



United States
Department of
Agriculture

Forest Service

Jackson,
Mississippi



Cultural Resources Overview

National Forests in Mississippi

TABLE OF CONTENTS

Page

iv List of Figures and Tables

v Acknowledgments

1 INTRODUCTION

CULTURAL RESOURCES OVERVIEW

FOR THE

NATIONAL FORESTS IN MISSISSIPPI

11 GEOGRAPHIC SETTING

Forest Description and Environment

17 PREHISTORIC OUTLINE

Patle Indian Stage

Archaic Stage

Poverty Point Period

Woodland Stage

Mississippian Stage

Compiled by

Mark F. DeLeon

Forest Archaeologist

28 HISTORICAL OUTLINE

35 FOREST MANAGEMENT PRACTICES

Timber Practices

Land Exchange Program

Forest Engineering Program

Special Uses

Recreation

LAND MANAGEMENT PLANNING

NATIONAL FORESTS IN MISSISSIPPI

41 KNOWN CULTURAL RESOURCES ON THE FOREST

Greenville National Forest

Delta National Forest

DeSoto National Forest

USDA Forest Service

100 West Capitol Street, Suite 1141

Jackson, Mississippi 39269

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TABLE OF CONTENTS

	Page
List of Figures and Tables.....	iv
Acknowledgements	v
INTRODUCTION	1
Cultural Resources	
Cultural Resource Values	
Cultural Resource Management	
Federal Leadership for the Preservation of Cultural Resources	
The Development of Historic Preservation in the United States	
Laws and Regulations Affecting Archaeological Resources	
GEOGRAPHIC SETTING	11
Forest Description and Environment	
PREHISTORIC OUTLINE	17
Paleo Indian Stage	
Archaic Stage	
Poverty Point Period	
Woodland Stage	
Mississippian Stage	
HISTORICAL OUTLINE	28
FOREST MANAGEMENT PRACTICES	35
Timber Practices	
Land Exchange Program	
Forest Engineering Program	
Special Uses	
Recreation	
KNOWN CULTURAL RESOURCES ON THE FOREST.....	41
Bienville National Forest	
Delta National Forest	
DeSoto National Forest	

KNOWN CULTURAL RESOURCES ON THE FOREST (continued) Page

Holly Springs National Forest
Homochitto National Forest
Tombigbee National Forest

SUMMARY OF CULTURAL RESOURCE INVESTIGATIONS . 51

Ackerman Unit
Bienville District
Biloxi District
Black Creek District
Bude District
Chickasawhay District
Delta National Forest
Grenada Unit
Holly Springs District
Homochitto District
Strong River District
Trace Unit

SUMMARY: Directions for Future Cultural
Resource Investigations 78

Introduction
Inventory and Evaluation of
Cultural Resources
Predicting Site Occurrence
Technological Improvements
Evaluating Research Procedures
Forest Management Impact Studies
Archaeological Site Management
Archaeological Site Preservation
Use of Computer for the Storage and
Manipulation of Data
Interdisciplinary Approaches to
Archaeological Research
Awareness and Understanding of
Cultural Resources
Interpretation of Cultural Resources
Cultural Resource Protection
Cultural Ecological Questions
Cultural-Historical Questions

BIBLIOGRAPHY 89

APPENDIX A 98

The Old Federal Road and Andrew Jackson's March Across
the Area of the DeSoto National Forest in 1814.

LIST OF FIGURES AND TABLES

<u>Figure</u>	<u>Page</u>
1 Physiographic Regions and National Forests	12
2 Composite Prehistoric Chronology for Mississippi ...	20
3 Enlargement of a Portion of the Finley Map of 1822	102

<u>Table</u>	<u>Page</u>
1 Effect of Site Preparation Methods on Cultural Resources	40
2 Summary of Surveyed Acres	51

INTRODUCTION *

The United States Forest Service is under mandate of Federal laws and regulations which require attention to and protection of the cultural resources on federally-owned lands, of which there are some 1.2 million acres in the state of Mississippi. These mandate the preparation of an overview of the cultural resources and their relationship to the prehistoric and historic development within the state, region, and the nation.

This overview of cultural resources and cultural resource management for the National Forests in Mississippi is written as a background for future planning statements and management decisions within the state. In order to know where the National Forests in Mississippi stand on cultural resources at present and what remains to be done in order to comply with current legislation, a planning statement with appropriate background materials is needed. This document should fill that need.

Cultural Resources

Cultural resources are generally defined as those sites, artifacts, structures or features which remain from human activity in the past. In Mississippi, a site older than 50 years or a standing structure built prior to World War II is considered a cultural resource. Included in this definition are archaeological or architectural materials; any item made, used, or modified by humans. In addition, the loci or places where past activity was concentrated are of vital interest. These cultural resources are both fragile and non-renewable. They are easily destroyed by the activities of vandals and amateur collectors, by legitimate construction work, and by scientific investigation. In the latter case, the results of scientific investigations are records, reports, and interpretation of the materials, associations, and other data retrieved. These data are no substitute for the actual resource but should provide for the desired preservation and interpretation of much of the information the resource has to offer. Nonetheless, once the site or other cultural resource is destroyed, "you can't grow a new one."

The examination and study of these cultural items allows the reconstruction and interpretation of past lifeways, including environmental adaptation in general and specific cases and the modifications in human behavior associated with those adaptations. "Environment" in this sense has physical, social, economic, and ideological aspects; some data on each of these is preserved under the proper circumstances, and can be studied and interpreted. Tools, utensils and weapons, ritual paraphernalia, settlement patterns and the built environment, and natural resources may come under consideration and examination.

★ Adapted from Wynn (1978): "An Overview of cultural resources in the National Forests in Mississippi." Written while serving as Faculty-Intern Archaeologist, Summer 1978.

Cultural Resource Values

We frequently speak of the value of sites or artifacts in conversation. It is vital to remember that although an artifact may in fact have a material (dollar) value in and of itself, for its artistry or artisanry, its major value from the perspective of cultural resources is in its context. A carefully worked spearhead may be a thing of beauty and undoubted antiquity, but it becomes much more valuable for the interpretation of cultural chronology and technological evolution if it is found adjacent to or imbedded in the remains of a Pleistocene mastodon, and properly recorded in place, undisturbed, before removal from its original location.

What values do cultural resources provide to us, to justify the time, attention, effort, and money expended to locate, evaluate, protect, and enhance them? Burney McClurkan (1977) has pointed out that public education is the primary value cultural resources provide. Since everything we do, and will do in the future, is based on what we have received from those who came before us, then knowing where we come from and how we got to be the way we are should help us better understand who and what we are and where we are going. Thus the study of cultural resources can provide us with a sense of perspective, of roots in time and space. This perspective should help in making decisions which will affect us in the future.

The National Trust for Historic Preservation has pointed out that:

The diversity of America's people and activities is a key factor in ... historic preservation [cultural resource values]. For example, the mansion on the hill was an important part of American life, but so were the worker's houses, transportation system, factory, churches, and all else that made up the town. The plantation house is understandable only with the slave quarters, the dependencies and the fields. Cultures of ethnic groups have given ... a rich history to the country. (National Trust: Goals and Programs, 1973 cited in King, Hickman, and Berg 1977:1).

Our society's traditions, arts, science, and technology are essentially products or expressions of behavior which help us to define ourselves as a society. The value of these aspects of our society may be scientific, historical, or artistic for the interpretation of technological, economic, social, or ideological aspects of past human activities for present and future generations.

Cultural Resource Management

Although a number of recent publications have attempted to define and discuss the management of cultural resources (e.g., Schiffer and Gummerman 1977; King, Hickman and Berg 1977; McGimsey 1972) perhaps the most concise recent statement of its importance to the Forest Service situation is found in Wildesen (1977:ii):

Cultural resource management (CRM) is the tool for protecting and enhancing cultural resource values. It is based on the concepts of conservation and Federal stewardship, and certain minimum requirements are mandated by Federal law. Managing cultural resources, like managing other kinds of resources, involves careful collection and analysis of data, weighing of various alternatives, and documenting the decision-making rationale for any action affecting cultural resources.

Because of the wide range and sometimes subtle expression of cultural resource values, effective CRM requires input from professional cultural resource specialists in the decision-making process. In addition, the law provides specified procedures which must be followed to assure that such values are considered in any decision-making process. Compliance with these procedures requires the land manager to accomplish a series of tasks which include inventory, evaluation, determination of effect, and mitigation of adverse effect.

Besides the general concerns mentioned above, some of the immediate objectives of CRM within the Forest Service in Mississippi and in the nation as a whole include the following:

- 1) Cultural resources awareness training for all Forest Service personnel, since we must be aware of and know something about a resource before we can protect it. The resources must be protected to be managed, and managed well, in order to be passed along, intact or enhanced, to succeeding generations of Americans.

- 2) Preparation of an overview of cultural resources within the Forest: what we presently know about the cultural resources relative to the history and prehistory of the state, and suggestions as to future needs and objectives, to serve as a planning guide for subsequent program management.
- 3) Careful planning and intelligent, systematic sampling to survey National Forest land as mandated in legislation and directives. Analysis of present knowledge and concepts utilized in other areas may be useful in establishing sampling strategies for efficient examination of National Forest land.
- 4) An inventory of known cultural resources on National Forests in Mississippi would be compiled and updated as a result of the sampling survey mentioned above, to be used as an additional planning tool or guide in future compartment prescriptions, roadbuilding, land exchanges, recreational and educational activities.

Our authority for the conservation and management of cultural resources is mandated by several Federal laws, beginning with the Antiquities Act of 1906, as well as Executive Order 11593 and other directives.

The objectives, policies, and responsibility of the Cultural Resources Management program within the Forest Service are also stated in Forest Service Manual 2361.

