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A CULTURAL RESOURCES LITERATURE SEARCH
OF THE BAYOU DU CHIEN DRAINAGE PROJECT AREA
IN FULTON, GRAVES, AND HICKMAN COUNTIES, KENTUCKY

by

Pamela A. Schenian
October 10, 1985

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Final Report

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OF THE BAYOU DU CHIEN DRAINAGE PROJECT AREA
IN FULTON, GRAVES, AND HICKMAN COUNTIES, KENTUCKY

by

Pamela A. Schenian


Pamela A. Schenian
Principal Investigator
and Project Archaeologist
October 10, 1985

Prepared for:

The Memphis District Corps of Engineers
Contact Person: Mr. Jimmy D. McNeil
668 Clifford Davis Federal Building
Memphis, Tennessee 38103
(901)521-3857

Prepared by:

Cultural Resource Analysts, Inc.
626 Portland Drive
Lexington, Kentucky 40503
(606)277-8882

Lead Agency: U.S. Army Corps of Engineers, Memphis District
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ABSTRACT

At the request of the Memphis District of the U.S. Army Corps of Engineers, a background and literature search has been performed for the Bayou du Chien drainage project area in Fulton, Hickman and Graves counties, Kentucky. The project area consists of a 2000 foot (609.6 meter) right-of-way on both sides of the dredged and/or natural channel of the Bayou du Chien between the intersection of the Bayou du Chien and Highway 94 near Water Valley, Graves county, Kentucky, to the juncture of the Bayou du Chien with the Mississippi River near Hickman, Fulton county, Kentucky. This report provides an environmental and cultural setting for the project area, reviews previous research in and near the project area, and discusses the recorded archaeological sites (15Fu4, 15Fu9, 15Fu13, 15Fu14, 15Fu20, 15Fu24, and 15Fu37 through 15Fu50) and historic cultural resources (15Gv4 through 15Gv6) in and near the project area. Expectations are made concerning the nature and distribution of potential cultural resources in the project area and recommendations are made for future archaeological action in the Bayou du Chien drainage project area.

Although few systematic archaeological surveys have been conducted in or near the project area, a number of sites have already been recorded, and the literature and informants indicate that additional archaeological sites exist in the Bayou du Chien drainage. One site, 15Fu4, has been placed on the National Register. Sites 15Fu37 through 15Fu49 are considered eligible for the National Register as an archaeological district but the district has not yet been nominated. It is recommended that all segments of the drainage be intensively and systematically field surveyed prior to project implementation. It is recommended that the Memphis District Corps of Engineers avoid impact to sites 15Fu4 and 15Fu37 through 15Fu49 if possible.

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TABLE OF CONTENTS

	<u>Page</u>
Abstract	i
Table of Contents	ii
List of Figures	iii
List of Tables	v
Preface	vi
Introduction	1
Setting and Environmental Background	4
Cultural Background	14
Previous Research	23
Sites Documented 1824-1932	23
Sites Documented Post-1932	28
Studies Outside the Project Area	33
Cultural Resources in the Project Area	36
Recorded Resources	36
Potential Cultural Resources	44
Conclusions and Recommendations	48
References Cited	50
Appendices (each numbered independently)	
Appendix A. Scope of Work.	
Appendix B. Project Maps.	
Appendix C. Annotated Site Descriptions from Funkhouser and Webb (1932).	
Appendix D. Project Correspondence.	
Appendix E. UTM Coordinates for Project Area Archaeolo- gical Sites and Historic Cultural Resources.	
Appendix F. Vitae of Principal Investigator.	

LIST OF FIGURES

	<u>Page</u>
Figure 1. General Project Location (stippled)	2
Figure 2. Bayou du Chien Drainage Project Area (stippled) . .	3
Figure 3. The Physiographic Regions of Kentucky	5
Figure B-1. Summary Map of U.S.G.S. Topographic Section Coverage, Figures B-2 Through B-12	B-2
Figure B-2. Location of Project Area, Historic Resources 15Gv4 Through 15Gv6, and Water Valley, Kentucky	B-3
Figure B-3. Location of Project Area	B-4
Figure B-4. Location of Project Area	B-5
Figure B-5. Location of Project Area	B-6
Figure B-6. Location of Project Area	B-7
Figure B-7. Location of Project Area, Site 15Fu7, and Moscow, Kentucky	B-8
Figure B-8. Location of Project Area and Sites Reported by John I. Kirk (1985), Unconfirmed, and Moscow, Kentucky	B-9
Figure B-9. Location of Project Area, Sites 15Fu4, 15Fu14, 15Fu24, and 15H11, the Western Kentucky Project 1985 Field Sites, and the Possible Canal . . .	B-10
Figure B-10. Location of Project Area, Sites 15Fu4, 15Fu14, and 15Fu24, the Western Kentucky Project 1985 Field Sites, and the Possible Canal . . .	B-11
Figure B-11. Location of Project Area, Sites 15Fu20 and 15Fu37 Through 15Fu50, and Hickman, Kentucky .	B-12
Figure B-12. Location of Project Area, Sites 15Fu9, 15Fu13, 15Fu14, 15Fu20, 15Fu37 through 15Fu50, and Hickman, Kentucky	B-13
Figure B-13. Summary Map of Locations of Archaeological Sites and Historic Resources in and near the Project Area	B-14
Figure C-1. Fig.10. Diagram of O'Byam's Fort	C-2

LIST OF FIGURES (CONTINUED)

	<u>Page</u>
Figure C-2. Fig. 21. Diagram of Fort Bayou de Chien. 15Fu4. The Adams Site	C-4
Figure C-3. Location of Fulton County Sites as Depicted in Funkhouser and Webb (1932)	C-6
Figure C-4. Location of Bayou du Chien Drainage Sites as Described in Funkhouser and Webb (1932) . . .	C-7

LIST OF TABLES

	<u>Page</u>
Table 1. Major Floral Species of the Bayou du Chien Drainage Project Area	10
Table 2. Summary of Cultural-Temporal Affiliation, Site Type and National Register Status of Project Area Archaeological Sites and Historic Cultural Resources	37
Table E-1. UTM Coordinates of Recorded Archaeological Sites and Historic Cultural Resources in and near the Project Area	E-2

PREFACE

At the request of the Memphis District of the U.S. Army Corps of Engineers, "Bayou du Chien" has been used as the spelling of the name of the project area drainage in this report. The name of the drainage is spelled in several different ways in the extant literature, however. Among the alternate spellings are the following: 1) "Bayou de Chien" (Carstens 1982; Funkhouser and Webb 1932; U.S.G.S. 1969a, 1977, 1981, 1982a, 1983); 2) "Bayou de Chein" (Funkhouser and Webb 1932:130; Robbins 1936); and 3) "Bayou DuChien" (Scope of Work, Appendix A of this report). Other variations, especially in the capitalization of "de" or "du", exist. Local pronunciation varies considerably from the French pronunciation of "du Chien". Local pronunciation of "du" ranges from \dæ\ to \dũ\. The local pronunciation of "chien" is similar to the French pronunciation of "chez" or the English pronunciation of "shay". These variations in local pronunciation have probably contributed to the proliferation of alternate spellings of the drainage name. "Bayou du Chien" has been used as the spelling of the drainage in this report, with the exception of some quotations and some figures. Alternative spellings of the drainage name which are present in quotations or in figures taken from other sources have been maintained as they appear in the original.

INTRODUCTION

This report has been prepared at the request of the Memphis District of the U.S. Army Corps of Engineers (COE). The purpose of this report is to provide a comprehensive review of the extant literature and background materials relating to the nature of cultural resources and potential cultural resources within the Bayou du Chien River Basin in Graves, Hickman and Fulton counties, Kentucky. As required by the scope-of-work (Appendix A), this report provides information about the environmental setting of the project area and general cultural considerations pertinent to the study locality. Previous research in the project area and documented cultural and archaeological resources in and near the project area are discussed. Statements are made concerning the probable nature and distribution of cultural resources in the project area and recommendations are made concerning future archaeological action in the Bayou du Chien drainage.

The study area consists of a 2000 foot (609.6 meter) right-of-way on either side of the dredged and/or natural meandering channel of the Bayou du Chien. The project area begins at the intersection of the Bayou du Chien and Highway 94, near Water Valley, Graves county, Kentucky, and continues westward through Hickman and Fulton counties to the juncture of the Bayou du Chien with the Mississippi River at Hickman, Fulton county, Kentucky. The project area is approximately 31 miles (50 kilometers) in length. The general project location is shown in Figures 1 and 2. Detailed maps of the project area are contained in Appendix B.

The overall project sponsor is the Memphis District of the U.S. Army Corps of Engineers. The archaeological liason for the District is Mr. Jimmy D. McNeil. The background and literature search and the preparation of this report was performed in July and August, 1985, by Ms. Pamela A. Schenian for

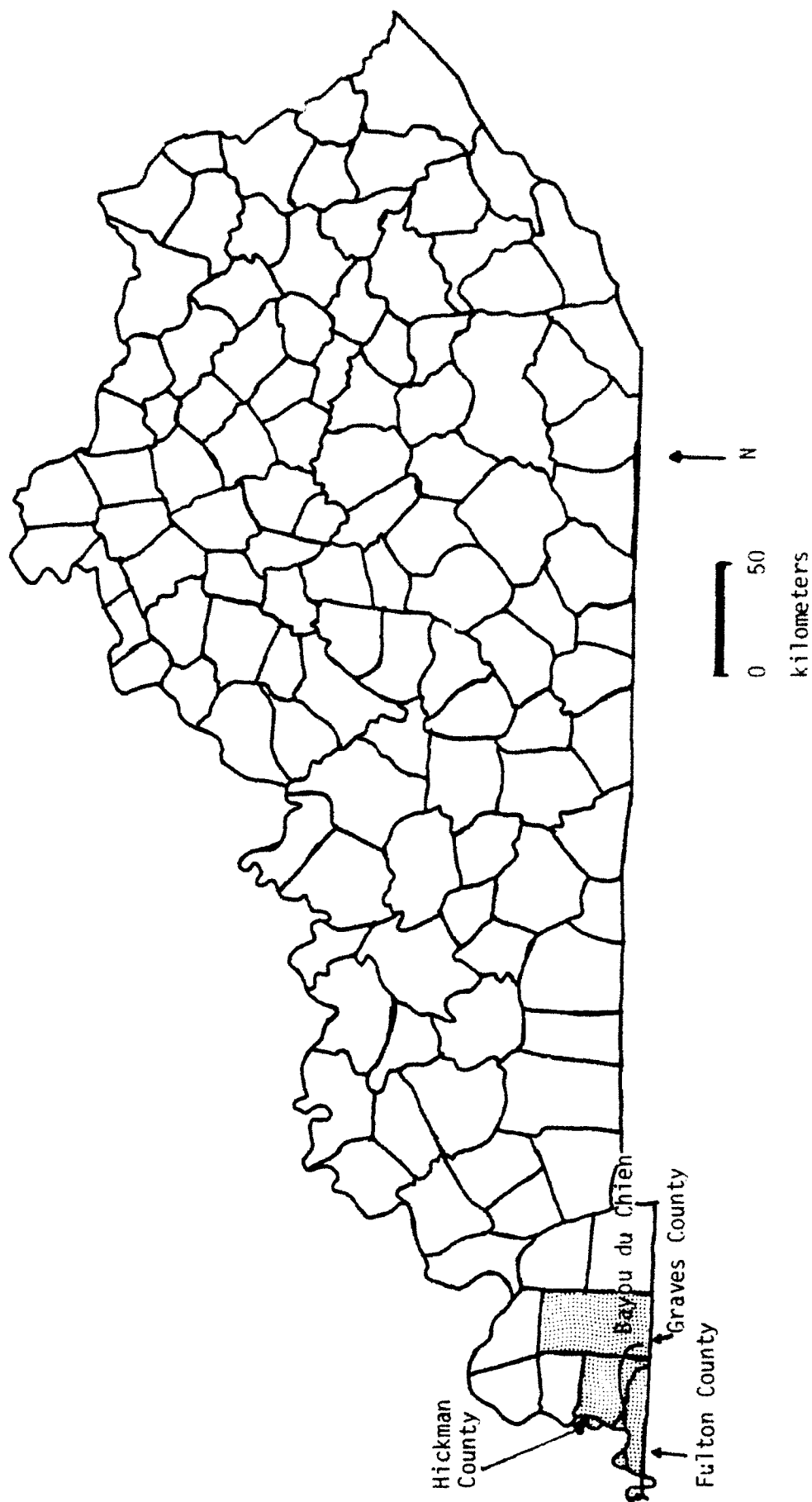


FIGURE 1. General Project Location (stippled).

FIGURE 2. Bayou du Chien Drainage Project Area (stippled).

Cultural Resource Analysts, Inc., Lexington, Kentucky. This work was conducted under contract number DACW66-85-M-1533. No field work was performed in conjunction with this study and no archaeological materials were collected under this contract. Copies of documentation (eq. correspondence) generated as a result of this project are being curated at the Archeology Laboratory, Murray State University, Murray, Kentucky.

SETTING AND ENVIRONMENTAL BACKGROUND

Graves, Hickman and Fulton counties are located in the western part of Kentucky in what is known as the Jackson Purchase Physiographic Region (Figure 3). The Jackson Purchase includes a total of 2400 square miles (Franklin 1974) making up eight counties. Geological formations of the Jackson Purchase region are the most recent of Kentucky. They are comprised of gravels, sand, silt and clay which were deposited during the Cretaceous, Tertiary and Quaternary geological periods when the Gulf Coastal Plain encompassed much of the Purchase area (Fenneman 1938). The Purchase area is generally low-lying, although some sharper relief is found in the central portion, primarily in Graves county. The Purchase is bordered to the west, north and east by the Mississippi, Ohio and Tennessee Rivers, respectively. The Tennessee State Line forms the southern boundary of the Purchase.

The project area is drained by the Bayou du Chien. The Bayou du Chien originates in Graves county and flows generally westward to its juncture with the Mississinpi River at Hickman, Fulton county, Kentucky. The juncture of the Mississippi River, Bayou du Chien and Obion Creek has changed location through time (Fisk 1944). The numerous sloughs and former islands which now adjoin the river banks reflect this. The present configuration of the juncture of the three rivers is therefore likely to be different from prehistoric configurations. Segments of the Bayou du Chien have been dredged.

