of six prehistoric sites for significance in terms of the National Register of Historic Places. Testing at these sites included a combination of investigation techniques including: (1) surface examinations, (2) subsurface tests, and (3) site mapping. The analytical methods utilized include: (1) informant interviews, (2) archival research, and (3) lab processing, and (4) artifact analysis, and (5) artifact and records curation. The general procedures followed are described briefly in this chapter. Specific methods utilized on each site are described in detail in Chapter 5.

SURFACE EXAMINATIONS

Upon the initial visit to a site, all artifacts observed on the surface of the field were flagged with wire flags. The distribution was measured, mapped and photographed and then artifacts were collected according to provenience. In several instances controlled surface collections were made and the surface artifacts were collected separately from each excavation unit so that surface density of the unit could be compared to other sites. Surface visibility was excellent and, in most instances, the previously known site boundaries were greatly enlarged. Artifact densities were found to be much higher than reported by I. R. I. (1978). When artifact densities were extremely high, a controlled collection was taken in a high density area and all artifacts within the designated area were collected.

SUBSURFACE TESTS

Shovel Tests

Shovel tests were excavated in order to determine the best locations for placement of 1m x 1m test units and to examine deposits across the entire site and/or between excavation units. All shovel tests were excavated in a controlled manner with special attention given to the depths at which artifacts were found and the nature of the soil matrix. All soil removed from each test was either screened through 1/4 inch hardware mesh or closely examined by trowelling. Each test was profiled and soil textures and colors described. All shovel tests were plotted on the site map.

METHODS

Test Units

From two to six 1m x 1m test units were excavated at each site pursuant to the contract specifications. These units were positioned within areas of high artifact density or according to potential anthropic soils as observed in shovel tests. Units were laid out according to magnetic north and all depth measurements were made from the line level string attached to the southwest corner of the unit.

Usually the plowzone was excavated as a unit or in ten cm levels. All other levels were excavated according to cultural or natural levels of not greater than 10 cm in depth. Levels were shovel skimmed and all soil removed was dry screened through 1/4 inch mesh. The base of each level was scraped with a trowel and examined for features. If feature stains or cluster of artifacts were found, they were mapped, described, photographed, and artifacts given a separate provenience number. If carbonized materials were observed within a feature, then C14 and/or a soil sample was taken for flotation.

A portion of each unit was excavated at least 2 levels below cultural bearing levels. Once the unit was completed, at least one wall was cleaned, photographed, and profiled. Soil colors were described according to the Munsell Color designations.

SITE MAPPING

A detailed site map was drawn in the field by using an alidade and plane table. Distances were measured with a 30 or 50m metric tape. Permanent data were positioned off the edge of the site and tied into the site map. All shovel tests, 1m x 1m units, controlled surface collections, artifact clusters and diagnostic artifacts were mapped in addition to prominent natural features such as the terrace edge, the river, largest trees, etc..

INFORMANT INTERVIEW

One informant interview was conducted with Mr. Charles Franklin Rampley in connection with the previously unreported historic component of 23S0465. This was conducted on site and recorded in stereo on a Panasonic Model RX-F20 cassette recorder, and later transcribed verbatim (Appendix B). The interview concentrated on the use of space around the log house between 1915 and 1935. This was an important piece of data showing that this cabin has been standing in place for over 75 years even though it is not shown on the current USGS maps. While conducting the interview an Ently projectile point was discovered at our feet. This event was dramatically captured on tape.

RECORDS RESEARCH

After the field work was finished a records search was conducted at the State Archeologists office in Jefferson City, and at the Missouri Archeological Survey's office in Columbia. This search concentrated on defining the extent of information known on similar sites in the county so that the sites could be evaluated in terms of the National Register of Historic Places criteria. Particular attention was concentrated on locating old maps and identification of unpublished manuscripts on sites known in the county.

LABORATORY PROCESSING

Upon completion of the fieldwork, artifacts were returned to the MCRA laboratory. Bags of artifacts were checked in against the Field Specimen logs. All discrepancies were resolved before washing was initiated. All artifacts were gently washed over screens with 1/4" mesh. The samples were then air dried. The artifacts are then sorted into general categories (fire cracked rock, flaked debitage, sherds, chipped lithics, faunal remains, etc.), and site, provenience, and category numbers are applied to at least several artifacts in each category with indelible ink, as required by the curating institution (Cf. Division of American Archeology, University of Missouri Curation Standards). The artifacts were then bagged and boxed for analysis.

Artifact Analysis

The level of analysis conducted for a specific project is directly related to the project goals, amount of time and funds available. For the purposes of this project, it was believed that it would be more cost effective to proceed with a very general analysis of the recovered lithic material. This is in response to sections of the Scope of Work (Appendix A, paragraph no. 3.07) that states work was not to proceed to the level of "Mitigation".

Lithic artifacts were separated into the categories discussed below. The total number and weight for each category, except fire cracked rock, was calculated. Only weight was noted for fire cracked rock.

Decortication flakes any flakes with at least 10% of the dorsal surface covered with cortex was placed in this category. Shatter with 10% cortex was also included here.

Debitage Any flake or shatter that did not possess more than 10% cortex on the dorsal surface, or show any signs of intentional flake removal was placed in this category.

METHODS

Biface Bifaces, whether in the initial stages of reduction or at the preform stage were placed in this category. Bifaces were identified as having flakes removed from both surfaces from the margins toward the center of the artifact. A hafting area was not present.

Tools Stone tools had to be task specific to be placed in this category (i.e. spokeshaves, gravers, etc.). Broken projectile points that had been retouched into tools were classified as tools. "Utilized" flakes were not classified as tools due to the level of investigation and the pedafact/utilized flake question (Jeff Flenniken personal communication).

Core Lithic artifacts that had flakes removed, but had no apparent pattern (i.e. initial stages of biface reduction) were classified as cores. In addition, river cobbles or pieces of bedded chert that had 1 or 2 flakes removed were also placed in this category.

Fire Cracked Rock Any stone material that a freshly broken surface (in relation to the cortex) with that surface exhibiting crazing and being extremely irregular and rough. Pot lidding was often present on smooth surfaces. Discoloration was used to identify fire cracked rock in a few instances however, it was never used as the sole basis for placing material in this category.

Projectile Points were identified by type using standard published typologies for the region (Chapman 1975, 1980), and for the Southeast in general (Bell 1958, 1960; Perino 1968, 1971). These were relied upon for identification of the temporal period of many of the components which, given the limited amount of work done on many periods in the Boothill may be subject to revisions in the light of further work.

Pottery Sherds were separated by temper type (i.e. sand, shell, grog, etc.), location (i.e. body, rim base), and surface decoration. Due to the highly weathered condition of most of the sherds, decorative technique was often difficult to ascertain. Consequently only a few sherds have been identified to specific types (Chapman 1980; Phillips 1970; Morse and Morse 1980; S. Williams 1954). As with the projectile points some of the temporal positioning based on the sherds are qualified by the poor quality of temporal control over the earlier part of the period.

Historic Artifacts were analyzed to determine the time period of the occupation. Published typologies and reports (Noel Hume 1970; Price and Price 1980; Lafferty and Lockwood 1982) were used in the dating and typing of these materials.

Artifact and Records Curation

Recovered archeological materials and records are to be curated with the American Archeology Division, at the University of Missouri, Columbia.

CHAPTER 5

TESTING AND ANALYTICAL RESULTS

by

Carol B. Spears, Robert H. Lafferty III,
and
Michael C. Sierzchula

INTRODUCTION

Six archeological sites were tested in the Castor River Testing project. The details of this program and the results are discussed in this chapter. The sites are arranged sequentially by number for easy access.

SITE 23S0459

Description

Site 23S0459 was initially recorded by Iroquois Research Institute (IRI) in 1978 as a prehistoric specialized activity area located on a terrace east of the Castor River. Although surface visibility was good (50-75%), only one chert flake was observed and collected at that time. Site dimensions were estimated as 1 square meter. No further investigations were conducted or recommended by IRI (1979:77).

In the recent investigations conducted by MCRA, the surface of the site was further examined and the site tested. Based on information collected, 23S0459 is best described as a prehistoric lithic scatter confined to the surface and the plowzone level. The site represents limited activity areas affiliated with the Early Woodland and Mississippi periods. The approximate extent of the relatively low density of cultural material on the surface is 230m north-south and 120m east-west with the majority of the artifacts concentrated on the tops of three knolls (Figure 7). An abandoned railroad bed bisects the site. Surface visibility at the time of site investigations was excellent (75-100%) due to a sparse ground cover of low grasses and weeds in the fallow field.

Methods of Testing

Site investigations by MCRA included examining the surface of the entire field, flagging all artifacts observed and then collecting them according to three proveniences: the south knoll, the central knoll and the north knoll. Seven controlled shovel tests and two 1m x 1m test units positioned within these areas were excavated. The location of all units are shown in Figure 7.

RESULTS

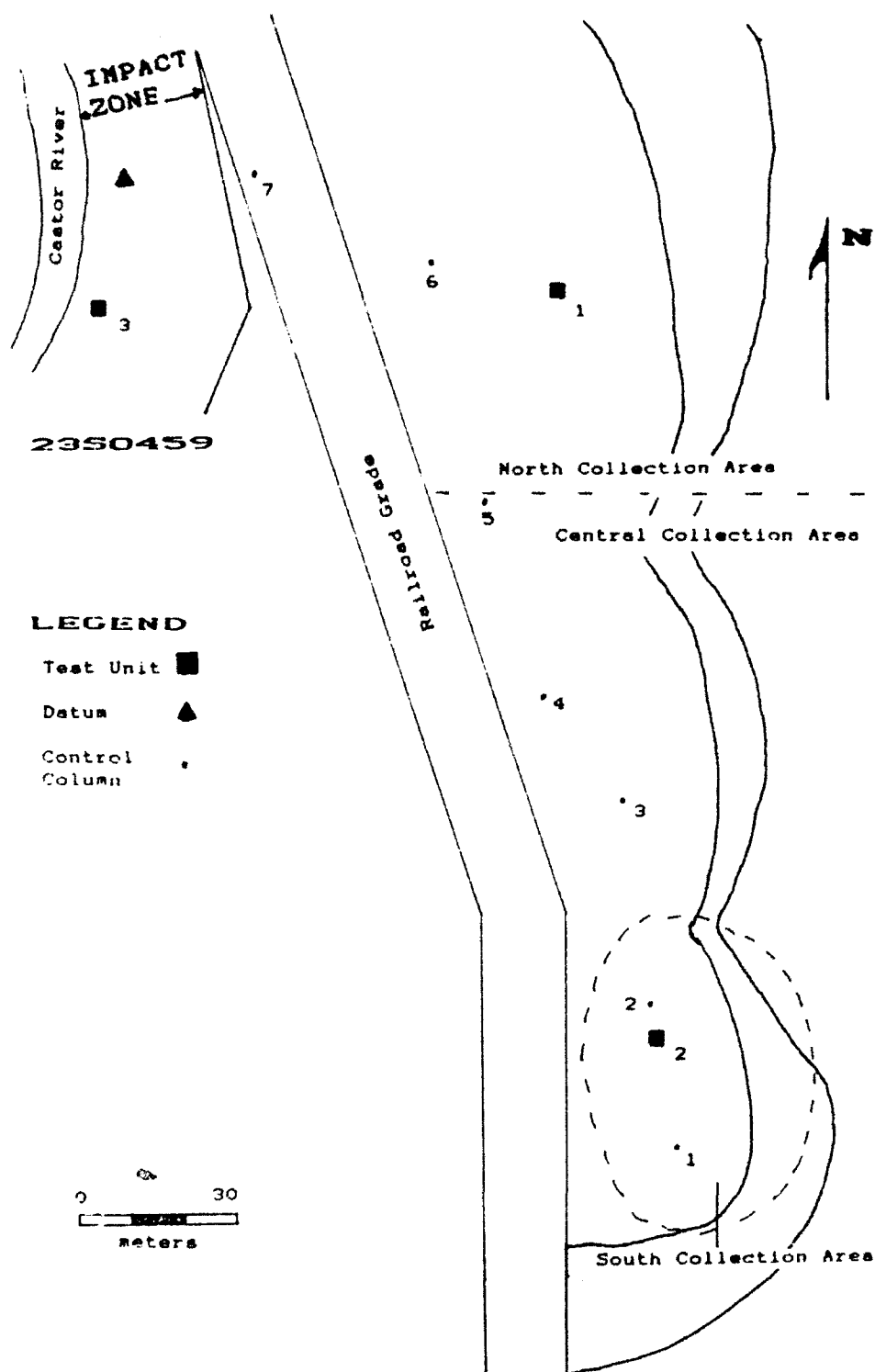


Figure 7. 2380459, Site map.

Table 2. Site 2360459, Surface Material all observed artifacts

Collection Areas:	North	Central	South
Artifacts (Count/gms)			
Lithics			
Core		1/237.0	1/501.0
Debitage		20/ 26.8	6/ 24.0
Hertzian Cone			1/ 26.5
Fire Cracked Rock (FCR)	/319.0	/112.0	/327.0
Fire Cracked Chert	/ 14.0		
Decortication Flakes	8/ 67.7	2/ 11.0	12/126.5
Preforms			1/ 87.5
Bifaces	2/ 48.0	1/ 32.0	
PP/K, Fragment	1/ 2.2		
Dart (distal)			1/ 25.0
Scallorn			1/ 1.0
Historic, Whiteware	1/ 1.8		
Total	12/452.7	24/418.8	23/1118.5

Surface Material

Upon arriving on the site the surface was systematically walked over and all artifacts observed on the surface were flagged. It was immediately apparent that the main concentration of material was well to the east of the impact zone (Figure 7). It was also apparent that there were three concentrations of material on each of the three erosional remnants (knolls) which were dissected portions of the Relict Braided Surface eroded by a seasonal watercourse draining to the east of the site. These three artifact concentrations were collected separately (Table 2), and all artifact observed on the surface were collected. One Scallorn point and two unidentifiable larger bifaces were also recovered from the surface.

Shovel Tests

A series of 7 controlled shovel tests were excavated at 20-30 meter intervals down the center of the terrace and positioned within the artifact clusters on tops of each knoll (Figure 8). In general, soils in these tests disclosed a plowzone level of light brown or reddish brown clay or silty clay to approximately 20 cm below the surface. The plowzone level was underlain by a more compact tan or grey mottled clay subsoil which had an increase in frequency of orange mottles in the lower levels.

RESULTS

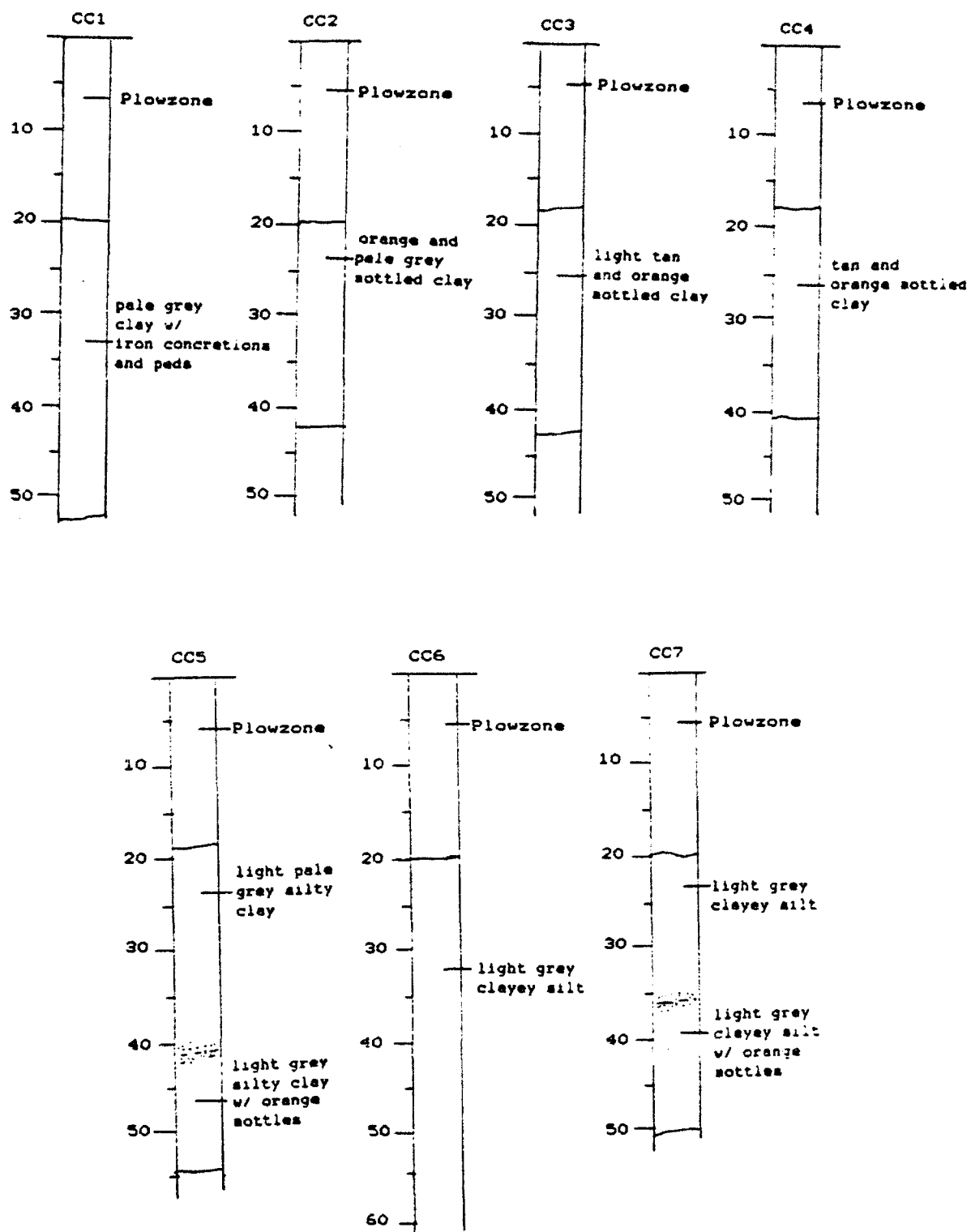


Figure 8. 2380439, Shovel Test Profiles.

The shovel tests were excavated in natural levels and terminated between 42-60cm below the surface. One piece of unmodified chert and one fire cracked rock were found in Shovel Tests 4 and 6 respectively. Both of these artifacts were located at about 25 cm below the surface or just below the plowzone. The soils in the shovel tests were not characteristic of intact anthropic levels.

Test Units

Test Unit 1, was positioned in the vicinity of the north collection area at the approximate center of the artifact cluster. The plowzone level was water saturated, but soils below were drier. All soil was shovel skimmed and screened through 1/4 inch hardware mesh. The south wall profile is shown in Figure 9.

Level 1, from 0-17 cm below the surface consisted of the plowzone, a medium brown silt (5YR3/4). At 17 cm there was a distinct change in soil composition to a yellow silty clay with some grey clay mottles. East-west plowscars were also observed at this depth. Artifacts collected in the plowzone consisted of 2 pieces of fire cracked chert.

Level 2 which consisted of the compact yellow silty clay with grey mottling continued from 17-27 cm below the surface. Two decortication flakes were found in the top of the level or just below the plowzone. No artifacts were collected from the base.

Levels 3 and 4 (only the southwest 1/4 of the unit) were excavated from 27-37 and 37-47 cm below the surface respectively. Neither of these levels contained artifacts, cultural features, or levels.

Level 5, from 47-57, likewise did not contain cultural material. Soils in this level were not screened due to their high clay content and numerous iron concretions.

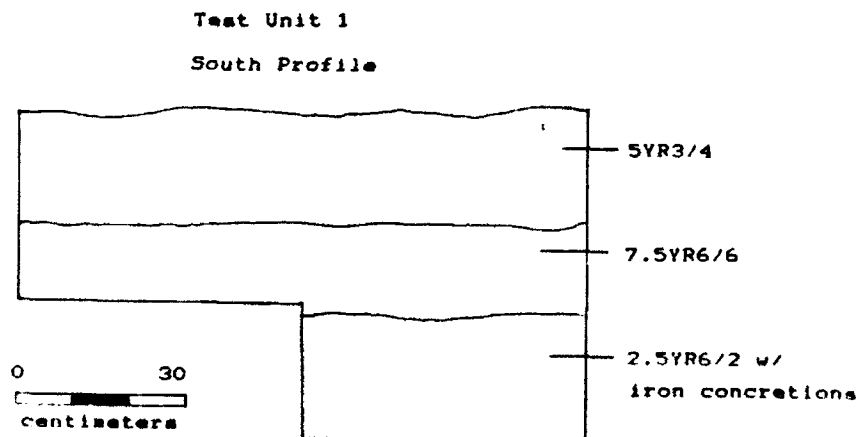


Figure 9. 2380459, Test Unit 1, South Profile

RESULTS

Table 3. Site 2380459, Artifact Recovered from Test Unit 1.

Excavation levels:	1	2
Artifacts (#/gms)		
Lithics		
Fire Cracked Rock (FCR)	2/12.0	
Decortication Flakes		2/4.0
Total	2/12.0	2/4.0

Test Unit 2 was positioned in the approximate center of the south knoll. Two chert bifaces, 2 flakes, and some fire cracked rock was collected from the surface of this unit. However, due to a sudden rainstorm and continually wet conditions, the unit was not completed. On a return visit to the site an additional unit, Test Unit 3, was positioned within the project right-of-way on the west side of the abandoned railroad bed directly adjacent to the river. Only a light scattering of debitage was observed on the surface in this area and no collections were made.

Test Unit 3 consisted of a plowzone level from 0-20 cm which was composed of a brown silty soil (10YR5/4). Only one artifact, a corner notched projectile point probably dating to the Early Woodland Period was collected from the top 10 cm in the level.

The plowzone was underlain by a compact silt which contained numerous concretions and lots of clay mottling. The subsoil continued to approximately 40 cm below the surface where the unit was terminated. No artifacts or cultural features or levels were observed. The north wall profile is shown in Figure 10.

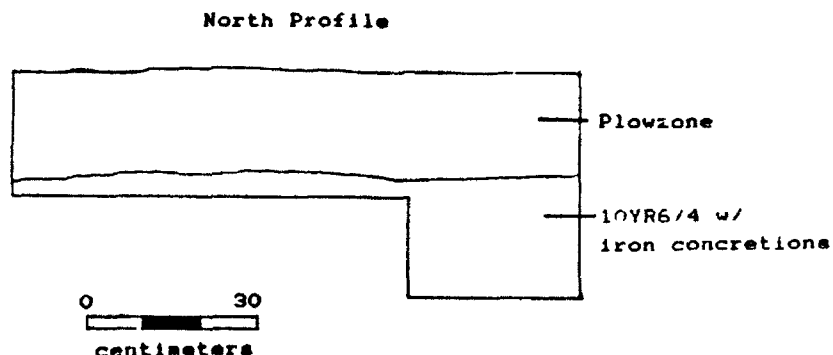


Figure 10. 2380459, Test Unit 3, North Profile

Proposed Site Function and Cultural Affiliation

The artifact assemblage consisted of artifacts related to the manufacturing of tools such as decortication flakes, unmodified chert, cores, flakes and debitage, an Hertzian cone (an indication of percussion flaking), and a biface exhibiting characteristics of an initial stage of manufacture. The low density of material and the lack of midden and ceramics at the site are also evidence that 23SD459 probably functioned as a limited activity site upon several occasions.

Only two temporally diagnostic artifacts were found, a Scallorn arrow point and an Early Woodland corner notched projectile point. The cultural affiliation of the site then is based on the collection of these two artifacts.

Site Significance

23SD459 has been significantly disturbed by a long history of agricultural activities and by the construction and then removal of the railroad bed bisecting the terrace. All cultural material was located on the surface, in the plowzone, or in the first 5 cm below the plowzone. No cultural features or levels were observed and there is a low probability for intact deposits remaining at the site. Due to the low density of artifacts and the lack of intact deposits, 23SD459 has little research value and is not considered potentially significant or eligible to the National Register.