Federal Leadership for the Preservation of Cultural Resources^{*}

Since World War II, massive public construction projects (highways, dams, urban renewal) have destroyed hundreds of thousands of archaeological sites throughout the country. With the rapid expansion of essential construction activities today, we as a nation are losing irreplaceable information about our cultural heritage on such an enormous scale that it is impossible for the private sector alone to retard or prevent the loss. Therefore, it is fitting that the federal government, acting on behalf of the American people, play a major role in protecting and preserving those historic and archaeological resources which remain.

All federal agencies are required by law to consider the presence of significant cultural properties before they undertake any project that may cause irreparable loss or destruction of such properties. This responsibility also extends to the systematic search for, documentation of, and evaluation of cultural properties on public land in the absence of any active federal undertaking.

* Abstracted from National Park Service (1981): "Archaeological and Historical Data Recovery Program, 1979."

The Development of Historic Preservation in the United States

Since colonial times Americans have had considerable interest in preserving historic and prehistoric sites. The mounds in the

southeastern United States sparked the curiosity of early relic hunters and amateur archaeologists, the most famous being Thomas Jefferson who carefully excavated an Indian mound near Monticello. The cult that arose around George Washington, for example, resulted in attempts to preserve historic homes such as Mt. Vernon and the Hasbrouch House, which was purchased by the State of New York in the last part of the 19th century.

After the close of the Civil War, people became more concerned with examining the rapidly disappearing aboriginal cultures, and the rush to obtain Indian artifacts began. Semi-trained archaeologists excavated unsystematically for years. The result was hundreds of thousands of unmarked and unprovenanced artifacts.

In the 1880's the federal government became interested in historic preservation and archaeology; the extensive vandalism at Casa Grande had impressed enough people to cause the government to take action. After several abortive attempts at a broad based federal plan, the Antiquities Act of 1906 was enacted to protect cultural resources on federal land. Since that time concern with the preservation of our national heritage has increased. This concern is reflected in the development of laws that pertain to the preservation of archaeological, architectural, and other cultural resources.

As a part of the extensive "New Deal" legislation of the Depression, the National Historic Sites Act of 1935 enacted a national policy of historic preservation and authorized the Secretary of the Interior to initiate a number of preservation programs, including designating National Landmarks and protecting property that is of national historic or archaeological significance. In 1937 the National Survey of Historic Sites and Buildings began to identify and evaluate the significance of national properties, beginning the list of National Historic Landmarks.

In the late 1940's there was a surge of Reservoir construction, unavoidably affecting countless riverine sites, both Indian settlements and historic communities. The River Basin Survey was established as a salvage program to act in concert with reservoir construction in an attempt to study at least some of the cultural resources before they were destroyed.

Interest in historic preservation continued to grow and, in 1949, the National Trust for Historic Preservation was established. Its major purpose was to encourage and facilitate public participation in the preservation movement. However, this growing movement was challenged in the 1950's by the program for interstate highways. More legislation was needed to protect properties that would be affected by the construction of these highways. The Federal-Aid Highway Act of 1956 was enacted which in turn led to the development of the Highway Archaeological Salvage Program and finally, in 1966, the passage of the Department of

Transportation Act which requires that, when feasible, highways be relocated rather than disturb significant sites. It also calls for setting aside Department of Transportation funds to protect sites which might be affected by the construction of roads or highways.

The 1960's saw the development of the "new archaeology," a reorientation in ways of thinking about archaeology as well as a time of innovations in method and theory. At this time there was also an attempt made to unify the archaeology and historic preservation movements. In 1960 the "Beautification of America" program was begun; 1964 was declared "International Monuments Year." And in 1966 the National Historic Preservation Act which was passed. This act defines historic preservation as "the protection, rehabilitation, restoration, and reconstruction of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, or culture." The Historic Preservation Act authorized the Secretary of Interior to maintain a National Register of Historic Places, created the President's Advisory Council on Historic Preservation, directed agencies to consider the effects of undertakings on National Register properties and to consult with the Advisory Council when an undertaking may affect a property, and set aside grants for the states and the National Trust for Historic Preservation. As a result of the act, the Secretary of the Interior called for the establishment of State Historic Preservation Officers in each state.

In 1969 the National Environmental Policy Act was enacted. This act restates that every federally funded or licensed project must take into account during the planning stages the potential effects of the project on the total environment. This significant act emphasized the option of preserving or avoiding a site rather than automatically requiring last minute salvage attempts.

Executive Order 11593 (Preservation and Enhancement of the Cultural Environment) was signed in 1971 and directs all federal agencies to locate, inventory, and nominate historic properties on their lands to the National Register. This calls for early consideration to be given to archaeological resources and for agencies to "exercise caution" in construction to avoid damaging any possible National Register quality sites until the list is complete and all significant resources are known and located.

In 1974 another preservation measure was enacted by Congress: Public Law 93-291, the "Archaeological and Historic Preservation Act." This act expanded the earlier Reservoir Salvage Act of 1960 by extending the salvage requirements from reservoir construction to all federal or federally licensed or financially assisted projects. Up to 1 percent of the total federal project cost can be transferred to the Department of the Interior or used by the individual agency to fund data recovery activities, and the act further sets a precedent for preserving data as well as artifacts by calling for analysis of recovered data and publication of the results of analyses.

The Archaeological Resources Protection Act of 1979 updates the Antiquities Act of 1906. It redefines the concept of antiquities and

includes penalties for violation of this act, giving enhanced protection to federally owned antiquities.

During the 1970's several significant changes occurred not only in the law, but in attitudes as well. There has been an attempt throughout the profession of archaeology, both in academia and in the federal government, to raise standards of work and expectations through use of more highly qualified personnel with increased levels of expertise. Just as significantly, new attitudes about the role of archaeology as a science of behavior and historic preservation have developed. These changes have increased the credibility of archaeology as a science, and particularly of archaeology conducted with federal involvement.

The following Federal laws and Executive orders are the most significant of the many that govern cultural resources management, and are taken verbatim from Forest Service Manual 2361:

The Organic Administration Act of June 4, 1897. Authorizes the Secretary of Agriculture to regulate occupancy and use of the National Forests. Protection of cultural resources from vandalism is authorized under 36 CFR 261.9e. Classification of special interest areas which should be managed for recreation use substantially in their natural condition is authorized under 36 CFR 294.1a. Such areas which are of a nature or significance to justify or require more intensive management, protection, interpretation, or use are authorized under 36 CFR 294.1b.

Antiquities Act of 1906. (P.L. 59-209; 34 Stat. 225; 16 U.S.C. 431 et seq.) Provides for the protection of historic or prehistoric remains or any object of antiquity on Federal lands; establishes criminal sanctions for unauthorized destruction or appropriation of antiquities; and authorizes scientific investigation of antiquities on Federal lands, subject to permit and regulations. Paleontological resources also are considered to fall within the authority of this Act.

Historic Sites Act of 1935. (P.L. 74-292; 49 Stat. 666; 16 U.S.C. 461 et seq.) Authorizes the establishment of National Historic Sites and otherwise authorizes the preservation of properties of national historical or archeological significance; authorizes the designation of National Historic Landmarks; establishes criminal sanctions for violation of regulations pursuant to the Act; authorizes interagency, intergovernmental, and interdisciplinary efforts for the preservation of cultural resources; and other provisions.

Reservoir Salvage Act of 1960. (P.L. 86-521; 74 Stat. 220; 16 U.S.C. 469-469c.) Provides for the recovery and preservation of historical and archeological data, including relics and specimens, that might be lost or destroyed as a result of the construction of dams, reservoirs, and attendant facilities and activities.

National Historic Preservation Act of 1966. (P.L. 89-665; 80 Stat. 915; 16 U.S.C. 470 et seq.) Declares a national policy of historic preservation defined in the Act as the protection, rehabilitation, restoration, and reconstruction of districts, sites, buildings, structures, and objects significant in American history, architecture, archeology, or culture, including the encouragement of preservation on the State and private levels; directs the expansion of the National Register of Historic Places (National Register) to include cultural resources of State, local, and national significance; authorizes matching Federal grants to States and the National Trust for Historic Preservation for acquisition and rehabilitation of National Register properties; establishes an Advisory Council on Historic Preservation (ACHP); provides procedures in Section 106 for Federal Agencies to follow in the event an undertaking may affect a property on, or eligible to, the National Register. As amended, the Act authorizes the Secretary of the Interior to withhold from disclosure to the public locational information on National Register listings "whenever he determines that the disclosure of specific information would create a risk of destruction or harm to such sites or objects" (PL 94-458, 90 Stat. 1942). Section 106 of the National Historic Preservation Act is implemented by regulations issued by the ACHP (36 CFR 800).

National Environmental Policy Act of 1969 (NEPA). (P.L. 91-190; 83 Stat. 852; 42 U.S.C. 4321 et seq.) Declares that it is the policy of the Federal Government to preserve important historic, cultural, and natural aspects of our national heritage. Compliance with NEPA requires consideration of all environmental concerns during project planning and execution.

Executive Order 11593, Protection and Enhancement of the Cultural Environment, May 13, 1971. (36 FR 8821) Asserts that the Federal Government shall provide leadership in preserving, restoring, and maintaining the historic and cultural environment of the Nation; directs Federal Agencies to ensure the preservation of cultural resources in Federal ownership, and institutes procedures to ensure that Federal plans and programs contribute to the preservation and enhancement of nonfederally-owned sites; orders Federal Agencies to locate, inventory, and nominate to the National Register all properties under their control or jurisdiction that meet the criteria for nomination; directs them to exercise caution during the interim period to ensure that cultural resources under their control are not inadvertently damaged, destroyed, or transferred before the completion of inventories and evaluation of properties worthy of nomination to the National Register, and directs the Secretary of the Interior to undertake certain advisory responsibilities in compliance with the order.

Historical and Archeological Data Preservation Act of 1974. (P.L. 93-291; 88 Stat. 174.) Amends the Reservoir Salvage Act of 1960 to extend provisions for the protection of historical and archeological data at dams to involve any alteration of the terrain caused as a result of Federal construction project or Federally licensed activity or program.