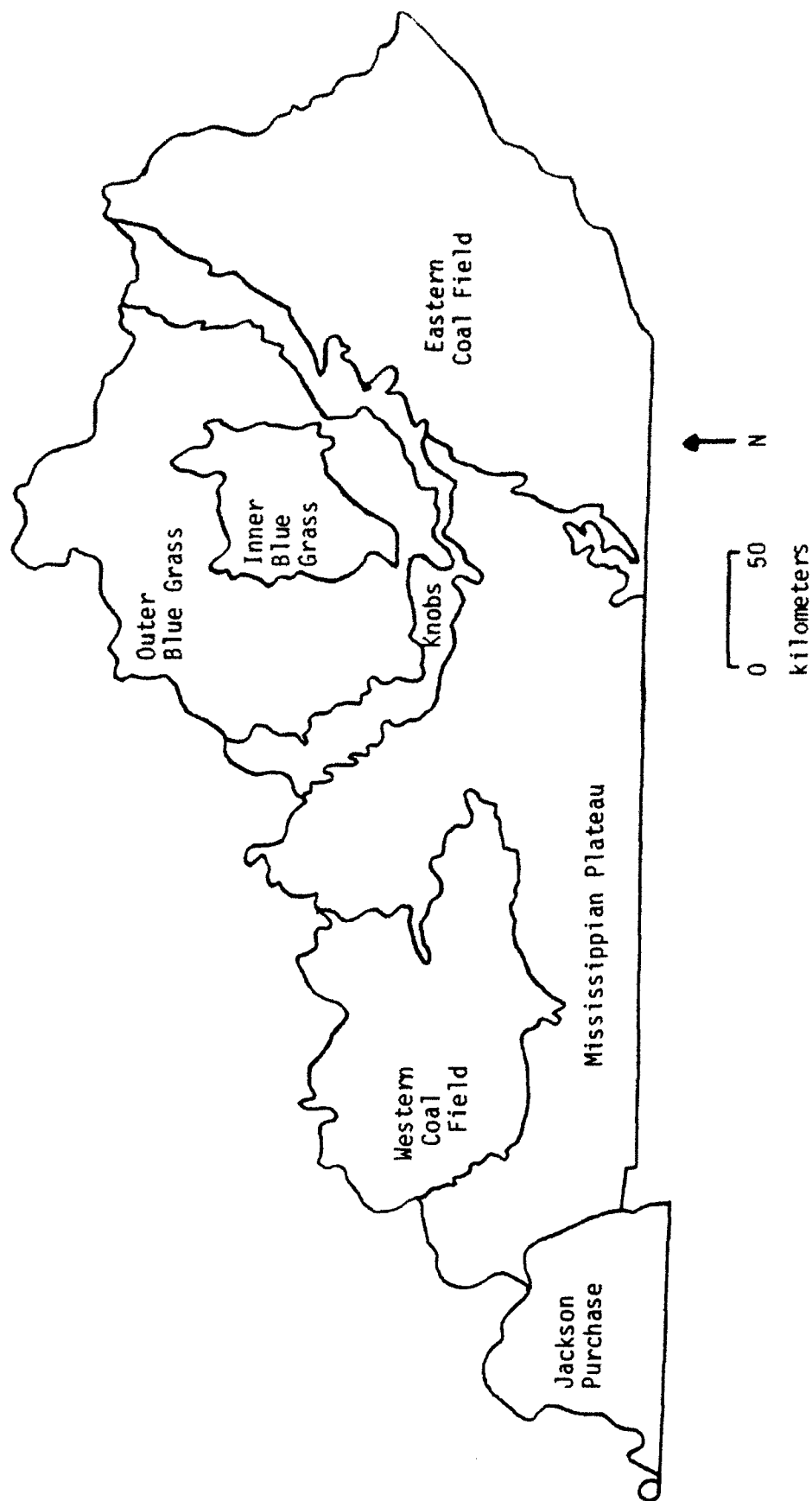


FIGURE 3. The Physiographic Regions of Kentucky.

As exhibited on the Water Valley (U.S.G.S. 1981), Crutchfield (U.S.G.S. 1969a), Clinton (U.S.G.S. 1977), Oakton (U.S.G.S. 1982b), Cayce (U.S.G.S. 1982a) and Hickman (U.S.G.S. 1983) 7.5 minute topographic quadrangles, a variety of landforms exist in the project area. The floodplain gradually broadens from the headwaters of the Bayou du Chien to its mouth. On the floodplain are sloughs, swamps, meanders and ponds. In portions of the project area, gently sloping hills rise from the floodplain. In other areas, such as at the headwaters of the Bayou du Chien near the community of Water Valley, Kentucky, and at Hickman, Kentucky, the relief is sharper, and steep bluffs overlook the floodplain.

Finch (1963, 1971), Lee (1974), Olive (1967, 1972) and Wilshire (1963) have described the geological deposits of the project area. The floodplain of the Bayou du Chien is covered by Pleistocene and Holocene age alluvium. This alluvium consists of yellowish- to grayish-brown, bluish-gray, greenish-gray or light to dark gray silt interlensed or intermixed with gray to bluish-gray silty clay and sands of various shades of gray and brown. Bluish- to greenish-gray pebbles and gravel occur in the sand matrix, while brown iron oxide concretions and carbonized vegetation occur locally in the silt deposits (Finch 1971). The ridge tops and slopes adjacent to the floodplain are covered with Pleistocene age loess. This loess consists of yellowish-brown, brownish-gray to dark grayish brown, medium gray and dark grayish brown silt containing some clay and sand. Both the alluvial and loessic deposits are underlain by Pliocene (?) and Pleistocene age continental deposits. The continental deposits consist of yellowish-brown to dark reddish-brown and yellowish gray sandy silts, yellowish-gray to medium gray sands which weather to red or reddish brown, yellowish-brown clay or sandy clay, and reddish-brown chert and quartz gravels in a sand matrix. The

continental deposits are underlain by Eocene age coastal plain deposits. The coastal plain deposits are comprised of sand, silt and clay. The sand deposits are various shades of white, gray, orange, brown and red. The silt deposits are yellowish-brown in color and sandy. The clay deposits consist of light-yellowish brown to light-brownish-gray, olive-green, and light-olive-brown clays, in places sandy and/or silty (Olive 1967). The continental deposits and coastal plain deposits are exposed in some localities, primarily at the headwaters of the Bayou du Chien and its tributaries and at the headwaters of other area drainages. The chert gravels and clays of these deposits would have been important resources for the prehistoric inhabitants of the project area. The gravels were exploited as a readily available local sources of raw material for the manufacture of stone tools, and the clay sources were exploited in the later prehistoric periods for the manufacture of ceramics.

According to the General Soil Map of Kentucky (Soil Conservation Service 1975) the soils of the Bayou du Chien floodplain belong to the Brandon-Loring-Saffell association in the approximate east one-third of the project area, to the Grenada-Loring association in the central one-third, and to the Falaya-Henry association in the western one-third of the project area. The former two soil associations are characterized as "deep, well-drained to poorly drained soils, formed in loess on undulating and hilly uplands" (Soil Conservation Service 1975) while the latter association is described as "deep, well-drained to poorly drained soils on nearly level flood plains and undulating terraces of the major streams" (Soil Conservation Service 1975). More detailed soil surveys are available for Graves county (Leighty and Wyatt 1953) and Fulton county (Newton and Sims 1961). Newton and Sims (1961:46-49, General Soil Map) describe the soil associations

of the Bayou du Chien floodplain in Fulton county as very poorly to somewhat poorly drained silt-loam subject to seasonally high water tables and to severe erosion. The soil types of the Graves county portion of the Bayou de Chien project area vary from well-drained to poorly drained silt loams (Leighty and Wyatt 1953:Sheet No. 1). In general, the soils of the Bayou du Chien floodplain become more poorly drained as one progresses from the headwaters in Graves county to the mouth of the Bayou du Chien in Fulton county. Historically the broad alluvial floodplain at the juncture of the Bayou du Chien, Obion Creek, and Mississippian River has been unsuitable for agriculture or permanent habitation due to the high water table and seasonal flooding (McNerney 1976b:1). This was probably true in prehistoric times as well. The alluvial floodplain provides a variety of micro-environments, however, that would provide varied faunal and floral resources to the inhabitants of the Bayou du Chien drainage area.

Braun (1950:Map of Forest Regions and Sections) categorized all of the project area, except the Mississippi River floodplain, as belonging to the Mississippi Embayment section of the Western Mesophytic Region (cf. Shelford 1963). This classification includes "a mosaic of unlike vegetation types, of prairie, oak-hickory forest, swamp forest, and mixed mesophytic communities" (Braun 1950:157). The prairielands were most extensive in present-day Graves county at the time of first White settlement. The settlers called this prairie area "the barrens", believing the prairie cover to be due to low soil fertility (Braun 1950:155). Alternately, it has been suggested that the prairie cover represented "a relict community which remained from a drier interglacial or postglacial time and had been perpetuated ... by Indians who periodically burned it to encourage grass and thus attract game (Wharton and Barbour 1973:21) or else that the prairie cover was the result of burning

of an original hardwood forest cover by the Indians (Leighty and Wyatt 1953:8). The extent of the prairie lands may have thus varied over time. Species of the Southeastern Evergreen Forest vegetated the Mississippi River floodplain (Braun 1950:Map of Forest Regions and Sections). This forest region would have extended onto the Bayou du Chien floodplain and onto the floodplains of other major tributaries of the Mississippi (Braun 1950:291).

Table 1 lists the major species of vegetation which were present in the project area in early historic times. A variety of herbaceous plants would also have been available in the project area (Wharton and Barbour 1971). These trees, shrubs, wildflowers and other vegetation would have provided a variety of nuts, fruits, herbs and other foodstuffs for the early settlers as well as for the prehistoric peoples who proceeded them. These plants would have also provided the raw materials for basketry and wood tools. The vegetation also served to feed and shelter a large variety of wildlife.

The species of animals which inhabit the project area are too numerous to list in entirety. Historically, however, white-tail deer (Odocoileus virginianus), cottontail rabbit (Sylvilagus floridanus), swamp rabbit (Sylvilagus aquaticus), gray squirrel (Sciurus carolinensis), fox squirrel (Sciurus niger), racoon (Procyon lotor), opossum (Didelphis virginiana), Mephitis mephitis, mink (Mustela vison), muskrat (Ondatra zibethicus), red fox (Vulpes vulpes), bear (Ursus americanus), and wild turkey (Meleagris gallopavo) are among the most common game species (Battle, Perrin and Kniffen 1972:40-41; Davis 1925; Newton and Sims 1964:33). Many additional species of mammals (Barbour and Davis 1974; Funkhouser 1925), birds (Barbour et. al. 1973; Mengel 1965), reptiles and amphibians (Barbour 1971), fish and unioids would have been available to prehistoric and historic inhabitants of the Bayou du Chien drainage. In the earliest period of human habitation in the area, now extinct Pleistocene megafauna and smaller vertebrate species which

Western Mesophytic Forest Region Species (Braun 1950:158-159)

Forest Type	Location	Common Name	Species Name
mixed mesophytic	ravine slopes and ridge tops	silver maple	<u>Acer succharinum</u>
		sugar maple	<u>Acer saccharum</u>
		maidenhair fern	<u>Adiantum pedantum</u>
		Devil's walking stick	<u>Aralia spinosa</u>
		bamboo	<u>Arundinaria gigantea</u>
		papaw	<u>Asimina triloba</u>
		gladefern	<u>Athyrium pycnocarpon</u>
		silvery gladefern	<u>Athyrium thelypteroides</u>
		cross-vine	<u>Bignonia capreolata</u>
		Virginia grapefern	<u>Bostrychium virginianum</u>
		ironwood	<u>Carpinus caroliniana</u>
		hickories	<u>Carya spp.</u>
		bittersweet	<u>Celastrus scandens</u>
		redbud	<u>Cercis canadensis</u>
		dogwoods	<u>Cornus spp.</u>
		strawberry bush	<u>Euonymus americanus</u>
		American beech	<u>Fagus grandifolia</u>
		white ash	<u>Fraxinus americana</u>
		wild hydrangea	<u>Hydrangea arborescens</u>
		butternut	<u>Juglans cinerea</u>
		black walnut	<u>Juglans nigra</u>
		spicebush	<u>Lindera benzoin</u>
		tuliptree	<u>Linodendron tulipifera</u>
		sweetgum	<u>Liquidambar styraciflua</u>
		cucumber tree	<u>Magnolia acuminata</u>
		mulberry	<u>Morus rubra</u>
		sour gum	<u>Nyssa sylvatica</u>
		hophornbeam	<u>Ostrya virginiana</u>
		Virginia creeper	<u>Parthenocissus quinque-</u> <u>folia</u>
		beech fern	<u>Phegopteris hexagonoptera</u>
		Christmas fern	<u>Polystichum acrosti-</u> <u>choides</u>
		white oak	<u>Quercus alba</u>
		red oak	<u>Quercus borealis</u> var. <u>maxima</u>
		black oak	<u>Quercus velutina</u>
		poison ivy	<u>Rhus radicans</u>
		elderberry	<u>Sambucus canadensis</u>
		sassafras	<u>Sassafras albidum</u>
		bladdernut	<u>Styphylea trifolia</u>
		basswood	<u>Tilia floridana</u>
		basswood	<u>Tilia neglecta</u>
		grapes	<u>Vitis spp.</u>

TABLE 1. Major Floral Species of the Bayou du Chien Drainage Project Area.

 Western Mesophytic Forest Region Species (Braun 1950:158-159)

Forest Type	Location	Common Name	Species Name
oak-hicory forest	uplands	sugar maple	<u>Acer saccharum</u>
		Devil's walking stick	<u>Aralia spinosa</u>
		hickories	<u>Carya spp.</u>
		dogwoods	<u>Cornus spp.</u>
		American hazelnut	<u>Corylus americana</u>
		persimmon	<u>Diospyros virginia</u>
		beech	<u>Fagus grandifolia</u>
		upland forestiera	<u>Forestiera ligustrina</u>
		white ash	<u>Fraxinus americana</u>
		holly	<u>Ilex spp.</u>
		tuliptree	<u>Liriodendron tulipifera</u>
		mulberry	<u>Morus rubra</u>
		sour gum	<u>Nyssa spp.</u>
		white oak	<u>Quercus alba</u>
		southern red oak	<u>Quercus falcata</u>
		blackjack oak	<u>Quercus marilandica</u>
		chinquapin oak	<u>Quercus prinoides</u>
		post oak	<u>Quercus stellata</u>
		black oak	<u>Quercus velutina</u>
		poison ivy	<u>Rhus radicans</u>
		elderberry	<u>Sambucus canadensis</u>
		sassafras	<u>Sassafras albidum</u>
		buckberry	<u>Symphoricarpos orbicu-</u>
	<u>latus</u>		
	<u>Ulmus alata</u>		
<hr/>			
prairie	uplands	long grasses	
<hr/>			
swamp forests	broad alluvial valleys	box elder	<u>Acer negundo</u>
		red maple	<u>Acer rubrum</u>
		silver maple	<u>Acer saccharinum</u>
		river birch	<u>Betula nigra</u>
		pecan	<u>Carya pecan</u>
		smooth hackberry	<u>Celtis laevigata</u>
		sweet gum	<u>Liquidambar styraciflua</u>
		sycamore	<u>Platanus occidentalis</u>
		cottonwood	<u>Populus deltoides</u>
		swamp cottonwood	<u>Populus heterophylla</u>
		overcup oak	<u>Quercus lyrata</u>
		water oak	<u>Quercus nigra</u>
		pin oak	<u>Quercus palustris</u>
		willow oak	<u>Quercus phellos</u>

 TABLE 1. Major Floral Species of the Bayou du Chien Drainage Project Area.
 (cont.)