Project Impact

The proposed canalization project will disturb the western edge of 23SD459, which had the lowest artifact density on the whole site (approaching zero). However, since the integrity and research value of the site has already been lost, the planned project will have no adverse effect on 23SD459.

Recommendations

No further archeological work is recommended at 23SD459 in connection with the proposed project.

SITE 23SD465

Description

23SD465 is a large multicomponent prehistoric and historic site first reported by IRI in their survey of the project area. The site covers 37,000m² and is situated on an edge of the Relict Braided Surface adjacent to and five meters above the Castor River (Figure 11). There has been some active alluviation on this surface. The site is located adjacent to five creeks which merge with the Castor River above and below the site. The uplands

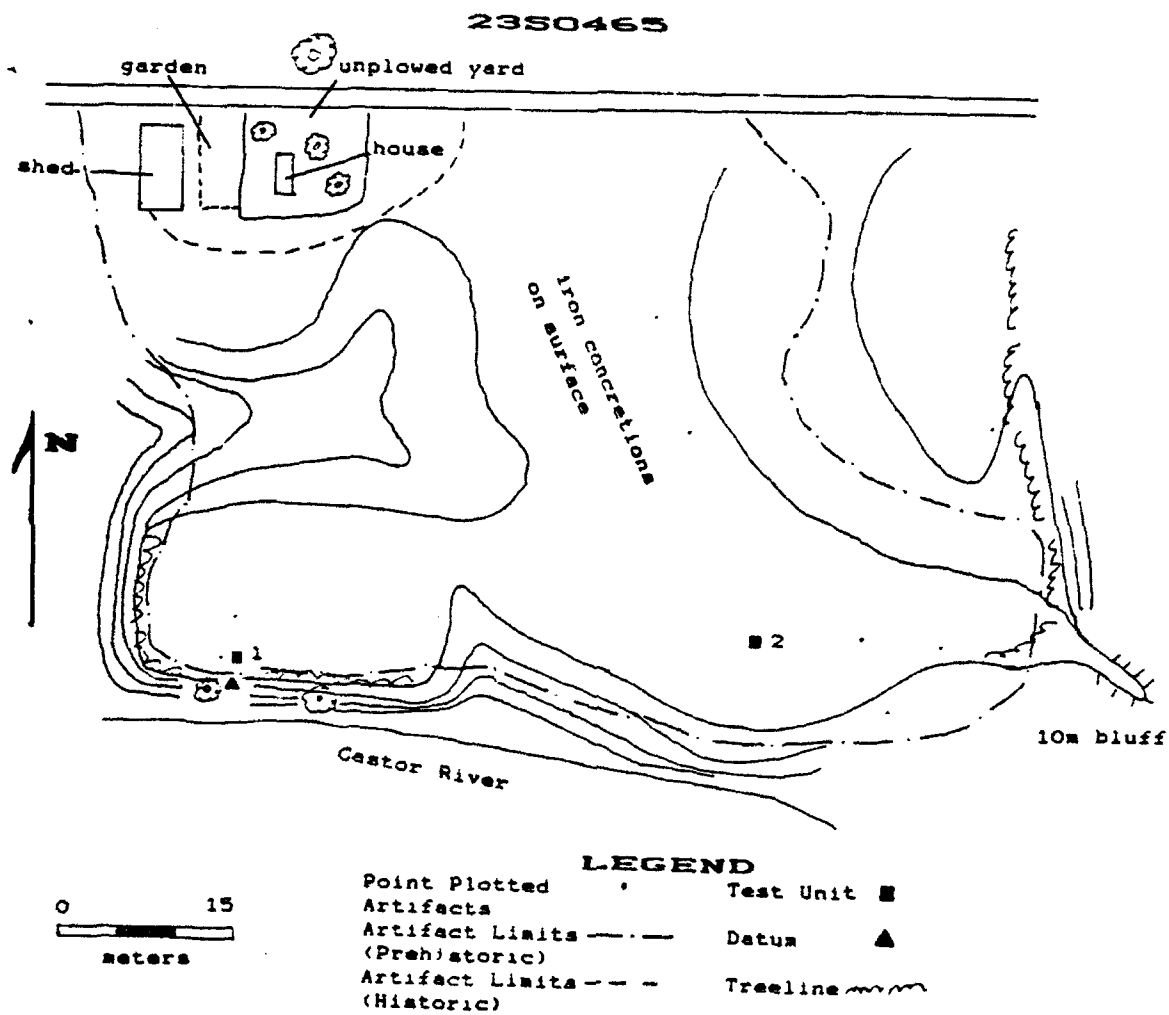


Figure 11. 2350463, Site Map

are 400m north of the site. This is the closest approach of the river to the uplands on the north side of the valley for 5 miles (8km) along the course of the river.

Previous Investigations

The IRI investigations included a controlled surface collection (in 100m² units over 5400m² of the site), excavation of 32 shovel tests (20 of which contained cultural material), and excavation of a 1 x 2m test pit some where on the eastern part of the site (IRI 1979:83). Their investigations suggested that the site covers 53,000 square meters (5.3 ha or 13.25 acres) and that the site was restricted to a 16cm deep plowzone. The diagnostic artifacts recovered suggested occupations in the Archaic, Woodland, Mississippi and possibly Paleo-Indian periods. They classified the site as a long term occupation site (IRI 1979:83-85).

During the MCRA investigations in March the surface had high visibility (70-90%) and was obscured by soybean stubble and rain. At this time artifacts were flagged and only one diagnostic artifact was collected. In May the site was in 2-10 cm high soybeans which had been cultivated and rained on affording excellent visibility approaching 95% on all areas of the site. There were footprints systematically up and down the rows and little piles of loose flakes suggesting that the site had been recently collected. Conversations with Mr. Charles Franklin Rampley, Mr. Frank Rampley and Mr. Willard Rampley indicated that the site has long been known locally and that people often came to collect on the site. Despite the collecting since the past rain we collected 13 points and tools from the surface of the site. These included mainly untypeable point fragments, probably a biproduct of the site being collected for many years..

Methods of Testing

1.4 days with four crew members was spent testing 23S0465. The initial visit in March disclosed a large area of artifact scatter covering a greater area than IRI had mapped and the unmapped log cabin which in the drizzling rain gave the investigators an unreal feeling of having stepped into an unknown dimension. Were we in the correct place? Yes the topography was as shown on the map. Had the cabin been moved recently to its location? No, the map was in error. In May we flagged artifacts on the edge of the scatter and diagnostic artifacts. Two 1 x 1m test units were excavated in areas of high artifact density on the west and east parts of the site. The site was mapped and a datum set in the impact zone. All diagnostic artifacts were point plotted. The historic component was mapped by flagging artifacts in the field and all of these were collected. The log cabin was photographed and an interview was conducted with Mr. Charles Franklin Rampley (Appendix B).

Table 4. Site 2380465, Surface Material

Point Plotted Select Surface Material

ESN	Artifacts	Count	WT (gms)
16	PP/K, Midsection	1	6.0
17	PP/K, Distal half	1	10.4
18	PP/K, Distal fragment, heat treated	1	3.8
19	PP/K, Midsection	1	8.9
20	Decortication Flake, edge modification	1	29.3
21	PP/K, Base, Heat Treated (Gary ?)	1	2.6
22	Quartzite interior flake	1	3.6
23	Decortication Flakes	2	26.2
24-1	Biface	1	28.4
24-2	Drill Midsection	1	2.9
25	Biface Fragment	1	31.2
26-1	Decortication Flakes	8	106.5
26-2	Debitage	2	11.3
27-1	Preform	1	32.2
27-2	Flake, Heat Treated with fine dorsal flk1		1.6
28	Cores, Quartzite and Chert river cobbles	3	502.3
29-1	Split River Cobbles	2	680.9
29-2	Decortication Flakes	2	29.5
29-3	Debitage, Heat Treated	1	1.8
30	Core, River Cobble	1	122.1
31	Biface, initial stage, upland chert	1	118.8
32-1	Core, River Cobble	1	59.1
32-2	Decortication Flake	1	9.7
32-3	Debitage	1	2.0
33-1	Biface Fragment	1	12.6
33-2	Decortication Flake	1	12.1
33-3	PP/K fragment, heat treated	1	1.1
Totals		40	1856.9

Test Units

Test Unit 1 was placed in the impact zone in a high artifact concentration (Figure 11). The top level (0-11 cm) was the plow-zone. This was a dark brown (7.5YR3/2) clayey silt with a high artifact concentration. One east west plowscar was recorded at the base of this level.

Excavation level 2 (11-21cm) had the same dark brown (7.5YR3/2) clayey silt but contained small iron concretions and flecks of carbon. The soil was much softer on the south side of the unit than on the north side of the unit. Artifact densities continued to be fairly high in this level.

Excavation level 3 (21-33cm) was largely contained in the third stratum which was a yellowish brown (10YR5/4) silty clay. At the base of this level the soft area on the south of the unit was obviously some sort of disturbance which was labeled Feature 1.

Feature 1 was hand excavated as a unit with a trowel. It had a sloping bottom, dipping toward the south, an irregular plan view, and a higher artifact density than the rest of the level (excavation level 4). The stain was 65cm (EW) x 45cm (NS) on the south side of the unit. There was a root hole across the bottom at 40cm. This appeared to be the sloping bottom of the cultural deposit, perhaps a filled in gully, on the edge of the bluff.

The remainder of the fourth excavation level was in a pale brown (10YR6/3) silty clay which contained no cultural material. This was excavated to a depth of 43cm and terminated at a light grey (10YR7/2) clay. Two levels of this stratum were laboriously excavated without producing any cultural material. A post hole digger hole, which was excavated to 73cm exhibited the same pale grey clay of the relict Braided surface.

Table 5. Site 23SD465, Artifacts recovered in Test Unit 1.

Excavation levels:	Surface	1	2	3	E1
<u>Artifacts (#/gms)</u>					
Lithics					
Debitage	3/ 4.9	38/ 18.7	37/ 24.7	24/ 53.9	
FCR	/ 13.9	/366.5	/398.2	/374.5	/ 8.8
Sandstone	1/202.2		/ 95.4	1/ 62.0	1/10.0
Decor. Flakes		18/ 50.6	15/ 19.7	9/ 20.3	1/ 3.4
Shatter	2/ 2.5				
Ceramics					
Barnes Plain				4/ 4.4	
Botanicals			*	*	*
Total	6/209.6	56/69.3	62/139.8	38/140.6	2/13.4

* Observed in excavation, none recovered.

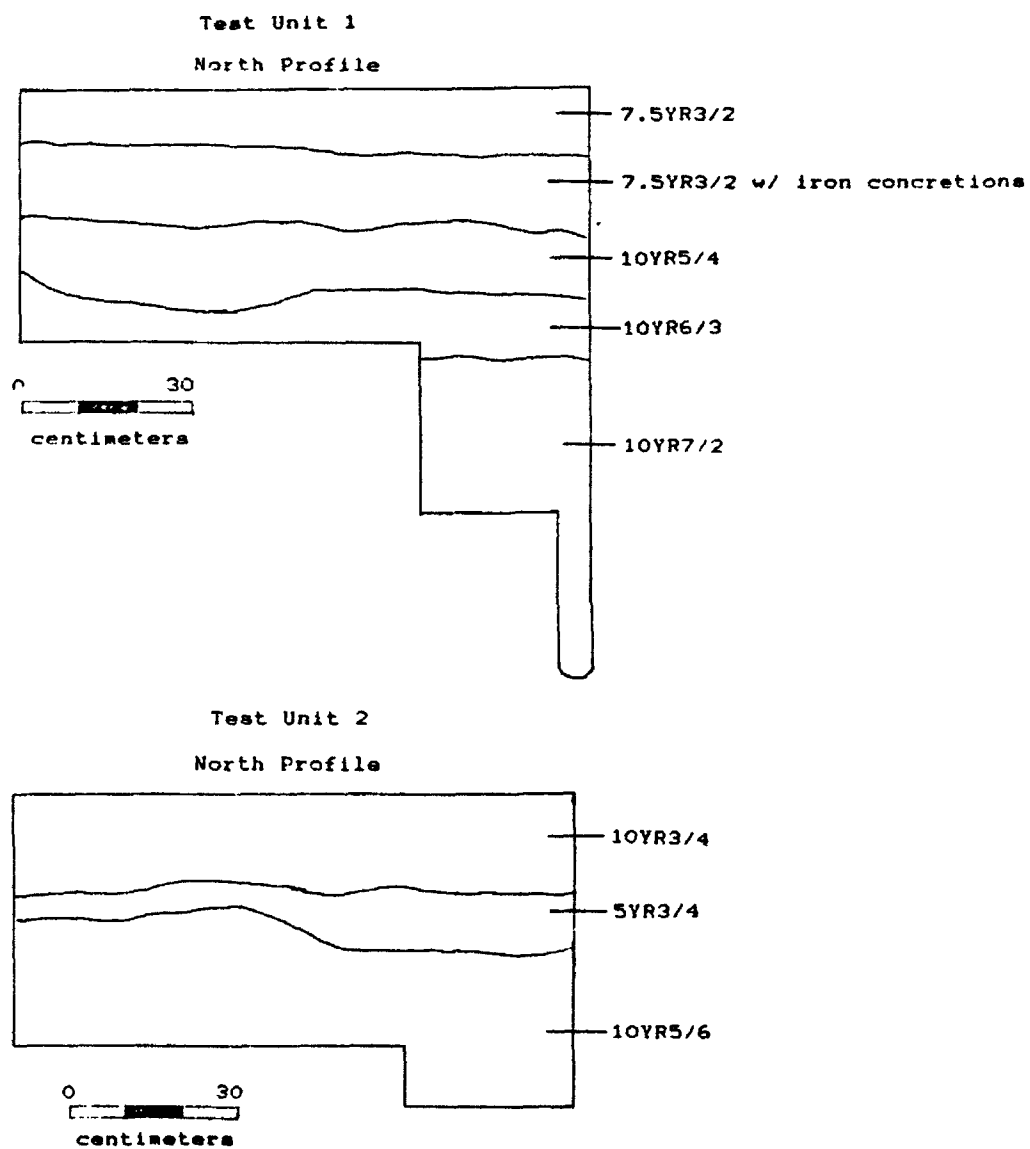


Figure 12. 2380465, Test Unit profiles.

Test Unit 2 was excavated on the top of the east knoll in the densest part of the surface scatter (Figure 11). Excavation level 1 was the plowzone (0-15cm) which was a dark brown (10YR3/4) silt with large numbers of small gravels. Excavation level 2 (15-25cm) contained all of the midden stratum and a part of the third stratum.

The midden is a thin stratum of variable thickness which is characteristic of anthropic soils. This was a dark brown (5YR3/4) clayey silt with artifacts, carbon and fewer pebbles than the plowzone. This dark soil was observable on the surface and overlaying the grey soils with large numbers of iron concretions found northeast of the site boundary (Figure 11). The dipping of the east part of our excavated profile (Figure 12) suggests the probability of a small basin shaped feature which was undetected in plan view.

Excavation level 3 contained the upper part of stratum 3 which is a yellowish brown (10YR5/6) silty clay with very few pebbles and many fewer artifacts. The last two levels (35-45cm and 45-55cm) were totally contained in stratum 3 and contained no artifacts.

Table 6. Site 2350465, Artifacts recovered from Test Unit 2.

Excavation levels:	Surface	1	2	3
<u>Artifacts (#/gms)</u>				
<u>Lithics</u>				
Core	1/ 52.0	1/ 39.0	5/865.6	
Debitage	7/ 74.4	164/195.1	96/ 90.9	9/ 49.8
Decortication Flakes	6/106.9	78/370.6	24/ 86.2	9/ 75.2
Bifaces		2/ 26.0		
PP/K fragment		1/ 19		
Fire Cracked Rock	/205.6	/2751.3	/2142.8	/228.9
Sandstone		22/168.3		
Specular hematite		1/ 5.1		
<u>Ceramics</u>				
Shell tempered Plain			1/ 0.8	
Fired Clay			5/ 3.7	
<u>Bone</u>				
Calcined frag.			2/ 0.5	
<u>Botanicals</u>				
			*	*
Total	14/233.3	269/823.1	133/1047.7	18/125.0
*observed in excavation, none recovered				

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Table 7. Site 23SD465, Artifacts from near cabin.

Artifacts (Dates of Manufacture)	Counts	Weights (g)
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HISTORIC ARTIFACTS

Glass

Bottle Neck (no seam through lip)	1	13.3
Milk Glass	13	5
Clear Glass (some discoloration)	16	193.7
Marble (modern 1904-P)		

Historic Ceramics

Porcelain	1	1.2
Albany	2	17.4
Bristol	2	68.4
Whiteware (with transfer print)	1	3.2
Whiteware	9	
Whiteware (with green gather)	1	
Salt Blaze	1	

Metal

Metal Object (decorative?)	1	43.9
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Shell

Mussell Shell	1	9.1
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Total

PREHISTORIC ARTIFACTS

Projectile Points/Knives (PP/K)

Unidentified PP/K (Etley-like but much smaller)	1	33.2
---	---	------

Decortication Flakes

	1	1.8
--	---	-----

Total

	2	35.0
--	---	------

Historic Cabin

The historic cabin was originally a one room structure of hewn logs. There are several added rooms of frame construction. The original chimney has been removed and this was patched over with sawn boards which along with a hanging brick chimney indicates being done while the house was occupied. Mr. Charles Franklin Rampley indicated that he remembers seeing the house in 1915 and suggested that it was old at that time. The artifacts suggest that the occupation dates at least into the latter part of the 19th century (Table 7).

Proposed Site Functions and Cultural Affiliations

Site 23SD465 is a multifunctional site utilized during at least three periods: Woodland, Mississippi and historic. There appears to be some areal segregation of components with the Mississippi component on the east knoll, the Woodland on the southwest part of the site and the Historic component on the Northwest part of the site. Several different functions are suggested by the data recovered including occupation and lithic reduction.

The prehistoric lithics recovered indicate a heavy utilization of the site for early stage lithic reduction. There is a fairly high density of cores and decortication flakes. Most of the raw materials are cobbles probably procured near by in the several creeks which converge from the north at this location. However there were a number of cores and flakes of quartzite and tabular chert which probably came from further upstream in the Ozark or St. Francis highlands. The depth of these deposits, the midden, and presence of ceramics suggests that some period of occupation was associated with these components.

The historic component is undoubtedly an occupation site. The artifacts recovered strongly indicate a beginning date of occupation in the mid-19th century, and the interview with the Rampleys indicate that the house was occupied into the mid 20th century.

Site Significance

This site contains information which is significant in terms of the National Register of Historic Places Criteria (Federal Register 1976:1595). The deposits are largely intact and there are indications of buried surfaces in which the point of origin of features are likely to be definable. The site has preserved botanical materials, lithics, and ceramics. A large number of problem domains are addressable with this kind of data including different lithic reduction strategies from two or more periods at the same source area, seasonality of occupations, and definition of archeological phases. The latter consideration includes chronometric alignment of the Woodland component and potentially spacial limits of the already defined Mississippian phases which are known largely from excavations on the larger mound centers (Cf. Chapman 1980). Hand hewn log cabins are rare in the valley and could be used to argue that the site is significant on architectural grounds.

Project Impacts

The proposed project will primarily impact the surface of the site by having heavy equipment track over the surface on the southwest part of the site. In this area the plowzone is only 11cm thick and, unless there is considerable care taken when the

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equipment is used there could be damage to the lower intact strata of the Woodland component. There are several trees on this part of the site which are over 1m in diameter. Since these are associated with the historic feeling and integrity of the site these should not be impacted by the project.

Recommendations

1a. Carry out the proposed construction when the site is dry to keep the site from being damaged by equipment bogging down and monitored by an archeologist. This should be proceeded by making a controlled surface collection of the impacted area. If impact cannot be avoided by working in the dry season then either (1b) change the work side of the project, or (1c) carry out a data recovery program by excavation of the to be impacted deposits.

2. Avoid cutting any of the large trees along the river bank as these are a part of the environment which gives a secluded feeling of association which is an important characteristic of the Historic component.

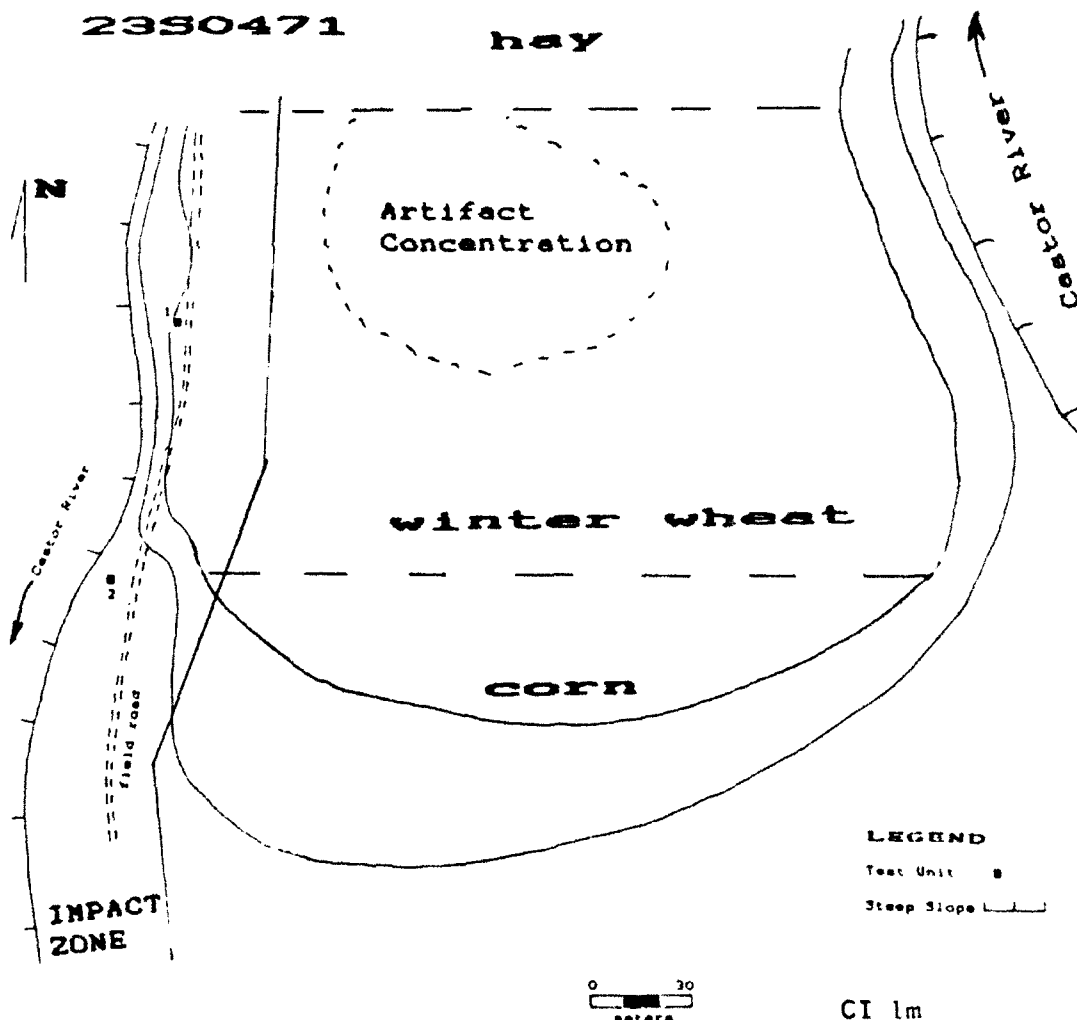


Figure 13. 2380471, Site Map

SITE 23S0471

Description

Site 23S0471 was recorded by Iroquois Research Institute (IRI) as an isolated find at the base of a prominent terrace situated perpendicular to Castor River and trending east across a narrow neck of a point bar which is about to be cut off. During the initial visit by MCRA personnel a very light scatter of debitage (less than 5 flakes), one Gary point base, a flake scraper, and fire cracked rock were noted on the terrace above the initial site location, with no cultural material observed at the IRI location. The point and scraper were collected. Winter wheat, approximately 10cm in height was present at the time of the first visit, resulting in excellent visibility.