Other Acts such as Multiple Use-Sustained Yield Act of 1960 (74 Stat. 215), the Forest and Rangeland Renewable Resources Planning Act of 1974 (88 Stat. 476), and National Forest Management Act of 1976 (90 Stat. 2949). Establishes National Forest management direction and thereby may affect cultural resource management activities.

State and Local Laws and Orders. Legislation, orders, regulations, and ordinances vary greatly from State to State. Federal Agencies should be aware of the protection that States and their dependencies have provided for cultural resources, and take them into account during resource surveys and development planning.

The President's Memorandum on Environmental Quality and Water Resources Management, July 12, 1971 Directs Federal Agencies with water resource responsibilities and programs to publish procedures implementing the ACHP's Regulations 36 CFR 800.

American Indian Religious Freedom Act (92 Stat. 469), August 11, 1978. Establishes as policy of the United States protection and preservation for American Indians of their inherent right to freedom to believe, express, and exercise their traditional religions. The Forest Service has a responsibility to recognize the connection between the cultural resource program and the religious freedom of American Indians. The Act directs Agencies to consult with native traditional leaders in order to determine the potential effect of Forest Service activities upon Native American religious and cultural rights and practices.

Public Buildings Cooperative Use Act of 1976 (90 Stat. 1505) and Executive Order 11772 "Federal Space Management." Encourage adaptive use of historic buildings as administrative facilities for Federal Agencies and activities.

Mississippi Antiquities Law

The "Antiquities Law of Mississippi" Sections 39-7-1 et seq., MISSISSIPPI CODE 1972, provides that it is in the public interest and public policy "to locate, protect, and preserve all sites, objects, buildings, shipwrecks, and locations of historical, archaeological, educational or scientific interest ... on or under any of the lands, tidelands, submerged lands and bed of the sea within the jurisdiction of

the State of Mississippi." The responsibility for supervision of such antiquities is vested in the Department of Archives and History and its Board. They also maintain the state's records of sites and other such antiquities, under the supervision of the State Historic Preservation Officer, who is also Director of the Department of Archives and History.

The following brief discussion of the geology of the state is abstracted from Kelly (1973, 1974).

Tomblow Hills: Occupying the northeastern corner of the state is a belt of rugged hills drained by the Tennessee and Tomblow rivers. The area contains the highest elevations in the state as well as the highest point, Woodall Mountain at 806 feet. This region is part of the Fall Line which is the outermost extension of the Appalachian mountains. The geologic surface units include the Tascatawba and Eufaula formations. Primary vegetation is the oak-hickory-pine forest (Forest 1942).

Black Prairie: A narrow level belt of dark calcareous soils lies west of the Tomblow Hills, which is an extension of the Black Belt of this region is called in Alabama. Resting on the Selma chert, the surface is flat to gently undulating, and the area is virtually devoid of trees. Native vegetation included cedars, oaks, sages, and grasses.

Pontotoc Ridge: The flat expanse of the Black Prairie gives way on the west to a prominent elevated land area called Pontotoc Ridge. Underlain by the Ripley formation it serves as the divide between the valleys of the Mississippi and Tomblow rivers.

Fairburn: West of Pontotoc Ridge is a narrow level belt of heavy clay soil, derived from the Porter's Creek and Clayton formations, which is responsible for poor drainage. The soil is of low fertility, and the vegetation consists mostly of a scrubby growth of oaks and pines.

North Central Hills: This region, an extension of the Red Hills section of Alabama, is the most extensive upland in Mississippi. The area is underlain by the Wilcox, Tallapoosa, Willsco, and Kaskaskia formations. The native vegetation was diverse, including loblolly-shortleaf pine, oak-pine and oak-hickory forest types. The soils are partly eroded, however the streams have incised broad valleys which are fertile.

East Hills: West of the North Central Hills, and stretching the entire length of the state, is an extremely hilly belt composed of fossiliferous. The soils are windblown sediments, extremely fertile but highly eroded.

GEOGRAPHIC SETTING

Mississippi lies totally within the East Gulf Coastal Plain which is a section of the larger Atlantic and Gulf Coastal Plain province, extending from New England to eastern Mexico. The East Gulf Coastal Plain may be characterized as an elevated sea bottom and, with minor exceptions, lies generally below 500 feet. The Coastal Plain is formed from sediments laid down in marine brackish and fluvial environments, which rest on deformed rocks of the Appalachian and Ouachita Mountains. The Coastal Plain in Mississippi slopes gently from the northern interior toward the Gulf of Mexico, and the topography varies from flat to undulating to steep. Mississippi's location within the Coastal Plain accounts for the lack of extreme variation in the surface configuration, however the differences in the subsurface geology produces differences in the erosion of the underlying formations. As a result, the state exhibits a series of lowlands separated by escarpments facing inland and sloping seaward which justifies the delineation of ten physiographic regions for the state. The following brief discussion on the regions is abstracted from Kelley (1973, 1974).

Tombigbee Hills: Occupying the northeastern corner of the state is a belt of rugged hills drained by the Tennessee and Tombigbee rivers. The area contains the highest elevations in the state as well as the highest point, Woodall Mountain at 806 feet. This region is part of the Fall Line Hills which is the outermost extension of the Appalachian chain. The geologic surface units include the Tuscaloosa and Eutaw formation. Primary vegetation is the oak-hickory-pine forest (Thomas 1974:21).

Black Prairie: A narrow level belt of dark calcareous soils lies west of the Tombigbee Hills, which is an extension of the Black Belt as this region is called in Alabama. Resting on the Selma chalk, the surface is flat to gently undulating, and the area is virtually devoid of trees. Native vegetation included cedars, oaks, sedges, and grasses.

Pontotoc Ridge: The flat expanse of the Black Prairie gives way on the west to a prominent elevated land area called Pontotoc Ridge. Underlain by the Ripley formation it serves as the divide between the valleys of the Mississippi and Tombigbee rivers.

Flatwoods: West of Pontotoc Ridge is a narrow level belt of heavy clay soil, derived from the Porter's Creek and Clayton formations, which is responsible for poor drainage. The soil is of low fertility, thus the vegetation consists mostly of a scrubby growth of oaks and pines.

North Central Hills: This region, an extension of the Red Hills section of Alabama, is the most extensive upland in Mississippi. The area is underlain by the Wilcox, Tallahatta, Winona, and Kosciusko formations. The native vegetation was diverse, including loblolly-shortleaf pine, oak-pine and oak-hickory forest types. The soils are easily eroded, however the streams have incised broad valleys which are fertile.

Bluff Hills: West of the North Central Hills, and stretching the entire length of the state, is an extremely hilly belt composed of loess soils. The soils are windblown sediments, extremely fertile but highly erosive.

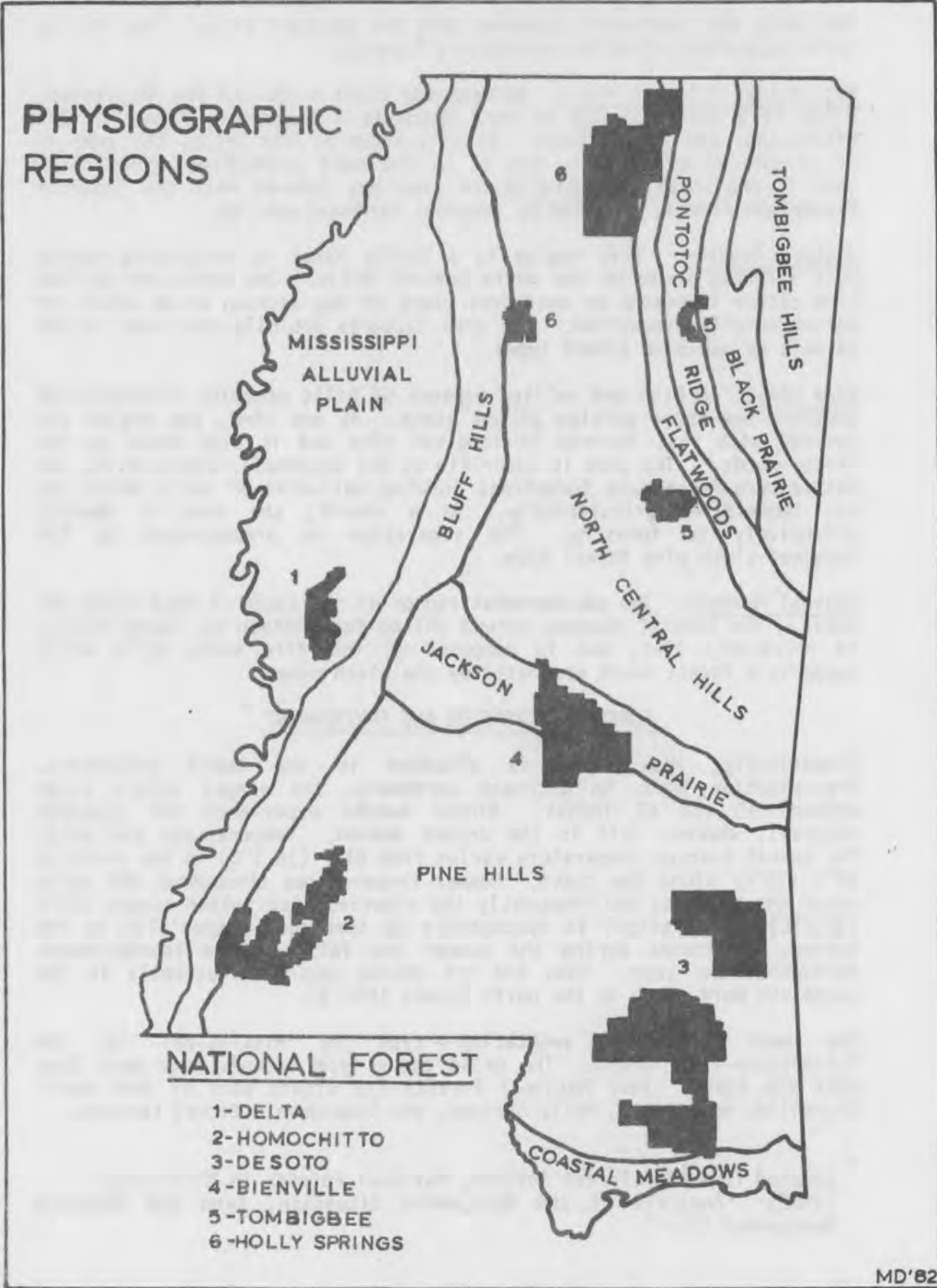


Figure 1

The soils thin eastward, blending into the adjacent hills. The fertile soils supported extensive oak-hickory forests.

