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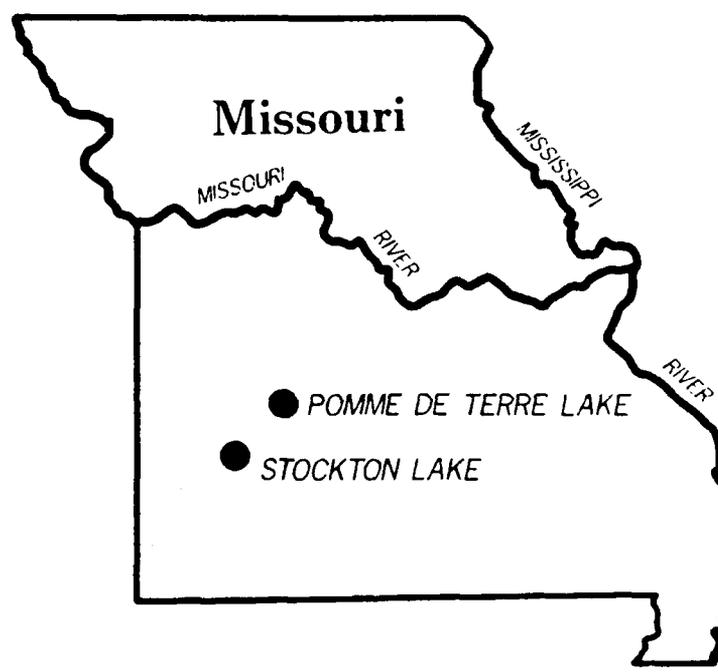


US Army Corps of Engineers
Kansas City District

Prewitt and Associates, Inc.
Consulting Archeologists
Austin, Texas

Archeological Survey of Selected Fish and Wildlife Management Areas at Pomme de Terre and Stockton Lakes, Dade, Hickory, and Polk Counties, Missouri

Contract No. DACW41-81-C-0160



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JAN 08 1990
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By.
Ross C. Fields, Principal Investigator
Patricia A. Mercado-Allinger
Jack M. Jackson

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1989

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ARCHEOLOGICAL SURVEY OF SELECTED FISH AND WILDLIFE
MANAGEMENT AREAS AT POMME DE TERRE AND
STOCKTON LAKES, DADE, HICKORY, AND
POLK COUNTIES, MISSOURI

by

Patricia A. Mercado-Allinger

and

Jack M. Jackson

with Contributions by

Margaret Ann Howard

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Daniel J. Prikryl

Principal Investigator: Ross C. Fields

REPORTS OF INVESTIGATIONS, NUMBER 43

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Consulting Archeologists
Austin, Texas

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ABSTRACT

Survey of approximately 630 acres of land at Pomme de Terre Lake and 1,960 acres at Stockton Lake was carried out during 1983 and 1984 in order to identify and assess in terms of National Register of Historic Places eligibility criteria all cultural resources located within portions of selected Fish and Wildlife Management lands under the jurisdiction of the U.S. Army Corps of Engineers, Kansas City District. The survey resulted in the identification of 68 archeological sites, 14 of which are recommended as eligible for nomination to the National Register of Historic Places. Two sites are significant under Criteria A, C, and D because of their association with early historic settlement of the Western Ozark Highlands and the intactness of their structures which could yield important information regarding rural architecture. The remaining 12 sites are significant under Criterion D because they contain data important to the study of prehistory in the project areas.

ACKNOWLEDGMENTS

It is through the assistance and cooperation of several individuals that the designated tasks of this project were accomplished, and we would like to take this opportunity to extend our thanks. We would first like to thank all of the Corps of Engineers personnel involved with this contract for their efforts to guide and coordinate the various phases of this project. Also, Mary K. Evans and Robert Hughes deserve recognition for freely sharing their knowledge about the history of the region. The assistance provided by the staffs at the Polk County Museum and the Dade, Hickory, and Polk county courthouses is also greatly appreciated.

As the current project was conducted under a modification to a previous contract, Elton R. Prewitt continued to serve as Project Director, and the position of Principal Investigator was still filled by Ross C. Fields. Patricia A. Mercado-Allinger assumed the duties of Project Archeologist, and Jack M. Jackson was assigned to the position of Project Historian. Serving on the field crew during the winter of 1983 were Margaret A. Howard, Mary Standifer, and Sandra Hannum. The spring 1984 field personnel included Bill Bryan, Larry Pete, and Molly Godwin. Laboratory processing was undertaken by Margaret A. Howard, Sandra Hannum, Linda Nance Foster, and Patricia A. Mercado-Allinger.

Finally, we thank the Prewitt and Associates, Inc. personnel for their assistance in the production of this report: Elton R. Prewitt and Ross C. Fields for their comments and editing; Linda Nance Foster for typing and editing; Sandra Hannum for drafting; and E. Ellen Atha for artifact illustrations.

CHAPTER 1

BACKGROUND DATA

Introduction

During December of 1983 and May and June of 1984, personnel from Prewitt and Associates, Inc. undertook a cultural resources survey of selected Fish and Wildlife management areas at Stockton and Pomme de Terre lakes, Missouri. Site assessments, analyses, and report preparation were accomplished between June and August of 1984. The surveyed lands are under the jurisdiction of the U.S. Army Corps of Engineers, and the work was contracted by the Kansas City District. The Corps of Engineers initiated the project in compliance with the National Historic Preservation Act of 1966, as amended (Public Law 89-665), and funding is authorized by Public Law 86-523, as amended by Public Law 93-291. Compliance with Section 2(a) of Executive Order 11593 ("Protection and Enhancement of the Cultural Environment," dated 13 May 1971), namely providing documentation for the identified sites, is the goal of this project.

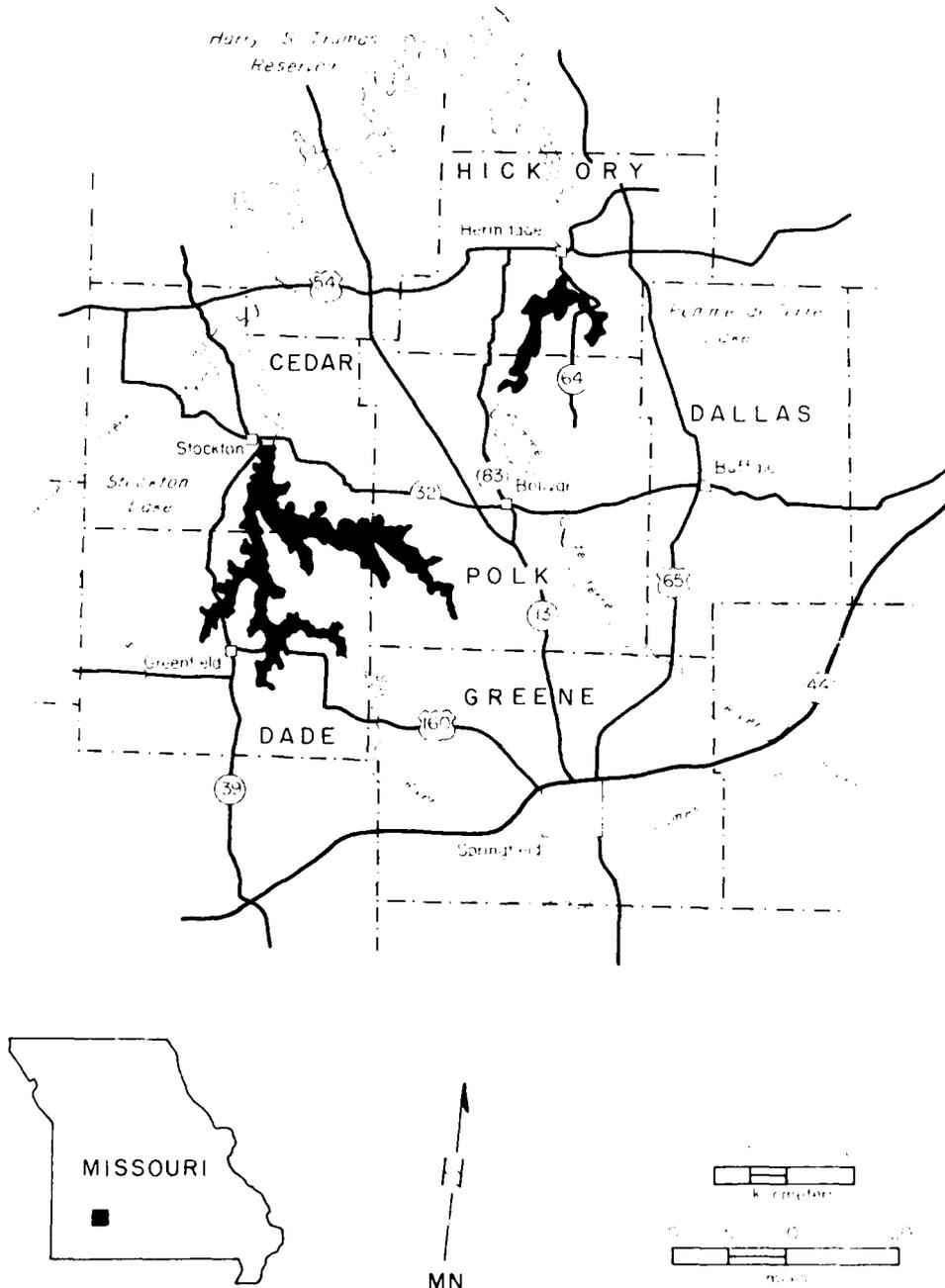
Stockton and Pomme de Terre lakes are located in Cedar, Dade, Hickory, and Polk counties, Missouri (Fig. 1). This project involved intensive survey of approximately 630 acres at Pomme de Terre Lake and 1,960 acres at Stockton Lake, constituting 38.63% and 35.49% samples of the Fish and Wildlife management lands.

The purpose of this project was to identify and record all archeological sites within the areas examined and to conduct investigations as appropriate for evaluation of these resources under the National Register of Historic Places criteria of eligibility. This work is the most recent effort by the Corps of Engineers to inventory and evaluate the conditions of archeological sites within the lake project areas to better enable management of the resources. Intensive survey of shoreline and Public Use areas was originally recommended in the preliminary cultural resource management plans developed for Pomme de Terre Lake (McNerney 1978) and Stockton Lake (Espey, Huston and Associates, Inc. 1980). To date, archeological surveys have been completed of the shoreline between the 838- and 851-ft msl elevations of all the Public Use areas at Pomme de Terre Lake (McNerney 1980), 18% of three Public Use areas at Stockton Lake (Espey, Huston and Associates, Inc. 1980), and approximately 3,500 acres of Public Use areas at Stockton Lake and 3,400 acres of various Public Use and Fish and Wildlife management areas at Pomme de Terre Lake (Girard and Freeman 1984).

This report provides information concerning the environmental setting and culture history of the project areas and summarizes previous cultural resources investigations undertaken in the project vicinity (Chapter 1). Chapter 2 describes the methods of investigation and research framework employed during this project. The results of the survey are discussed and sites described and evaluated in terms of National Register criteria in Chapter 3. A more detailed treatment of site significance is presented in Chapter 4 and is followed by specific recommendations for the management of significant sites (Chapter 5). Appendices 1 and 2 present the results of prehistoric and historic artifact analyses. Appendix 3 is a glossary of significant terms used in this report, and Appendix 4 contains a summary of the qualifications of the personnel involved with this project.

Figure 1

POMME DE TERRE & STOCKTON LAKES CEDAR, DADE, HICKORY & POLK COUNTIES, MISSOURI LOCATIONS OF PROJECT AREAS



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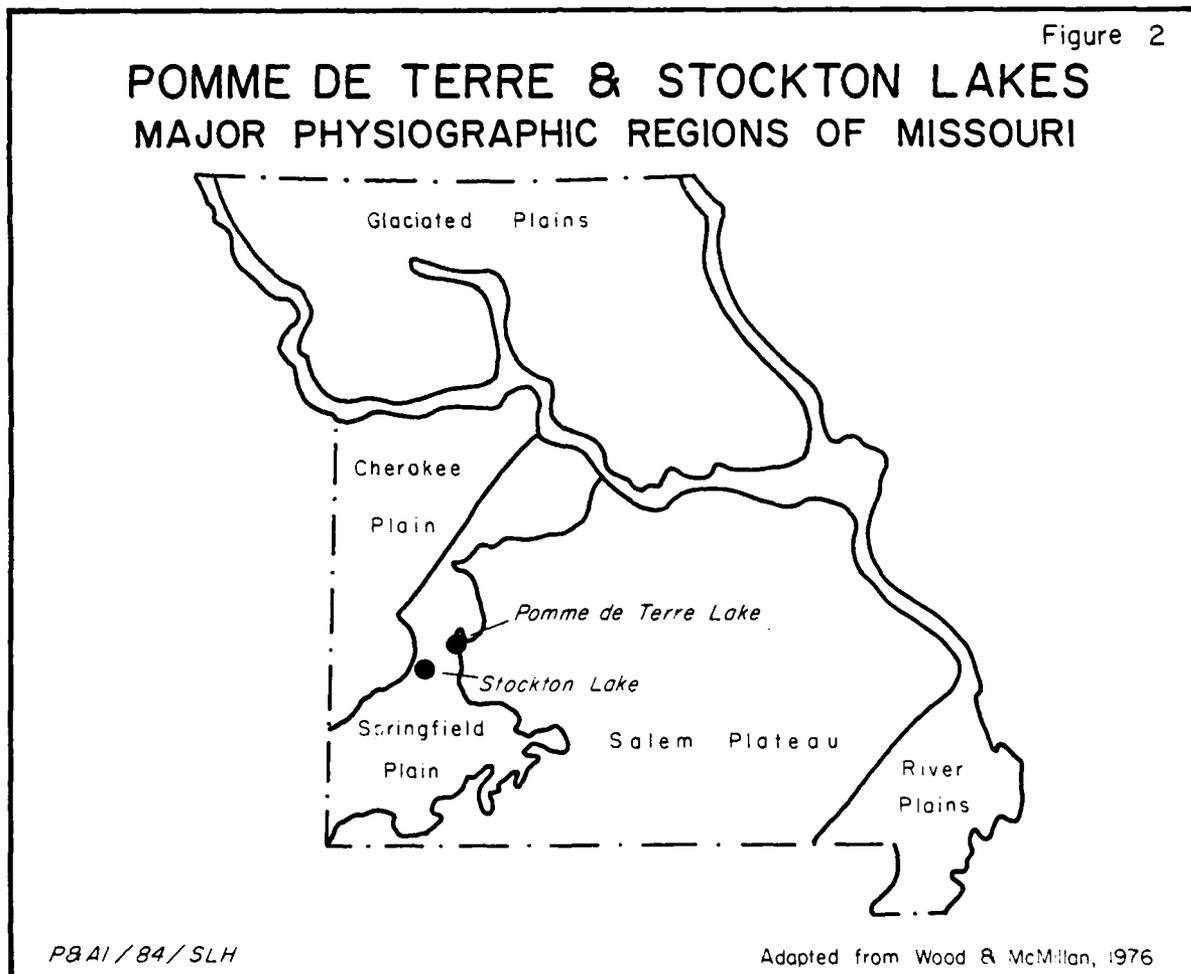
Adapted from *Missouri Wildlife*, Missouri Department of Conservation, 1977

Environmental Setting

This discussion summarizes important aspects of the environmental setting for Pomme de Terre and Stockton lakes. The interested reader is directed to Girard and Freeman (1984:4-15) for a more thorough treatment of the subject.

Physiography and Geology

The project areas are located near the western limits of the Ozark Upland Region of the Interior Highlands Province (Rafferty 1983:1). The Ozark region is an uplifted and dissected area which exhibits more relief to the east (Salem Plateau) and has broad, gently rolling upland plains and steep-sided valleys known as the Springfield Plain to the west (Fig. 2) (Sauer 1920:62, 66).



Stockton and Pomme de Terre lakes are located within the Osage Watershed system (Fig. 3). Stockton Lake was created by a 10,500-ft-long dam on the Sac River and controls a 1,160-square-mile drainage area in Cedar, Dade, and Polk counties, Missouri (U.S. Army Corps of Engineers 1981:5). The Sac and Little Sac rivers are the primary watercourses which form Stockton Lake, but a number of minor tributaries (Maze, Sons, Turkey, and Turnback creeks) also drain into the lake. A 7,240-ft-long earthen dam constructed below the confluence of the Pomme de Terre River with Lindley Creek forms Pomme de Terre Lake (U.S. Army Corps of Engineers 1980:A). Pomme de Terre Lake has a drainage area of 611 square miles in Hickory and Polk counties, Missouri (U.S. Army Corps of Engineers 1980:6).

Numerous springs are present on the Springfield Plain but are less abundant than those on the Salem Plateau (Vineyard and Feder 1974:7). Springs in the project areas are generally small with low discharge rates. Vineyard and Feder (1974:192-194) report that larger springs are concentrated near the headwaters of the Sac River.

The geologic history of this area can be traced back to the Precambrian Era when igneous activity uplifted the Ozark region (Stout and Hoffman 1973:8). During the subsequent Paleozoic Era, cycles of sea advance and retreat resulted in several episodes of deposition and erosion (Branson 1918). Table 1 lists the geologic formations exposed in the Stockton and Pomme de Terre areas. It should be noted that in the vicinity of Pomme de Terre Lake, the Jefferson City Formation and Cotter Dolomite form extensive outcrops. Burlington-Keokuk Limestone outcrops extensively in the Stockton area. Each of these formations include chert materials.

Continual erosion during the Mesozoic and Cenozoic eras produced the surficial materials now evident in the project area. Chert-clay residuum and colluvium occur where bedrock is cherty dolomite and limestone. Where shales and clays form the substrates, silt-clay residuum has developed and sand derived from underlying sandstones is also known to occur locally (Stout and Hoffman 1973:14). The glacial activity of the late Cenozoic Era did not affect this region.

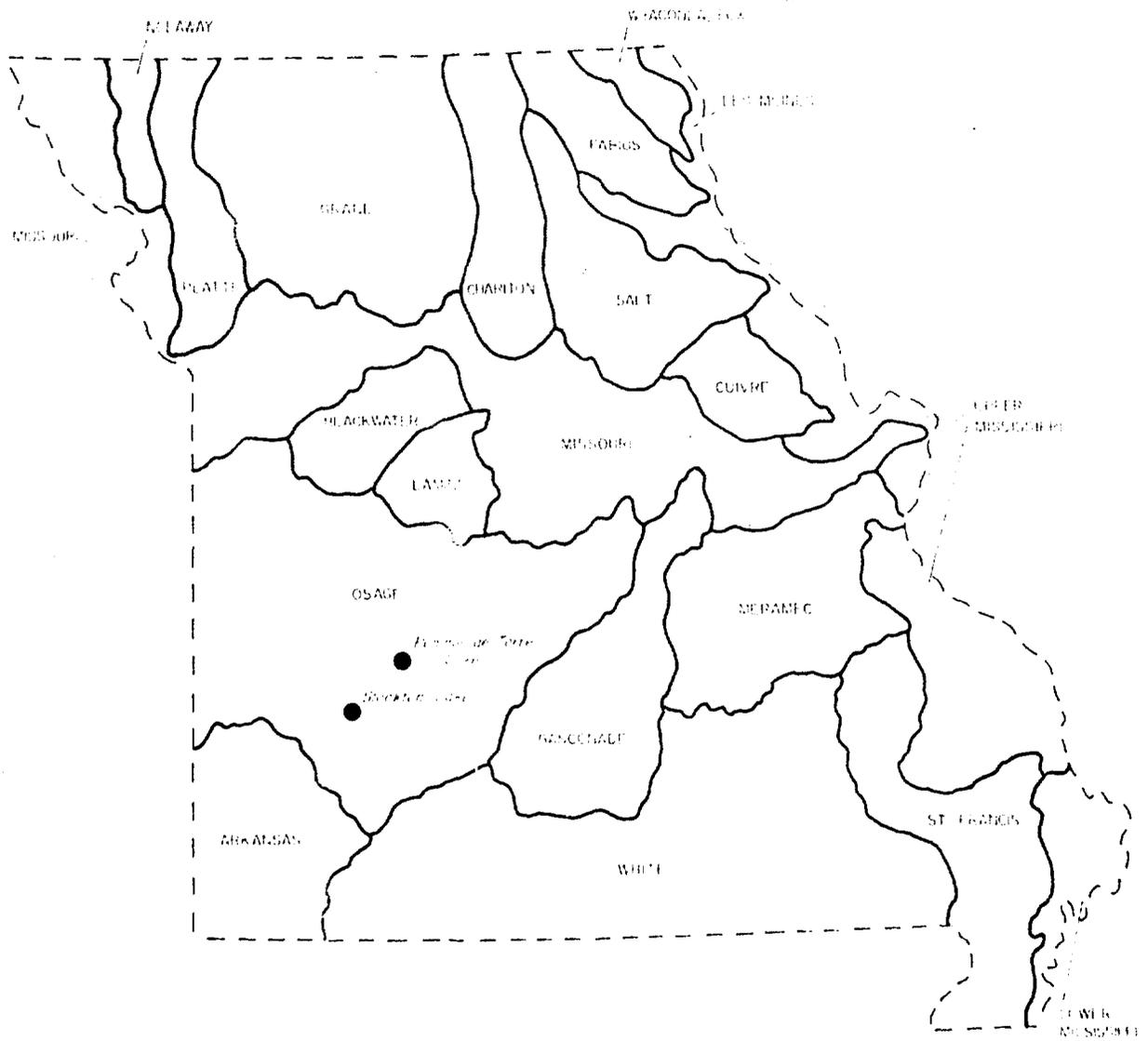
Climate

Data regarding the average growing season and precipitation and temperature levels for the project areas are derived from McMillan (1976a:Table 2.1) and are presented in Table 2. Current climatic patterns are highly variable, but there is a tendency for low amounts of precipitation during the winter and occasional droughts during the summer months (McMillan 1976a:20).

Environmental Zones

The Springfield Plain is dominated by grassland vegetation which is especially adapted to level surfaces with well-developed soils, conditions which are most common to the upland prairies. Oak-hickory climax forest with a post oak-blackjack oak association predominates along the western border of the Salem Plateau and is often found to extend westward along stream valleys (McMillan 1976a:21). Forest species are better adapted to the coarse and

POMME DE TERRE & STOCKTON LAKES MISSOURI STATE HISTORIC PRESERVATION PROGRAM WATERSHED MAP



Legend:
— Watershed Boundary
- - - State Boundary

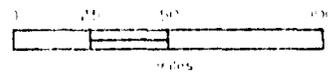
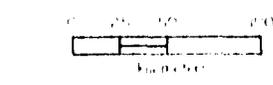
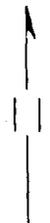


TABLE 1

DESCRIPTIONS OF GEOLOGIC FORMATIONS WHICH OUTCROP IN THE PROJECT AREAS
(Adapted from Thomson [1982] and Castillon [1982])

CENOZOIC

RECENT ALLUVIUM -- Unconsolidated silt, sand, and gravel deposited in the bottoms of valleys. The gravel is composed of chert and gravel-size fragments of exposed formations. Sand and silt form the matrix.

PALEOZOIC

PENNSYLVANIAN PENNSYLVANIAN SANDSTONE AND CONGLOMERATE -- Red to brown, fine to coarse-grained sandstone and cobble conglomerates with sandstone matrix. Some red to black shales also occur in the unit. The formation is poorly cemented, and gravels and sand often are the only evidence for the occurrence of the formation. The unit is extremely variable in thickness.

MISSISSIPPIAN WARSAW FORMATION -- Light gray, coarse to medium crystalline, fossiliferous limestone with some nodules of light gray chert. The unit is from 150 to 180 ft thick.

BURLINGTON-KEOKUK LIMESTONE -- White to gray, coarsely crystalline and crinoidal limestone containing some nodular or bedded chert. These cherts contain internal molds of fossils. An oolite layer (Short Creek Oolite) is found at the top of the unit. Some of the lower beds are brown colored and dolomitic. The unit is up to 160 ft thick.

ELSEY-REEDS SPRING FORMATION -- Gray micritic limestone with 25 to 50% chert. The chert is primarily nodules and long lenses and is mottled white, cream, and gray. The unit is prominent in the southern part of the area but loses its identity to the north possibly becoming part of the lower Burlington-Keokuk Limestone. The unit is 80 to 120 ft thick.

PIERSON FORMATION -- Brown to brownish gray magnesian limestone and dolomite with occasional chert- and calcite-filled nodules and joints. The unit is from 10 to 20 ft thick in the north and up to 40 or 50 ft thick in the south.

Table 1, continued

MISSISSIPPIAN, continued	<p>NORTHVIEW FORMATION -- Olive green to gray-blue shales with light brown siltstone. The siltstone occasionally contains worm burrows. To the north the formation has increasing amounts of bluish gray to brown, massive bedded limestone and dolomite at the bottom and interfingers with the Sedalia Formation. The Northview is up to 80 ft thick.</p> <p>COMPTON FORMATION -- Gray, thin-bedded, fossiliferous limestone and light brown, massive dolomite. The unit has poor exposures and is difficult to find in the field. It is from 10 to 20 ft thick. The Sedalia Formation is undifferentiated from the Compton.</p>

ORDOVICIAN	<p>COTTER DOLOMITE -- Silty gray to brown, cherty dolomite with lenses and locally persistent sandstone beds. The cherts are oolitic and dense white, gray, or black. Some sandstone beds are from 25 to 30 ft thick. Swan Creek Sandstone is the name given to a prominent red-colored member of the Cotter. The Cotter Dolomite is 100 to 150 ft thick.</p> <p>JEFFERSON CITY FORMATION -- Cherty, gray to brown silty dolomite with some sandstone beds. The cherts are oolitic and clean white to gray.</p>

rocky soils which occur on ridgeslopes, while grasslands are better suited to floodplains and terraces where runoff is high and soils are fine textured.

The prairie-forest environment in the Pomme de Terre and Stockton areas has undergone many alterations since the period of initial Anglo-American settlement as the result of land clearing, development, and fire. Changes in climate have also likely affected the paleoenvironment. Little is currently known about the paleoenvironment of the area, but a few attempts have recently been made to reconstruct conditions on the basis of analogy for the lower Pomme de Terre River downstream from Pomme de Terre Lake (McMillan 1976a; King 1982).

King (1982:9-61) describes seven vegetation zones for the lower Pomme de Terre River (Harry S. Truman Reservoir), noting differences of topography and potentially available resources: upland oak-hickory forest, bluff glades, bottomland forest, marsh/aquatic, bottomland prairie, open woodlands, and upland prairie. As Girard and Freeman (1984:9-14) synthesized data concerning topography, dominant and economically important fauna and flora, potentially significant mineral resources, and the seasonal availability of plant foods, such an effort will not be repeated here.

TABLE 2
CLIMATIC DATA FOR THE PROJECT AREAS

TEMPERATURE

Mean maximum temperature - January	6.5° to 7.5° C (43.7° to 45.5° F)
Mean minimum temperature - January	-5.5° to -4.4° C (22.1° to 24° F)
Mean maximum temperature - July	32° C (89.6° F)
Mean minimum temperature - July	20° C (68° F)

PRECIPITATION

Mean spring precipitation	30.48 cm (12 inches)
Mean summer precipitation	30.48 cm (12 inches)
Mean autumn precipitation	25.4 cm (10 inches)
Mean winter precipitation	15.24 cm (6 inches)
Mean annual precipitation	101.6 cm (40 inches)

GROWING SEASON

Average date for last killing frost	April 5
Average date for first killing frost	October 30

Culture History

Formulation of a chronological framework for southwestern Missouri has relied upon the work undertaken at Rodgers Shelter in the lower Pomme de Terre River Valley (McMillan 1976b; Kay 1982a). Figure 4 correlates the time/stratigraphic units defined at Rodgers Shelter with the sequence used by Chapman (1975, 1980). Only those cultural periods which have been identified in the project vicinity are discussed.

Dalton Period

The earliest occupation of this region seems to have occurred during the Dalton period, which Chapman (1975:29) characterizes as a hunter-forager tradition in existence from 10,000 to 9,000 B.P. Modern fauna were present, and an oak-hickory forest was established by this period, although the climate was moister than what is currently prevalent (Kay 1982c:729). Excavations at Rodgers Shelter encountered slightly earlier Dalton

Figure 4

CHRONOLOGICAL SEQUENCE OF HORIZONS AT RODGERS SHELTER (Kay 1982c)
AND CULTURAL/TEMPORAL UNITS OF CHAPMAN (1975, 1980)

<u>A.D./B.C.</u>	<u>B.P.</u>	<u>Rodgers Shelter (Kay 1982c)</u>	<u>Chapman (1975, 1980)</u>
			Late Mississippi
			Early Mississippi
1000	1000	Horizon 1 (Woodland/Mississippian)	Late Woodland
0	2000		Middle Woodland
		Horizon 2 (Woodland/Late Archaic)	
1000	3000	Horizon 3 (Late Archaic)	Early Woodland
2000	4000	Horizon 4 (little occupation)	Late Archaic
3000	5000	Horizon 5 (Middle Archaic)	Middle Archaic
5000	7000	Horizon 6 (Middle Archaic)	
6000	8000	Horizon 7 (Middle-Early Archaic)	Early Archaic
		Horizon 8 (Early Archaic)	
7000	9000	Horizon 9 (little occupation)	Dalton
8000	10,000	Horizon 10 (Dalton)	
9000	11,000	Horizon 11 (little occupation)	Paleoindian
11,000	13,000		
12,000	14,000		Early Man

occupations in Horizon 10, which dates to 10,500 to 9,500 B.P. (Kay 1982a:102-103). These occupations at Rodgers Shelter appear to have been ephemeral camps where activities were clustered around open hearth features (McMillan 1976b:223). The Dalton period artifact assemblage recovered from Rodgers Shelter indicates specialized scraping, woodworking, hunting, and tool maintenance activities (Kay 1982c:734). Floral and faunal remains suggest that there was reliance upon nuts and small and large game animals (particularly forest, forest-edge, and riparian species) (McMillan 1976b:224; Kay 1982c:734). Dalton points were recovered along with Plainview and fluted lanceolate points from the earliest occupations at Rodgers Shelters, a situation which Kay (1982b:554) interprets as evidence of early development of an Archaic tradition. In the project vicinity, evidence of Dalton period occupations is limited (Chapman 1954:15; Roper et al. 1977; Collins et al. 1983).

Early/Middle Archaic Periods

Early and Middle Archaic occupations have been identified in Horizons 8 through 5 at Rodgers Shelter and have yielded radiocarbon dates of 8030 ± 300 B.P. to 5200 ± 200 B.P. (Kay 1982a:81-106). This span of time is coincident with the hypsithermal during which climatic conditions became warmer and drier and resulted in the expansion and contraction of extant habitats (Purdue 1982:253, 256). More specifically, open tall-grass prairie habitats probably became more prevalent on the uplands, while floodplain environments seem to have been more resistant to the drying trend (Brown 1983:10). Modifications of subsistence strategies seem to reflect these environmental changes as there appears to have been a greater emphasis upon plant foods and riparian and forest-edge species and a decline in large game exploitation during these periods at Rodgers Shelter (Kay 1982c:735).

The majority of the recovered artifacts at Rodgers Shelter indicate an emphasis upon tool production activities and the introduction of a variety of grinding implements for pigment and food preparation during the Early and Middle Archaic (Kay 1982c:735-736). A rock cairn dog burial, possible crude structures, hearths, and tool caches are features which have been identified with these occupations at Rodgers Shelter (Kay 1982c:735).

A number of projectile point types first occur in the archeological record at this time, with basal grinding, serration, and beveling as common attributes. The frequency of Dalton points diminishes, while Rodgers or Rice Lanceolate, Graham Cave Notched, and Rice Lobed points are more numerous during the Early Archaic (Kay 1982b:547). Kay (1982b:547) notes that lanceolate forms continue to dominate during the Middle Archaic but are found to occur with ovate lanceolates, flared base (Johnson), broad blade (Kirk-like), and contracting stem (Hidden Valley) specimens, as well as fluted Dalton-like forms, a San Patrice-like point, and bifurcated base LeCroy points.

Previous investigations at both Pomme de Terre and Stockton lakes have encountered evidence of Early/Middle Archaic occupations (Chapman 1954; Chapman et al. 1962:60; McMillan 1966:124-128). Little can be said about the nature of these occupations because of questionable integrity or the lack of subsurface investigations.

Late Archaic Period

At approximately the time of the Late Archaic (ca. 3500 to 2500 B.P.), the hypsi-thermal terminated, resulting in more-mesic climatic conditions. The environmental response was a gradual expansion and westward encroachment of oak-hickory forest, a contraction of the tall-grass prairie habitat, and increase in the deer population (Kay 1982c: 731-732). Subsistence was concentrated on the exploitation of forest-edge and floodplain environments and even involved limited cultivation of such tropical cultigens as squash and gourd (Kay 1982c:737).

Variability in settlement is first apparent during the Late Archaic. Kay (1982c:736-739, 1983:63) presents a model to account for this variety of settlement practices which includes: (1) annual or spring-through-fall sedentary encampments located near springs or perennial water sources where horticultural activities were undertaken; and (2) temporary and seasonal camps located at caves and rockshelters where specialized extractive activities such as scraping and butchering are indicated. The Late Archaic component at the Phillips Spring Site (Kay 1982d; Robinson and Kay 1982) is an example of a base camp. Rodgers Shelter (Kay 1982c:620) and Blackwell Cave (Wood 1961; Falk 1969) contain deposits which appear to represent specialized Late Archaic camps.

Projectile points also differ markedly from earlier forms during this period. On the basis of excavations at Rodgers Shelter, it seems that the Sedalia Lanceolate is a diagnostic point type as are the Smith and Castroville types which exhibit basal notching, corner notched Eteley and Afton types, and straight stemmed points such as the Table Rock and Stone types (Kay 1982b:547). Another artifact, the bifacial "Sedalia digger," seems to be representative of this period and is probably indicative of horticultural activities (Chapman 1975:184).

From survey investigations at Pomme de Terre and Stockton lakes, Late Archaic occupations apparently were both numerous and widespread (Chapman 1954; Wood 1961; Chapman et al. 1962). Information concerning individual components is limited as few sites have been excavated, and many of the sites with Late Archaic components which have been excavated have proven to be shallow with mixed deposits (Chapman 1954:61-94; Chapman et al. 1962:141-153; Wood 1965:181-185; McMillan 1966:73-118, 136-175).

Early/Middle Woodland Periods

The adoption of ceramic technology and the first use of the bow and arrow differentiate the Woodland period from earlier occupations. The Early Woodland period is distinguishable in the Northeast and Northwest Prairie regions of the state by the occurrence of cord-marked and incised pottery of the Black Sand Complex (Chapman 1980:10-16), but such wares have been found locally in Middle Woodland contexts (Chapman 1980:19-20). Kay (1982c:739) estimates that in the study area the bow and arrow were in use by 1200 B.P. and ceramics were utilized by 2500 B.P. Evidence for such an early ceramic date is lacking thus far. Wood (1976:102) related the ceramic component at the Boney Spring Site with the Early Woodland period on the basis of crushed-limestone-tempered and sand-tempered ceramics, but the associated radiocarbon dates (1900 ± 80 B.P. and 1910 ± 80 B.P.) are more in keeping with those expected for the Middle Woodland period.

From excavations at the Phillips Spring Site (Kay 1982d:52), it is known that cultivation of cucurbits continues in the Early/Middle Woodland periods. Pit features indicative of storage activities and post molds which may represent structures were also encountered in the Early/Middle Woodland component at Phillips Spring (Kay 1982d:55-56). Although poorly separated, the ceramic occupations at Rodgers Shelter yielded Rice Side Notched dart points and Scallorn and Cahokia arrow points (Kay 1982b:547-548). The sherds recovered from these strata at Rodgers Shelter have yet to be described, but Kay (1982c:739) reports that some show similarities to Hopewellian (Middle Woodland) design elements. Possibly associated with these occupations at Rodgers Shelter are contracting stem dart points (Gary and Langtry types) and a Cupp dart point which bears a resemblance to the Scallorn point type (Kay 1982b:548).

Excavations at Blackwell Cave, Component C, at Pomme de Terre Lake (Wood 1961:90, 102) and Tater Hole Shelter and Griffin Shelter at Stockton Lake (McMillan 1966:91-136) encountered materials often associated with the Middle Woodland period. At Blackwell Cave, the Middle Woodland artifact assemblage was found to contain a variety of chipped and ground stone tools (leaf-shaped knives, oval flake snubbed scrapers, pebble manos, slab metates, rubbed hematite), bone awls, antler flakers, Gary and Rice Side Notched points, and ceramics with grit or sherd temper and various surface treatments (smoothed, cord roughened, dentate and rocker stamping, bosses, finger-pinching, and indentations) (Wood 1961:90). Uncontrolled excavation by Marshall at Tater Hole Shelter (McMillan 1966:101) produced sherd-tempered incised, stamped, rouletted, and punctated sherds which probably relate to the Middle Woodland period. Griffin Shelter excavations (McMillan 1966:183) yielded decorated ceramics, Gary and possibly Snyders dart points, triangular and ovate bifaces, and lamellar flake knives.

Late Woodland/Mississippian Periods

Population dispersed and subsistence patterns again emphasized hunting and gathering during the Late Woodland period (Chapman 1980:78). In order to identify Late Woodland occupations in southwestern Missouri, Chapman (1980:80-81) uses traits identified at Late Woodland components in adjoining areas. Characteristic Late Woodland period ceramics include crushed-limestone-tempered plain, brushed, or cord-marked wares and Baytown wares (clay/grog or sand tempered with similar decorative treatments). Contracting stem (Gary, Langtry, and Table Rock Pointed Stem), shallow side notched (Rice), and corner notched (Snyders Notched) dart points often accompany Late Woodland components. Triangular (Mississippi) and triangular notched (Cahokia, Huffaker, Morris, Reed, and Washita) arrow points and shell-tempered pottery are usually indicative of the later Mississippian period.

Although numerous sites, including caves and rockshelters, with Late Woodland and Mississippian components have been recorded locally, it is difficult to separate the two periods because few components remain undisturbed. In the Pomme de Terre area, subsurface investigations reported in Chapman (1954:70-97) recovered Late Woodland diagnostics from several sites, but these could not be clearly distinguished from earlier or later occupations. The Late Woodland/Mississippian sites at Stockton Lake are identified primarily on the basis of diagnostic point types since ceramics and stratified deposits are rare occurrences (Pangborn 1967; Calabrese et al. 1969; Pangborn et al. 1971). Chapman (1980:86) suggests that the absence of ceramics at such sites as Dryocopus Village and Flycatcher Village may indicate a continuation of Late Archaic adaptations or brief occupations for the purpose of hunting and foraging on the tall-grass prairie.

Another unique aspect of Late Woodland/Mississippian occupation in the Western Prairie Region is the occurrence of ceremonial/human burial mounds and cairns from which four complexes (Fristoe, Bolivar, Stockton, and Nemo) have been defined (Wood 1960:90, 1961:92-96, 1965:68-72, 91-93, 130-133). Many of these features contain common Late Woodland and Mississippian point types and ceramics and one or more of the following burial types: (1) extended and supine primary burials; (2) primary flexed burials; (3) bundle burials; (4) skull and crossbone bundle burials; (5) ossuaries; (6) cremations; and (7) broadcast burials (Wood 1967:112).

Historic Period

The Historic Period in southwestern Missouri covers slightly more than the last 350 years since the first contacts between Europeans and the local aboriginal population. An excellent and quite detailed overview of this period is available in a recent report by Espey, Huston and Associates, Inc. (1980:1-7 through 1-28). The brief explanation given here does not seek to duplicate that general overview but to accomplish two other goals: (1) to offer general historic background information that will allow specific historic sites to be placed in a general framework of cultural chronology; and (2) to emphasize certain aspects of the historic record that are particularly important to understanding the nature or significance of certain sites found during the survey. The region where both Stockton and Pomme de Terre lakes are now located encompasses four counties (Cedar, Polk, Dade, and Hickory) which were a part of the area occupied by the Osage tribe in early historic times. Perhaps as early as the 1780s this picture was modified as successive waves of displaced aboriginal inhabitants from the eastern states were pushed westward by the advancing Anglo-American frontier of settlement. This led to occupations by Cherokee, Chickasaw, Choctaw, Shawnee, Kickapoo, Sac, Fox, Delaware, Potawatomi, and other less-well-known cultural groups. These sometimes mixed with the Osage occupations and with each other, such that the cultural affiliation of a particular historic aboriginal site may be quite difficult to define. In 1826 the Osage and other remnant Indian groups were expelled from Missouri (Synhorst 1977:17, 43, 69, 71). This opened the way for unrestricted Anglo-American settlement.

Further references to the historic Osage, their relationships with the displaced tribal groups moving westward into their traditional lands, and the eventual expulsion of the entire Indian population can be found in Chapman et al. (1962:87-95), Wood (1966:104-109), Chapman (1974:81-89, 90-120), and Synhorst (1977).