During a revisit to 23S0471 in May to test for potential significance hay and winter wheat between 0.85 and 1 meters high was present on the terrace and terrace slope. Corn, according to Mr. Hendley (the landowner) was in the floodplain portion of the area to be investigated. He requested that MCRA not walk or place any test unit in the areas having crops and hay. This restricted test units to the field road and areas immediately adjacent to the river in the proposed impact zone (Figure 13). This terrace overlooks a large, somewhat flat point bar in the active floodplain of the Castor River.

Areas containing winter wheat had zero visibility due to the dense growth resulting in no visual inspection. Bare spots and areas of sparse growth were present in the stand of hay resulting in approximately 10% visibility. Three flakes were noted but not collected. The hay was being grown on the terrace and terrace slope next to the river. The area of the IRI isolated find had 100% visibility, but no other artifacts were observed.

Test Units

Two 1 X 1m test units were excavated at 23S0471.

Test Unit 1 was located on the terrace adjacent to the river in the vicinity of the debitage (Figure 13). An area free of domestic vegetation was chosen so as to respect Mr. Hendley's request that we not disturb his crops. Test unit 1 was 13 meters east of Castor River and 1.5 meters west of the farm road. Excavation was to proceed in 10 cm levels, sifting the soil through 1/4" hardware cloth. Below the plowzone, no evidence of past human behavior was observed at any point during the excavation of this unit.

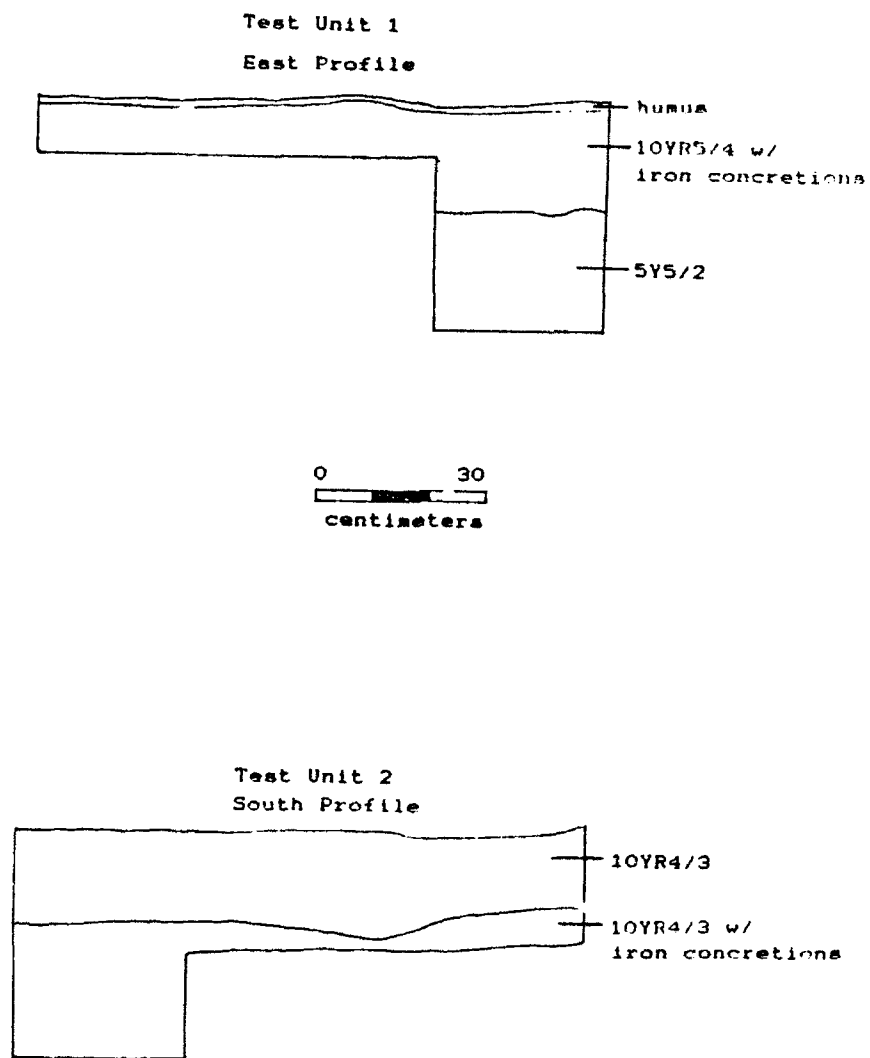


Figure 14. 23S0471, Test Unit profiles

The layer of humus (Figure 14) approximately 2 cm thick was removed by shovel skimming. After this point however, it became necessary to use a pick to remove the clay due to its hard, dry compact nature. Iron concretions were present in large numbers in the first stratum (0-20 cm). The soil was 10YR5/4 on the Munsell color chart and had a grey/light yellow mottled appearance (Figure 14). When water was added to this soil to make it malleable, it took on a clayey feel.

The first 10 cm of the entire unit was excavated. However due to the nature of the soil and the almost impossible task of processing it through the 1/4 inch hardware cloth, the remaining unit was reduced to a 30cm by 30cm in the S.E. corner.

Stratum 2 was encountered at 19-20 cm below datum and extended to at least 40 cm. It was olive grey in color and 5YR5/2 according to the Munsell color chart. A very clean break with Stratum 1, in both color and soil texture, was noted. It was entirely clay and had no iron concretions (Figure 12).

Test Unit 2 was located south of Test Unit 1. The terrace slope was to the north and east of this test unit (Figure 13). Test Unit 2 was 8.10 meters from the bank of Castor River, 19 meters from the terrace slope to the east and 15 meters to the terrace slope to the north.

The first 20 cm of the entire 1 x 1m unit was excavated. Iron concretions began appearing at approximately 17cm bd and extended to the bottom of the excavation. Excavations from 20 to 40cm bd were restricted to a 30 x 30 cm area in the southeast corner. No soil change was noted in the entire 40 cm excavation. The soil was brown (10YR4/3) and was extremely mottled with grey and yellow clay. The soil was a clayey silt and contained inclusions of pure grey clay.

No artifacts were recovered nor was any evidence of past human behavior such as pits or anthropic soils observed.

Proposed Site Function and Cultural Affiliation

Site function of 23SD471 cannot be determined at this time due to the paucity of information recovered. The Gary point base suggests a Late Archaic to Woodland period of occupation. As noted above, no artifacts or features were observed during testing and surface remains were very sparse. IRI had classified 23SD471 as a "special activity area", based on the one flake they recovered.

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Site Significance

The area of the site investigated does not possess the qualities of integrity or other materials that would allow it to be nominated to the National Register of Historic Places.

Project Impact

The proposed project will disturb the western portion of 23SD471. Based on the testing by MCRA, this area of site 23SD471 is a surface-plowzone site. Its research value and integrity has been severely compromised by recent historical activities such as plowing and erosion. The planned COE project will not adversely effect 23SD471; neither the tested insignificant portion nor the untested central part of the site.

Recommendations

No further archeological work is recommended at 23SD471 in connection with the proposed project.

SITE 23S0496

Description

23S0496 is a large, multicomponent prehistoric site initially recorded and tested by Iroquois Research Institute in 1978. Their investigations consisted of controlled surface collections in two areas of the site, several shovel tests, and excavation of one 1m x 1m test unit. Although surface visibility at the site was not good due to high winter wheat, a high density of artifacts was collected in three 10 m x 10m units on the eastern end of the site. The test unit, which was located adjacent to one high density area, contained artifacts in the top 8 cm or plow-zone level (IRI 1978:134). All shovel tests on the site were reported to have been negative. Diagnostic artifacts collected included projectile points from the Woodland and Archaic periods. Based on information collected by IRI, the site was considered to have been utilized as a temporary campsite or as an extraction area for local resources throughout several periods (IRI 1978:134).

In the recent investigations by MCRA, the site which had excellent surface visibility due to low sparse weeds, grass, and wild onions, was found to contain a high density of artifacts, a midden stain, and to extend over 150,000 square meters. Test excavations also showed an area of intact midden, features, and cultural levels. Further examinations conducted included controlled surface collections, shovel tests, mapping of diagnostic artifacts, and the excavation of six 1m x 1m units. Based on the collection of over 40 lithic tools and/or projectile points, and 10 sand or grog tempered ceramics, the site dates from the Archaic through the Woodland periods. Because it contains important intact deposits, 23S0496 has a high research potential and is considered eligible to the National Register of Historic Places.

Methods of Testing

A total of 3.5 days with 4 crew members was spent testing 23S0496. The initial visit to the site disclosed an area of dark midden stain on the surface. The southeast edge of the terrace had recently been severely eroded exposing an extremely high density of artifacts. This area was literally paved in lithics (Figure 15). A controlled collection unit measuring 2.5 x 2.5m was positioned within the concentration. Then the entire plow-zone level was quickly skimmed off the area to observe whether intact levels or features remained. Feature 1 a large pit was exposed in this manner and a 1m x 1m unit (Test Unit 2) was excavated in order to examine a portion of this feature.

23S0496

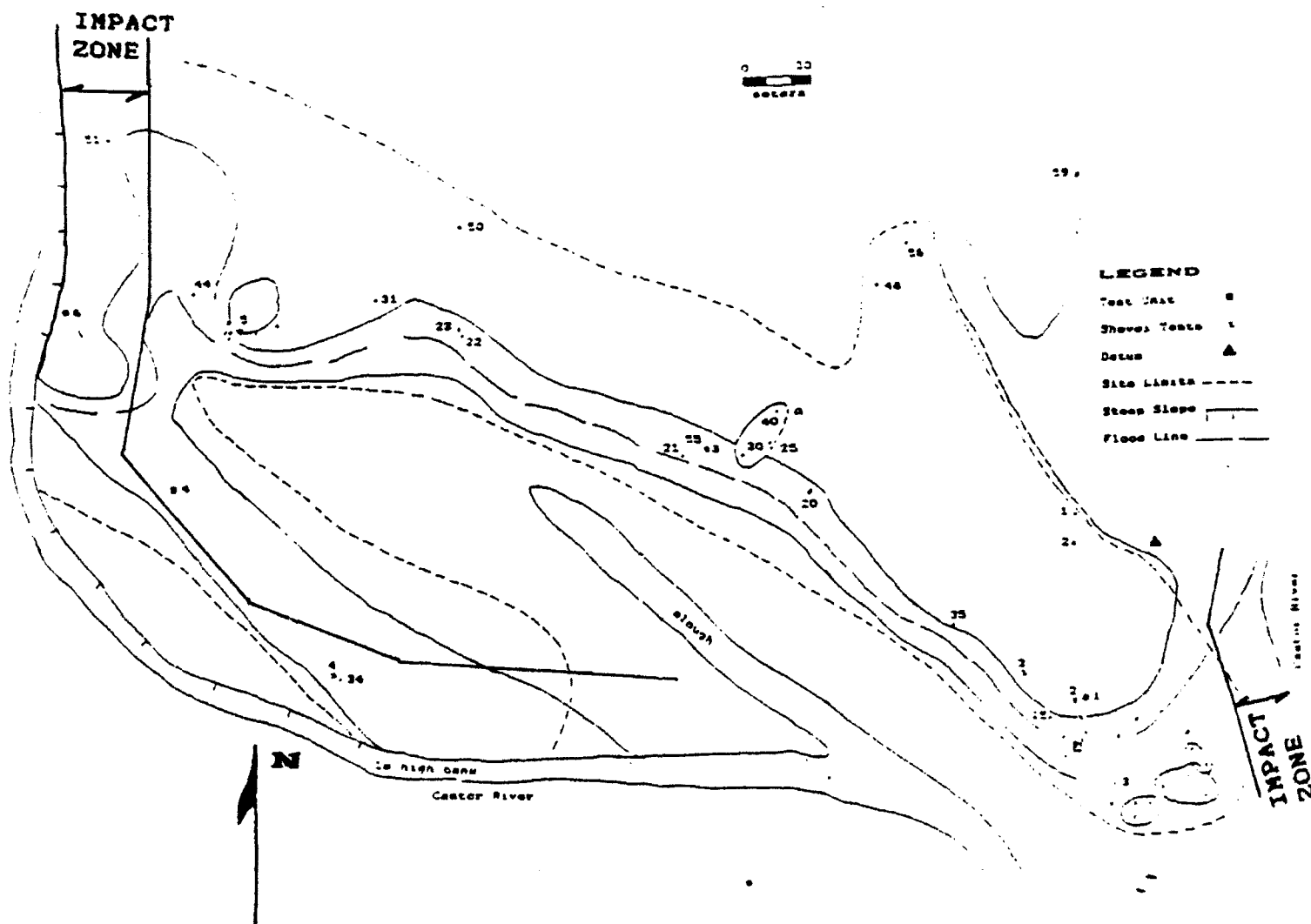


Figure 15. 23S0496, Site Map

Three shovel tests were excavated in the midden area in order to locate its deepest area to insure proper placement of Test Unit 1. This unit disclosed a thin level of intact midden below the plowzone and several features.

The surface of the entire length of the terrace and the floodplain below was closely examined. Four people spaced 10-15 m apart walked in zigzag fashion up and back down the terrace. All diagnostic and tools were flagged, mapped, and collected. Artifacts were observed the entire length of the terrace with high density areas on rises or knolls next to the terrace edge. Test Unit 3 was positioned within a concentration located one half of the distance between the southeast and northwest ends of the terrace. Test Unit 6 was placed at the northwest end of the site on the edge of the river bank and Test Unit 5 was located on a high spot west of Test Unit 6 and a drainage area.

The floodplain was examined in a similar fashion. After a hard rain additional artifacts and the base of a sand tempered pot was found in the floodplain at the southeastern end of the site. Beyond the areas labeled B, C, and D in Figure 16, there was a low drainage and only a few artifacts were noticed south of these concentrations. A few widely scattered artifacts were observed below the northwest end of the terrace along the top of a low northwest to southeasterly trending rise. Shovel Test 4 and Test Unit 4 were positioned on this rise (Figure 15). Since cultural material and features were found in this area of the floodplain, the site boundaries were greatly expanded, from the 89,400 square meters (IRI 1978:133) to 150,000 square meters.

Controlled Surface Collections

As stated, a controlled surface collection (2.5m x 2.5m) was made on the southeastern end of the site where rain had scoured out portions of 23S0496. Over 1/2 hour was spent by 4 people collecting all artifact in this unit. The artifacts completely filled 3 large cloth bags. A total of 407 lithic artifacts, 1 grog tempered sherd 2.9935 grams of fire-cracked rock were included in this sample and are listed in Table 8.

Surficial artifact density in this area of the site is 65 artifacts per square meter not including the fire-cracked rock. By weight and including the fire-cracked rock, there were 757 grams per square meter. The high density of material by count is considerably more than the .5 mean surficial density which Iroquois Research Institute (1979:133) computed based on their controlled collections in 1978.

The assemblage which includes a high frequency of decortication flakes, three hammerstones, and lots of lithic debris is an indication that reduction and manufacturing activities were conducted here. The ratio of debitage and tool manufacturing debris to whole or fragmentary tools and projectile points is almost 40 to 1 and is another indication of tool manufacturing activities.

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Table 8. Site 23SD496, Controlled Surface Collection Material

Artifact	Count	WT (gms)
Fire Cracked Rock	NA	2993.5
Grog Plain Body Sherd	1	2.9
Hammerstones	3	261.8
Decortication Flakes	212	1023.9
Debitage	181	384.3
Glass (clear)	1	2.8
Scraper	1	10.7
Biface Frag.	2	27.1
Drill Frag.	1	1.8
Unidentified PP/K Frag.	5	19.6
Ensor (?) PP/K	1	4.6
Totals	408	4733

Mapped Artifacts

In addition to debitage 51 projectile points or tools and 1 sand tempered pot base (6 reconstructable base and 11 body sherds) were observed on the surface of the site and mapped according to provenience. These plotted specimens are shown in Figure 15, 16, and 17. Lithics in this sample included 41 projectile points or fragments, 3 preforms, 2 drills, 7 bifaces, 1 hafted digging tool or ax, 1 Mill Creek hoe fragment, 3 large primary flakes, 1 true blade, 1 fire-cracked rock, 1 side notched tool.

The mapped specimens included 31 projectile points which based on morphology can be assigned to a temporal period. Of these: 3 were Early Archaic side notched types, Graham Cave and Big Sandy (one Graham Cave point did not exhibit basal grinding); 1 was a Middle Archaic point similar to the Rice Lobed; 5 were Early Woodland corner notched points; 2 were Middle Woodland, Steubens; 2 were Late Woodland, Steuben Expanding Stemmed; 8 were from the Late Archaic to the Middle Woodland period, Stone Square Stemmed; 3 were Late Archaic to Woodland, 2 unidentified and one Gary; and 2 were Woodland types. Based on this sample, the site is affiliated from the Early Archaic to the Late Woodland periods with the majority of the typable projectile points from the Late Archaic to the Middle Woodland periods.

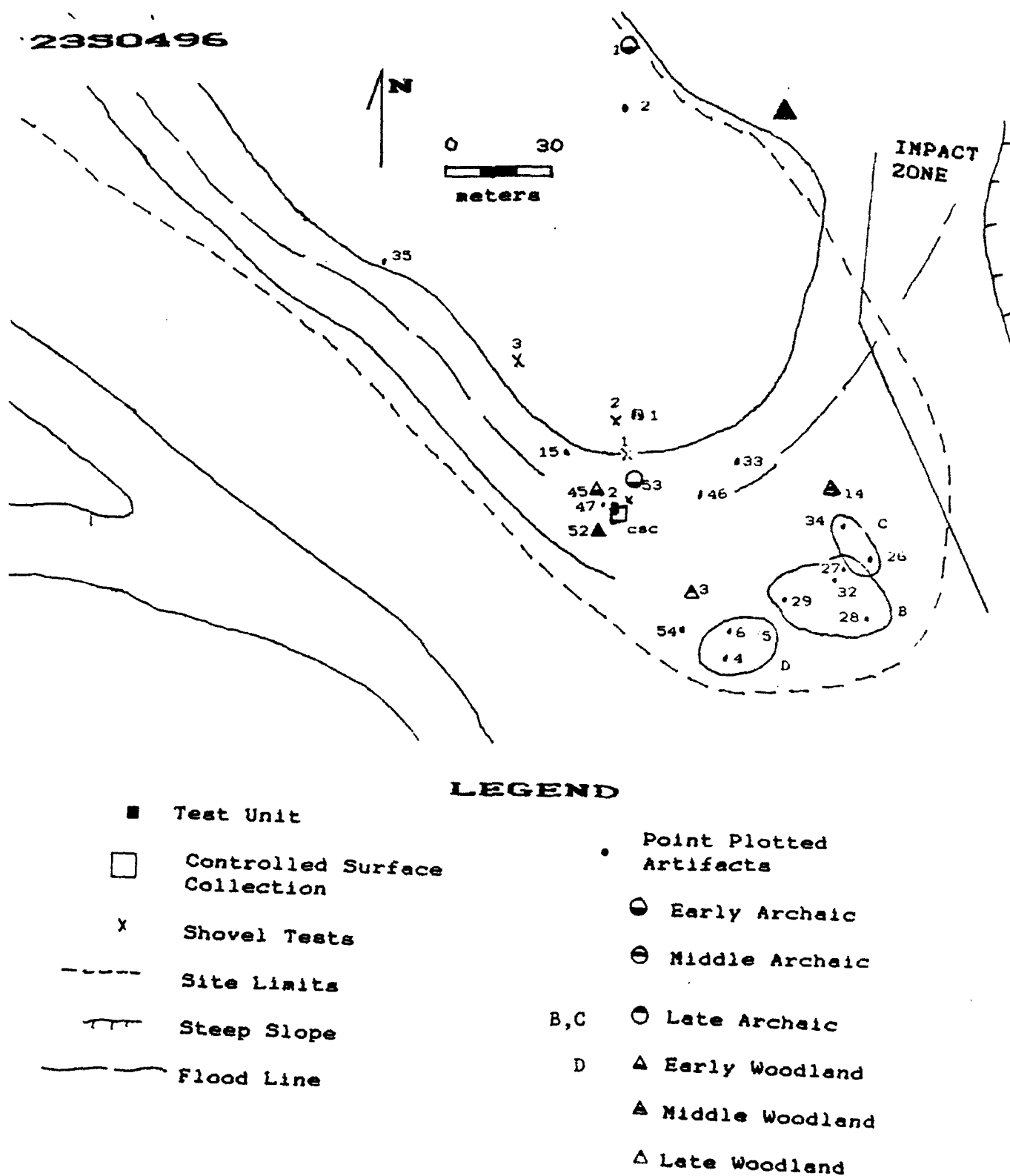


Figure 16. 23SD496, Detailed Map of the East End of Site

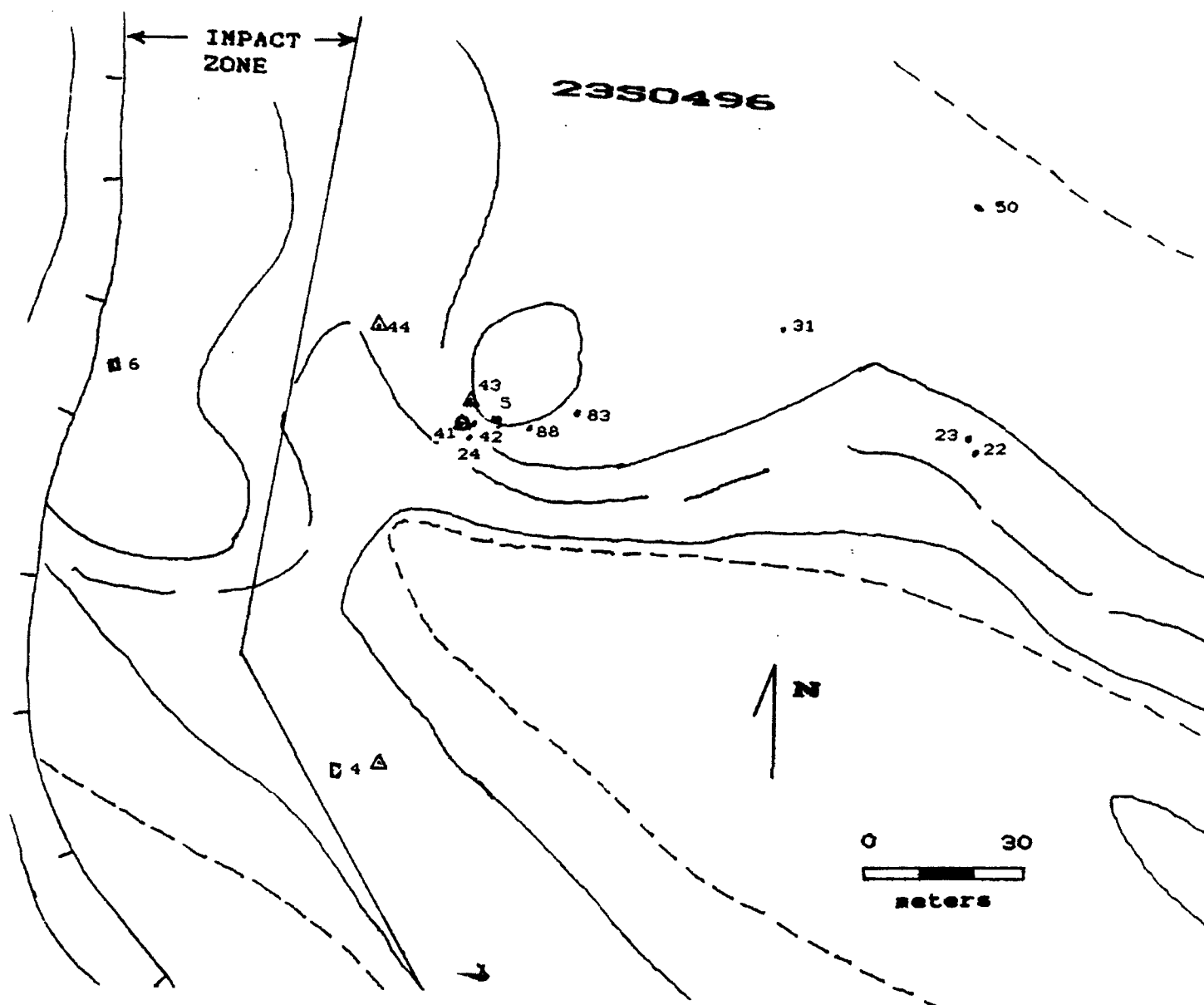
Table 9. Site 23S0496, Point Plotted Surface Material