Mississippi Alluvial Plain: Between the Bluff Hills and the Mississippi fliver is a fertile wedge of land which is a floodplain formed by the Mississippi and Yazoo rivers. Locally known as the Delta, the area is of slight relief overall, and it is* the most productive agricultural land in the state. Originally the area was covered with the Southern Floodplain Forest, typified by numerous hardwood species.

Jackson Prairie: This region is a fairly level to undulating narrow belt situated south of the North Central Hills. The soils are derived from either limestone or weathered clays of the Jackson Group which are agriculturally productive. The area supports loblolly-shortleaf forest as well as oak-pine forest types.

Pine Hills: A high and rolling expanse of hills occupies virtually the southern one-third portion of the state. At one time, the region was covered with vast forests of longleaf pine and is also known as the "Piney Woods." The area is underlain by the Catahoula, Citronnelle, and Hattiesburg-Pascagoula formations forming well-drained soils which are not impressive agriculturally. As a result, the area is devoted extensively to forestry. The vegetation is predominated by the longleaf-slash pine forest type.

Coastal Meadows: The southernmost region in the state is that along the coast. The Coastal Meadows extend inland for fifteen to twenty miles, is relatively flat, and is composed of infertile sandy hills which supports a forest cover dominated by the slash pine.

FOREST DESCRIPTION AND ENVIRONMENT *

Climatically, Mississippi is situated in the humid subtropics. Precipitation tends to decrease northward, and annual totals range between 45 and 65 inches. Winter months experience the greatest rainfall, whereas fall is the driest season. Temperatures are mild. The annual average temperature varies from 61° F (16.1° C) in the north to 68° F (20° C) along the coast. Summer temperatures throughout the state reach the eighties and frequently the nineties, but seldom exceed 100° F (37.7° C). Mississippi is susceptible to tornadoes, especially in the spring, hurricanes during the summer and fall, and to thunderstorms throughout the year. Snow and ice storms occur infrequently in the south and more often in the north (Cross 1974:3).

The most prevalent vegetation type in Mississippi is the Oak-Hickory-Pine Forest. The broad cover type extends over more than half the state. Four National Forests lie within part of this belt: Bienville, Homochitto, Holly Springs, and Tombigbee National Forests.

★ Adapted from USDA-Forest Service, National Forests in Mississippi (1982): "Analysis of the Management Situation, Land and Resource Management Plan."

On these Forests, vegetation generally ranges from pine ridgetops to hardwood bottoms, although it is not uncommon to find hardwoods on ridgetops, coves, and si deslopes. Neither is it uncommon to find pines in bottoms. Pine-hardwood mixtures occur in some places. Forest timber types include loblolly and shortleaf pines, some longleaf, yellow poplar, white oak-red oak-hickory, swamp chestnut oak-cherrybark oak, sweetgum-yellow poplar, sweetgum-Nuttall oak-willow oak, bald cypress-water tupelo, beech-magnolia, sycamore-pecan-American elm, sweet bay-tupelo-red maple and the associated species for these types.

Understory plants include some of the above as well as post oak, sugarberry, sassafras, persimmon, dogwood, sourwood, holly, wax myrtle, hawthorn, crab apple, and French mulberry.

Plants on the forest floor depend on the amount of light reaching them. However, grasses and forbs are those normally found in the pine and the hardwood ecosystems. The understory is dense over much of the area.

Part of the Tombigbee and Bienville National Forests contain strips of prairie belt vegetative types. Those areas located in the Jackson Prairie Belt are characterized by loblolly or loblolly-shortleaf pine types with red oak, hickory, and scrub oak understories. Lesser vegetation species include blackberry, huckleberry, poison ivy and oak, hawthorns, and several species of ferns and grasses. The drainages in the prairie belt contain water and willow oak with some sweetgums and red maple. The belt extends across the northern and southeastern portion of the Bienville National Forest. Perhaps the most unique associations within this area are the virgin prairies found near the central portion of the prairie belt. The calcareous soils of these areas are characterized by various species of legumes and grasses with sparse, poorly developed loblolly pine.

Eastern red cedar covers much of the calcareous soil areas that occupy a few hundred acres in the northeastern and southeastern parts of the Trace Unit, Tombigbee National Forest.

The DeSoto National Forest lies within the Southern Mixed Forest vegetative zone. This belt extends over south Mississippi, extending inland from the Gulf Coast for approximately 100 miles. Species include longleaf, loblolly and slash pines, sweetgum, beech, yellow poplar, white oak, swamp chestnut oak, turkey oak, cucumber tree, bay magnolia, southern magnolia, live oak, laurel oak, ironwood, red bay, and holly.

The DeSoto National Forest lies mainly in a Longleaf-Slash Pine belt within the Southern Mixed Forest. The drier sites are dominated by the longleaf pine type. In places the longleaf pine is associated with turkey oak, bluejack oak and blackjack oak. On places where fire has been more frequent, the longleaf occurs almost as pure stands. Understory communities associated with the longleaf pine type include bluestem-panicum-paspalum grasses, gallberry-gaupon-yellow jessamine, and other xerics.

Slash pine is the dominant forest type on the moist sites. It is the dominant type in many plantations established during and since the

1930's. Slash pine occurs in pure stands or mixed with longleaf, loblolly, or various species of hardwoods, depending on site and past management. Understory communities associated with the Slash Pine type include gallberry-yaupon-yellow jessamine.

The forest contains many narrow drains, and some wider ones dominated by the Sweetbay-Swamp Tupelo-Red Maple forest type. These areas remain wet except during prolonged drouth periods, and the soils are usually organic. They may or may not have a well-defined stream channel. The dominant plant species are buckwheat tree ("titi"), sweetbay, and swamp cyrilla. Many of these areas have a sparse overstory of mature loblolly or slash pine. Some have a scattering of mixed hardwoods such as water oak, red maple, and yellow poplar.

Hardwood types are not a dominant feature of the DeSoto, but they do occur occasionally in the better drained flood plains, on moist stream terraces, and lower slopes. Some of the more common species are southern red oak, cherrybark oak, water oak, white oak, sweetgum, yellow poplar, and hickory. They may occur either as dominant hardwood stands, or in combination with pines, usually slash or loblolly.

The Delta National Forest lies in the Southern Floodplain Forest which follows the entire western boundary of the state. The Delta is the only bottomland national forest in the country. The species occur in three generally recognized forest types: sweetgum-willow oak, situated on better drained levees and terrace remnants; hackberry-elm-ash, occurring in poorly drained flats; and overcup oak-bitter pecan, in low flats and sloughs.

Of the seven major weed species represented, buttonbush, swamp privet, and planertree are generally found in low flats or sloughs. Swamp dogwood, haw, and deciduous holly commonly grow on higher areas, although they may range from flats to low ridges. Palmetto is almost always on a ridge. In a few areas, weed species grow in groups to completely dominate the stand, but normally they are found as single trees scattered throughout the understory.

Ground cover vegetation on the Forest includes a myriad of vines and forbs. Though the forbs are by no means uncommon, they are not as conspicuous as the vines. Vines can be found in almost every portion of the Delta Purchase Unit, including areas of nearly full shade. The chief vine species are buckvine and trumpet creeper. Other commonly found species are redvine, ratan vine, Carolina moonseed, blackberry, dewberry, Virginia creeper, green briar, grape, and poison ivy.

There is considerable fish habitat on the National Forests in Mississippi, with some 112 lakes encompassing over 2750 acres, and 276 streams with almost 1400 miles of channel. Prominent species in these waters are the largemouth bass, bluegill, redear sunfish, crappie, and channel catfish.

The National Forests in Mississippi contain a variety of wildlife. Squirrels, whitetail deer, and turkeys are plentiful. Grey squirrels and fox squirrels inhabit Mississippi forests. Ducks, quail, and a few

doves are attracted to some areas within the Forest, i.e., greentree reservoirs, regeneration areas, and plantings for wildlife. Two species of rabbits inhabit the forests -- the cotton tail and the swamp rabbit. Raccoons, red and grey foxes, opossums, beavers, and skunks are plentiful. The coyote is being sighted more frequently.

PREHISTORIC OUTLINE

One of the tasks undertaken initially in outlining the range and variety of past human activities across the landscape is the delineation of the cultural history—the broad sequence of the pattern of past occupations. The basis for defining the prehistoric cultural history in any given area or region is the artifacts present and the stratigraphic relationships of groups of artifacts to each other. The artifacts in part serve as a frame of reference which tie these remains of past human events to a given range of time. Inferences concerning the manufacture and use of the artifacts result in an interpretation of the culture which deposited them in terms of the range of activities performed during a particular span of time. Because artifacts provide the basis for outlining the range of cultural activities occurring during a given period of time, the exercise in placing groups of artifacts in time and space is also known as Material Culture History.

The record of prehistoric occupations in North America is broken into several discrete units of time known as Cultural Stages. From oldest to youngest, these stages are the Paleo-Indian, Archaic, Poverty Point, Woodland, and Mississippian stages. The stages represent broad patterns of apparent social organization, economy, technology, and adaptation to the environment. Cultural Stages are ordered into subdivisions called Periods which further identify groups of artifacts to identifiable cultures with a more restrictive time depth; Periods are localized expressions of a cultural tradition. Where archaeological work in an area has been intensive enough in scope so that particular artifact groups are to be further restricted in time and space with obvious differences between cultures occurring elsewhere in the same time span, culture phases are defined. The phase is a very restricted localized expression of a cultural tradition (cf. Willey and Phillips 1958).