Although the Historic Period is generally agreed to begin with the 1617 grant of trading rights and control of lands drained by the Mississippi River from the King of France to the India Company, actual contact did not occur until the eighteenth century. In fact, the last three-quarters of the eighteenth century saw the growth of European contact and trade with the French, Spanish, and English. The Louisiana Purchase opened the area first to trade with the trappers, fur agents, and peddlers from the United States, then very quickly to potential settlement by Anglo-American farmers.

The initial historical aboriginal period can be conceptualized as a slow acculturation process where the horse, firearms, cloth, and iron pots replaced the analogous features of aboriginal material culture. To a large extent, the hunting routines of the Osage were modified to seek out the pelts that were desired by the traders. This made their primitive

subsistence economy a part of the growing worldwide capitalist economy. Or at least, the Osage were responsive to the demands of that system. If beaver hats were very fashionable in London, beaver pelts would buy more iron pots from the traders along the Sac and Pomme de Terre rivers.

The fortunes of the French Empire in the Napoleonic Wars had a direct effect on the aboriginal population. Had they continued as the subjects of a distant imperial system with only a single European settlement at New Orleans to facilitate trade, the story of the nineteenth century might have been much different. Because Napoleon needed funds, the whole of the Louisiana Territory was sold to the United States, thus sealing the fate of the Osage in southern Missouri. The purchase was made in 1803, and the Lewis and Clark Expedition was launched the same year to explore the unknown land. In slightly more than 20 years, the flood of land-hungry Anglo-American farmers had displaced the Osage.

1825-1865: EARLY ANGLO-AMERICAN SETTLEMENT

Land claims and settlements before 1830 are quite rare in the four-county region. Settlers began to trickle into the territory on a steady basis after 1830, and the financial panic of 1837 seemed to open the floodgate. However, settlement remained fairly sparse and was confined to the most desirable bottomlands along major streams, certain favored prairies, or the vicinity of natural springs until after the Civil War.

This initial Anglo settlement was chiefly accomplished by the yeomen farmers of the upper south. They were a mix of old-line Americans of largely English origin who had occupied the Carolina backcountry from early colonial times and the more recent "Scotch-Irish" immigrants. These hardy Scotch-Irish folk were transplanted by the British crown from their native Scotland to the garrison towns of Ulster in Northern Ireland. During the first years following the American Revolution, a stream of these people landed at Philadelphia and took the great wagon road south into North Carolina and Tennessee. One of the cultural features that marks their passage is the central courthouse square. Price (1968:36) traces the standard patterns of the common southern county seat town to the seventeenth-century garrison towns of Ulster. It is perhaps significant that three of the four county seats in the study area have the central courthouse square, while the fourth has the rarer open central square.

Any given page of the 1850 census (Ellsberry n.d.) for the region confirms that the majority of the settler families had come from their birthplaces in Tennessee, Kentucky, and North Carolina. The folk culture that they brought with them is easily recognized in the traditional architecture of the early farmhouses. A study of the Folk Architecture in Little Dixie: A Regional Culture in Missouri (Marshall 1981) confirms this strong association with the traditions of the upper south.

Although the association with the southern tradition is strong, this was not an area where slave-manned plantations dominated the economy. Slave ownership was relatively rare in this area. The typical family practiced the virtually self-sufficient mixed subsistence agriculture that had sustained their forebears on the frontier in Tennessee and Kentucky. The area was rather remote from cash crop markets (Rafferty 1975:300) until improved roads and rail transport were introduced after the Civil War. To some degree, the size of the common farmstead in the four-county region still reflects this lifeway. The average farm size in the four-county region during the first part of the twentieth century still ranged between 100 and 140 acres (Sauer 1920:181).

The prosperous farmer might accumulate land in excess of his immediate needs, but it was normally intended for the future homes of his children. Some families came to Missouri in multigenerational chain migrations, much like the Pitts family in Hickory County. The Pitts family began arriving in the county in the late 1830s and continued to come through the 1850s (The Goodspeed Publishing Co. 1889:223).

Thomas B. Pitts, who was born in Tennessee in 1829, purchased his homestead from the government land office on July 31, 1855 (Hickory County Register of Lands, Original Entries Book:28). The 80-acre farm cost only \$125. Three log buildings (23HI562) were found intact on this tract of land. The adjoining tract of land remained in the public domain until after the Civil War. It was purchased by Jerimiah Pitts, eldest son of Thomas B., on November 27, 1871 (Hickory County Register of Lands, Original Entries Book:27). Jerimiah Pitts was 19 when he purchased the land. A log cabin (23HI555) was found on this property as well.

The Pitts family is still living in Hickory County, although their way of life is now far different than that of the original settlers from whom they are descended. The transition of rural families to cash crop industrialized farming and the changed lifeways of those who left the farm are very similar throughout this region.

1865-1930: CHANGING ECONOMIC BASIS

The railroads brought in consumer goods and provided a market link for the sale of cash crops. Farming began to change from a way of life to a highly competitive business. Some prospered, some failed, and some clung to the old way of life long after cash crop farming had become the norm.

Between 1880 and 1910, the farms prospered. Perhaps 90% of the rural domestic structures found in the area were first erected during this period of prosperity. These balloon-framed houses are still largely of a traditional nature on either the Cumberland pattern or the central-hall pattern. The large barns also reflect the more industrial-business nature of the farms of this era.

1930-1984: ECONOMIC DISASTER AND RECOVERY

The prosperity of the area declined during the 1920s and came to an abrupt halt during the Great Depression of the 1930s. Many farms that had been in the same family for almost a century were lost to mortgage holders. Land prices plummeted, and sheriff's sales became common. It was during this period of drought and depressed farm prices that livestock farming became the dominant land-use pattern.

The small villages like Hulston which had once milled the grain from surrounding farms and sold the benefits of industrial society from its general store became virtual ghost towns. The automobile and hard times combined to strangle many of these smaller hamlets. When the lakes were built, the Hulston mill was moved to another site and preserved. The store and homes that once made up this quiet mill village were moved or dismantled.

The basic economy of the four-county region is now much more dependent on the sport and recreational services associated with the two lakes and is somewhat less oriented toward agriculture. But, the past has left its mark on the land.

Previous Investigations

Pomme de Terre Lake

The Flood Control Act of 28 June 1938 (Public Law 75-761) is the authorizing legislation for Pomme de Terre Lake, although it was not until 1957 that construction actually commenced. Archeological fieldwork was undertaken prior to and concurrent with this construction, the first of which entailed reconnaissance of the proposed floodpool area by University of Missouri Field School personnel and the Ozarks Chapter of the Missouri Archaeological Society (Chapman 1954:1-2). This was followed by a project by the University of Missouri under contract with the National Park Service involving the completion of the floodpool survey and testing of six sites (Chapman 1954).

During 1957 and 1958, excavations of selected sites and a resurvey of the reservoir were accomplished by the University of Missouri under a second agreement made with the National Park Service (Wood 1960). Twenty years later, the U.S. Army Corps of Engineers requested that a cultural resource management plan be prepared for the lake. The plan consisted of a literature search, review of documentation for all known sites on Corps of Engineers lands, assessment of the relationship of known sites to developed and undeveloped areas, and a review of previous investigations in the project vicinity (McNerney 1978). From these data, McNerney (1978:35-40) developed a set of management recommendations for the known prehistoric sites on Corps of Engineers holdings. This work was followed by a shoreline survey of Public Use areas which located no significant sites (McNerney 1980). Girard and Freeman (1984) report the results of the most recent investigations by Prewitt and Associates, Inc. of Austin, Texas, which involved survey of 3,400 acres of Public Use and Fish and Wildlife management lands, testing of selected sites, and assessment of National Register eligibility for sites located by the survey.

Stockton Lake

Construction of Stockton Lake was authorized along with eight other reservoirs in the Osage River Basin by the Flood Control Act of 1954 (Public Law 83-780). Preliminary archeological reconnaissance and testing projects were undertaken from 1961 through 1962 (Wood 1965; McMillan 1966) by the University of Missouri in cooperation with the River Basin Interagency Archaeology Program (National Park Service). Another phase of work was accomplished in 1965 which involved excavation of several open sites, shelters, mounds, and cairns (Wood 1966). During 1966 and 1967, the University of Missouri was contracted by the National Park Service to excavate several open camp and village sites (Kaplan et al. 1967; Ward 1968; Calabrese et al. 1969).

Espey, Huston and Associates, Inc. of Austin, Texas, surveyed 18% of three Stockton Lake Public Use areas for the U.S. Army Corps of Engineers, Kansas City District, in 1979 (Espey, Huston and Associates, Inc. 1980). A cultural resource management plan was also developed, including a predictive model of site location and recommendations for the identification, preservation, and interpretation of cultural resources. The Corps of Engineers later contracted with Prewitt and Associates, Inc. of Austin, Texas, for another phase of work, entailing testing of selected sites, survey of 3,500 acres of Fish and Wildlife management lands and Public Use areas, and the identification of significant sites eligible for nomination to the National Register of Historic Places (Girard and Freeman 1984).

CHAPTER 2

RESEARCH ORIENTATION AND METHODS OF INVESTIGATION

The survey of 1,960 acres at Stockton Lake and 615 acres at Pomme de Terre Lake is specified in a modification to the contract Scope of Work for the previous project reported by Girard and Freeman (1984). As with the original project, further requirements include the determination of "1) the number of resources present, 2) their areal and temporal extent, 3) their cultural and scientific importance, 4) their eligibility for the National Register of Historic Places, and 5) appropriate mitigative methods for eligible sites."

In addition to these tasks, the investigations were directed toward understanding regional settlement patterns. To accomplish this goal, attempts to correlate activities, environmental setting, and temporal affiliation are made for the sites encountered. These data are presented in Chapter 4 of this report.

Assessment of Sites

Evaluation of the National Register eligibility of each site recorded by this survey is a contract requirement. National Register criteria for evaluation are listed in 36 CFR 60, Section 60.6 and specify eligibility for properties:

- 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.

Sites associated with events that made significant contributions to the broad patterns of history are considered eligible for nomination under Criterion A. The events must relate to a theme or pattern. The property should be intact and have strong associations with and be a good representative of the specific event or theme (U.S. Department of the Interior, National Park Service, National Register Division 1982:17-19). Application of Criterion A is difficult for historic sites found in the project areas because systematic demolition and removal of standing structures has destroyed the integrity of most properties which might otherwise be eligible for nomination. Fortunately, not all of the Corps of Engineers properties have undergone such treatment, and a few historic sites which can be related to the initial period of Anglo-American migration into the western Ozarks remain undamaged.

Criterion B is also used to evaluate historic sites for National Register eligibility. If a property can be demonstrated to be associated with individuals whose activities have been important within significant themes in national, state, or local history, it is eligible under this criterion (U.S. Department of the Interior, National Park Service, National Register Division 1982:19). The specific identity of the individual and the contributions made must be clearly documented (U.S. Department of the Interior, National Park Service, National Register Division 1982:20). Again, the presence of intact structures is an assumption of the criterion.

The existence of standing structures is a basic requirement for Criterion C which specifies eligibility for historic archeological sites which clearly represent a type, period, or method of construction. An eligible site should demonstrate the common architectural pattern of the particular structural type, individual variation, changes in the pattern over time, or the transition between one style to another (U.S. Department of the Interior, National Park Service, National Register Division 1982:22). Only the rare site which has escaped demolition and/or removal of its buildings at Pomme de Terre and Stockton lakes could potentially be eligible for nomination under these requirements.

Criterion D is relevant to evaluations of significance for both historic and prehistoric sites. This criterion specifies that an eligible property is one that may be able to yield important information which would support or supplement the data base in a significant manner (U.S. Department of the Interior, National Park Service, National Register Division 1982:30). It is also necessary to establish the relationship of the site in question to a particular aspect of history or prehistory for it to be considered eligible. This goal is best accomplished by the formulation of a research design which specifies the research questions to be addressed, the types of data needed to provide answers, and the techniques required for data recovery (U.S. Department of the Interior, National Park Service, National Register Division 1982:31).

Research Orientation

An attempt is under way in Missouri to develop a framework for research (State Historic Preservation Plan) which would define regional study units and research concerns on a statewide basis. As the plan is not yet completed, the current project is designed in a manner similar to that of the previous phase of work which was based on the research concerns identified by prior work in the region. A thorough discussion of the strategies and orientations of this earlier research is provided in Girard and Freeman (1984:47-56) and is not duplicated here.

The basic research goals of the current project include: (1) isolation of individual occupations; (2) identification of the range of activities associated with the occupations; and (3) placement of occupations in temporal and spatial contexts. The specific research questions identified for particular cultural periods by Girard and Freeman (1984:56-61) are useful and relevant concerns but are more appropriate for intensive excavations.

Methods of Investigation

The current project entailed three major tasks -- intensive field survey, archival research, and data analysis. The following discussion details the methods employed to accomplish each task.

Intensive Field Survey

SURVEY SAMPLE

Intensive cultural resources survey of 1,960 acres at Stockton Lake and 615 acres at Pomme de Terre Lake was requested by the Corps of Engineers. Survey units were selected from a list of Fish and Wildlife management areas included with the work request. In several instances, high lake levels required that adjustments to the original survey plan be made so that acreage figures would not be reduced. Survey unit boundaries were simply modified to allow additional coverage of areas above the floodpool.

From a total of 5,523 acres of Fish and Wildlife management lands at Stockton Lake, 20 survey units were chosen for examination. These units comprise the required total acreage (1,960 acres) which is a 35.49% sample of the Stockton Lake lands. The following is a list of the Stockton Lake survey units and surveyed acres at each.

<u>Survey Unit</u>	<u>Surveyed Acres</u>
Segment 1/Area 1	119
Segment 1/Area 2	65
Segment 1/Area 3	167
Segment 1/Area 4	138
Segment 1/Area 5	118
Segment 1/Area 6	117
Segment 1/Area 7	102
Segment 1/Area 8	66
Segment 2/Area 1	85
Segment 2/Area 2	63
Segment 2/Area 3	42
Segment 3/Area 1	115
Segment 3/Area 2	39
Segment 3/Area 3	88
Segment 3/Area 4	67
Segment 4/Area 1	118
Segment 4/Area 2	104
Segment 4/Area 3	61
Segment 4/Area 4	167
Segment 4/Area 5	119
	<u>1,960</u>

POMME DE TERRE AND STOCKTON LAKES PROJECT

Eight survey units were selected from 1,631 total acres for Pomme de Terre Lake. In this case, the acreage surveyed exceeded the acreage requested by 15 acres. Thus, instead of a 37.7% sample, a 38.63% sample was made. Survey units and surveyed acres for Pomme de Terre Lake are listed below.

<u>Survey Unit</u>	<u>Surveyed Acres</u>
Segment C/Area A	79
Segment C/Area B	93
Segment D/Area A	79
Segment D/Area B	55
Segment D/Area C	59
Segment E/Area A	89
Segment I/Area A	80
Segment I/Area B	<u>96</u>
	630

SURVEY AND TESTING TECHNIQUES

The survey was carried out on foot by a crew of three or four persons walking transects spaced at approximately 25-m intervals. In general, the areas surveyed can be classified into one of four categories:

(1) Wooded slopes and uplands: Because of the density of vegetation (Fig. 5a) and occurrence of leaf litter and humus (Fig. 5b), surface visibility is less than 5%. However, humus and leaf litter is easily cleared by foot or with a shovel. Small areas (ca. 50 cm in diameter) were cleared at regular (15-to-25-m) intervals along the transects. Soils are shallow, and bedrock outcrops are frequent in these areas. Thus, shovel tests were shallow (5 to 15 cm in depth) and excavated at irregular intervals. The possibility that buried sites were missed is minimal; however, there is a chance that small, dispersed lithic scatters were not identified.

(2) Cleared, uncultivated terraces and slopes: Portions of the terraces and slopes surveyed had apparently been cleared in the past but are currently overgrown with thick grasses, brambles, saplings, and honeylocust (Fig. 6). Surface visibility is generally less than 50%. Shovel tests of 15 to 30 cm in depth were excavated as necessary to obtain subsurface data. There is some possibility that deeply buried deposits were not identified.

(3) Plowed terraces: Depending on the density of cultivated plants, surface visibility varies from about 50% to over 90% (Fig. 7a). It was found that sites could easily be identified in these areas without the use of shovel tests as most are superficially exposed. Soils generally are deep, and there is a possibility that deeply buried sites were not identified in areas where stream cutbanks are not present. Shovel tests of 15 to 30 cm in depth were excavated where surface visibility was especially poor.

(4) Shorelines: Due to lake level fluctuations, surface visibility is generally greater than 50%. Many shoreline areas are eroded and their surfaces covered with flood debris (e.g., tree limbs, large logs, gravels, recent trash), although one location (Fig. 7b) exhibited evidence of soil deposition. Because deposits are usually eroded, shovel

Environmental Photographs



a. Typical forested upland area near Stockton Lake showing density of vegetation (23DA340, Spring 1984).



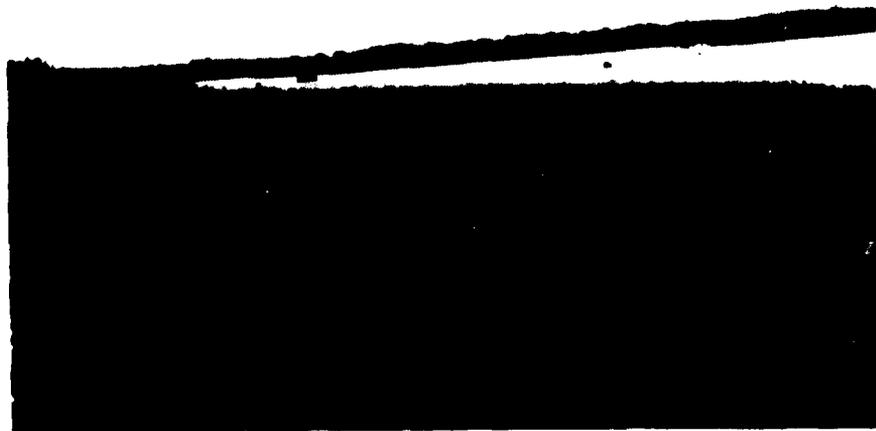
b. Wooded upland area above Pomme de Terre Lake showing leaf litter on the surface (23HI554, Winter 1983).

Figure 6

Environmental Photographs



a. Example of formerly cleared and cultivated ridgeslope above Birch Branch now covered with secondary growth (23DA352, Spring 1984).



b. Terrace adjacent to the Little Sac River, formerly cleared and now overgrown (23PO361, Spring 1984).

Environmental Photographs



a. Terrace at Stockton Lake showing plowed field with relatively poor surface visibility (23P0356, Spring 1984).



b. Shoreline at Walnut Creek showing evidence of soil deposition from recent inundation (23P0355, Spring 1984).

tests were often not necessary. The possibility that the survey failed to identify sites in these areas is minimal.

When archeological sites were identified, they were recorded by means of Archaeological Survey of Missouri site forms, narrative notes, and a scaled compass-and-pace sketch map. Each map includes site limits; major topographic features; locations of collected artifacts, cultural features, and/or artifact concentrations; and locations of shovel tests. When appropriate, sketch maps also provide survey boundary data, roads, and other manmade landmarks. Site documentation also includes black-and-white and color photographs.

Shovel testing was an integral part of these investigations. Tests averaging 25 to 30 cm in diameter were made along survey transects where surface visibility was poor and at identified sites to determine the vertical and horizontal characteristics of the cultural deposits. When possible, these tests were excavated in arbitrary 15-cm levels and the fill was screened through 1/4-inch-mesh hardware cloth. When moisture and clay content were high, screening of excavated fill was abandoned in favor of careful examination with the aid of a trowel. The results of each shovel test were recorded on Testing Data Forms which describe the natural and cultural materials encountered and other pertinent data. Shovel tests were not always excavated at identified sites as several were deflated and many of the historic sites had been extensively disturbed by heavy machinery.

Initially, the policy for artifact collection involved the recovery of all temporally or functionally diagnostic artifacts which were superficially exposed and all cultural materials encountered in subsurface tests. When it became apparent that collection of all excavated materials would be extremely cumbersome, the policy was modified so that only diagnostic artifacts were collected from test excavations and notations made of the other nondiagnostic cultural materials encountered. As stated earlier, locations of shovel tests and collected artifacts were plotted on the site sketch maps.

Archival Research

A number of archives and records depositories were consulted to obtain information concerning the history of the areas surveyed at Pomme de Terre and Stockton lakes. Much of the preliminary research regarding the general development of the Western Ozark Highlands had been accomplished by Girard and Freeman (1984) and was not duplicated under this contract. This being the case, the efforts of this project concentrated upon tracing ownership histories to determine the span of occupation and the earliest settlement of each historic site recorded so that assessments of significance in terms of National Register criteria could be made. To fulfill these goals, local informants were contacted and deed and tax records at the Hickory, Polk, and Dade county courthouses were examined. In addition, extensive use was made of local histories, printed plat maps and censuses, and archival materials on file at local museums. The available Corps of Engineers tract files also proved to be useful references.

Analysis of Results

The body of data generated by field investigations and archival research was then evaluated in accordance with the project research goals. To achieve some consistency with

the Girard and Freeman (1984) report, chronological placement, site location, artifacts, and site size are the major concerns of this analysis.

SITE CHRONOLOGY

Chronological controls are vital to the study of changes in human adaptive systems. However, it is not always possible to determine the temporal context of sites using data gathered by survey investigations. Only 37 of the 68 sites recorded by this project yielded temporally diagnostic artifacts (i.e., ceramics, projectile points, etc.). These diagnostics are described and classified in Appendices 1 and 2 according to the morphological characteristics which have been demonstrated to have temporal significance (Chapman 1975, 1980; Kay 1982b). Using the results of this classification effort, five sites appear to have Early/Middle Archaic components, seven sites have components dating to the Late Archaic and Early/Middle Woodland periods, and Late Woodland/Mississippian period occupation is indicated at six sites. Artifacts, features, and supporting documentation indicate 24 sites were occupied during the Historic Period.

SITE LOCATION

Landform, nearest perennial drainage, and distance of the nearest water source was tabulated for each site encountered. The distribution of sites according to landform is as follows:

<u>Landform</u>	<u>No. of Sites</u>
Ridge	21 (30.8%)
Ridgeslope	28 (41.2%)
Upper terrace	3 (4.4%)
Lower terrace	15 (22.1%)
Gravel bar	<u>1 (1.5%)</u>
	68 (100%)

The high percentage of sites in upland situations is undoubtedly influenced by the current inundation of floodplains and most terraces. Site distribution according to the nearest perennial drainage is provided below:

<u>Drainage</u>	<u>No. of Sites</u>
Pomme de Terre River	6 (8.8%)
Lindley Creek	1 (1.5%)
Other tributaries of the Pomme de Terre River	4 (5.9%)
Sac River	18 (26.5%)
Little Sac River	13 (19.1%)
Tributaries of the Sac and Little Sac rivers	<u>26 (38.3%)</u>
	68 (100%)

POMME DE TERRE AND STOCKTON LAKES PROJECT

Distance to the nearest source of perennial water was also calculated using USGS topographic maps which date prior to lake construction. This information is presented below.

<u>Distance to Water</u>	<u>No. of Sites</u>
< 100 m	44 (64.7%)
≥ 100 m < 350 m	22 (32.4%)
≥ 350 m < 600 m	<u>2</u> (2.9%)
	68 (100%)

Unlike the sites recorded by the previous survey (Girard and Freeman 1984:74), none of these sites are over 600 m from a reliable water source. Further, most sites are within 100 m of perennial water.

SITE ARTIFACTS

Ceramic, lithic, and faunal materials recovered from prehistoric sites are inventoried and classified into morphological categories in Appendix 1. Appendix 2 contains a similar treatment of the collected historic artifacts, although the utility of such efforts is overshadowed by the information available in archival records.

SITE SIZE

The approximate size of each site has been calculated in hectares. Size calculations for historic sites are based on extents of feature and artifactual remains and not property boundaries. To determine size frequency, four size classes are defined:

<u>Site Size</u>	<u>No. of Sites</u>
≤ 1 ha	41 (60.3%)
> 1 ha ≤ 3 ha	8 (11.8%)
> 3 ha ≤ 7 ha	8 (11.8%)
> 7 ha	<u>11</u> (16.1%)
	68 (100%)

As with the findings of Girard and Freeman (1984:74), most of the sites are less than one hectare in size.

CHAPTER 3

DESCRIPTIONS AND EVALUATIONS OF CULTURAL RESOURCES

The cultural resources encountered in Fish and Wildlife management areas during the current investigations at Pomme de Terre and Stockton lakes are described in this chapter. The descriptions are presented, as appropriate, by survey area.

Pomme de Terre Lake

All archeological sites recorded at Pomme de Terre Lake by the current project are shown on Figure 8 and listed in numerical order in Table 3. This table also includes basic data regarding USGS map reference, nearest drainage, topographic situation, site type, and cultural period as well as the page number reference for the site description in this report. Survey area designations incorporate the Corps of Engineers real estate "Segment" information with arbitrarily determined "Areas."

Segment C/Area A

Segment C/Area A (Fig. 9) is situated on both banks of an unnamed tributary to Decker Branch which is now a part of Pomme de Terre Lake. The right bank consists of a dissected ridge with moderately steep slopes, and a prominent point formed by Cotter and Jefferson City dolomite and chert outcrops is located in the eastern portion of the area. The left bank is primarily an open floodplain which has apparently been cleared of trees for pasturage. The remainder of the survey unit consists of uncleared woodlands.

Previous archeological investigations have not been reported for this area, and no sites are known to be located in the vicinity. The current work involved inspection of a total of 79 acres. No cultural resources were encountered.

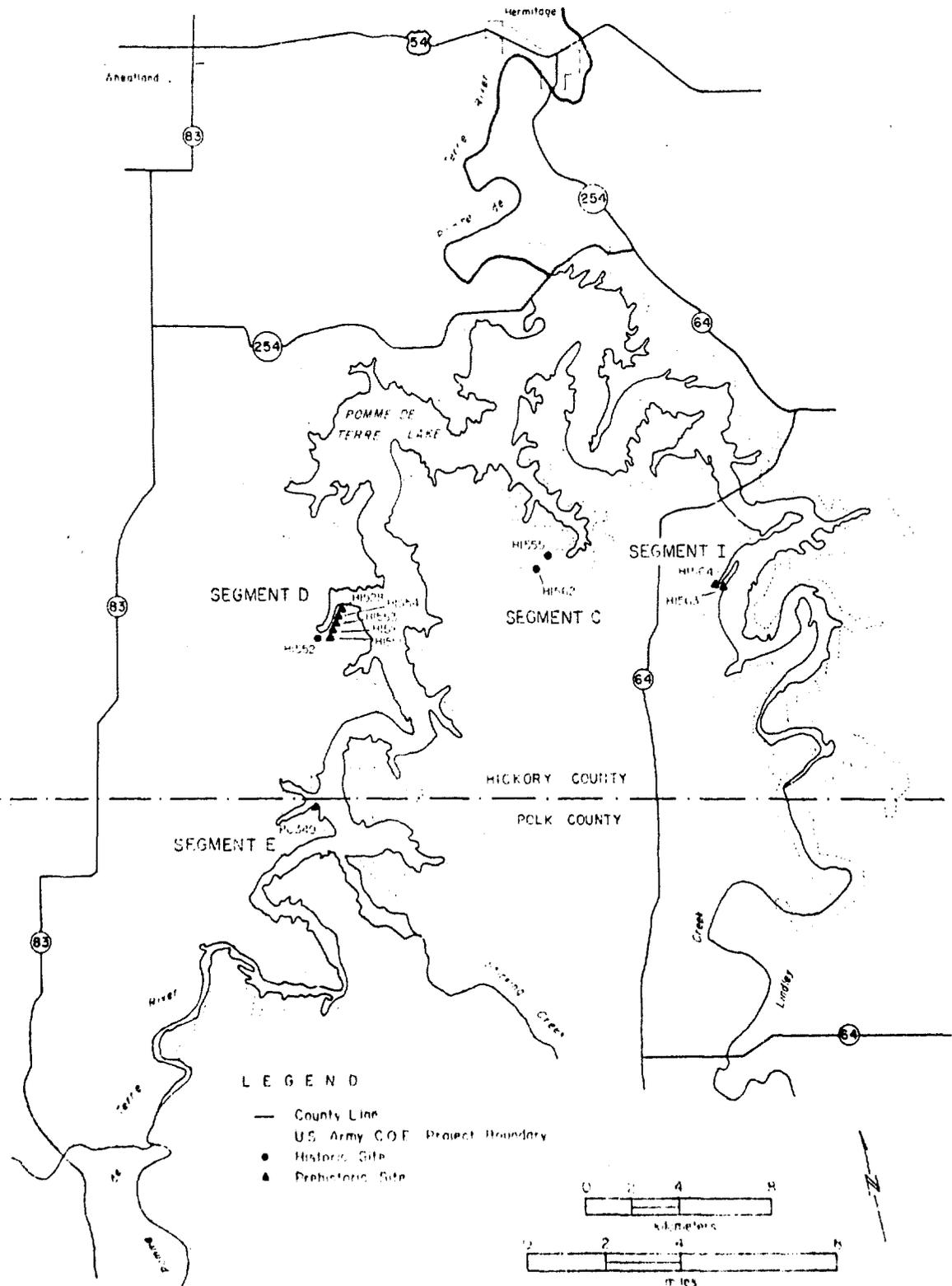
Segment C/Area B

This area (see Fig. 9) includes 93 acres along both banks of Decker Branch at its confluence with Little Decker Branch (now a part of Pomme de Terre Lake). Pine-oak forest with little understory was observed throughout the area. Topography on the left bank includes a narrow floodplain of Recent alluvium and the lower reaches of a ridgeslope. The right bank consists of moderately steep and dissected ridgeslopes. Cotter and Jefferson City sandstones, dolomites, and cherts are exposed on the ridgeslopes. Alterations to the landscape are limited to recent road construction south of a residential development north of Decker Branch and vegetation clearing on a ridgetoe south of the drainage.

Two historic sites, 23HI555 and 23HI562, were recorded in this area by the current survey. Earlier surveys have not reported any sites in the area, and no sites are listed in the data bank of the Archaeological Survey of Missouri.

Figure 8

POMME DE TERRE LAKE SITE LOCATIONS 1983-1984 SURVEY



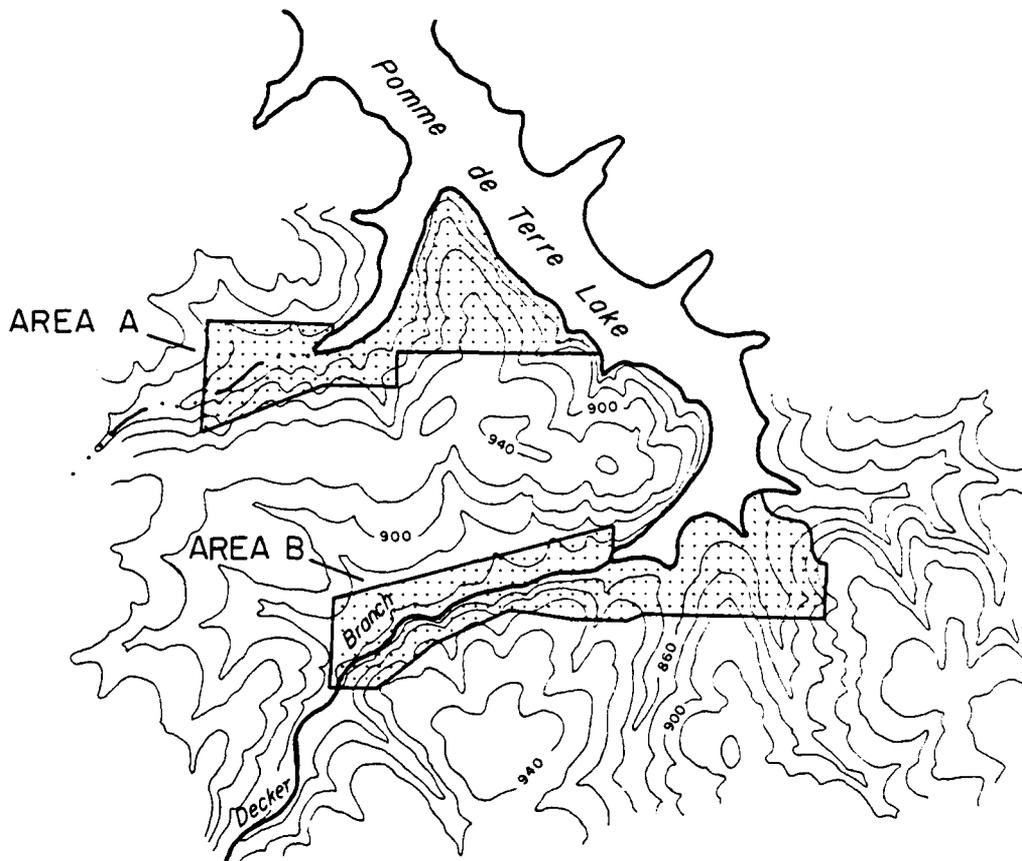
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TABLE 3
 INDEX TO CULTURAL RESOURCES ENCOUNTERED
 POMME DE TERRE LAKE

Site No.	Survey Area	7.5'		Drainage	Landform	Cultural Period	Site Type	Page in Text
		USGS Map						
23HI511	Segment D/Area A	Sentinel		Pomme de Terre	Ridge	Prehistoric	Lithic scatter	34
23HI528	Segment D/Area A	Sentinel		Pomme de Terre	Ridge	Prehistoric	Lithic scatter	34
23HI551	Segment D/Area A	Sentinel		Pomme de Terre	Ridge	Prehistoric	Lithic scatter	36
23HI552	Segment D/Area A	Elkton		Pomme de Terre	Ridgeslope	Historic	Historic residence	36
23HI553	Segment D/Area A	Sentinel		Pomme de Terre	Ridge	Prehistoric	Lithic scatter	37
23HI554	Segment D/Area A	Sentinel		Pomme de Terre	Ridge	Early/Middle Woodland	Lithic scatter	37
23HI555	Segment C/Area B	Sentinel		Decker Branch	Ridgeslope	Historic	Historic residence	31
23HI562	Segment C/Area B	Sentinel		Decker Branch	Ridgeslope	Historic	Historic residence	31
23HI563	Segment I/Area A	Sentinel		Lindley Creek	Ridgeslope	Prehistoric	Lithic scatter	42
23HI564	Segment I/Area A	Sentinel		Mill Branch	Lower terrace	Prehistoric	Lithic scatter	42
23PO349	Segment E/Area A	Elkton		Horn Hollow	Ridgeslope	Prehistoric	Lithic scatter	40

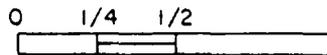
Figure 9

POMME DE TERRE LAKE
SEGMENT C
SURVEY AREAS A & B

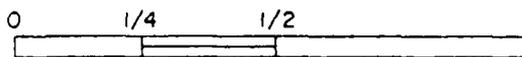


LEGEND

 Survey Area



kilometer



mile

Contour Interval = 20'

P8A1/84/SLH

23HI555

Site 23HI555 is located 110 m north of Decker Branch on a broad, gentle slope. It consists of two structural features and a surface scatter of metal and glass in an area 30 m north-south by 30 m east-west. Features include a stone-lined depression and the collapsed remnants of a log cabin constructed of square hewn logs above a stone-slab foundation, all of which constitute the remnants of an historic farmstead. The depression, which may represent the remains of an outbuilding such as a root cellar, is situated 15 m north of the cabin and is outside of Corps property. The cabin has decayed through time, leaving only portions of the lower walls intact (Fig. 10a). The log structure is 3.5 m long by 6.5 m wide by 4 m high, with the long axis aligned generally east-west. Felled trees heaped into the cabin's interior prevented its inspection. The site vicinity is wooded and, interestingly, ornamental vegetation (i.e., irises, day lilies, etc.) so commonly associated with historic farmsteads was not apparent. As Figure 10a shows, light snow cover occurred over the site when it was recorded; however, this snow cover was not thick enough to have obscured ornamental vegetation.

Investigation of 23HI555 was limited to surface inspection. Subsurface testing was not undertaken due to the shallow and gravelly nature of the soils. No artifact collections were made since temporally diagnostic materials were not found.

A review of courthouse records and Corps of Engineers tract files revealed that the log cabin was built by the first landowner, Jeremiah Pitts, who purchased 80 acres from the land office on November 27, 1871 (Hickory County Register of Lands, Original Entries Book: 27). Pitts was the son of Thomas B. Pitts, who came to Missouri circa 1855 during the mass migration by the Pitts family from Tennessee and Kentucky (The Goodspeed Publishing Co. 1889:223). Deed records show that in 1893 Jeremiah Pitts gave one-half interest in the farm to Fountain Pitts (Hickory County Deed Record 46:50). According to tax records for 1916, the land was no longer in the Pitts family but owned by an individual named Eugene Clymore (Hickory County Tax Records 1916). By 1927, 68 acres of the original tract were back in the Pitts family with Leslie A. Pitts listed as the owner in the tax rolls for at least 30 years (Hickory County Tax Record 1927, 1957). Holly F. Kincaid, from whom the Corps of Engineers purchased the land, only briefly maintained ownership (U.S. Army Corps of Engineers. Tract file C306-2).

The research potential of this late nineteenth-century farmstead is assessed as high. The portion of the site located within the Corps holdings is in fair condition and presents an excellent opportunity to yield information concerning changes in farming and settlement activities by descendants of the area's first settlers. The partially intact, late nineteenth-century structure may provide information concerning the region's rural architecture. Site 23HI555 is considered to be a locally significant resource and is potentially eligible for nomination to the National Register of Historic Places under Criteria A, C, and D.

23HI562

This is an historic farmstead bisected by the Corps of Engineers property line. It is situated on a ridgetop approximately 90 m south of the right bank of Decker Branch. The entire site area, which encompasses 67 m north-south by 70 m east-west, and the surrounding slope appear to have been deforested in the past. Brown clay loams comprise the surface soils.

The site consists of three log structures in good condition, a trash midden, a cistern, and a roadbed. The largest structure (Structure 1) is the most intact, measuring 7.40 m northwest-southeast by 4.44 m northeast-southwest, and probably represents a residence. It has a stone foundation, square-hewn logs with half-dovetail corner notching form the exterior walls, milled wooden slats cover the interior walls, and the roof is absent (see Fig. 10b). Mortar and stone chinking are still evident between the exterior logs. Another characteristic of this structure is the presence of stone slab walks and/or porches situated adjacent to the western and eastern facades. The only ornamental vegetation noted at the site is a concentration of yuccas found between the cistern and Structure 1.

The other two log structures are located just south of the Corps boundary and probably are the remnants of former outbuildings. Structure 2, situated approximately 78 m southwest of Structure 1, measures 3.7 m north-south by 3.7 m east-west and consists of a stone foundation and portions of exterior walls. Structure 3 is 15 m east of Structure 1 and is the most decayed feature at the site. All that remains is a square alignment of collapsed logs in an area 4.4 by 4.4 m. Other features include a roadbed which enters the site area from the southeast and skirts around the eastern structures, a centrally located trash dump containing vehicle parts, and a trash-covered cistern adjacent to Structure 1.

Investigations at 23HI562 involved surface inspection. No subsurface probing was conducted, and nothing was removed from the site.

From historic records, it is known that the earliest historic occupation at this location was in 1855 by Thomas B. Pitts. The farmstead recorded as 23HI562 was most likely built at this early date. Born in Tennessee in 1829 (U.S. Department of Commerce, Bureau of the Census 1870), Pitts was 26 years-of-age when he purchased 80 acres in Section 26 on July 31, 1855, for the sum of \$1.25 acre (Hickory County Register of Lands, Original Entry Book:28). From modest beginnings, his holdings grew to 240 acres by 1883 (Hickory County Tax Record 1883). Tax records show L. B. Pitts, presumably his widow Lucinda, as the owner in 1891 (Hickory County Tax Record 1891), and by 1904 the land had been acquired by Luther J. Slavens, a land speculator who lived in Hermitage (Hickory County Tax Record 1904:43). Slavens held the land until 1929 when Leslie A. Pitts bought the acreage along Decker Branch (Hickory County Tax Record 1929:76). Pitts maintained ownership through the 1950s, and in 1958 it was acquired by Holly Kincaid, from whom the Corps of Engineers purchased the land (U.S. Army Corps of Engineers. Tract file C306-2).

Site 23HI562 is considered to be potentially eligible for nomination to the National Register of Historic Places under Criteria A, C, and D. It is a locally significant site, having been homesteaded during the mid-nineteenth century by a member of the prominent Pitts family. The portion of the site which is on Corps property includes the least disturbed structure (Structure 1) and adjacent features, all of which probably represent the main residential area, significant to the study of nineteenth-century rural architecture and residential activities.