FSN	Artifact	Count	WT (gms)
1	Big Sandy PP/K	1	13.0
2	Mill Creek Hoe Frag.	1	51.0
3	Steuben Expanded Stem PP/K	1	3.0
4	Kirk Corner Notched PP/K	1	7.5
5	Delhi PP/K	1	9.5
6	Delhi PP/K	1	14.0
7	Big Sandy	1	13.0
8	Steuben Expanded Stem PP/K	1	6.5
9	Chipped-stone Axe	1	54.0
11	Preform	1	19.5
12	Stone Square Stem PP/K	1	22.5
13	Rice Side Notched PP/K	1	6.5
14	Steuben Expanded Stem PP/K	1	6.0
15	Preform	1	39.5
20	Biface	1	52.0
21A	Unidentified PP/K Frag.	1	7.0
21B	Unidentified PP/K Frag.	1	4.3
22	Biface	1	12.0
23	Unidentified PP/K Frag. retouched into steep edge scraper	1	7.0
24	Flake	1	5.0
25	Stone Square Stem PP/K	1	23.5
26	Fire Cracked Rock	1	41.0
27	Stone Square Stem PP/K	1	10.5
28	Biface Frag.	1	11.0
29	Stone Square Stem PP/K	1	13.5
30	Stone Square Stem PP/K	1	15.5
31	Biface	1	35.5
32A	Sand, Base Sherds	6	134.5
32B	Sand, Body Sherds	11	52.8
33	Unidentified PP/K Frag.	1	8.0
34A	Gary PP/K	1	14.5
34B	Unidentified PP/K Frag.	1	6.0
34C	32 caliber Lead Ball	1	5.0
35A	Quartzite Flake	1	79.5
35B	Unidentified PP/K Frag.	1	8.6
35C	Unidentified PP/K	1	31.7
38	Unidentified PP/K Frag.	1	4.5
40	Stone Square Stem PP/K	1	23.6
41	Rice Side Notched PP/K	1	10.0
42A	Biface Frag.	1	28.0
42B	Quartzite Flake	1	10.0

 Table 9 (continued). Site 23S0496, Point Plotted Surface Material

<u>FSN</u>	<u>Artifact</u>	<u>Count</u>	<u>WT (gms)</u>
43	Drill Base	1	6.2
44	Steuben Expanded Stem PP/K	1	6.0
45A	Biface	1	18.5
45B	Unidentified PP/K	1	11.6
46	Rice Lobed PP/K	1	5.7
47	Unidentified PP/K Frag.	1	2.8
48	Stone Square Stem PP/K	1	22.8
50	Unidentified PP/K Frag.	1	5.0
51	Biface	1	18.0
52	Stone Square Stem PP/K	1	13.2
53	Graham Cave Side Notched PP/K	1	5.2
54	Preform	1	6.5
55	Unidentified Corner Notched PP/K (E. Wldd?)	1	14.0
56	PP/K Frag. retouched into steep edge scraper	1	5.3
59	Unidentified Corner Notched PP/K (Wldd?)	1	5.0
83A	Unidentified PP/K Frag.	1	9.5
83B	Drill Base	1	9.5
84	Unidentified PP/K	1	5.0
85	Unidentified PP/K Frag.	1	7.5
88A	Side Notched Tool	1	13.5
88B	Flake	1	4.6

Totals		77	1115.4



LEGEND

- | | |
|-----------------|---------------------------|
| ■ Test Unit | • Point Plotted Artifacts |
| x Shovel Tests | ○ Late Archaic |
| --- Site Limits | △ Woodland |
| ⌋ Steep Slope | |
| — Flood Line | |

Figure 17. 23S0496, Detailed Map of West End of Site.

The base of the sand tempered pot was found in the mud on the floodplain after a gully washing rainstorm. It has characteristics of the Barnes type and is an indication of the Woodland occupation.

By plotting these artifacts according to cultural period represented, several tight clusters of artifacts from the same time period are evident (Figures 15, 16 & 17, Groups A-E). These included the 3 Stone Square Stemmed points located within a 20 m area in the approximate center of the site (Group A) and a similar grouping with a sand tempered pot base in the floodplain on the southeastern edge of the site (Group B). Two Rice side notched points (Group C) form a tight cluster with the latter group of square stemmed points. Only 25 m southwest of that group were three Early Archaic corner notched projectile points (Group D). In the northwest part of the site in the vicinity of Test Unit 5, one Late Archaic, one Early Woodland corner notched and two drill fragments were found in a 25 meter area. Only one other drill was found in the controlled collection area at the site.

The mapped specimens delineated several concentrations of artifacts along the terrace. Each of these could be interpreted as a separate site or location of prehistoric activity. In addition, several discrete clusters of artifacts from the same time period were observed. This is one indication that there are temporally distinct units and activity areas on the site. Controlled collections of small units in large blocks over the site would add significant information on these already observed temporal and activity areas.

Shovel Tests

Four shovel tests were excavated at the site. Three of these were placed in the midden area and one was located on the low rise in the floodplain (ST4). The units in the midden were to examine subsurface strata in order to place Test Unit 1. All of these units contained midden underlain by yellowish brown clay. The midden level consisted of various depths with the deepest on the top of the rise (ST2). Detailed profiles were not made of these units because for the remainder of the time spent at 23S0496, they were filled with rain water.

Shovel Test 4 was a fairly large unit 60 x 40 cm at the top and it was excavated to 80 cm below the surface. Soils in this test consisted of a plowzone of dark brown silty loam to 20 cm. The plowzone was underlain by a yellow brown sand with small amounts of clay and flecks of charcoal to about 60 cm. From there it graded into a darker yellow brown sand for 20 cm. No artifacts were observed but the fact that the darker level was at the base of the unit indicated a possibility for deeply buried A horizons. Test Unit 4 was positioned north of this test on the same low rise in order to further investigate the deep soil levels in the floodplain.

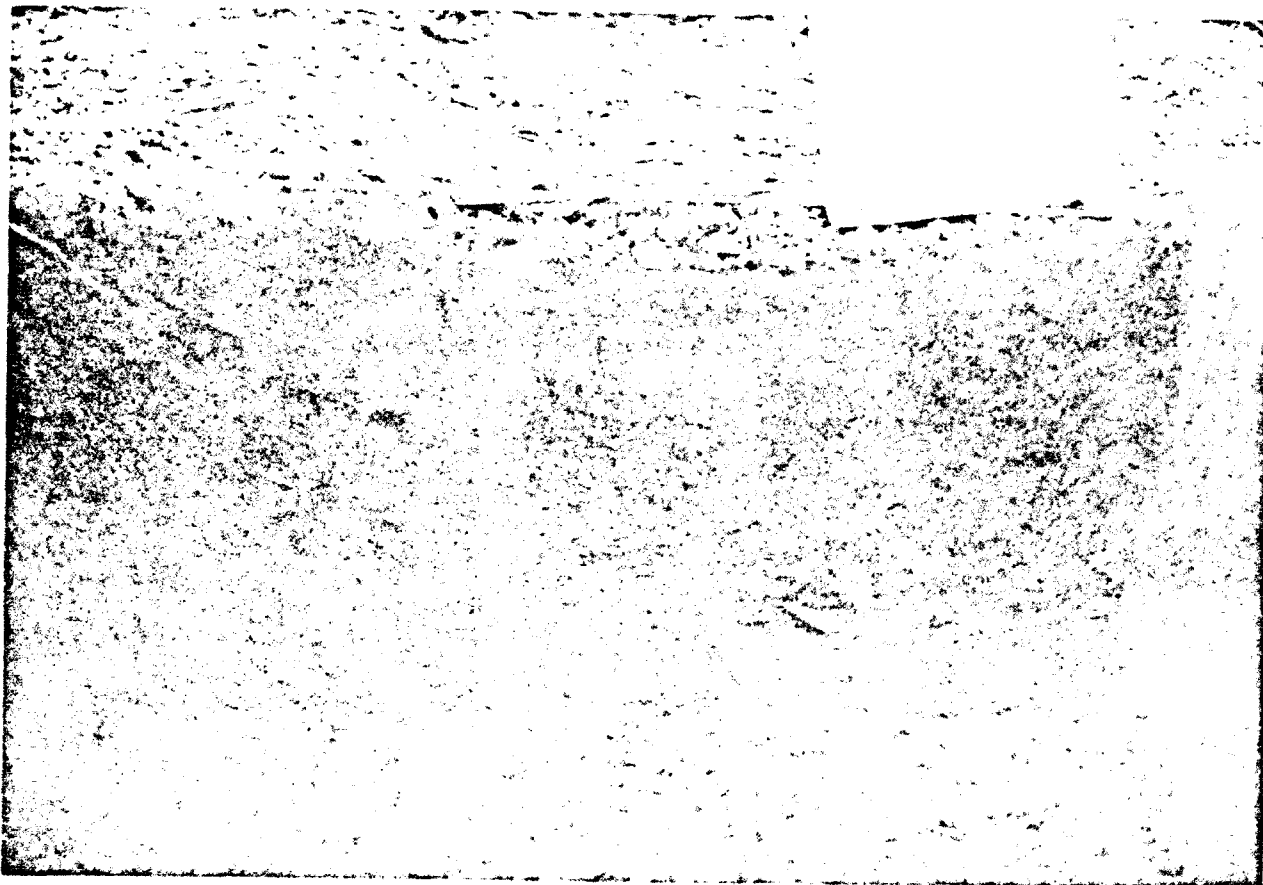


Figure 18. 23S0496, Test Unit 1 Profile.

Test Units

As stated a total of 5 1m x 1m test units were excavated at the site (Figure 15).

Test Unit 1. Test Unit 1 was positioned in the midden area. The plowzone was a loosely compacted dark brown (10YR3/4) silty loam midden located from 0- 15 cm below the surface. A total of 41 lithics, miscellaneous fire cracked rock and 1 grog tempered sherd were collected from the level.

At 15 cm the soil changed to a very dark brown almost black (5YR3/3) silty loam midden which was more compact than the plowzone. Flecks of burned bone, burned clay and charcoal were evident throughout the level. Further evidence that this was intact were the three features which were exposed. Features 2 and 3 were first noticed at 15 cm and Feature 4 was found toward the base of the level at 24 cm. Within the level fill (15-25), excluding the features, were 2 sherds, 15 lithic artifacts and miscellaneous fire cracked rock.

From 25-37 the soil, except for Feature 4, gradually changed to a yellowish brown or grey clay (10YR5/3) with concretions and flecks of charcoal. This level contained only 4 lithic artifacts. One corner notched projectile point was found in the east wall

profile in pit feature (Feature 7) which was not discernible in the floors of the scraped levels (Figure 18). This point was lying at a 45 degree angle which is further evidence that this was in a pit feature.

The general fill from 37-47 was a grey and yellow mottled clay with an increase in concretions. Two decortication flakes and one piece of debitage were collected from the general fill. All of these artifacts were lying flat. This was the last level to be excavated due to ground water seeping into the unit and an impending rainstorm. It is the professional opinion of MCRA that the soil was bleeding into the grey gleyed clay which underlies the site.

Feature 2 was an artifact cluster consisting of a rock and a large sherd (actually counted as four sherds) which were lying vertical at the base of the plowzone and the top of the midden. No feature staining was apparent, but the midden soil was so dark that a pit outline etc. might not be discernible. No indications of this feature were evident in the subsequent levels.

Feature 3 was a concentration of 6 sherds (4 grog tempered cordmarked and 2 grog tempered plain), 2 pieces of hematite, 2 pieces of burned clay (pellets) and lots of charcoal. The feature was first noticed at 15 cm or directly under the plowzone. It continued tapering inward until it bottomed out at 29 cm below the surface as shown in the East Wall Profile (Figure 18). Feature 2 seems to have functioned as a small refuse pit related to a domestic structure.

Feature 4 was first noticed at 24 cm below the surface and consisted of a loose, wet, black homogenous stain roughly circular and 15 cm in diameter. It began in the midden level but penetrated the subsoil and acted as an aquifer from which ground water could seep into the unit. Even though the unit was terminated at 47 cm, Feature 4 was cross sectioned and found to continue another 30+ cm and to slightly taper, making its entire depth at least 53 cm. Artifacts collected in this feature include 4 fire cracked rocks, 1 decortication flake and 1 badly weathered grog tempered sherd. Feature 4 probably functioned as a postmold, and due to its depth it may have been a support post for a prehistoric house.

The profile of the East Wall of Test Unit 1 is shown in Figure 18. As stated a pit feature (Feature 7) which was not apparent in the scraped levels was observed in the wall. A corner notched projectile point was found lying at a 45 degree angle at 36 cm below the surface, and thus this feature is affiliated with the Early Woodland period. The size and function of Feature 7 is not known.

RESULTS

Table 10. Site 23SD496, Test Unit 1.

Excavation levels:	1	2	3	4
<u>Artifacts (#/gms)</u>				
Debitage	13/69	4/4.8		
Fire Cracked Rock	/466.5	/314.5	/9.2	
Decortication Flakes	28/182.4	8/86.9	1/7.5	2/5.7
Grog Tempered Plain	1/1.1			
Sand/Shell Tempered		1/6.1		
Checked Stamped		1/8.7		

Surface Artifacts

Core	1/162.1
Debitage	3/3.2
PP/K Frag.	1/4.7

Feature 4

Fire Cracked Rock	/3.5
Grog Tempered Body Sherd	1/3.8
Decortication Flakes	1/0.8
Fire Cracked Rock (?)	/3.5

Artifacts Recovered from Profile

Debitage	1/10.1	East Wall	36-38 cm. BS
PP/K Frag.	1/18.3	East Wall	36-38 cm. BS
Fire Cracked Rock	/22.4	North Wall	23 cm. BS

Total

Test Unit 2. The plowzone was scraped off the entire 2.5 x 2.5 m controlled collection unit and the northern 1/2 had dark brown soils while the southern side was yellow clay. Feature 1 was observed on the west side of the unit and so a 1m x 1m unit was placed in the NW corner. From 14 -24 cm there was still a fair amount of material in the general fill and 16 flakes and pieces of debitage were collected in addition to fire cracked rock. Soil in the general fill consisted of a dark brown silty clay.

From 24-34 cm there were even more lithics and 35 flakes and debitage artifacts were collected along with fire cracked rock and 6 pieces of grog tempering debris. Most of the flakes seemed to be lying flat and the general level seemed characteristic of a lithic reduction/activity area. Toward the base of this level the soil was becoming lighter and had a higher percentage of clay.

From 34-44 the artifact density began to decrease and only 9 flakes or debitage, and fire cracked rock were recovered from the general fill in the level. The soil had become more grey in color, had a higher clay content, and contained iron concretions.

From 45-55 there were 12 flakes and debitage and the soil was about the same color and texture. From 55-75 only the northwest 1/4 of the unit was excavated. One flake was collected from 60 cm below the surface, but other than that only 3 red sandstone rocks were found in the southeast corner of the unit. The soil in the lower levels was more characteristic of the gleyed clays which underlie the entire site. The North Wall Profile is shown in Figure 19.

Feature 1 was a postmold in which the edges were very defined. The feature was filled with loose homogenous dark brown soil and it acted as an aquifer for ground water to seep into the unit. It extended over 40 cm in depth and was not fully excavated due to water saturation. The sides of the feature taper inward. Artifacts found in the feature included 1 fire cracked rock, 1 piece of debitage, and 1 contracting stemmed projectile point.

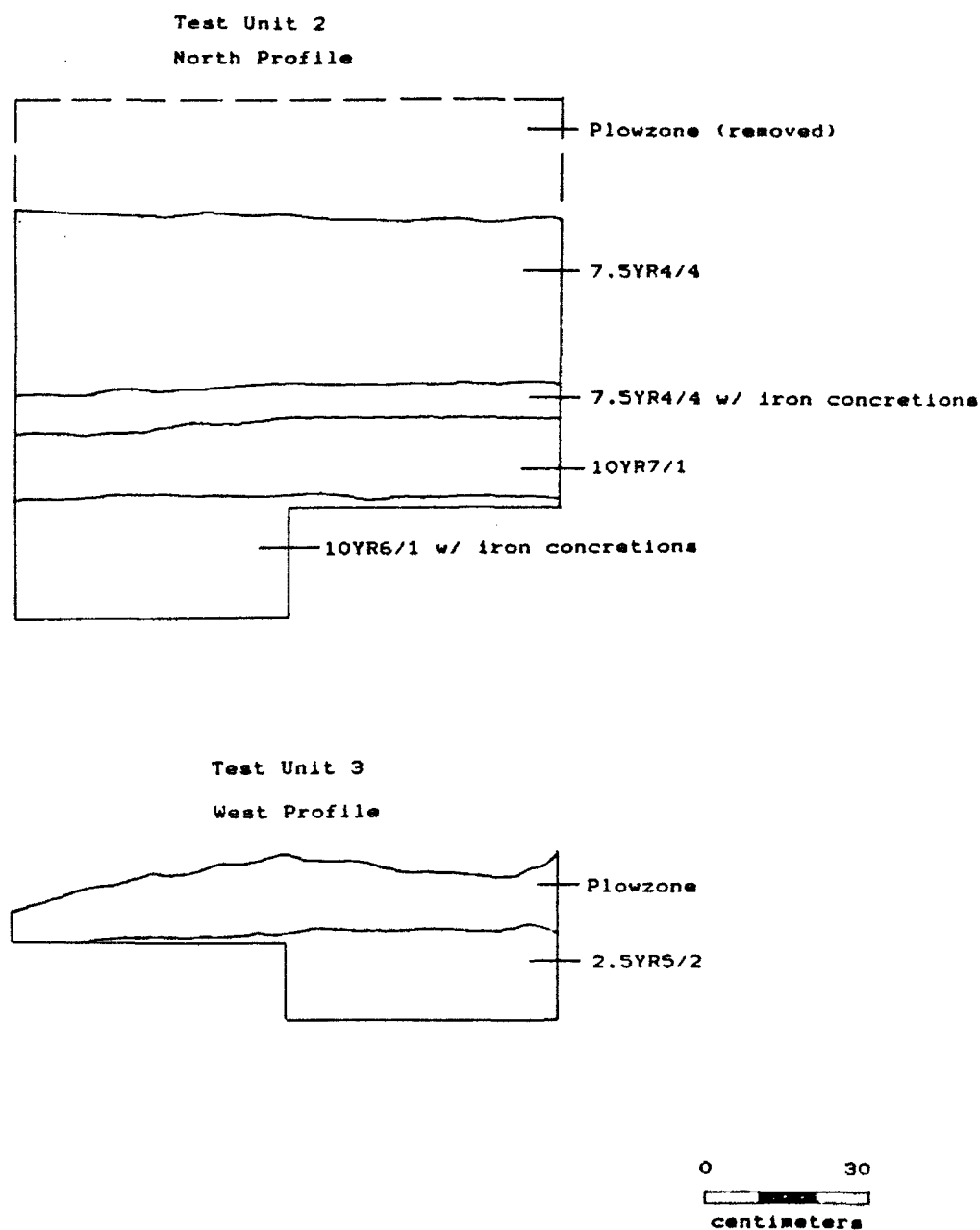


Figure 19. 23S0496, Test Units 2 and 3, Profiles

 Table 11. Site 23SD496, Test Unit 2.

Excavation levels:	1	2	3	4
<u>Artifacts (#/gms)</u>				
Debitage	9/11.4	25/131.8	5/5.6	6/14.6
Fire Cracked Rock	/706.9	/659.9	/469.3	
Decortication Flakes	7/66.6	10/45.9	4/4.6	6/33.4
Grog Manufacturing Debris		6/2.9		

Feature 1.

Depth (cm)	Artifacts	Count	Weight (g)
14-24	Angular Chert Chunk	1	20.2
	PP/K, contracting stemmed base	1	2.9
24-34	Debitage	1	0.4
34-45	Fire Cracked Rock		21.6
Total		3	45.1

Test Unit 3. Test Unit 3 was located on the edge of the terrace half way between the southeastern and northwestern portions of the site. The plowzone in this unit was only about 10 cm thick and consisted of a dark greyish brown silty clay. The only artifacts, 1 decortication flake and one fire cracked rock, were found either on the surface or in the plowzone. At the base of the plowzone, plowscars were present trending east west across the unit.

Below the plowzone to where the unit was terminated at 30 cm was a compact grey brown clay with iron inclusions. This soil was a very hard plastic clay with a well developed old structure. Due to these characteristics, the soil in these levels was cut in thin layers by a shovel or hoe and was not screened. No cultural materials or levels were evident in this unit.

Table 12. Site 23SD496, Test Unit 3.

Excavation levels:	Surface	1
Artifacts (#/gms)		
Fire Cracked Rock (FCR)		/244
Decortication Flakes	1/2.8	
Total	1/2.8	/244

Test Unit 4. Test Unit 4 was the only unit positioned in the floodplain. The plowzone in this unit was evident from 0-20 cm and soils consisted of a loosely compacted dark brown sandy loam. At 16 cm distinct plowscars running east-west were observed. Artifacts collected in the plowzone included one decortication flake and fire cracked rock. A concentration of red fire cracked rock was observed in the north west corner of the unit in a area about 15 cm in diameter.

From 20-30 the soil consisted of a slightly more compact brown sandy loam and contained flecks of charcoal. At 25 cm below the surface 2 flat lying sherds were found. Both of these were sand tempered. One was a cordmarked rim sherd and the other was a body sherd. Other artifacts found in the level included fire cracked rock and charcoal. At the base of the level after the unit was scraped, a darker brown stain (Feature 5) was distinct in a portion of the floor and in the east wall in the same plowzone area which had the cluster of firecracked rock.

From 30-40 the fill of the unit became much lighter and consisted of a yellow brown sandy clay. At this level Feature 5 was a distinct 40 x 30 cm stain extending into the east wall. It contained charcoal (wood) and 1 core and one firecracked rock. Only one fire cracked rock was collected from the matrix surrounding Feature 5.