The prehistoric record of much of Mississippi's pine uplands has received such scant attention that only the broadest outline of the cultural history can be assembled. The limited amount of research conducted within the pine covered uplands restricts the known cultural history to a comparison with the cultural trends of adjacent regions where the prehistoric record is better understood. Impressively, though a detailed artifact analysis was not undertaken, cultural affinities for most of Mississippi seem to relate more directly with the adjacent Mississippi River Alluvial Valley, as opposed to areas eastward along the Gulf Coastal Plain, which differs culturally from the Mississippi Valley. The affinities are seen largely in artifacts which overall and through time seem to have a Mississippi Valley derivation.

The basic prehistoric chronological framework for Mississippi is shown in Figure 2 which also represents a comparison with the chronologies of adjacent areas. The chronology shown here differs slightly from the nomenclature used for the Mississippi Valley as defined by Jeffrey Brain (1971), or for the state of Mississippi overall by McGahey (1975), in that the chronology is presented according to the Stage-Period framework used traditionally in the Southeast (cf. Griffin 1952). This is because the Stage-Period framework, in the absence of stratigraphic data, permits a considerable degree of overlap between the temporal units and

is thus a descriptive versus interpretive tool. It should be noted that the following discussion omits the mention of diagnostic artifacts for determining the general cultural history. This information can be found in Phillips (1970) and Brain (1971).

Paleo Indian Stage

Paleo Indian Period, ca. 15,000-8,000 B.C. Although evidence indicates that man's arrival in North America may have occurred as early as 30,000 years ago, the evidence is not convincing. Man's entrance into the present day United States is more reliably pegged at 12,000 years ago when much of the world's oceans were locked up in giant ice sheets or glaciers, which provided a land bridge between Siberia and Alaska due to the greatly reduced sea level. At the same time, an ice-free corridor through Canada was present which served as a funnel into the "lower 48" for travelers crossing the Bering land bridge. The motivation for movement into North America is tied to the existence of now extinct large mammals such as mammoth, bison, and ground sloth which in turn characterize the technology and economy of the Paleo Indians as highly mobile and efficient nomadic hunters of the large game.

Evidence for the hunting way of life of the Paleo Indian is found variously through North and South America in the distinctive lanceolate spear point called the "Clovis Point," which along with a distinctive tool kit for butchering, hide and bone working has been found in association with the remains of extinct megafauna in certain parts of the country. Included are sites located in Texas and Florida where Clovis tools have been found associated with the remains of large game animals. In the Mississippi Valley, fossils of extinct mammals have been discovered; however, the only association of them with early man in Mississippi rests with the discovery of a fossilized human pelvis lying in a stratum containing the bones of several extinct mammals near Natchez. The "Natchez Pelvis" was recorded in 1846 by Dr. W. M. Dickerson, a Natchez physician, who published a short account of some fossilized bones he had collected during the period from 1837-1844 in a gully situated in the Loess Bluffs bordering the Mississippi Alluvial Valley. Otherwise, the presence of the Clovis hunters in Mississippi is indicated by scattered and isolated surface finds of the distinctive tool types (McGahey 1975).

The nomadic hunting way of life of the Paleo Indians declined with the extinction of the Pleistocene megafauna at about 8,000 years ago; therefore, the subsequent development of techniques to adapt to the changing environment emerged.

Archaic Stage

The preceding Paleo Indian big game hunting tradition represented a relatively homogeneous set of cultural patterns with considerable areal extent. The extinction of the Pleistocene megafauna did not signal the decline of efficient hunting technologies, however, for the Paleo Indian big game hunting tradition epitomizes a basic subsistence pattern which continued with varying shifts in emphasis throughout prehistory (Brain 1971:13). The Archaic Stage is subdivided into three periods: Early

(ca. 8,000-5,000 B.C.)» Middle (ca. 5,000-2,500 B.C.)» and Late (ca. 2,500-500 B.C.). The Archaic "Stage may be characterized as the emergence and development of strategies for adapting to environments approaching those of modern times. Further, a broad spectrum of natural resources was utilized which characterizes the food procurement habits during the Archaic as a hunting, fishing and collecting-gathering pattern. It is also probable that cultivation on a small scale of such wild plant food species as goose foot (*Chenopodium*) and sunflower (*Helianthus*) supplemented the wild foods (Willey 1966:254). The development of technologies for full utilization of the products of forests, rivers, prairies, and coastal areas during the Archaic has been termed Primary Forest Efficiency (Caldwell 1958).

The developing Archaic pattern through time, as seen in archaeological contexts, indicates an ever increasing population. Although the development of Primary Forest Efficiency characterizes Archaic culture overall, a degree of regionalization emerged which is manifest in the variability of artifacts from different areas. The Archaic Stage and the trajectory of the Archaic pattern can be summarized as a series of transitions. The Early Archaic period emerged from the Paleo Indian Stage and involved the replacement of technologies for big game hunting. This transition is seen in the variety of stone tool forms with clear antecedents in the Clovis tool types. Increasing adaptation to the wide range of resources available from the environment, with shifts in emphasis from hunting to increased reliance on fishing and wild food gathering, along with a degree of sedentism emerges during the Middle Archaic Period. The classic "Archaic Tradition" over the transitional easures of social control and an even more effective adaptation to the environment marks the Late Archaic Period. During this period of time, the socio-technological complexity of the Poverty Point manifestation emerged which overlaps with the subsequent Woodland Stage of prehistorical cultural development, exemplified by the manufacture of pottery and true agriculture. Nevertheless, the Late Archaic, as observed by McGahey (1975:14), was probably the point in time when man was as effectively adapted to obtaining a living from the land as possible.

Early Archaic Period (ca. 8,000-5,000 B.C.). The transition from big game hunting to the full Archaic subsistence pattern occurred during this segment of time encompassing about 3,000 years. Indicative of this period is a continuation of the Clovis tool tradition; however, Early Archaic tool types increase in frequency and diversity in form and function. Noteworthy additions to the material culture include the ground stone mortar and pestle which constitutes some of the earliest evidence of the movement toward Primary Forest Efficiency (Marshall 1973:28). Hunting techniques changed from the use of spears to smaller darts, and the highly efficient throwing stick or atlatl emerged. A pattern of seasonal rounds with temporarily occupied camps, rather than continual nomadism, by band level social groups typifies subsistence activities. The Early Archaic Period in the Southeast is more thoroughly documented in the Highland regions, such as the Tennessee Valley, where diverse stone tool forms with continuities in form, function and time depth indicate a certain degree of regionalization. In Mississippi, regional variation of Archaic culture is not yet well

DATES	BLAKEMAN 1976			McGAHEY 1975	PHILLIPS 1970	BRAIN 1971	
1500	Mississippi	Mississippi	MISS.	Mississippi	Mississippi	Mississippi & Southern Cult	V
1300						Coles Creek	IV
1100	Late Woodland	Miller III	WOODLAND PERIOD	Coles Creek	Coles Creek	Mounds	IV
900				Baytown	Baytown	Baytown Agricultural Revolution	III
700	Middle Woodland	Miller II	WOODLAND PERIOD	Marksville	Baytown	Hopewell Radiation	II
500							
300	Early Woodland	Transitional Archaic-Woodland	WOODLAND PERIOD	Tchula (Tchefuncte)	Tchula	Tchefuncte	I
100 BC-AD							
300	Late Archaic		TRADITIONAL	Late Archaic	Poverty Point	Tchula	I
500							
2100	Early Archaic		ARCHAIC	Middle Archaic		Old Basin	III
2300						2500	3000
5000	Early Archaic		ARCHAIC	Early Archaic		Still Gin	II
6000						7000	8000
8000	PALEO-INDIAN					Gene III	I
9000						Shaw	IV
10000						Busey	III
12500						Helm	II
15000							

Figure 2 COMPOSITE PREHISTORIC CHRONOLOGY FOR MISSISSIPPI

(Sources In "References Cited")

documented (Marshall 1973:30); however, one pattern in particular seems to characterize various parts of the state--the Dalton Culture.

The term Dalton denotes a particular style of projectile point (the Dalton Point) with associated artifact assemblages which refer to a particular lifeway or culture that occupied the southeast as early as 8,000 B.C. (Schiffer 1975:103). The antiquity of remains of Dalton Culture and the alteration of their depositional context by both natural processes and other occupations restrict a complete reconstruction of the lifestyle. The lifestyle of the Dalton Culture is explained in terms of societal relationships and resource procurement. In the broadest sense, Dalton Culture consisted of several interrelated bands of people involved in a series of reciprocal relationships tied to resource procurement, which in turn was based on a seasonal round (Morse 1975). Evidence for the Dalton presence in Mississippi occurs in both riverine and upland environments, and thus far campsites or specialized resource procurement sites are involved in the settlement cycle. An assemblage of specialized as well as general purpose tools complements the Dalton tool kit, and, in addition, the San Patrice projectile point style co-occurs.

Middle Archaic Period (ca. 5,000-2,500 B.C.). As Willey reports (1966), the Middle Archaic Period represents the coalescence of a variety of traits which serve to exemplify the cultural developments and resulting cultural pattern of the Archaic tradition. Like the preceding period, settlement patterns were tied to a band level society practicing a seasonal system of subsistence procurement. The features which serve to distinguish Middle Archaic occupations from Early Archaic are a tendency for lithic tools to be apparently more crudely made, an increase in the occurrence of nutting and milling implements, ground and grooved stone axes, and finely polished ground stone atlatl weights; these furnish evidence of adaptation to the total environment and of general technological advancement (McGahey 1975:13). During the Middle Archaic, the variety of unifacial chipped stone tools found during the Early Archaic declines in frequency, although bifacial tools (projectile points) become large, and square-stemmed. This may indicate hunting was less important, while fish and shellfish increased in importance (McGahay 1975:13). Domesticated dogs certainly were present during this time, and burials contain individuals accompanied not only by dogs but other mortuary offerings as well.