Segment D/Area A

Segment D/Area A (Fig. 11) is a 79-acre parcel located on the right bank of an unnamed left bank tributary to the Pomme de Terre River. The eastern portion of the area abuts the upper reaches of Pomme de Terre Lake and is a heavily dissected and steep ridgetop with

Photographs of Historic Sites



a. Site 23HI555. View of the southern facade of the collapsed log cabin.



b. Site 23HI562. View of the western facade of the log cabin. The interior wall slats are visible through the entrance area.

small ridgecrest areas at the highest elevations. Topography of the western portion of Segment D/Area A includes a gentler ridgeslope above a floodplain zone. Shallow deposits of silty loams, clay loams, and clays support a mixed hardwood forest with little understory. Cherts of the Cotter and Jefferson City formations are eroding from the ridgeslopes and were encountered below the soil strata in subsurface probes. A swath along the Corps boundary bulldozed in the recent past and two lake access roads are the only disturbances evident.

A check with the data bank of the Archaeological Survey of Missouri revealed that no archeological sites were known to occur at this location; also, no cultural resources investigations have been reported. The current work identified five prehistoric sites (23HI511, 23HI528, 23HI551, 23HI553, and 23HI554) and one historic site (23HI552).

23HI511

This is a lithic scatter containing chert debitage and no apparent features within an area 40 m north-south by 120 m east-west and extending vertically to a maximum of 25 cm. It is situated on a wooded ridgecrest approximately 90 m southeast of an unnamed Pomme de Terre River tributary.

Temporally diagnostic artifacts were not encountered on the surface or in any of the five shovel tests excavated at the site. Four of the tests were positive, yielding chert debitage and edge-modified flakes from silty loams and clay loams overlying gravels. All of the artifacts recovered from the tests were collected for further study and are described in more detail in Appendix 1.

Piles of debris attesting to recent bulldozing lie immediately adjacent to 23HI511. This bulldozing has definitely affected the eastern site area. The site's disturbed condition, coupled with the nature of the cultural materials found, serve as the bases to assess the information yield potential of 23HI511 as low. The site does not contain sufficient data to address any of the specified National Register criteria and is considered ineligible for nomination.

23HI528

Site 23HI528, a scatter of chipping debris with no apparent features, is situated on a ridgecrest. An unnamed Pomme de Terre River tributary now inundated by the lake is 75 m to the north. A chert core found on the surface in a clearing surrounded by hardwoods spurred more-intensive inspection of the area, including the excavation of five shovel tests. Only three of the tests had positive results, producing chert flakes from 0 to 22 cm below the present surface in tan clay loam and silty loam deposits. Gravels which may have served as a lithic source were found to occur beneath the soil strata. A uniface fragment was collected.

The site extends horizontally over an area 100 m north-south by 40 m east-west. It may have included a larger area in the past since a new residential development occurs immediately south of the site. Bulldozing along the Corps boundary in the southern site area is also evident. Lastly, the site area proper may have been cleared of vegetation, rendering further damage to the resource.

POMME DE TERRE LAKE
SEGMENT D
SURVEY AREAS A, B & C

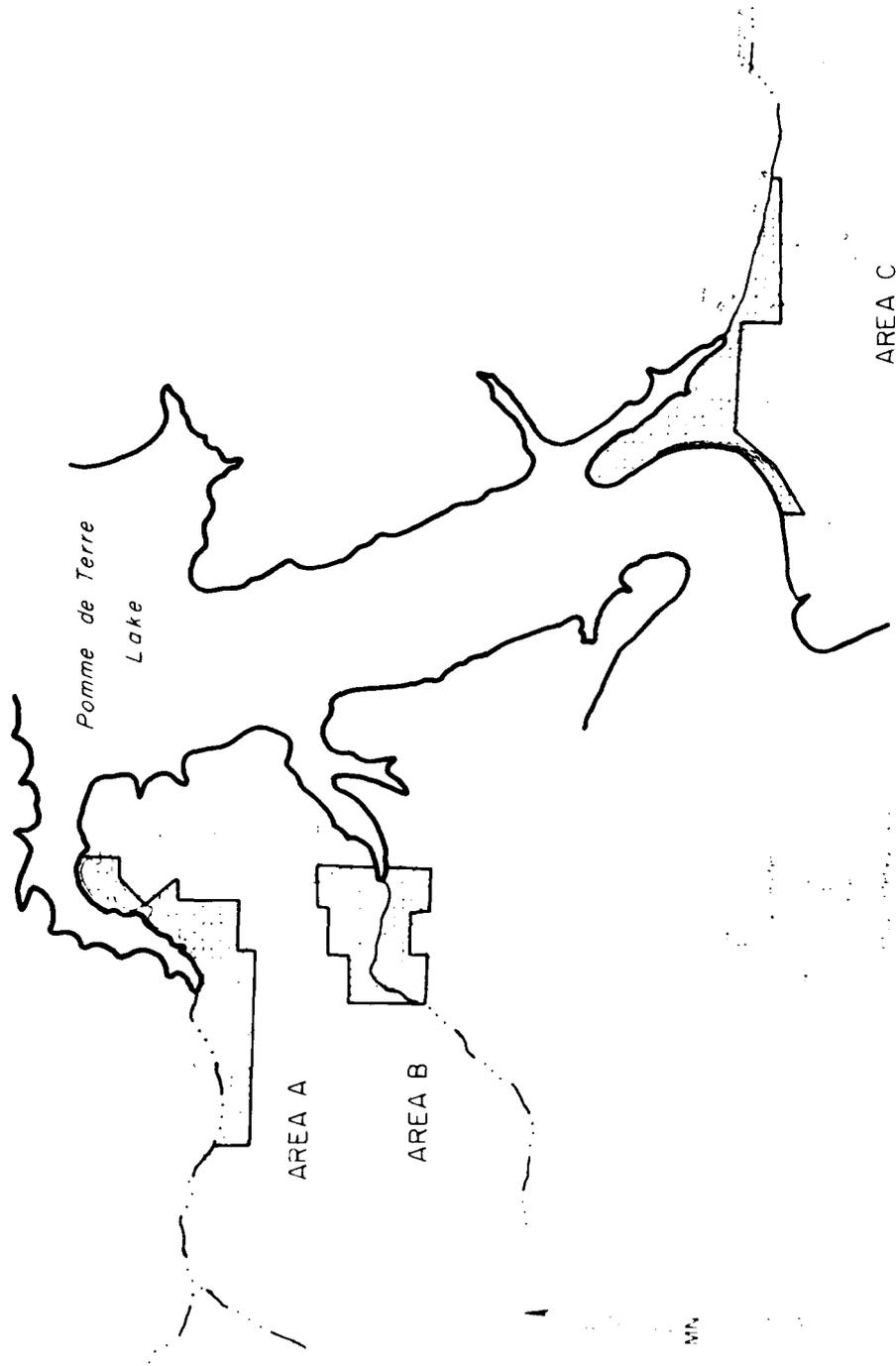


Figure 11

Using the data at hand, 23HI528 appears to represent a locus of lithic reduction activity. None of the cultural remains encountered are datable, and the integrity of the site is questionable. It is therefore felt that the information yield potential of 23HI528 is low, and it is considered ineligible for nomination to the National Register of Historic Places.

23HI551

Site 23HI551 is a small (20 m north-south by 20 m east-west) lithic scatter containing chert chips. Cultural features were not observed. The scatter appears to be in good condition and is situated on a ridgecrest between two intermittent drainages which join the waters of Pomme de Terre Lake 210 m to the northwest. Numerous angular chert fragments cover the surface above the culture-bearing stratum of tan sandy clay loam. From two positive shovel tests and an inspection of the drainage exposures, it was determined that the maximum depth of this deposit is 25 cm below the present surface. Gravels eroding from the drainage above the aforementioned soil zone may have been exploited for raw materials. Collections were not made at 23HI551 because of the lack of temporally diagnostic artifacts and other datable materials. The artifacts encountered indicate only one activity, that of lithic reduction. The information available from this site is limited. Further, 23HI551 cannot be specifically placed within the chronological framework. As a result, the site is assessed as having a low potential to yield significant data and is therefore ineligible for nomination to the National Register of Historic Places.

23HI552

The remains of an historic farmstead and dairy occupied between 1855 and 1957 were recorded as site 23HI552. No structures remain at the site, but a number of identifiable features occur; these include two stock tanks, a chicken wire enclosure, a fence and gate, two stone dams, and a broken concrete slab. The site area is covered with secondary growth (primarily saplings) and low grasses; scattered irises were also observed.

Miscellaneous metal, ceramic, rubber, and glass items indicative of household, farming, and dairy activities are scattered on the surface. None of the observed materials appear to be over 50 years old and therefore nothing was collected; however, a detailed list of materials observed was compiled.

The site encompasses an area measuring 180 m north-south by 250 m east-west on a gentle ridgetop approximately 120 m south of an unnamed Pomme de Terre River tributary. Two intermittent drainages, each having small stone dam features, delimit the site on the east and west.

It is doubtful that the site maintains any integrity. The lack of standing structures considered together with the uneven ground surface and disturbed condition of the features all suggest that the area has been heavily disturbed.

From courthouse records, it is known that the land was patented on April 27, 1855, by Barney Pitts (Hickory County Register of Lands, Original Entries Book:30). Pitts, who owned a considerable amount of land in Hickory County, apparently did not live on the property. The first to do so was William Coon, who acquired a 40-acre parcel here in 1883 and

built the first house on the land by 1885 (Hickory County Tax Record 1883). H. J. Fisher was the owner of this tract by 1916 (Hickory County Tax Record 1916:5), but it is unclear if he ever occupied the land. In 1929 Lois Barnes obtained these 40 acres from Fisher and continued as owner until 1957 (Hickory County Tax Record 1929:77). The land was purchased by the Corps of Engineers from Carl Williamson, a short-term owner (U.S. Army Corps of Engineers. Tract file D410-1).

Site 23HI552 is considered to be ineligible for nomination to the National Register of Historic Places. The research potential of this site is low due to its highly disturbed condition.

23HI553

This is a scatter of lithic flakes situated on a wooded ridgecrest overlooking an unnamed Pomme de Terre River tributary. The site is 40 m southeast of this drainage, and a mound of dirt and debris suggests that it had been partially bulldozed. One formal shovel test and two shovel probes indicate that debitage occurs within the upper 15 cm of reddish brown silty loam with gravels in orange clay below the cultural deposit. The horizontal limits of the site are 140 m northwest-southeast by 100 m northeast-southwest. Unfortunately, cultural features could not be identified and none of the artifacts noted on the surface or recovered from the excavated tests were temporally diagnostic forms. As a consequence, nothing was collected from the site.

Site 23HI553 contains cultural materials indicative of only one activity, lithic reduction. The integrity of the deposit is questionable, and its temporal placement cannot be determined using the available data. The information yield potential indicated by the evidence is low. Site 23HI553 does not, therefore, appear to be eligible for nomination to the National Register of Historic Places.

23HI554

Site 23HI554 contains a scatter of lithic tools, including a corner notched projectile point, and debitage. Cultural materials are exposed on the surface in disturbed areas of a ridgecrest approximately 50 m east of an unnamed Pomme de Terre River tributary. Most of the 50 m north-south by 50 m east-west site area appears to have been cleared of all but a few hardwood trees. Houses are adjacent to its southern limits, suggesting that some disturbance may have occurred as a result of construction activities. The site probably once extended southward off Corps property to include the developed residential area. In overall appearance, however, 23HI554 does not seem to be excessively disturbed.

Soils at this location are shallow and generally are clay loams mixed with gravels. A shovel test was excavated to a depth of 25 cm near the location of the projectile point find but yielded no subsurface artifacts. Features are not apparent at the site, and the only temporally diagnostic artifact, the aforementioned projectile point, is a form which relates to the Early and Middle Woodland periods. This projectile point was the only specimen collected.

Although the integrity of this surficial lithic scatter has been slightly damaged, intact deposits may exist. It is one of the few scatters at Pomme de Terre Lake recorded

by these investigations where temporal diagnostics were found. The site is also distinguished by the fact that the cultural materials observed indicate an activity (food procurement) other than lithic reduction. It is the only known example of an Early/Middle Woodland component on a ridgecrest in the Pomme de Terre area. Consideration of all of these factors lead to an assessment of high information yield potential for the site. Thus, this site is considered to be potentially eligible for nomination to the National Register.

Segment D/Area B

Segment D/Area B (see Fig. 11) is located south of Area A and includes 55 acres along both banks of an unnamed tributary to the Pomme de Terre River. Ordovician-age Cotter and Jefferson City formations composed of cherty dolomites and sandstones are the geologic members in this area. The northern (left) bank appears to have been cleared and now supports a sparse growth of secondary vegetation (i.e., saplings, forbs). This bank includes a gentle ridgeslope and floodplain, while the right bank is a steep and heavily dissected ridgeslope. The right bank is also forested with mixed hardwoods, and little understory vegetation is evident. Surface soils are shallow throughout the area and are primarily clayey. At the eastern limits of the area, the tributary becomes a part of the Pomme de Terre Lake floodpool.

This area had not been inspected for cultural resources prior to the current survey. No previously recorded archeological sites are known to occur within the confines of this survey area. The present investigations did not detect any cultural resources.

Segment D/Area C

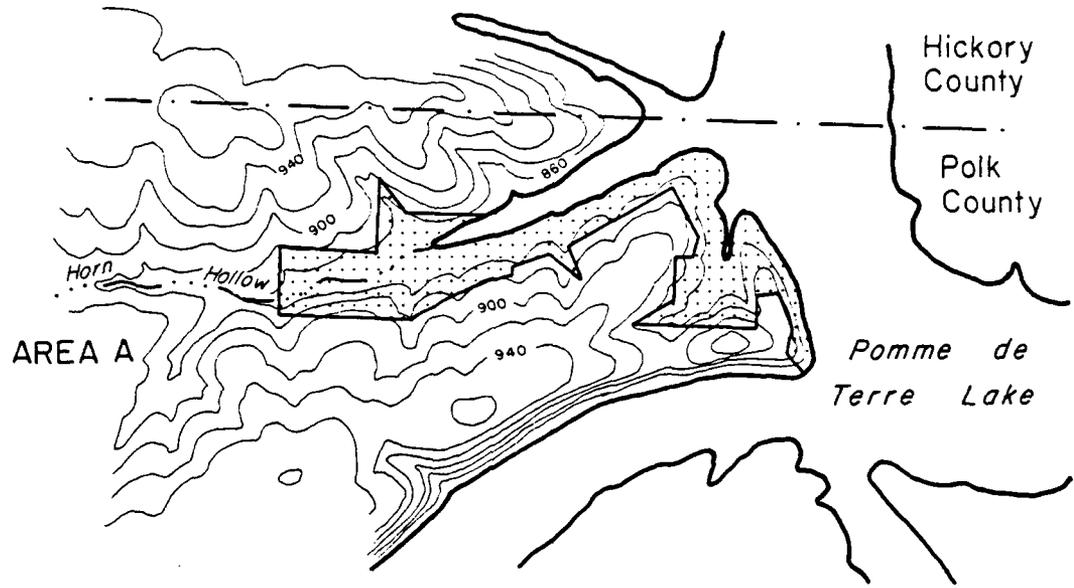
Cultural resources could not be found within the limits of this 59-acre parcel which is situated south of the confluence of Big Hollow Branch with the Pomme de Terre River (see Fig. 11). This confluence has since been inundated by the waters of Pomme de Terre Lake, causing a dissected ridge at the center of the survey area to become a peninsular projection. Outcrops of Cotter and Jefferson City sandstones, limestones, and cherts form a steep ridgeslope to the east and a sheer bluff to the west with a number of small rock overhangs, none of which contained cultural materials. Very little soil overlies the rock, and weathering has left the surface littered with angular chert nodules. The entire area is wooded with pines and oaks and has relatively little understory vegetation. The only alteration to the natural landscape is a gravel lake access road which runs parallel to a drainage at the eastern margin of the central peninsula. Lastly, no prior archeological research has been reported for this location, and the data bank of the Archaeological Survey of Missouri has no sites listed in the vicinity.

Segment E/Area A

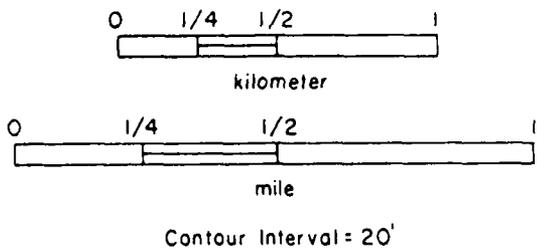
This survey area is south of the confluence of Horn Hollow with the Pomme de Terre River (Fig. 12). Most of the 89 acres here identified as Segment E/Area A includes a

Figure 12

POMME DE TERRE LAKE SEGMENT E SURVEY AREA A



- LEGEND**
-  Survey Area
 -  County Line



PBAI/84/SLH

dissected and moderately steep ridgeslope south of the confluence, but the western portion includes both the right and left banks of the Horn Hollow drainage. A broad floodplain containing rocky soils and Recent alluvium is also present in this western area. Limestone outcrops and chert nodules are exposed on the ridgeslopes where little soil has developed. Clearing of the mixed hardwood forest and construction of a lake access road are the primary disturbances noted in Segment E/Area A.

Previous archeological investigations have not been reported for this area, and the Archaeological Survey of Missouri has no records for this location. The work undertaken by the current project encountered one prehistoric site, 23PO349.

23PO349

Site 23PO349 is a moderately dense lithic scatter (120 m north-south by 100 m east-west) in good condition associated with a chert outcrop. Excavation of four shovel tests with positive results revealed that chipping debris (i.e., flakes, a possible core) occurs in the top 20 cm of a gravel-bearing clay loam. Cultural features were not observed at the site, and temporally diagnostic artifacts were not encountered. A housing development outside of Corps of Engineers property has been constructed immediately south of the site, and to the southeast a lake access road runs northeast-southwest. The site is 80 m south-southwest of the Horn Hollow-Pomme de Terre River confluence on a north-facing and wooded ridgeslope. Collections were not made.

Site 23PO349 is a discrete and relatively intact deposit containing evidence of lithic procurement and tool manufacturing activities. Even lacking temporal controls, the information yield potential of such a site is high since techniques of procurement and tool manufacture could be revealed. The site therefore is potentially eligible for nomination to the National Register of Historic Places under Criterion D.

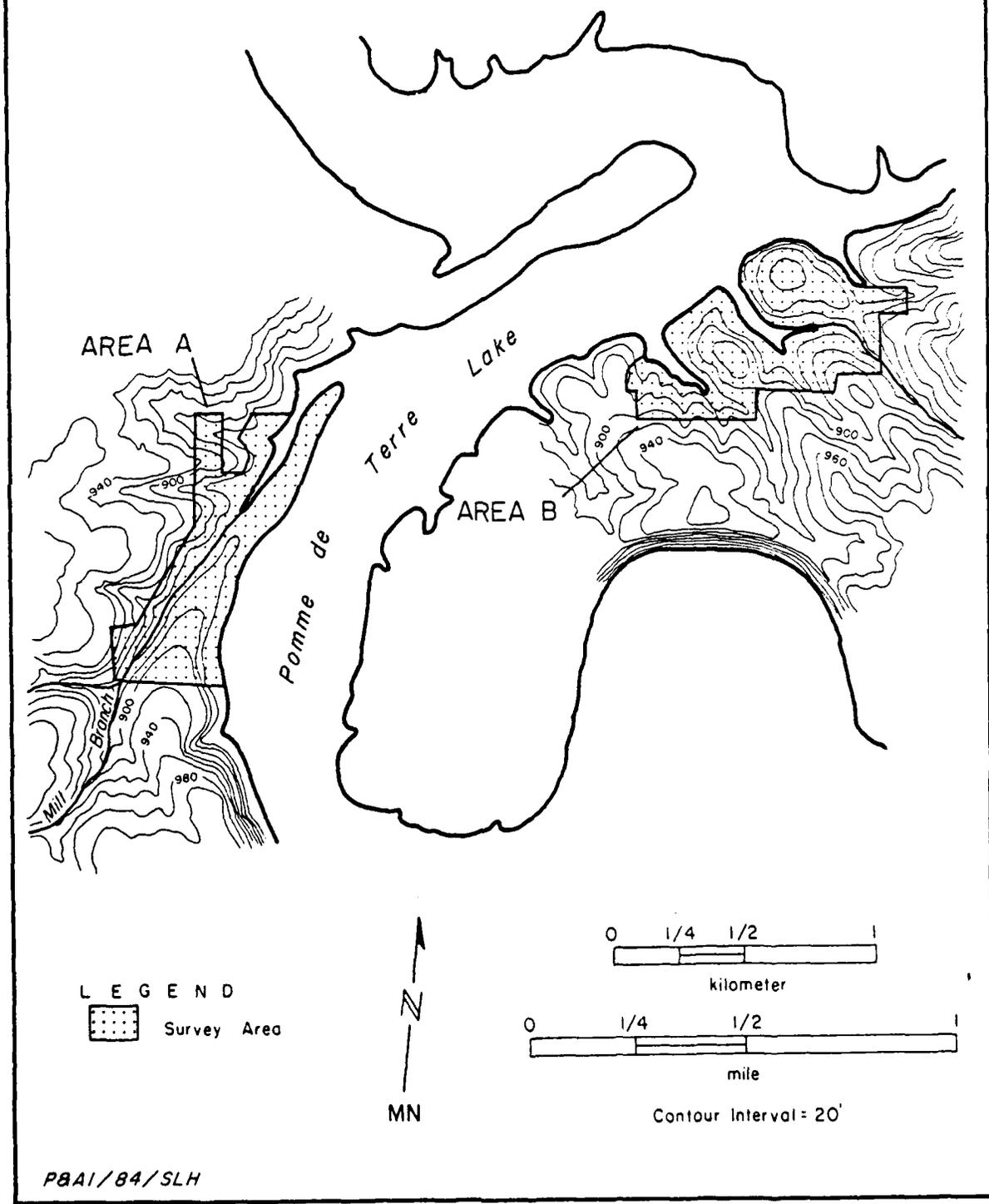
Segment I/Area A

Segment I/Area A is an 80-acre parcel situated southwest of the confluence of Mill Branch with Lindley Creek, now inundated by Pomme de Terre Lake (Fig. 13). Mill Branch bisects the area, which includes a dissected ridgeslope on the left bank and a narrow and rocky ridge projection on the right bank. This ridge now forms a peninsula above the waters of Pomme de Terre Lake. The area west of Mill Branch is densely wooded. The ridge-crest is open and sparsely grassed. Vegetation on the ridgeslopes consists of an upper-story of juniper, elm, and walnut trees and an understory of vines and shrubs. The area is composed of dolomites, cherts, and sandstones of the Cotter and Jefferson City geologic formations. An exposure of high grade chert was encountered along the easternmost slope, and shallow rocky soils are prevalent elsewhere. Disturbances observed at Segment I/Area A include an abandoned and overgrown roadbed on the peninsula ridge, a lake access road and activity area on the left bank of Mill Branch, and a stock pond in the northeastern portion of the survey area.

This area is not known to have been inspected during earlier investigations. Previously recorded sites are not listed in the data bank of the Archaeological Survey of Missouri. The current project located two prehistoric sites, 23HI563 and 23HI564.

Figure 13

POMME DE TERRE LAKE SEGMENT I SURVEY AREAS A&B



P8A1/84/SLH

23HI563

This is a surficial lithic scatter in good condition containing an isolatable chipping station 5 m in diameter. Lithic tools and debitage were noted on the surface in an area 25 m north-south by 20 m east-west. The artifacts, which include a number of tested cobbles, cortical and interior flakes and chips, cores, unifaces, and bifaces, were found associated with a banded gray chert source. Perhaps as much as 10% of the artifacts observed show signs of heat treatment. The chert is eroded from bedrock exposed on a ridgetop 5 to 10 m above the site which is approximately 15 m east of Pomme de Terre Lake (formerly Lindley Creek). Shoreline debris above the site area attests to periodic inundation by the lake. Fluctuation of the lake level has undoubtedly affected the condition of the site, subjecting it to wave action and shoreline erosion.

Site 23HI563 is currently wooded with junipers and oaks growing from bedrock and rubble. Surface soils are dark brown silty clay loams which do not exceed 3 cm in depth above bedrock. Because of the shallow nature of the soils, controlled subsurface tests were not undertaken. Two of the bifaces observed on the surface were collected for further study and are described in Appendix 1 of this report.

Despite the apparent lack of temporal indicators, the likelihood that this site could yield important information regarding lithic procurement and tool manufacturing techniques is high. Also, the deposit is relatively intact and contains a small, discrete specialized activity area. Site 23HI563 appears to be potentially eligible for nomination to the National Register under Criterion D.

23HI564

Site 23HI564 is a sparse subsurface lithic scatter on a lower terrace of the left bank of Mill Creek. It is situated on a narrow and sloping floodplain margin adjacent to the creek which is dissected by seep-fed erosional features that have exposed bedrock and chert cobbles which may have served as a source of raw material. This area may once have been cleared of vegetation as the oaks and junipers on the site are uniformly small and the understory of grasses, vines, and shrubs is relatively thick. Erosion relating to changing creek conditions may also have damaged 23HI564.

Excavation of numerous shovel probes and a formal shovel test helped to define the vertical and horizontal dimensions of the site. From these data and thorough surface inspection, it was determined that 23HI564 encompasses an area of 550 m southwest-northeast by 50 m northwest-southeast. Cultural materials were noted on the surface and in a zone of sandy and silty clay loams 10 to 15 cm below the surface. The cultural zone also contains numerous unaltered chert chunks. The site probably represents a lithic procurement and reduction locale. Temporal assignment of the site cannot be accomplished as artifacts diagnostic of specific cultural periods or other datable materials were not encountered. Nothing was removed from the site.

Site 23HI564 does not appear to be eligible for nomination to the National Register of Historic Places. The information yield potential of the site is low since its integrity is questionable and its temporal placement is unknown.

Segment I/Area B

Segment I/Area B is a 96-acre parcel covered with mixed hardwood forest located south of Pomme de Terre Lake (formerly the confluence of Stick Branch with Lindley Creek) (see Fig. 13). The topography is rugged, including steep ridgeslopes and two prominent ridgecrests. Where present, surface soils are shallow rocky clay loams. Weathered chert nodules and dolomite bedrock of the Jefferson City and Cotter formations are exposed on the surface. Thick understory vegetation consisting of vines and shrubs occurs on the slopes and along drainages. Tree removal activities on the western ridgecrest have left numerous shallow depressions (often filled with recent trash). Two roadbed clearings and a rock-lined footpath leading to a recent log latrine are also evident on the western ridgecrest. Otherwise, the survey unit is undisturbed.

The current investigations encountered no cultural resources at this location. No previous investigations are reported for the area.

Stockton Lake

All archeological sites identified at Stockton Lake during this survey are shown in Figure 14. Table 4 lists the cultural resources recorded during the current investigations numerically and provides general information for each. The table also includes page references for the site descriptions included in this text. Although the survey area designations seem to follow the same format as that for the Pomme de Terre Lake areas, they are completely arbitrary labels. Because of the number of areas to be surveyed at this lake, it was decided to assign those in close proximity as subareas of the same "Segment" rather than using Corps of Engineers designations.

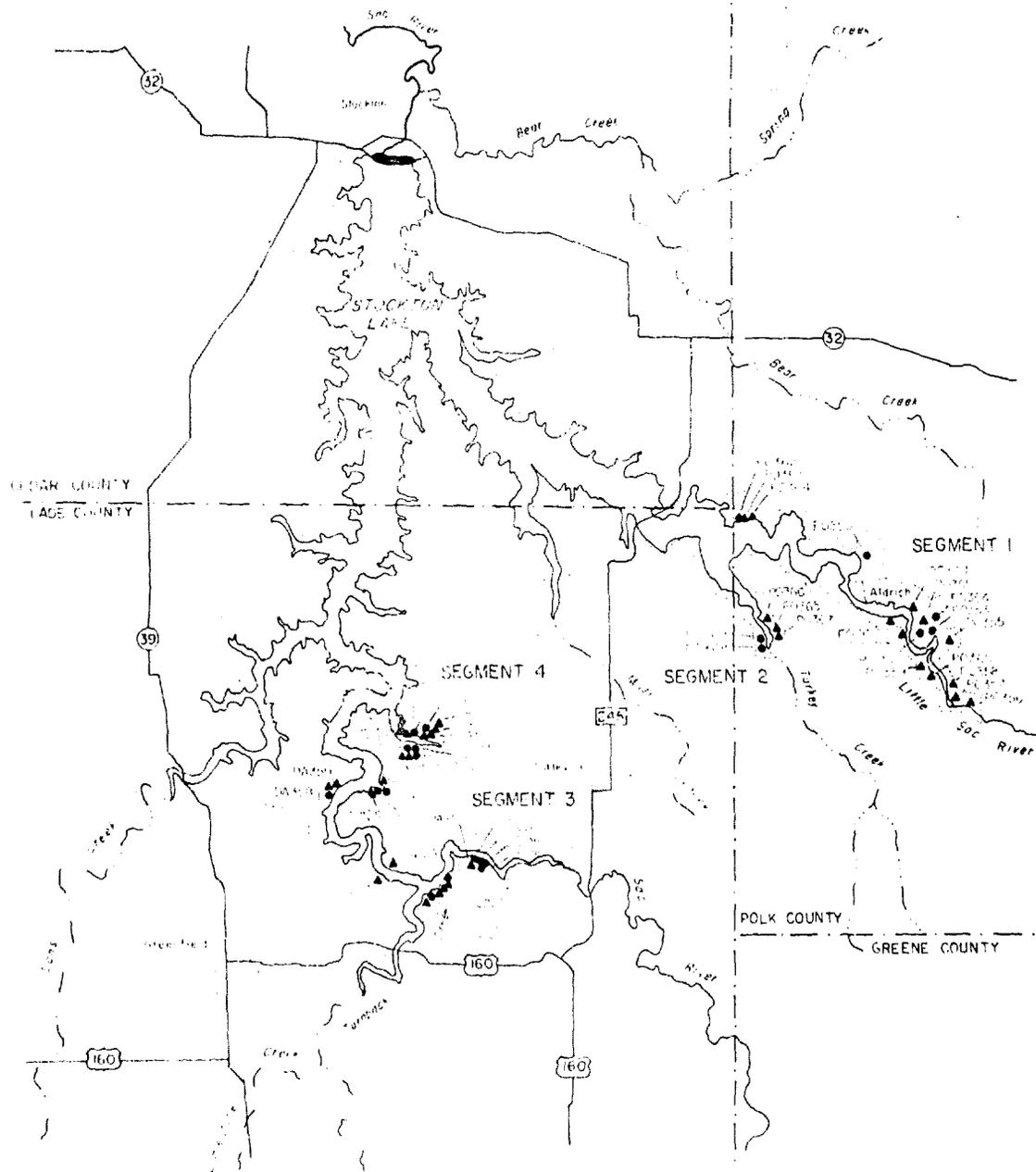
Segment 1/Area 1

Figure 15 shows the configuration of this 119-acre survey area which includes portions of the right and left banks of Coffman Branch and a ridgeslope south of the now-inundated confluence of Coffman Branch with the Little Sac River. Topography of the northern half of the area is characterized by a wooded ridgeslope above a broad floodplain which is open pasturage to the west and a cultivated field to the east. The southern area includes steep ridgeslopes above a narrow floodplain. The ridgeslopes are covered by a mixed hardwood forest with dense understory. Northview Formation siltstones and limestones underlie Pierson Formation limestones and dolomites. The uppermost ridgeslopes are formed by Burlington-Keokuk limestones. Southwestern and southeastern portions of the survey area have gentler slopes which support dense secondary growth and open grassland respectively. A dense growth of intruder vegetation was also noted along the right-of-way of an overhead transmission line crosscutting the southern area.

In general, gravels underlie silty clay loams, although in some areas south of Coffman Branch gravels were not encountered in subsurface probes. Three modern trash dumps and an overgrown roadbed were also observed.

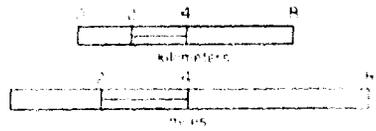
Figure 14

STOCKTON LAKE SITE LOCATIONS 1983-1984 SURVEY



LEGEND

- County Line
- US Army COE Project Boundary
- Historic Site
- ▲ Prehistoric Site



DAG/PA/110

TABLE 4
 INDEX TO CULTURAL RESOURCES ENCOUNTERED
 STOCKTON LAKE

Site No.	Survey Area	7.5' USGS Map	Drainage	Landform	Cultural Period	Site Type	Page in Text
23DA63	Segment 3/Area 1	Greenfield	Sac River	Lower terrace	Prehistoric	Lithic scatter	70
23DA310	Segment 3/Area 2	Greenfield	Sac River	Ridgeslope	Prehistoric	Lithic scatter	72
23DA328	Segment 3/Area 3	Greenfield	Turnback Creek	Ridgeslope	Late Woodland/ Mississippian	Rockshelter, prehistoric midden	73
23DA329	Segment 3/Area 3	Greenfield	Turnback Creek	Ridgeslope	Historic	Historic residence	73
23DA330	Segment 3/Area 3	Greenfield	Sac River	Lower terrace	Middle/Late Woodland	Lithic scatter	74
23DA331	Segment 3/Area 3	Greenfield	Sac River	Ridgeslope	Prehistoric	Bedrock mortar, prehistoric midden	75
23DA332	Segment 3/Area 3	Greenfield	Sac River	Ridgeslope	Prehistoric	Lithic scatter	75
23DA333	Segment 3/Area 3	Greenfield	Sac River	Ridgeslope	Historic	Historic residence	76
23DA334	Segment 3/Area 4	Dadeville	Sac River	Ridgeslope	Prehistoric	Lithic scatter	77
23DA335	Segment 3/Area 4	Dadeville	Sac River	Lower terrace	Historic	Historic structure	77
23DA336	Segment 3/Area 4	Dadeville	Sac River	Lower terrace	Historic	Historic residence	78
23DA337	Segment 3/Area 4	Dadeville	Sac River	Lower terrace	Historic	Historic structure	78
23DA338	Segment 3/Area 4	Dadeville	Sac River	Ridge	Historic	Historic residence	80
23DA339	Segment 4/Area 1	Greenfield	Birch Branch	Lower terrace	Prehistoric	Lithic scatter	81
23DA340	Segment 4/Area 1	Crisp	Birch Branch	Ridgeslope	Undetermined	Stone mounds	82
23DA341	Segment 4/Area 1	Crisp	Birch Branch	Ridgeslope	Historic	Historic residence	82

Table 4, continued

Site No.	Survey Area	7.5'		Drainage	Landform	Cultural Period	Site Type	Page in Text
		USGS Map	Map					
23DA342	Segment 4/Area 1	Crisp		Birch Branch	Ridgeslope	Prehistoric	Lithic scatter	84
23DA343	Segment 4/Area 1	Greenfield		Birch Branch	Ridgeslope	Prehistoric	Lithic scatter	84
23DA344	Segment 4/Area 1	Greenfield		Birch Branch	Ridgeslope	Undetermined	Stone mounds	85
23DA345	Segment 4/Area 1	Crisp		Birch Branch	Gravel bar	Prehistoric	Lithic scatter	85
23DA346	Segment 4/Area 1	Crisp		Birch Branch	Ridgeslope	Early/Middle Woodland	Lithic scatter, bedrock mortar	86
23DA347	Segment 4/Area 1	Greenfield		Birch Branch	Ridgeslope	Historic	Historic residence	87
23DA348	Segment 4/Area 1	Greenfield		Birch Branch	Lower terrace	Historic	Historic residence	87
23DA349	Segment 4/Area 2	Greenfield		Birch Branch	Lower terrace	Historic	Historic feature	88
23DA350	Segment 4/Area 2	Greenfield		Birch Branch	Ridgeslope	Historic	Historic residence	88
23DA351	Segment 4/Area 3	Greenfield		Birch Branch	Ridge	Prehistoric	Lithic scatter	89
23DA352	Segment 4/Area 3	Greenfield		Birch Branch	Ridgeslope	Prehistoric	Lithic scatter	90
23DA353	Segment 4/Area 3	Greenfield		Birch Branch	Ridgeslope	Historic	Historic residence	90
23DA354	Segment 4/Area 4	Greenfield		Sac River	Ridgeslope	Prehistoric	Lithic scatter	92
23DA355	Segment 4/Area 4	Greenfield		Sac River	Ridgeslope	Prehistoric	Lithic scatter	92
23DA356	Segment 4/Area 4	Greenfield		Sac River	Ridgeslope	Historic	Historic residence	93
23DA357	Segment 4/Area 4	Greenfield		Sac River	Ridgeslope	Historic	Historic structure	94
23DA358	Segment 4/Area 5	Greenfield		Sac River	Ridgeslope	Early/Middle Archaic	Lithic scatter	94
23DA359	Segment 4/Area 5	Greenfield		Sac River	Ridgeslope	Prehistoric	Stone mounds	95
23DA360	Segment 4/Area 5	Greenfield		Sac River	Ridgeslope	Historic	Historic feature	95

Table 4, continued

Site No.	Survey Area	7.5' USGS Map	Drainage	Landform	Cultural Period	Site Type	Page in Text
23P0304	Segment 1/Area 2	Aldrich	Little Sac River	Lower terrace	Late Woodland- Mississippian	Excavated stone mound, lithic scatter	52
23P0307	Segment 1/Area 7	Aldrich	Little Sac River	Ridge	Prehistoric	Excavated stone mound	60
23P0350	Segment 1/Area 1	Aldrich	Coffman Branch	Ridgeslope	Historic	Historic structure	50
23P0351	Segment 1/Area 3	Aldrich	Little Sac River	Ridge	Late Archaic	Lithic scatter	53
23P0352	Segment 1/Area 3	Aldrich	Little Sac River	Ridge	Historic	Historic residence	54
23P0353	Segment 1/Area 3	Aldrich	Walnut Creek	Ridge	Historic	Historic residence	54
23P0354	Segment 1/Area 3	Aldrich	Little Sac River	Ridge	Historic	Historic feature	55
23P0355	Segment 1/Area 4	Aldrich	Walnut Creek	Lower terrace	Early Woodland	Lithic scatter	56
23P0356	Segment 1/Area 5	Aldrich	Little Sac River	Upper terrace	Early-Middle Archaic, Middle- Late Woodland, Late Woodland- Mississippian	Lithic scatter	56
23P0357	Segment 1/Area 5	Aldrich	Little Sac River	Lower terrace	Prehistoric	Lithic scatter	57
23P0358	Segment 1/Area 5	Aldrich	Little Sac River	Upper terrace	Early-Middle Archaic	Lithic scatter	58
23P0359	Segment 1/Area 6	Aldrich	Little Sac River	Ridgeslope	Early Archaic	Lithic scatter	59
23P0360	Segment 1/Area 6	Aldrich	Little Sac River	Lower terrace	Prehistoric	Lithic scatter	59
23P0361	Segment 1/Area 7	Aldrich	Big Branch	Lower terrace	Late Archaic, Early-Late Woodland	Lithic scatter	61
23P0362	Segment 1/Area 8	Aldrich	Little Sac River	Ridgeslope	Prehistoric	Lithic scatter	62

Table 4, continued

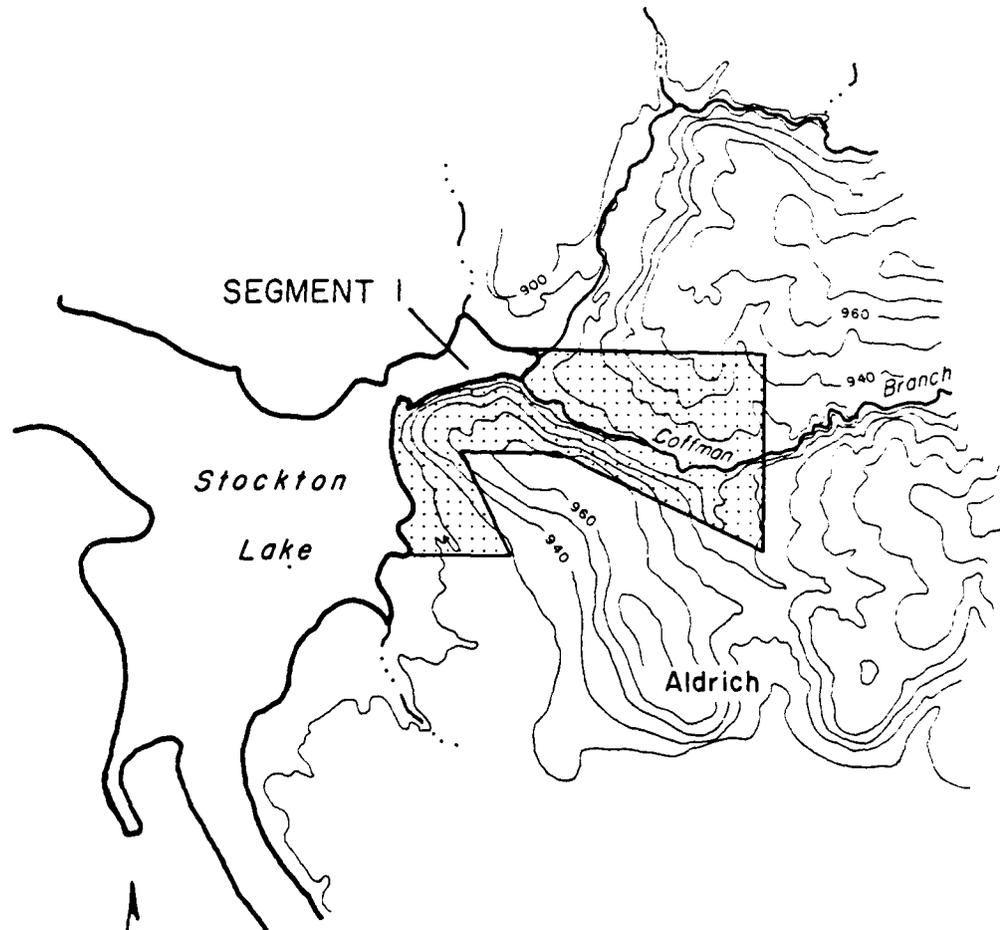
Site No.	Survey Area	7.5'		Drainage	Landform	Cultural Period	Site Type	Page in Text
		USGS Map						
23P0363	Segment 1/Area 8	Aldrich		Little Sac River	Ridgeslope	Prehistoric	Lithic scatter	62
23P0364	Segment 1/Area 8	Aldrich		Little Sac River	Ridgeslope	Undetermined	Stone mounds	64
23P0365	Segment 2/Area 1	Aldrich		Turkey Creek	Ridgeslope	Prehistoric	Lithic scatter	66
23P0366	Segment 2/Area 1	Aldrich		Turkey Creek	Ridgeslope	Prehistoric	Lithic scatter	66
23P0367	Segment 2/Area 1	Aldrich		Turkey Creek	Lower terrace	Early Archaic- Middle Woodland, Mississippian	Lithic scatter	67
23P0368	Segment 2/Area 3	Aldrich		Turkey Creek	Upper terrace	Historic	Historic residence	68
23P0369	Segment 2/Area 3	Aldrich		Turkey Creek	Ridgeslope	Historic	Historic feature	60

Figure 15

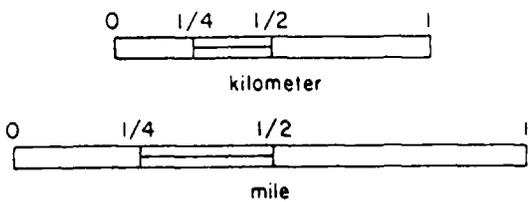
STOCKTON LAKE

SEGMENT I

SURVEY AREA I



LEGEND
[Stippled Box] Survey Area



Contour Interval = 20'

P8A1/84/SLH

POMME DE TERRE AND STOCKTON LAKES PROJECT

One historic site, 23PO350, was recorded during this phase of work. A review of earlier reports and the Archaeological Survey of Missouri data bank revealed that no previous investigations have been undertaken and no sites recorded at this location.