From 40-50 the soil in the unit was becoming more water saturated and it was not possible to screen. Feature 5 was still distinct. From this point a soil sample was removed for flotation and an attempt was made to excavate the remainder of the feature. This activity had to continue over a 2 day period in order to wait for the water table to drop. Feature 5 continued to slope inward to at least 70 cm below the surface where the water table again forced us to terminate the excavation. Artifacts collected from 60-70 cm in Feature 5 included charcoal and fire cracked rock. The east wall profile of the unit and Feature

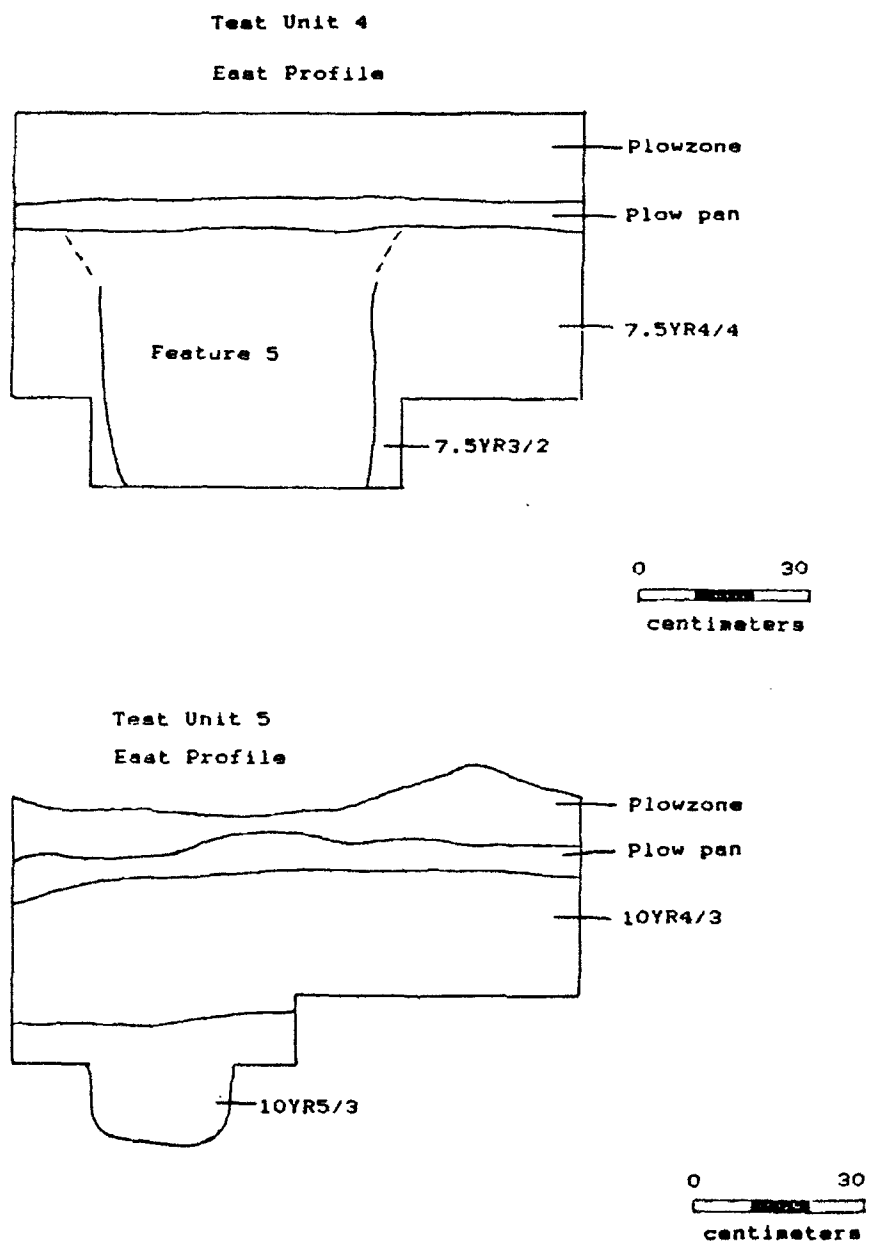


Figure 20. 23SD496, Test Units 4 and 5, Profiles

RESULTS

5 are shown in Figure 20. The size and shape of Feature 5 is not known because an unknown portion extends into the east wall. The function is likewise not known although based on these investigations, it has characteristics of a large basin shaped pit.

Table 13. Site 23SD496, Test Unit 4.

Excavation levels:	1	2	3
<u>Artifacts (#/gms)</u>			
Lithics	?		
Fire Cracked Rock (FCR)		/11.2	/16.7
Ceramics			
Barnes Cordmarked		1/5.4	
Barnes Plain		1/1.7	

Total

Feature 5

Depth (cm)	Artifacts	Count	Weight (g)
30-40	Core	1	37.2
	Fire Cracked Rock		10.0
40-60	Charcoal		
65-70	Fire Cracked Rock		6.8
Total		1	54.0

Test Unit 5. Test Unit 5 was located on a knoll in an artifact cluster toward the northwestern end of the site. Eight artifacts including 4 decortication flakes and 4 pieces of debitage in addition to fire cracked rock were collected from the surface of the 1m x 1m.

The plowzone continued from 0-7 cm and consisted of a loose water saturated brown silty clay loam. It was not possible to screen this level due to high water content. A total of 30+ artifacts were found in the plowzone level including one sand tempered body sherd, 18 decortication flakes, 8 pieces of debitage, 2 unidentified projectile point fragments and miscellaneous pieces of fire cracked rock.

From 7-20 the upper part of the unit consisted of a more compact subplow zone and then it turned into an orange yellow brown silty clay. Only fire cracked rocks were collected from this level.

From 20-30 the soil consisted of a yellow brown clay and no artifacts were collected. A roughly circular stain 10 cm in diameter (Feature 6) was noted but after it was cross sectioned, it was found to be a root or rodent disturbance.

Only the northeast 1/4 of the unit was removed from 30-40 cm and 40-56 cm. The soil became increasingly more grey in color, had a higher clay content and contained more concretions. No artifacts were found in these lower subsoil levels.

Table 14. Site 23SD496, Test Unit 5.

Excavation levels:	Surface	1	2
<u>Artifacts (#/gms)</u>			
Lithics			
Debitage	4/ 5.8	8/ 17	
Fire Cracked Rock (FCR)*	/566.0	/204.3	/ 60.5
Decortication Flakes	4/ 15.8	18/ 79.6	
PP/K Fragments		2/ 5.8	
Total	8/ 21.6	28/103.4	
*Not included in totals			

Test Unit 5. Test Unit 5 was located at the extreme north-western end of the site just above the river. The plowzone (0-18) consisted of a greyish brown silty clay with orange mottles. Due to the high clay content this level was hard to screen. One decortication flake was found on the surface of the unit and 2 pieces ofdebitage and miscellaneous fire cracked rock were collected from the plowzone. From 18-22 there was a more compact old sub plow level, and plowscars and tractor treads staining were observed. One piece ofdebitage and firecracked rock were collected in the sub plow.

From 22-32 the soil changed to an orange brown silty clay with flecks of charcoal and then graded into a grey gleyed clay to about 42 cm where the unit was terminated. Three pieces ofdebitage and 2 decortication flakes were collected from 22-32 cm. No artifacts or features were found in the levels below. The south wall profile of Test Unit 6 is shown in Figure 21. The only possibility for intact levels in this unit are the thin 5-6 cm band of soil between the sub plow and the grey clay subsoil. This area of the site is likely to be impacted by the proposed project.

RESULTS

Table 15. Site 2380496, Test Unit 6.

Excavation levels:	Surface	1	2	3
Artifacts (#/gms)				
Lithics				
Debitage		2/ 2.2	1/ 0.7	3/8.6
Fire Cracked Rock (FCR)*		/104.7	/ 2.1	
Decortication Flakes	1/1.2			2/12.5
Bifaces				
Total	1/1.2	2/ 2.2	1/ 0.7	5/21.1
*Not included in total				

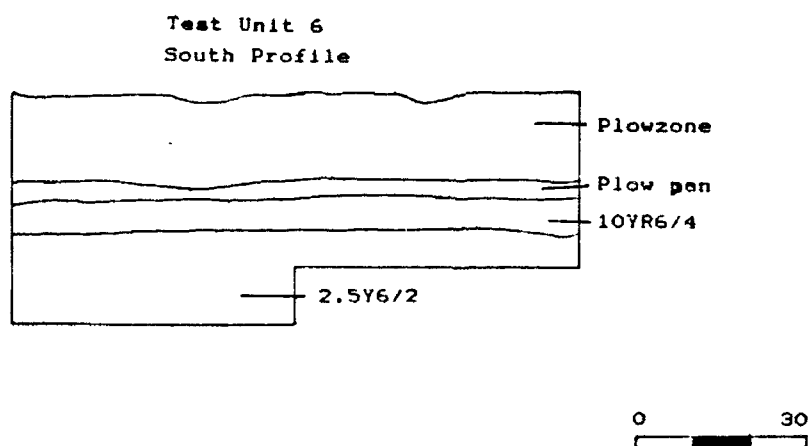


Figure 21. 2380496, Test Unit 6, Profile

Proposed Site Function and Cultural Affiliation

Site 23S0496 is a multicomponent site which was occupied from the Early Archaic to the Late Woodland periods. During this period the site functioned as a lithic manufacturing area, as a campsite, and as a semi or permanent village during the later periods. The location of the site on a high terrace along the Castor River in one of two areas where the river cuts Crowley's Ridge was an advantageous place to exploit the chert resources and perhaps to transport tools and raw material to permanent villages and and camps downstream.

Site Significance

Due to the presence of areas with both intact levels and features, the site has a high research value and is considered eligible to the National Register.

Project Impact

Both the southeastern portion and the northwestern portions of the site will be adversely impacted by the proposed project.

Recommendations

Those portions of the site which will be disturbed are recommended for further research to include controlled surface collections and excavations to mitigate the proposed impact. If the work can be done in the dry season then controlled surface collecting prior to impact may be an acceptable alternative if the concerned agencies and officials agree that the impact will not disturb subplowzone deposits.

Site 23SD497

Description

Site 23SD497 is a small prehistoric site initially recorded by IRI in 1978. They classified the site as a short term occupation site. Their investigation were restricted to the eastern end of the site where they made a controlled surface collection over 2,300m² of the estimated 5700m² site area and excavated a 1 x 1m test unit. IRI indicated that all of the site was restricted to the 10 cm thick plowzone which they said was underlain by ". . a light brownish gray (10 YR 6/2), friable clay which extended to the base of the excavation." (IRI 1979:136).

Site 23SD497 is situated on the somewhat eroded edge of the Relict Braided Surface. This area has been brought into cultivation since 1963. When the MCRA crew visited the site in March the whole surface except for the slopes had 2-3cm of standing water on the surface. In May this had only begun to dry out. The MCRA investigations indicate that the site covers approximately 20,000 m² and has three concentrations of material, one located at the east end where IRI carried out their investigations and two on the rises at the west end of the site. The surface visibility was fair (40-60%) on both visits with standing weeds and milo stubble.

Methods of Testing

In March the crew walked systematically over the site and flagged all material observed on the surface. Since testing was impossible at this time, all of the flags were pulled and only diagnostics collected and their location specified on flags left in the woodlines. In May we again flagged all material to define the material concentrations, and excavated test units in all three of these. Two other test units were excavated in less dense concentrations in the right-of-way. The locations of these units are shown in Figure 22.

Table 16. Site 23SD497, Surface Material

Select/General Surface Material

Artifacts	Count	WT (gms)
Core	1	175.4
Debitage	10	99.8
Decortication Flakes	7	211.2
Hammerstones	2	283.4
Total	20	769.8

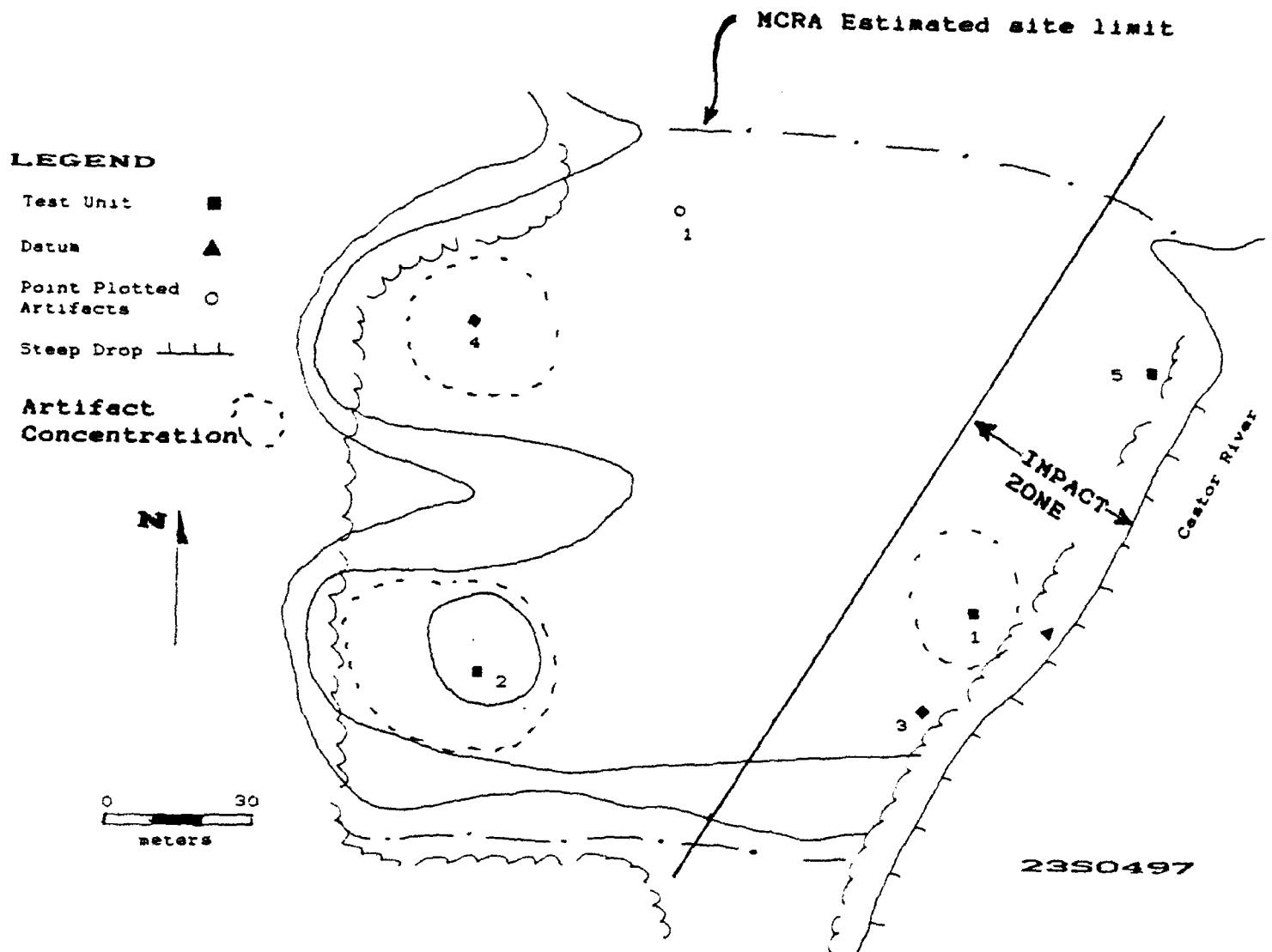


Figure 22. 23S0497, Site Map

RESULTS

Test Units

Test Unit 1 was excavated in the right-of-way on the east end on the site in what IRI called its west concentration. This was positioned in the densest part of the artifact scatter observed on this part of the site. Excavation level 1 was 10 cm thick and contained the plowzone. This was a brown (10YR4/3) silty clay with many large iron concretions which were retained on the 1/4" screen. Only a few pieces of fire cracked rock were recovered in this unit. The base of the plowzone was highly distinct changing to a grey (10YR5/2) plastic clay with many large iron concretions. This was impossible to screen and was trowel cut instead. Levels 2-4 (10-40 cm BS) produced no cultural material.

Table 17. Site 23SD497, Test Unit 1, Artifacts Recovered.

Excavation levels:	1
Artifacts (#/gms)	
Sandstone	3/119.3
Fire Cracked Rock (FCR)	/108.4

Test Unit 2 was excavated on the south rise on the west end of the site. This was positioned in the densest part of the artifact scatter observed on this part of the site. Excavation level 1 was 10 cm thick and contained the plowzone. This was a brown (10YR4/3) silty clay with many large iron concretions being the only material retained on the 1/4" screen. The base of the plowzone was highly distinct changing to a grey (10YR5/2) plastic clay with many large iron concretions. This was impossible to screen and was trowel cut instead. Levels 2-4 (10-40 cm BS) produced no cultural material.

Test Unit 3 was excavated in the right-of-way on the east end on the site in what IRI called its west concentration. This was positioned in the densest part of the artifact scatter observed on this part of the site. Excavation level 1 was 10 cm thick and contained the plowzone. This was a brown (10YR4/3) silty clay with many large iron concretions which were retained on the 1/4" screen. Only a few pieces of fire cracked rock were recovered in this unit. The base of the plowzone was highly distinct changing to a grey (10YR5/2) plastic clay with many large iron concretions. This was impossible to screen and was trowel cut instead. Levels 2-4 (10-40 cm BS) produced no cultural material.

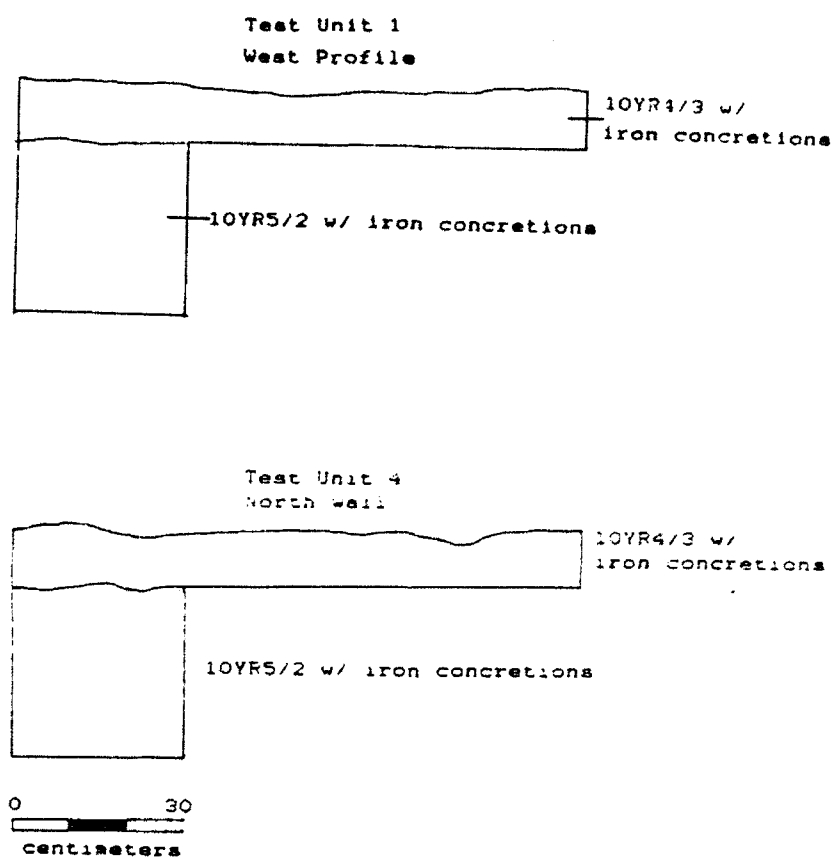
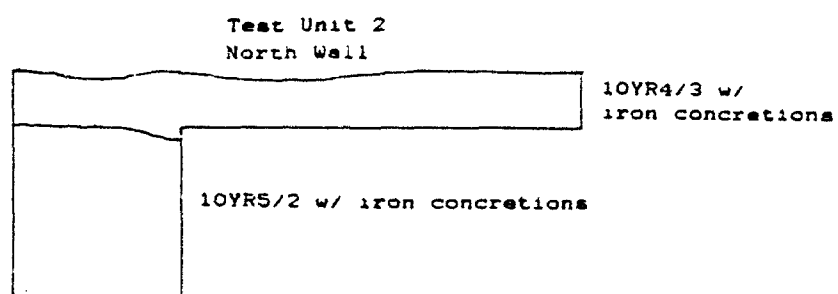
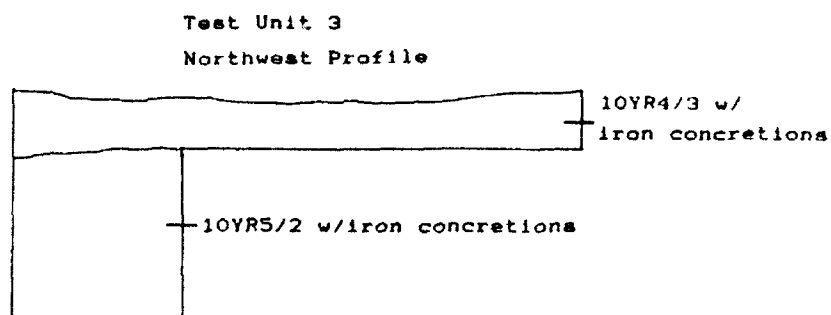


Figure 23. 23SD497, Test Units 1 and 4, Profiles



0 30
centimeters



0 30
centimeters

Figure 24. 2390497, Test Units 2 and 3, Profiles

 Table 18. Site 23SD497, Test Unit 3, Recovered Material.

Excavation levels:	Surface	1
Artifacts (#/gms)		
Debitage	3/21.9	
Fire Cracked Rock (FCR)	25.6	140.3
Decortication Flakes		7/ 9.3
Sandstone		1/ 14.9
Total	3/47.5	8/164.5

Test Unit 4 was excavated on the north rise on the west end of the site. This was positioned in the densest part of the artifact scatter observed on this part of the site. Excavation level 1 was 10 cm thick and contained the plowzone. This was a brown (10YR4/3) silty clay with many large iron concretions which were retained on the 1/4" screen. No material was recovered in this unit. The base of the plowzone was highly distinct changing to a grey (10YR5/2) plastic clay with many large iron concretions. This was impossible to screen and was trowel cut instead. Levels 2-4 (10-40 cm BS) produced no cultural material.

Test Unit 5 was excavated in the right-of-way on the east end on the site in what IRI called its east concentration. This was positioned in the densest part of the artifact scatter observed on this part of the site. Excavation level 1 was 10 cm thick and contained the plowzone. This was a brown (10YR4/3) silty clay with many large iron concretions which were retained on the 1/4" screen. No cultural material was recovered in this unit. The base of the plowzone was highly distinct changing to a grey (10YR5/2) plastic clay with many large iron concretions. This was impossible to screen and was trowel cut instead. Levels 2-4 (10-40 cm BS) produced no cultural material.

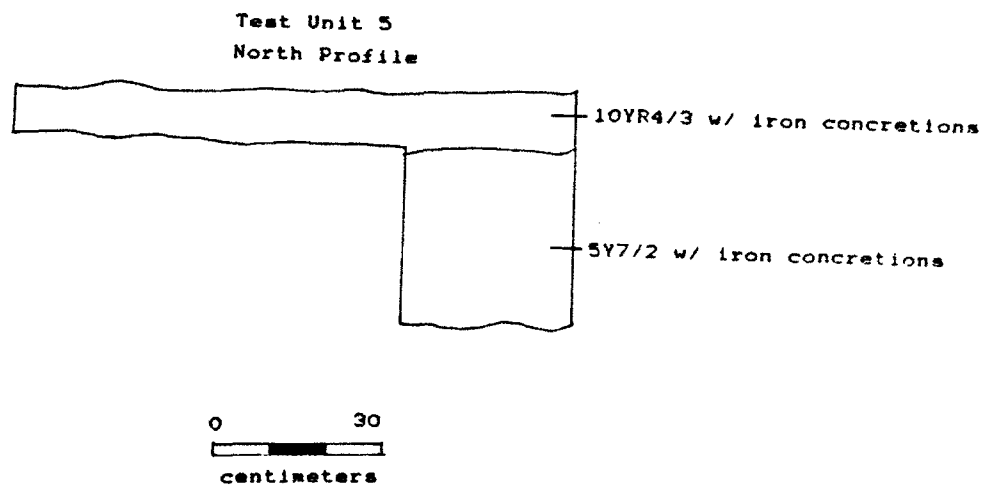


Figure 25. 23SD497, Test Unit 5, Profile.

Proposed Cultural Affiliation and Function

This site is a very low density scatter. One scallorn point was recovered from the surface suggesting a Mississippian period affiliation.

Site Significance

This site does not possess intact deposits and the surface density is extremely light. Therefore 23SD497 does not have characteristics which would make it eligible for nomination to the National Register of Historic Places.

Project Impacts

The surface of this site will be impacted by equipment tracking over it.

Recommendations

No further archeological work is recommended at this site in connection with the Castor River Enlargement Project.

SITE 23S0500

Description

This site is the only site investigated situated on the modern floodplain ca 4m below the Relict Braided surface. The site was originally reported by Iroquois Research Institute in 1979. They excavated 14 shovel tests which recovered no cultural material and collected a 1300m² area in the center of the scatter. They considered the artifact density to be extremely light which was consistent with the MCRA results (see below). IRI recovered no temporally identified diagnostic artifacts.

Site 23S0500 is located in a small floodplain (Figure 26), which is currently under cultivation. In March this was extremely wet and slick. The whole bottom had been plowed since harvest affording excellent surface visibility (70-90%). The area was systematically walked over at 10m intervals and all surface material flagged. The highest density of material was in the center of the field where IRI had defined the site. At this time only one diagnostic artifact was observed. This was collected and its position noted by a flag left in the treeline. In May we returned to the field and found that the west end had been test plowed. The remainder of the site had thousands of seedling maples reducing the visibility from the previous field season to 40-80%. The surface was systematically walked over and material was flagged resulting in a similar site definition.