 Western Mesophytic Forest Region Species (Braun 1950:158-159)

Forest Type	Location	Common Name	Species Name
swamp forest (cont.)	broad alluvial valleys	chestnut oak	<u>Quercus prinus</u>
		black willow	<u>Salix nigra</u>
		bald cypress	<u>Taxodium distichum</u>
		winged elm	<u>Ulmus alata</u>
		American elm	<u>Ulmus americana</u>

 Southern Evergreen Forest Region (Braun 1950:281-297; Leighty and Wyatt 1953:9; Wharton and Barbour 1973)

Forest Type	Location	Common Name	Species Name
mesophytic hardwood forests	slopes and ravines	white baneberry	<u>Actaea pachypoda</u>
		maidenhair fern	<u>Adiantum pedatum</u>
		white snakeroot	<u>Eupatorium rugosum</u>
		wild hydrangea	<u>Hydrangea arborescens</u>
		pale jewelweed	<u>Impatiens pallida</u>
		wood nettle	<u>Laportea canadensis</u>
		Virginia creeper	<u>Parthenocissus quinquefolia</u>
		beech fern	<u>Phegopteris hexagonoptera</u>
		Virginia knotweed	<u>Polygonum virginianum</u>
		Christmas fern	<u>Polystichum acrostichoides</u>
		sessile trillium	<u>Trillium sessile</u>
pine and pine-oak forest	sand hills, moist soils, flat bottomlands	lobolly pine	<u>Pinus taeda</u>
		Spanish moss	<u>Tillandsia</u> spp.
bottomland hardwood forest	bottomlands, alluvial plains of major tributaries of Mississippi River	silver maple	<u>Acer saccharinum</u>
		hickories	<u>Carya</u> spp.
		ashes	<u>Fraxinus</u> spp.
		honey locust	<u>Gleditsia triacanthos</u>
		black walnut	<u>Juglans nigra</u>
		sweet gum	<u>Liquidambar styraciflua</u>

 TABLE 1. Major Floral Species of the Bayou du Chien Drainage Project Area.
 (cont.)

Southern Evergreen Forest Region (Braun 1950:281-297; Leighty and Wyatt 1953:9; Wharton and Barbour 1973)

Forest Type	Location	Common Name	Species Name
bottomland hardwood forest (cont.)	bottomlands, alluvial plains of major tributaries of Mississippi River	red mulberry	<u>Morus rubra</u>
		sour gum	<u>Nyssa spp.</u>
		sycamore	<u>Platanus occidentalis</u>
		cottonwood	<u>Populus deltoides</u>
		white oak	<u>Quercus alba</u>
		swamp white oak	<u>Quercus bicolor</u>
		southern red oak	<u>Quercus falcata pogodae-</u> <u>folia</u>
		pin oak	<u>Quercus palustris</u>
		chinquapin oak	<u>Quercus prinus</u>
		black oak	<u>Quercus velutina</u>
		sassafras	<u>Sassafras albidum</u>
		American elm	<u>Ulmus americana</u>
<hr/>			
swamps	lowlands	buttonbush	<u>Cephalanthus occidentalis</u>
		sweet gum	<u>Liquidambar styraciflua</u>
		water tupelo	<u>Nyassa equatica</u>
		overcup oak	<u>Quercus lyrata</u>
		pin oak	<u>Quercus palustris</u>
		willow oak	<u>Quercus phellos</u>
		willow	<u>Salix spp.</u>
		cypress	<u>Taxodium distichum</u>

TABLE 1. Major Floral Species of the Bayou du Chien Drainage Project Area.
(cont.)

are also now extinct or which no longer inhabit the project area would have been present in addition to or in place of the species present in historic times.

From data gathered at Hickman, Kentucky, the following generalizations may be made about the climate which supported the faunal and floral resources of the project area. The climate of the project area is quite favorable, being relatively mild, temperate and humid. The wettest month is generally May which has an average rainfall of approximately 5.5 inches (14 cm). The driest month is October which averages slightly more than two inches (5.1 cm) of rainfall. Average annual precipitation is 46.26 inches (116 cm), while the average temperature is 58.2°F, with a wide annual range (Franklin 1974:14). The length of the growing season is approximately 200 days (Franklin 1974:16).

In summary, the project area consists of a number of microenvironments which support a diverse and abundant floral and faunal resources base. These resources, in conjunction with the chert and clay resources and a climate conducive to agricultural pursuits would have attracted people to this area throughout prehistory and history.

CULTURAL BACKGROUND

Mankind has existed within Western Kentucky for more than 12,000 years. This fact demonstrates that prior to and after the establishment of modern biotic patterns, prehistoric man was well adapted to exploiting the natural habitat of the area. Physical evidence of the eastern North American Indian's appearance and adaptation to the changing post-glacial conditions of the region is most frequently found in his technology, specifically in that part of the technology that has been preserved throughout the ages, such as inorganic artifacts, like stone tools and ceramics.

Three distinct temporal-cultural periods may be distinguished within the

western Kentucky area: prehistoric, protohistoric and historic (Griffin 1967). Prehistory (ca., 10,000 B.C. to A.D. 1600) refers to that time before the use of written records within a particular geographical region. Proto-history (ca., A.D. 1600 to A.D. 1800) is the time period shared between two or more cultural groups within the same area in which only one of the groups makes use of writing. All historic cultural groups use writing as a form of communication and record keeping. In the west Kentucky area, history begins around A.D. 1800.

The major classificatory stages or cultural traditions of eastern U.S. prehistory are Paleo-Indian, Archaic, Woodland and Mississippian. The Archaic and Woodland periods are further subdivided into Early, Middle and Late temporal subperiods. These subdivisions correspond in general to major cultural developments within a major cultural tradition, i.e., the development of mound building or the invention of a new technology such as ceramic manufacture. These subdivisions also provide convenient temporal divisions within the much larger cultural traditions.

The Paleo-Indian Cultural Tradition is one of the earlier, if not the earliest, cultural stage of prehistoric development in the New World. This stage of development (ca., 10,000 B.C. to 8000 B.C.) is generally characterized by small bands of nomadic hunters. These individuals lived during the cold climatic conditions associated with the end of the Wisconsin glaciation. They manufactured single- and double-fluted, lanceolate projectiles, and other types of bifacial and unifacial chipped stone tools. Although frequently referred to as "Big Game Hunters" (some Paleo-Indian artifacts have been found in association with extinct Pleistocene megafauna, i.e., mammoth (Mammuthus primigenius) and mastodon (Mammut americanum), the Paleo-Indians relied more frequently on the hunting of caribou (Rangifer

tarandus), wapiti (Cervus canadensis), white-tailed deer, black bear, bison (Bison ssp.), and numerous smaller, nonhuman vertebrates. Some Paleo-aged sites also contained vegetal processing tools that may have served as grinding implements. The Paleo-Indian, therefore, was a gatherer of wild plant foods as well as a hunter. Very little is known, however, about the sociological or ideological aspects of Paleo-Indian culture (e.g., social organization, settlement system, and burial customs), although Rolingson and Schwartz (1966) and Rolingson (1964) have suggested several plausible hypotheses about Paleo-Indian adaptation and cultural process. More recently, Gatus and Marquardt (1984) have attempted to clarify the chronology of the Paleo-Indian Period and to identify variations in site types at Paleo-Indian sites in western Kentucky.

From about 8000 B.C. to 1000 B.C., climatic conditions appear to have stabilized. Yearly temperature averages were, in some areas, probably slightly greater than those of today. The cultural adaptations during this seven thousand year period appear to have been extremely successful (Caldwell 1958) and archaeological evidence of the Archaic Cultural Tradition is much more plentiful than that of the previous Paleo-Indian Period, probably because of a general increase in population size and more permanency in settlement patterns.

Regional variation in multi-niche exploitation appears to have been the subsistence theme throughout the Archaic Tradition. Oscillation between focal and diffuse subsistence economies were present (Cleland 1976) and probably related to regional cultural techno-environmental potential and exploitation techniques. Technological inventories of material culture were greatly expanded to perform the myriad tasks necessary for multi-niche exploitation, i.e., various projectile point forms, scrapers, burins, knives, drills, and perforators, as well as a variety of ground stone axes or celts,

pestles, grinding stones, and hammerstones. Some evidence of basketry and textile production also exists for the eastern U.S. area cultures, especially from Kentucky (Watson 1974). Social organization appears to be more complex and ideological expressions, e.g., burials with grave goods, are more frequent. Near the end of the Archaic Period some Kentucky cultures demonstrate expansion in food subsistence pursuits (e.g., horticulture), production of ceramics and/or stone bowl proto-types, and the establishment of long-distance trade routes through which rare or precious raw materials and ideas were transmitted.

It is out of the Archaic Tradition that the Woodland cultures developed beginning around 1000 B.C. This cultural tradition lasted until about A.D. 900. The broad spectrum of cultural development seen in the Archaic is greatly expanded and embellished during the Woodland Period by Ohio Valley cultural groups, e.g., Adena (ca., 1000 B.C. to 300 B.C.) and Hopewell (ca., 300 B.C. to A.D. 300) cultures.

During the early to middle portions of the Woodland Period (ca., 1000 B.C. to A.D. 300), secular-elitism and aesthetic developments were emphasized (e.g., elaborately furnished burial offerings, and the construction of large conically-shaped burial mounds for only certain individuals within Woodland society). Sedentary or permanent settlements with rounded- or squared-walled dwellings were constructed in areas generally accessible to flat river bottom-lands. The latter areas were used principally for horticultural pursuits. However, hunting still appears to have been an important cultural subsistence activity and many small, usually male-dominated hunting camp stations have been located (Prufer and McKenzie 1967).

By A.D. 900 the mid-Ohio Valley region cultures continued the Woodland development, but with added subsistence emphases that included permanently

settled, agriculturally-oriented communities. Aesthetic cultural-behavioral norms seem to be replaced with utilitarian norms in the Late Woodland. Villages several acres in size were often fortified with palisaded walls and were generally located on small hill-tops overlooking floodplains. Agricultural pursuits, including the growing of corn, beans, and squash, were well developed. The bow and arrow were new technological inventions. Burials occurred within limestone slab burial chambers. These post-Woodland cultural developments, termed Mississippian, appear to have persisted until the influx of European missionaries and traders, circa A.D. 1650. A suggested chronology of the Mississippian period and variations in Mississippian site types in western Kentucky has been discussed in Clay (1963, 1976). After the influx of Euro-Americans, native American populations suffered a major decline in population, primarily as a result of introduced diseases to which they had no natural resistance.

Social disruption and cultural dislocation among various Woodland Indian groups occurred primarily during the Proto-historic Period. By the late 17th and early 18th century, disease, disruption and social turmoil were marked to such an extent that specific Indian groups, which had been present in the early Proto-historic Period, were said to be no longer inhabiting Kentucky. In 1780, John Filson had visited Kentucky and in 1784 published a book stating that no Indian tribe laid claim to the area known as Kentucky. Kentucky, therefore, was declared "free" for White settlement (Filson 1784). European expansion into the Ohio Valley-Kentucky Chickasaw and Shawnee territories led to additional conflicts. It also resulted in the complete depletion of elk (wapiti), bison and other big game animals.

French and English traders had been exploring the territory that was to become Kentucky since 1693, if not before. Settlement by Europeans did not

begin until the time of the American Revolution, however. A treaty with the Cherokee opened the land for settlement in 1775, and Daniel Boone's fort in present Madison county was constructed in the same year. Kentucky County, legally part of Virginia, was established in 1776 (Kerr 1922).

In 1780, George Rogers Clark built Fort Jefferson near the confluence of Mayfield Creek and the Mississippi River (James 1972), approximately 30 miles north of present-day Hickman, Kentucky, and the current project area, in an attempt to establish an American claim to the western most area of what was then Virginia. The Chickasaw Indians had not yet relinquished their claims to the area between the Tennessee and Mississippi Rivers, however, and frequently held the fort under seige. Fort Jefferson was abandoned in June of 1781. Few settlers attempted to re-occupy the area of Kentucky County west of the Tennessee River until it was purchased from the Chickasaw Indians in 1818. This territory, known as Jackson's Purchase, was annexed to Kentucky, which had been granted statehood in 1792.

The entire Jackson Purchase area in Kentucky was designated Hickman county in 1821. This was subsequently further divided until the present eight counties of the Jackson Purchase were established in 1886. Graves county, with Mayfield as county seat, was formed in 1823. The present day boundaries of Hickman county, with Clinton serving as county seat, and Fulton county, with the city of Hickman as county seat, were established in 1845 (Franklin 1974:4-5).

Like the remainder of the Purchase Area, little settlement by Euro-Americans occurred in the project area before the acquisition of the territory from the Chickasaw Indians. The majority of the project area has been used for agricultural pursuits in historic times, consisting of dispersed farmsteads, lumber mills and other isolated, agriculturally-related

sites. Three communities, however, lie in or immediately adjacent to the project area. These are Hickman, Moscow and Water Valley.

The city of Hickman, in Fulton county, was first settled in 1819 by James Mills (Battle, Perrin and Kniffen 1972:42), although Mills may have visited the area as early as 1804 (Fulton County Historical Society 1983: 22). This settlement was originally called Mills Point. The community of Mills Point prospered as a river port, attracting the attention of an investor, G.W.F. Marr. Marr successfully contested the legality of a military survey of the land, and subsequently gained control of some 3000 to 4000 acres in the Mills Point area. Marr hired Austin F. Tyler to develop a town plan, and changed the name of the community to Hickman (Marr's wife's maiden name). Hickman was incorporated in 1834 or 1837 (sources differ on this point) by an act of the Kentucky legislature (Battle, Perrin and Kniffen 1972:42; McHugh 1977:11; Robbins 1936).