Over much of Mississippi, Middle Archaic occupations are sparsely represented. In fact, the Middle Archaic is perhaps one of the least known periods in the prehistory of the northern Gulf area (Gagliano 1977:237). Working in the Amite River Valley of southeast Louisiana, Gagliano (1977) has advanced the delineation of an Amite River Phase as a regional variation of the Middle Archaic pattern, and by extension, a summary of the phase follows as a representative description for the time frame for Mississippi.

Amite River Phase sites most typically are found in riverine environments where chert gravel is common, and its distribution appears to coincide with outcrops of stream gravels (Gagliano 1977:237-42). Lithic resource procurement does not appear to be the predominant

activity at the sites; rather, the diversity of the artifact, assemblage suggests that a much broader range of activities was performed involving a full range of economic and social pursuits (Ibid.) One of the more revealing social activities of Amite River Phase peoples is the construction of low, circular earth mounds, often considered to be crematory platforms. They are also possibly an indication of semi-sedentariness in the form of a house mound (Ibid.)

Late Archaic Period (ca. 2,500-500 B.C.). The inventory of cultural materials used during the Middle Archaic persists into the last period of the Archaic Stage; however, even a wider range of both chipped and ground stone tools appears (McGahey 1975:14). Perhaps the most noteworthy trend during the late Archaic was increasing cultural interplay and additions of foreign or exotic materials indicating an exchange network for raw materials. The atlatl was still the preferred hunting implement, stone plummets (probably used as net sinkers) became popular, and items of body adornment, such as drilled stone and marine shell beads, became more frequent. The large projectile points continue to be large, broad-stemmed styles; however, they become more ovoid in form.

While the settlement-subsistence theme of Primary Forest Efficiency probably reached a zenith during the Late Archaic and was successful in that it persisted in isolated instances into the succeeding stage of cultural development, the Late Archaic Period was also a time of socio-political advances encompassed by the Poverty Point Culture, ncurrently the idea for the manufacture of pottery occurs elsewhere in the Southeast during the Late Archaic, which in itself signals the approach of a new set of cultural patterns.

The Late Archaic cultures in Mississippi had perhaps established well-defined resource procurement territories, which also implies a more developed order of social organization with long-term occupied base camps. Gagliano (1977) has defined the Pearl River Phase which represents the South Mississippi variation of Late Archaic culture. The Pearl River Phase was defined from materials recovered from the Cedarland Plantation Site, located on the edge of the Pearl River estuary in Hancock County, Mississippi (Gagliano and Webb 1970). The interesting feature about this Late Archaic manifestation is the occupational orientation to coastal settings, as well as indications for semi-permanent habitations. These indications include large shell middens containing the remains of several animal species intermixed with diverse forms of artifacts. Thus, for South Mississippi, a change from Middle Archaic to Late Archaic evidences a shift in emphasis from purely terrestrial exploitation, which required seasonal movements tied to faunal migration and floral maturation, to maximizing local resources represented by both riverine, coastal, and terrestrial environments (Brain 1971:36).

Materials indicative of the Late Archaic are found on sites scattered throughout the pine uplands, which by inference presupposes the exploitation of the area during this time, which in turn implies seasonal activity related to more permanently occupied areas.

The settlement-subsistence base developed during the Late Archaic provided a degree of cultural stability and sedentism, prerequisites for the pursuits of noneconomic activities. In particular, a new dimension to the cultural pattern was added--the elaboration of the social and religious superstructures (Brain 1971:40). Still to come later were technological and economic innovations exemplified in the manufacture of pottery and the practice of agriculture; however, the rise of socio-religious institutions marks the divergence of a new cultural pattern which departs significantly from that pattern set by the Archaic Tradition.

At this point in describing the pattern of cultural development in the State, the overall picture becomes somewhat complex. The Poverty Point phenomenon which arose around 2,000 B.C. and lasted until approximately 500 B.C. was centered in the Mississippi Alluvial Valley and extended to the coast. It in part stemmed from the Archaic pattern of highly successful resource procurement represented by the Late Archaic; however, the important point is that the Late Archaic culture was not subsumed entirely by the Poverty Point culture. The Archaic pattern persisted alongside the development of Poverty Point, and it has been proposed that during this time of diverging cultural settings there were apparently numerous exchanges between the "Archaic Hill People" and the Poverty Point Culture peoples (Marshall 1973:37). The traditional ordering of the prehistoric cultural history into Stages-Periods leaves Poverty Point as a stepchild in the classification, for it is distinct from Archaic as well as Woodland stages and does not fit within either. Brain (1971) has partially resolved this classification problem by dispensing with the traditional stage-period units and formulating a chronology based on a linear framework of development called eras, as opposed to arbitrary units of time, or stages, as used in this discussion.

Poverty Point Period

The rise and fall of the culture known as Poverty Point is largely intertwined with the geologic history of the Mississippi Alluvial Valley; however, the cultural sphere also extended to the Gulf Coast. Although Poverty Point lifeways originated in the Late Archaic pattern, its divergence is marked by the propensity for earth moving projects which are physical manifestations of the socio-religious elaboration that brought them about (Brain 1971:41). The Poverty Point period may be characterized as a culture involved in a highly organized and viable religious system, a developed social hierarchy, an elaboration of arts and crafts, and a far-flung interaction sphere (Brain 1971:45). The type site for the period, the Poverty Point Site located in northeastern Louisiana, consists of a series of six concentric earthen ridges with four large mounds. At the time the site was occupied, it was situated at a geographical point closest to where four major rivers approached each other at this time--the Mississippi, Red, Ohio, and Arkansas Rivers. The location served to enhance the site's involvement as a major redistributive and trade center. Exotic raw materials such as copper, catlinite, obsidian, steatite, and non-local cherts were brought to the site from considerable distances. One of the significant outgrowths of the Poverty Point culture was the development of a

nonproductive artisan class to which many scholars have attributed the various innovations and refinements in lithic technology, particularly a specialized microlithic industry (Brain 1971:47-49). Unique to Poverty Point material culture are quantities of baked clay objects of various forms which are believed to have served as substitutes for cobbles in the "hot rock" cooking technique.

The problem confronting archaeologists in explaining the rather high degree of socio-political organization of Poverty Point culture is: How could such a highly developed form of social organization occur in the absence of agriculture? It has long been believed that complexity in social organization was a response to stability of food supply, such as that afforded by agriculture. However, the peoples of the Poverty Point culture had already achieved a highly successful subsistence base from the natural richness of the bottomlands of the Mississippi Alluvial Valley without realizing the natural potential for agriculture.

Woodland Stage

The appearance of pottery arbitrarily serves as the turning point in the cultural chronology, marking the end of the Archaic pattern and the beginning of the Woodland tradition. Although pottery itself signals the rise of a changing cultural pattern, changes in adaptive strategies are also inferred. These strategies include an increased reliance on agriculture which in turn indicates a more settled lifestyle. Along with the additions to settlement-subsistence routines, the Woodland Stage represents a period of time when increasing localization occurs, and various artifact assemblages serve to define the spatial extent of local cultural expressions. The Woodland Stage is divided into three periods which collate to specific localized cultures or cultural periods. These are: Early (Tchula Periods, ca. 500-100 B.C.); Middle (Marksville Period, ca. 100 B.C.-A.D. 100); and Late (Baytown Period, ca. A.D. 400-800) (McGahey 1975:16-17). Like the preceding Archaic Period, the change from one cultural period to the next never was abrupt, rather change occurred over a period of transition.

Tchula Period. The initiation of the Woodland pattern in Mississippi is marked by the appearance of pottery and is known as the Tchula Period. Along the coast, diverse cultural settings are seen in the emergence of different pottery styles--Tchefuncte, Bayou La Batre, and Alexander. Due to certain factors indicating a reliance on seasonal resource procurement, it is difficult to separate the Tchula Period lifestyle from that of the Archaic; however, the addition of pottery to the cultural inventory suggests a certain degree of sedentism not present during the Archaic. In addition, sites containing Tchula Period ceramics tend to be smaller than Poverty Point sites, although they are more numerous than either Poverty Point or Late Archaic sites (McGahey 1975:17).

The Tchula Period may be viewed as a brief span of time representing cultural lag in that the socio-political structure of Poverty Point declined instead of increasing its sphere. At the same time, it appears as though migrations filtered in for a brief interval bringing the technology for ceramic manufacture but no concomitant developments in

economics or settlement. The Tchula Period merges at the later end of its time span into the Marksville Period which again brings striking developments to the local cultures in terms of socio-political elaboration.

Marksville Period. The Marksville Period is a period of time when increasing interaction occurs across regions and is expressed in the development of an elaborate religious and trade network referred to as the "Hopewell radiation" Brain (1971:54). In part, the socio-political emphasis of Poverty Point returns, having undergone a brief submergence during the Tchula Period. However, whereas Poverty Point was a development indigenous to the Mississippi Valley, Hopewell was centered in the Ohio Valley. In addition, the Hopewell phenomenon brought about the development of many regional phases which focused on the theme of mortuary ceremonialism. Marksville Period sites increase in frequency over the earlier Tchula Period sites and are larger (McGahey 1975:16). The noteworthy cultural traits of the Marksville Period are the introduction of new and distinctive pottery styles with a wide variety of designs, artifacts of exotic raw materials and the construction of domed, conical mounds exclusively for the burial of the dead (Newman 1977:16). During this period, a hunter-gather economy predominates, although there is some meager evidence suggesting that cultigens like corn and squash may have been introduced (Ibid.)