Most of the material was located on a slight (20cm) alluvial ridge 10-20m north of the treeline. North of this is a low area which even in May had standing water on the surface. To the west and east of the main concentration there is a very light scatter of material (less than 1 artifact per 1000m²).

Methods of Testing

Site 23S0500 was tested with four 1 x 1m test units placed in areas of the highest material density. Three of these were placed in the right-of-way and the other ca 10m outside of it. Diagnostic artifacts and tools were point plotted, and a surface collection was made on the surface of the units prior to excavation. Most of the surface material consisted of fire cracked rock with very few flakes.

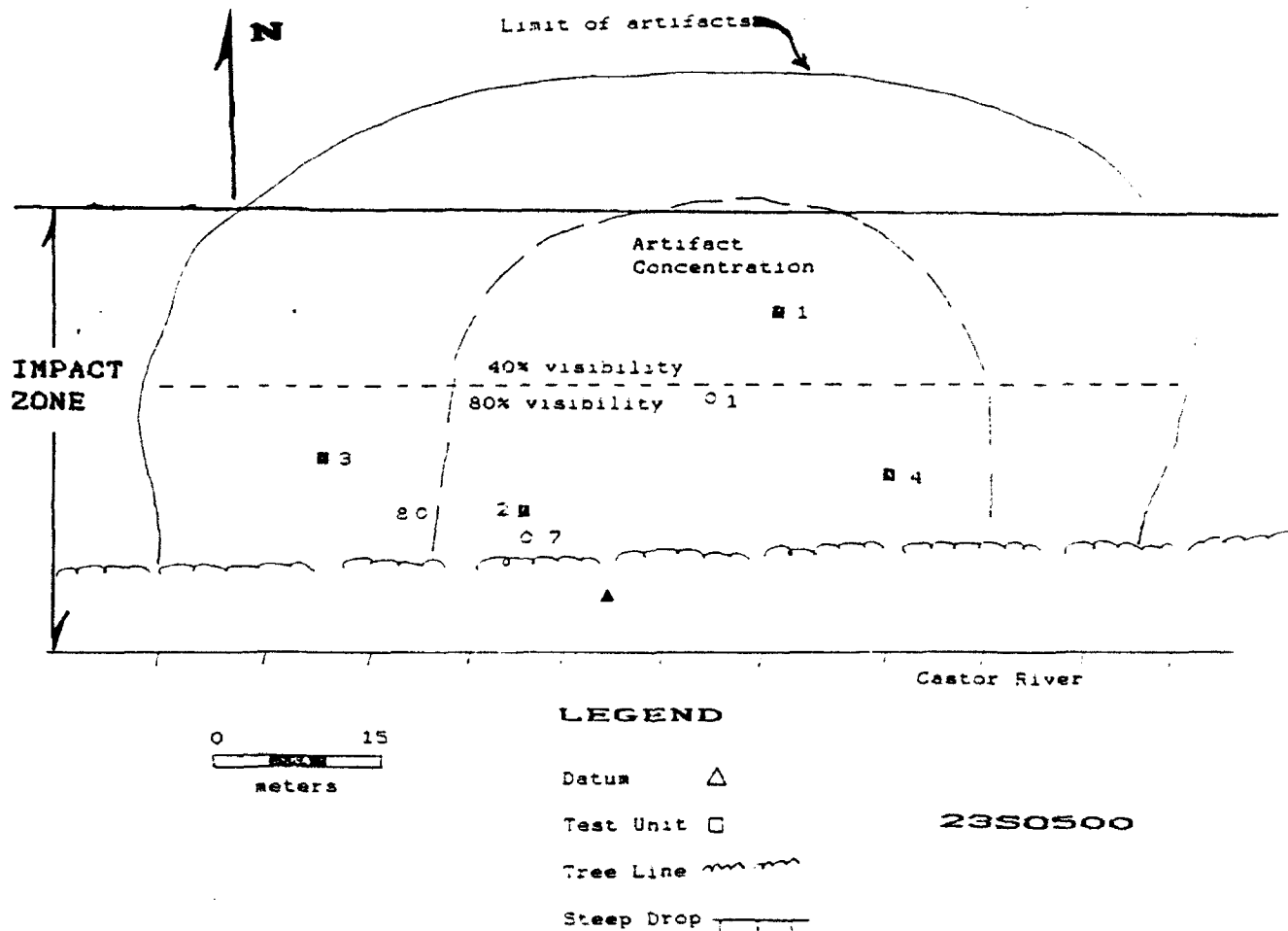


Figure 26. 23S0500, Site Map

 Table 19. Site 23S0500, Surface Material.

Select/General Surface Material

Artifacts	Count	WT (gms)
Cores	3	187.7
Debitage	4	93.0
Fire Cracked Rock (FCR)		1033.6
Decortication Flakes	3	17.8
Total	10	1332.1

Point Plotted

FSN Artifacts

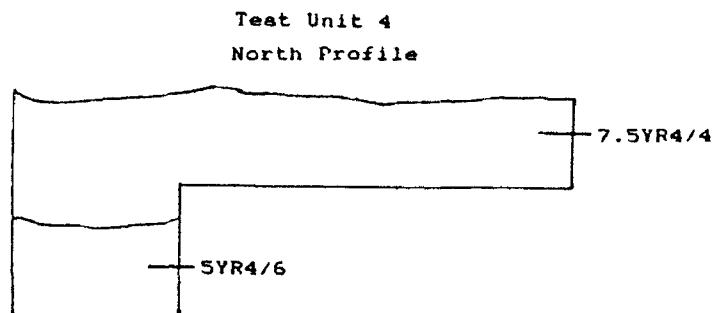
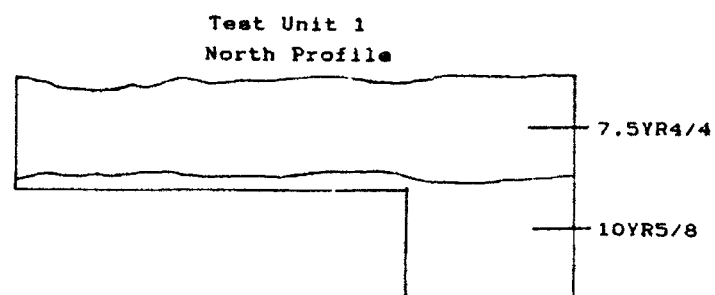
7	PP/K, Carrollton, Proximal 1/2	1	7.9
8	Biface	1	17.4
10	PP/K, Corner Notched	1	10.5

Test Unit 1 was excavated out of the right-of-way and positioned in the densest part of the artifact scatter. The soils were much siltier than expected and became much more clayey with increasing depth (Figure 27).

Excavation level 1 was from the surface to 20 cm below the surface and consisted of the plowzone, which was a brown (7.5YR4/4) clayey silt. Flakes and Fire cracked rock were recovered from this unit (Table 20). Between 15 and 20 cm below surface a decrease in pebbles was noted and plowscars were observed from 15 to 20cm running east-west across the floor of the unit.

In level 2 (20-30 cm) the soils became clayier and no artifacts were recovered in this level. Some grey mottling began at the top of this level which became greyer and more clayey with increasing depth. No cultural material was observed in the screens from this level so only the northeast 30 x 30 cm corner was excavated.

At the top of Level 3 (30-40cm) we began to encounter iron concretions. These increased in quantity and size with increasing depth, as did the clay content. No cultural material was recovered in this level and the excavations were terminated.



0 30
centimeters

Figure 27. 2390500, Test Units 1 and 4, profiles

 Table 20. Site 23S0500, Test Unit 1, Material Recovered.

Excavation levels:

1

Artifacts (#/gms)

Debitage	5/ 1.7
Fire Cracked Rock (FCR)	/185.3
Decortication Flakes	2/ 0.8

Total

 7/187.8

Test Unit 2 was excavated in the center of the artifact concentration and positioned over a Trinity projectile point which was collected from the surface. (Table 21). All of the cultural material was recovered in the plowzone which was 15 cm thick and excavated as one excavation level. The plowscars ran east west in this unit and were troweled out to avoid contamination of the second excavation level. The plowzone was a Dark brown (7.5YR4/4) silt with a low density of artifact (Table 21).

The second level of this unit (15-25 cm) was a brown (5YR4/6) silt with many crawfish (*Potamobius* sp.) burrows filled with grey clay. There was also a root impression in the northwest part of the unit. Seventeen grams of fire cracked rock were recovered in the upper part of this unit.

Excavation levels 3 and 4 (25-35 and 35-57) were in the same Brown silt which became increasingly mottled with grey clay and iron concretions with increasing depth. No cultural material was recovered from these excavation level. Excavations were terminated at 57cm below surface.

 Table 21. Site 23S0500, Test Unit 2, Material Recovered.

Excavation levels:

1

2

Artifacts (#/gms)

Fire Cracked Rock (FCR)	15.1	17.3
PP/K, Trinity	1/13.1	

Total

 1/28.2

17.3

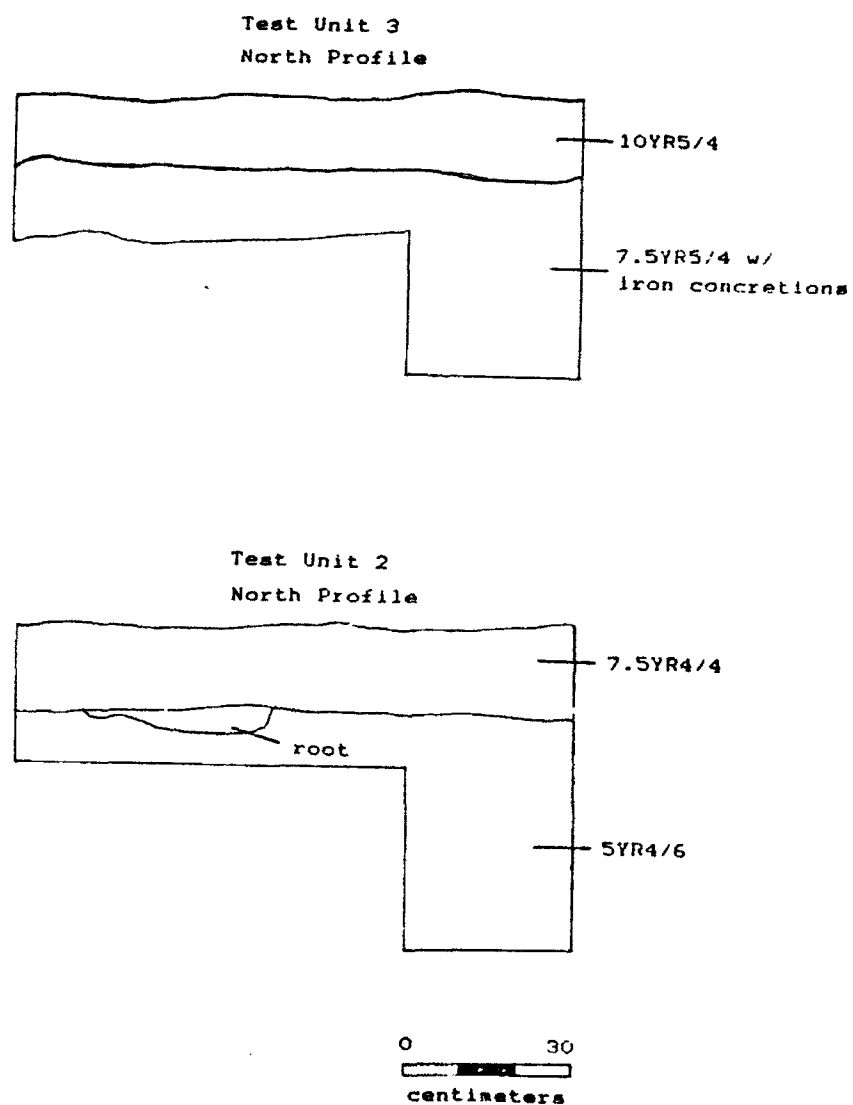


Figure 28. 23S0500, Test Units 2 and 3, Profiles.

Test Unit 3 was positioned to the west of the main artifact concentration within the right-of-way and the artifact scatter. The first excavation level included the plowzone and was excavated to a depth of 13 cm where the soil became harder and two plowscars were encountered running east-west. The plowzone was a yellowish brown (10YR5/4) silt which contained no cultural material.

Excavation Level 2 was restricted to the north 40 cm of the unit between 13-23 cm BS. This was in a Yellowish Brown (7.5YR5/4) silty clay horizon which contained no cultural material. As with the other two units the clay content and iron concretions increased with the following 2 excavation levels (23-33 and 33-43 cm BS) which were restricted to the northeast 40 x 30cm corner of the unit. No cultural material was recovered in these levels.

Table 22. Site 23SD500, Test Unit 3, Material Recovered.

Excavation levels:	1
Artifacts (#/gms)	
Fire Cracked Rock (FCR)	2.1
PP/K, Distal tip	1/0.8
Total	1/2.9

Test Unit 4 was positioned in the eastern part of the artifact concentration and the right-of-way (Figure 26). Excavation level 1 contained the plowzone and was excavated to 15 cm below surface. East west plowscars were observed at this level and the excavations were restricted to a 30 x 30cm northwest corner of the unit. The plowzone was the only part of the unit which contained cultural material.

In excavation level 2 (15-25 cm) the soils became clayey and changed to the brown (5YR4/6) silty clay B Horizon soils. This contained no cultural material and continued to 40 cm below surface.

Table 23. Site 23S0500, Test Unit 4, Material Recovered.

Excavation levels:	1
Artifacts (#/gms)	
Fire Cracked Rock (FCR)	/126.3
Total	/126.3

Proposed Cultural Affiliation and Function

This site is a very low density scatter. One Carrollton and one Trinity point were recovered from the surface suggesting an occupation date of ca 1000-2000 B.C. (Bell 1958). Function is more difficult to assess because of the small amount of material recovered.

Site Significance

This site does not possess intact deposits and the surface density is extremely light. Therefore 23S0500 does not have characteristics which would make it eligible for nomination to the National Register of Historic Places.

Project Impacts

The surface of this site will be impacted by equipment tracking over it.

Recommendations

No further archeological work is recommended at this site in connection with the Castor River Enlargement Project.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

by

Robert H. Lafferty III

INTRODUCTION

The Castor River Testing Project tested six archeological sites for National Register of Historic Places significance. These sites had been discovered in 1978 by Iroquois Research Institute. Four of the sites (23S0465, 496, 497 and 500) were tested by IRI and found to be insignificant. The other two sites (23S0459 and 23S0471) were isolated finds and not tested.

The field work executed by MCRA resulted in somewhat different results than IRI (1978:77-139; cf. Appendix A). The sites were found to be much larger and deeper than the IRI accounts indicated. Specifically 23S0459 and 23S0471 were found to be sites (artifact bearing matrices as opposed to isolated finds) located outside of the impact area and restricted to the plow-zone. Site 23S0465 was found to cover 37,500 square meters (as opposed to the 53,000 reported by IRI). Site 23S0496 was found to cover 150,000 square meters (IRI Reported 89,400 m²). Site 23S0497 was found to cover 20,000 square meters and 23S0500 was found to cover 50,000 (IRI reported 5,700 and 3,300, respectively). Site 23S0497 was the only site whose depth was consistently the same as reported by IRI based on their single test unit at the three tested sites. The other two sites (23S0496 and 23S0465) exhibited much more variation in the depositional processes than IRI reported. Their depths of 8cm and 16cm was the thinnest parts of the site encountered in the MCRA work.

An analysis of the Castor River Physiography indicates that this valley is a truly rare environment which was accessible to the lowland populations of the northern part of the Lower Mississippi Valley and it contained resources which were of importance to these peoples (Chapter 2). The depositional regime is also quite different from most valleys in this part of the continent since the river is filtered of large sediments and is cutting into the Relict Braided Surface. This is composed of fine consol-

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dated sediments which do not erode easily. This has been a stable if periodically waterlogged surface for ca. 8,000 years. The MCRA investigations indicate that there has been localized alluvial deposition on the tops of these (23S0496 and 23S0465) near stable courses of the Castor River and on the foreslope at the base of the old Relict Braided Surface. In some of these foreslope locations on the point bar sides of the river, the stratigraphy is deeper with potentially isolatable components (23S0496). Both of these situations appear to be rare in the Castor Gap judging from the topographic map of the valley and the sites tested. It is also of some interest to note that the preference of site locations on the edge of the Relict Braided Surface and more modern meander surface is structurally similar to preferred site locations in the Tyronza Basin (Lafferty et al 1984, 1985). Therefore the depositional environments in which the sites are located are rare. It is a location which is related culturally to the upper part of the whole Lower Mississippi Valley.

SITE SIGNIFICANCE

Federal Regulation 36CFR60.4 outlines the qualities which make cultural properties significant and eligible for nomination to the National Register of Historic Places (NRHP). These regulations state:

National Register criteria for evaluation.

The quality of significance in American history, architecture, 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

(a) That are associated with events that have made a significant contribution to the broad patterns of our history; or

(b) That are associated with the lives of persons significant in our past; or

(c) That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

(d) That have yielded, or may be likely to yield, information important in prehistory or history. (Federal Register 1976:1595)

In order for sites to be significant and eligible for NRHP nomination they should have intact deposits and a high degree of integrity of location, setting, feeling and association. While this is not a criterion for significance it is a general precondition defined in the regulations (Federal Register 1976:1595). In some instances it can be waived if intact deposits of a particular study unit (cf. Davis 1982 and Morse 1982 for the specific ones currently recognized in Arkansas adjacent to the Bootheel, none have yet been defined for Missouri) are not known or known to be almost nonexistent. For example, in the Ozarks Sabo et al (1982) explicitly included disturbed assemblages from the Archaic, Mississippian and Woodland periods and virtually any Paleo-Indian/Dalton site as potentially significant suggests just how rare these undisturbed sites are in that region. Other highly disturbed sites which are known to be representative of classes of sites with known undisturbed deposits are likely to be non-significant; however specific arguments might also waive this.

The temporal cut off for significance is legally set at more than 50 years old. Again this requirement can be waived if the resource is associated with someone of note or importance, and is otherwise eligible under Criteria a, b or c.

For a site to be archeological significant (Criterion d) it must be shown to have data relevant to current research questions in an archeological region such as the Central Mississippi River Valley (cf. Tainter and Lucas 1983 for comment and extensive reference of this discussion). At the present time, most of the basic study units which form the basic cultural, chronological and spatial units which are manipulated in more sophisticated processual analysis have not been defined (Chapman 1975, 1980; see discussion of these in Chapter 3). Therefore, chronology construction and assemblage/phase definition are all high priority activities and form relevant research questions for the Archaic and Woodland periods. While such basic work has been done for some of the larger Mississippian sites, we presently know very little about the dispersion of smaller Mississippi farmsteads and hamlets nor their relations with the larger centers. The Castor River gap is between several of the larger sites in Southeast Missouri (e.g., Peter Bess, Richwoods and Lilbourn) and therefore may be the only place where boundary maintenance between several of the supposed independent polities may be fruitfully studied.

23S0459

This site is situated on the Relict Braided Surface on a cut bank of the Castor River. Our investigations indicates that the site is restricted to the plowzone and located mostly more than 50 meters east of the project area. One test unit excavated on the lower slope indicated that the foreslope of the RBS is not spread out; rather it is the eroded surface of the RBS with gleyed clays immediately below the plowzone. There are no intact

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deposits in the impact zone. This site has artifacts from Archaic and Mississippian times. The disturbed nature of this site makes it useless for defining phases since the assemblage is mixed. This site is not significant in terms of the National Register of Historic Places criteria.

23S0465

This site is situated at a straight away on the Castor River where three creeks confluence with the River. The uplands is 200m away and there is presumably chert close by. There are alluvially deposited intact archeological deposits including 15-20cm of midden on at least two locations on the site with intact deposits to 35 cm below the surface. We recovered shell tempered pottery from the east rise and sand tempered pottery from the west one in the impact zone. A feature of an unknown type, possibly a tree root, was found in one test unit. It is probable that there are preserved cultural features on this site. The collections indicate that this site was a major lithic reduction place with predominantly early stage reduction taking place. This in and of itself is enough to make this site significant in terms of the NRHP Criterion D. There is also data which can be used for phase construction of the Woodland and Mississippian. Several Archaic points and fragments were collected; however according to Mr. Rampley the collecting has been rampant on this site so it is probable that there is more temporal variation present than is indicated in our collections. The Historic component is also important and includes a log cabin which is rarely preserved today in this region. This site is significant in terms of the NRHP criteria C and D. MCRA has completed the paper work to nominate this site to the NRHP.

23S0471

This site is situated on a cut bank of the river on the edge of the Relict Braided Surface. Our work on this site was constrained by the landowner not wanting us (understandably) to impact his crops. Consequently, we restricted our investigations to the impact zone. The test units recovered no material and Test Unit 2 placed on the foreslope of the RBS indicated that there was no recent alluvial deposition which might harbor buried deposits. This slope is similar to that on 23S0459 and is a sculpted edge of the RBS, not built up by deposition. The only diagnostic collected from this site is a Gary base from the high part of the site well away from the impact zone in the highest density of material. This area was a very low density scatter, and while we did not test it directly it is our opinion that it is similar in nature to 23S0459 and 23S0497 with deposits restricted to the plowzone. The tested portion of this site is not significant in terms of the National Register of Historic places criteria and will not be impacted by the proposed project.

23S0496

This site is a very large site situated on a cut bank and two point bars of the river. Across the river the river cuts into Crowley's Ridge. This site contains stratified deposits on two places on top of the Relict Braided Surface, stratified deposits in more recent alluvium laid down south west of the RBS and stratified foreslope deposits on the east end of the site. A number of prehistoric features were encountered in four of our six test units. A large number of typable projectile points were recovered from the surface and prehistoric pottery was recovered in a number of the subplowzone excavations. Material dating from the Early Archaic through the Mississippi periods was recovered and there is some indication of areal segregation of components. There are intact deposits below the plowzone which range in depth to over 70cm below surface. There is a large quantity of reduction debris and most is early stage reduction. This site contains data on the composition of a large number of archeological phases which cover the prehistoric time. There is also carbon preserved in the subplowzone deposits. This site is clearly significant in terms of the NRHP criterion D. MCRA is preparing a nomination form for this site.

23S0497

This site lies against a cut bank of the Castor River and located on a recently cleared portion of the Relict Braided Surface. The deposits are very thin with no recent alluvial areas and is totally contained in the 10cm thick plowzone which was amazingly consistent all the way across the site. In several of the test units which were all placed in areas of high artifact density (which was low compared to sites 23S0465 and 23S0496), no artifacts were recovered. The only diagnostic artifact observed or recovered was a Scallorn point found on the west side of the site. This site therefore has a Mississippian component. 23S0497 is totally restricted to the plowzone and therefore highly disturbed. The clay subplowzone deposits are so plastic that it is unlikely that they were excavated prehistorically other than as a source of clay and this is unlikely because of the huge iron concretions. This site is not significant in terms of the National Register of Historic Places criteria.

23S0500

This site was the only site investigated located in recent alluvium. It is totally off the Relict Braided Surface and when we finally got to it we were hopeful that there might be some depth to this site. All of the test units indicated that the cultural deposits were restricted to the 15cm plowzone. The diagnostic artifacts collected to date indicate a Late Archaic period of occupation, and this is highly questionable, based on one point. This site is clearly not significant in terms of the National Register of Historic Places Criteria.

CONCLUSIONS

PROJECT IMPACTS

This project will involve snagging brush and sand from the bottom of the river and piling it along the creek edge. The principal adverse effect to the archeological sites will be the equipment tracking across the surface. If this is done when the surface is well dried and baked out, and the equipment is not too heavy then the impact will be only to the surface deposits. If this work cannot be done in the dry season, or if it cannot be stipulated in the contract and some minimum tractability studies done indicating the maximum military class of vehicles which can be used to avoid impact, then there will be impact to the sub-plowzone deposits. There are several alternatives recommended below to mitigate the impacts on the significant cultural resources.