23PO350

Remnants of a small rock structure found approximately 50 m south of the Coffman Branch-Little Sac River confluence and situated between two springs were recorded as site 23PO350. This structure has four walls of unmortared limestone slabs generally arranged in a rectangular fashion. Rusted corrugated tin was found in the interior of the structure. Materials for the structure were undoubtedly obtained from a limestone outcrop 15 m upslope. Wall length dimensions are 4.3 m (north wall), 4.2 m (east wall), 4.6 m (south wall), and 3.7 m (west wall). The corners of the structure are the most intact and are 48 cm (northwest corner), 66 cm (northeast corner), 36 cm (southeast corner), and 38 cm (southwest corner) high. Because of downslope sloughing, wall height is also not uniform.

Interestingly, a thorough inspection of the surface and excavation of two shovel tests did not locate any associated trash other than the aforementioned tin. Also, no domestic vegetation was found amongst the hackberry and beech trees in the area. These two factors suggest that the feature may have been a springhouse (or "cave") for food storage rather than a residence. Its proximity to two springs lends strength to such an interpretation. An associated residence may have been located on the floodplain below 23PO350; if so, it is now beneath the waters of Stockton Lake.

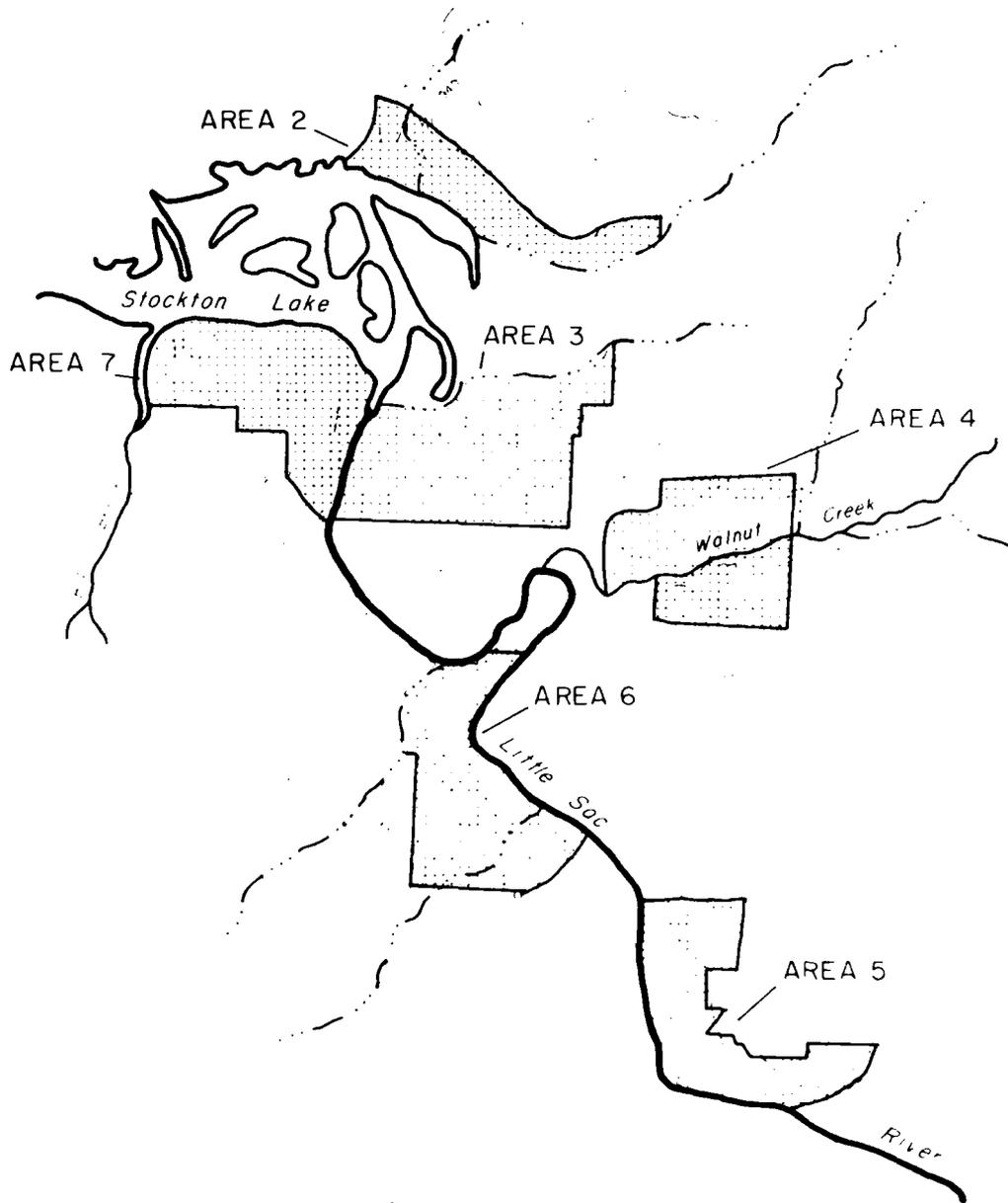
Unfortunately, none of the available historic records specifically account for this structure. The Susan Coffman family from Tennessee was the first to occupy the land, either in 1834 or 1838 (Polk County Museum, Tax Assessors Plat Book; Polk County Tax Records 1834:15). Mrs. Coffman's eldest son, Thomas B., sold this portion of the property to Jasper A. Brim in 1856 (Polk County Deed Record F:211). Brim held the property until 1880 when his estate was probated and sold to J. B. Upton (Polk County Deed Record X:323). The 1904 printed plat map of Union Township is the first document to show a residence, owned by T. O. Brim, near Coffman Branch, but it was located in the NE $\frac{1}{4}$ of the NE $\frac{1}{4}$ of the section, nowhere near 23PO350. Another house in the same quarter section appears on the 1918 plat map, with N. E. Holman listed as the owner (on the vault wall of the Shell Abstract Co., Bolivar, Missouri). On August 16, 1927, Holman sold the entire 145-acre farm to Paul C. and Marie Toalson (Polk County Deed Record 204:62). The 119.4 acres of the Toalson farm were purchased by the Corps of Engineers and did not include the house and barn built in the 1930s (U.S. Army Corps of Engineers. Tract file 1842).

Site 23PO350 has limited research potential because of the lack of artifactual remains which could yield information about its age and function, the lack of associated historic features such as a residence, and the lack of historical documentation which could aid in interpreting the feature. The site is therefore not recommended for nomination to the National Register of Historic Places.

Segment 1/Area 2

Much of the 65-acre tract comprising Segment 1/Area 2 (Fig. 16) is an open floodplain on the right bank of an unnamed Little Sac River tributary (now inundated by Stockton

STOCKTON LAKE SEGMENT I SURVEY AREAS 2-7



Lake). The floodplain is either pasturage (forbs, grasses, and saplings) or cultivated fields. A steep and wooded ridgetop is situated north of one of the two gravel roads in the area which provide access to the lake. A partially inundated levee parallels the shoreline, and a drainage in the western area has been partially channelized.

Inspection of this tract made possible the reassessment and redefinition of previously recorded site 23PO304. The University of Missouri undertook excavations of the rock cairn feature, also known as the Cordwood Cairn Site (Wood 1965a:145-154). The current investigations encountered no other cultural resources.

23PO304

Site 23PO304 is redefined to include an area 1.4 km northwest-southeast by 0.1 km northeast-southwest. The site designation originally referred to a rock cairn, the Cordwood Cairn, which was completely excavated by the University of Missouri (Wood 1965:145-154). The circular cairn with no interior features yielded two extended burials, a bundle burial, broadcast burial materials, and associated grave goods (Wood 1965:146). Excavations recovered numerous Marginella and conch shell disk beads, two dolomite ear-spools, two sherds, side and corner notched points, an ovoid biface, flake scrapers and knives, utilized flakes, and debitage (Wood 1965:149-152). The cairn fill also contained bone fragments identified as deer, turtle, and bison or elk (Wood 1965:152). At that time, 23PO304 was not attributed to a recognized burial complex (Wood 1965:174). Chapman (1980:15) later suggested that the cairn might relate to the Stockton Ceremonial Complex (A.D. 500-1500) since it contained several classes of artifacts commonly associated with the complex such as corner notched arrow points, conch shell beads, and shell-tempered ceramics. A thorough search was made of the area indicated as the cairn location during the current project efforts but revealed no traces of the feature. To the west, a pile of large limestone slabs was found south of a drainage cut and may represent the discarded remains of the Cordwood Cairn excavations.

The site boundaries were extended in order to incorporate an extensive prehistoric lithic scatter. The site covers a large segment of the right bank floodplain of an unnamed tributary to the Little Sac River and contains evidence of a range of activities. Cultural materials observed on the surface include cores, hammerstones, lithic debitage, utilized blades, unifaces, biface fragments, burned sandstone, ground stone, and projectile points. A displaced hearth consisting of approximately 25 fragments of burned sandstone was found on the shoreline as well. Six shovel test excavations revealed that cultural deposits extend minimally to depths of 30 to 45 cm. A stemmed biface fragment was collected from the site but is too incomplete to be typed (see Appendix 1).

Much of site 23PO304 is currently open and untimbered. Secondary growth, including sumacs, vines, grasses, forbs, and cottonwood and maple saplings, predominates in the eastern and western areas. The central portion of the site is planted in wheat. Construction of two lake access roads and the eastern levee immediately offshore have undoubtedly impacted the site. The Cordwood Cairn excavation report mentions bulldozer activity in the western area as well (Wood 1965:145). In sum, a number of forces have affected the integrity of site 23PO304, but data obtained from shovel testing suggest that there may still be intact subsurface deposits.

Despite the number of disturbances evident, 23PO304 still could be potentially eligible for nomination to the National Register of Historic Places under Criterion D. The potential for this site to enhance the data base is assessed as high as it presents an excellent opportunity to address research questions concerning the association of the cairn feature with the surrounding lithic scatter. The range of site activities could also be studied.

Segment 1/Area 3

This survey area encompasses 167 acres southeast of the confluence of an unnamed tributary with the Little Sac River (see Fig. 16). It is a low, artificially terraced ridge which grades into a broad floodplain to the north and west. Fields of grain and pasturage cover much of Segment 1/Area 3. Little in the way of native vegetation remains, although the ridgecrest in the southern portion of the survey area does support a stand of mixed hardwoods. Three stock ponds are situated on the northern ridgethlope, and two dirt roads crosscut the area.

The current investigations located three historic sites (23PO352 through 23PO354) and one prehistoric site (23PO351). No earlier research has been reported for this area, and according to the data bank of the Archaeological Survey of Missouri, no recorded sites are known to occur in the vicinity.

23PO351

Site 23PO351 is a large prehistoric lithic scatter which covers nearly all of the Segment 1/Area 3 survey unit. Artifacts in varying densities were observed within an area 1 km north-south by 0.5 km east-west. The Little Sac River serves as the western boundary, and the northern limits are defined by an unnamed Little Sac River tributary. Walnut Creek delimits the southern extent. Site 23PO351 likely continues eastward beyond the current study limits. Very obvious gaps in the horizontal extent are apparent in locations where historic activities could be identified. To facilitate management, each locale of historic activity was considered a separate site (23PO352 through 23PO354) and is described accordingly. Nine randomly placed shovel tests excavated to depths of 25 to 45 cm and numerous probes to determine the presence or absence of cultural materials revealed that the vertical extent of the cultural deposits varies from surficial to at least 45 cm depth. It is also known that portions of 23PO351 have been highly disturbed as one test produced historic glass and crockery from 30 to 45 cm, below prehistoric materials. Disturbances which are evident at the site include stock tanks, roadbeds, and artificial terraces. The ridgecrest also seems to be somewhat eroded, and shoreline erosion is active in the floodplain. Ground surface visibility ranges from excellent on the ridgecrest and shoreline to fair in the fields of hay and secondary growth. Surface soils are primarily brown silty and sandy loams containing little or no gravels. Subsoils are gravel-laden clay loams and clays.

The primary cultural activity evident at 23PO351 is lithic reduction. Nearly all of the cultural materials observed in surface and subsurface contexts were chert debitage. Flakes and chips indicative of each stage of lithic reduction were noted throughout the site. Other artifacts are decidedly scarce, and the only other tool form found was a square stemmed dart point fragment comparable to a Late Archaic period type (see Appendix

1). As the dart point indicates activities other than lithic tool manufacturing and was the only time-diagnostic specimen encountered, it was the only item collected.

It seems doubtful that intact deposits remain at 23P0351. The site's disturbed condition coupled with the general lack of datable materials renders its information yield potential minimal. Thus, site 23P0351 does not meet the specified criteria of eligibility for nomination to the National Register of Historic Places.

23P0352

Site 23P0352 is situated on the ridgecrest approximately 400 m east of the Little Sac River. Cultivated fields surround the site which contains the remnants of an historic farmstead covering an area 50 m north-south by 200 m east-west. There are no extant structures, but a fenced enclosure 50 m north-south by 50 m east-west matching the location of a residence shown on the 1956 Aldrich USGS 7.5' topographic sheet remains. This enclosure is constructed of barbed and woven wire, has a low alignment of stacked rocks along the west side, and has a rock post at the northwestern corner. Hardwoods, fruit trees, irises, and day lilies grow along the fence.

The interior of the enclosure shows signs of substantial disturbance, having an uneven surface now overgrown with grasses and forbs. Only one feature, a shallow depression measuring 10.5 m east-west by 5.6 m north-south could be identified inside the enclosure. The only evidence of the associated outbuildings also shown on the 1956 topographic sheet was a single rough-dressed sandstone block found northwest of the enclosure. An east-west dirt road runs immediately south of the fence enclosure, and a large pile of rubble containing concrete, metal, and stone materials has been deposited south of the road.

Investigations at 23P0352 were limited to surface inspection. Visibility of the ground surface was fair. From observations made in eroded areas, it was determined that light brown sandy loams overlie reddish brown clay loams.

Historic records reveal that the first dwelling on the site was probably built by George H. Shuler who purchased part of the Crockett Hubbard farm in 1884 (Polk County Deed Record 11:130). Plat maps show the house was still there in 1904 and 1918 (Polk County Museum, Union Township Plats). Another house was built by the last owner, George L. Shuler, who purchased the land in 1936 or 1937 from S. P. Cravens (U.S. Army Corps of Engineers. Tract file 1911). The earlier residence had apparently deteriorated and was demolished prior to construction of the newer house. What remains of site 23P0352 probably relates to the later occupation. Since the site has undergone at least two episodes of demolition and a fence enclosure is the only remaining feature, it seems unlikely that much significant information could be obtained from further research. Site 23P0352 is therefore not eligible for nomination to the National Register of Historic Places.

23P0353

This site is a twentieth-century farmstead apparently constructed between 1935 and 1963 by W. W. and Golden Shuler (U.S. Army Corps of Engineers. Tract file 1910). The land has been part of farm holdings since it was patented in 1851 by Rhoda Hunt (Polk County Plat Map), but no reference is made to any improvements in deed or tax records until the 1930s.

Site 23PO353 is located on the easternmost ridgecrest in the Segment 1/Area 3 survey unit. The confluence of Walnut Creek with the Little Sac River lies 200 m to the south. Mixed hardwoods are scattered over the southern site area, while in the northeastern area impenetrable clusters of briars are present. Open grassland surrounds the site, which covers 150 m north-south by 180 m east-west. The site location coincides with a residence complex shown on the 1956 USGS 7.5' topographic sheet, but no structures currently remain. Extant features include a gate entrance with five decorated concrete pillars and a wooden cattle guard, deteriorating barbed wire fences with concrete and wooden (railroad tie) corner posts, and an overgrown roadbed. As no artifacts were encountered, nothing was collected from the site. Methods of investigation were limited to surface inspection.

This site does not meet the criteria of eligibility for inclusion on the National Register because of its poor condition and recent age.

23PO354

This historic site covers an area 20 m north-south by 6 m east-west and is situated on a ridgecrest approximately 200 m south of an unnamed right-bank tributary to the Little Sac River. The site consists of broken concrete slab pieces, rough-dressed limestone, and an iron water pump heaped in a 4-m-diameter depression. An alignment of rough-dressed limestone 20 m long and generally oriented north-south lies immediately east of the depression. Large junipers cluster around the depression area with tall grasses predominating elsewhere. The water pump is a manual gooseneck type with lettering on the handle reading "PAT JAN 16, 1912."

The site appears to have been a "cave" or springhouse formerly associated with a farm complex to the south, now separated by the Corps of Engineers boundary. Further ownership history research was not undertaken when it became evident that 23PO354 was an outbuilding related to the twentieth-century farmstead. The site has limited research potential and therefore does not appear to be eligible for nomination to the National Register of Historic Places.

Segment 1/Area 4

This survey area is located along both banks of Walnut Creek east of its confluence with the Little Sac River (see Fig. 16). A total of 138 acres were inspected at this location. The area consists of a broad floodplain of Recent-age alluvium below a steep ridge-slope on the right creekbank and steep, dissected ridgeslopes on the left bank. Dense juniper thickets occur on the lower ridgeslopes, and mixed hardwoods were encountered on the upper slopes. Cherts, dolomites, and limestone formations outcrop on these slopes and, where present, soils are rocky and shallow. The floodplain north of Walnut Creek is a cultivated field with as much as 30 cm of silty clay loam above a stratum of gravels. Cobble-sized chert gravels were also noted in the creekbed which had recently been channelized. An unpaved road bisects the entire survey unit, and the right-of-way for an overhead transmission line situated in the western portion of Segment 1/Area 3 has been cleared of vegetation.

No previous archeological work and no recorded sites have been reported at this location. One prehistoric site, 23PO355, was identified by the current investigations.

23PO355

Site 23PO355 is a prehistoric lithic scatter exposed in a wheat field and bisected by an unpaved road. Cultural features were not identified, but chert bifaces and debitage were found in surface and subsurface contexts on the lower terrace north of Walnut Creek. The southern portion of the site is probably subjected to periodic flooding.

Five arbitrarily placed shovel tests were excavated, two of which produced no subsurface cultural materials. In the three positive tests, artifacts were encountered to a maximum depth of 30 cm below the ground surface. The horizontal extent of the site within the current study limits is 300 m north-south by 850 m east-west. A wooded ridgeslope serves as the northern boundary, and Walnut Creek defines the southern limit. Site 23PO355 probably continues beyond the eastern and western boundaries of Segment 1/Area 4.

Materials recovered from testing and a selection of bifaces from the surface were collected for further study. A hafted scraper, a corner notched projectile point, edge modified flakes, and debitage were also collected and are described in Appendix 1. The corner notched specimen resembles Early Woodland projectile points, while the hafted scraper appears to be a reworked Early to Middle Archaic projectile point. A quartzite distal projectile point fragment too incomplete to be typed and a sandstone metate fragment noted on the surface were not collected.

This site is potentially eligible for nomination to the National Register of Historic Places under Criterion D as intact deposits may lie below the plowzone. Judging from the variety of tool forms encountered, site 23PO355 has a high potential to yield information pertinent to research questions concerning temporal affiliation, lithic reduction, and site function.

Segment 1/Area 5

This survey area is a 118-acre parcel located on the right bank of the Little Sac River (see Fig. 16). Ordovician-age Cotter dolomite outcrops along the 900-ft contour separating the floodplain from the gentle ridgeslope. A dense growth of mixed hardwoods occurs along the riverbank margin and the outcrop. Both the ridgeslope and floodplain are partially under cultivation and partially fallow. Portions of the floodplain have been artificially terraced, and an unpaved county road bisects the center of the survey unit. Two unnamed right-bank tributaries serve as the northern and eastern survey boundaries.

According to the data bank of the Archaeological Survey of Missouri, no previously recorded sites are known to occur in the vicinity and previous cultural resources investigations have not been reported for the area. The current project efforts located three prehistoric lithic scatters, 23PO356 through 23PO358.

23PO356

This site is situated on an upper terrace approximately 80 m north of the confluence of an unnamed tributary with the Little Sac River. The site was identified in a recently plowed field completely devoid of vegetation. Surface soils are reddish brown sandy and

silty clay loams. These soils are fairly homogeneous and extend vertically to at least 30 cm below the present ground surface. Pennsylvanian sandstones and cobble conglomerates underlie these soils.

A thorough inspection of the surface was undertaken, and a moderate density of cultural materials was found in an area extending 100 m north-south by 80 m east-west. No cultural features were identified at this site, which probably continues northward beyond the Corps of Engineers boundary which now defines the northern site limit. Two shovel tests were excavated to 30 cm depths but did not detect sterile deposits, suggesting that undisturbed subsurface deposits may remain below the plow zone.

A variety of tool types were observed at 23P0356, including stemmed and unstemmed bifaces, a pitted and battered stone, edge modified flakes, and debitage. Six stemmed bifaces were collected for additional analysis. Certain of these stemmed specimens are forms diagnostic of the Early Archaic to Mississippian periods, while others proved to be too fragmentary to be typed. A sample of the materials observed were collected from the site and these are described in Appendix 1.

Based on the data at hand, site 23P0356 is assessed as having a high information yield potential and as being potentially eligible for nomination to the National Register of Historic Places under Criterion D. The evidence seems to indicate that intact subsurface deposits containing materials pertinent to the study of lithic reduction and site function exist at this location. Further, the number and variety of temporally diagnostic artifacts encountered suggest that there are isolatable components at 23P0356.

23P0357

Site 23P0357 is a scatter of lithic artifacts on the right bank of the Little Sac River. The site is located on a lower terrace currently vegetated with grasses and forbs, and the area is probably subjected to periodic overbank flooding. Construction of a paved county road and agricultural terracing have greatly impacted the site. The original surface has been altered to such a degree that intact deposits may not remain.

Although no features could be found, several classes of artifacts such as bifaces, cores, debitage, and burned sandstone fragments were observed on the surface of 23P0357. No temporal diagnostics were located at the site. Collections were made and include a biface and debitage (see Appendix 1). Only one of the five shovel tests excavated produced subsurface cultural materials from 0 to 30 cm below the present surface level. Tests also provided data regarding the soils present. Surface soils are primarily sands and silts, although washout areas expose gravels and sandy clay loams.

At present, site materials occur in an area 250 m north-south by 200 m east-west. The abundant cobbles noted in the clover fields to the south may have been exploited for lithic materials, and this area perhaps was once an extension of 23P0357. This relationship could not be definitely established because vegetation obscured surface visibility over much of this area and artifacts could not be found with the cobbles either in surface exposures or in shovel tests.

This location has undergone such extensive alteration that it is doubtful that the site retains any integrity. The potential of 23P0357 to contribute significantly to the

data base must therefore be assessed as low, and it does not meet the specified criteria for National Register eligibility.

23PO358

Site 23PO358 covers a large portion of the gentle ridgeslope in Segment 1/Area 5. From the excavation of numerous shovel probes and two controlled shovel tests, it was determined that cultural deposits have an average depth of 30 cm below the ground surface. The documented horizontal extent of the site is 300 m north-south by 300 m east-west. Site 23PO358 probably continues to the north and east beyond Corps of Engineers property. A steep and wooded limestone exposure serves as the western site limits. An unnamed right-bank tributary to the Little Sac River forms the northern site boundary, and its confluence with the river is 150 m to the west.

The entire site area is a cultivated grain field containing a moderate density of lithic debitage, unstemmed bifaces, utilized flakes, a sandstone mortar fragment, and a stemmed biface on the surface. Soils are rocky clay loams. The plow zone has affected at least the top 19 cm of soil at 23PO358, and localized erosion is evident. Artifacts collected from the site include chipping debris, edge modified flakes, unstemmed bifaces, and a stemmed biface, all of which are described in Appendix I. Only one of the specimens recovered, the stemmed biface, is a temporally diagnostic form, indicative of Early and Middle Archaic occupations (Chapman 1975:242). Features were not noted.

Because site 23PO358 has thin cultural deposits which have been badly disturbed by cultivation, the site does not appear to retain sufficient integrity for it to be eligible for nomination to the National Register of Historic Places. The site's potential to yield significant information is limited because of the degree of disturbance.

Segment 1/Area 6

This survey area includes 117 acres on the left bank of the Little Sac River (see Fig. 16). It consists of a rolling ridgeslope and low-lying floodplain separated by a steep limestone bluff. The bluff is composed of Northview Formation materials and has undergone much weathering and solution action, thereby littering the riverbank with colluvial debris. Three drainages crosscut the area and flow in a northeasterly direction, eventually joining the Little Sac River. The northern and southern drainages, which delimit the survey area, are spring fed.

Most of Segment 1/Area 6 is cultivated, and surface visibility was fairly good although somewhat impaired by dense undergrowth along the wooded river and drainage banks. Silty and sandy loams are the predominant surface soils with clay loams and gravels exposed in eroded areas.

No previous archeological research has been conducted and no previously recorded sites are reported in the vicinity of Segment 1/Area 6. The present work identified two prehistoric sites, 23PO359 and 23PO360.

23PO359

This is a lithic scatter situated on a rolling ridgetop which is currently under cultivation. Surface observations coupled with the results of five controlled shovel tests and numerous probes revealed that the site is quite extensive, extending 1 km north-south by 300 m east-west. Drainages mark the northern and southern site boundaries, while the eastern limit is defined by a limestone bluff overlooking the Little Sac River. Sandy clay loams and clay loams occur on the surface of the site.

Features were not observed at 23PO359, but an abundance of lithic debitage and tools were noted. Collections include edge modified flakes, debitage, unstemmed bifaces, and a lanceolate stemmed biface (see Appendix 1). Although the density of materials at the site suggests numerous occupations, only one temporal diagnostic was found, the lanceolate specimen (indicative of Early Archaic period occupation). The vertical extent of the site's deposits varies from surficial to at least 30 cm. Continuous cultivation has undoubtedly affected the integrity of the shallow deposits, but deeper deposits have probably remained undamaged below the plow zone.

Despite the disturbance by cultivation, site 23PO359 is assessed as having a high information yield potential. The site appears to have intact sub-plow-zone deposits, and it may produce materials pertinent to questions concerning temporal placement, lithic reduction, and site activities. The site is potentially eligible for the National Register under Criterion D.

23PO360

Site 23PO360 occurs on a cultivated floodplain bounded by an intermittent drainage on the north and the Little Sac River on the east. Surface soils are clay loams and silty clay loams. Within the Segment 1/Area 6 survey unit, the site covers an area 200 m in diameter. The site is bisected by a spring-fed drainage used to define the southern limit of the survey area. Overbank flooding has affected the site, with the eastern areas showing signs of recent inundation.

Lithic tools, debitage, ground stone, and burned sandstone litter the surface of 23PO360. Two unstemmed bifaces and a small amount of chipping debris were collected and are described in Appendix 1. Although the presence of burned sandstone seemed promising, nothing could be positively identified as a cultural feature.

No subsurface deposits were encountered in the numerous shovel probes and two controlled tests which were excavated. This would suggest that the portion of the site within the defined boundaries of Segment 1/Area 6 maintains no integrity and is therefore ineligible for nomination to the National Register of Historic Places.

Segment 1/Area 7

Segment 1/Area 7 is situated on the left bank of the Little Sac River, extending west from the Cedar Bluff prominence to the Big Branch drainage (see Fig. 16). Portions of the Little Sac River are now inundated by Stockton Lake. The eastern half of the 102-acre

tract is dominated by a long, steep, wooded ridge known as Cedar Bluff which is composed of Cotter Dolomite and Pierson Formation strata. A dense growth of mid-level grasses and forbs covers the floodplain and lower ridgetops to the west. Two stock tanks are located near the southern Corps of Engineers boundary, a dirt road cuts across the center of the survey unit, and the remnants of a steep road embankment are evident in the western area.

Prehistoric site 23PO361 was recorded and 23PO307 revisited during the current investigations. Site 23PO307 (King's Curtain Mound) is a previously recorded site which was excavated by the University of Missouri in 1963 (Wood 1965:112-129). Aside from the excavations at King's Curtain Mound, no earlier archeological research in the vicinity of Segment 1/Area 7 has been reported.

23PO307

This site, otherwise known as the King's Curtain Mound, is situated atop the Cedar Bluff prominence approximately 60 m west of the Little Sac River. In the fall of 1963, personnel from the University of Missouri undertook excavations at the site, completely dismantling the circular limestone and earth feature which was roughly 6 m in diameter and 0.5 m high (Wood 1965:112). Four human burials were found at the base of the mound, and a fifth was in a pit beneath the mound (Wood 1965:113-116). Another subsurface pit containing abundant charred corn kernels and artifacts was also detected beneath the mound structure (Wood 1965:113). Cremated and unburned broadcast burial materials were found centrally concentrated in the mound fill (Wood 1965:116). The site assemblage produced by these excavations includes ceramics (a shell-tempered bowl and a limestone-and-calcite-tempered effigy pipe), chipped stone (stemmed and unstemmed bifaces, a drill/perforator, retouched and utilized flakes, and debitage), ground hematite, modified bones (a hook, two awls, and a polished fragment), a crinoid stem bead, shell beads and pendants (conch, *Anculosa*, and *Marginella*), copper, and a number of unmodified faunal and lithic specimens (Wood 1965:117-129). Wood (1965:130-131) singled out the characteristics of topographic situation, mound construction, and the presence of shell-tempered ceramics and arrow points to classify 23PO307 as a Mississippian period Stockton Burial Complex mound. In fact, excavation of this site and two other mounds (Madrigal Mound/23PO300 and Petite Cote Cairn/23PO301) provided the basic data used to define the Stockton Burial Complex (Wood 1965:130-133).

All that currently remains of the King's Curtain Mound are cleared areas among the junipers, oaks, and other hardwoods, two backdirt piles, and a rock dump within an area 28 m north-south by 16 m east-west. Two previously unreported bedrock mortar stations occur on the site as well. The stations are located in the central site area and consist of two large slabs of limestone, each with four roughly circular mortar holes of various diameters and depths. Limestone outcrops throughout the site area, and soils, where present, are very shallow clay loams. This site visit concentrated upon documenting the current condition of 23PO307. Limited subsurface probing was undertaken because of the general lack of soils coupled with the fact that the major cultural feature of the site had already been completely excavated. No cultural materials were encountered in any of the probes.

In spite of the discovery of the bedrock mortars, 23PO307 is essentially destroyed and therefore is not eligible for nomination to the National Register of Historic Places.

23PO361

Site 23PO361 is a large (500 m east-west by 200 m north-south) lithic scatter containing materials indicative of Archaic and Woodland period occupations. It is situated on a lower terrace on the left bank of the Little Sac River (now a part of Stockton Lake) and is bounded on the west by Big Branch. A line of maples at the northern end of the site is partially inundated by the lake waters. Vegetation beyond the eroding shoreline consists of grasses and forbs. Sandy clay loams are typically dark brown from 0 to 18 cm below the surface and become lighter and mottled with depth. Although the site is now in pasture, it seems to have been cultivated and perhaps artificially terraced in the past.

Ground surface visibility is excellent along the northern shoreline where wave action has exposed an abundance of debitage, cores, unifaces, bifaces (stemmed and unstemmed), and ground stone. A concentration of burned sandstone, probably the disturbed remnants of a hearth feature, was also found in this exposure. A continuous scatter of similar cultural materials was observed on the surface throughout the site area as well. Sterile deposits were not encountered in any of the shovel probes or in either of the two controlled shovel tests which were dug to 30 cm below the surface. In fact, the density of artifacts increases with depth, suggesting that intact deposits may underlie the plow zone. The stemmed bifaces collected from the site provide further evidence for this interpretation because they resemble Late Archaic and various Woodland period types. Other specimens recovered from 23PO361 include unstemmed bifaces, a uniface, an edge modified specimen, and debitage, all of which are described in Appendix 1.

Agricultural activities have undoubtedly affected the upper levels of 23PO361, and the fluctuating waters of Stockton Lake are actively eroding the shoreline. More-localized damage to the resource has resulted from construction of a road embankment in the western site area and a dirt road which crosscuts the central site area. In spite of these impacts, the site retains some integrity and contains information which could greatly contribute to the data base. Site 23PO361 therefore is potentially eligible for nomination to the National Register of Historic Places under Criterion D.

Segment 1/Area 8

This 66-acre survey unit is situated northeast of the former confluence of the Little Sac River with Turkey Creek (Fig. 17). The Stockton Lake floodpool has inundated these drainages and their floodplains. The lakeshore serves as the southern boundary for Segment 1/Area 8. High Point Public Use Area is located east of this survey area and was itself inspected by recent archeological surveys (Espy, Huston and Associates, Inc. 1980:2-8 through 2-15; Girard and Freeman 1984:194).

Segment 1/Area 8 consists of steep ridgetops dissected by intermittent drainages which were dry at the time of the current survey. Much of the survey unit is wooded with juniper, oak, and hickory trees, although one area has been deforested and is now vegetated with dense sumac and briar thickets. Outcrops of Burlington-Keokuk Formation limestones are evident throughout the survey unit and form sheer bluffs above Pierson Formation limestones along the southernmost exposures. Where observed, gravelly silty clay loams form a thin veneer above the limestone strata.

According to the data bank of the Archaeological Survey of Missouri, site 23PO40 was to have been within the current survey tract; however, no trace of the stone mound could be found in the vicinity of the map plotting. Three additional prehistoric sites, 23PO362 through 23PO364, were identified during the present project efforts.

23PO362

Site 23PO362 is a lithic scatter with a low density of chipping debris. No sources of raw material are associated with the site which seems limited to an area of 15 m north-south by 20 m east-west. Lithic reduction is the only activity evident at 23PO362 as only chert debitage was encountered in the 15-cm-thick cultural zone. Because of thick leaf litter coverage, artifacts are not exposed on the site surface. Collections were not made as no temporally or functionally diagnostic materials were encountered in the numerous shovel probes and two shovel tests. Features were not noted.

The site is located on a ridgeslope approximately 100 m north of Stockton Lake (previously the Little Sac River) and 15 m west of an unnamed right-bank tributary. Beneath the mat of leaf litter, 10 to 20 cm of red-brown silty and clay loams overlie weathered limestone. Erosion does not seem to be active here, and no manmade disturbances were observed.

Site 23PO362 does not appear to contain significant research information. It is an isolated deposit that is likely representative of a single episode of lithic reduction. Further, despite extensive subsurface probing, datable materials could not be found. Site 23PO362 does not meet the criteria of eligibility for nomination to the National Register of Historic Places.

23PO363

This is a surficial lithic scatter consisting of debitage thinly distributed over an area 60 m north-south by 60 m east-west. None of the chipping debris observed shows any evidence of utilization, but a small amount has either been burned or intentionally heat treated. A single quartzite hammerstone is the only other artifact type found.

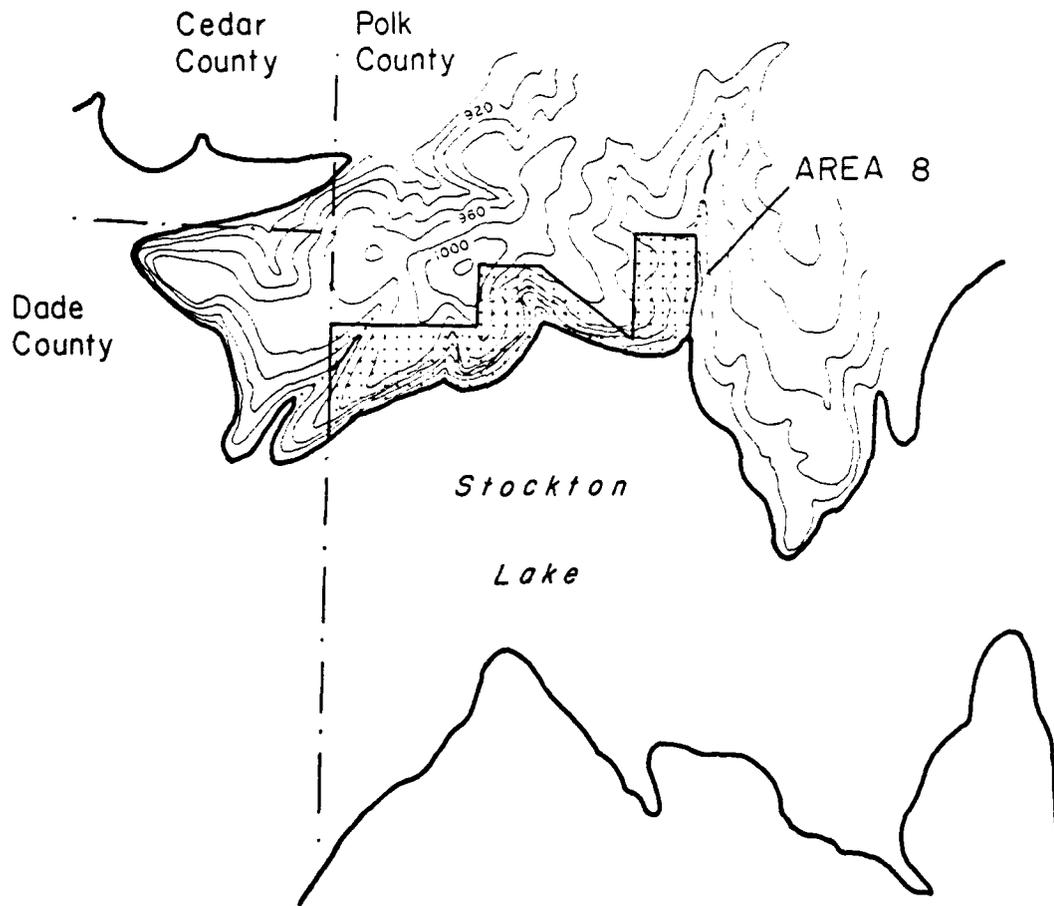
There are no recognizable features at 23PO363, even though the Archaeological Survey of Missouri data bank lists an unexcavated stone mound, 23PO40, in the vicinity. If the data bank information is accurate, the feature has been obliterated.