Hickman's role as a commercial and shipping center was expanded in the 1850s with the laying of the Hickman and Obion Railroad in 1854 and of the Hickman and Union City line in 1858. The Nashville and Northwestern Railroad assumed control of these lines, later incorporating them into the Nashville, Chattanooga and St. Louis Railroad system. Additional railroad lines were established with Hickman as a station. The Mobile and Ohio Railroad was constructed around 1856 and the Southern Division of the Illinois Central Railroad was laid in 1873 to 1874 (McHugh 1977:11). These railroad lines at first complemented the river shipping activities, but later dominated and then replaced the river commerce.

Throughout the history of Hickman the riverfront served as the locus of commercial and industrial activities, with the city's residential areas located on the bluffs back from the Mississippi and Bayou du Chien. The location of the industrial section on the riverfront made it prone to

flooding. High floods in 1911, 1912 and 1927 proved that the levee system in existence was inadequate, resulting in the 1934 construction of a concrete seawall to protect the main business section of Hickman and of a new levee to protect the industrial area of West Hickman.

The community of Moscow, in Hickman county, was first settled in the early 1820s (Battle, Perrin and Kniffen 1972:62-63). This community has served as shipping center for the surrounding agricultural district since its establishment. Freight and passengers could be transported both to and from the Mississippi River and Hickman via flatboats on the Bayou du Chien. A ferry service, established in the 1830s, allowed passage across the Bayou du Chien. The early establishment of hotels, saloons, restaurants and a race track added to the prosperity of the town, attracting visitors for social events as well as for the commercial facilities.

In 1829 a new location for the county seat of Hickman county was being sought to replace the original county seat at Columbus, Kentucky. Residents of Moscow lobbied for the re-location of the county seat to Moscow based on the prosperity of the community and on its central location within the 1820s boundaries of Hickman county. The 1829 bid for the county seat was unsuccessful, but Moscow politicians continued to seek re-location of the county seat to Moscow. Politicians from Columbus and Clinton, the other two towns seeking the county seat designation, countered by lobbying for the creation of new counties. This eventually led to the creation of Ballard and Fulton counties in 1845. The creation of these counties caused Moscow to be located on the perimeter, rather than at the center, of Hickman county.

Despite this setback in political aspirations, Moscow continued to flourish as a shipping center throughout the nineteenth century. The shipping industry was increased by the introduction of railroad transport via the Mobile and Ohio railroad in the 1850s. The eventual decline of

river transport and railroad passenger traffic, combined with the improvement of road systems and growth of more centrally located neighboring communities brought about the decline of importance of Moscow in shipping (Battle, Perrin and Kniffen 1972:62-63; Hickman County Historical Societies 1983:28-29; Owings 1971:15-17). The collapse of the shipping industry led to the closing of most businesses not essential to the immediate agricultural community in the early twentieth century, and many residents moved from Moscow.

Water Valley, at the eastern extreme of the project area in Graves county, was established as a railroad community following the construction of the Illinois Central Railroad in the 1870s. It serves as a shipping and processing center for the surrounding agricultural district (Battle, Perrin and Kniffen 1972:60).

According to Battle, Perrin and Kniffin (1972:42-44, 63), McHugh (1977:22), Owings (1971) and the Fulton county (Fulton County Historical Society 1983) and Hickman county (Hickman County Historical Society (1983) histories, many of the original structures, from the period circa 1820 to 1840, in Hickman and Moscow were destroyed in the nineteenth century by fires or floods, were replaced by later structures, or were allowed to deteriorate following abandonment. The Civil War also caused the destruction of numerous early structures. No major battles were fought in the project area, but both the Confederate and Union armies were present in the area. Although Kentucky was officially a neutral state, and the Purchase Area had been occupied by the Union Army early in the war, many people in Graves, Hickman and Fulton counties sympathized with the Confederacy. The activities of Confederate guerillas and the recriminatory actions of the Union army caused considerable damage to property in the project area and its adjacent communities.

PREVIOUS RESEARCH

The project area is part of the Jackson Purchase Archaeological Management Area (Clay 1978). Research in Fulton, Hickman and Graves counties may be divided into two major periods. The first of these is characterized by the exploration and description of sites, primarily large mound groups, during the nineteenth and early twentieth century. The second period, 1933 to the present, is characterized by long hiatus in archaeological research followed by predominantly cultural resource management studies conducted in fulfillment of historic preservation and environmental protection legislation requirements.

Sites Documented 1824-1932

Archaeological research in the project area during the first period focused primarily on the exploration and description of mounds and earthworks. This work was part of the national concern in solving what has been called "the Moundbuilder problem" (Willey and Sabloff 1974:21-87). Most archaeological exploration in eastern North America during the nineteenth and early twentieth centuries was conducted in an attempt to determine the origin of the builders of the mounds and earthworks and their relationship to the Native Americans living during the protohistoric and historic periods. Several mounds, mound groups and earthworks in Fulton and Hickman counties attracted the attention of early explorers.

Funkhouser and Webb (1932) summarize the early report of sites in the project area (Loughridge 1888, Marshall 1824, Rafinesque 1824, Thomas 1894, Young 1910) as well as present information about sites newly reported to them as a result of their questionnaire survey. Funkhouser and Webb list 13 sites in Fulton county (1932:128-133), nine sites in Graves county (1932:142-144)

and 10 sites in Hickman county (1932:185-187). Of these 32 sites, eight lie in or near the project area. These are the Funkhouser and Webb (1932) Fulton county sites 1, 2, 4, 7, 9, 11 and 13 and Hickman county site 2. (See Appendix C for the complete Funkhouser and Webb (1932) descriptions of these sites.) Problems have been encountered by more recent researchers in trying to re-locate the Funkhouser and Webb (1932) sites based on their descriptions and mapped locations. Additional discrepancies were noted during the preparation of this report. For the sake of clarity each site will be discussed in the order given in Funkhouser and Webb (1932).

Fulton County Site 1 (see Appendix B:12-14; Appendix C:1-2,6-7)

This site is known as O'Byams Fort. The site was first described and mapped by Loughridge (1888:174-176)(Appendix C:2). Thomas (1894) and Young (1910:51,57) also refer to and depict this site, which consists of a large "tuning fork" shaped earthwork with associated mounds. Funkhouser and Webb (1932:129) state that they visited the site in 1931, and that the site was "almost entirely obliterated" by that time. Carstens (1982) surveyed the site area in 1981, re-locating the earthworks and mounds as described and depicted by the earliest surveyors. Carstens (1982:17-19) concluded that Funkhouser and Webb did not actually survey site 1 (O'Byams Fort), but visited site 11 (Appendix C:5-7) (Stahr Hill, to be discussed below) mistaking the Stahr Hill site for the O'Byams Fort site.

The O'Byams Fort site was originally assigned state site number 15Ful. In the Carstens (1982) 1981 survey of the O'Byams Fort site, each mound or earthwork was separately surface collected and re-assigned individual site numbers, with one exception. This exception is the assignation of a single site number to two adjacent mounds following the mixing of the surface collections of these mounds by a fieldworker. As a result of the Carstens

(1982) survey, the O'Byams Fort mound complex received state site numbers 15Fu37 through 15Fu44. Site number 15Fu37 refers to the earthwork and associated habitation area, sites 15Fu38, 15Fu39, 15Fu40, 15Fu42, 15Fu43 and 15Fu44 are individual mounds associated with the earthwork, and site 15Fu41 refers to the two adjacent mounds which were collected together.

Through an early error by Thomas (1894:280), site 15Hi1 (Appendix B: 10, 11), the McLeod Bluff site (McNerney 1976; Webb and Funkhouser 1933) or McClouds Bluff site (Funkhouser and Webb 1932:185-186), was misidentified as O'Byams Fort. Later sources using Thomas' information sometimes duplicate this error (Funkhouser and Webb 1928:320; Phillips 1970). Researchers need, therefore to determine which site (15Fu37 or 15Hi1) is being referred to by the name "O'Byams Fort" before using the information provided in a source.

Fulton County Site 2 (see Appendix C:2)

This site was reported (Funkhouser and Webb 1932:129) to be an earthwork with an associated habitation site, lying approximately one-half mile (0.3 km) south of site 1. The site had been heavily disturbed by railroad and road construction and by cultivation by the time of Funkhouser and Webb's 1931 visit. Based on his 1981 survey of the site area, Carstens (1982:17-19) determined that site 2, actually 0.45 kilometers south of Stahr Hill, is a mound belonging to the O'Byams Fort mound complex, but lies within the boundaries of the surface scatter of the Stahr Hill habitation complex. This mound was originally assigned site number 15Fu2, but re-assigned state site number 15Fu38 as part of the O'Byams Fort complex following Carstens (1982) (Appendix B:12-14).

Fulton County Site 4 (see Appendix B:10-11, 14; Appendix C:3-4, 6-7).

Site 4 is a mound complex consisting of seven mounds (Funkhouser and Webb 1932:131-132). This site is referred to by Rafinesque (1824), Marshall (1824) and Young (1910:46) and was mapped by Loughridge (1888: 176-177) (Appendix C:4). Funkhouser and Webb (1932:131) refer to the site as "Fort Bayou de Chien" and "Roberts Mound". The site diagrammed (Funkhouser and Webb 1932:132) is now known as the Adams Site, or 15Fu4. The location of site 4 on the Fulton county map (Funkhouser and Webb 1932:128) (Appendix C:6) does not correspond to the location of 15Fu4, however. The location depicted corresponds more closely with a site later recorded, 15Fu24, which is a habitation site.

In their description of site 15Fu4, Funkhouser and Webb (1932:131) also describe a canal which originated at the north end of 15Fu4 and connected Bayou du Chien with Obion Creek to the north. This canal is known as "Lake Slough" or "Dry Lake". Whether it is of cultural or natural origin has never been adequately resolved (Funkhouser and Webb 1928:79; Funkhouser and Webb 1933:131; Jewell 1954, 1982a,b; McNerney 1976:2-3; Webb and Funkhouser 1933:8). McNerney (1976) sought the opinion of a geologist, Dr. George Fraunfelter of Southern Illinois University at Carbondale. Fraunfelter (1976:1) stated

Direct observations have not led to the recognition of evidences of excavations along the dry lake drainageways that would indicate canal building or maintenance activities in the area ... There is no sign of any un-natural interruption of sedimentation patterns, in fact Dry Lake is not a single drainage system; but rather, a series of disconnected depressions and channels that represent parts of a number of different drainageways.

It is not apparent from Fraunfelter's (1976) brief (one and a half page) discussion of the canal what field techniques were employed to examine the canal. No systematic archaeological reconnaissance has ever been conducted of this feature. This feature is not considered part of the 15Fu4

mound complex, and no state site number has ever been assigned to it.

Fulton County Site 7 (see Appendix B:8,14; Appendix:4,6,7)

Site 7 is described as one of a series of camp sites located on the banks of the Bayou du Chien (Funkhouser and Webb 1932:133). This site has been assigned site number 15Fu7. Site 15Fu7 lies on the Little Bayou du Chien, not the Bayou du Chien, however, and lies outside the current project area.

Fulton County Site 9 (see Appendix B:13-14; Appendix C:4,6,7)

Site 9 is reported (Funkhouser and Webb 1932:133) to be a small mound which had been heavily disturbed by 1932. This site received state site number 15Fu9. It now lies within the city limits of Hickman.

Fulton County Site 11 (see Appendix B:13-14; Appendix C:5-7)

Site 11 is called the Stahr Hill or Indian Hill site. It is described as a "mound or camp site" (Funkhouser and Webb 1932:133) which was disturbed by railroad and road construction. This is apparently the site visited by Funkhouser and Webb in 1931 in the mistaken belief that it was O'Byams Fort (Carstens 1982:17-19), as discussed above. Followings Carstens' 1981 survey, state site numbers 15Fu45, 15Fu46, and 15Fu47 were assigned to the Stahr Hill complex. Site 15Fu45 is the Stahr Hill or Indian Hill site, a large multi-component village site. Site 15Fu46, the Black Site, and 15Fu47, the Lattus site, are smaller habitation sites considered to be part of the Stahr (Indian) Hill site complex and possibly contemporaneous with the main village area, 15Fu45 (Carstens 1982:19). The location of site 11 as depicted in Funkhouser and Webb (1932:128) does not correspond to the location of Stahr Hill or of any recorded site.

Fulton County Site 13 (see Appendix B:13-14; Appendix C:5-7)

Site 13 was a mound first described by Loughridge (1888:173) which was destroyed during the development of Hickman (Funkhouser and Webb 1932:133). This site has been assigned state site number 15Fu13.

Hickman County Site 2 (see Appendix B:10-11,14; Appendix C:5,7)

Hickman county site 2 is listed as a mound group on the Bayou du Chien (Funkhouser and Webb 1932:186). The locational information given in the brief description would place the site in Fulton county, however. This site was reported to Funkhouser and Webb by a local resident, and it is not apparent from their 1932 report that the information had been field checked. The reported location of Hickman county site 2 corresponds roughly with that of 15Fu4 (the Adams Site) or 15Fu14.

Summary

In summary, the early period research, culminating in Funkhouser and Webb's (1932) catalog of sites, resulted in the documentation of eight sites in or near the Bayou du Chien drainage. Hickman county site 2, if it refers to a site other than 15Fu4 or 15Fu14, has never received a state site number. Following more recent surveys in the project area, the O'Byams Fort complex (Fulton county sites 1 and 2) has received state site numbers 15Fu37 through 15Fu44, the Stahr Hill complex (Fulton county site 11) has received site numbers 15Fu45 through 15Fu47, and the Adams Mound group (Fulton county site 4) has been assigned site number 15Fu4. Fulton county site 13 has been designated 15Fu13; 9, 15Fu9; and 7, 15Fu7.

Sites Documented Post-1932

A long hiatus in archaeological research in the project area appears in the literature following the publication of Funkhouser and Webb (1932).

One site, 15Fu14, was recorded in the late 1950s following a survey by Sloan (1957)(Appendix B:10-11,14). The location of this site is considered tentative, however, because directions to the site were given in hundredths of miles, a difficult measurement to accurately replicate and map (Clay, personal communication). Following the Sloan survey, there is again a hiatus until work was renewed in the 1970s in response to the enactment of historic preservation and environmental protection legislation. This research has taken the form of cultural resource management archaeological reconnaissance project related to specific development project and of larger scale research projects funded by government agencies.