RECOMMENDATIONS

Alternative 1

Avoid impact by making all of the work take place from the other side of the river at sites 23S0465 and 23S0496.

Alternative 2

Do penetrometer testing of the impact zones on the two sites to determine the maximum class of vehicle which can be used under what conditions without impacting the subplowzone deposits. Take a controlled surface collection from the surface of the impact zone before impact. Make collection unit size small enough so that activity areas can be distinguished (4m x 4m or smaller). Have an archeologist monitor the construction in these areas to assure that there is no adverse impact. Spread any spoil over the site to thicken the plowzone which will protect the preserved subplowzone deposits and may improve the agricultural capabilities of the land.

Alternative 3

Carry out full Data Recovery in the Impact zones of the affected sites (the southwest and west ends of 23S0496 and the southwest and possibly the east point of 23S0465), to include controlled surface collections, and controlled excavations of intact deposits. Then let the construction contract with no archeological strings attached, other than monitoring which should be carried out as there are often anaerobic environments in low laying areas which have been known to produce seldom preserved artifacts of wood.

Insignificant sites

No further archeological work is recommended at sites 23S0459, 23S0471, 23S0497, and 23S0500 in connection with this project.

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APPENDIX A

SECTION C

SCOPE OF WORK

Archeological Testing of Archeological Sites 23S0459, 23S0465, 23S0471, 23S0496, 23S0497 and 23S0500, Castor River Channel Enlargement Project, Stoddard County, Missouri.

1. General.

1.01. The Contractor shall conduct archeological testing of Castor River Channel Enlargement Project, Stoddard County, Missouri. These tasks are in partial fulfillment of the Memphis District's obligations under the National Historic Preservation Act of 1966 (P.L. 89-665); the National Environment Policy Act of 1969 (P.L. 91-190); Executive Order 11593, "Protection and Enhancement of Cultural Environment," 13 May 1971 (360FR3921); Preservation of Historic and Archeological Data, 1974 (P.L. 93-291); and the Advisory Council on Historic Preservation, "Procedures for the Protection of Historic and Cultural Properties" (36 CFR 8, Part 800).

1.02. Personnel Standards.

a. The Contractor shall utilize a systematic, interdisciplinary approach to conducting the study. Specialized knowledge and skills will be used during the course of the study to include expertise in archeology, history, architecture, geology and other disciplines as required. Techniques and

methodologies used for the study shall be representative of the state of current professional knowledge and development.

b. The following minimal experiential and academic standards shall apply to personnel involved in cultural resources investigations described in this Scope of Work:

1. Archeological Project Directors or Principal Investigators (PI). Individuals in charge of an archeological project or research investigation contract, in addition to meeting the appropriate standards for archeologist, must have a publication record that demonstrates extensive experience in successful field project formulation, execution and technical monograph reporting. The Contracting Officer may also require suitable professional references to obtain estimates regarding the adequacy of prior work.

2. Archeologist. The minimum formal qualifications for individuals practicing archeology as a profession are a B.A. or B.S. degree from an accredited college or university, followed by a minimum of two years of successful graduate study with concentration in anthropology and specialization in archeology and at least two summer field schools or their equivalent under the supervision of archeologists of recognized competence. A Master's thesis or its equivalent in research and publication is highly recommended, as in the M.A. degree.

3. Other Professional Personnel. All non-archeological personnel utilized for their special knowledge and expertise must have a B.A. or B.S.

degree from an accredited college or university, followed by a minimum of one year of successful graduate study with concentration in appropriate study.

4. Other Supervisory Personnel. Persons in any archeological supervisory position must hold a B.A., B.S. or M.A. degree with a concentration in archeology and a minimum of 2 years of field and laboratory experience.

5. Crew Members and Lab Workers. All crew members and lab workers must have prior experience compatible with the tasks to be performed under this contract. An academic background in archeology/anthropology is highly recommended.

c. All operations shall be conducted under the supervision of qualified professionals in the discipline appropriate to the data that is to be discovered, described or analyzed. Vitae of personnel involved in project activities may be required by the Contracting Officer at anytime during the period of service of this contract.

1.03. The Contractor shall designate in writing the name of the Principal Investigator. Participation time of the Principal Investigator shall average a minimum of 50 hours per month during the period of service of this contract. In the event of controversy or court challenge, the Principal Investigator shall be available to testify with respect to report findings. The additional services and expenses would be at Government expense, per paragraph 1.08 below.

1.04. The Contractor shall keep standard field records which will include, but are not limited to, field notebooks, state approved site forms (prehistoric, historic, architectural) field data forms and graphics and photographs. Publishable quality site maps with precise boundaries and proposed impact boundaries will be submitted for each site.

1.05. To conduct the field investigation, the Contractor will obtain all necessary permits, licenses; and approvals from all local, state and Federal authorities. Should it become necessary in the performance of the work and services of the Contractor to secure the right of ingress and egress to perform any of the work required herein on properties not owned or controlled by the Government, the Contractor shall secure the consent of the owner, his representative, or agent, prior to effecting entry on such property.

1.06. Innovative approaches to data location, collection, description and analysis, consistent with other provisions of this purchase order and the Cultural Resources requirements of the Memphis District, are encouraged. Such approaches will require prior consultation with the Contracting Officer and/or his authorized representative.

1.07. No mechanical power equipment shall be utilized in any cultural resource activity without specific written permission of the Contracting Officer.

1.08. Techniques and methodologies used during the testing shall be representative of the current state of knowledge for their respective disciplines.

1.09. The Contractor shall furnish expert personnel to attend conferences and furnish testimony in any judicial proceedings involving the archeological and historical study, evaluation, analysis and report. When required, arrangements for these services and payment therefor will be made by representatives of either the Corps of Engineers or the Department of Justice.

1.10. The Contractor shall supply such graphic aids (ex: profile and plan drawings) or tables as are necessary to provide a ready and clear understanding of special relationships or other data discussed in the text of the report. Such tables or figures shall appear as appropriate in the body of the report.

1.11. The Contractor, prior to the acceptance of the final report, shall not release any sketch, photograph, report or other material of any nature obtained or prepared under this contract without specific written approval of the Contracting Officer.

1.12. The extent and character of the work to be accomplished by the Contractor shall be subject to the general supervision, direction, control and approval of the Contracting Officer. The Contracting Officer may have a

representative of the Government present during any or all phases of the described cultural resource project.

2. Study Area.

2.01. The Castor River Enlargement Project is located in Stoddard County, Missouri. The proposed improvements include ditch cleanout and piling excavated materials on the ditch banks. The project areas are Sites 23S0459, 23S0465, 23S0471, 23S0496, 23S0497, and 23S0500. All sites can be located on the Bloomfield, Missouri, 15 minute USGS Quadrangle - 23S0459 is in T27N, R11E, W 1/2, W 1/2, SW 1/4 of Section 30 at UTM Zone 16, E24130, N4093120 at Station No. 180+00, left descending bank. Site 23S0465 is in T27N, R10E, NW 1/4, NE 1/4, NE 1/4 of Section 22, at UTM Zone 16, E237740, N4095970 at Station Nos. 495+00 - 493+00, left descending bank. Site 23S0471 is in T27N, R10E, NW 1/4, NW 1/4, SE 1/4 of Section No. 25 at UTM Zone 16, E240480, N4093460 at Station No. 252+00, left descending bank. Site 23S0496 is in T27N, R10E, SW 1/4, SE 1/4, NE 1/4 of Section 21 at UTM Zone 16, E236120, N4095600 at Station No. 565+00, on the left descending bank. Site 23S0497 is in T27N, R10E, SE 1/4, NE 1/4, NW 1/4 of Section 21 at UTM Zone 16, E235470, N4096050 at Station No. 622+00, on the left descending bank. Site 23S0500 is in T27N, R10E, SE 1/4, SW 1/4, SE 1/4 of Section 17 at UTM Zone 16, E234240, N4096540 at Station No. 722+00, left descending bank. Iroquois Research Institute excavated one subsurface (1m X 1m) test unit in each site 23S0465, 496, 497, and 500; none were excavated in 23S0459 and 471.

3. Definitions.

3.01. "Cultural resources" are defined to include any buildings, site, district, structure, object, data, or other material relating to the history, architecture, archeology, or culture of an area.

3.02. "Background and Literature Search" is defined as a comprehensive examination of existing literature and records for the purpose of inferring the potential presence and character of cultural resources in the study area. The examination may also serve as collateral information to field data in evaluating the eligibility of cultural resources for inclusion in the National Register of Historic Places or in ameliorating losses of significant data in such resources.

3.03. "Intensive Survey" is defined as a comprehensive, systematic, and detailed on-the-ground survey of an area, of sufficient intensity to determine the number, types, extent and distribution of cultural resources present and their relationship to project features.

3.04. "Mitigation" is defined as the amelioration of losses of significant prehistoric, historic, or architectural resources which will be accomplished through preplanned actions to avoid, preserve, protect, or minimize adverse effect upon such resources or to recover a representative sample of the data they contain by implementation of scientific research and other professional techniques and procedures. Mitigation of losses of cultural resources includes, but is not limited to, such measures as: (1) recovery

and preservation of an adequate sample of archaeological data to allow for analysis and published interpretation of the cultural and environmental conditions prevailing at the time(s) the area was utilized by man; (2) recording, through architectural quality photographs and/or measured drawings of buildings, structures, districts, sites and objects and deposition of such documentation in the Library of Congress as a part of the National Architectural and Engineering Record; (3) relocation of buildings, structures and objects; (4) modification of plans or authorized projects to provide for preservation of resources in place; (5) reduction or elimination of impacts by engineering solutions to avoid mechanical effects of wave wash, scour, sedimentation and related processes and the effects of saturation.

3.05. "Reconnaissance" is defined as an on-the-ground examination of selected portions of the study area, and related analysis adequate to assess the general nature of resources in the overall study area and the probable impact on resources of alternate plans under consideration. Normally reconnaissance will involve the intensive examination of not more than 15 percent of the total proposed impact area.

3.06. "Significance" is attributable to those cultural resources of historical, architectural, or archeological value when such properties are included in or have been determined by the Secretary of the Interior to be eligible for inclusion in the National Register of Historic Places after evaluation against the criteria contained in How to Complete National Register Forms.

3.07. "Testing" is defined as the systematic removal of the scientific, prehistoric, historic, and/or archeological data that provide an archeological or architectural property with its research or data value. Testing may include controlled surface survey, shovel testing, profiling, and limited subsurface test excavations of the properties to be affected for purposes of research planning, the development of specific plans for research activities, excavation, the development of specific plans for research activities, preparation of notes and records, and other forms of physical removal of data and the material analysis of such data and material, preparation of reports on such data and material and dissemination of reports and other products of the research. Subsurface testing shall not proceed to the level of mitigation.

3.08. "Analysis" is the systematic examination of material data, environmental data, ethnographic data, written records, or other data which may be prerequisite to adequately evaluating those qualities of cultural loci which contribute to their significance.

4. General Performance Specifications.

4.01. The Contractor shall prepare a draft and final report detailing the results of the study and their recommendations.

4.02. Subsurface Data Retrieval - Testing.

a. Subsurface (1m x 1m) test units (other than shovel cut units) shall be excavated in levels no greater than 10 centimeters. Where cultural zonation or plow disturbance is present, however, excavated materials shall be removed by zones (and 10 cm levels within zones where possible). Subsurface test units shall extend to a depth of at least 20 centimeters below artifact bearing soils. A portion of each test unit, measured from one corner (of a minimum 30 X 30 centimeters), shall be excavated to a depth of 40 centimeters below artifact bearing soils. All excavated material (including plow zone material) shall be screened using a minimum of 1/4" hardware cloth. Representative profile drawings shall be made of each excavated unit.

b. The Contractor shall establish a permanent datum at each site which shall be precisely related to the site boundaries as well as to a permanent reference point (in terms of azimuth and distance). If possible, the permanent reference point used shall appear on Government blueprint (project) drawings and/or 7.5 minute U.S.G.S. quad maps. If no permanent landmark is available, a permanent datum shall be established in a secure location for use as a reference point. The permanent datum shall be precisely plotted and shown on U.S.G.S. quad maps and project drawings. All descriptions of site location shall refer to the location of the primary site datum.

c. Stringent horizontal spatial control of site specific investigations will be maintained by relating the location of all collection and test units to the primary site datum.

d. Other types of subsurface units may, at the Contractor's option, be utilized in addition to those units required by this Scope of Work.

e. Subsurface investigations will be limited to testing and shall not proceed to the level of mitigation. However, in order to provide enough information to make a determination of site eligibility to the National Register of Historic Places, a minimum of six (6) test units shall be placed in Site 23S0496, four (4) test units in Site 23S0500, five (5) test units each in Sites 23S0465 and 23S0497, and a minimum of two (2) and maximum of five (5) test units each in Sites 23S0459 and 23S0471.

f. All test units excavated shall be backfilled by the Contractor.

4.03. Analysis and Curation. Unless otherwise indicated, artifactual and non-artifactual analysis shall be of an adequate level and nature to fulfill the requirements of this Scope of Work. All recovered cultural items shall be cataloged in a manner consistent with state requirements or standards of curation in the state in which the study occurs. The Contractor shall consult with appropriate state officials as soon as possible following the conclusion of fieldwork in order to obtain information (ex: accession numbers) prerequisite to such cataloging procedures. The Contractor shall have access to a depository for notes, photographs and artifacts (preferably in the state in which the study occurs) where they can be permanently available for study by qualified scholars. If such materials are not in Federal ownership, applicable state laws, if any, should be followed

concerning the disposition of the materials after the completion of the final report. Efforts to insure the permanent curation of properly cataloged cultural resources materials in an appropriate institution shall be considered an integral part of the requirements of this Scope of Work.

5. General Report Requirements.

5.01. The primary purpose of the cultural resources report is to serve as a planning tool which aids the Government in meeting its obligations to preserve and protect our cultural heritage. The report will be in the form of a comprehensive, scholarly document that not only fulfills mandated legal requirements but also serves as a scientific reference for future cultural resources studies. As such, the report's content must be not only descriptive but also analytic in nature.

5.02. Upon completion of all field investigation and research, the Contractor shall prepare reports detailing the work accomplished, the results, the recommendations, and appropriate alternative mitigation measures, when required, for each project area. The format suggested by Guidelines for Contract Cultural Resource Survey Reports and Professional Qualifications as prepared by the Missouri Department of Natural Resources should be reviewed and, to the extent allowed by this Scope of Work utilized as an aid in preparing the required report.

5.03. The report shall include, but not necessarily be limited to, the following sections and items:

a. Title Page. The title page should provide the following information; the type of task undertaken, the cultural resources which were assessed (archeological, historical, architectural); the project name and location (county and state), the date of the report; the Contractor's name; the purchase order number; the name of the author(s) and/or the Principal Investigator; and the agency for which the report is being prepared.

b. Abstract. The abstract should include a summary of the number and types of resources which were tested, results of activities and the recommendations of the Principal Investigator.

c. Table of Contents.

d. Introduction. This section shall include the purpose of the report; a description of the proposed project; a map of the general area; a project map; and the dates during which the task was conducted. The introduction shall also contain the name of the institution where recovered materials will be curated.

e. Environmental Context. This section shall contain, but not be limited to, a discussion of probable past floral and faunal characteristics of the project area. Since data in this section will be used in the evaluation of specific cultural resource significance, it is imperative that the quantity and quality of environmental data be sufficient to allow detailed analysis of the relationship between past cultural activities and environmental variables.

f. Previous Research. This section shall describe previous research which may be useful in deriving or interpreting relevant background research data, problem domains, or research questions and in providing a context in which to examine the significance of cultural resources.

g. Testing and Analytical Methods. This section shall contain an explicit discussion of research strategy, and should demonstrate how such information as environmental data, previous research data, and personal interviews have been utilized in constructing such a strategy.

h. Testing and Analytical Results. This section shall discuss resources tested and analyzed; the nature and results of analysis, and the scientific importance or significance of the work. Quantified listings and descriptions of artifacts and their proveniences may be included in this section or added to the report as an appendix. Tested sites shall include a site number.

i. Conclusions and Recommendations.

(1) This section shall contain assessments of the eligibility of specific cultural properties in the study area for inclusion in the National Register of Historic Places.

(2) Significance shall be discussed explicitly in terms of previous regional and local research and relevant problem domains. Statements concerning significance shall contain a detailed, well-reasoned argument for the property's research potential in contributing to the understanding of

cultural patterns, processes or activities important to the history or prehistory of the Locality, Region or nation, or other criteria of significance. Conclusions concerning insignificance, likewise, shall be fully documented and contain detailed and well-reasoned arguments as to why the property fails to display adequate research potential or other characteristics adequate to meet National Register criteria of significance. For example, conclusions concerning significance or insignificance relating solely to the lack of contextual integrity due to plow disturbance or the lack of subsurface deposits will be considered inadequate. Where appropriate, due consideration should be given to the data potential of such variables as site functional characteristics, horizontal intersite or intrasite spatial patterning of data and the importance of the site as a representative systemic element in cultural patterning. The Contractor should be guided, in this regard, by Archeological Property Nominations by Tom King (Published in 11593, Vol. 1, No. 2). All report conclusions and recommendations shall be logically and explicitly derived from data discussed in the report.

(3) The significance or insignificance of cultural resources can be determined adequately only within the context of the most recent available local and regional data base. Consequently, the evaluation of specific individual cultural loci examined during the course of contract activities shall relate those resources not only to previously known cultural data but also to a synthesized corpus of data including that generated in the present study.

(4) The Contractor shall provide appropriate alternative mitigation measures for significant resources which will be adversely impacted. Data will be provided to support the need for mitigation, and the relative merits of each mitigation design will be discussed. Preservation of significant cultural resources is nearly always considered preferable to recovery of data through excavation. When a significant site can be preserved for a cost reasonably comparable to, or less than the cost required to recover the data, full consideration shall be given to this course of action.

(5) Conclusions derived from testing activities concerning the nature, quantity and distribution of cultural items should be used in describing the probable impact of project work on cultural resources.

j. Reference (American Antiquity style).

k. Appendices (Maps, correspondence, etc.). A copy of this Scope of Work shall be included as an appendix in all reports.

5.04. The above items do not necessarily have to be discrete sections; however, they should be readily discernable to the reader. The detail of the above items may vary somewhat with the purpose and nature of the study.

5.05. In order to prevent potential damage to cultural resources, no information shall appear in the body of the report which would reveal precise resource location. All maps which indicate or imply precise site locations

shall be included in reports as a readily removable appendix (ex: envelope).

5.06. No logo or other such organizational designation shall appear in any part of the report (including tables or figures) other than the title page.

5.07. Unless specifically authorized by the Contracting Officer, all reports shall utilize permanent site numbers assigned by the state in which the study occurs.

5.08. All appropriate information (including typologies and other classificatory units) not generated in these purchase order activities shall be suitably referenced.

5.09. Reports detailing testing activities shall contain site specific maps. Site maps shall indicate site datum(s), location of data collection units (including shovel cuts, subsurface test units and surface collection units); site boundaries in relation to proposed project activities, site grid systems (where appropriate) and such other items as the Contractor may deem appropriate to the purposes of this purchase order.

5.10. Information shall be presented in textual, tabular, and graphic forms, whichever are most appropriate, effective and advantageous to communicate necessary information. All tables, figures and maps appearing in the report shall be of publishable quality.

5.11. Any abbreviated phrases used in the text shall be spelled out when the phrase first occurs in the text. For example use "State Historic Preservation Officer (SHPO)" in the initial reference and thereafter "SHPO" may be used.

5.12. The first time the common name of a biological species is used it should be followed by the scientific name.

5.13. In addition to street addresses or property names, sites shall be located on the Universal Transverse Mercator (UTM) grid.

5.14. All measurements should be metric. If the Contractor's equipment is in the English system, then the metric equivalents should follow in parentheses.

5.15. As appropriate, diagnostic and/or unique artifacts, cultural resources or their contexts shall be shown by drawings or photographs.

5.16. Black and white photographs are preferred except when color changes are important for understanding the data being presented. No instant type photographs may be used.

5.17. Negatives of all black and white photographs and/or color slides of all plates included in the final report shall be submitted so that copies for distribution can be made.

6. Submittals.

6.01. The Contractor shall, unless delayed due to causes beyond his fault or negligence, complete all work and services under the purchase order within the following time limitations after receipt of notice to proceed.

a. Four (4) copies of the draft report will be submitted within 50 calendar days following receipt of notice to proceed.

b. The Government shall review the draft report and provide comments to the Contractor within 20 calendar days after receipt of the Government's comments on the draft report.

c. An unbound original and 25 bound copies of the final report shall be submitted within 30 calendar days following the Contractor's receipt of the Government's comments on the draft report.

6.02. If the Government review exceeds 20 calendar days, the period of service of the purchase order shall be automatically extended on a day-by-day basis equal to any additional time required by the Government for review.

6.03. The Contractor shall submit under separate cover 4 copies of appropriate 15' quadrangle maps (7.5' when available) and other site drawings which show exact boundaries of all cultural resources within the project area and their relationship to project features, and single copies of all forms, records and photographs described in paragraph 1.04.

6.04. The Contractor shall submit to the Contracting Officer completed National Register forms including photographs, maps, and drawings in accordance with the National Register Program if the sites tested are found to meet the criteria of eligibility for nomination and for determination of significance. The completed National Register forms are to be submitted with the final report.

6.05. At any time during the period of service of this contract, upon the written request of the Contracting Officer, the Contractor shall submit, within 30 calendar days, any portion or all field records described in paragraph 1.04 without additional cost to the Government.

7. Schedule.

7.01. The Contractor shall, unless delayed due to causes beyond his control and without his fault or negligence, complete all work and services under this contract within the following time limitations.

<u>Activity</u>	<u>Due Date</u> (Beginning with acknowledged date of receipt of notice to proceed)
Begin Testing of Sites	
23S0459, 465, 471, 496, 497, and	
23S0500, Castor River, Stoddard	
County, Missouri	10 calendar days

Submittal of Draft Report

120 calendar days

Government Review of Draft

Reports

140 calendar days

Contractor's Submittal of

Final Reports

180 calendar days

7.02. The Contractor shall make any required corrections after review by the Contracting Officer of the reports. In the event that any of the Government review periods are exceeded and upon request of the Contractor, the purchase order period will be automatically extended on a calendar day-for-day basis. Such extension shall be granted at no additional cost to the Government.

8. Method of Payment.

8.01. Upon satisfactory completion of work by the Contractor, in accordance with the provisions of this purchase order, and its acceptance by the Contracting officer, the Contractor will be paid the amount of money indicated in Block 25 of the purchase order.

8.02. If the Contractor's work is found to be unsatisfactory and if it is determined that fault or negligence on the part of the Contractor or his employees has caused the unsatisfactory condition, the Contractor will be

liable for all costs in connection with correcting the unsatisfactory work. The work may be performed by Government forces or Contractor forces at the direction of the Contracting Officer. In any event, the Contractor will be held responsible for all costs required for correction of the unsatisfactory work, including payments for services, automotive expenses, equipment rental, supervision, and any other costs in connection therewith, where such unsatisfactory work as deemed by the Contracting Officer to be the result of carelessness, incompetent performance or negligence by the Contractor's employees. The Contractor will not be held liable for any work or type of work not covered by this purchase order.

8.03. Prior to settlement upon termination of the purchase order, and as a condition precedent thereto, the Contractor shall execute and deliver to the Contracting Officer a release of all claims against the Government arising under or by virtue of the purchase order, other than such claims, if any, as may be specifically excepted by the Contractor from the operation of the release in stated amounts to be set forth therein.

APPENDIX B

INTERVIEW WITH MR. CHARLES FRANKLIN RAMPLEY

This interview with Mr. Charles F. Rampley (CR) took place at site 2380465. Robert H. Lafferty II (BL) and Michael Chapman (MC) conducted the interview. Editorial notes ([]) are supplied to make the text more understandable. The interview was in progress for several minutes before the recording was begun. (BL) was asking about the organization of the yard as we stood in the west yard.