Site 23PO363 is situated on a wooded ridgeslope where red-brown clay loam has accumulated in shallow bedrock depressions. Sparse low grasses and forbs afford excellent surface visibility. Most of the cultural materials rest on an eroded surface of weathered chert and limestone. Shovel probes and scrapings undertaken where soils are present yielded cultural materials from 0 to 14 cm below the ground surface.

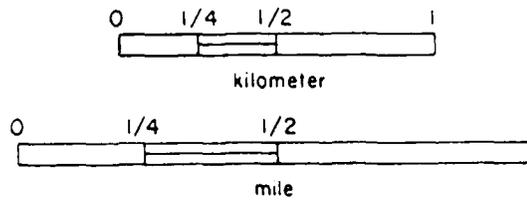
Since such a low density of artifacts and only one activity, that of lithic reduction, is evident at the site and datable materials are lacking, the potential of the site to contribute significant information is low. Site 23PO363 does not appear to be eligible for nomination to the National Register of Historic Places.

Figure 17

STOCKTON LAKE SEGMENT I SURVEY AREA 8



LEGEND
[Stippled Box] Survey Area
- - - County Line



Contour Interval = 20'

P&A1/84/SLH

23PO364

Two rock mounds located on a ridgetlope above a steep limestone bluff overlooking the Little Sac River Valley are considered together as site 23PO364 and cover an area 100 m northwest-southeast by 20 m northeast-southwest. The southern feature (Mound A) is 20 m north of the Stockton Lake shoreline. An ephemeral stream approximately 75 m west of Mound B drains to the southeast into the lake. The entire ridgetlope is wooded, primarily with juniper and walnut trees, and a thin veneer of soil overlies bedrock.

Mound A is located 100 m southeast of Mound B. It is composed of small fragments of limestone. The dimensions of the mound are 3.75 m north-south by 5.15 m east-west, and it ranges in height from 1.2 m on the north to 0.6 m on the south. It overlies limestone bedrock, and a rectangular alignment of cobbles is immediately downslope. Mound A appears to be in pristine condition as there are no potholes, and minimal slumping is in evidence.

Mound B, constructed of larger pieces of limestone than Mound A, has been substantially disturbed. The center of the feature has a large depression, and a rusted collapsible shovel suggesting uncontrolled excavations was found lodged in the mound material. It is interesting to note that cultural materials are not evident in the disturbed area. Mound B is roughly circular, measuring 3.77 m north-south by 3.20 m east-west and 0.8 to 0.25 m high.

Shovel tests were excavated at both features but yielded no cultural materials. Testing was halted upon reaching bedrock. It is very possible that Mound B retains little or no integrity. It should be noted that these features are located 250 m due east of the aforementioned 23PO40 mound plotting (see 23PO363 description). It seems possible that 23PO40 was misplotted, but this would not account for the two mounds identified by the current project. Lacking further substantiating data, no conclusion regarding this situation can be drawn with confidence at the present time.

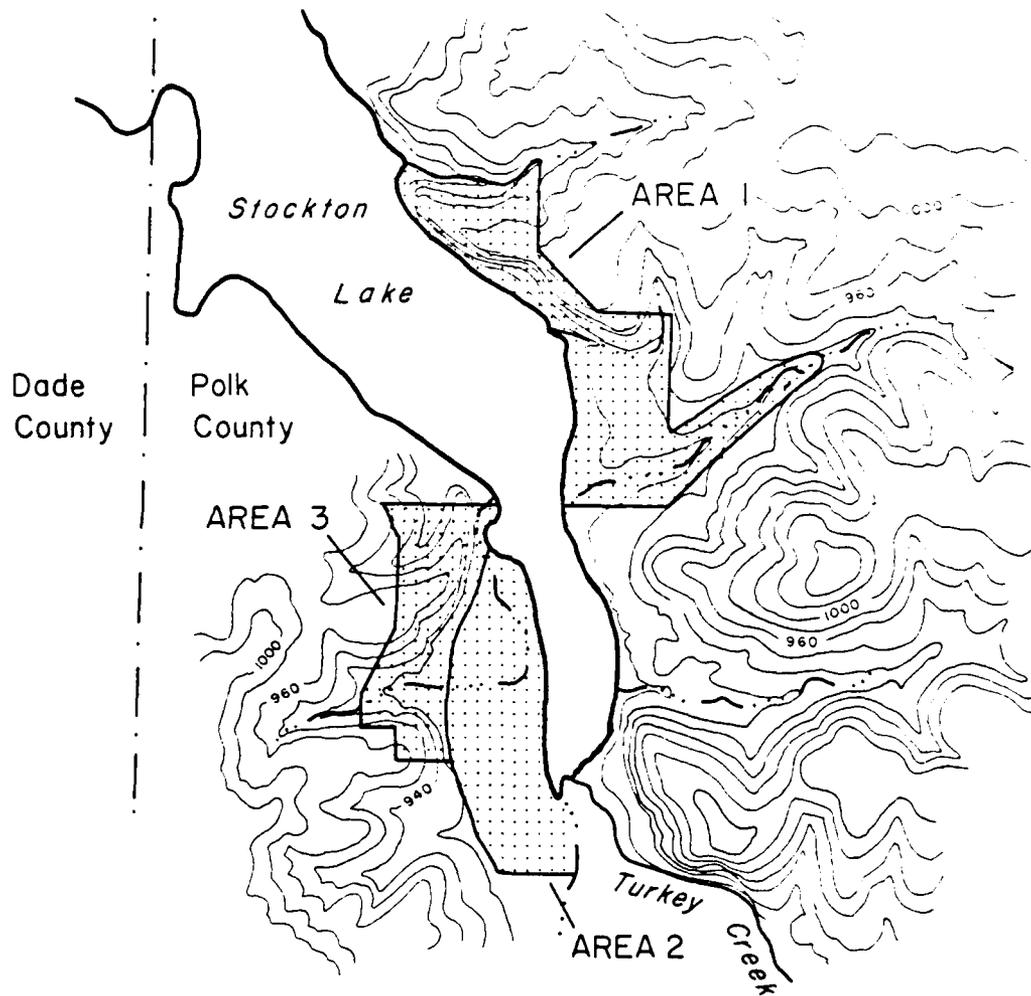
It is difficult to assess the significance of 23PO364 because artifacts were not encountered. The site is partially intact with one of the mound features in excellent condition and the second heavily damaged. The characteristics of mound construction and topographic situation observed at 23PO364 are similar to those traits which help to distinguish Mississippian period Stockton Burial Complex tumuli from other prehistoric burial mound traditions (Chapman 1980:150). However, there are insufficient data to determine the function and temporal affiliation of these features. In fact, it cannot even be definitely said that the site is prehistoric. Site 23PO364 is therefore not eligible for nomination to the National Register.

Segment 2/Area 1

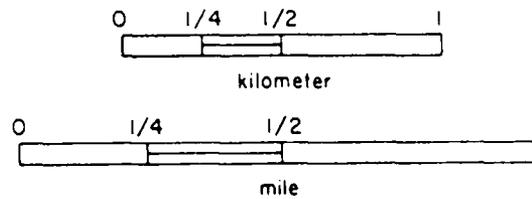
This 85-acre survey unit is located on the right bank of Turkey Creek and south of an unnamed tributary (Fig. 18). The floodpool of Stockton Lake currently inundates the drainage. Roughly one-half of the area is the Blair Bluff prominence composed of Burlington-Keokuk limestones underlain by strata of the Pierson and Northview formations. This bluff is densely forested, with elm, hickory, and locust trees being the primary constituents. Underbrush is moderately thick.

Figure 18

STOCKTON LAKE SEGMENT 2 SURVEY AREAS 1-3



LEGEND
[Stippled Box] Survey Area
[Dashed Line] County Line



Contour Interval = 20'

PBAI/84/SLH

The southern half of Segment 2/Area 1 is an open and gently sloping floodplain drained by a Turkey Creek tributary. Wheat had just been harvested prior to the survey so that surface visibility was excellent. A stock pond is a recent disturbance on the floodplain, and an overgrown roadbed is evident along portions of the Segment 2/Area 1 eastern boundary.

No archeological investigations before this phase of work are known to have been undertaken at this location. Furthermore, the Archaeological Survey of Missouri data bank does not have any previously recorded sites listed in the vicinity of Segment 2/Area 1. Three prehistoric sites, 23P0365 through 23P0367, were recorded during the current survey.

23P0365

Site 23P0365 is a prehistoric lithic scatter exposed along the southern slope of Blair Bluff 40 m northeast of Stockton Lake. Cortical and interior chipping debris is sparsely distributed in an area 150 m northwest-southeast by 40 m northeast-southwest and is clustered at an outcrop of natural chert nodules. No collections were made at the site, and no other artifact types were encountered. Cultural features are not apparent.

The site is in a grassy clearing surrounded by mixed hardwoods. Soils extend to a maximum depth of 5 cm at this site, and much of the cultural deposit lies on exposures of Burlington-Keokuk limestone. Neither of the two controlled shovel tests produced subsurface cultural deposits. The only disturbances evident are a recent and possibly historic trash dump to the southeast and construction of the Corps of Engineers boundary fence 16 m north of the debitage concentration. In sum, 23P0365 appears to be a surficial lithic reduction locality which is relatively intact. It is felt that diffuse deposits lacking datable materials such as 23P0365 have limited research potential and are probably ineligible for nomination to the National Register of Historic Places.

23P0366

Site 23P0366 is a moderately dense deposit of lithics which yielded no datable cultural materials. It is situated on the upper slopes of the western exposure of Blair Bluff. An unnamed right-bank tributary joins Stockton Lake (formerly Turkey Creek) approximately 80 m to the northwest. No natural lithic sources could be found in the immediate vicinity. Soils are shallow at this location, with a 15-cm-thick stratum of sandy and silty clay loams overlying a matrix of clay with decomposing Burlington-Keokuk limestone. The site area is thickly vegetated with mixed hardwoods and a dense understory which limits surface visibility.

Excavation of two controlled shovel tests and four probes to determine the presence or absence of artifacts produced chipping debris and burned rocks above bedrock to an average depth of 30 cm. The materials encountered in the two tests were collected for further study and are described in Appendix 1. On the basis of the data obtained from the subsurface tests, the minimum horizontal extent of the site is defined as 120 m northwest-southeast by 80 m northeast-southwest.

Site 23P0366 is undisturbed and contains materials indicative of lithic reduction activities. The research potential of such a site is limited when it cannot be dated.

This appears to be the case in this situation, and, as a result, 23PO366 is considered ineligible for nomination to the National Register of Historic Places.

23PO367

This is a lithic scatter situated on a lower terrace. It covers an area 275 m north-south and 200 m east-west on the right bank of Turkey Creek (now Stockton Lake). Three stemmed bifaces indicative of Early/Middle Archaic, Early/Middle Woodland, and Mississippian occupations were encountered on the surface near a newly constructed stock pond. Aside from these specimens, few artifacts could be located on the surface and only one of the six shovel tests excavated produced subsurface cultural materials (debitage) to a depth of 30 cm below the ground surface. Appendix 1 provides more-detailed descriptions of thedebitage, the edge modified flakes, and the stemmed bifaces collected from the site.

Site 23PO367 is partially cultivated in its northern and eastern areas and has a thick growth of shrubs and tall grasses south of the centrally located stock tank. Portions of the wheat field had been harvested prior to the current site visit so that ground surface visibility ranged from excellent to poor. Surface soils are sandy and clay loams which are as much as 15 to 30 cm thick. Subsoils are red-brown clays and clay loams. An eroded 5-ft-high cutbank adjacent to the stock tank attests to active shoreline erosion. At present, the lakeshore is 20 m west of the site.

From all appearances, it seems that the cultural deposits at 23PO367 maintain little if any integrity. Undisturbed, deeply buried materials may be present, but a thorough search of the eroded cutbank showed no signs of deeper strata. In sum, although diagnostic artifacts indicate multiple occupations at 23PO367, it is unlikely that sufficiently intact deposits which could produce significant data remain. This site therefore does not meet the criteria of eligibility for inclusion on the National Register of Historic Places.

Segment 2/Area 2

Segment 2/Area 2 encompasses 63 acres of floodplain on the left bank of Turkey Creek (see Fig. 18). The original acreage planned for survey was substantially greater, but the creek level had risen and made 43 acres unavailable for inspection. Most of the survey area was either cultivated or recently harvested. Three ephemeral drainages crosscut the area, and a stock pond is located at the southwestern corner of Segment 2/Area 2. Dry, hard-packed clay loam is evident on the surface and is underlain by a stratum of pebbles 20 cm below ground level.

No previous archeological investigations have been reported at or near this location. The data bank of the Archaeological Survey of Missouri does not have any previously recorded sites on file, and the current work at Segment 2/Area 2 did not identify any cultural resources.

Segment 2/Area 3

Segment 2/Area 3 is 10 to 400 m west of Turkey Creek (see Fig. 18) and consists of a steep to moderately steep ridgeslope and two small ridgecrest areas. Most of the area is undisturbed mixed hardwood forest, but a cleared right-of-way for an overhead transmission line cuts across the northern slope and an unpaved road follows along the eastern boundary. The northeastern slope forms a steep bluff above Turkey Creek and has exposures of Burlington-Keokuk limestone, Pierson and Northview strata.

Previously recorded sites and earlier cultural resources investigations have not been reported for this location. Two historic sites, 23PO368 and 23PO369, were recorded during the present investigation of this survey unit.

23PO368

This site represents the remnants of a farmstead complex. No standing structures remain, but a number of features are still identifiable in an area 140 m northwest-southeast by 80 m northeast-southwest. A stock tank and collapsed corral are located in the southern site area. A centrally located fence enclosure surrounded by fruit trees and ornamental vegetation contains a square (10-by-10-m) concentration of saplings which probably represent the location of the former residence. A 40-m-square growth of catclaw and sumac seems to indicate an outbuilding location to the northwest. Three roadbeds crosscut the site; two are still in use and the third, which runs east-west immediately south of the fence enclosure, is overgrown. Interestingly, no foundations, cisterns, or wells could be found at 23PO368, suggesting that the structures were probably removed rather than demolished.

The entire site area is covered with tall, thick grasses. It is situated on an upper terrace above the Turkey Creek floodplain and is bisected by a tributary drainage. Gravelly alluvium is evident on the surface. The left bank of Turkey Creek is currently 550 m east of 23PO368.

Artifacts were not observed at the site, and consequently no collections were made. The current work was limited to surface examination and a review of courthouse documents. The Corps of Engineers tract file (#1717) for this location indicates that in 1950 L. N. Rowan moved a house onto the property and built several outbuildings soon thereafter. Although details of the Rowan occupation closely coincide with what has just been described, occupations dating back to the mid-nineteenth century are known for the area.

The earliest landholder was Thomas McDaniel who patented the land on September 2, 1856 (Polk County Plat Map). McDaniel deeded a portion of the land to his son William E. who held it at least until 1877 (Polk County Deed Record H:563). It is particularly significant that the early documents show the McDaniel family in this area because of the proximity to the McDaniel family cemetery west of the project area. It was not until 1904, when ownership of the property was listed under the name of J. L. Anderson, that there is any documentation of structures on the land. Plat maps printed in 1904 and 1918 show a house east of the McDaniel Cemetery (Polk County Museum Collection and County Recorders Office), possibly the same structure located just east of the Corps of Engineers property examined during this phase of work. The land changed hands again sometime after 1918 when

it was acquired by the S. B. Rowan family who lived on a 40-acre farm to the south (Polk County Plat Book 1904).

No evidence of any of the earlier occupations was encountered at 23P0368. Everything observed can be attributed to the 1950s, and, as the site is not particularly significant, it is not eligible for nomination to the National Register of Historic Places.

23P0369

The remains of three stone fence markers, aligned northeast-southwest in an area 70 by 20 m, were recorded as 23P0369. These features are collapsed, generally circular mounds of rubble which average 3 m in diameter. Cylindrical stone markers constructed of stacked rocks and supported with stakes and wire are commonly found along fencelines in this region.

Each "mound" at site 23P0369 consists of fragments of chert and dolomite. A single strand of barbed wire was found paralleling the features as well. Each feature was tested to be certain of function and cultural affiliation. Two of the tests were negative, and the third, excavated at the southern feature, produced a wire nail from 28 cm below the present surface. This nail was collected for further study.

The left bank of Turkey Creek is 400 m east of 23P0369. Soils at the site are shallow loams, having an approximate depth of 8 cm above clay and natural chert substrates. The area is wooded and has a moderately dense understory. Burlington-Keokuk limestone is exposed on the steep bluff face below the site.

Historic records substantiate the interpretation of these features as fence markers. The 1904 printed plat map of Union Township (Polk County Museum, Polk County Recorders Office) shows a property line running to the north-northeast from the McDaniel Cemetery and between the W. H. Brown and J. L. Anderson farms. The markers found at 23P0369 seem to represent the remains of the old property line. It is felt that the information yield potential of this site is low; function and age have already been determined, and there is little likelihood that additional information of any significance can be derived from further investigations. Site 23P0359 is not eligible for nomination to the National Register of Historic Places.

Segment 3/Area 1

This 115-acre tract is located on the right bank of the Sac River, now beneath the waters of Stockton Lake (Fig. 19). The area is primarily an open grassland, although the right bank of an unnamed drainage used as the eastern survey boundary is wooded. Several other intermittent drainages dissect the survey unit which includes gently sloping terraces below a broad ridgetlope. Pierson Formation dolomites, limestones, and cherts are exposed along the 950-ft contour where the terraces grade into the ridgetlope.

Three stock tanks occur within the confines of Segment 3/Area 1. County Road CC crosscuts the southeastern portion of the area, and a dirt road has disturbed the central portion of the unit. The area examined north of County Road CC has undergone extensive disturbance as the result of cattle grazing, particularly along the muddy shoreline.

Site 23DA63 was relocated and its limits redefined. No other cultural resources were encountered, and no other archeological investigations are reported for this location.

23DA63

This is a previously recorded site listed as a blufftop village/campsite in the data bank of the Archaeological Survey of Missouri. According to this information, the site had not been tested previously and shoreline erosion was evident at the time it was recorded. The present project detected site materials on the Stockton Lake (formerly the Sac River) shoreline and upslope from the shoreline in an area measuring 1.4 km northwest-southeast by 0.2 km northeast-southwest. Site 23DA63 is currently vegetated with mid-level grasses, and chert nodules are eroding from an exposure of Pierson Formation strata above the site.

Numerous shovel probes were made throughout the site area to determine the horizontal limits of the site and the integrity of the deposits. Modified and unmodified lithic debitage was recovered from a controlled shovel test excavated to a depth of 40 cm; the cultural materials occurred in a 35-cm-thick zone of sandy loam and clay subsoils, the upper 20 cm of which appears to be a plow zone. The artifacts encountered in the shovel test include debitage and an edge modified flake, all of which were collected for further analysis. A moderately dense to sparse scatter of debitage occurs on the surface. Other types of artifacts, temporally significant materials, and cultural features appear to be absent.

Only small portions of the southern one-third of site 23DA63 located south and east of a stock pond are relatively little disturbed. County Road CC, a borrow area, and a dirt road (old County Road CC) have affected the northern areas. Also, soils along the shoreline north of County Road CC have undergone severe mixing as a result of stock traffic. Plowing has disturbed the upper portion of the thin cultural deposit over most of the site area. Shoreline erosion noted during a previous site visit is not evident at the present time. Perhaps the eroded areas have been inundated by the rise of the lake level.

Lithic reduction appears to be the primary cultural activity indicated at 23DA63. While substantial parts of the site may have been lost due to inundation and lakeshore erosion, there is no evidence to indicate that the remaining portions of the site represent a village/campsite; the proximity of a natural lithic source further substantiates the lithic reduction interpretation. The entire site area has undergone some degree of disturbance, and it appears doubtful that substantial intact deposits which could contribute significant information remain. The site is therefore not eligible for nomination to the National Register of Historic Places.

Segment 3/Area 2

This survey unit is located on the left bank of the Sac River which is now inundated by Stockton Lake (see Fig. 19). A spring-fed Sac River tributary bisects the 39-acre tract, and a second spring-fed drainage serves as the northwestern survey boundary. The topography of Segment 3/Area 2 is rugged, composed of moderately steep ridgeslopes formed by strata of Burlington-Keokuk limestone and the Pierson Formation. The area is relatively undisturbed mixed hardwood forest with a roadbed crosscutting the southwestern corner and another paralleling the western boundary. Vegetation has also been cleared along a

STOCKTON LAKE
SEGMENT 3
SURVEY AREAS 1-4

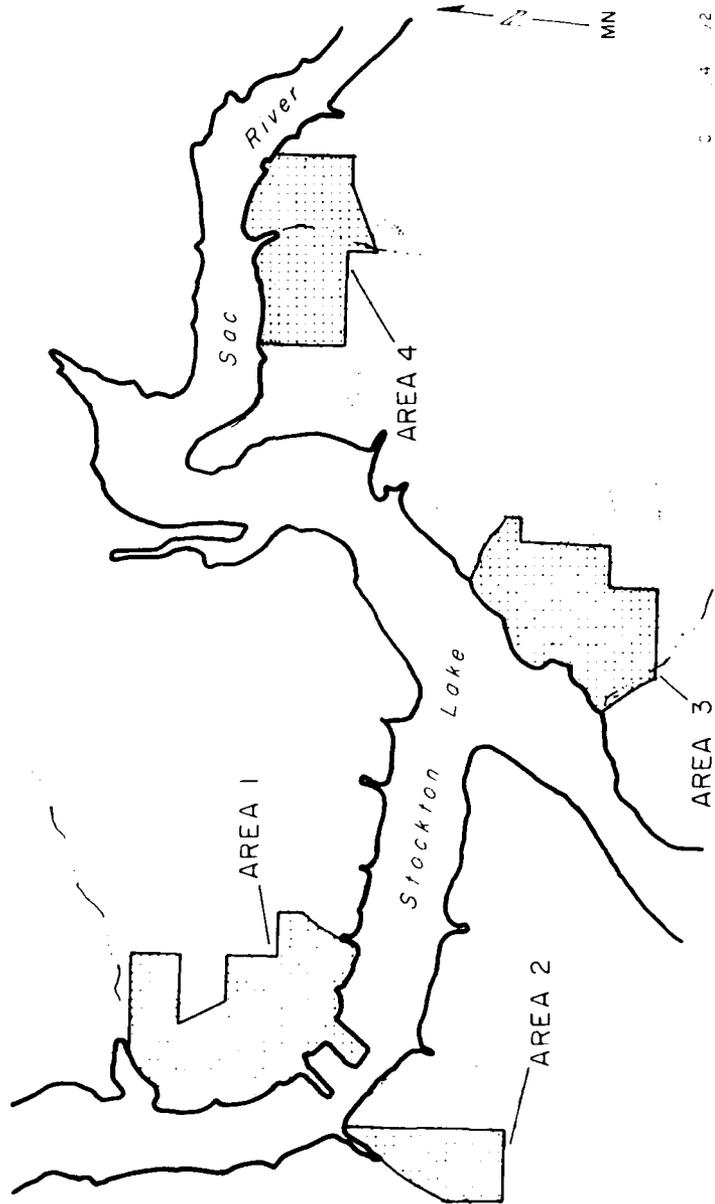


Figure 19

powerline right-of-way near the southern survey limit. Surface visibility is generally poor because of dense understory growth. To compensate, numerous shovel probes were undertaken. These revealed a thin mantle of clay loams above decomposing bedrock. The current investigations identified one prehistoric site, 23DA310. Previous archeological research has not been reported, and no previously known sites are recorded in the vicinity of Segment 3/Area 2.

23DA310

Site 23DA310 is a small (30 m north-south by 30 m east-west) concentration of chipping debris found in a grassy clearing on a ridgetlope above a spring-fed drainage. The current left bank of Stockton Lake is approximately 400 m to the northwest, while the aforementioned drainage is about 50 m north of the site. A sparse deposit of debitage was encountered in a zone of dark brown clay loam overlying weathered bedrock. Exposures of dolomite and limestone, probably of Pierson Formation association, occur both on the site and down-slope. Three controlled shovel tests revealed that surface soils extend to a maximum depth of 15 cm. An upperstory of cedar elms, honey locusts, and junipers and a dense understory vegetation cover the slopes surrounding the site. Cultural features and temporally diagnostic artifacts were not located. A variety of chipping debris was retrieved from shovel testing. These materials were collected and are described in Appendix 1.

No manmade disturbances are apparent at 23DA310, although erosion seems somewhat active. The only cultural activity evident at the site is lithic reduction, and its temporal placement remains unknown. It is felt that 23DA310 does not meet the eligibility requirements for nomination to the National Register as it is unlikely to add significant information to the local data base.

Segment 3/Area 3

Stockton Lake has inundated the Turnback Creek and Sac River floodplains and forms the northern boundary for this 88-acre survey unit (see Fig. 19). A dirt road cuts across Segment 3/Area 3 and eventually joins County Road EE. Roadbeds were also detected near the lake.

An upper terrace supporting secondary intruder vegetation such as catclaw and sumac is situated below moderately steep and dissected ridgetslopes. These slopes are wooded (oaks and junipers) with little undergrowth. Dense leaf litter limits ground surface visibility over much of the ridgetslope area, but occasional outcrops of sandstone allow excellent visibility. The numerous drainages which relieve this survey unit expose loosely cemented conglomerates and sandstones of the Pennsylvanian Formation. An historic stone dam occurs on one of these drainages; it was not recorded as a site because of its apparently recent age. With the exception of the terrace area, sandy and silty soils do not exceed 15 cm in depth. On the terrace, gravels and weathered sandstone underlie 45 cm of sandy, silty, and clay loams.

Two historic sites (23DA329 and 23DA333) and four prehistoric sites (23DA328 and 23DA330 through 23DA332) were recorded within this survey area by the current project efforts. The data bank of the Archaeological Survey of Missouri and previous reports of

investigations show that a previously reported camp/village site, 23DA52, lies north of the acreage examined in an area inundated by Stockton Lake.

23DA328

Site 23DA328 consists of limestone overhangs on both sides of an intermittent drainage. The site as defined covers an area 30 m north-south by 20 m east-west. Stockton Lake is 150 m to the northwest. Oak and elm trees grow in the vicinity, and vines and mosses are evident on the overhangs themselves. The eastern overhang (Shelter A) measures 10.55 m north-south by 5.75 m east-west, has a western exposure, and contains over 30 cm of alluvium. The western overhang (Shelter B) is 8.58 m north-south by 4.23 m east-west, contains a similar amount of alluvium, and has a northeastern exposure. Geologically, the area is made up of Pennsylvanian-age strata.

Artifacts and features are not evident on the surface of Shelter B. Two shovel tests excavated in and near the shelter to depths of 28 and 30 cm also yielded no cultural materials. Shelter A produced an abundance of artifacts from the surface and a shovel test excavated to a depth of 30 cm. Displaced cultural materials were also found on the surface above Shelter A and on backdirt piles in front of the overhang. A broken hand screen found with the backdirt further attests to pothunting at Shelter A. Features were not identified at this overhang. All of the materials recovered from site 23DA328 are associated with Shelter A. Included in the collections are mussel shells and burned bone fragments, two stemmed bifaces, an unstemmed biface, burned rocks, debitage, and grit-tempered ceramics. Only one of the stemmed bifaces recovered, from the 0-15-cm level of the shovel test, is complete enough to be typed and indicates occupation during the Late Woodland/Mississippian periods. The grit-tempered ceramics which were collected from the surface and both levels of the shovel test are also diagnostic of Woodland and Mississippian occupations. It is noted that although the test at Shelter A was terminated at a 30-cm depth, sterile deposits had not yet been reached.

Although pothunting activities have reduced the integrity of the midden at Shelter A, the entire midden has not been disturbed, and it appears that intact deposits remain. Shelter B is in excellent condition and, in spite of the negative shovel tests, it is felt that it may contain cultural deposits thus far undetected. Overall, the potential for this site to contribute significant data is considered to be high. Site 23DA328 is therefore potentially eligible for nomination to the National Register under Criterion D.

23DA329

This is an historic site found in an area of 85 m north-south by 95 m east-west on the lower reaches of a ridgetop. Stockton Lake (formerly the Turnback Creek/Sac River confluence) is 100 m to the northwest, and a tributary drainage is approximately 50 m west of the site. Another intermittent drainage runs across the eastern site area. Courthouse records indicate that 23DA329 was a farmstead continuously occupied since it was first inhabited in the mid-nineteenth century. Only traces of this farmstead are still evident, and these include sandstone and concrete foundation blocks, overgrown roadbeds, barbed wire fences, and two sandstone bedrock exposures with concrete veneer. A 20 m north-south by 25 m east-west area in the southwestern portion of the site has been extensively disturbed, and a dirt road skirts the western edge of the site. All structures have been either

removed or demolished. A pile of fill immediately south of 23DA329 also indicates manmade disturbances.

Tall grasses and forbs cover most of the site area. Fruit trees and ornamentals (irises and bridal wreath) cluster in the vicinity of the disturbed patch mentioned above. Surficially exposed brick, ceramic, glass, and metal specimens were located near this disturbed area and on one of the sandstone outcrops. A sample of these materials was collected and is described in Appendix 2. Because of the site's disturbed condition and apparent thinness of the soils, subsurface testing was not undertaken.

The history of ownership for this area can be traced to William Downing who patented the entire quarter section on July 30, 1856 (Dade County Plat Map). The Downing Cemetery, since moved by the Corps of Engineers (Real Estate Tract Map, Segment 10) relates to this early occupation. In 1881 a deed from Benjamin C. and Charity Pemberton (Dade County Deed Record 30:521) transferred the property to Elkara Downing, Rhoda A. Downing, and Louisa J. Wright. After this date, the Wright family maintained ownership of the land (Dade County Deed Record 166:459; Deed Record 180:454) until the Corps acquisition in the early 1960s. According to Corps of Engineers tract file 1011, all of the structures at 23DA329 were constructed of native cut lumber after 1934. The materials observed at the site are probably attributable to this recent occupation. It is possible, however, that the housesite may have been constant through time, replaced by the 1930s frame house.

Site 23DA329 does not appear to be eligible for nomination to the National Register of Historic Places. The site has been heavily disturbed, and all that remains can be assigned to the most recent occupation.

23DA330

Site 23DA330 contains a moderately dense scatter of lithic artifacts. It is exposed on the surface of a terrace overlooking Stockton Lake in an area 170 m north-south by 250 m east-west. The terrace appears to have been cultivated in the past and is now covered by a thick growth of catclaw and grasses which had been burned recently. Excavation of three arbitrarily placed shovel tests revealed that the vertical extent of the site ranges from 30 to 45 cm below the present ground surface. Testing was unable to detect a well-defined plow zone, although the site area has likely been cultivated in the past. Sandy and silty loams yielded unmodified flakes, burned rocks, edge-modified specimens, and an untyped stemmed biface fragment. Only one of the items observed at 23DA330, a stemmed biface found on the surface, is a time-diagnostic form indicative of the Middle to Late Woodland periods. The diagnostic and all of the cultural materials retrieved from the shovel tests were collected and are described in Appendix 1.

It is possible that site 23DA330 may represent the southeastern extension of the now-submerged 23DA52. Site 23DA52 is a village/camp site recorded on the floodplain immediately south of the confluence of the Sac River with Turnback Creek prior to the impoundment of Stockton Lake. Insufficient information is available from the Archaeological Survey of Missouri to allow such a conclusion to be drawn, however.

A number of manmade disturbances have affected the integrity of site 23DA330. The entire site area appears to have been under cultivation in the past because of the types of vegetation present. Roadbeds crosscut the terrace, and there is evidence of a former fence

alignment near the center of the site. Because of these disturbance factors and the apparently shallow nature of the cultural deposits, it appears that site 23DA330 lacks integrity and is thus ineligible for nomination to the National Register of Historic Places.

23DA331

Site 23DA331 is one of the few prehistoric sites recorded in the area to date which has bedrock mortar features. Five roughly circular mortar holes ranging in depth from 3 to 25 cm are evident on the north end of a large (23.5 m north-south by 9 m east-west) outcrop of sandstone situated on a ridgetop. A cluster of burned sandstone fragments also rests on the outcrop. Three quartzite cobbles with ground surfaces were found on the surface under a juniper tree north of the mortar holes. Shovel testing west of the mortar station identified buried cultural deposits. One of the tests was placed at the edge of the outcrop but produced no artifacts from the 43 cm of excavated fill. Edge modified artifacts and chipping debris were encountered in a 20-cm-thick deposit of red-brown sand overlying weathered sandstone in the second shovel test 4.5 m west of the mortar station. Datable materials are not in evidence in the overall site area of 10 m north-south by 13 m east-west.

Stockton Lake (formerly the Sac River) is approximately 100 m north of site 23DA331. An unnamed intermittent tributary passes along the southern and western site limits. Coluvial debris in the form of large sandstone boulders litters the area. Oaks and junipers predominate in the areas adjacent to the outcrop, while low grasses and forbs provide a sparse ground cover for the midden area.

Site 23DA331 is potentially eligible for nomination to the National Register of Historic Places because of its undisturbed condition and high research potential. It is one of a handful of sites in the region having bedrock mortars and could undoubtedly contribute significant information to the local data base. Although temporal controls are currently lacking for the site, it still addresses the National Register eligibility requirements of Criterion D.

23DA332

Site 23DA332 is a subsurface deposit of lithic debitage which was detected by shovel testing. The site occurs on a ridgetop approximately 120 m southeast of the Sac River (now Stockton Lake). The area is wooded, and a mat of leaf litter obscures the surface. Soils are sandy loams mixed with weathered sandstone and chert fragments.

The cultural deposits at 23DA332 are shallow, ranging from 15 to 30 cm in depth, and no features were noted. Three of the five shovel tests produced artifacts in an area of 22 m north-south by 23 m east-west. In addition to the debitage, an unstemmed biface fragment, a core, and an edge-modified flake were found. One of the tests also yielded a glazed semiporcelain sherd from the 0-15-cm level suggesting recent activity in the area as well. The artifacts recovered from testing were collected and are described in detail in Appendices 1 and 2. Other than the historic sherd, temporal diagnostics were not encountered.

Slopewash is the major disturbance evident at 23DA332. The site is in fair condition but has limited research potential. This assessment is based on the lack of prehistoric temporal indicators and the sparseness of the deposits. Site 23DA332 is considered to be ineligible for nomination to the National Register of Historic Places.

23DA333

This site consists of the remnants of an historic farmstead including three separate rock foundation features, an ovoid depression, and a surface scatter of recent metal and ceramic materials. Two overgrown roadbeds and a cleared area are in the vicinity of the foundation features. The estimated site area is 78 m north-south by 38 m east-west. The westernmost rock feature is a square alignment measuring 4.27 m north-south by 5.10 m east-west with a 1.5-m opening at the southeastern corner. A rectangular cluster of rocks (3.38 m north-south by 5.40 m east-west) is situated between this alignment and a square (4 m north-south by 4 m east-west) rock cluster. The rocks observed in each of these features are rough-dressed sandstone.

Site 23DA333 is located on a ridgetop 70 m south of the Sac River. It is surrounded by oak trees, and a quince bush is located adjacent to the central rock feature. Sandy loam soils are evident on the surface. No subsurface probing was undertaken, and artifact collections were not made.

Corps of Engineers tract file 1015 states that there were no extant buildings at the time the land was purchased from Joe B. Jennings. From deed records, it would appear that a separate farm on this property was owned and sold by J. W. Parrish numerous times during the Great Depression of the 1930s (Dade County Deed Record 176:452; Deed Record 180:312; Deed Record 188:115; Deed Record 194:338). The last apparent occupants of the house on this site were Fannie Sappington and Louisa Miller, who sold the parcel to Mr. Jennings during World War II (Dade County Deed Record 196:213, 611). Unfortunately, the available archival records do not clearly document the earliest occupation on this land. It is known that the property was originally patented in 1841 by R. Cates (Dade County Plat Map), but it cannot be determined if Cates actually resided on the land.

From all indications, it seems that 23DA333 represents a twentieth-century farmstead, possibly 1930s vintage. As the site is not particularly significant to local history and meets none of the other criteria of eligibility, it does not appear to be eligible for nomination to the National Register of Historic Places.

Segment 3/Area 4

This survey unit contains 67 acres. It is forested with mixed hardwoods in the western and south-central areas, and open grasslands occupy the central and eastern areas with the central area also exhibiting evidence of artificial terracing. The northern limit of Segment 3/Area 4 is defined by the left bank of the Sac River (now inundated by Stockton Lake) (see Fig. 19). The entire survey area can be characterized as moderately steep and dissected ridgetops. Numerous intermittent drainages are evident, and a centrally located drainage is spring fed. Pierson Formation strata form a steep bluff at the western lakeshore and on the right bank of the spring-fed stream. On the western shoreline,

Pennsylvanian sandstone and conglomerate are exposed. Otherwise, a surface layer of silty and clay loams overlies loosely cemented conglomerates. County Road EE loops through the unit, and three stock tanks have further modified the area.

The current investigations recorded four historic sites (23DA335 through 23DA338) and one prehistoric site (23DA334). Neither the data bank of the Archaeological Survey of Missouri nor previous reports of investigations indicate any earlier research or known sites for the area.

23DA334

This is a lithic scatter located on the upper reaches of a ridgetop. It is primarily an open grassland, but the landscape is dotted with oak, walnut, and honey locust trees. No cultural materials were observed on the surface because of dense grass cover. As a result, the site was defined solely on the basis of shovel test results. Five tests were excavated in an area 170 m north-south by 90 m east-west, all of which yielded cultural materials to a depth of 35 cm. Debitage is the best-represented artifact category, but a few edge-modified specimens and a burned rock were also encountered. All of the artifacts recovered by testing were retrieved for additional study and are described in Appendix 1. Features were not identified, and temporally diagnostic materials were not found.

The site seems to be in fair condition, although the area may have been cultivated in the past. Soils become thinner and contain more sands and gravels upslope. At the downslope (northern) end, clay loams are evident to 35 cm below the current ground surface. Stockton Lake (formerly the Sac River) is 225 m to the north, and a spring-fed tributary is 80 m east of the site.

The research potential of 23DA334 is limited because of the thinness of the cultural deposit, the likelihood that cultivation has disturbed the deposits, and the apparent lack of temporally diagnostic artifacts. Other lithic scatters on ridgetops seem to be in better condition and to offer greater information. Thus, site 23DA334 is judged to be ineligible for nomination to the National Register of Historic Places.

23DA335

Site 23DA335 consists of the remnants of two barns once associated with the historic Hulston Mill settlement. Limited information regarding these structures is available, and Corps of Engineer tract file 1025 simply describes them as in poor condition and lacking roofs as the result of high winds. From photographs attached to the tract file, the barns seem to have been of wood-frame construction. All that currently remains are isolated foundation features in an area 60 m northeast-southwest by 15 m northwest-southeast. The northern feature is a 7 m north-south by 12 m east-west cluster of rough-dressed stone and rotting lumber. Approximately 10 m to the south is a rectangular (6 m north-south by 9 m east-west) depression which is lined with rough-dressed stones and which has a 4-m-diameter pile of stones abutting the eastern end. Since there is little evidence of the wood-frame construction remaining, it seems likely that the structures have either been removed or demolished. Associated artifacts were not noted, and subsurface probes were not undertaken.

POMME DE TERRE AND STOCKTON LAKES PROJECT

This site is situated at the southern end of an open pasture. It is on a lower terrace on the left bank of the Sac River (now Stockton Lake), and an unnamed tributary is 25 m to the west. Soils along the bank of the tributary are clayey and support a stand of oaks and elms. Clay loams are evident in the open pasture which has a thick mat of grasses currently grazed by cattle. A fenceline lined with shrubs and trees parallels County Road EE to the east.

Historic records indicate that a second generation of the Hulston family settled this area and ran a mill here between 1870 and 1914 (Dade County Deed Record 146:447; U.S. Army Corps of Engineers. Tract file 1040). In 1919 R. G. and H. P. Hughes acquired the land from R. A. Vanhooser (Dade County Deed Record 146:448). The property remained in the Hughes family until the Corps of Engineers bought it during the 1960s. Unfortunately, the barns cannot be attributed to a specific period; but judging from their poor state of repair during the last term of occupation, they probably predate the mid-twentieth-century occupations.

Site 23DA335 does not appear to be eligible for nomination to the National Register of Historic Places. Little is left of the former barns, and they do not represent important constituents of the Hulston Mill community.