The Carstens (1982) 1981 survey referred to in the discussion of Funkhouser and Webb's (1932) catalog of sites was a cultural resource management (CRM) study of two proposed sewer lines near Hickman, Kentucky. In addition to the assignation of state site numbers to the O'Byams Fort complex (15Fu37 through 15Fu44) and the Stahr Hill complex (15Fu45 through 15Fu47), three additional sites were reported near the current project area as a result of the survey (Appendix B:12-14). These are sites 15Fu48, 15Fu49 and 15Fu50. An additional area to the west of Hickman and out of the current project area was also surveyed as part of the Carstens (1982) survey with negative results.

One of the techniques used by Carstens (1982) to locate site areas was the field-checking of areas identified as anomalies on aerial photographs. The applicability of aerial photograph interpretation to the identification of archaeological sites was tested in a study funded by the Kentucky Heritage Council (Carstens and Weber 1982; Carstens, Kind and Weber 1982). Although the field work of this study was concentrated on the Sassafras Ridge site (15Fu3) area to the southwest of the current project area, aerial photographs illustrating the "signatures" or anomalies of the features at O'Byams Fort (15Fu37) and Adams Mound (15Fu4) appear in Carstens and Weber (1982:16,18).

Only a few CRM projects have been conducted in or near the current project area in the Bayou du Chien drainage. McHugh (1976,1977) conducted archaeological reconnaissance surveys of two areas proposed for development in the city of Hickman with negative results. Berwick's (1978) survey of the proposed Hickman slope adjustment project area also encountered no new sites. Portions of Obion Creek, to the north of the current project area, have been surveyed (McNerney 1976a,b). Site 15Fu20 and 15Fu24, in the current project area, were reported in 1976 by McNerney (Clay, personal communication), but not discussed in either survey report. The McLeod Bluff site (15Hil) and the canal are discussed in McNerney (1976b), however.

Two segments of the Great River Road project (McGraw 1981, 1984) traverse the Bayou du Chien drainage. These are Alternate H-1 along Salmon Road near Hickman (Appendix B:12) and Alternate I-1 along Highway 239 near Moscow (Appendix B:7-9). Because these routes follow existing roads, only a narrow right-of-way corridor was inspected by pedestrian reconnaissance adjacent to the roads. Part of Alternate I-1, the segment in "the area north from Moscow, Kentucky for a distance of some .4 kilometers" (McGraw 1984:2) could not be adequately inspected due to the nature of the crops. McGraw (1984:2,40) recommends that this area be re-examined prior to development to ensure that no significant archaeological deposits would be impacted. No new sites were encountered in the current project area during the Great River Road survey, but several previously recorded sites which lie in the project area were encountered and evaluated. These sites consist of 15Fu4, 15Fu14, 15Fu20 and 15Fu24. In addition the "ancient canal" discussed above in conjunction with Funkhouser and Webb's (1932) Fulton county site 4 (15Fu4, the Adams Site) were evaluated. McGraw (1984:42) recommended no further work on 15Fu20 in conjunction with the Great River Road Project, because it lies outside the right-of-way of Alternate

H-1 of the Great River Road. Further archaeological action was recommended for sites 15Fu4, 15Fu14 and 15Fu24 if Alternate I-1 was selected, and for the "ancient canal" if alternate H-1 was selected, for construction of the Great River Road. Outside the current project area, the Great River Road Project recorded in the recording of 47 sites -- one in Ballard county (15Ba306), six in Carlisle county (15Ce13 through 15Ce18), 38 in Hickman county (15Hi16 through 15Hi47, 15Hi49 through 15Hi54) and two in Fulton county (15Fu12 and 15Fu51).

The Western Kentucky Project is an on-going research program funded by the Kentucky Heritage Council with Dr. R. Barry Lewis of the University of Illinois, Champaign-Urbana, as Principal Investigator. The program has included several seasons of investigations at the Adams Site (15Fu4). A series of publications have resulted from these investigations, including an analysis of human skeletal remains (Allen 1984), an analysis of the ceramics (Lewis and Mackin 1984) and comparisons of the Adams Site with other area Mississippian mound group sites (Lewis 1984, Stout 1984). During the 1985 field season, the Western Kentucky Project included a survey of the ridge systems adjoining in the discovery of eight previously unrecorded sites within an approximate one kilometer radius of site 15Fu4 and an extension of the boundaries of site 15Fu24. Site forms have not yet been filed with the Office of State Archaeology, Lexington (Clay, personal communication), so these sites have not yet been assigned state site numbers. According to Tom Sussenbach (1985), a member of the Western Kentucky Project research team, one of the sites is an Archaic (probably late Middle Archaic) site, while the remaining seven are lithic scatters of indeterminate cultural-temporal affiliation. The eight sites in the Bayou du Chien drainage project area, and additional sites encountered outside the current project area, will

"be fully described and discussed in a monograph to be put out in 1986 ... Western Kentucky Project, Report 5. University of Illinois, Urbana" (Lewis, editor, in prep.) (Sussenbach 1985).

The Office of State Archaeology, University of Kentucky, Lexington lists no sites in addition to 15Fu4, 15Fu9, 15Fu13, 15Fu14, 15Fu20, 15Fu22, and 15Fu37 through 15Fu50 as existing in or near the current project area, the Bayou du Chien drainage (O'Mack, personal communication). Dr. R. Berle Clay, Office of State Archaeology (personal communication) stated that the location of 15Fu14 is tentative pending field checking of the original site report location (Sloan 1957).

The State Historic Preservation Office (Sanders 1985) lists three historic cultural resources in or near the project area in addition to the prehistoric sites described above. These are historic resources 15Gv4 through 15Gv6 at the eastern extreme of the project area, in Graves county (Appendix B:3,14). These historic resources were assigned numbers similar to the Smithsonian system numbers assigned to archaeological sites. These are not archaeological sites, however, and are not listed with the Office of State Archaeology. These historic resource numbers duplicate numbers already assigned to archaeological sites, so researchers should determine which set of resources (archaeological sites or historic resources) are being referred to in sources. Historic resource 15Gv4 is the Bayou de Chien Church, a standing structure. Historic resource 15Gv5 is the Camp Beauregard Cemetery. The Camp Beauregard Cemetery dates from the Civil War. Many of the soldiers interred in the cemetery died during a flu epidemic at Camp Beauregard (Pollack, personal communication). Historic resource 15Gv6 is the Nell Rose Home, a standing structure in Water Valley (Railey, personal communication). National Register eligibility of historic resources 15Gv4 through 15Gv6 has not been assessed.

Mr. Jim Railey, of the Kentucky Heritage Council, has been conducting

a survey of previously recorded sites throughout Kentucky to assess National Register eligibility. As a result of this survey, the Adams Site, 15Fu4, has been placed on the National Register, and documentation is being prepared to nominate the O'Byams Fort (15Fu37 through 15Fu44) and Stahr Hill (15Fu45 through 15Fu47) complexes and sites 15Fu48 and 15Fu49 to the National Register as an archaeological district in the near future (Railey, personal communication).

Studies Outside the Project Area

Recent research in the Bayou du Chien drainage has been limited primarily to the re-examination of sites first reported in the nineteenth and twentieth centuries. More intensive archaeological research has been conducted in other areas of Fulton, Hickman and Graves counties, and other western Kentucky areas, however, which will be useful in the analyses and interpretation of archaeological materials recovered in the Bayou du Chien area in the future.

Like the O'Byams Fort, Stahr Hill, and Adams Mounds sites, the Sassafras Ridge Site, 15Fu3, has long been the focus of archaeological studies. Klinger, Cande and Kandare (1983:4-6) argue that this site was first excavated by Moore, but was referred to by Moore (1916:493,504-505) as the "Campbell Mound". The Campbell Mound is also mentioned by Funkhouser and Webb (1928:317). Under the name of Sassafras Ridge the site is first described in Funkhouser and Webb (1932:130-131). Lewis (1946) also discusses this site. Clay (1961) analyzed ceramics from 15Fu3 as part of his survey of Mississippi Valley sites in Kentucky, and Mathews (1969,1972) described materials from the site. Schock and Langford (1978) located 12 sites (15Fu300 through 15Fu311) in the Sassafras Ridge area, and Carstens and Weber (1982) (see also Carstens, Kind and Weber 1982) located one additional site (15Fu53). Klinger, Cande and Kandare (1983) recorded four sites (15Fu64 through 15Fu66) to the north

of Sassafras Ridge.

Another major tributary of the Mississippi River in the Jackson Purchase area, the Mayfield Creek, has also been the subject of a recent literature review (Klinger and Kandare 1984) and a survey (McGraw 1974) in which one site (15Gv10) was located. Archaeological reconnaissances of areas along the Mississippi River proposed for revetment construction in Fulton county southwest of the project area (McNerney 1979) and in Fulton and Hickman counties northwest of the current project area (Fitting et al. 1976) yielded no sites.

White (1980) located 177 historic structures in Kentucky and Tennessee during a survey of 21 Mississippi River levee berm items. These structures were not assigned state archaeological site numbers and their locations are not listed with the Office of State Archaeology. In a related study, McNerney and Nixon (1980) located nine archaeological sites in the 21 berm areas. One of these sites, 15Fu27, lies in southwest Fulton county, but the remainder are in Tennessee. Smith (1976) located three sites (15Fu21 through 15Fu23) in an archaeological reconnaissance near Lake No. 9 in southwest Fulton county. Schwartz and Sloan (1960) located three sites (15Fu16 through 15Fu18) along Running Slough in western Fulton county. McHugh (1978) and Schock and Weis (1978) have conducted CRM studies in or near the city of Fulton, Fulton county, but located no sites. Moffat (1983) also conducted a CRM study near Fulton, with negative results. Borrow pit surveys in connection with the Illinois-Central-Gulf Railroad bridge project (Janzen 1984a,b) in Fulton county, also encountered no sites. In a survey of Harris Fork Creek in Fulton county, Kentucky, and Obion county, Tennessee, McNerney and White (1980) located two sites in Tennessee, but none in Kentucky.

In addition to the studies already discussed above, archaeological

research in Hickman county has been limited to two brief journal articles, describing a reburial on Chalk Bluff (Muscovalley 1967) and a pipe from around Columbus (Muscovalley 1969), three borrow pit surveys (Schock 1981, Wesler 1982, Janzen 1983) which encountered no sites, and a cultural resources survey near Williams (McNeil 1984) which also encountered no sites. Funkhouser and Webb (1932:186-187) mention that Young (1910:18) and Rafinesque (1824) refer to sites in Hickman county which could not be definitely located based on their descriptions. Caution must be taken, however, in assuming these sites are in the present day Hickman county. The appellation "Hickman county" has applied to several different land masses through the history of the Jackson Purchase. Early sources (pre-1845) and sources which use information from these early sources without clarifying site location may be referring to sites outside the present boundaries of Hickman county.

Graves county has been the location of a number of CRM studies in recent years, but all of these have been conducted considerably north of the current project area. Surveys in or near the city of Mayfield which encountered no sites are McHugh (1975,1976), Schenian (1984), and Schock (1975). Carstens and Carpenter (1978) located one site (15Gv13) in Mayfield, and Schock (1983) located two (15Gv27 and 15Gv28). McHugh located one historic site (15 Gv-H-1) near Symsonia in a survey of a proposed sewer facility. Carstens and Carpenter (1979) located no sites during the survey of the sewer system for Fancy Farm. Foster and Schock (1976) located 22 sites in the survey of the proposed U.S. 45 re-alignment in Graves and McCracken counties, Kentucky. Of these 22 sites, 14 (15Gv2 and 15Gv300 through 15Gv312) are in Graves county.

For additional west Kentucky archaeological references see Boisvert (1982) and Hilgeman (1983,1984).

CULTURAL RESOURCES IN THE PROJECT AREA

Recorded Resources

To date, 24 state archaeological site numbers and three historic cultural resource numbers have been assigned to prehistoric and historic cultural resources in or near the current project area. Three of the archaeological sites were assigned new numbers following re-survey (Carstens 1982). Sites 15Fu1, 15Fu2 and 15Fu11 have been re-assigned state site numbers 15Fu37 through 15Fu44, 15Fu38, and 15Fu45 through 15Fu47 respectively. Table 2 summarizes the cultural-temporal affiliation, site type and National Register status for the archaeological sites and for the historic cultural resources in and near the project area. Sites 15Fu1, 15Fu2 and 15Fu11 have not been included in this table, but notations have been made to indicate the current numbers associated with those site areas.

Eight of the 24 site numbers have been assigned to separate areas of the O'Byams Fort complex, formerly 15Fu1, the O'Byams Fort site (Appendix B:12-14). The O'Byams Fort complex is a Middle Woodland earthworks with associated mounds and a habitation area. Site number 15Fu37 refers only to the non-mound earthwork, which has a shape similar to a tuning fork, and to the habitation area associated with this earthwork. The remaining seven numbers assigned to this complex, 15Fu38 through 15Fu44, represent eight Middle Woodland mounds. Site 15Fu41 represents two mounds from which the surface collections were inadvertently mixed. The remaining numbers each represent single mounds. Late Woodland-Mississippian cultural materials were found on mound 15Fu38, located within the boundaries of the Stahr Hill complex habitation site (15Fu45) surface scatter, and on mound 15Fu44. Based on the alignment of these mounds in relation to the earthwork and other mounds (15Fu39 through 15Fu43), however, 15Fu38 and 15Fu44 were assigned to

Archaeological Sites

Site Number	Cultural-Temporal Affiliation	Site Type	National Register Status
15Fu4	Mississippian	mound complex	listed on National Register
15Fu7	Late Woodland/Mississippian	habitation	not assessed
15Fu9	indeterminate prehistoric	mound	not assessed
15Fu13	indeterminate prehistoric	mound complex	not eligible
15Fu14	Late Woodland/Mississippian	mound?	not assessed
15Fu20	Woodland-Mississippian	habitation	not assessed
15Fu24	Late Woodland	habitation	not assessed
15Fu37 ^a	Middle Woodland	earthwork and village	considered eligible for National Register as part of Archaeological District to include 15Fu37 through 15Fu49, but not yet nominated
15Fu38 ^{a,b}	Middle Woodland	mound	see 15Fu37
15Fu39 ^a	Middle Woodland	mound	see 15Fu37
15Fu40 ^a	Middle Woodland	mound	see 15Fu37
15Fu41 ^a	Middle Woodland	two mounds	see 15Fu37
15Fu42 ^a	Middle Woodland	mound	see 15Fu37
15Fu43 ^a	Middle Woodland	mound	see 15Fu37
15Fu44 ^a	Middle Woodland	mound	see 15Fu37

TABLE 2. Summary of Cultural-Temporal Affiliation, Site Type and National Register Status of Project Area Archaeological Sites and Historic Cultural Resources.