Baytown Period. The preceding Marksville Period signals the florescence of the Woodland tradition in Mississippi and is exemplified by elaboration of social organization, stylistic innovations in ceramic manufacture, and ceremonialism tied to the dead. The culture following in the wake of the Marksville decline seemed to have lost the social and religious basis epitomizing the cultural achievements of Marksville. The Baytown Period, nevertheless, saw the channeling of new emphases in settlement-subsistence routines over Marksville pan-regional, socio-political ceremonialism.

The Baytown Period is observed archaeologically by a very non-descript pottery type which is found on sites of diverse topographic settings throughout Mississippi. There is a marked increase in the number of sites evidencing Baytown materials. The shift in subsistence preferences includes cultivation to an appreciable extent. For the first time in prehistory, agriculture appears in the archaeological record as an important component to food procurement, whereas speculation about agriculture characterizes studies dealing with earlier periods. Even though agriculture assumes importance, the high point of the general Woodland tradition is a new technological innovation--the bow and arrow--which appears in the Baytown Period.

Although the Baytown Period is considered to represent "an interval of cultural recession," situated in time between two more colorful periods, it reflects the significant achievements of the Woodland Period overall (Brain 1971:59).

Mississippian Stage

Mississippian Period. The last segment of prehistory is characterized by the rise of extensive, centralized social networks and the emergence of a religious hierarchy intimately interwoven with settlement-subsistence activities. The Mississippian Period is probably the most understood period in Southeast prehistory due to the presence of sites marked by large mound complexes. The truncated, pyramidal mounds are the vestiges of a socio-religious system which was able to assemble human actions for social goals as noted in the massive labor requirements for mound construction. Previously, small mounds were built to serve as graves, but mounds were now built as sub-structures for houses, probably for religious buildings (Brain 1971:68). The social life of the Mississippian Period cultures was interwoven with religious ceremonialism, which was directed to maintaining the agricultural basis--the cultivation of corn, beans, and squash. Due to prerequisites for reliable and efficient large scale cultivation, Mississippian temple mound centers are found within the margins of large, mature, and agriculturally productive river valleys.

Other than the obvious mounds marking Mississippian sites, a distinctive pottery style is diagnostic for sites of this period, which may lack mounds. Such non-mound sites served as family based farmsteads or seasonal hunting-collecting stations; they were oriented to lesser temple centers, which in turn were tied to a major temple center. Interestingly, south Mississippi does not contain much evidence for Mississippian Period occupations. Particularly lacking are the ceremonial mound centers, although certainly seasonal campsites are scattered throughout the area.

The Mississippian cultural variations in Mississippi is Coles Creek, sometimes called the Coles Creek Period (McGahey 1975). Archaeologists differ on the temporal placement of Coles Creek as either late or terminal Woodland, or early Mississippian. Nevertheless, as it was localized in the Lower Mississippi Valley, it set the antecedents for the cultural system encompassing the Mississippian Period overall. Specifically, Coles Creek emerges from Baytown with a continuation of a similar ceramic tradition, but the construction of temple mounds is a new tradition. Seen as a local development, the set of elements comprising Coles Creek was later subsumed by the Mississippian pattern entirely, which is seen as an influence from the North (McGahey 1975:18). The influence for both Coles Creek and Mississippian lay in Mesoamerica and was felt initially in the south. Subsequently, these influences were developed more extensively in the north then filtered back south (Brain 1971:70). Regardless, the basis for Mississippian Period occupations in Mississippi begins with Coles Creek.

The Mississippian Period lifeway persisted until the intrusion of the French into the Mississippi Valley during the late 1600's, when the Natchez Indians were encountered; the associated mound-religious social organization of the Natchez served to document the Mississippian lifeways up to that time. Thus, much of the archaeologist's knowledge of the cultural activities occurring during the Mississippian Period stems from the French accounts of the Natchez. Colonial activities

peripheral to the Mississippi Valley preceded the arrival of the French, in the form of non-native diseases and most notably the ramifications of the DeSoto expedition of about 150 years earlier.

The chain of events contributing to the rapid decline of the Mississippian lifeways was accelerated by the persistence of the French in the new territory of North America, and shift in Indian lifeways from a slow and steady rise to florescence, and decline occurred with great rapidity. The changes which subsequently characterize the culture history lie in the realm of recorded history.

HISTORICAL OUTLINE

The present-day state of Mississippi is the result of several distinct episodes of occupation and ethnic diversity. The initial inhabitants were, of course, the native Americans: principally the Chickasaws in the north, the Choctaws in the central and south, and the Natchez in the southwest along the Mississippi River; these native groups played pivotal roles in the colonial machinations of European powers, namely the Spanish, French, and English. Native groups receiving lesser European attention included the Acolapissa, Bayougoula, Biloxi, Ofo, and Pascagoula on the Gulf, the Chakchiuma, Choula, Houma, Ibitoupa, Koroa, Taposa, Tioux, and Yazoo on the Yazoo River, and the Tunica in the northwestern part of the state (Gibson 1973:69). By the mid 1760's, only the Choctaws and Chickasaws remained (Guice 1974:28).

The first European claim to Mississippi soil stemmed from the Spanish expedition of Hernando DeSoto in 1540. Although Spain made no attempts to colonize the newly found lands, Mississippi remained under Spanish Dominion by right of discovery and exploration until 1699. France laid titular claim to Mississippi as early as 1682 when Robert Cavelier, Sieur de La Salle, claimed the entire Mississippi Valley, a huge expanse of land called Louisiana Territory, for France. It was not until 1698 when France took the initiative in establishing an effective claim to the Louisiana Territory by sponsoring an expedition to colonize the Mississippi Valley. Under the leadership of Pierre Le Moyne, Sieur d'Iberville, the expedition reached the present day Mississippi sound in 1699, where cordial relations were established with the Biloxi Indians (Kynerd 1974:29). After a brief expedition with the help of the local Indians to locate the Mississippi River, a settlement and fort was erected on the east side of Biloxi Back Bay, at present-day Ocean Springs. Called Fort Maurepas, the settlement found the soils too infertile and moved to the new Fort Louis in Mobile in 1702 (Kynerd 1974:35).

In 1716, fourteen years after the abandonment of Fort Maurepas, d'Iberville's brother, Jean Baptiste Le Moyne, Sieur de Bienville, secured from the Natchez Indians, through a peace treaty, a small plot of land to construct a fort overlooking the Mississippi River at present-day Natchez. Known as Fort Rosalie, the colony at Natchez was never able to attain peaceful relations with the Indians, who subsequently massacred the French settlers and burned the fort in 1729 (Howell 1973:129-130). Concurrently, the English, vying for control of the continental interior, from the Atlantic seaboard, stirred up the belligerence of the Chickasaws toward the French. The expanding French colony in the Natchez area was thus at war with both the Natchez and Chickasaws, and retaliatory measures for the Fort Rosalie massacre resulted in eliminating the Natchez threat after two years; Natchez survivors fled to the Chickasaws for refuge. As an ultimate consequence of the failure to secure peace with the Chickasaws, and the insecurity of their alliance with the Choctaws, the French launched a large-scale attack upon the Chickasaws in 1736. The effort called for one army led by Bienville from the south to rendezvous with another army led by D'Artaguet from the Illinois country, and converge on the heavily fortified village of Ackia, near present-day Tupelo. Bienville reached

the village first, attacked and was repulsed, while D'Artaguettes' forces were intercepted before the two bands could join.

The Battle of Ackia effectively diminished the colonial efforts of the French, coupled with overall neglect throughout the colony. An uneasy peace was reached with the Chickasaws in 1740, however the continual troublemaking on the part of the English made that peace all the more unreliable. In 1755 war erupted between France and England in what became the final contest over domination of North America (Howell 1973:132-133). Spain also entered the war in 1762. Eventually the fate of the Louisiana Territory was decided at the conference table in 1763. The outcome, known as the Peace of Paris, concluded the Seven Years War, or French and Indian War, by giving to England all of the Louisiana Territory east of the Mississippi River except New Orleans, which was awarded to Spain. According to Howell (1973:133):

The partition of Louisiana in 1763 ended sixty-four years of French rule. Louisiana had never measured up to the French government's expectations. Its governors were always in disrepute. Misadventure, dissention, and misrule had been its destiny. The French government did not grieve its loss.

The land acquired by the English was bounded on the north by 32° 28' latitude, the mouth of the Yazoo River, and extended east to the Chattahoochee River; it was called British West Florida. The focus of British control in Mississippi was in the Old Natchez District where old Fort Rosalie was rebuilt and renamed Fort Panmure. The Natchez settlements began to grow due to increased English migration, and since the Natchez District remained loyal to Great Britain many loyalists left the American colonies during the Revolutionary War for Natchez. The decade of the 1770's brought a measure of prosperity to the Natchez District. The ambitious English and Scottish pioneers soon pushed the frontier north from Natchez to the Yazoo River and south to Pinckneyville (Stone 1975:23). Their prosperity was tenuously tied to cultivating money crops whose success was established elsewhere: tobacco produced an inferior leaf in the Natchez region, and though indigo grew well, it was inferior to the bountiful crops grown in the West Indies (ibid.). Cotton was grown, however its heyday would await the development of gins toward the close of the eighteenth century.

British West Florida was short-lived. In 1779 the Spanish reestablished authority over the Natchez District by forcing the English to surrender at Baton Rouge. After the American Revolution hundreds of settlers poured into Spanish Natchez in search of generous land grants and a ready market through New Orleans for their produce (Holmes 1973:158-160). The Spanish attempted to make living attractive in the Natchez District to the largely English speaking and independent minded citizenry. They were required to sign loyalty oaths promising to support the Spanish in defense of their homes and to reveal knowledge of plots against the government. Although slavery existed at an early period in the District, the Spanish encouraged the institution by giving additional lands to settlers bringing slaves with them. Under the military governor Manuel Gayoso de Lemos a beautiful city was laid out

on the bluffs overlooking the Mississippi River, and as the town prospered the tradition of the antebellum Natchez mansion began (Holmes 1973:171).