23DA336

The features observed at this historic site constitute the remains of yet another farmstead in the vicinity of the Hulston Mill community. The site has been substantially disturbed, and all structures have either been removed or demolished. All that can be identified at 23DA336 is a broken concrete foundation and a scatter of cinder blocks and rough-dressed sandstone inside a barbed wire fence enclosure which measures 15 m north-south by 17 m east-west. A sparse scatter of recent metal and glass was observed on the surface, none of which was collected. Quince bushes and irises occur along the fence, and a large oak is situated just south of the foundation feature. An overgrown roadbed runs due west from the enclosure and intersects with County Road EE.

Site 23DA336 is 80 m south of the Sac River (currently Stockton Lake) on a lower terrace now in pasture. A shovel test was excavated northeast of the enclosure to determine if there are subsurface cultural materials and the nature and depth of the soils. The soils are silty sands with a maximum depth of 15 cm with sandstone and gravel substrates. Artifacts were not encountered in the test.

Everything observed at 23DA336 probably postdates 1940. There is not an available Corps of Engineers tract file, but the real estate tract map (Segment 10, Tract 1036) lists Paul Nixon as the landholder. Another tract record (U.S. Army Corps of Engineers. Tract file 1041) indicates that Nixon was definitely in the area during the 1960s. The site may therefore relate to this recent date. It does not appear to be eligible for National Register nomination because of its recent age and poor condition.

23DA337

Site 23DA337 includes remains of the historic Hulston Mill settlement west of the former mill. Standing structures are absent, and foundations and fencelines are the only

remaining features. A square (7-by-7-m) foundation of massive rough-dressed sandstone and structural debris (concrete, cinder blocks, rough-dressed limestone) pushed against one side of a barbed wire fence enclosure were observed within an area 90 m northwest-southeast by 40 m northeast-southwest. Associated artifacts are not evident on the surface of the site.

The stone foundation is located in an open, grassy field south of a densely wooded area and is isolated from the other features. Hardwoods line the fence enclosure. A cluster of irises was found at the southeastern corner of the enclosure. The interior of the enclosure is a grassy clearing except for a rectangular growth of sumac. This secondary vegetation probably represents the former location of structures which have been demolished. The rubble generated by this demolition was likely bulldozed from this area 10 m east to the fence where it is now located.

The entire site area is situated on a sloping lower terrace 50 m south of the left bank of the Sac River (currently inundated by Stockton Lake). County Road EE loops around three sides of the site, and the ridgetop to the south has been artificially terraced. Shallow clay loams were identified in the numerous informal shovel probes made. Cultural materials were not encountered in any of these probes.

There is an abundance of documentation for this area, so that the various features can be identified with confidence. The features noted in the northwestern site area probably represent nineteenth- and twentieth-century occupations. According to U.S. Army Corps of Engineers tract file 1025, a frame house built in 1951, a nineteenth-century log cabin, and several outbuildings were once located in the area. The log cabin was 16 by 21 ft and had vertical siding on the upper gables (U.S. Army Corps of Engineers. Tract file 1025). From about 1870 until 1914, this was the property of the Hulston family (U.S. Army Corps of Engineers. Tract file 1040). On February 26, 1914, the cabin was sold to R. A. Vanhooser, who in turn sold the property to members of the Hughes family at the end of 1919 (Dade County Deed Record 146:447-448). The land remained in the Hughes family until it was acquired by the Corps of Engineers.

Records also aid in the identification of the rock feature at the southeastern end of the site. It appears to be the remains of the Hulston Mill general store first mentioned as a separate tract in a deed executed by Nancy Hulston on November 19, 1888 (Dade County Deed Record 53:112). The store, which is recorded in U.S. Army Corps of Engineers tract file 1041 as having asbestos brick siding and a false front, may have existed prior to the 1888 date. W. A. Hughes, listed in the 1880 census as a 25-year-old farm worker living at the home of Peter A. Van Osdell in Hulston, became the first storekeeper. The store was later run by H. P. Hughes, who, together with his brother Ralph J., purchased the log cabin on the adjoining tract in 1919 (Dade County Deed Record 146:447-448; U.S. Army Corps of Engineers. Tract file 1025). In 1953 the store closed permanently, although the owner, Frank Griffin, continued to live on the property until 1960 (U.S. Army Corps of Engineers. Tract File 1041), when it was sold to Mr. John Nixon (Dade County Deed Record 226:97-98), who later deeded it to his brothers, Frank and Paul Nixon (U.S. Army Corps of Engineers. Tract file 1041). The store was not in operation and the house remained vacant during the Nixon ownership (U.S. Army Corps of Engineers. Tract file 1041). From a photograph in Corps of Engineers tract file 1041, it seems that the residence was a recent construction with a concrete slab foundation. No evidence of this structure was found during the current investigations.

The hamlet built around the grist mill on the Sac River is important to local history as it was an economic center for the area. The original mill was constructed in the late 1830s by Henry Pemberton (U.S. Army Corps of Engineers. Tract file 1040). It was washed out and rebuilt by the Pemberton family and then sold to John Christopher Hulston about the time of the Civil War. During the Civil War, this mill, along with other mills in Dade County, provided flour for the Union Army (excerpt from Springfield, Missouri News and Leader [23 September] 1963 in U.S. Army Corps of Engineers tract file 1040). Subsequently, the surrounding community, which also included a store, blacksmith shop, and post office, was referred to as Hulston or Hulston Mill (Hughes 1984). Yet another mill with modern steel machinery was constructed on the older foundations during the 1880s. As a preservation measure when the Corps acquired the land, the mill was moved to a park east of the Pemberton Cemetery in the vicinity of Cave Spring Branch. Site 23DA337, although associated with the historically important Hulston Mill, is not eligible for the National Register of Historic Places because the site lacks integrity. All structures have been removed from the site, and disturbance to the structure locations appears to have been extensive. Further, both structure locations continued to be used well into the twentieth century, and it is doubtful that intact remains relating to nineteenth-century use could be isolated from later materials.

23DA338

This site contains the remains of an historic housesite possibly constructed during the first quarter of the twentieth century. Deed records (Dade County Deed Record 206:249) mention a house on the property owned by Samuel Farmer and his wife, but details regarding the date and type of construction are lacking. The property was later sold to A. Frank and John Nixon by Mr. and Mrs. T. D. Hickey in 1948 (Dade County Deed Record 206:249), after which it was the subject of numerous transactions within the Nixon family (Dade County Will Book B:427; Deed Record 221:220; Deed Record 223:124; Deed Record 224:19; Deed Record 226:97; Deed Record 227:106, 320). Thus, it can safely be said that the house was built prior to 1948.

Only a part of the Nixon family farmstead was acquired by the Corps of Engineers (Dade County Deed Record 236:77). Indeed, the Corps of Engineers boundary line bisects the site so that the only feature on Corps property is a structural foundation of rough-dressed sandstone with two overgrown roadbeds in the vicinity. A few bricks were found scattered on the surface at the eastern margin of the foundation where the stones are quite massive. A smaller pile of stones at the western edge of the feature suggests that a formerly attached stone structure or perhaps a chimney might have collapsed. A few glass items and metal license plates were observed on the surface, but the only item collected was a brick. As noted in Appendix 2, the brick is of a form commonly made during the nineteenth century. A shovel test excavated to 15 cm below the present surface produced two glass fragments (not collected) from stony clay loam fill. A standing barn was noted on the portion of the site south of the Corps boundary.

Site 23DA338 is situated on a ridgetop which is forested with a mixture of elm, beech, and sycamore trees. Silver maples cluster along the western side of the foundation. Grasses provide the on-site ground cover. Springs issue from an outcrop of Pierson Formation strata 50 m west of the site and feed a drainage which flows northward 300 m to join Stockton Lake.

Only the partial remains of a house structure are still evident at 23DA338. The house was probably removed or torn down, and little is known about it from courthouse records. It may have been a wood-frame house with stone-veneer floors and a stone foundation, a style which was popular in the area between 1910 and 1920. Even if the site dates to this period or to the nineteenth century as indicated by the brick, it is not particularly significant to local history and therefore not eligible for nomination to the National Register of Historic Places.

Segment 4/Area 1

Segment 4/Area 1 consists of 118 acres of dissected ridgeslopes located on the right bank of Birch Branch (currently inundated by the Stockton Lake floodpool) (Fig. 20). Strata of the Pierson Formation are evident along the steeply sloping shoreline, while the overlying Burlington-Keokuk limestone has been exposed by the numerous drainages which crosscut the survey unit. Much of the acreage examined is wooded, but open grassy areas occupy the lower south-central slopes and the broad upper slopes where the land was probably once cultivated. Recent clearing of vegetation was noted around these open fields, likely as a fire prevention measure. A few overgrown roadbeds were encountered, and a recent rock dam was noted across one of the drainages (this dam was not recorded as a site because it appears to be less than 50 years old). An unpaved lake access road cuts across the center of the area to Birchwood Park.

No previously recorded sites are known to occur within the confines of Segment 4/Area 1. Previous reports make no statements about earlier archeological investigations at this location. The current work identified three historic sites (23DA341, 23DA347, and 23DA348) and seven prehistoric sites (23DA339, 23DA340, and 23DA342 through 23DA346).

23DA339

This is a large lithic scatter detected in an area 340 m north-south by 600 m east-west. The density of cultural materials varies from sparse to moderately dense. Chipping debris and cores are the most abundant artifacts, indicative of lithic reduction activities. Cultural materials are exposed on the surface, and three of the seven shovel tests yielded artifacts to 30 cm below ground level. The debitage, edge-modified specimens, and core encountered in these positive tests were collected and are described in Appendix 1. Features are not evident at this location, and datable materials also seem to be lacking.

The site occurs on the lower terraces overlooking the right bank of Birch Branch, which forms the southern site boundary. Several intermittent drainages dissect the site, two of which form its western and eastern boundaries. The area is now in pasture and is surrounded by stands of mixed hardwoods. The abrupt change of vegetation suggests that the site was probably once forested but later cleared for either grazing or agricultural purposes. Surface soils are hard-packed reddish brown clay and sandy loams which appear to have been recently plowed. A well-defined plow zone could not be identified in any of the subsurface probes, but considering the shallowness of the cultural deposits, it is likely that intact subplow-zone cultural remains do not exist.

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Judging from the types of materials observed and the disturbed condition of the site, site 23DA339 does not seem to have much potential to yield significant data regarding local prehistory. As a result, the site does not meet the requirements for nomination to the National Register of Historic Places.

23DA340

Site 23DA340 consists of two stone mound features approximately 2 m apart. The site covers an area 12 m north-south by 8 m east-west. The mounds are situated on a ridgetop which has a thin veneer of silty loam soils beneath a layer of leafy humus. Birch Branch is approximately 45 m west of the site. The area is forested with mixed hardwoods. Dense understory vegetation nearly obscures the features from view.

The mounds are aligned generally north-south. Mound A, the northern feature, has two large potholes on its eastern and western margins: it is roughly circular, measuring 4.6 m north-south by 3.45 m east-west, and is 60 to 70 cm high, sloping to the north. Mound B measures 2.8 m north-south by 3.75 m east-west and has an average height of 60 cm, although slumpage is evident at the southern end. Both mounds are constructed of chunks of limestone and dolomite with very little fill. Informal shovel probes were made at each of the mounds, one of which yielded a decorticate chip which was not collected. Soils surrounding the features do not contain cultural materials. No temporal diagnostics were found.

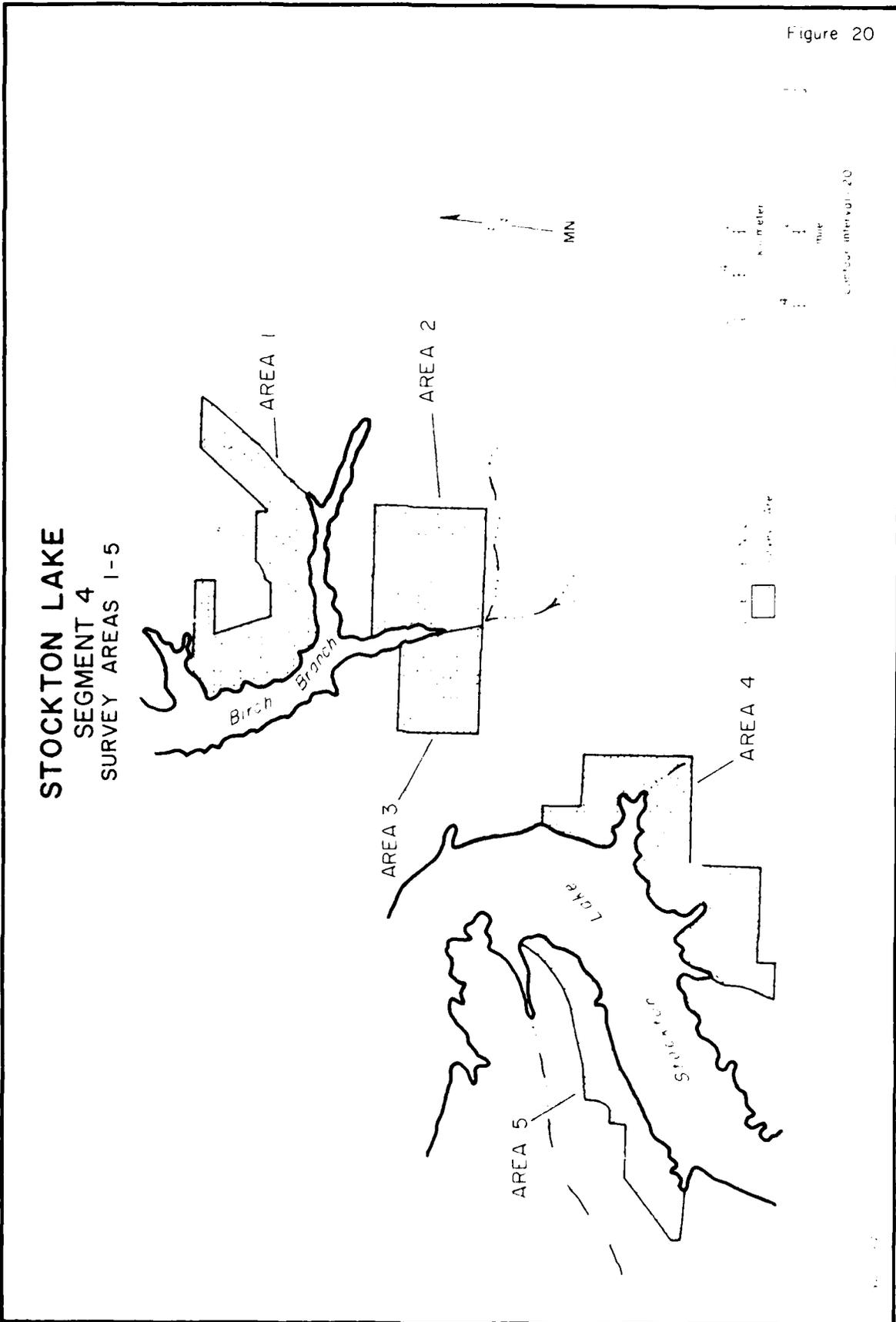
Site 23DA340 has not been clearly demonstrated to be of prehistoric origin despite the fact that a chip was encountered in one mound (the artifact may have been a fortuitous inclusion). The temporal and functional affiliations of the site cannot be determined. As a result, 23DA340 is ineligible for nomination to the National Register of Historic Places.

23DA341

This is an historic farmstead (ca. 100 m north-south by 100 m east-west) settled circa 1850 (Dade County Plat Map) by William Hudson, who is listed in the 1860 census as a 69-year-old farmer born in Tennessee, and his wife Elizabeth. The deteriorated log cabin and log barn on the property when it was acquired by the Corps (U.S. Army Corps of Engineers. Tract file 635) were probably erected by Hudson. On March 10, 1871, the administrator of the Hudson estate sold the land to James Hailey (Dade County Deed Record 15:491), who then resold it on the same day to Hillary Morris (Dade County Deed Record 15:524). Morris's widow Mary and son Joseph T. inherited the farmstead in 1876 (Dade County Deed Record 26:43) and sold it to Sophia Barrett in 1881 (Dade County Deed Record 31:288). Sometime around 1900, the property passed into the hands of the Tackett family (Dade County Deed Record 86:482). The Corps of Engineers obtained the tract, which had been abandoned for several years, from the heirs of Monford W. Tackett (U.S. Army Corps of Engineers. Tract file 635).

The log structures and associated outbuildings described and photographed in Corps of Engineers documents (U.S. Army Corps of Engineers. Tract file 635) were subsequently burned (Evans 1984). This concurs with the absence of standing structures. All that remains are two concentrations of burned corrugated tin and rough-dressed stone blocks, remnants of a storm or root cellar constructed of stone blocks, and a now-overgrown fenced garden plot. Section line roads are still evident to the north and east, and an overgrown roadbed runs

Figure 20



southward from the site to Stockton Lake. Farm machinery parts and corrugated tin litter the surface. Collections were not made.

Site 23DA341 is situated on a ridgetlope where secondary growth is extremely thick below an upperstory of mixed hardwoods. A right-bank Birch Branch tributary is 25 m to the north. In spite of the dense vegetation, cultural features are still discernible. Site documentation is based on surface observations and information available in Corps of Engineers records (U.S. Army Corps of Engineers. Tract file 635).

Because the site is highly disturbed, it is doubtful that site 23DA341 could make important contributions to the study of historic rural occupations in this region. This site does not retain sufficient integrity to be eligible for nomination to the National Register of Historic Places.

23DA342

Site 23DA342 is a scatter of lithic artifacts detected on the surface of two plowed plots. Numerous shovel probes were undertaken to define the horizontal limits (480 m north-south by 300 m east-west) of the site, and a controlled shovel test revealed that the cultural deposits are no more than 15 cm thick. An unstemmed biface fragment found on the surface and the cultural materials (an edge-modified flake and debitage) recovered from the shovel test were collected for further study and are described in Appendix 1. No features or temporally diagnostic artifacts were observed.

The site is located on a ridgetlope 110 m west of Birch Branch. It extends across two open fields currently covered with briars, dewberries, and grasses. Mixed hardwoods surround the site, and downslope to the northwest is a natural chert outcrop. An abandoned section line road bisects the site. A firebreak has also been cleared of vegetation around the site's periphery.

Site 23DA342 does not appear to be eligible for nomination to the National Register of Historic Places. Cultivation has badly disturbed the cultural deposits, and because of the current lack of diagnostics, the temporal placement of the resource is not possible. Without in-situ deposits, little knowledge would be gained from additional investigations at 23DA342.

23DA343

This site is a concentration of lithic debitage encountered on a wooded ridgetlope 60 m north of Birch Branch. Intermittent drainages delimit the site on the east and west. The western drainage has exposed a stratum of natural chert. Grasses and forbs form a dense surface cover which limits visibility. Subsurface probes and tests were necessary to locate the site initially and then determine its horizontal and vertical dimensions. Site 23DA343 extends to a maximum depth of 30 cm and over an area 60 m north-south by 80 m east-west. Soils encountered in these subsurface probes are clay loams with clay substrates.

Site 23DA343 is a shallow deposit of lithic debitage. The chert outcrop adjacent to the site may have served as a source of lithic materials. Chipping debris and an edge-modified flake recovered from a shovel test were collected and are described in Appendix 1.

There is no evidence of cultural features, and the temporal affiliation of the site cannot be established as datable materials were not encountered.

Lithic scatters lacking temporal diagnostics such as 23DA343 have limited information yield potential. Lithic reduction is obviously the primary activity indicated, and the proximity of a chert outcrop was likely an attraction to the location. While questions regarding lithic reduction could be addressed at this site, any research results would be of limited utility since they cannot be related to cultural periods. This site is therefore not recommended for nomination to the National Register of Historic Places.

23DA344

Two undisturbed stone mounds found on a wooded, moderately steep ridgeslope were recorded as site 23DA344. The southern feature, designated Mound A, is an ovoid mound measuring 3.27 m north-south by 5.20 m east-west. Mound B is located approximately 38 m upslope and to the northeast; it is a smaller, roughly circular feature which measures 2.85 m north-south by 2.55 m east-west. The mounds are composed of chunks of native limestone and dolomite and a slight amount of fill. Mound B ranges in height from 40 to 70 cm, and Mound A is 60 cm to 1 m high. Each feature was shovel tested, but no artifacts were encountered. Interestingly, the excavated fill contained charred materials, and the test at Mound A yielded a pecan shell which may have been a recent intrusion.

The right bank of Birch Branch (now inundated by Stockton Lake) is 70 m south of 23DA344. An unnamed tributary joins Birch Branch about 100 m southeast of the site. A variety of oaks and other hardwoods constitute the upperstory vegetation. Leaf litter and forbs provide a moderately dense ground cover. Inspection of the surrounding area did not yield cultural materials.

It is unusual to find undisturbed stone mounds in this region. The site exhibits characteristics of mound construction and topographic situation which are typical traits of the prehistoric Stockton, Fristoe, and Bolivar burial traditions (Chapman 1980:150-152). However, as the probes undertaken during the current investigations failed to produce cultural materials, the function and temporal placement of the site remain undetermined. The features at 23DA344 are therefore considered to have limited information yield potential. The site does not meet the eligibility requirements for nomination to the National Register of Historic Places.

23DA345

This lithic scatter was found on the right bank of an unnamed Birch Branch tributary. It is a small (20 m north-south by 5 m east-west) concentration of materials eroding from a tree-lined streambank. A few artifacts were also noted on the gravel bar below the bank; the broad, grassy floodplain to the west does not seem to contain any associated cultural deposits. Soils observed in the two shovel tests excavated on the floodplain are primarily clay loams. In contrast, probes made near the surface finds produced clays, sands, and gravels.

It is possible that the gravels at 23DA345 were exploited as a lithic source. This interpretation is supported by the fact that the artifacts observed are crudely flaked

cores and core tools, although these materials may have been redeposited since all exhibit patina and evidence of stream rolling. Also, probing along the bank exposure did not detect any in-situ deposits or features. Because of its questionable origin and apparently limited research potential, site 23DA345 is not eligible for nomination to the National Register of Historic Places.

23DA346

Site 23DA346 is a moderately dense prehistoric lithic scatter which is limited to the surface in some areas and extends vertically to at least 30 cm at other locations. The site encompasses 150 m north-south by 190 m east-west on a dissected ridgeslope approximately 100 m west of an unnamed Birch Branch tributary. The confluence of this tributary with Birch Branch is about 600 m southwest of 23DA346. Open grasslands predominate on the ridgeslope. The intermittent drainages which relieve the slope are lined with trees. An overgrown roadbed crosses the eastern margin of the site; otherwise, manmade disturbances are not evident. Ground surface visibility is fair in the grassy areas and excellent where Burlington-Keokuk limestone is exposed.

A bedrock mortar station was encountered at the limestone outcrop. This station is comprised of two mortar holes with possible hematite pigment staining; one is 15 cm deep and measures 12 by 15 cm, and the second measures 9 by 8 cm and is 4 cm deep. Ten shallow circular depressions, which may be ground, also occur on the surface of this outcrop. These depressions have no traces of pigment staining.

Chipping debris, a variety of unstemmed bifaces, and edge-modified specimens were observed on the surface of 23DA346. A stemmed biface comparable to forms diagnostic of Early and Middle Woodland occupations was collected from a drainage bed near the western edge of the site. Site 23DA346 may have been occupied during these periods, but the biface was found in a disturbed context and may not be related to the site occupation.

Three formal shovel tests were excavated at 23DA346. While one of the tests yielded no artifacts, two produced lithic debitage to a depth of 30 cm below the present ground surface and had not yet reached sterile deposits when they were terminated. The cultural materials encountered in these tests were collected for further study. Several unstemmed bifaces and edge-modified specimens found on the surface were also collected. These artifacts are described in Appendix 1.

The materials and features recorded at this site represent a number of activities important to the study of local prehistory. It would seem that 23DA346 was a habitation site where lithic reduction, a variety of processing activities, and possibly hunting were undertaken. Intact subsurface deposits which could yield significant data regarding the sequence of occupations may also be present. It is also distinguished by the presence of bedrock mortars and is the most extensive site recorded during this survey to have such features. Site 23DA346 is assessed as having a high information yield potential and as being potentially eligible for nomination to the National Register of Historic Places under Criterion D.

23DA347

This site consists of the remains of an historic farmstead covering an area 50 m north-south by 50 m east-west. There are no extant structures at 23DA347, and it is currently recognizable by an overgrown roadbed leading to a rectangular barbed wire fence enclosure. A foundation of rough-cut blocks measuring 5.50 m north-south by 2.40 m east-west is located within the enclosure. Fragments of concrete and burned corrugated tin also occur within the fenced enclosure. Glass and metal are strewn on the surface of the site and in the adjoining drainage 50 m to the east. Collection of these materials was not made because none are temporally diagnostic.

It seems that the farmstead was both demolished and burned, after which intruder vegetation took hold. The uneven surface of the site is covered with a dense growth of grasses and forbs, and a thicket of immature locust trees is located inside the fence enclosure. Mixed hardwoods surround the site area. Stockton Lake (formerly Birch Branch) is 75 m to the south. The location matches that of an unoccupied structure shown on the 1956 USGS Greenfield 7.5' topographic sheet.

Site 23DA347 was settled during the late nineteenth or early twentieth centuries. An informant remembered two houses with vertical board-and-batten siding on the property, one of which may have had a log interior section (Evans 1984). The original landholder could not be determined from the available records. Except for a brief period of abandonment around the time of the Great Depression, it appears that the farmstead was continually occupied at least from 1919 until its acquisition by the Corps of Engineers. T. N. Jacobs purchased the land from the Boyd family in 1919 (Dade County Deed Record 147:9), and in 1928 R. P. Murphy acquired the tract by foreclosure (Dade County Deed Record 148:319; Deed Record 170:476). In 1945 Isaac Feasel bought the land (Dade County Deed Record 200:387), and in 1958 his widow sold it to Thea Aleshire (Dade County Deed Record 220:387). Aleshire was the landholder at the time the Corps of Engineers acquired the property (U.S. Army Corps of Engineers. Real Estate Tract Map, Segment 6).

This site does not appear to be eligible for nomination to the National Register. It is highly disturbed and is not particularly significant to local history. The information yield potential of this site is minimal.

23DA348

Site 23DA348 is a sparse scatter of historic structural debris found near the location of two former buildings which are shown on the 1956 USGS Greenfield 7.5' topographic sheet. The area was one of the parcels owned by Isaac Feasel (Dade County Deed Record 180:288). Feasel later combined the land with two adjoining farms (Dade County Deed Record 200:387), and the entire holdings were sold to Thea Aleshire (Dade County Deed Record 220:387). As with site 23DA347, the property was owned by the Boyd family in 1919 (Dade County Deed Record 147:9).

This site is located 70 m north of the right bank of Birch Branch on a lower terrace currently supporting a thick growth of high grasses, forbs, and honey locusts. Because of the density of the vegetation, it was difficult to locate cultural remains. A thorough search was made, and all that could be found were two sandstone blocks, sheet metal, and corrugated tin in an area 50 m north-south by 90 m east-west. As these materials are obviously displaced and none are temporally diagnostic, they were not collected.

Site 23DA348 has been completely destroyed and does not meet any of the criteria of eligibility specified for nomination to the National Register.

Segment 4/Area 2

Segment 4/Area 2 is located east of a major left-bank tributary to Birch Branch (see Fig. 20). The survey unit consists of 104 acres on the crest and western slopes of a dissected ridge. Mixed hardwoods cover much of the area, although open grasslands attest to past clearing. A spring-fed drainage flows westward nearly dividing the area in half; a floodplain has developed at its confluence with the Birch Branch tributary. Silty soils were encountered on the ridgecrest, but elsewhere soils are either absent or shallow with a high clay content. Occasional outcrops of Burlington-Keokuk limestone and the Pierson Formation are evident in this area.

Old County Road EE serves as the southwestern survey boundary. The new right-of-way angles across the southeastern corner of the unit. Other manmade modifications encountered in Segment 4/Area 2 include three stock ponds, an overgrown roadbed, and an old barbed wire fence. Erosion does not appear to be particularly active.

Two historic sites, 23DA349 and 23DA350, were recorded by the current project efforts. The Archaeological Survey of Missouri data bank lists no known sites, and previous cultural resources investigations have not been reported in the area.

23DA349

This site consists solely of the decayed remnants of an historic bridge. The original placement of the feature is unknown. It is a 4-by-2.5-m segment constructed of split logs attached to two large (25.4 to 58.4 cm in diameter) logs with metal spikes and partially overlain by planking.

The feature was found on a lower terrace on the left bank of an unnamed Birch Branch tributary, approximately 55 m west-southwest of its confluence with a spring-fed drainage. The area is wooded, and dark silty and clay loams are exposed on the surface. The moist conditions and shoreline debris suggest that this location had been flooded recently. An unpaved road is shown on the 1956 USGS Greenfield 7.5' topographic sheet slightly north of 23DA349 and crossing the Birch Branch tributary. There may have been a bridge across this drainage which has since been inundated by the floodpool of Stockton Lake. There is nothing to positively relate this feature with the road, and the construction is not datable. Site 23DA349 is considered to be not eligible for nomination to the National Register of Historic Places.

23DA350

Site 23DA350 is an historic farmstead on the northern bank of a spring-fed drainage. No structures remain on the site, but a number of features were identified in an area 100 m north-south by 125 m east-west. Features encountered at this site include two rough-dressed stone foundations, an ovoid depression containing broken cinder blocks, two

parallel fences with segments of barbed wire and wood construction on the floodplain, and a three-sided corral with a cattle chute on the wooded ridgeslope to the north. Much of the site area is open pasture with shallow clay loam soils. The stream south of 23DA350 has exposed Pierson Formation limestones. An overgrown roadbed parallels the drainage on the north bank. Cultural materials observed on the surface include broken concrete, metal (pipe, shovel), and an abandoned vehicle. A whiteware sherd was retrieved from a shovel probe but discarded because it is not a diagnostic ware. Nothing was collected from the site.

According to courthouse and Corps of Engineers documents (Dade County Deed Record 195:93; U.S. Army Corps of Engineers. Tract file 640), a barn and machine shed were built and the residence modernized by Raymond and Aileen Wilson, holders of the land from 1942 until its acquisition by the Corps of Engineers. The features recorded during the current investigations appear to relate to this recent occupation. There is, however, a long history of ownership for this tract which can be traced back to 1857, the year it was patented by William Hudson of Tennessee (Dade County Plat Map; U.S. Department of Commerce, Bureau of the Census 1860). From 1871 until 1891, the property was in the hands of the Hailey family (Dade County Deed Record 15:491, 524; Deed Record 19:283; Deed Record 24:383; Deed Record 33:717; Deed Record 39:59; Deed Record 64:44). After 1891 the land was not held continuously by any one family, and the number of transactions shown in courthouse documents proliferated, often because of foreclosure due to delinquent taxes (Dade County Deed Record 70:3-4; Deed Record 105:442; Deed Record 120:408; Deed Record 127:449; Deed Record 146:359; Deed Record 155:429; Deed Record 168:290; Deed Record 193:217; Deed Record 194:214; Deed Record 196:442). Site 23DA350 unfortunately does not contain materials which can be attributed to the earlier occupations and is not eligible for nomination to the National Register of Historic Places.

Segment 4/Area 3

This 61-acre survey unit is situated on the left bank of an unnamed Birch Branch tributary now a part of Stockton Lake. The area is a moderately steep and dissected ridge adjacent to Segment 4/Area 2 (see Fig. 20). Mixed hardwood forest with dense understory growth occurs on the ridgeslopes, while a portion of the slopes and the ridgecrest have been cleared for either agricultural or grazing purposes and now support mixed grasses. A dirt road courses along the southern end of the survey unit, and a stock pond was encountered above the Birch Branch tributary.

Two prehistoric sites (23DA351 and 23DA352) and one historic site (23DA353) were found by the current investigations. The data bank of the Archaeological Survey of Missouri contains no records for known sites in the area, and previous cultural resources investigations are not reported in the available literature.

23DA351

This site is an undated sparse scatter of lithics encountered in a wheat field surrounded by thickly forested ridgeslopes to the north, east, and west. It is located on a ridgecrest 400 m west of a left-bank tributary to Birch Branch, and a dirt road runs along its southern edge. Chipping debris is evident in the central portion of the ridgecrest,

covering an area 200 m north-south by 200 m east-west. A shovel test excavated to a depth of 25 cm produced debitage from the 0-15-cm level. The silty soils present are shallow and in places are completely eroded, exposing Pennsylvanian conglomerate and limestone substrates. As no tools or temporally diagnostic materials could be found, site 23DA351 appears to be a locus of lithic reduction activities, and perhaps the conglomerate strata in the immediate area served as a source of raw material. Cultural features are not in evidence, and collections were not made at the site.

Ground surface visibility at site 23DA351 is good because of cultivation. However, because the cultural deposits are shallow, this activity has undoubtedly reduced the integrity of the site. Without intact deposits, the information yield potential of the site is limited, and it is not eligible for nomination to the National Register.

23DA352

Site 23DA352 is a lithic scatter lacking temporal indicators. Lithic debitage is sparse to moderately dense at this site, and features and other artifacts were not encountered. Excavation of two controlled shovel tests documented deposits to 45 cm below the surface, 15 cm deeper than the plow zone. No artifacts were collected from this site.

The site is situated on an artificially terraced grassy ridgeslope approximately 100 m west of an unnamed left-bank tributary to Birch Branch (currently a part of the Stockton Lake floodpool). The density of the grasses limits surface visibility. An intermittent drainage bisects the slope, and an overgrown roadbed was identified near the northern edge of the site. Its horizontal dimensions, determined on the basis of informal shovel probes made at 40-m intervals, are 350 m northwest-southeast by 100 to 150 m northeast-southwest. The extent of 23DA352 is nearly coincident with the extent of an open pasture which has the appearance of a formerly cultivated field. Soils at this location are clay loams which overlie decomposing Pierson Formation limestone. A thicket of honey locusts is developing in the area, and mixed hardwoods forest the slopes above and below the site, suggesting that the entire ridgeslope originally was wooded.

Deforestation, terracing, and cultivation have diminished the information yield potential of 23DA352. As noted above, intact deposits may still be present below the plow zone, but most of the cultural deposits have been disturbed. Lithic reduction seems to be the primary activity represented, but the temporal context of the site remains unknown. All things considered, 23DA352 appears not to meet the criteria of National Register eligibility.

23DA353

This site constitutes the remains of an historic farmstead which appears to be a twentieth-century settlement. None of the trash or features observed indicate nineteenth-century occupations, but courthouse records show that an entire quarter section of land was patented by Samuel E. Shaw from Kentucky on March 30, 1857 (Dade County Plat Map; U.S. Department of Commerce, Bureau of the Census 1870), after which it was intermittently held by members of the Shaw family until 1910 (Dade County Deed Record 10:498; Deed Record 27:109; Deed Record 30:206; Deed Record 34:410; Deed Record 91:226). From 1910 on, foreclosures and sheriff's sales spurred a flurry of transactions. A. L. and Jessie Hull, the last

landowners prior to acquisition of the property by the Corps of Engineers, purchased the property in 1954 (Dade County Deed Record 217:58). According to Corps of Engineers records, the Hull residence was a "partially modern" frame house which appeared to be 50 years old in 1963, and three springs furnished water for livestock and household use (U.S. Army Corps of Engineers. Tract file 637).

The current project found a cluster of features at site 23DA353, including an alignment of rough-dressed sandstone foundation blocks, a possible collapsed chimney, a corral and cattle chute, remnants of wood and barbed wire fences, and a trash-filled depression. Much of the site area (defined here as 100 m north-south by 60 m east-west) is littered with domestic and farm refuse. The site is on a wooded ridgeslope, primarily walnut and elm forest with a dense understory of sumac, vines, poison ivy, and other invader species. A left-bank tributary to Birch Branch is 100 m to the east. Soils at the site are gravelly clay loams covered with dense humus. Rose bushes, strawberries, gooseberries, and irises are present in the vicinity of the foundation feature. Springs were detected downslope, 40 m east of the foundation and above a stock pond. An abandoned roadbed winds through the site. No subsurface probes or collections were made during the current investigations because of the thinness of the soils.

Site 23DA353 does not meet the criteria of eligibility for nomination to the National Register of Historic Places. Its structures have been demolished and much of the site appears to have been bulldozed. Cultural materials observed at this farmstead site are all assignable to the twentieth century and do not indicate earlier occupations. It is doubtful that significant information regarding local history could be retrieved from this site.

Segment 4/Area 4

Stockton Lake (formerly the Sac River Valley) defines the western limit of this 167-acre parcel (see Fig. 20). The topography is rugged, particularly in the northern area where Burlington-Keokuk limestone and Pierson Formation strata form a steep bluff known as Shaw Bluff. Otherwise, Segment 4/Area 4 consists of moderately steep ridgeslopes dissected by spring-fed streams and intermittent drainages. Mixed hardwood forest covers most of the survey unit, having little underbrush in the northern half and dense secondary growth in the southern area. Certain portions of the upper slopes appear to have been deforested and are now open pastures which support dense stands of forbs, grasses, catclaws, and sumacs. Soils are deepest (ca. 30 cm) on these upper slopes and are primarily clay and silty loams. Elsewhere, soils are either absent or very shallow above the limestone substrate. The shoreline is rocky, weathered Pierson Formation material. Surface visibility at Segment 4/Area 4 varies from fair to poor dependent upon the presence of leaf litter and vegetation.

Alterations to the landscape at this location appear to be limited to the aforementioned deforestation and a roadbed which leads to a former residence complex shown on the 1956 USGS Greenfield 7.5' topographic sheet. Four sites were recorded at this location; two are prehistoric (23DA354 and 23DA355), and two are historic (23DA356 and 23DA357). Reports of investigations do not indicate any earlier research at this area, and no known sites are listed with the data bank of the Archaeological Survey of Missouri.

23DA354

Site 23DA354 is a lithic scatter which did not yield temporal diagnostics. The site encompasses an area 340 m northeast-southwest by 200 m northwest-southeast on a ridgeslope with the Stockton Lake shoreline abutting its western limit. The upper slopes of the site have obviously been deforested for either pasturage or cultivation and currently support secondary growth (i.e., sumacs, forbs, grasses, briars). Downslope the site is wooded, and erosion and colluvial action appear to be affecting the site. Fluctuating lake levels and wave action are damaging the western margin of 23DA354. Natural chert exposures occur on the lower slopes.

With the exception of the shoreline exposures, cultural materials are not evident on the surface. Upslope, leaf litter and vegetation limit ground surface visibility. In addition to an informal probe, two shovel tests were excavated. One of the tests produced lithic debitage from 30 cm of silty and clay loams, while the other, located 3 m from the first, was negative. Artifacts noted at the site include chert chips, flakes, a uniface, and a biface, none of which were collected. Datable materials and cultural features were not encountered.

Overall, this site appears to be a lithic reduction locality, particularly since lithic materials are locally available. The presence of other tools suggests that tool manufacturing and/or processing activities were also undertaken at the site. Because of the disturbances noted and lack of datable materials, the research potential of the site is limited. As a result, site 23DA354 is not recommended for nomination to the National Register of Historic Places.

23DA355

This is a lithic scatter found in a cleared pasture. Numerous probes and two formal shovel tests encountered chert flakes, chips, and a biface fragment from a 30-cm-thick culture-bearing zone. On the basis of subsurface testing, the horizontal extent of 23DA355 was determined to be 200 m north-south by 100 m east-west. The density of artifacts is low; no cultural materials could be found on the surface because of the thickness of the ground cover. Cultural features were not identified, and temporally diagnostic artifacts were not recovered. Collections were not made at the site.

Site 23DA355 is situated on a ridgeslope approximately 100 m east of a Sac River tributary now inundated by the Stockton Lake floodpool. Soils at this location overlie Burlington-Keokuk limestone. Certain areas are deflated, while 35 cm of fill was encountered in one shovel test. Despite the variation in soil thickness, vegetation at 23DA355 prevents good visibility of the surface. Tall grasses, forbs, and sumacs cover the site area. Dense mixed hardwood forest surrounds the site.

Site 23DA355 appears to have limited information yield potential. Deforestation has most likely disrupted the integrity of the shallow cultural deposits. If the area was cultivated in the past, the possibility of in-situ deposits is further diminished. Lithic reduction is the primary activity indicated by the artifacts, but without intact datable deposits, further investigations at 23DA355 would be of limited utility. The site is therefore assessed as being ineligible for nomination to the National Register of Historic Places.

23DA356

Site 23DA356 consists of structural features, fences, and roadbeds in an area 80 m north-south by 100 m east-west. The site represents the remnants of an historic farmstead, possibly dating to the mid-nineteenth century. No structures remain as they have been demolished and/or removed. Features at the site include a rectangular alignment of rough-dressed limestone blocks which was probably the house foundation and chimney, a square (10-by-10-m) depression in the northern site area, and a circular depression which may have been a springhouse or "cave" adjacent to a seep and containing limestone blocks. Irises, day lilies, and a variety of trees are growing along a rectangular barbed wire fence enclosure around the foundation feature, which is itself overgrown with sumacs and briars. A large oak covered with ivy is located at the northwestern corner of the enclosure. A roadbed skirts along the western site area and forks near the square depression. One of these forks continues 250 m downslope leading to Stockton Lake, while the other courses eastward across the site area and is partially lined with a stone wall and barbed wire fencing. Broken glass, ceramic sherds, and numerous metal items were noted on the surface of 23DA356. None of the specimens observed were collected since none are temporal indicators.