Archaeological Sites (continued)

Site Number	Cultural-Temporal Affiliation	Site Type	National Register Status
15Fu45 ^c	Mississippian	habitation	considered eligible for the National Register as part of Archaeological District to include 15Fu37 through 15Fu49, but not yet nominated
15Fu46 ^c	Late Woodland	habitation	see 15Fu45
15Fu47 ^c	Late Woodland	habitation	see 15Fu45
15Fu48	Late Woodland	habitation	see 15Fu45
15Fu49	indeterminate prehistoric	undetermined	see 15Fu45
15Fu50	indeterminate prehistoric	undetermined	not eligible

Historic Cultural Resources

Item Number	Cultural-Temporal Affiliation	Description	National Register Status
15Gv4	Historic	church (standing structure)	not assessed
15Gv5	Historic	cemetery	not assessed
15Gv6	Historic	house (standing structure)	not assessed

Notes: a = part of O'Byams Fort complex, formerly 15Fu1; b = formerly 15Fu2; c = part of Stahr Hill complex, formerly 15Fu11.

TABLE 2. Summary of Cultural-Temporal Affiliation, Site Type, and National Register Status of Project Area (cont.) Archaeological Sites and Historic Cultural Resources.

the O'Byams Fort complex (Carstens 1982).

Sites 15Fu45 through 15Fu47 have been assigned to the Stahr Hill complex (Appendix B:12-14), a Late Woodland-Mississippian habitation site (Carstens 1982). Site 15Fu45 is the main village site. The principal occupation of site 15Fu45 was during the Mississippian Period, but culturally diagnostic materials associated with the Middle Woodland and Late Woodland are also present. Site 15Fu46 is a habitation site containing diagnostic materials associated with the Early Woodland, Middle Woodland and Late Woodland and Mississippian periods. Site 15Fu47 is a small habitation site which has been assigned to the Late Woodland-Mississippian period on the basis of four sherds (one Neeley's Ferry shell tempered body sherd and three Baytown Plain clay tempered body sherds). Sites 15Fu46 and 15Fu47 are located primarily on the Bayou du Chien floodplain, while 15Fu45 is located primarily above the bluff crest overlooking the Bayou du Chien.

Three additional sites are located within the general vicinity of the O'Byams Fort and Stahr Hill sites. These are 15Fu48, 15Fu49 and 15Fu50 (Appendix B:12-14). Site 15Fu48 is a Late Woodland Baytown habitation site, apparently unmixed with either the nearby Middle Woodland or Late Woodland-Mississippian site complexes. Site 15Fu49 yielded only two artifacts. These were a chert core of local raw material and a chert flake of a non-local white chert similar to the white chert that is the most common chert type found at the nearby O'Byams Fort mound complex. Site 15Fu49 is of indeterminate cultural-temporal affiliation at this time and the site function is unknown. Site 15Fu50 is a badly disturbed site of unknown cultural and temporal affiliation.

Carstens (1982) recommended that the O'Byams Fort complex (15Fu37 through 15Fu44) and Stahr Hill complex (15Fu45 through 15Fu47) be nominated to the National Register as an archaeological district. He further recommended that

sites 15Fu48 and 15Fu49 be included in this district nomination. Carstens (1982) stated that 15Fu48 warranted inclusion in the district, because, as a Late Woodland habitation site "it represented a third form of cultural adaptation to the region" (Carstens 1982:Appendix Three, Site 15Fu48 Kentucky State Site Form) to complement the Middle Woodland O'Byams Fort complex and Late Woodland-Mississippian Stahr Hill complex data. Site 15Fu49 was recommended for inclusion, because it is potentially associated with the O'Byams Fort complex. Site 15Fu50 is considered to be too disturbed for inclusion on the National Register. Documentation is currently being prepared to nominate sites 15Fu37 through 15Fu49 to the National Register as an archaeological district.

One site in the project area, 15Fu4, the Adams Site (Appendix B:10-11, 14), was placed on the National Register in 1985. The Adams Site is a Mississippian mound complex, situated on a bluff overlooking the Bayou du Chien, but extending onto the floodplain.

A third mound complex (15Fu13) exists in the project area (Appendix B:13-14), but was heavily disturbed in the nineteenth century by the growth and development of the city of Hickman. This site is not eligible for the National Register, because of its disturbed nature. The cultural affiliation of this mound has never been determined. Another mound, 15Fu9 (Appendix B:13-14), also of indeterminate prehistoric construction, was similarly disturbed during the development of Hickman.

Sites 15Fu20 (Appendix B:12-14) and 15Fu24 (Appendix B:10-11, 14) are habitation sites. Cultural materials diagnostic of the Late Woodland period were recovered from 15Fu24 during the 1985 Western Kentucky Project field season (Sussenbach 1985). According to the Office of State Archaeology computer files, Woodland and Mississippian cultural materials have been

recovered from 15Fu20. Site 15Fu20 encompasses a knoll, extending onto the Bayou du Chien floodplain and into a present day swamp. Site 15Fu24 lies on a hillslope adjacent to the Bayou du Chien floodplain. National Register eligibility has not been assessed for either site.

According to the Office of State Archaeology files (Clay, personal communication), site 15Fu14 (Appendix B:10-11,14) is a mound dating to the Middle Mississippian period. The location of the site is tentative, because the original site description (Sloan 1957) was vague, giving locational directions in hundredths of miles, an inaccurate measurement. A local collector, Mr. John I. Kirk of Hickman, Kentucky, was asked to circle the location of archaeological sites of which he had knowledge on topographic sections of the project area. He indicated that a mound existed at the tentative location of 15Fu14. The topographic sections provided to Mr. Kirk did not show the locations of recorded sites. Mr. Kirk is an engineer with a Jackson Purchase area contracting firm, and is familiar with topographic maps. It is highly probable, therefore, that his locational information is accurate. This should be field checked, however, to firmly establish the boundaries and nature of the site.

Based on the UTM coordinates listed for site 15Fu7 in the Office of State Archaeology computer files, 15Fu7 lies on a knoll or natural levee on the Little Bayou du Chien floodplain, and not on the Bayou du Chien as described by Funkhouser and Webb (1932). This location of 15Fu7 lies outside the current project boundaries. Site 15Fu7 is a Late Woodland/Mississippian habitation site. National Register eligibility of this site has not been assessed.

The remaining three cultural resources in the project area are historic cultural resources, and not archaeological sites. These have been assigned

historic cultural resource numbers 15Gv4, 15Gv5, and 15Gv6. These resources are not listed with the Office of State Archaeology, and the Smithsonian style resource numbers duplicate archaeological site designations. 15Gv4 is a standing structure, a Cumberland Presbyterian church called the Bayou de Chien Church. 15Gv5 is the Camp Beauregard Cemetery, which dates to the Civil War, ca. 1860. 15Gv6 is the Nell Rose Home in Water Valley, Kentucky. A specific location of the home is not indicated on the State Historic Preservation Office/Kentucky Heritage Council topographic quadrangle (Railey, personal communication) for the area (Water Valley, Kentucky-Tennessee (U.S.G.S 1981). The National Register eligibility of these historic resources has not been assessed. (See Appendix B:3,14 for the location of 15Gv4 through 15Gv6.)

Although not yet officially recorded sites, the eight sites found in the vicinity of 15Fu4 during the Western Kentucky Project 1985 field season should be considered among the cultural resources of the project area. Kentucky state site forms will be filed with the Office of State Archaeology as soon as processing of the artifacts is completed and the sites will be fully described in Lewis (in prep.) (Sussenbach 1985). According to Sussenbach (1985) seven of the sites are lithic scatters of indeterminate cultural or temporal affiliation, while the eighth is tentatively identified as an Archaic site, probably dating to the late Middle Archaic.

No sites attributable to the Paleo-Indian Period have been recorded in or near the project area. The Western Kentucky Project discovered one Archaic site (probably late Middle Archaic) in the current project area during the 1985 field season (Sussenbach 1985). This site has not yet received a state site number. This site represents the first recorded Archaic Period site in the project area. The Woodland and Mississippian Periods are the

predominant cultural periods represented in sites in the Bayou du Chien drainage. Only one site (15Fu46) has produced cultural materials associated with the Early Woodland sub-period. The Middle Woodland sub-period is represented by the O'Byams Fort complex (15Fu37 through 15Fu44) and by a component at 15Fu46. Late Woodland cultural materials are present at the Stahr Hill complex (15Fu45 through 15Fu47), 15Fu7, 15Fu38, 15Fu44, 15Fu48 and 15Fu24. The Mississippian Period is represented by both mound sites (15Fu4, 15Fu14) and habitation sites (15Fu45 through 15Fu47, the Stahr Hill complex). Three historic cultural resources (two standing structures and a cemetery) have been recorded as existing in or near the current project area, and historic refuse dating from the twentieth century has been found at several sites in the O'Byams Fort and Stahr Hill complexes, but no historic archaeological sites have been recorded in the project area.

Site types present in or near the project area include mounds and mound complexes (15Fu4, 15Fu9, 15Fu13, 15Fu14, 15Fu37 through 15Fu44) and habitation sites (15Fu45 through 15Fu47, 15Fu48, 15Fu7, 15Fu20, 15Fu24). A possible processing site (15Fu49) (Carstens 1982) has also been recorded.

The sites recorded in the project area are situated in a variety of topographic settings. These include the floodplain (15Fu46, 15Fu47, 15Fu4), swamps (15Fu20), hillslopes (15Fu24) and bluffs (15Fu37 through 15Fu45, 15Fu48 through 15Fu50). Many of the sites, whether on the floodplain or on the bluffs, are indicated on the topographic quadrangles as isolated knolls (15Fu4, 15Fu7, 15Fu38 through 15Fu43).

The majority of sites recorded in the project area were first recorded in the nineteenth and early twentieth centuries, with more recent research serving to clarify the original site information. Although some new sites (15Fu20, 15Fu24, the Western Kentucky Project 1985 sites) have been reported

since the Funkhouser and Webb (1932) report, little archaeological research has been conducted in the majority of the project area.

Potential Cultural Resources

It is highly improbable that the 24 archaeological sites with assigned state site numbers, the eight sites recently discovered during the 1985 Western Kentucky Project field season, and the three historic cultural resources, are the sole prehistoric and historic cultural resources in the Bayou du Chien drainage project area. Although 24 archaeological site numbers have been assigned in or near the project area, the majority represent a small number of site complexes (O'Byams Fort, Stahr Hill and the Adams Site) which have been mentioned in the literature since the nineteenth and early twentieth centuries. Recent studies (Carstens 1982; the Western Kentucky Project) have focused on the areas of the originally reported sites, and few CRM projects have taken place in or near the current project area, so large areas of the project area have never been surveyed or tested by a professional archaeologist. The "ancient canal" has never been systematically examined, and the location of 15Ful4 has not been confirmed since its 1957 (Sloan) recording. In addition the following quotes indicate that numerous sites exist along the Bayou du Chien, known to local collectors, but never systematically surveyed and recorded.

Archaeologically Hickman County is one of the most interesting of the counties of Kentucky, being located in the heart of a region rich in evidences of prehistoric occupation ... The entire course of the Bayou de Chien, which runs through the county, is marked by an endless series of mounds, camp sites and burial fields which can not be listed separately but which as a whole represent a long and extensive aboriginal influence (Funkhouser and Webb 1932:185).

[Fulton county site]7. A camp site on the Bayou de Chien Creek ... This site is famous for its artifacts and according to Mr. George L. Alley of Fulton, is only one of a long series of sites which are to be found along the banks of the Creek ... Apparently this region was the favorite camping ground for a

considerable number of aborigines over a long period of time (Funkhouser and Webb 1932:133).

it [Lake Slough] passes just west of another large bluff ... upon which are a number of large mounds and extensive evidence of prehistoric occupation ... Certain it is that in this region showing such extensive evidences of occupation, a water way connection ... would have been of immense advantage (Webb and Funkhouser 1933:8-9).

Kirk (1985) also reports a series of sites along the banks of the Bayou du Chien (Appendix B:9). Kirk only indicated sites on the topographic quadrangles given to him which he has personally visited, but he states that other sites are known to other area collectors.

Based upon the nature and distribution of recorded cultural resources in and near the project area and in the general region, and upon the environmental characteristics of the project area, the following series of expectations regarding the nature and distribution of potential cultural resources in the Bayou du Chien drainage project area are made.

1. Few small special purpose or extractive sites, such as chert reduction sites, have been recorded within the project area, primarily because the large mound and habitation sites have been the focus of archaeological research in the project area until recently (eg. Carstens' (1982) delineation of .5Fu49, a possible processing site). Systematic investigation of the project area should result in the recording of numerous special purpose sites.
2. Many of the recorded sites in the project area are delineated on the topographic quadrangles as isolated knolls, both on the floodplain (eg. 15Fu7) and on the bluffs (eg. 15Fu38). Similar topographic features depicted on the U.S.G.S. quadrangles are likely to be either cultural features (ie. sites) or natural features (knolls, levees, terrace remnants) with one or more archaeological sites located on each.
3. No Paleo-Indian sites have been recorded in the project area, but several have been recorded elsewhere in Graves county. The Youngblood Site, 15Gv26, is located on a hill overlooking Panther Creek, in an area characterized by swampy lowlands (Gatus and Marquardt 1984:24). Paleo-Indian sites may occur in the Bayou du Chien project area in a similar environmental setting.
4. The sole Archaic Period site reported in the project area was discovered during the Western Kentucky Project 1985

field season. It is likely that additional Archaic Period sites will be encountered by systematic survey of the project area.

5. Additional Woodland and Mississippian Period sites are expected to occur in the project area. Based on the past concentration on mound sites:
 - a. It is unlikely that additional mound groups will occur in the project area.
 - b. It is highly probable that short term habitation sites and special purpose sites, either associated with reported sites (eg. O'Byams Fort) or distinct from previously recorded sites exist in the project area.
6. No historic archaeological sites have been recorded in the project area, but it is likely that some exist in the project area, since the area has been settled by Euro-Americans since the early nineteenth century. Based on the environmental and cultural history of the area:
 - a. No historic residential sites dating to before ca. 1820 are expected in the project area.
 - b. The maximal age range of historic sites should decrease with distance from the mouth of the Bayou du Chien (ie. the earliest historic sites will be located near the Mississippi River and Hickman, Kentucky, and the earliest historic sites near Water Valley should be minimally several decades more recent).
 - c. Many early structures in Hickman have been destroyed by flood, fire or development, and the remaining associated archaeological evidence of their existence will be disturbed, destroyed, or inaccessible (under water, under pavement).
 - d. Many early structures in Moscow have been dismantled or otherwise destroyed, but archaeological evidence of their existence should remain. Since Moscow has declined in size since the turn of the century, undisturbed historic archaeological sites may exist in the vicinity of Moscow, especially on the Bayou du Chien floodplain. Some of these sites may be of some significance to local history, but few, if any, are expected to be of National Register significance.
7. Based on a review of the U.S.G.S. topographic quadrangles which depict the project area, several historic cemeteries lie in or near the proposed project area.
8. Unscientific collection and excavation has occurred at recorded sites (eg. 15Fu14) and is occurring at unrecorded sites (Kirk 1985).