Were there any out buildings that you remember?(BL)

There might have been an old barn, my brother owned it, see he married that was his daddy-in-law and he married Wids daughter and Wid turned it over well I guess they gave it to them to Blanche. And Joe owned it, my brother. (CR)

Joe Rampley?(BL)

Yes and he lived here awhile. And he was Wilards father?(BL)

Yes. (CR)

Joe lived here till about when? Do you have any recollection?(BL)

It's been several years ago, he traded it to his boy, Wilard, for a place in Booneville. I expect that's been 15 years ago. (CR)

So he lived here till about 1970 or thereabouts. (BL)

Yes that's about right. (CR)

So was the garden always been here on the west side?(BL)

No, it used to be on the east side. (CR)

So it use to be on the east side. (BL)

Was the yard fenced at all, do you remember?(BL)

Well when I was a little kid I just couldn't tell you about that no more than I know. The old man, Will Carpenter, and the old lady they had ginneys, [guinea hens]. My dad, I remember my dad was going in from work, he worked back here in bend in this death place and he was going in one evening and he stopped here in front of this house. That was all grown up here in that fence row right across that road, and a ginney nest out there and the ole lady Carpenter went out there and dad got some ginney eggs off of her to get us started in them. I remember that and I was just a little shake back then that's about the first I can remember. (CR)

Were you going in a wagon then?(BL)

It was a wagon. (CR)

Mules?(BL)

Horses and mules. (CR)

About what time was that what year do you remember?(MC)

Well see I'm 75 years old. (CR)

You said you were just a little shake. (BL)

And I expect I was five or six years old, I was big enough to come down here with my dad, just draggin along. (CR)

So that would have been right around the first World War? (BL)

Yea I imagine so. (CR)

And at that time they were working all the fields with horses and mules? (BL)

Yea horses and mules that's all they had. Yea there was just little shacks all around the country. Back then that's all people had, they didn't have these fine houses like they have now. (CR)

It's a whole different landscape now. (BL)

I told my boys I just wish it was back like it was back then myself. There was a lot more woods back then. (CR)

Were pretty much of these low areas woods back then? (BL)

Yea a lot of it was woods. It was back in here then. More than it is now. (CR)

There's hardly any woods left it seems anymore. (BL)

That old field right there just across here [west of the creek, west of site 23S0465] was the oldest field, that's been an old field along time. (CR)

Yes some of the first Indian fields were found they called them the old fields, Ocmulgee old fields (BL)

There's an old Indian camp right over there. (CR)

Oh?

There's one over there too. (CR)

Yea, there's a lot of them around here. (BL)

I've hunted that far ridge over there just across the woods there, that high spot. (CR)

Does it seem like there are a lot less arrowheads around than there used to be? (BL)

Oh yea people picked them up, people come here as far as Kentucky and Tennessee. (CR)

Really? (BL)

Sure and pick up Indian arrows. The'll be somebody coming. Everytime somebody works up there ground here comes a rain well here they come. (CR)

Somebody was out there before we got here yesterday. You see the footprints up and down every single row. (BL)

I know, after people works their ground and there comes a rain, here they come, people looking for arrows. I got several I picked up by the time my daddy started picks up and he's given a lot of his away to kids you know. (CR)

Do you know if there was a well here or what did they do for water?(BL)

Well they had an old well. (CR)

Do you recollect where that would have been in relationship to the house?(BL)

Well at that time I couldn't just tell you, but latter on there was a well right out there across from the east side from the house. But it ain't there no more. (CR)

It's all plowed up now. (BL)

Yea. Yea, this is about the oldest place I know of around here, that's a standing. There used to be one down here now [east], on down you know where that road turns where you go yonder way just off to the left. (CR)

Where it turns?(BL)

Yea an old log house, a cyclone blowed through and blew it away. (CR)

Really!(BL)

I'll be darned. (MC)

That was. I was little then, oh I was maybe 12. (CR)

You remember a big flood of maybe 27 or 29? The Mississippi flood?(MC)

Yea. (CR)

Did it come up in here at all, back up the Castor or anything?(BL)

I don't believe it comes that far. (CR)

Because where testing it over there we got down about half a yard deep and it is all built up in all directions from flooding it looks like on top of this type of soil which is real old. (BL)

A lot of that is done since they cut the river off at Greenbriar, you see that used to be a good river. (CR)

Spring feed. (MC)

Yep it used to be a good river but they ruined it when they cut it off. (CR)

Yea it's muddy now. (MC)

Yea it's just an old slow, you see it doesn't have no head water now. Now when you get above the virgin general [?] up there you know where they built the levee and cut this river off, and dug it across, it's a pretty and clear stream now. I was up there last fall. (CR)

I guess it must have been one of your cousins who said they lived back up here a mile in half straight up, younger man. (BL)

Young boy that's my son. He was down here. He told me he was down here this morning. (CR)

Yea we saw him. (BL)

He was riding a motorcycle, that's my youngest son. That old house I would say would be at least a hundred years old maybe older than that. (CR)

It's interesting the way it's been built. (MC)

That's the way they all used to be built. There's a lot of them around here, they do one big room in front and then they be a little kitchen behind. (CR)

There's something else here [southwest room] I didn't realize that doesn't connect on the inside? (BL)

No it doesn't. I don't think it does; does it? (MC)

This little room here does it connect on the inside or is that just a shed thats been added? (MC)

It connects I think. (CR)

Maybe it used to. (MC)

Well what was over here if it wasn't a garden? Yard? (BL)

Yard I guess. (CR)

This just old man ole that old man Carpenter just from that fence there over to there just a small spot around here (CR)

Back to the river?(BL)

Yea, people had a house back where that old house is, Johnny House. (CR)

I've got a friend in South Arkansas named John House, he's a archeologist too. (BL)

My brother lived here awhile. (CR)

Is there anything else you can tell us about it?(BL)

Now when we had built that shed on there, on that side. (CR)

On the front?(BL)

Yea no it wasn't like that, no it was just the house, just the logs. You see Wilard put that shed on there. (Cr)

Was there not a porch at all on there?(BL)

Yea I think it had a porch. (CR)

But that one's different. (BL)

Yea I remember that ole place a long time. (CR)

Were the boards [vertical clapboards on the west side] always on there that you remember on the log part?(BL)

No I don't think so. (CR)

They're pretty recent?(BL)

They have just been put on there. (CR)

You know you don't see many log cabins that much at all anymore. (BL)

Naw there used to be a lot of them, I remember when there used to be little ole shacks all over here. Now after you turn and go down here just a little piece along that woods over there used to be a cabin, than back here on these piece there used to be a cabin, there be two, two cabins just about like that, no outfits. (CR)

What about an outhouse or privy?(BL)

I don't remember. (CR)

Did they used to have outhouses or privies around here when you were growing up?(BL)

Yes some of us did and some of us didn't, some just went in

the woods. (CR)

That's what they did down in south Arkansas. Down near EL Dorado, they didn't have any outhouses down there either. Maybe that's when they started building them, when they started cutting down all the woods. (BL)

I wish I could live it over, you know people now a days they live it too fast, they're killing themselves, people used to raise gardens, you take people now days, even the farmers don't have a chicken anymore, they all don't grow nothing, no cows. (CR)

They're just business. (MC)

Just row cropping, there's already a surplus of stuff, people still just keep trying to raise every bit they can, I'ts like I told the boys if they all just quit and raised just about half of the crop they use these chemicals, that's what is killing the people it's all these chemicals. (CR)

I only saw one worm out there while we were digging. (BL)

It's like these fellers were putting out this fertilizer I'm suppose, now you know there's chemicals in that fertilizer and whenever they put it on a crop, the crop is going to absorb it, and they kill weeds with chemicals. and when ever that gets on your crop, just like when they spray that corn right there, that corn is going to absorb part of it. They got to where now they feed livestock stuff that they can grow fast. (CR)

I know, we raise our own cows and we don't get any of that stuff put in it. (BL)

It's just like a feller bought a place up here just on the south side of where I live, name of Mereck. He's got chickens, he's got cattle, he milks cows, and he raises a garden. The only feller around here that I know. I got a boy who raises his own garden but he don't got no stock, but the boy who was down here before he's got cattle, but he ain't got no garden or anything like that. (CR)

Hey Mick, do you and Marge want to get over here with the range pole and photograph the house, from a side view, a front view, and get some close ups of the log notching, the corners, and the bottoms of the rafters? (BL)

Ok. (MCS)

Do you want to go over to the house (BL)?

Yea I'll go with you if you want me to. (CR)

I believe there using it for storage for chemicals or fertilizer here in the front part of it. (MC)

I don't know myself, I haven't looked at the ole house for years. This feller here, he owns that place there, there's a fireman putting out right there, he lives down there towards. (CR)

There's a hedge row right there I see. (BL)

Yea that was just an old fence row years back. (CR)

My neighbor Albert used to live in Guatemala for ten years, and he said that in any other place in the world it's illegal to cut down hundreds of trees. (BL)

There's a marble down here. (MC)

It's a marble I thought it was a bird egg. It must've been one of Wilards when he was a kid I guess. (CR)

Oh God Bob! (MC) [BL picks up a spear point one inch from marble between the three of us]

That's a dandy! (CR)

It sure is! (BL)

If you hadn't found that marble we'd never seen that. (MC)

It is early Archaic I think its somewhere around then. (BL)

Ten thousand or twelve thousand years old. (MC)

Ten thousand years old, it's amazing how old some of these things are. Put it in the garden collection I guess. (BL).

Yes. (MC)

You see all these artifacts we collect will eventually be turned over to the University of Missouri you know. (BL)

Yea. (CR)

They will curate them forever. (BL)

I've got a arrow it's plum perfects that just cover a dime will cover it, its that little. (CR)

It's a real arrowhead. This one was probably on a spear or a knife. (BL)

Yes this one is a spear point. The little bitty ones are arrowheads now, these are spear points the big ones. (MC)

Well that one's little; a dime will cover that. (CR)

Some of them are real beautiful let me tell you. (BL)

It was found over there on that ridge. (CR)

Oh right over there? (BL) [west of the house ca 100m]

Right over there just across the woods there. (CR) [southwest of house]

I'll make a note of that. (BL)

Yea them old logs have been there along time. (CR)

Look at the size of them man I mean. (BL)

That was in 1933 when my brother lived here. "JWR the fourth month of 33". He put that plaster in. (CR)

Put this in, yea. (MC)

Plastered. (BL)

It's mud yea, mud. (CR)

Mud. (MC)

Used to be mud a dob of mud. (CR)

Yea there's still mud there. (BL)

I was going to say you don't see trees that big. (BL)

Anymore yea. (MC)

I think. (CR)

Very often. (BL)

I think it's Poplar or Redgum. (CR)

Redgum? (BL)

It maybe be Redgum, you see them get to be pretty good size trees. (CR)

Yea split and glued down. (BL)

I haven't been in this old house in along time. I'll give you a look if you want to, he don't care. (CR)

I see. (BL)

Now that's got a hanging chimney there, so they used to have a stove there. (BL).

Yep. (CR)

But the way the side look it looks like. (BL)

It used to be a fireplace. (CR)

It used to a fireplace there. (BL)

That's right there used to be a fireplace. (CR)

Well then they took that out and (BL)

Thats right my boy done that. (CR)

Oh he did. (BL)

Well not my boy but my brother. (CR)

Your brother. (BL)

Yea that used to be a fireplace. (CR)

I was noticing that from out side there, those windows. Were the windows always the same? (BL)

I couldn't tell you that. Imagine they was so, because I know that my brother didn't cut out no holes and put no window. (CR)

Yea that's kind of hard to retrofit there, to cut through that wall. (BL)

I know he didn't do it. (CR)

Mickey get a shot over here where they replaced the fireplace. How are you doing on film? OK. (BL)

Now this side has been put on there since. (CR) [the south add-on]

Yea you can tell. (MC)

In eighty years or so probably. (CR)

This doesn't look like the same plaster. (BL)

Probably since. (CR)

What I think it is; Bob the sun has baked it out and stuff. (MC)

It's probably made out of lime. (CR)

Yea thats what it looks like. (BL)

Now my boy, my brother didn't put that in there, now he put

that out in front I know. (CR)

This is different. (BL)

Yea it's cement. (CR)

I guess that looks the same. (BL)

Oh I see those are just whole logs just knotted out at the ends. (BL)

It's an old house. (CR)

The old sandstone slab is here. (MC)

Yea old sand rock it sit on you get them up in the hills there's a lot of them up there. (CR)

You reckon they got them out of Crowleys Ridge? (MC)

Yea. (BL)

Yea right up here in one of these hills. (CR)

It's not very far back? (BL)

Yea there's a lot of them up on my place. (CR)

Yea that's high enough, turn it around the other way. (BL)

It's a bad place for them. (MC)

There's a bumble bee. (CR)

Years ago there was a awful yellow jackets nest fin here. (CR)

Yea I bet there's been a bunch of them in here at one time. (MC)

Ground hogs gets in that old house there, there in there now I bet. The other day I come out here and there was one out in the road it run and got out the way. (CR)

Oh yea. (BL)

Yea there not many farms as there used to. The farmers they grumble because they can't get enough of there stuff they raise and they just keep trying to raise more of it. The government has already got a surplus and they blame the government because they won't pay them a great big price for some more. That's right. (CR)

I know it's absurd, it really is. (BL)

The government can't buy it all. (CR)

Sometimes I think they buy too much as it is, most everything they usually pay too much for it. (BL)

It's got to were machines are too high, you take a tractor, like a tractor them fellers are riding out there now, you can't get one of them for less than \$30,000. (CR)

And that would probably be used. (BL)

And some of them run as much as a \$100,000. (CR)

Yea. (MC)

I know it didn't use to be that way I bought, the first tractor I bought -that was in 1932- maybe I paid \$1,500.00 for the tractor and breaking ground, the disc and the covering. (CR)

What kind was it? (MC)

Model A John Deere. (CR)

That's pretty good. (MC)

Ain't like that no more. (MC)

And that was just about everything you needed. (BL)

Everything you needed to farm. (CR)

Traded a team of mules in on it for \$550.00. (CR)

And they take a team of mules? (BL)

Yea take it for the tractor. (CR)

Wow! (BL)

Yea for \$550.00. (CR)

Well when tractors came in did a lot of people, you know there were alot of mules and horses around a lot more than there are now, I mean what happened? (BL)

Well. People just went to tractors and got rid of their horses and mules. (CR)

Where did they go? Did they just hang around and die? (BL)

A lot of them went to the Gakees for hogs, ground them up for dog meal. Yes sir that was what mules were worth then, that was a team of 10 mules, they didn't make them any better. They weighed about 1,300 hundred a piece, you could plow all day long it didn't hurt those mules. All you need to worry about is hurting yourself. (CR)

Did you ever have to give the mules a rest? (BL)

Not them. (CR)

I know, we were doing some work down around Little Rock on the Dorchen plantations, a big tree out in the field is were they said they used to cool down the mules, called a mule cooling tree. You ever heard of anything like that? (BL)

No, my boy, when I was, I married in 1930 and I a farmed down near Bell City and there was 160 acres that was cleared a square 160 then I had a 18 acre patch back north of that and I had about 25 acre patch back west of that and me and my brother tended that with a teams. (CR)

That 160 acres, was that about all you could handle with a horse? (BL)

Yea we had fours. He had two and I had two teams. (CR)

Then of course you had a pasture to feed your teams with right? (BL)

Well yea we had a little pasture, but we mostly just feed them dry feed, hay and corn. But you know then we raised 75 to 80 bushels corn to acre and we didn't have to fertilizer, didn't have no chemicals, didn't use no chemicals to kill weeds. (CR)

How about huh? (BL)

We raised some seed corn so they raised on homemade corn. (CR)

Did you fertilize with manure or anything like that? (BL)

No, you didn't have to learned that. Now I been down there, the old house I lived then is still there, course this was years ago and I went down there to see and there's a cottonwood tree in the yard that I set when I lived there. (CR)

Oh really. (BL)

But that tree is about that big around now. (CR)

Over a yard almost four or five feet. (BL)

Tall. (CR)

Pretty fast growing. (BL)

Yea I spent a lot of hours down there. Down there's Copper-town I lived there six years here about 20 years ago and south-east where I lived there was a Indian cave and I plowed up Indian bones out there. (CR)

Yea you said. (BL)

Your son was saying something about that this morning when I was talking to him. (MC)

I kept a bunch of them and brought them up here see I was born up where I'm at now. My boy, I traded them the farm when I got to where I wasn't needed. My wife told me when ever, a lot of years before she past away that when ever we got done with it she wanted Larry, that's my youngest boy, to have it. And I told him, he said he wanted it. And he's living up there now. He got that trailer and built some on it. His wife she's a nurse, she works at the hospital southeast of the Cape. (CR)

It's a pretty long haul from here isn't it? (MC)

Yea she drives it. (CR)

You'd be surprised how things have changed in that amount of years. (CR)

I knew a guy when I was going to college who told me, can you imagine a world with no airplanes, no radios, no cars, that's the world I grew up in. (BL)

I when I was about 16 years old, I had a 25 Model Ford Roadster and you know that there was just two or three in the whole country. And I had one (CR)

Yea, when did they start paving the roads around here? (BL)

When I was about 17 or 18 years old. When they first built this, but they have widened it. You see 25 highway used to be gravel I guess I was probably older than that, I used to travel that old highway. That road east of main 25 used to be an old gravel road, gravel highway 25 went out through there it went that aways. They ditched about a quarter of a mile or more east of here of this one here now, they got to moving this way closer up. Yea I've been here a good bit, just about too long. Had a stroke trip me up just about 15 years ago, then last month I had a heart trouble and my lungs filled up, they let my lungs fill up with fluid. [I] liked to died. (CR)

That was no fun. (BL)

I thought I was I got to. But the boys loaded me up into the car to take me to Sykstons Hospital. That's what I couldn't understand, I went over there for the first time and my daughter-in-law told me my lung were full of fluid before I ever left home. Now she knows and I went over there to the hospital to the emergency room and they checked me over and they said it was Bronchitis. Then up in the hospital, I stayed 8 days, stayed in intensive care for 3 days, they got me up and kinda going again and I come home was home about a month and same thing again. And

it was worst that time then it was the first time. I thought I was going to die boy, I tell you they told me it's just like just drowning when your lungs fill up with water, you can't get your wind. The boys got me in the car again and head out over there with me and they took me over there and they put me in intensive care and I told the boys that I had to hand it to the woman, because I had a woman doctor that time and she told me you didn't get here none too quick and she said you might have a little bronchitis but that ain't your trouble it's your heart. She said your heart don't pump enough blood to get enough oxygen to take care of the socket build up. And she give me pills to get the water out of my lungs and I've been good ever since. But I have to take a pill everyday, no three times a week. Now I take a heart pill. (CR)

That's not too bad, it's better than have your lungs fill up. (BL)

Iv'e felt better than I've felt the last couple of years. (CR)

Well good. (MC)

How about cellars for storing roots and things and vegetables? (BL)

Some people had them but there was never one here. (CR)

Never was one here. (BL)

Did they not put them down in the houses so much or does that make any sense? (BL)

Well they, in them days and times they had a time keeping water out of them in this low ground. Way back there, I can remember when my dad, when he lived up there, when I was just a little shaver he had a old mud cistern. (CR)

Mud cistern? (BL)

Yea. (CR)

No boards or anything. (BL)

No. (CR)

I read about one of them two days ago; they had one down in Old Washington in Arkansas. (BL)

Yea an old mud cistern. (CR),

Have you ever heard of flower pits? (BL)

No. (CR)

For like putting flowering plants in. (BL)

No, my girls always had alot of flowers, but they just had them on the ground. She always raised a garden and she always had a row of flowers in her garden , her flower bed you know. (CR)

How about house plants? (BL)

Yea, she had them. (CR)

They stayed inside all winter? (BL)

Yea, they stayed inside, my wife always had house flowers. I've got one of the flowers that she had and it blooms in the winter time, it's kind of a flagnite, you have to take it in the winter time, I put it out in the summer. (CR)

Do most of these old house places have fruit trees around them? (BL)

Yep, used to more than there are now, of course people let their houses die out. My dad used to have an orchard (CR).

In about 1950 it seems like they stopped putting trees in. (BL)

Yea, they started putting in these big orchards and people let theirs go. That old tree there , I betcha is over a hundred years old. (CR)

That pear tree there? (BL) [pointing to pear tree east of house which is ca 20 cm dbh]

Yea it's a pear tree and it never fails to have pears on. (CR)

Huh. (BL)

Well I'll be darn. (MC)

I bet that thing, its there since I can remember it's been. (CR)

I would never have guessed it was that old. (BL)

Yea it's old. (CR)

There's no telling how old that tree really is it's older than I am, I know. I'd be surprised if it didn't have some on this year, it would be the first year. (CR)

Why it sure does, doesn't it? (MC)

Yea, it has some on it every year, it always has some pears

on it. Last year some of them was so big they were breakin it down, they don't look as thick this year (loud truck noise). It's been there as long as I can remember. (CR)

How about this vehicle here. What's the story on it? (BL)

Oh I don't know, Carl Wilard had it rigged up, a buzz saw to cut wood with. (CR)

He had a wood saw hooked up here? (BL)

Yea he pulled it with a engine, I don't know where the engine is in there or not I don't know I don't think it is. I borrowed it from him one time, we sawed up some slab one time for a neighbor who had a whole bunch of saw mill slabs. I borrowed it off from him to cut him some slabs you see. The saw it ran off of these tracks. (CR)

There's a rabbit. (MC)

Look-e that. (CR)

Oh really. (BL)

I don't remember just how it ran off it, a transmission, the transmission is even gone now ain't it. (CR)

I believe everythings gone out of it now. (MC)

It looks like everything back to the clutch is gone. Here's the clutch. (BL)

He had a saw run in here somewheres, had a sash come back and the saw in there and a table that could slide that pole across there and saw it. (CR)

Right across this way or was it tied straight in. (BL)

Yea. Thats why these are crossed (CR)

Oh, I see. (BL)

It ain't all there anymore. (CR)

How about all these bullet holes? (BL)

Somebody, people comes down here and shoots around. (CR)

Something to shoot at I guess. (MC)

Yea, its been there along time as long as I been here. (CR)

Usually these old places like this have dog trots in them

APPENDIX B

you know where they got the kitchen in the back of the house. They keep it separate from the rest of the house, just sort of a path way. (MC)

Yea. (CR)

It don't look like a tree would stay alive that long now does it? Yea but it is, I know of course because its been here ever since I can remember and it was. (CR)

Pretty good size then? (BL)

Yea I can't tell here lately where its growed any at all it just stays green and it has pears. (CR)

They say oak trees are not mature until they are over three hundred years old. (BL)

I know elm trees are practically they ain't as old as you might think, they set out there by themselves and they have growed fast. These walnut trees have growed since my brother has lived here, and they have twice as many as they used to be. (CR)

Not too big. Well I guess we need to push on to our next site guys. (BL)

APPENDIX C

BRIEF BACKGROUND OF THE CONTRIBUTORS TO THIS PROJECT

Dr. Robert H. Lafferty III served as Principal Investigator (PI) on this project. Dr. Lafferty took his Ph.D. in 1977 from Southern Illinois University. Since 1976 he has spent 25 months in the field directing all kinds of cultural resource management projects, authored or co-authored ten books and more than thirty smaller technical reports and papers. He has successfully completed cultural resource management projects totalling more than \$700,000. A part of these projects have involved NRHP significance testing of 76 different archeological sites. He has developed and tested predictive models on five projects. Dr. Lafferty directed the field work and served as the principal point of contact with the sponsoring agency. He was responsible for the overall execution of the projects. He is a Vietnam War Veteran.

Ms. Carol S. Spears serves as Project Archeologist and field director on this project. Ms. Spears has over 10 years experience in field work and has much experience in the planning, direction and execution of archeological projects, and extensive photographic and field experience. Ms. Spears took her MA in Anthropology at the University of Arkansas and has archeological experience in Arkansas, Missouri, North Carolina and Yugoslavia. She authored large parts of this report.

Mr. Michael C. Sierzchula served as Crew Chief, and lithics analyst on this project. He has 8 years experience working in archeology in the Southeast and West. He took his MA at the University of Arkansas and has extensive experience in report writing and fieldwork. He authored part of the report.