The site is situated on a gentle ridgetop which is bisected by an ephemeral stream. Hardwood forest surrounds this grassed clearing suggesting that the area had been purposefully deforested in the past. Limestone bedrock is exposed on the surface in portions of the site. A shovel probe was attempted, but it encountered only 6 cm of sterile fill. It is therefore doubtful that cultural deposits have much depth at 23DA356.

The history of ownership for this tract can be traced back to 1851 when James M. Dicus patented it and an adjacent property (Dade County Plat Map). A total of 191.5 acres, including this parcel, was purchased in 1857 for \$1,000 by John Wilson (Dade County Deed Record 5:270). George W. and Mary Cotner acquired the property in 1858 (Dade County Deed Record 5:665) and four years later sold it to Campbell P. Hudson (Dade County Deed Record 8:88). Between 1882 and 1884, a series of quitclaim deeds were filed in favor of James H. Markum (Dade County Deed Record 40:428; Deed Record 53:100, 428; Deed Record 54:633). From this point on, except for two brief intervals, the land changed hands between members of the interrelated Hudson, Marcum, and Crain families (Dade County Deed Record 110:504; Deed Record 118:296-297; Deed Record 196:5-6; Deed Record 199:550; Deed Record 200:267, 279-280). The Corps of Engineers acquired the property from Rayburn and Clara Crain in 1966 (Dade County Deed Record 232:456).

Corps of Engineers tract file 911 describes the former farmstead complex in detail. It consisted of an older wood-frame, one-and-one-half-story house built in the Cumberland style, a wellhouse, and numerous other outbuildings. The Cumberland style of house construction was especially popular during the late nineteenth and early twentieth centuries. The former barn was an excellent example of the continuous occupation of site 23DA357 from the mid-nineteenth century to recent years as it was built around two log cribs and roofed partially with asphalt shingle and partially with older wood shingle. The arrangement of the features recorded at the site corresponds well with the structures described in the Corps of Engineers records (U.S. Army Corps of Engineers. Tract file 911), although not all of the outbuilding locations were identified. It appears that, because of its disturbed state, site 23DA356 is not eligible for nomination to the National Register of Historic Places.

23DA357

This site consists of a single wood-frame structure which has been moved onto the Corps of Engineers boundary so that one-half of the structure is on Corps property. It is situated on a wooded ridgeslope 300 m south of an unnamed Sac River tributary. The structure measures 16 m north-south by 10 m east-west and has a corrugated tin roof; it appears to be a twentieth-century feature as it is built of cut lumber and all of the hardware is machinemade. The structure rests on a wood-beam axle and two iron wheels. There are two hinged doors on the northern facade and one hinged and one sliding door on the southern facade. The eastern and western facades have two small (30-by-61-cm) windows covered with chicken wire. The interior of the structure has been partitioned into three cells, and it is wired for electricity. The occurrence of the structure at this location seems recent since the access road leading to this Corps of Engineers tract has been rerouted around it. Because the location of 23DA357 is not the original placement of the structure, associated deposits were considered to be unlikely. As a result, subsurface testing was not undertaken during the current investigations.

Interestingly, the Corps of Engineers records (U.S. Army Corps of Engineers. Tract file 911) for this tract include a photograph of this structure, identified as the recently built milk barn once located at the 23DA356 farmstead. Knowing this, the current location of 23DA357 would postdate Corps of Engineers acquisition in 1966 (Dade County Deed Record 232:456). Site 23DA357 would not contribute much useful information to the local data base since it is a modern structure which has been relocated. It does not meet any of the criteria of eligibility for nomination to the National Register of Historic Places.

Segment 4/Area 5

Segment 4/Area 5 includes 119 acres on the left bank of the Sac River, now inundated by Stockton Lake (see Fig. 20). A roadbed serves as the northern boundary for this dissected ridgeslope which has wooded drainages and open grasslands on the upper slopes. In general, the area slopes gently, although some of the drainages steeply incise the ridge exposing Pierson Formation and Burlington-Keokuk limestone strata. Because of the density of undergrowth and leaf litter in the wooded areas, surface visibility ranges from poor to fair. Comparable visibility of the surface was encountered in the clearings where grasses, forbs, briars, and sumacs predominate. Clay loams form thin to thick soils. The presence of secondary growth on the upper slopes suggests prior clearing of vegetation for agricultural or pasturage purposes. A large rock dam built across an intermittent drainage is another manmade modification observed at this location; it was not recorded as a site because it appears to be less than 50 years old.

There are no previous reports of cultural resources investigations for this area, and the Archaeological Survey of Missouri data bank has no known sites listed. The current work located two prehistoric sites (23DA358 and 23DA359) and one historic site (23DA360).

23DA358

Site 23DA358 is a moderately dense scatter of lithic artifacts which covers an area 400 m north-south by 275 m east-west. The site is situated on a ridgeslope which is

currently a recently burned, open field covered with grasses, forbs, sumacs, and catclaws. The left bank of Stockton Lake (formerly the Sac River) is 100 m to the southeast. Soils are clay loams with increasing clay content with depth. It seems that this area has been deforested as mixed hardwoods occur to the east, south, and west. The uneven nature of the surface and remnants of a corn crop indicate past cultivation, although a plow zone could not be readily defined from the subsurface testing undertaken. A recently cleared fire lane encircles the entire field and a utility line crosses the site.

Artifacts observed on the surface of 23DA358 include a stemmed biface, unstemmed bifaces, cores, and debitage. From a positive shovel test, it is known that the site's cultural deposits extend to at least 30 cm. All of the materials recovered from the test and a sample of the specimens observed on the surface were collected for further study. These items are described in Appendix 1; the stemmed biface collected is comparable to Early and Middle Archaic period forms.

The vertical extent of disturbance at 23DA358 is difficult to ascertain as a well-defined plow zone was not encountered. Given the location of the site on a ridgetlope, however, it is likely that deep cultural deposits are not present and that cultivation has disturbed the bulk of the cultural remains present. More-intact Early to Middle Archaic components are present in the project area and have a greater information yield potential. Thus, site 23DA358 is not eligible for nomination to the National Register of Historic Places.

23DA359

This is an undisturbed prehistoric stone mound 8 m in diameter and approximately 1 m in height. It is situated on a ridgetlope on the right bank of an ephemeral stream which is approximately 25 m west of Stockton Lake and 80 m west of the former channel of the Sac River. The site occurs in moderately dense woods with a ground cover of grasses, forbs, and leaf litter. The feature is constructed of cobble-sized limestone fragments and contains a slight amount of greasy, dark clay loam fill under 20 cm of stone overburden. Two shovel probes were dug to 40 cm depth at the eastern and western margins of the mound. The western probe produced a reduced core and debitage which were collected and are discussed in Appendix 1. Datable materials and interior features were not detected. Subsurface probing was also undertaken in the vicinity of the feature but had negative results. Site 23DA358, the extensive lithic scatter described above, is 100 m west of the mound.

Judging from the results of investigations at other stone mounds in the region, an undamaged mound such as 23DA359 has a high potential to yield significant data. Under the specifications of Criterion D, the site appears to be eligible for nomination to the National Register of Historic Places.

23DA360

Site 23DA360 is a historic feature encountered at the southern edge of an open field on a wooded ridgetlope approximately 40 m north of Stockton Lake (formerly the Sac River Valley). It is an alignment of limestone and sandstone stacked 20 cm to 1 m high and 50 cm wide. The alignment parallels the shoreline, running north-south for a distance of about 150 m, whereupon it makes a turn to the southwest and continues for another 80.5 m. A

400-m-long barbed wire fence with a stacked-stone fence post joins the western end of the rock alignment. Household refuse, primarily recent glass, has been dumped below the wall. Portions of the feature appear to be slumped, but overall it is in fair condition.

The alignment at 23DA360 was probably a retaining wall meant to retard erosion. It is difficult to date such a feature, but such conservation measures were relatively uncommon before the 1930s. With this in mind, the land history was not investigated beyond 1927 when a warranty deed from W. A. and Jenny Long to George O. and Ruth Johnson was recorded (Dade County Deed Record 168:107). Either of these two farm families could have constructed the wall.

Site 23DA360 is not likely to yield significant information about local history. As a result, it is not eligible for nomination to the National Register.

CHAPTER 4

SIGNIFICANCE OF THE CULTURAL RESOURCES

Assessments of the cultural and scientific importance of the cultural resources encountered during this phase of work were derived in a manner consistent with the methods employed by Girard and Freeman (1984) and are presented in this chapter. Each site was evaluated in terms of the National Register of Historic Places criteria of eligibility, and this discussion expands upon the short statements made with each site description in Chapter 3. These assessments are also compared with the findings of Girard and Freeman (1984).

National Register Criteria of Eligibility

Fourteen of the sites recorded during the current project are recommended as eligible for nomination to the National Register of Historic Places and are listed in Table 5. Criterion D, which specifies eligibility for sites with the potential to contribute important information relevant to history or prehistory, is applicable in each case. The recommended historic sites also have the potential to yield significant data regarding nineteenth-century settlement (Criterion A) and rural architecture (Criterion C) of the western Ozark Highlands. Unlike the previous survey (Girard and Freeman 1984), this project encountered no sites eligible for nomination under Criterion B as none of the historic sites could be demonstrated to be associated with individuals prominent in the history of either the Stockton or Pomme de Terre areas. The following discussion of significant sites is organized according to the criterion used to assess National Register eligibility.

Significant Sites, Criterion A

Data obtained from field investigations and archival research indicate that sites 23HI555 and 23HI562 are associated with occupations significant to the history of the Pomme de Terre area. In both cases, archeological evidence corroborates the historical records. Comparable sites were not found at Stockton Lake. In contrast, five sites significant to the history of both areas were recommended for nomination to the National Register by Girard and Freeman (1984:201).

Site 23HI562, homesteaded in 1855 by Thomas B. Pitts, is the earlier of the two sites recommended as eligible and dates to the initial Anglo-American period of settlement in the western Ozark Highlands. Site 23HI555 represents a later nineteenth-century occupation by a second-generation member of the Pitts family. These two sites offer excellent opportunities to study the early rural development of the region from the perspective of one of its pioneer families.

TABLE 5
SUMMARY OF SIGNIFICANT SITES

	Early/Middle Archaic	Late Archaic, Early/Middle Woodland	Late Woodland/ Mississippian	Historic	Undetermined
CRITERIA A, C, AND D					
23HI555				x	
23HI562				x	
CRITERION D					
23DA328			x		
23DA331					x
23DA346		x			
23DA359					x
23HI554		x			
23HI563					x
23PO304			x		
23PO349					x
23PO355		x			
23PO356	x	x	x		
23PO359	x				
23PO361		x	x		

Significant Sites, Criterion C

The log structures at 23HI555 and 23HI562 (see Fig. 10) are sufficiently intact to qualify the sites for nomination under Criterion C. Because of the abundant timber in the region, the use of logs in construction was common during the initial Anglo-American settlement period. When milled lumber became an economically feasible alternative during the late nineteenth century, the practice of log construction was essentially abandoned. According to historic documents, sites 23HI562 and 23HI555 represent first- and second-generation farmsteads which were occupied continuously by various members of the Pitts family until the 1950s. These sites could offer significant data to the study of individual variations in log structures and changes in methods of construction over time. None of the sites reported in Girard and Freeman (1984) qualified for nomination under this criterion.

Significant Sites, Criterion D

Criterion D is applicable for all 14 of the sites recommended as eligible for nomination to the National Register of Historic Places. Each of these sites is considered to be significant on the basis of intact condition and the potential to contain information of importance to the prehistory and history of the Stockton and Pomme de Terre areas. Judgments of significance are geared toward understanding cultural adaptive systems in a variety of temporal and spatial contexts.

Table 6 presents locational and size data for all datable sites recorded during the current project and is organized using a general chronological framework. As in Girard and Freeman (1984:202-203), decisions regarding the classification of prehistoric components are based on the presence of certain categories of artifacts (i.e., projectile points, ceramics) commonly associated with particular cultural periods. Appendix 1 of this report includes detailed descriptions of the diagnostic artifacts collected during the current project. The use of diagnostic indicators to determine temporal placement of components within a general chronology is necessitated by the level of these investigations.

EARLY/MIDDLE ARCHAIC PERIOD

The current project encountered five Early/Middle Archaic components at Stockton Lake and none at Pomme de Terre Lake. All are moderately dense lithic scatters situated on ridgeslopes at 23DA358 and 23PO359 and on terraces at 23PO356, 23PO358, and 23PO367. They are most common along the Little Sac River, although two (23PO367 and 23DA358) were located above the Sac River and its tributaries. Only one component at 23DA358 is more than 100 m from a perennial water source. Site 23PO356 appears to be small because it encompasses less than 1 hectare on Corps of Engineers property, while the other Early/Middle Archaic components are more than 3 hectares in size.

The extensive Early/Middle Archaic components may represent single occupations by large groups or possibly continuous or repeated habitation by small groups. Cultivation has damaged each of the components to some degree, and 23PO367 has been further altered by periodic inundation and excavation of a stock pond. The artifacts observed at sites 23PO356 and 23PO359 are indicative of more-varied activities than is suggested for the other Early/Middle Archaic components. Because deposits at sites 23DA358, 23PO358, and 23PO367 are quite disturbed and do not extend vertically beyond the plow zone, the potential for research is limited. It is felt that because of the density and extent of material remains and apparent intactness of 23PO356 and 23PO359, the research problems outlined above may be best addressed at these two sites.

Girard and Freeman (1984:204-205) report that components of this period have been recorded in every topographic situation and along a variety of drainage systems, usually near perennial drainages. These investigations found all but one of the Early/Middle Archaic components within 100 m of a perennial water source on only three of five defined landforms. With one exception (23PO356), Early/Middle Archaic components can be characterized as either extensive terrace or upland sites. The horizontal extent of the single small terrace site (23PO356) could be determined only within Corps of Engineers holdings, and it seems likely that it continues onto private property and is thus larger than is suggested here. The greatest variety of tool forms were encountered at this small terrace

TABLE 6
 FREQUENCIES OF COMPONENTS BY CULTURAL PERIOD AND SITE LOCATION*

LANDFORM	Early/Middle Archaic Period		Late Archaic and Early/Middle Woodland Period		Late Woodland/ Mississippian Period		Historic Period		Subtotals
	#	%	#	%	#	%	#	%	
Ridge	0		1	(14.3)	0		4	(16.6)	5
Ridgeslope	2	(40.0)	1	(14.3)	1	(16.7)	14	(58.4)	18
Upper Terrace	2	(40.0)	1	(14.3)	1	(16.7)	1	(4.0)	5
Lower Terrace	1	(20.0)	4	(57.1)	4	(66.6)	5	(21.0)	14
Gravel Bar	0		0		0		0		0
DRAINAGE									
Pomme de Terre River and tributaries	0		1	(14.3)	0		3	(12.5)	4
Sac River and tributaries	1	(20.0)	2	(28.6)	2	(33.4)	15	(62.5)	20
Little Sac River and tributaries	4	(80.0)	4	(57.1)	4	(66.6)	6	(25.0)	18

*28 of the 68 sites investigated have prehistoric components which could not be assigned to a specific period; 3 sites have components which could not be assigned to either prehistoric or historic periods.

Table 6, continued

	Early/Middle Archaic Period		Late Archaic and Early/Middle Woodland Period		Late Woodland/ Mississippian Period		Historic Period		Subtotals
	#	%	#	%	#	%	#	%	
DISTANCE TO PERENNIAL WATER SOURCE									
< 100 m	4	(80.0)	6	(85.8)	5	(83.3)	12	(50.0)	27
≥ 100 m < 350 m	1	(20.0)	1	(14.2)	1	(16.7)	9	(37.5)	12
≥ 350 m < 600 m	0		0		0		3	(12.5)	3
≥ 600 m < 850 m	0		0		0		0		0
≥ 850 m < 1.25 km	0		0		0		0		0
≥ 1.25 km	0		0		0		0		0
SIZE									
≤ 1 ha	1	(20.0)	2	(28.5)	2	(33.3)	20	(83.3)	25
> 1 ha ≤ 3 ha	0		1	(14.5)	0		2	(8.3)	3
> 3 ha ≤ 7 ha	1	(20.0)	2	(28.5)	2	(33.3)	1	(4.2)	6
> 7 ha	3	(60.0)	2	(28.5)	2	(33.3)	1	(4.2)	8

site, although one of the upland sites (23PO359) also appears to represent a number of activities. The other upland (23DA358 and 23PO359) and terrace (23PO358) sites are disturbed and contain a narrower range of cultural materials. Sites 23PO356 and 23PO359 are assessed as having a high probability of containing buried Early/Middle Archaic components which would contribute significant data for the refinement of regional chronology.

LATE ARCHAIC AND EARLY/MIDDLE WOODLAND PERIODS

The Late Archaic and/or Early/Middle Woodland period components encountered at seven sites (23DA330, 23DA346, 23HI554, 23PO355, 23PO356, 23PO361, and 23PO367) during the current project are moderately dense deposits which occur primarily on terraces and near a variety of drainages. The component found at 23HI554 is small and is the only one located on a ridge. The nearest perennial water source to the component at site 23DA346 is over 100 m distant. All of the components assignable to these periods are lithic scatters; one (23DA346) contains a bedrock mortar feature, and a possible hearth was observed at another (23PO361). Site 23HI554 is the only site at Pomme de Terre Lake which yielded Early/Middle Woodland materials. Each of the size categories is represented by the terrace sites at Stockton Lake, but the dimensions of three components (23PO355, 23PO356, and 23PO361) are artificially determined by survey boundaries. In fact, as pointed out by Girard and Freeman (1984:205), the division of terrace areas into distinct sites is probably not meaningful because these areas appear to have been the focus of activity during the Late Archaic and Early/Middle Woodland periods.

Sites 23PO356 and 23PO367, which yielded materials indicative of Early/Middle Archaic occupations, also produced Middle Woodland and Early/Middle Woodland projectile point types. As noted in the previous discussion, 23PO356 presents an excellent opportunity to retrieve information regarding the sequence of occupations and range of activities as it contains intact deposits beneath the plow zone. Site 23PO367 is too disturbed to contribute significant data.

Cultivation has damaged shallow deposits at all but two components (23DA346 and 23HI554). Unfortunately, 23DA330 appears to originally have been a shallow Middle/Late Woodland component and is now lacking in integrity. Site 23PO361 has been further affected by wave action, periodic flooding, artificial terracing, and construction of road embankments but still seems to contain intact, buried deposits. The component at the small ridge site (23HI554) at Pomme de Terre Lake has been minimally disturbed by vegetation clearing activities.

The sites which contain cultural features (23DA346 and 23PO361) yielded a variety of tool forms indicative of several activities. A range of artifacts was also noted at two of the terrace sites (23PO355 and 23PO356). Deposits containing diagnostic point types with modified and unmodified flakes were encountered at the single upland site (23HI554) and the remaining terrace sites (23DA330 and 23PO367).

In summary, four of the terrace sites (23DA346, 23PO355, 23PO356, and 23PO361) at Stockton Lake and the upland site (23HI554) at Pomme de Terre Lake are judged to be eligible for nomination to the National Register of Historic Places under Criterion D. The components at sites 23DA330 and 23PO367 do not retain sufficient integrity to be considered eligible. Smaller components such as those at 23HI554 and 23DA346 may represent functionally distinct habitations as proposed by Girard and Freeman (1984:206), and the former is

the only evidence of Late Archaic or Early/Middle Woodland upland activity recorded during these investigations. The density and variety of artifacts indicate a wide range of activities at three of the terrace sites (23PO355, 23PO356, and 23PO361) recommended as eligible for nomination to the National Register.

LATE WOODLAND/MISSISSIPPIAN PERIODS

Six components (23DA328, 23DA330, 23PO304, 23PO356, 23PO361, and 23PO367) at Stockton Lake are assignable to these late prehistoric periods. It is interesting to note that four of the components (23DA330, 23PO356, 23PO361, and 23PO367) were identified at sites which also yielded materials diagnostic of earlier occupations.

Two different types of sites relate to these periods: (1) upland rockshelters, and (2) terrace lithic scatters. One example of a rockshelter site was encountered at 23DA328 which is over 100 m from the nearest perennial source of water (Fig. 21a). Both ceramics and projectile points indicative of Late Woodland/Mississippian periods were recovered from surface and subsurface contexts at this site, along with faunal remains and other lithic artifacts. Girard and Freeman (1984:206) reported no Late Woodland/Mississippian components at any of the rockshelters recorded during the previous survey. Even though 23DA328 has been affected by uncontrolled excavations, a portion of the midden appears to be undisturbed. Because this is one of the few rockshelters above the Stockton Lake floodpool with a Late Woodland/Mississippian component, 23DA328 is recommended as eligible for National Register nomination.

The other five components are fairly dense lithic scatters on terraces, most exceeding 3 hectares in size. Site 23PO304 is the only instance where components other than Late Woodland/Mississippian occupations are not in evidence. It is further distinguished by the fact that it appears to have been associated with the Cordwood Cairn excavated by Wood (1965:145-154) and it still has intact deposits buried in the western portion of the site.

Multiple components including Late Woodland/Mississippian occupations are indicated at the other terrace sites. Of these sites, 23PO356 and 23PO361 have the fullest complement of tool forms and appear to be relatively undisturbed. Sites 23PO356 and 23PO361 are felt to have the greatest potential for isolation of components and determination of associated activities. The information yield potential of the components indicated at 23PO367 and 23DA330 is limited because of extensive damage by cultivation, modern roads, and other alterations to the landscape.

Nearly all of the sites with Late Woodland/Mississippian components identified by this survey are extensive terrace sites. The sole exception (23DA328) is an upland rockshelter which is assessed as having a high research value because of its potential to yield data significant to the study of site activities. Site 23DA328 is also one of the few rockshelters related to Late Woodland/Mississippian occupations which has not been inundated by Stockton Lake. Three of the terrace sites (23PO304, 23PO356, and 23PO361) have high potentials for defining site activities associated with specific occupations. Similar findings are reported by Girard and Freeman (1984:207) for occupations relating to these periods.

HISTORIC PERIOD

Patterns of distribution similar to those noted by Girard and Freeman (1984:207) seem to also be applicable for the historic components recorded during the current project. Historic sites were found to be small in size, and most occur in upland (i.e., ridges and ridgeslopes) situations. One-half of the components are within 100 m of a perennial water source, and none are more than 350 m from water. Historic components were encountered only along the Sac and Little Sac drainage systems.

The higher incidence of historic components at Stockton Lake and in upland situations reflects the effects of inundation and differing survey methods rather than significant patterns of settlement. Archival records indicate that nineteenth-century settlement in the Pomme de Terre area was most intensive adjacent to the upland prairies, particularly concentrated in the vicinity of the Wheatland Prairie northwest of the area examined. Also, according to early land maps, the emphasis of settlement in the Stockton and Pomme de Terre areas changed from the uplands to the bottomlands and lower terraces during the latter part of the nineteenth century. Since the construction of the reservoirs, the bottomlands and much of the lower terrace areas are now inundated and inaccessible. Although archeological investigations were conducted in the areas to be affected by Stockton and Pomme de Terre lakes, the emphasis of this early work was on prehistoric resources and not historic sites. The current project was not biased in this manner but was limited to examination of areas above the floodpool level.

Of the 24 historic sites recorded during this phase of work, only 2 farmsteads (23HI555 and 23HI562) appear to be eligible for nomination to the National Register under Criterion D. Sites 23HI555 and 23HI562 are recommended as eligible for nomination because they can be fairly accurately dated on the basis of courthouse documents and they are the most intact historic sites encountered. These two sites are believed to have the greatest potential to yield information regarding the sequence of occupations and the changes in farmstead activities and material culture in this area of the western Ozark Highlands from the mid-nineteenth century through the twentieth century.

UNDATED SIGNIFICANT SITES

Four presumably prehistoric sites (23HI563, 23PO349, 23DA331, and 23DA359) encountered on ridgeslopes above the Pomme de Terre and Sac river systems also appear to contain significant research data in spite of the current inability to relate them to specific cultural periods. All of the sites appear to be intact; two (23HI563 and 23PO349) are lithic scatters, one (23DA331) is a bedrock mortar station with an associated midden, and one (23DA359) contains a stone mound feature. Each of the sites has good potential to yield information regarding upland activities. It is considered highly possible that time-diagnostic materials may be recovered from these sites because of the apparent lack of disturbances.

Sites 23HI563 and 23PO349 are lithic scatters located at natural chert nodule sources. Both are located at Pomme de Terre Lake; the former is very small and may represent an episode of procurement and reduction in contrast to the latter which has more-extensive deposits. The chipping debris observed at 23HI563 represents all stages of lithic tool manufacturing, possibly even heat treatment, while the presence of bifaces and unifaces suggests that other types of processing activities were undertaken as well. The extent and

Photographs of Prehistoric Sites



a. View of rockshelter (23DA328) showing mounds of excavated fill in the foreground.



b. View of undated site (23DA331) with bedrock mortar station.

density of deposits at 23PO349 is indicative of repeated use, and perhaps separate components can be isolated.

Site 23DA331 (Fig. 21b) at Stockton Lake is considered to be a significant resource because it is one of the few known sites in the region with a bedrock mortar feature. The site seems to be a localized habitation which may have been located to take advantage of a natural rock outcropping for specialized processing, although testing of the midden also yielded evidence of lithic reduction activities.

The stone mound at 23DA359 overlooks the Sac River Valley and was the only such feature to produce cultural materials. It is definitely not a natural occurrence and does not appear to be the result of recent land clearing. Burial or "ceremonial" mound complexes are indigenous in the region, and 23DA359 may represent such a feature in spite of the fact that human burial remains were not encountered by testing. Site 23DA359 is considered to be significant as it is one of the few unexcavated stone mounds recorded which remains undisturbed and has the potential to yield important information to the local data base.

CHAPTER 5

MANAGEMENT RECOMMENDATIONS AND PROJECT SUMMARY

This chapter summarizes the current project results and makes recommendations for the management of the sites assessed as significant. The recommendations are presented first and are organized according to survey area. The focus of these recommendations is upon preservation, either through avoidance or protective measures. If preservation is not possible and the integrity of significant sites is threatened, then mitigation of impacts through data recovery is a recommended option. For those sites eligible for National Register nomination under Criteria A and C, mitigation could also entail the initiation of an interpretive program wherein the public would be informed of significant aspects of architecture and early settlement in the western Ozark Highlands. Following the recommendations is a summary of these investigations.

Pomme de Terre Lake

Segment C/Area A

No cultural resources were encountered in this area.

Segment C/Area B

Two sites (23HI555 and 23HI562) eligible for nomination to the National Register under Criteria A, C, and D are located in this area. Since both are surrounded by wooded areas, they are not highly visible. No roads provide easy access to the sites at present. It is recommended that the present conditions be maintained and that future development plans avoid these significant sites. Mitigation through data recovery and efforts to inform the public of the significance of these two sites should be initiated only if they cannot be preserved.

Segment D/Area A

Only one (23HI554) of the six sites encountered in this area is assessed as significant. It is situated immediately adjacent to a residential area and probably receives a fair amount of foot traffic. A lake access road also runs along the northern perimeter of the site. The site area appears to have been cleared of underbrush and is actively maintained. Vegetation should be allowed to grow at 23HI554 so as to provide a natural surface cover. No further landscaping should be undertaken, and qualified personnel should inspect the area to determine if erosion or public use results in the exposure of artifacts and/or features.

Segment D/Areas B and C

These investigations did not detect any cultural resources at either location.

Segment E/Area A

Site 23P0349 is the only significant resource found in this area. In spite of the fact that it is located near a housing development and a lake access road, 23P0349 is relatively undisturbed. As the site occurs on a wooded ridgeslope, surface visibility is limited. It is recommended that the present conditions be allowed to continue and that future development plans avoid 23P0349. Because of the site's proximity to housing and public use areas, its condition should be monitored by qualified personnel. If adverse impacts should become unavoidable and uncontrollable, a data recovery program should be initiated.

Segment I/Area A

One significant site (23HI563) was encountered in this area. The site is highly visible and easily accessible from the lake but is not subject to heavy public use. Periodic flooding and erosion have affected 23HI563, but the impacts do not yet seem severe. It is recommended that future development plans avoid this location and that the site be inspected periodically by qualified personnel. The degree of slope and general lack of soils at 23HI563 suggest that efforts to stabilize the area would probably be unsuccessful. If cultural materials continue to be disturbed, mitigation of impacts through data recovery is recommended.

Segment I/Area B

The current project encountered no cultural resources at this location.

Stockton Lake

Segment 1/Area 1

No significant archeological sites were recorded in this area.

Segment 1/Area 2

One significant site, 23P0304, occurs at this location. Even though the site is accessible by a paved county road and lake access roads, it is not highly visible.

However, continued cultivation of this area will undoubtedly result in additional breakage and displacement of artifacts and features. It is recommended that such activities cease and grasses be planted and maintained to limit visibility and combat erosion of the remaining intact deposits. Also, the site should be avoided by future development plans. Initiation of data recovery is recommended if these protective measures are not feasible.

Segment 1/Area 3

None of the sites recorded at this location appear to meet the National Register criteria of eligibility as all have been extensively disturbed by land modifications.

Segment 1/Area 4

Site 23PO355 is the only site where significant deposits remain intact in this area. It is likely that continued plowing and cultivation would result in further spatial displacement of cultural deposits, artifact breakage, and destruction of possible features. Because an unimproved lake access road bisects 23PO355, it is recommended that gravel be deposited on the road and a grass cover be planted elsewhere on the site to limit visibility. Cultivation of 23PO355 should cease. The site should also be avoided by future development plans. If these recommendations cannot be implemented, a program of data recovery is advised.

Segment 1/Area 5

The current investigations encountered only one significant site (23PO356) within the limits of this survey unit. The site does not receive heavy public use and is presently subject to displacement by plowing and cultivation. The severity of the impacts from these practices has been limited because of the apparent depth of the deposits at 23PO356. However, continuation of these activities would only further disturb the integrity of the deposits. It is therefore recommended that no further cultivation be undertaken and that grasses be planted to conceal and stabilize the area. The site should also be avoided by future development plans. If these protective measures are not possible, mitigation of impacts through data recovery is recommended.

Segment 1/Area 6

Site 23PO359 is the only site where significant deposits remain intact below plow zone disturbances in this area. An unimproved road bisects the site to provide access to the Little Sac River. In spite of easy access to 23PO359, public use has not significantly affected the resource. Plowing and cultivation have rendered the most damage to the site and, if allowed to continue, will only further displace site materials and destroy any possible features. It is recommended that current cultivation practices cease and grasses be planted and maintained to obscure site visibility and combat erosion. Future

development plans should avoid the site. If these recommended actions are not feasible, a data recovery program should be initiated.

Segment 1/Area 7

One significant site (23P0361) was encountered in this area. It is subject to shoreline erosion due to lake level fluctuations, and a lake access road courses across the site. Most of the site is currently covered with dense vegetation, so it is not highly visible. It is recommended that current conditions be maintained and that future development plans avoid the area. Site 23P0361 should also be inspected periodically by qualified personnel and data recovery initiated if adverse impacts become unavoidable or uncontrollable.

Segment 1/Area 8

None of the cultural resources encountered at this location are eligible for nomination to the National Register.

Segment 2/Area 1

Significant sites were not found in this area.

Segment 2/Area 2

Investigations could not locate any cultural resources within the confines of this survey unit.

Segment 2/Area 3

No significant sites were encountered at this location.

Segment 3/Areas 1 and 2

Significant cultural resources were not detected at either survey unit.

Segment 3/Area 3

Only one significant site, 23DA328, was found in this area. The site is an easily recognizable rockshelter but is not readily accessible and not subject to heavy public use. However, uncontrolled excavations have damaged portions of the deposit in the past. As 23DA328 is located along an intermittent drainage, it may also be affected by periodic flooding. Qualified personnel should monitor the condition of this site. If further destruction at 23DA328 becomes apparent, mitigation of impacts through data recovery is recommended. It is also recommended that future development plans avoid the area.

Segment 3/Area 4

Examination of this area encountered no significant sites.

Segment 4/Area 1

Site 23DA346 is the only significant site located in this area by the current investigations. The site appears to be undisturbed and has no roads or public facilities in the immediate vicinity. Where soils are present at 23DA346, dense grasses limit visibility of site materials. The present conditions should be allowed to continue, and future developments plans should avoid the area. The site should be inspected periodically by qualified personnel, and a data recovery program initiated if adverse impacts become unavoidable and uncontrollable.

Segment 4/Areas 2, 3, and 4

Significant cultural resources were not encountered at these locations.

Segment 4/Area 5

One significant site, 23DA359, was found in moderately dense woods at this survey unit. No disturbances are evident at the site, and it is not in an area which is subject to heavy public use. It is recommended that future development plans avoid 23DA359 and that current conditions be allowed to continue. Qualified personnel should examine the site periodically. If it becomes apparent that the recommended measures are not effective, data recovery will be necessary to mitigate any adverse impacts to the site.

Project Summary

Survey investigations of selected Fish and Wildlife management areas around Stockton and Pomme de Terre lakes were conducted by personnel from Prewitt and Associates, Inc. of Austin, Texas, for the U.S. Army Corps of Engineers, Kansas City District. This project is a part of the continuing efforts to inventory and evaluate the conditions of the cultural resources which occur on public lands as designated by the National Historic Preservation Act of 1966, as amended (Public Law 89-665). In addition to recording all identified sites and determining the condition of each, the task of assessing their significance in terms of criteria of eligibility for nomination to the National Register of Historic Places (36 CFR 60, Section 60.6) was specified for this phase of work.

Approximately 630 acres (38.63%) of the Fish and Wildlife management land at Pomme de Terre Lake and 1,960 acres (35.49%) of the Fish and Wildlife management lands at Stockton Lake were examined during this project. A total of 68 sites were recorded by these efforts, 57 at Stockton and 11 at Pomme de Terre. The survey was accomplished by a crew of three or four persons walking transects at approximately 25-m intervals. Shovel testing was undertaken in areas where ground surface visibility was limited by dense vegetation or leaf litter.

Of the 68 sites recorded during the survey, 14 are assessed as significant in terms of National Register eligibility criteria. Documentary evidence indicates that two sites (23HI555 and 23HI562) at Pomme de Terre Lake are associated with the initial period of Anglo-American settlement in the western Ozark Highlands and are thereby assessed as significant in terms of National Register Criterion A. Sites 23HI555 and 23HI562 are also potentially eligible for nomination under Criterion C because of the presence of intact structures which could yield significant information regarding rural architecture. All 14 of the sites recommended as eligible for National Register nomination at Stockton and Pomme de Terre lakes meet the specifications of Criterion D as they contain information important for understanding local history and prehistory. These sites have the potential to contribute data regarding early historic settlement and Early/Middle Archaic, Late Archaic and Early/Middle Woodland, and Late Woodland/Mississippian prehistoric occupations in the Stockton and Pomme de Terre areas.

The earliest evidence of human activity encountered in the areas surveyed is attributable to the Early/Middle Archaic periods. Five moderately dense lithic scatters with Early/Middle Archaic components were found on ridgetops and terraces in the Stockton Lake area, two of which appear to have high research values. Late Archaic and/or Early/Middle Woodland diagnostic artifacts were encountered at seven sites primarily situated on terraces and near drainages. Most are extensive lithic scatters with a variety of tools, and all but two retain sufficient integrity to contribute significant data. Six sites at Stockton Lake contain evidence of Late Woodland/Mississippian occupations; one is a rockshelter and the others are extensive and dense lithic scatters. Three of the terrace sites and the rockshelter are felt to be sufficiently intact to yield significant data regarding these late prehistoric occupations. The rockshelter (23DA328) is the only Late Woodland/Mississippian site where ceramics were encountered. There has been a general paucity of ceramics recovered from sites in the Pomme de Terre and Stockton areas (Girard and Freeman 1984:220). Also, as relatively few of the known rockshelters contain temporally diagnostic artifacts, 23DA328 is a particularly significant site and may be a functionally unique habitation for the study area. Two of the 24 recorded historic sites have the potential to

contribute substantively to the local data base concerning the nature and material culture of nineteenth-century occupations. Lastly, four undated sites containing important data concerning a variety of specialized activities are assessed as eligible for nomination to the National Register under Criterion D.

Significant sites may be potentially affected by a number of adverse impacts, including intensive public use activities, cultivation, shoreline erosion, and construction of public facilities. It is recommended that all of the identified significant sites on Fish and Wildlife management lands be avoided by future development and that current plowing and cultivation activities cease. Regular monitoring of significant sites which may be damaged by shoreline erosion and/or intensive public use is also recommended. If these sites cannot be preserved, data recovery programs should then be initiated.

APPENDIX 1: Prehistoric Artifact Analysis

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INTRODUCTION

Faunal materials and ceramic and lithic artifacts collected from prehistoric sites during the current phase of work are described in this appendix. Lithic materials make up the bulk of the collection and have been categorized according to manufacturing technique, morphology, function, and stylistic attributes to derive the following general classes: stemmed bifaces; unstemmed bifaces; unifaces; ground and pecked stone; cores; flakes, chips, and angular fragments; and unmodified stones. Only a few ceramic and faunal specimens were recovered.

STEMMED BIFACES

Stemmed bifaces are bifacially chipped specimens with pointed distal ends and modified proximal areas which are assumed to have been used for hafting. They often function as projectile points but also may have served as hafted cutting and scraping implements. Although many of the specimens are fragmentary, they appear to represent final stages of manufacture. This category is subdivided in accordance with attributes recognized as temporally or functionally significant. The descriptions below correspond closely with the subclasses used in Girard and Freeman (1984), and Table 7 shows the distribution of each subclassification by site.

Hafted Scraper (1 specimen)

This specimen (Fig. 22a), recovered from the surface of 23P0355, is a side notched biface with a steeply and bifacially flaked distal end. Scrapers of this form are usually broken projectile points which have been reworked. Hafted scrapers are not diagnostic of a specific cultural period, but they are known to first occur at Early Archaic components (Chapman 1975:128). If the projectile point type from which the scraper in question was manufactured can be determined, then the scraper would postdate the point. In this case, it is difficult to establish the projectile point type because of damage to one side of the base. The intact portion of the base is not ground and exhibits a rounded, almost lobed corner below a U-shaped side notch comparable to Big Sandy Notched and Rice Lobed points which are typical Early to Middle Archaic forms (Chapman 1975:242, 254). Because the shoulders are broken, the specimen cannot be more definitely typed.

Lanceolate (1 specimen)

This medium-sized projectile point (Fig. 22b) collected from the surface of 23P0359 has blade edges that have been so severely edge damaged that very little of the blade margins remain intact. The distal end is also lacking. The stem, which is more intact, has slightly expanding, heavily ground sides and a concave base. The stem attributes suggest that the artifact is either of Late Paleoindian or, more likely, Early Archaic age. It does not fit into an established type but does show slight affinities to the Dalton category; however, the specimen does not have the parallel sided stem, deep basal concavity, or the basal thinning flakes that are typical of Dalton points.

TABLE 7
PROVENIENCE OF STEMMED BIFACES

Site	Hafted Scraper	Lanceolate	Side Notched Form 1	Side Notched Form 2	Flared Base	Square Stemmed	Corner Notched Form 1	Corner Notched Form 2	Corner Notched Form 3	Expanding Stem Form 2	Expanding Stem Form 3	Expanding Stem Form 4	Triangular	Fragments Distal Tip	Fragment Medial Section	SUBTOTALS
POMME DE TERRE LAKE																
23HI554	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	1
STOCKTON LAKE																
23DA328	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	2
23DA330	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	2
23DA346	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1
23DA358	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1
23PO304	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
23PO351	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1
23PO355	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	2
23PO356	-	-	1	-	-	-	-	-	-	-	1	-	-	2	-	6
23PO358	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1
23PO359	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1
23PO361	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	3
23PO367	-	-	-	-	-	-	-	-	1	1	-	-	1	-	-	3
SUBTOTALS	1	1	2	1	1	2	1	2	1	2	2	2	1	5	1	25

Side Notched, Form 1 (2 specimens)

These two dart points are characterized by U-shaped side notches and slightly concave, ground bases. The more complete specimen (Fig. 22c), from the surface of 23PO358, has convex blade margins, and the blade is lenticular in cross section. Although the blade edges of the other specimen (Fig. 22d), from the surface of 23PO356, are heavily damaged, it appears also to have had convex blade margins and a slight alternate bevel in cross section. The stem length is small in proportion to the blade length for both specimens, and the maximum width of the stem is equal to that of the blade at the shoulder.