9. Permanent or long-term prehistoric habitation sites are expected to occur above the 300' contour.
10. Only limited areas of the project area have been developed. The sole disturbance(s) to sites in the majority of the project area will be due to agricultural activities (eg. plowing, land leveling) and/or vandalism by pothunters.
11. No long term or permanent Proto-historic Indian habitation sites are expected in the project area.
12. Sloan (1957) mentioned that local collectors know of sites in the swamps and other lowland areas of the Bayou du Chien. These are probably special purpose sites, rather than habitation sites.
13. Although it is unlikely that the "ancient canal" is man-made, it is likely that prehistoric peoples utilized the floral and faunal resources of this feature (eg. to harvest fish trapped in the slough after floodwaters recede). Sites are expected to occur in and/or adjacent to this feature.
14. The configuration of the juncture of the Bayou du Chien with Obion Creek and the Mississippi River has changed through time. Prehistoric sites which were deposited on the broad alluvial floodplain of this juncture may be:
 - a. Destroyed, disturbed or redeposited by the meandering of the Bayou du Chien.
 - b. Buried by alluvial deposits and protected from disturbance in the Historic Period.
 - c. Underwater and inaccessible.
15. Sites are expected to occur on the floodplain adjacent to ponds, meanders and intermittent streams.
16. No correlation is expected between the location of sites and the dredged channel of the Bayou du Chien. The dredging activities may have disturbed and exposed archaeological deposits, however.

The preceding expectations must be tested with field investigation of the project area. Additional research in the project area will allow for the clarification of expectations of the nature and distribution of prehistoric and historic cultural resources in and near the Bayou du Chien drainage.

CONCLUSIONS AND RECOMMENDATIONS

The Bayou du Chien drainage project area is known to contain several recorded and significant sites, despite the fact that only limited research has been conducted in or near the project area. The specifics of the project proposed for the drainage, including project boundaries, are not well defined as presented in the scope of work (Appendix A). It is not possible to make highly specific recommendations regarding the potential impact of projects in the Bayou du Chien drainage on the prehistoric and historic cultural resources at this time. The following recommendations are made as items to be taken into consideration in the planning of projects by the Memphis District COE.

1. In view of the sparse record of intensive and systematic archaeological reconnaissance in the project area, all project segments, except within the site boundaries of 15Fu37 through 15Fu50, surveyed by Carstens (1982) and site 15Fu4, already on the National Register, should be intensively field surveyed prior to implementation of any project.
2. Site 15Fu4, the Adams Site, is listed on the National Register. Any project which will directly or indirectly (eg. through increased erosion) impact 15Fu4 will involve mitigation of the site.
3. Documentation is currently being assembled to nominate sites 15Fu37 through 15Fu44 (the O'Byams Fort complex), 15Fu45 through 15Fu47 (the Stahr Hill complex), 15Fu48 and 15Fu49 to the National Register as an archaeological district. If this archaeological district is placed on the National Register, then any proposed project that directly or indirectly impacts any part of the district will involve mitigation of the affected site areas.
4. Site 15Fu14 should be surveyed to clarify its location and nature.
5. Subsurface testing should take place at 15Fu14, 15Fu20 and 15Fu24 to obtain data to assess the National Register eligibility of these sites.
6. The site information resulting from the Western Kentucky Project 1985 field season should be obtained, when available, and the data incorporated into project planning.

7. The Memphis District COE should maintain communication with the Kentucky State Historic Preservation Officer and the Office of State Archaeology, especially to keep informed about the status of sites 15Fu37 through 15Fu49.
8. The "ancient canal" should be systematically tested by a team consisting of, but not necessarily limited to, archaeologists and geologists in order to establish its origin and nature, and its prehistoric uses, if any.
9. The Memphis District COE is urged to avoid or minimize impact to sites 15Fu4 and 15Fu37 through 15Fu49 if possible.

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APPENDIX A.
SCOPE OF WORK

(SECTION C)

Scope of Work

Cultural Resource Literature Search of the Bayou DuChien River Basin Project within Fulton, Hickman, and Graves Counties, Kentucky.

1. General.

1.01. The Contractor shall conduct a background and literature search of the Bayou DuChien River Basin within Fulton, Hickman, and Graves Counties, Kentucky. (See paragraph 2). These tasks are in partial fulfillment of the Memphis District's obligations under the National Historic Preservation Act of 1966 (P.L. 89-665); the National Environment Policy Act of 1969 (P.L. 91-190); Executive Order 11593, "Protection and Enhancement of Cultural Environment," 13 May 1971 (36 F.R. 3921); Preservation of Historic and Archeological Data, 1974 (P.L. 93-291); and the Advisory Council on Historic Preservation, "Procedures for the Protection of Historic and Cultural Properties" (36 CFR VIII Part 800).

1.01. Personnel Standards.

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

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

(1) Archeological Project Directors or Principal Investigators (PI). Persons in charge of an archeological project or research investigation contract, in addition to meeting the appropriate standards for archeologist, must have a publication record that demonstrates extensive experience in field project formulation, execution and technical monograph reporting. Suitable professional references may also be made available to obtain estimates regarding the adequacy of prior work. If prior projects were of a sort not ordinarily resulting in a publishable report, a narrative should be included detailing the proposed project director's previous experience along with references suitable to obtain opinions regarding the adequacy of this earlier work.

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

(3) Other Professional Personnel. All non-archeological personnel utilized for their special knowledge and expertise must have a B.A. or B.S. degree from an accredited college or university, followed by a minimum of the year of successful graduate study with concentration in appropriate study.

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

(5) Crew Members and Lab Workers. All crew members and lab workers must have prior experience compatible with the tasks to be performed under this contract. An academic background in the appropriate field of study is highly recommended.

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

1.03. The Contractor shall designate in writing the name or names of the Principal Investigator. In the event of controversy or court challenge, the Principal Investigator shall testify with respect to report findings.

1.04. The Contractor shall keep standard records which may be reviewed by the Contracting Officer. These records shall include field notes, site survey forms and any other cultural resource forms and/or records, field maps and photographs necessary to successfully implement requirements of this Scope of Work.

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

1.06. Innovative approaches to data location, collection, description and analysis, consistent with other provisions of contract and the cultural resources requirements of the Memphis District, are encouraged.

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

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

1.09. The extent and character of the work to be accomplished by the Contractor shall be subject to the general supervision, direction, control and approval of the Contracting Officer. The Contracting Officer may have a representative of the Government present during any or all phases of the described cultural resource project.

2. Study Area.

2.01. The Bayou DuChien River Project is located in Fulton, Hickman, and Graves Counties, Kentucky. The right-of-way extends 2000 feet (609.6 meters) on both sides of the dredged channel and/or natural meandering channel. The project begins where Bayou DuChien and Highway 94 intersect, from here the bayou and project go approximately 31 miles to intersect the Mississippi River at Hickman, Kentucky (see enclosed maps).

3. Definitions.

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

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

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

3.04. "Mitigation" is defined as the amelioration of losses of significant prehistoric, historic, or architectural resources which will be accomplished through preplanned actions to avoid, preserve, protect, or minimize adverse effect upon such resources or to recover a representative sample of the data they contain by implementation of scientific research and other professional techniques and procedures. Mitigation of losses of cultural resources includes, but is not limited to, such measures as: (1) recovery and preservation of an adequate sample of archeological data to allow for analysis and published interpretation of the cultural and environmental conditions prevailing at the time(s) the area was utilized by man; (2) recording, through architectural quality photographs and/or measured drawings of buildings, structures, districts, sites and objects and deposition of such documentation in the Library of Congress as a part of the National Architectural and Engineering Record; (3) relocation of buildings, structures and objects; (4) modification of plans or authorized projects to provide for preservation of resources in place; (5) reduction or elimination of impacts by engineering solutions to avoid mechanical effects of wave wash, scour, sedimentation and related processes and the effects of saturation.

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

3.06. "Significance" is attributable to those cultural resources of historical, architectural, or archeological value when such properties are included in or have been determined by the Secretary of the Interior to be eligible for inclusion in the National Register of Historic Places after evaluation against the criteria contained in 36 CFR 63.

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

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

4. General Performance Specifications.

4.01. The Contractor shall prepare for the project area a draft and final report detailing the results of the study and subsequent recommendations.

4.02. Background and Literature Search.

a. This task shall include an examination of the historic and prehistoric environmental setting and cultural background of the study area and shall be of sufficient magnitude to achieve a detailed understanding of the overall cultural and environmental context of the study area.

b. Information and data for the literature search shall be obtained, as appropriate, from the following sources: (1) Scholarly reports - books, journals, theses, dissertations and unpublished papers; (2) Official Records - Federal, state, county and local levels, property deeds, public works and other regulatory department records and maps; (3) Libraries and Museums - both regional and local libraries, historical societies, universities, and museums; (4) Other repositories - such as private collections, papers, photographs, etc.; (5) archeological site files at local universities, the State Historic Preservation Office, the office of the State Archeologist; (6) Consultation with qualified professionals familiar with the cultural

resources in the area, as well as consultation with professionals in associated areas such as history, sedimentology, geomorphology, agronomy, and ethnology.

c. The Contractor shall include as an appendix to the drafts and final reports written evidence of all consultation and any subsequent responses(s), including the dates of such consultation and communications.

d. The background and literature search shall be performed in such a manner as to facilitate predictive statements (to be included in the study report) concerning the probable quantity, character, and distribution of cultural resources within the project area. In addition, information obtained in the background and literature search should be of such scope and detail as to serve as an adequate data base for subsequent field work and analysis in the study area undertaken for the purpose of discerning the character, distribution and significance of specific identified cultural resources.

e. In order to accomplish the objectives described in paragraph 4.02.d., it will be necessary to attempt to establish a relationship between landforms and the patterns of their utilization by successive groups of human inhabitants. This task should involve defining and describing various zones of the study area with specific reference to such variables as past topography, potential food resources, soils, geology, and river channel history.

C-5. General Report Requirements.

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

5.02. Upon completion of all research, the Contractor shall prepare reports detailing the work accomplished, the results.

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

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

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

c. Table of Contents.

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

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

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

g. Literature Search and Personal Interviews. This section shall discuss the results of the literature search, including specific data sources, and personal interviews which were conducted during the course of investigations.

h. Conclusions and Recommendations. This section shall contain the recommendations of the Principal Investigator regarding all contract activities. Conclusions derived from records search concerning the nature, quantity and distribution of cultural loci, should be used in describing the probable impact of project alternatives on cultural resources. Conclusions and recommendations should include an evaluation of predictive statements formulated on the basis of the background and literature search.

i. References (American Antiquity style).

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

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

5.05. In order to prevent potential damage to cultural resources, no information shall appear in the body of the report which would reveal precise resource location. All maps which indicate or imply precise site locations shall be included in reports as a readily removable appendix (ex: envelope).

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

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

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

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

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

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

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

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

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

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

5.16. Negatives of all black and white photographs and/or color slides of all plates included in the final report shall be submitted.

6. Submittals.

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

a. Four (4) copies of the draft report will be submitted within 40 calendar days following receipt of notice to proceed.

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

c. The Government shall review the draft report and provide comments to the Contractor within 30 calendar days after receipt of the draft report. More than one review and revision of the draft report may be required.

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

6.02. If the Government review exceeds 30 calendar days, the period of service of the purchase order shall be extended on a day-by-day basis equal to any additional time required by the Government for review.

a. All maps which indicate or imply actual site locations shall be included in reports as a readily removable appendix (ex: envelope). In order to prevent potential damage to cultural resources, no information shall appear in the body of the report which would suggest resource location.

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

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

C-7. SCHEDULE.

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

<u>Activity</u>	<u>Due Date (Beginning with acknowledged date receipt of notice to proceed)</u>
Begin literature search	5 calendar days
Submittal of Draft Report	45 calendar days
Government Review of Draft Report	75 calendar days
Submittal of Final Report	105 calendar days

The Contractor shall, unless delayed due to causes beyond his control and without his fault or negligence, complete all work and services under this purchase order within 105 days after receipt of notice to proceed.

8: Method of Payment.

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

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

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

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

APPENDIX D.
PROJECT CORRESPONDENCE

19 July 1985

109 Davenport Hall
607 S. Mathews Street
Urbana, IL 61801

P.O. Box 178
Bartwell, Ky 42023

Fam Schenian
Archaeology Lab
Oriway Hall
Murray State University
Murray, KY 42071

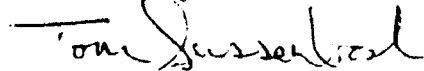
Dear Ms. Schenian:

Thank you for calling concerning site locations along the Bayou de Chien. We are still in the process of doing survey work in the area, and I have not had the time yet to analyze any of the material collected so far. So what follows is at a very preliminary stage. I've included a blow up of the Cayce quad showing the site areas that we have located so far. As of now we have eight additional sites in the area, besides the previously recorded Adams site (15-Fu-4) and site 15-Fu-24, located north of Adams. We have extended the boundaries of 15-Fu-24 considerably over the old designation. The materials we collected would date the site to the Late Woodland. The only other site with a suggested age is the one located east of Adams which is an Archaic site (probably Late Middle Archaic). The rest of the sites are lithic scatters. I hope this information is of some use to you.

These sites will be fully described and discussed in a monograph to be put out in 1986. Untitled paper. (in prep) Western Kentucky Project, Report 5. University of Illinois, Urbana.

Good luck on your work, and I'd be interested in seeing a copy of your report when it is completed. Say hello to Bill Lawrence for me when you see him again. We'll be leaving the field within two weeks to head back north to Urbana, but I'll be in the area this fall to finish up the work we started.

Sincerely,



Tom Sussenbach

P.S. Our research was funded by the Kentucky Heritage Council.

UNIVERSITY OF KENTUCKY

LEXINGTON, KENTUCKY 40506-0024

DEPARTMENT OF ANTHROPOLOGY
211 LAFFERTY HALLPamela A. Schenian
Staff Archaeologist
Department of Sociology and Anthropology
Murray State University
Murray, KY 42071

July 24, 1985

Dear Pam,

In response to your recent request for information regarding archaeological sites in the right-of-way of the Bayou DuChien River Basin Project, a search of our files indicates the presence of two major areas of prehistoric occupation, both of which you are already aware judging from the Xerox copies of your quad sheets. These are O'Byam's Fort (originally 15Fu1, redesignated as a series of discrete areas by MSU, including 15Fu37-44, 45-50) and the Adams site (15Fu4) with associated sites 15Fu14, 24. Both areas are of course major archaeological features and are undoubtedly on record at MSU. As you probably also realize, the University of Illinois field school was held this summer at the Adams site under the direction of Barry Lewis.