Overall, the characteristics of these two artifacts are very similar to those recognized for the Big Sandy type; however, both specimens are much smaller than the typical Big Sandy point which dates to the Early and Middle Archaic (Chapman 1975:242).

Side Notched, Form 2 (1 specimen)

This category consists of a single specimen collected from the surface of 23PO356; a complete stem and the proximal portion of the blade are present (Fig. 22e). The one blade shoulder lacks a barb. The artifact has a wide, U-shaped side notch that separates the blade from the stem. The maximum width of the blade, which is at the shoulders, aligns with the lateral edges of the stem.

The base is highly ground and has a deeper concavity than the Side Notched, Form 1 specimens described above. The stem form resembles that of the Early Archaic period Graham Cave Notched type but has smaller dimensions than what is typical for that classification.

Flared Base (1 specimen)

This medium-sized, nearly complete dart point collected from the surface of 23DA358 has a bifacially beveled blade and convex blade margins (Fig. 22f). Despite breaks at both shoulders, it appears that the shoulders are weak and that the maximum width of the artifact occurs on the portion of the blade just above the shoulders. The stem expands to a moderately concave, slightly flared base. No grinding is evident on the stem or base.

The artifact cannot be placed within an established type but is similar to specimens illustrated by Girard and Freeman (1984:Fig. 38e, f, g). An Early/Middle Archaic period date for this specimen is hypothesized.

Square Stemmed (2 specimens)

Both members of this category have sustained damage to portions of their stems and the distal ends of the blades. The larger specimen (Fig. 23a), recovered from the 0-15-cm level of a shovel probe made at 23PO351, is discolored and pitted as a result of burning. The size of the broken surfaces at the shoulders indicates that large barbs were

Figure 22. Stemmed Bifaces.

- a. Hafted scraper, 23P0355 (Lot 0-1).
- b. Lanceolate projectile point, 23P0359 (Lot 0-0).
- c. Side notched (Form 1) projectile point, 23P0358 (Lot 0-1).
- d. Side notched (Form 1) projectile point, 23P0356 (Lot 0-1).
- e. Side notched (Form 2) projectile point, 23P0356 (Lot 0-2).
- f. Flared base projectile point, 23DA358 (Lot 0-0).

All artifacts are illustrated actual size.

Figure 22

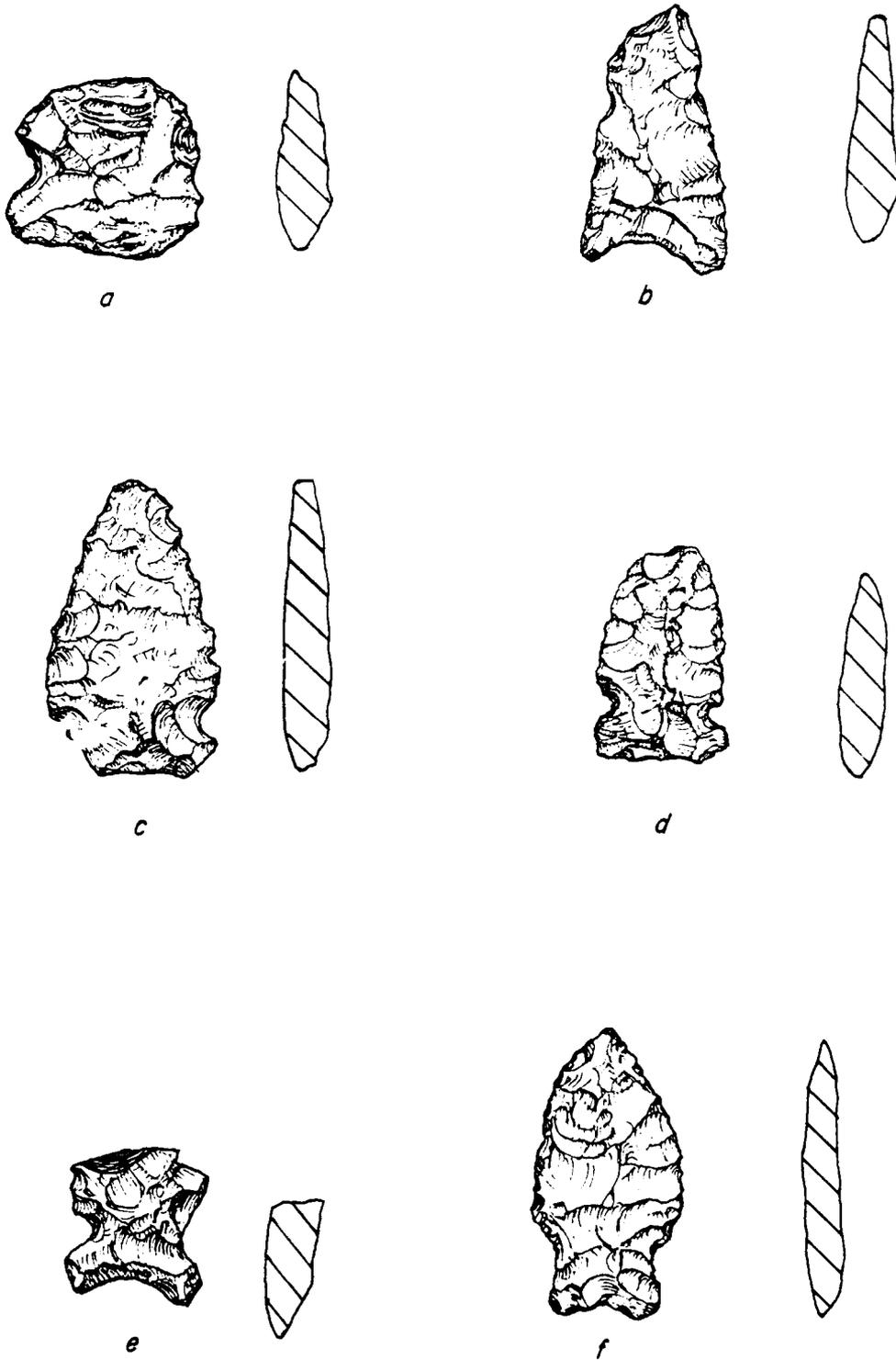
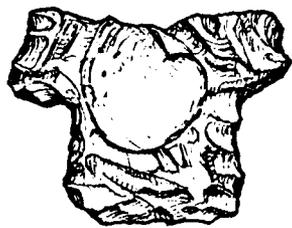


Figure 23. Stemmed Bifaces.

- a. Square stemmed projectile point, 23P0351 (Lot 1).
- b. Square stemmed projectile point, 23P0361 (Lot 0-1).
- c. Corner notched (Form 1) projectile point, 23P0355 (Lot 0-2).
- d. Corner notched (Form 2) projectile point, 23DA346 (Lot 0-1).
- e. Corner notched (Form 2) projectile point, 23HI554 (Lot 0-0).
- f. Corner notched (Form 3) projectile point, 23P0367 (Lot 0-0).

All artifacts are illustrated actual size.

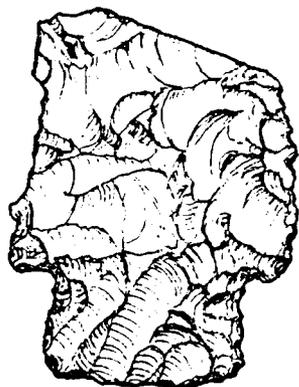
Figure 23



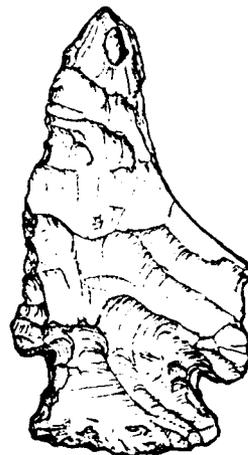
a



b



c



d



e



f

present originally. Although parts of the lateral edges of the stem are also damaged, it appears that the original stem shape was square.

The other specimen (Fig. 23b) is from the surface of 23PO361 and has a straight, well-thinned base. The one undamaged lateral stem edge is straight, which, with the base, suggests that the artifact had a square stem. Only a fragmentary portion of one blade edge is present, and its shape indicates a probable straight-sided blade margin. A break on the shoulder suggests that a barb was once present.

The first specimen fits comfortably into the Smith Basal Notched type which dates to the Late Archaic period (Kay 1982b:457). The other artifact seems to have had a square stem and probably was basally notched, but the thinness of the base is not common to the Smith Basal Notched type. However, no alternate type is proposed for this specimen.

Corner Notched, Form 1 (1 specimen)

This heat-treated artifact (Fig. 23c) recovered from the surface of 23PO355 has a wide, slightly expanding stem. Both the stem and the mildly convex base have been lightly ground. The distal end of the blade is missing, and one lateral blade edge has extensive edge damage. The intact blade margin has a slightly convex shape and shows evidence of resharpening. Large flakes have been removed from the blade faces and from the base. Shoulders are well defined by corner notching, but no barbs are present.

In outline, this specimen resembles one illustrated by Chapman (1980:Fig. 2-5c) which dates to the Early Woodland period.

Corner Notched, Form 2 (2 specimens)

These two specimens are characterized by corner notches, expanding stems, and convex bases. Both fall within the range of Girard and Freeman's (1984:240) Corner Notched, Form 2 type which probably dates to the Early and Middle Woodland periods.

One specimen collected from the surface of 23DA346 (Fig. 23d) has a broken distal end and lacks the distal portion of one blade edge. Except for a few flake scars on the stem, the artifact is unifacial. Large percussion flake scars are present on the opposing blade face. The more complete blade edge is somewhat damaged but appears to have a definite convex outline. Maximum width occurs at the barbless shoulders of the specimen.

The second member of this category (Fig. 23e), recovered from the surface of 23HI554, is a fragment that has one intact stem side and adjacent portions of a blade edge and base present. Most of the biface fragment consists of a proximal segment of the blade. Several pitted areas on the blade and stem are the result of burning. The shape of the stem fragment suggests that it was relatively wide and that the base was convex. There is no grinding on the stem or base.

Corner Notched, Form 3 (1 specimen)

This fragmentary specimen (Fig. 23f) from 23PO367 retains one narrow, U-shaped corner notch and approximately one-half of a convex stem. The blade is broad with convex margins and is lenticular in cross section. The remaining shoulder is slightly barbed. Even though the specimen lacks one of its corner notches, it is still apparent that the maximum width would have been at the notches. No grinding is evident on this artifact. Other than the lack of basal grinding, this specimen conforms to the St. Charles Notched point type which is considered by Chapman (1975:255) to be representative of the Early Archaic period, although other investigators feel that this form persisted until the Early and Middle Woodland periods (Chapman 1975:255).

Expanding Stem, Form 2 (2 specimens)

Two specimens recovered from the surface of 23PO367 and 23PO361 are assigned to this category. Although the artifact collected from 23PO367 has sustained damage at the distal tip, shoulders, and base, it is still in fairly good condition (Fig. 24a). The artifact is thin, finely made, and lenticular in cross section. What remains of the blade is long and narrow with fairly straight margins. Breakage has occurred at both shoulders, but it seems that originally small barbs were present above the U-shaped corner notches. The stem margins are straight and flare to a slightly convex base.

The specimen recovered from 23PO361 is thicker and shorter, although it too has a lenticular blade cross section (Fig. 24b). The blade is triangular and has straight margins which may have been finely serrated. Wide, U-shaped corner notches define angular shoulders. The stem expands to a straight base which has been damaged in the central area.

The stem accounts for approximately one-third of the overall length for both specimens. The thin specimen from 23PO367 best conforms to the Flared Base Category 40 defined by Kay (1982b:481-483), which dates to the Early to Middle Archaic periods. The second specimen is similar to the Kings Corner Notched type (Chapman 1980:312) which probably relates to the Early/Middle or Late Woodland periods.

Expanding Stem, Form 3 (2 specimens)

The first member of this class is a large corner notched arrow point (Fig. 24c) which is in the morphological range of the Scallorn type (Chapman 1980:312) attributed to the Late Woodland/Mississippian periods. This specimen was collected from the surface of site 23PO356; it has a short stem which expands to a straight base. The maximum width is at the shoulders, which are also barbed. Much of the blade is lacking, but enough remains to determine that it has a lenticular cross section and slightly convex margins. The artifact is finely flaked on both surfaces, and grinding is not evident.

The second specimen (from Shovel Test 1, Level 1 at 23DA328), which also may be considered a Scallorn, is much smaller and nearly complete (Fig. 24d). It has distinct shoulders and a flaring convex base. The stem accounts for nearly one-half of the overall

Figure 24. Stemmed Bifaces.

- a. Expanding Stem (Form 2) projectile point, 23P0367 (Lot 0-1).
- b. Expanding Stem (Form 2) projectile point, 23P0361 (Lot 0-0).
- c. Expanding Stem (Form 3) projectile point, 23P0356 (Lot 0-9).
- d. Expanding Stem (Form 3) projectile point, 23DA328 (Lot 1).
- e. Expanding Stem (Form 4) projectile point, 23DA330 (Lot 0).
- f. Expanding Stem (Form 4) projectile point, 23P0356 (Lot 0-5).
- g. Triangular projectile point, 23P0367 (Lot 0-2).

All artifacts are illustrated actual size.

Figure 24



a



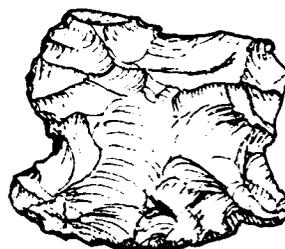
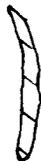
b



c



d



e



f



g



specimen length. The dorsal surface is well flaked, while the ventral surface exhibits basal and marginal flaking. Pitting on both surfaces is the result of burning.

Expanding Stem, Form 4 (2 specimens)

These two specimens are broken and lack distal tips. One of the artifacts (from the surface of 23DA330) is larger than the other (from the surface of 23PO356) and also has breakage along one shoulder. Both are distinguished by U-shaped side notches, weak shoulders, and convex bases. The stem and base of the larger specimen (Fig. 24e) are slightly ground, while these areas are heavily ground on the smaller artifact (Fig. 24f). The smaller of the two specimens has an alternately beveled blade and slightly convex blade margins. Similar information cannot be determined for the larger artifact as it is broken above the shoulders.

These specimens are probably Steuben Expanded Stem type bifaces (Chapman 1980:313) which date to the Middle and Late Woodland periods.

Triangular (1 specimen)

This artifact, recovered from the surface of site 23PO367, is thin and bifacially flaked (Fig. 24g). Although the distal tip is absent, it can still be determined that the specimen is triangular in outline and has slightly convex blade margins. The base is slightly concave, and the cross section is lenticular.

The specimen easily conforms to the Mississippi Triangular type which occurs during the Mississippian period (Chapman 1980:310). The type name of Fresno has also been used by some researchers to refer to this form (Bell 1960:44; Chapman 1980:308).

Fragments, Distal Tip (5 specimens)

Five specimens (two from the surface of site 23PO356; one from Shovel Test 6, Level 2 at 23PO304; one from the surface of 23DA328; and one from Shovel Test 1, Level 2 at 23DA330) are too incomplete to enable identification of their original form. Each is a triangular distal tip; three exhibit beveled cross sections, and two are lenticular in cross section. Blade margins are straight to slightly convex. Burning of the two specimens recovered from 23PO356 has resulted in pitted surfaces.

Finally, on the basis of gross size, only one of these specimens (from 23PO304) may represent the distal tip of an arrow point. The other four are probably dart point fragments.

Fragment, Medial Section (1 specimen)

This is a thin, medial fragment with fine bifacial flaking and slight beveling on one surface recovered from the surface of 23PO361. It retains a portion of one barbless shoulder, enabling its identification as a stemmed biface. Type classification, however, is not possible.

UNSTEMMED BIFACES

This category includes a variety of unhafted, bifacially modified specimens which were probably used or intended for use in a variety of processing activities. These artifacts are classified according to outline form or fragment group (Table 8). Many of the more complete bifaces still exhibit cortex and may represent discards or manufacturing failures. Judging from the thickness and angular character of the majority of the unbroken specimens, they were reduced from either cobbles or chunks of chert. Nearly all of the biface fragments are thin and finely flaked, indicative of reduction from flake blanks. Breakage evident on many of the fragments seems to be the result of use rather than error of manufacture.

Ovoid Bifaces (7 specimens)

These bifaces are roughly ovoid in outline, and all retain some amount of cortex on one or both faces. Weathering is evident on all of the artifacts, but one is highly weathered. Four of the specimens are large, thick, and have roughly shaped margins which lack extensive retouch and probably represent unfinished tools. The other three bifaces are more circular, relatively thin in cross section, and show some amount of secondary chipping along the margins. The workmanship on these three tools suggests that they were probably completed artifacts, although the other specimens may also have been utilized.

Triangular Biface (1 specimen)

Only one of the collected artifacts has a triangular outline. It is a large specimen which has a thick proximal end and one broken and reworked distal margin. The proximal end exhibits battering and retains some cortex. Only the reworked margin shows extensive secondary chipping and is probably the only area of the artifact used.

Distal Fragments (6 specimens)

These are fragments which retain lateral margins which converge at a pointed tip. Excluded from this category are comparable fragments which could be identified as portions of stemmed bifaces. Instead, this classification includes larger specimens broken during utilization or later stages of manufacture. Each member of this group is relatively well

thinned, and only one has cortex on a portion of the dorsal surface. This cortical specimen is also the only one with minimally retouched margins.

Medial Fragments, Group 1 (3 specimens)

These biface fragments have distal and proximal breakage and maintain two opposing blade margins. In each case, the blade margins are convex and cross sections lenticular. Even though shoulders are lacking, two of the artifacts have characteristics of thickness and flaking common among stemmed bifaces. The third specimen is larger overall and probably represents an unstemmed biface. All of these specimens are finely flaked and appear to represent fragments of finished tools or an advanced stage of reduction.

Medial Fragments, Group 2 (2 specimens)

This group consists of fragments with a single chipped margin. The margin is convex on both specimens, and breakage probably resulted from usage and/or manufacturing failure.

Proximal Fragments (9 specimens)

These are fragments of unstemmed bifaces with two to three contiguous chipped edges which do not form a distal tip. Only one specimen retains cortex. Two fragments are crudely flaked, whereas the others are all well thinned and appear to have broken from completed tools. The lateral margins of all nine specimens are convex. Seven specimens have convex bases and two have straight blades.

Longitudinal Fragment (1 specimen)

Only one longitudinal fragment was recovered. It is roughly ovoid in outline and nearly complete but lacks one lateral margin. The artifact is thick in cross section, crudely flaked, and appears to be a manufacturing failure. There is no evidence of secondary retouch on the specimen.

UNIFACES (2 specimens)

This group consists of broken specimens with flaking on only one surface which are distinct from edge-modified flakes. One fragment has breakage along its entire perimeter, while the other has distal and proximal break facets only. The former is quite thin and appears to represent a manufacturing failure. The latter is slightly weathered on one face and has steep secondary retouch on a convex lateral edge. This second artifact is a thicker specimen and may also have been broken during the flaking process.

TABLE 8

PROVENIENCE OF UNSTEMMED BIFACES, UNIFACES, AND GROUND/PECKED STONE*

Site	Ovoid Bifaces	Triangular Biface	Distal Biface Fragments	Medial Biface Fragments, Group 1	Medial Biface Fragments, Group 2	Proximal Biface Fragments	Longitudinal Biface Fragment	Uniface Fragments	Pitted Cobble	SUBTOTALS
POMME DE TERRE LAKE										
23HI528	-	-	-	-	-	-	-	1	-	1
23HI563	1	-	1	-	-	-	-	-	-	2
STOCKTON LAKE										
23PO355	1	-	-	1	-	-	-	-	-	2
23PO356	-	-	1	-	-	-	1	-	1	3
23PO357	-	1	-	-	-	-	-	-	-	1
23PO358	3	-	-	-	-	1	-	-	-	4
23PO359	-	-	1	-	-	2	-	-	-	3
23PO360	-	-	1	1	-	-	-	-	-	2
23PO361	1	-	1	-	1	3	-	1	-	7
23DA328	-	-	-	1	-	-	-	-	-	1
23DA332	-	-	-	-	1	-	-	-	-	1
23DA342	-	-	1	-	-	-	-	-	-	1
23DA346	-	-	-	-	-	2	-	-	-	2
23DA358	1	-	-	-	-	1	-	-	-	2
SUBTOTALS	7	1	6	3	2	9	1	2	1	32

*All artifacts were collected from the surface except the one artifact from 23DA332 which came from Shovel Test 1, 0-15 cm.

GROUND AND PECKED STONE (1 specimen)

This is a quartzite cobble with one surface which has been ground smooth (see Table 8). The center of this surface has been pecked to form a shallow pit, and battering is evident on the opposite, rounded surface. The artifact is comparable to pitted anvilstones which first appear in the archeological record during the Late Paleoindian period.

CORES

This category includes chert cobbles and chunks from which a series of flakes have been struck. The primary usage is assumed to be the production of flake blanks, although a few specimens show evidence of marginal retouch and are described separately. Table 9 shows the distribution of all of the recovered cores, chipping debris, and unmodified stones.

Tested Cores (5 specimens)

These are cores which have few flake scars and several striking platforms. All retain some amount of cortex, and two specimens are weathered. Only one core seems to have been made from a cobble; the others are quite blocky. It seems likely that these cores were rejected on the basis of irregularities in fracture and the presence of inclusions after limited attempts at reduction.

Edge Modified Cores (4 specimens)

This category includes cores with secondary chipping or use wear on at least one margin. Two of the specimens are large and heavy, possibly formed for chopping purposes. The other members of this group appear to have been used for scraping and cutting.

FLAKES, CHIPS, AND ANGULAR FRAGMENTS

Unmodified Flakes and Chips (241 specimens)

Chert and quartzite chipping debris which retains evidence of a bulb of percussion and striking platform are classified as unmodified flakes and chips (see Table 9). None of these materials show traces of utilization or secondary chipping.

TABLE 9

PROVENIENCE OF CORES; FLAKES, CHIPS, AND ANGULAR FRAGMENTS; AND UNMODIFIED STONES

Site/Provenience	Cores	Edge Modified Cores	Unmodified Flakes and Chips	Unmodified Angular Fragments	Edge Modified Flakes, Chips, and Angular Fragments	Burned Rocks	Heat Spalls	SUBTOTALS
POMME DE TERRE LAKE								
23HI511								
Shovel Test 1, 0-25 cm	1	-	4	2	3	-	-	10
Shovel Test 2, 0-25 cm	-	1	-	-	-	-	-	1
Shovel Test 3, 0-25 cm	-	-	2	1	1	-	-	4
Shovel Test 5, 0-10 cm	-	-	1	2	1	-	-	4
STOCKTON LAKE								
23P0355								
Shovel Test 1, 0-15 cm	-	-	-	-	1	-	-	1
Shovel Test 1, 15-30 cm	-	-	3	1	-	-	-	4
23P0356								
Shovel Test 1, 0-15 cm	-	-	1	-	1	-	-	2
Shovel Test 2, 0-20 cm	-	-	2	-	-	-	-	2
23P0357								
Shovel Test 2, 0-15 cm	-	-	1	-	-	-	-	1
Shovel Test 2, 15-30 cm	-	-	1	-	-	-	-	1
23P0358								
Surface	-	-	-	-	1	-	-	1
Shovel Test 1, 0-23 cm	-	-	2	-	-	-	-	2
Shovel Test 1, 23-30 cm	-	-	1	-	-	-	-	1
23P0359								
Surface	-	-	-	-	1	-	-	1
Shovel Test 1, 15-30 cm	-	-	2	-	-	-	-	2
Shovel Test 2, 0-15 cm	-	-	8	-	-	-	-	8
Shovel Test 2, 15-30 cm	-	-	2	-	-	-	-	2
Shovel Test 3, 0-15 cm	-	-	4	-	2	-	-	6
Shovel Probe, 0-20 cm	-	-	6	-	1	-	-	7
23P0360								
Shovel Test 2, 0-22 cm	-	-	1	-	-	-	-	1
Shovel Test 2, 22-30 cm	-	-	1	-	-	-	-	1

Table 9, continued

Site/Provenience	Cores	Edge Modified Cores	Unmodified Flakes and Chips	Unmodified Angular Fragments	Edge Modified Flakes, Chips, and Angular Fragments	Burned Rocks	Heat Spalls	SUBTOTALS
23PO361								
Surface	-	-	1	-	-	-	-	1
Shovel Test 1, 0-21 cm	-	-	3	-	1	-	-	4
Shovel Test 2, 0-15 cm	-	-	3	-	-	-	-	3
Shovel Test 2, 15-30 cm	-	-	3	-	-	-	-	3
23PO366								
Shovel Test 1, 0-15 cm	-	-	2	2	-	-	1	5
Shovel Test 1, 15-30 cm	-	-	4	-	-	1	-	5
Shovel Test 2, 0-15 cm	-	-	4	1	-	-	-	5
Shovel Test 2, 15-30 cm	-	-	2	-	-	-	-	2
23PO367								
Shovel Test 2, 30-36 cm	-	-	-	1	-	-	-	1
Shovel Test 6, 0-15 cm	-	-	1	-	-	-	-	1
Shovel Test 6, 15-30 cm	-	-	-	1	1	-	-	2
23DA63								
Shovel Test 1, 0-20 cm	-	-	13	-	1	-	-	14
Shovel Test 1, 20-40 cm	-	-	10	1	1	-	-	12
23DA310								
Shovel Test 1, 0-15 cm	-	-	2	3	-	-	-	5
23DA328 (Shelter A)								
Shovel Test 1, 0-15 cm	-	-	14	-	-	2	-	16
Shovel Test 1, 15-30 cm	-	-	13	4	-	1	-	18
23DA330								
Shovel Test 1, 15-30 cm	-	-	2	-	-	-	-	2
Shovel Test 2, 0-15 cm	-	1	11	-	2	-	1	15
Shovel Test 2, 15-30 cm	-	-	17	-	3	-	-	20
Shovel Test 2, 30-45 cm	-	-	10	1	2	-	-	13
Shovel Test 3, 0-15 cm	-	-	5	2	1	1	-	9
Shovel Test 3, 15-30 cm	-	-	4	1	1	-	-	6
23DA331								
Shovel Test 2, 0-15 cm	-	-	8	2	2	-	-	12

Table 9, continued

Site/Provenience	Cores	Edge Modified Cores	Unmodified Flakes and Chips	Unmodified Angular Fragments	Edge Modified Flakes, Chips, and Angular Fragments	Burned Rocks	Heat Spalls	SUBTOTALS
23DA332								
Shovel Test 1, 0-15 cm	-	-	1	-	1	-	-	2
Shovel Test 4, 15-30 cm	1	-	-	-	-	-	-	1
23DA334								
Shovel Test 1, 0-15 cm	-	-	15	1	2	-	-	18
Shovel Test 1, 15-30 cm	-	-	10	1	2	-	-	13
Shovel Test 1, 30-35 cm	-	-	2	-	-	-	-	2
Shovel Test 2, 0-15 cm	-	-	1	-	-	-	-	1
Shovel Test 2, 15-30 cm	-	-	3	-	-	-	-	3
Shovel Test 3, 0-15 cm	-	-	11	3	-	1	-	15
Shovel Test 4, 0-15 cm	-	-	2	-	-	-	-	2
Shovel Test 5, 0-15 cm	-	-	2	-	-	-	-	2
23DA339								
Shovel Test 1, 0-15 cm	-	-	1	-	-	-	-	1
Shovel Test 2, 15-30 cm	1	-	-	-	1	-	-	2
Shovel Test 7, 0-15 cm	-	-	-	1	-	-	-	1
23DA342								
Shovel Test 1, 0-15 cm	-	-	2	-	-	-	-	2
23DA343								
Shovel Test 1, 0-15 cm	-	-	2	-	1	-	-	3
23DA345								
Surface	1	1	-	-	1	-	-	3
23DA346								
Surface	-	-	4	-	1	-	-	5
Shovel Test 2, 0-15 cm	-	-	2	1	-	-	-	3
Shovel Test 2, 15-30 cm	-	-	6	3	1	-	-	10
23DA358								
Surface	-	1	-	-	-	-	-	1
Shovel Test 1, 0-15 cm	-	-	-	1	-	-	-	1
Shovel Test 2, 15-30 cm	-	-	1	-	-	-	-	1

Table 9, continued

Site/Provenience	Cores	Edge Modified Cores	Unmodified Flakes and Chips	Unmodified Angular Fragments	Edge Modified Flakes, Chips, and Angular Fragments	Burned Rocks	Heat Spalls	SUBTOTALS
23DA359								
Shovel Test (west end of mound), 40 cm	1	-	2	-	-	-	-	3
SUBTOTALS	5	4	241	36	37	6	2	331

Unmodified Angular Fragments (36 specimens)

This group includes angular pieces of chert and quartzite which were probably generated as a result of lithic reduction but lack bulbs of percussion and striking platforms (see Table 9). None of these specimens appear to have been used or subjected to retouch.

Edge-Modified Flakes, Chips, and Angular Fragments (37 specimens)

All flakes, chips, and angular fragments with marginal flaking are included with this group (see Table 9). These specimens do not appear to have been purposefully shaped, and the secondary flake scars evident may have been produced by retouch, utilization, or even by postdepositional factors.

UNMODIFIED STONES

Six burned stones and two chert heat spalls were recovered during the current project (see Table 9). The heat spalls may represent the material remains of lithic heat treatment activities, and the burned stones might indicate former hearth features; however, post-depositional burning could also produce the same results.

CERAMICS

Site 23DA328 is the only location where prehistoric ceramics were encountered (Table 10). A total of nine sherds, all grit-tempered body fragments, were recovered. Seven

TABLE 10
 PROVENIENCE OF PREHISTORIC CERAMICS AND FAUNAL REMAINS (N = 13)

	Grit (and Shell?) Tempered Sherds	Mussel Shells	Burned Bones
23DA328 (Shelter A)			
Surface	7	2	2
Shovel Test 1, 0-15 cm	1	-	-
Shovel Test 1, 15-30 cm	1	-	-
TOTALS:	9	2	2

specimens with exfoliated exteriors and smoothed interiors were found in a pile with a number of other artifacts at Shelter A. A shovel test at the shelter produced two more specimens which have smoothed interiors and exteriors. Thin holes are evident in the paste of these sherds, which may indicate leached-out shell particles. A variety of grit-tempered and grit-and-shell-tempered ceramics appear to be diagnostic of Woodland and Mississippian period occupations.

FAUNAL REMAINS

Faunal materials were collected from site 23DA328 (see Table 10). All of the material came from disturbed surficial contexts and consist of two mussel shell fragments and two fragments of burned bone. The bones could not be further identified, whereas the shell consisted of one nearly complete valve and one tooth fragment.

APPENDIX 2: Inventory of Historic Artifacts

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Jack M. Jackson

Table 11 is an inventory of all historic materials recovered during the current phase of work. Four major categories -- brick, ceramics, glass, and metal -- are employed along with appropriate subclassifications. The number of recovered specimens is tabulated for each site according to provenience. An exhaustive analytical effort was not undertaken because many of these materials are recent in age. Archival research proved to be a more informative and productive pursuit than artifact recovery.

TABLE 11
PROVENIENCE OF HISTORIC ARTIFACTS -- STOCKTON LAKE (N = 18)

Site/ Provenience	BRICK		CERAMICS		GLASS		METAL	
		Semi- Porcelain	Iron- stone	Crockery	Clear	Manganese- bleached	Wire Nails	Harness Guide Bracket
23P0359								
Surface	-	1	-	-	-	-	-	-
Shovel Probe, 0-20 cm	-	-	1	-	-	-	-	-
23P0369								
Mound A								
Shovel Test 1, 0-28 cm	-	-	-	-	-	-	1	-
23DA329								
Surface	1	-	5	1	1	2	2	1
23DA332								
Shovel Test 4, 15-30 cm	-	1	-	-	-	-	-	-
23DA338								
Surface	1	-	-	-	-	-	-	-
TOTALS	2	2	6	1	1	2	3	1

Collections made at sites 23DA329 and 23DA338 include artifacts indicative of specific periods of time which are in keeping with the information gathered from records research. Specifically, the type of ironstone ceramics recovered from 23DA329 were principally manufactured between 1870 and 1910. Manganese-bleached glass is usually indicative of a pre-World War I date, and the clear glass specimen is a patent medicine bottle neck which is a form commonly made between 1910 and 1930. The brick collected from 23DA329 is a wire-cut, box-molded specimen which suggests a nineteenth-century occupation. A similar brick with a "frog" indentation on one surface recovered from site 23DA338 is probably another nineteenth-century specimen.

APPENDIX 3: Glossary

angular fragment: piece of debitage apparently resulting from intentional flaking but lacking flake characteristics (i.e., striking platform, bulb of percussion).

archeological site: a specific place which exhibits evidence of human occupation or use.

base camp: a site type, commonly used in referring to hunter-gatherer cultures, where it is inferred that a variety of maintenance activities, such as tool manufacture and repair, food storage, and food preparation, were carried out; base camps are usually thought to have been occupied by whole social groups for relatively long periods of time.

biface: lithic artifact bearing flake scars on both faces.

bulb of percussion: the bulbar part on the ventral side of the proximal end of a flake; the remnant of a cone of force resulting from percussion or pressure.

bundle burial: human interment where disarticulated bones are gathered and bundled together after the flesh has been removed intentionally, by exposure, or by bacterial decay.

cairn: a mound of stones, often containing human burials at prehistoric sites in southwestern Missouri.

Cenozoic: geologic era encompassing the last 63 million years.

chip: a distal fragment of a flake which lacks a striking platform.

component: the manifestation of a given cultural entity at an archeological site.

core: a pebble or cobble from which one or more flakes have been intentionally removed.

cortex: natural surface, or rind, on materials used for chipped stone manufacture.

Cretaceous: geologic period within the Mesozoic Era lasting from 135 million to 63 million years ago.

crinoidal: containing the fossils of any of various marine invertebrates of the class Crinoidea, characterized by feathery arms radiating from a stalk.

cucurbit: any of various vines of the family Cucurbitaceae, including squash and pumpkin.

cultigen: cultivated plant, such as maize.

data recovery program: a plan of work which is implemented when a significant cultural resource is to be adversely impacted by a proposed activity and which is designed to recover sufficient information such that the loss of that cultural resource is ameliorated.

debitage: the residual lithic materials which result from the manufacture of tools or other chipped stone items.

Devonian: geologic period within the Paleozoic Era lasting from 400 million to 340 million years ago.

dissected: refers to a landscape which has been eroded into numerous narrow segments or lobes.

distal: The end or portion of a tool or object which, when in normal use position, is farthest from the user; the end or portion of a flake which is opposite the striking platform or point of percussion.

edge-modified flake, chip, or angular fragment: a lithic specimen which exhibits a series of secondary flake scars confined to its margin; may be the result of intentional retouch, use, or noncultural factors.

flake: any piece of stone removed from a larger mass by the application of force; to be classified as a flake, the piece must retain all or part of the platform used for removal.

forb: any herbaceous plant other than a grass, especially one growing in a field or meadow.

historic: refers to the period of human history which has elapsed since European exploration and settlement began in a given era.

Holocene: the most recent geologic epoch, encompassing about the last 10,000 years.

hypsihermal: a major climatic episode, lasting from about 8300 to 5200 years ago in southwestern Missouri, characterized by reduced annual precipitation and resulting in dramatic changes in floral and faunal communities as well as in geomorphic processes.

igneous: rocks formed by solidification from a molten or partially molten state.

lamellar: very thin.

lenticular: shaped like a lens, with two convex opposing surfaces.

mano: lithic tool which usually has been manufactured by pecking and grinding and which is thought to have been used primarily to crush and pulverize vegetal foods (e.g., seeds and nuts).

medial: toward the center, or the central part, of a body or object.

mesic: pertaining to moderate (neither very dry nor very wet) climatic conditions.

Mesozoic: geologic era lasting from 230 million to 63 million years ago.

Mississippian: geologic period within the Paleozoic Era lasting from 340 million to 310 million years ago.

mitigate: to lessen the negative effects of the loss of an archeological site through the implementation of a data recovery program.

mound site: prehistoric archeological site containing an artificial mound constructed of earth and/or stone.

National Register of Historic Places: official listing, maintained by the National Park Service under the auspices of the Secretary of the Interior, of properties judged to be significant in American history, architecture, archeology, engineering, and culture.

oolitic: referring to lithic materials containing spheroidal and elliptical structures (up to 2 mm in diameter) formed by the precipitation and accretion of carbonate around quartz grains and shell fragments in a marine environment.

Ordovician: geologic period within the Paleozoic Era lasting from 500 million to 430 million years ago.

ossuary: a container or receptacle for holding the bones of the dead.

paleoenvironmental studies: interdisciplinary research which endeavors to reconstruct past environments (e.g., climate, flora, fauna, geomorphic processes).

Paleozoic: geologic era lasting from 570 million to 230 million years ago.

Pennsylvanian: geologic period within the Paleozoic Era lasting from 310 million to 280 million years ago.

Precambrian: geologic era predating 570 million years ago.

primary burial: human burial where the bones lie in the same anatomical relationship that they occupied when the individual was alive; the body is in a contracted or flexed position, extended position, or sitting posture, and may lie on the face, side, or back.

preform: unfinished, unused form of a proposed artifact.

prehistoric: refers to that portion of human history which elapsed prior to the development of written records.

projectile point: a sharpened piece of stone, wood, bone, or other material which is intended for piercing and which is attached to the distal end of an arrow, a dart, or a spear.

proximal: the end or portion of a tool or object which, when in normal use position, is nearest to the user; the end or portion of a flake which includes the striking platform or point of percussion.

retouch: the process of removing small flakes, usually by pressure, to thin, straighten, sharpen, and smooth a chipped stone tool.

seasonal encampment: a site type, commonly used in referring to hunter-gatherer cultures, where it is inferred that a limited range of activities, usually involving the procurement or processing of seasonally available food resources, was carried out.

secondary burial: human interment where the bones are not in natural anatomical relationship; often takes the form of bundle burials where disarticulated bones are gathered after the flesh has been removed.

serrated: flaked to produce prominences resembling teeth such as those on a saw.

Silurian: geologic period within the Paleozoic Era lasting from 430 million to 400 million years ago.

step-scarring: scarring on a chipped stone artifact that occurs when a flake terminates abruptly in a right angle at the point of truncation.

striking platform: on a piece of lithic material, the surface area receiving the force necessary to detach a flake.

uniface: lithic artifact which has been flaked on one surface only.

APPENDIX 4: Key Personnel and Qualifications

This appendix, which is required by the Scope of Work, lists by job position all of the personnel who have been involved in the project, their academic background, and the date(s) of their involvement. Asterisks denote persons who were used as consultants; all others were on-staff at the time the work was carried out.

JOB POSITION AND PERSONNEL	ACADEMIC BACKGROUND	DATE
<u>Project Director</u>		
Elton R. Prewitt	B.A.; Anthropology; University of Texas at Austin M.A.; Geography; University of Texas at Austin	1983-1984
<u>Principal Investigator</u>		
Ross C. Fields	B.A.; Anthropology, University of Texas at Austin M.A.; Anthropology, University of Texas at Austin	1983-1984
<u>Project Archeologist</u>		
Patricia Mercado- Allinger	B.A.; Anthropology; University of Arizona M.A.; Anthropology; University of Arizona	1983-1984
<u>Project Historian</u>		
Jack M. Jackson	B.A.; History; George Washington University M.A.; Anthropology; University of Texas at Austin	1984
<u>Crewmembers</u>		
Sandra Hannum	B.A.; Anthropology and Geology; Clarion State College M.A.; Latin American Studies; University of Texas at Austin	1983
Margaret Howard	B.A.; Anthropology; Hamline University M.A.; Anthropology; University of Texas at Austin	1983
Mary Standifer	B.A.; Anthropology; University of Texas at Austin	1983
Bill Bryant	B.A.; Anthropology; University of Texas at Austin	1984
Molly Godwin	B.A.; Anthropology; University of Texas at Austin	1984
Larry Pete	B.A.; Anthropology; University of Southern Mississippi M.A.; Anthropology; University of Southern Mississippi	1984

POMME DE TERRE AND STOCKTON LAKES PROJECT

JOB POSITION AND PERSONNEL	ACADEMIC BACKGROUND	DATE
<u>Laboratory Assistants</u>		
Linda Nance Foster	B.A.; Anthropology; University of Texas at Austin	1984
Sandra Hannum	B.A.; Anthropology and Geology; Clarion State College M.A.; Latin American Studies; University of Texas at Austin	1984
Margaret Howard	B.A.; Anthropology; Hamline University M.A.; Anthropology; University of Texas at Austin	1984
Daniel Prikryl	B.A.; Anthropology; University of Texas at Austin	1984

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