No other recorded sites are known for the right-of-way. Complete bibliographic references to both the Adams and O'Byam complexes can of course be found in the Bibliography of Kentucky Archaeology. If you do not already have copies of the Bibliography and its updates, call or write and I can send you copies. Any other questions, just call or write. Dr. Clay is currently busy with the field school and won't be back on official duty until Monday of next week (July 29).

Sincerely,

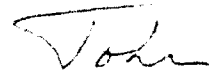
Scott O'Mack
Assistant State Archaeologist

August 5, 1985

Dear Pam:

I have circled the location of a couple of mounds and the general area of numerous other small sites that are scattered atop ridges in the open fields. Other sites are within the drainage area, but these are the only ones I have personal knowledge of in Fulton and Hickman Counties.

Sincerely,



John I. Kirk

P.S. Also, you will note that I have used the return address of Route#3, Hickman, KY 42050. To save time in future correspondence, you may send any information directly to me at that address.



KENTUCKY HERITAGE COUNCIL
The State Historic Preservation Office

August 21, 1985

Ms. Pamela A. Schenian
Murray State University
College of Humanistic Studies
Department of Sociology and Anthropology
Murray, Kentucky 42071

Dear Ms. Schenian:

Thank you for your letter of July 18, 1985 concerning the proposed Bayou DuChien River Basin Project in Fulton, Graves, and Hickman Counties. A review of our records indicates that you have already identified all of the known archaeological sites in the study area. There are, however, three (Gv4, Gv5 and Gv6) historical resources (see enclosure) recorded within or adjacent to the project area. To date, the National Register eligibility of these properties has not been assessed.

Sincerely,

Thomas N. Sanders
Site Protection Program Manager

TNS/rm
Enclosure

APPENDIX F.
VITAE OF PRINCIPAL INVESTIGATOR

VITAE OF PAMELA ANN SCHENIAN

Address and phone:

Home:

1300 Peggy Ann Dr. #West
Murray, Kentucky 42071
(502) 753-6272

Office:

Archeology Program, Ordway Hall
Department of Sociology/Anthropology
Murray State University
Murray, Kentucky 42071
(502) 762-3054

Date and place of birth: January 1, 1959, Waukesha, Wisconsin.

Marital status: unmarried.

EDUCATION

A.B.D., Anthropology Department, Northwestern University.
January 1984.

M.A., Anthropology Department, Northwestern University.
June 1982.

A.B., Anthropology Department, Bryn Mawr College. May
1980.

Field school, Mitchell Site, University of South Dakota --
Vermillion. July-August 1979.

Summer school, Biology Department, Carroll College. June
1978.

Summer school, Interdepartmental (English and Native
American Studies Program), University of Wisconsin --
Milwaukee. May 1978.

ACADEMIC AWARDS

Departmental Fellowship, Anthropology Department,
Northwestern University. Fall quarter 1982.

Presidential Fellowship, Northwestern University.
Academic year 1980-1981.

Bryn Mawr College Alumni Regional Scholarship Fund Award,
Region VII, Bryn Mawr College. Academic years 1979-1980,
1978-1979, 1977-1978.

Kiwanas Scholarship, Waukesha, Wisconsin chapter. Fall
1977.

Marine Bank of Waukesha, Wisconsin scholarship. Fall 1977.

EXPERIENCE

FIELD

Staff archeologist, Contract Archeology Program, Murray
State University, Murray, KY. November 1983 - present.

Phase I contract excavation, field technician, Kruse Bluff III site, Southern Illinois University, Carbondale, IL. September 24 - October 15, 1984. Principal Investigator: Dr. Philip Neusius.

Phase II contract survey, field assistant, Pirate's Cove site, Tennessee Valley Authority sub-contract. June 27, 1984. Principal Investigator: Beverly Bastian.

Phase III salvage excavation, field technician, 15M1109, Kentucky Heritage Council, Frankfort, KY. Principal Investigator: David Pollack.

Phase III contract excavation, Field assistant II (supervisor), Rensch Site, Illinois State Museum Society, Springfield, IL. May 18 - August 31, 1983. Principal Investigator: Dr. Mark A. McConaughy.

Co-director and excavator with John F. Doershuk. Contract excavation for Mr. Tom M. Swiss, attorney-at-law, Chicago, IL. Investigation of homicide site, Clarendon Hills Cemetery Site. March 23, 1983. Principal Investigator: Dr. Jane E. Buikstra.

Phase II survey contract field assistant, Center for American Archeology, Kampsville, IL. June - August 1982. Supervisors: Frank Cowan, Mike Spitzer, Dr. Russell Stafford.

Contract excavation, field technician, Rensch Site, Illinois State Museum Society, Springfield, IL. June 24 - September 15, 1981. Supervisor: Roger Boydston; Principal Investigator: Dr. Mark A. McConaughy.

Volunteer excavation, Mitchell Site, Mitchell Indian Village Preservation Society, in conjunction with field school, USD -- Vermillion. July - August 1979. Supervisor: Jeff Buechler; Director: Darrell Fulmer.

Phase I survey field crew, east shore of Lake Winnebago and Milwaukee metropolitan area, Great Lakes Archaeological Research Center, Milwaukee, WI. May - July 1979. Supervisors: Dr. Mark Bruhy, Dr. Al Van Dyke, Dr. David Overstreet.

LABORATORY

Supervisor of work-study students and volunteers, Murray State University Archeology Laboratory. November 1983 - present.

Volunteer lab supervisor of undergraduate projects -- Kautz Site analysis, Northwestern University. September 1982 - October 1983.

Lab assistant -- Rensch Site artifact and flotation processing, solving field to lab translation problems --

Dickson Mounds State Museum, Illinois State Museum Society. September 1 - 15, 1983. Supervisor: Tim Good; Principal Investigator: Dr. Mark A. McConaughy.

Volunteer lab work -- artifact inventory and unioid shell analysis, Mitchell Indian Vallage Preservation Society, in conjunction with field school, USD -- Vermillion. July - August 1979. Supervisors: Kathy Ataman, Janice Fulmer.

Lab crew -- artifact processing and inventory, flotation sample separation, archival research: Great Lakes Archaeological Research Center, Milwaukee, WI. May - July 1979. Supervisors: Dr. David Overstreet, Dr. John Wackman, Dr. Al Van Dyke.

Research assistant, Anthropology Department, Bryn Mawr College. Artifact curation and inventory for Dr. Richard Jordan. September 1978 - May 1979.

TEACHING

Archaeological consultant for Governor's Scholars Program, summer 1985. Gave lecture with slide show and archaeology lab tour, and supervised student projects.

Occasional guest lecturer for archaeology, physical anthropology, and cultural anthropology courses taught by Dr. Kenneth Carstens, Department of Sociology and Anthropology, Murray State University, Murray, KY.

Volunteer tutor of English (remedial and English as a second language) through the Adult Learning Center, Murray State University. Supervisor: Claire Resiq. February 1985 to present.

Teaching assistant for "New Directions in Archaeology" for Dr. Stuart Struever, Anthropology Department, Northwestern University. Spring quarter 1982.

Teaching assistant for "Culture and Society" for Dr. Napoleon Chagnon, Anthropology Department, Northwestern University. Fall quarter 1981.

OTHER
LECTURE

Murray State University Archeology Laboratory lecture tours for the Super Saturday program, grade school classes, Murray State University personnel and students, and other groups. Various dates.

"The Rench Site". Slide show presentation given for the Jackson Purchase Archaeological Association. December 12, 1983.

OTHER
RELATED

Artist -- platework, clean-ups of drawings for two books by Dr. Frederica de Laguna, Bryn Mawr College. October 1979 - May 1980.

Research assistant, Anthropology Department, Bryn Mawr College. Bibliographic research for Dr. Richard S. Davis, Dr. Judith Shapiro, and Dr. Philip Kilbride. September 1978 - May 1979.

PUBLICATION

"A Preliminary Analysis of the Cultural Features Identified During the 1966 and 1967 Carnegie Museum Excavations at Savage Cave" in Western Kentucky Speleological Survey Annual Report 1984, edited by John E. Mylroie. Murray State University Printing Services, Murray, Kentucky, 1985. pp. 11-30.

CONTRACT
ARCHAEOLOGY
REPORTS

"An Archaeological Reconnaissance of the Proposed Uniontown Greens Apartments Housing Development near Uniontown, Union County, Kentucky" for Rural Apartments Packaging Co., Inc., Shepherdsville, Kentucky. July 1985.

"The Archaeological Monitoring of the Deadmen Installation in a Fleeting Area Between Ohio River Miles 942.9 and 943.5 near Paducah, McCracken County, Kentucky" for Mid-South Towing Company, Metropolis, Illinois, and Davant, Louisiana. July 1985.

"An Archaeological Reconnaissance of a Proposed Apartment Complex Site in Hazel, Calloway County, Kentucky" for J. Jerod and Associates, Inc., Benton, Kentucky. June 1985.

With Ronald W. Deiss. "Final Report: A Probabilistic Sample Reconnaissance of Tennessee Valley Authority Lands Around Kentucky Lake". Prepared for the Tennessee Valley Authority, Division of Land and Forest Resources, Norris, Tennessee, in partial fulfillment of contract TV62216A and submitted by Kenneth C. Carstens, Ph.D., Director, Archeology Program, Murray State University. June 6, 1985.

"An Archaeological Reconnaissance of the Proposed Route A Re-alignment Segment: A Supplementary Study to 'An Archaeological Reconnaissance of Alternate Routes A, B and E and Alternate Sub-route E-1 Proposed for the Re-alignment of KY 1954 (Husband Road) in McCracken County, Kentucky'" for Presnell Associates, Inc., Louisville, Kentucky. June 1985.

"An Archaeological Reconnaissance of a Proposed Borrow Pit Site near Bardwell, Carlisle County, Kentucky" for Jim Smith Contracting Company, Inc., Grand Rivers, Kentucky. May 1985.

"An Archaeological Reconnaissance of Alternate Routes A, B and E and Sub-route E-1 Proposed for the Re-alignment of KY 1954 (Husband Road) in McCracken County,

Kentucky" for Presnell Associates, Inc., Louisville, Kentucky. May 1985.

"An Archaeological Reconnaissance of the Proposed Kentucky's Western Waterland Tourist Information Center, at Kentucky Highway 453 and Peaceful Valley Road, Livingston County, Kentucky" for Kentucky's Western Waterland, Grand Rivers, Kentucky. March 1985.

"An Archaeological Reconnaissance of the Proposed Essex Downs Apartments Housing Development in Murray, Calloway County, Kentucky" for Allied Development Corporation, Murfreesboro, Tennessee. February 1985.

"Route Recommendations Based on the Archaeological Background Research" for Presnell Associates, Inc., Louisville, Kentucky. January 1985.

"An Archaeological Reconnaissance of the Proposed Rolling Hills Apartments Housing Development near Morganfield, Union County, Kentucky" for Allied Development Corporation, Murfreesboro, Tennessee. January 1985.

"An Archaeological Reconnaissance of the Proposed Consumers Water District Second Water Station, near Mayfield, Graves County, Kentucky" for Consumers Water District, Inc., Mayfield, Kentucky. December 1984.

"An Archaeological Reconnaissance of Two Proposed Fleeting Areas near Paducah, McCracken County, Kentucky" for Mid-South Towing Company, Metropolis, Illinois, and Davant, Louisiana. December 1984.

"An Archaeological Reconnaissance of Two Proposed Borrowing Operations near Cadiz, Trigg County, Kentucky" for Crawford Construction Company, Inc., Paducah, Kentucky. November 1984.

"An Archaeological Reconnaissance of a Proposed Borrowing Operation near Bardwell, Carlisle County, Kentucky" for Jim Smith Contracting Company, Inc., Grand Rivers, Kentucky. August 1984.

"An Archaeological Reconnaissance of a Proposed Borrow Pit Expansion Site near Paducah in McCracken County, Kentucky" for Brown Builders, Inc., Springfield, Tennessee. May 1984.

"An Archaeological Reconnaissance of a Proposed Borrowing Operation near Aurora, Marshall County, Kentucky" for Martin Construction Company, Inc., Morganfield, Kentucky. April 1984.

"An Archaeological Reconnaissance of a Proposed Borrow Pit Expansion Site near Murray in Calloway County, Kentucky" for H.C. Hanson Construction Company, Bowling Green, Kentucky. February 1984.

With Ronald W. Deiss. "An Interim Report on a Probabilistic Sample Reconnaissance of Tennessee Valley Authority Lands Around Kentucky Lake". Prepared for the Tennessee Valley Authority, Division of Land and Forest Resources, Norris, Tennessee, in partial fulfillment of contract TV62212A and submitted by Kenneth C. Carstens, Ph.D., Director, Archeology Program, Murray State University. December 31, 1983.

With John F. Doershuk. "Report on the Excavation of the Clarendon Hills Cemetery Site" for Mr. Tom M. Swiss, attorney-at-law. Written in lieu of court testimony. Unpublished ms. March 1983.

OTHER
PROFESSIONAL
PAPERS

"The 1985 Savage Cave Progress Report". Paper presented at the annual National Speleological Society Conference, Frankfort, Kentucky. June 28, 1985.

"Lithic Exploitation Strategies at the Savage Cave Site, Logan County, Kentucky". Dissertation research proposal. Unpublished ms. Submitted in partial fulfillment of the requirements for admission to candidacy to the Ph.D., Department of Anthropology, Northwestern University, Evanston. February 1985.

"The Status of Archaeological Research at Savage Cave (15Lo11)". Paper presented at the annual Midwest Archaeological Conference, Evanston, Illinois. October 20, 1984.

"A Theory of Individual Style Variation for Archaeological Studies". Unpublished ms., submitted in partial fulfillment of the A.B.D. requirements, Anthropology Department, Northwestern University. October 1983.

"The Current Status of the Archaeological Materials from the Kautz Site (11-Du-46)". Unpublished ms. March 1983.

"Models of Environmental-Cultural Relationships: Testing with Archaeological Evidence". Unpublished ms., submitted in partial fulfillment of the M.A. requirements, Anthropology Department, Northwestern University. May 1982.

MEMBERSHIPS
AND
SUBSCRIPTIONS

American Archaeology
Jackson Purchase Archaeological Association
Lithic Technology
Society for American Archaeology