In 1795 Spain lost control of the Natchez District through the Treaty of San Lorenzo which defined the boundaries between the new United States and the Spanish colonies of East and West Florida. The provisions of the treaty, which Spain did not fulfill until 1798, fixed the boundary at the 31st parallel, or the "Line of Demarcation," which was surveyed during that year on the American side by Andrew Ellicot, and on the Spanish side by William Dunbar. On April 7, 1798, the United States Congress passed an act to establish the Mississippi Territory. The act fixed the boundaries at the 31st parallel on the south, 32° 28' latitude on the north, the Mississippi River on the west and the Chattahoochie River on the east, with the capital at Natchez (Gonzales 1974:36). Later, in 1804 the northern boundary was extended to the present-day Tennessee line, and in 1812 the land below the 31st parallel was annexed from Spain. In fourteen years the Mississippi Territory encompassed the land now occupied by the states of Mississippi and Alabama, yet during this span of time there were only two pockets of settlement: the Natchez District and St. Stephens on the Tombigbee (Haynes 1973a:174).

Developments during the territorial era included the cotton gin and new strains of cotton which infused the local populace with the desire for more land. Although the territory became "American" by virtue of proclamation in 1798, the Native Americans held pervasive claim to the new territory. This situation was partially resolved by the first Choctaw cession of 1801 with the Treaty of Fort Adams. Over two and one half million acres of tribal lands embracing the Old Natchez District in southwest Mississippi was ceded to the United States. The land rush was spurred additionally by the Louisiana Purchase of 1803 in which all of France's holdings west of the Mississippi River including New Orleans came into American possession. The entire Mississippi River was now under American control. Also in 1803 the Choctaws again ceded almost one million acres of tribal lands in south Alabama and Mississippi in the Treaty of Hoe Buckintoopa.

Much of the political events of the territorial period revolved around establishing claims to land acquired through previous Spanish or British grants, as well as homestead claims, and those resulting from absentee speculators. With the relocation of the capital from Natchez six miles north to Washington in 1802, and the subsequent establishment of the Federal Land Office for lands west of the Pearl River there in 1803, land matters were foremost in the minds of the settlers (Haynes 1973a: 183).

Awaiting resolution of preemptive property rights under previous grants, the Land Office was slow to perform its appointed task, and squatters became a problem. Settlers were lured again to the area, principally from Georgia and the Carolinas, in 1805 after the Treaty of Mount Dexter. Over four million acres of "Piney Woods" country in south Mississippi were ceded. Many of the first settlers in the "Piney Woods" were transients en route to the fertile Natchez District, spending a

year or two in a place along the way in order to make a crop. However, many were frontiersmen, a heterogeneous group described in the memoirs of one writer:

... they were really refugees from a growing civilization, consequent upon a dense population and its necessities. They were not an agriculturalist in a proper sense of the term; true, they cultivated in some degree the soil, but it was not the prime pursuit of these people, nor was the location sought for this purpose. They desired an open poor pine country, which forbade a numerous population ... The country gave character to the people; both were wild and poor. (Sparks 1872).

Evidently, the Piney Woods was preferred by some to the Natchez District where they were looked upon as plain unlettered farmers. By making their homes in the Piney Woods they were less subjected to the economic, social, and political influences of Natchez (Adkin 1972:35).

Nevertheless, not all who chose to settle in the Piney Woods over Natchez necessarily preferred a pastoral life to that of a slave owning planter. The conclusion of both the Creek Wars and the War of 1812 by forces under the command of Andrew Jackson in 1815 spawned yet another influx of settlers; however, well over half of the state remained Indian lands. The following year the Chickasaws ceded an area in the northeastern part of the state situated east of the Tombigbee River in the Treaty of Fort St. Stephens. This new cession subsequently became Monroe County, and known for its excellent cotton land, settlers rushed to stake a claim. Many of these settlers were from the Piney Woods.

On March 1, 1817 President Madison signed the enabling act which provided for admission of the western section of the territory as the state of Mississippi and for reorganization of the eastern part as the Alabama Territory (Haynes 1973b:246). In that same year the first Mississippi Constitution was drafted at Washington, and the state capital was reestablished at Natchez. In early December the U. S. Congress approved the state's constitution, and on and on December 10 President Monroe signed a proclamation admitting Mississippi as the twentieth state (Haynes 1973b: 250).

Perhaps the major issue in Mississippi during the decade and one half following statehood was that of Indian removal (Fortune 1973:259). Although the Indian threat was basically eliminated after the Creek Wars, it was conceded by both Indians and whites that an ultimate confrontation would develop through encroachments into Indian territory. Faced with a clear-cut choice of either removing to new lands west of the Mississippi River or be subject to Mississippi state law, the outcome became obvious. A series of Indian cessions followed statehood: the Treaty of Doak's Stand in 1820 in which the Choctaws relinquished over five million acres in west Mississippi was followed ten years afterward by the Treaty of Dancing Rabbit Creek in which the remaining ten and one half million acres of Choctaw tribal lands were ceded to the United States. Finally, the Chickasaws surrendered their lands in north Mississippi in 1832 in the Treaty of Pontotoc. Free of Indian claims, a

land grab of enormous proportions ensued, and farmers and planters from the older cotton states converged on northern Mississippi in droves, bringing thousands of black slaves with them. Well over half the state was settled in a matter of a few months and the state's population doubled between 1832 and 1837 (Stone 1973:24). Until the Civil War, cotton, slavery, and the plantation system were the dominant elements in the state's agricultural economy (Scarborough 1973:310).

Although the plantation system is often viewed as the pervasive antebellum lifestyle in the state, by far the largest agricultural element was the small family farm which could be found in every county and geographic region of the state. Most of these yeoman farmers owned their own land and many were slaveholders, however, their pursuits were directed to subsistence farming which in turn necessitated diversification over reliance on a single crop -- the practice of the planter. Accordingly, the yeoman farmers raised corn, sweet potatoes, vegetables, fruits, poultry, livestock, and often a small patch of cotton (Scarborough 1973:350). Nevertheless, slave grown cotton was the economic cornerstone of the state. Coupled with the massive investment in slaves and profits reaped with their labor, Mississippians were reluctant to diversify the agricultural production, develop industry, or improve transportation beyond that needed to get the cotton to market. These static developments together with abolitionist rumblings from the north set the stage for Mississippi, taking its cue from South Carolina, to adopt the Ordinance of Secession on January 9, 1861 (Bearss 1973:447).

Few Mississippians anticipated the devastating war which followed. Although the first hostile shot was fired on January 11, 1861, at the Union steamer *O. A. Tyler* at Vicksburg (Bearss 1973:447), it was not until after the Battle of Shiloh in the spring of 1862 that Mississippi became the focal point of the war in the west (Sansing 1974:41). The Union objective was complete control of the Mississippi River, which was thwarted frequently by the Confederate stronghold at Vicksburg. Mississippi saw a considerable amount of skirmishes and battles with the majority in the northern part of the state and in a wide corridor between Jackson and Vicksburg. The Battle of Vicksburg, however, proved to be the most significant battle of the war in Mississippi, which was concluded on July 4, 1863 with the city then occupied by Union troops (Sansing 1974:41). For a considerable period of time after the surrender of Vicksburg, the highly mobile forces of General Nathan B. Forrest prevented the state from being completely occupied by Federal troops. General William T. Sherman's infamous March to the Sea in the spring of 1864 crippled the "waist" of Mississippi, and a year later time was clearly running out for the Confederacy. Union troops forced the surrender of Richmond on April 3, 1864, and on April 9th General Robert E. Lee surrendered his Army of Northern Virginia to General Grant at Appomattox Court House. At Citronelle, Alabama on May 4th, General Richard Taylor surrendered the Confederate forces in Alabama, Mississippi, and East Louisiana, and finally, after the capture of President Jefferson Davis on May 10th, the last Confederate holdouts in the Trans Mississippi surrendered (Bearss 1973:491). The war was over, and of the 78,000 Mississippians mustered into service, 50,000 survived (Sansing 1974:41).

Those who returned found their property destroyed and the state's economy in a shambles. Property values were at their lowest since the formation of the state and money virtually disappeared from circulation (Harris 1973:552). The devastation resulting from the numerous battles, together with the emancipation of several hundred thousand slaves, brought a state of near anarchy with the consequence of the state falling under military rule for five years (Sansing 1974:42). Mississippians were literally back where they had been when their grandfathers first settled the wilderness (Betterworth 1973:622). The "Old South" was no longer; it was time for Reconstruction.

Reconstruction was a political and economic nightmare. The prewar prosperity from cotton appeared to provide a starting point, however, the labor supply was no longer as steady as before, and unfortunately, a worldwide cotton depression was in force. Additionally unfortunate was an out-migration of that labor force. By 1875 many farmers had lost title to their land and were forced to become sharecroppers, which bound them to the merchants for credit (Stone 1975:32). The sharecropper system dominated the state's prevailing agricultural economy well into the middle of the twentieth century.

Mississippi was readmitted to the Union on February 23, 1870. For the remainder of the nineteenth century the Delta was the only area to progress economically as a result of Federal efforts instituting a levee system (Stone 1975:33). The levee system opened up hundreds of acres of superb cotton land, and as a result, the area experienced a population influx (ibid.). The levees and clearing of the Delta also brought the lumber industry into the state, which subsequently moved south to the great virgin forests in the Piney Woods. The state's population on the whole, nevertheless, lived in miserable poverty which was made all the more hopeless by a feeble educational system, and endemic dietary related diseases. Stone (1975:34) succinctly characterizes post-Reconstruction time: "To find conditions approximating those in Mississippi in the late nineteenth century, one would have had to look at so-called underdeveloped nations elsewhere in the world."

An ironic twist of fate characterizes the social, economic, and political developments of the state at the twilight of the nineteenth century, for war was the force behind the impoverishment at hand, yet wars would bring the state out of the doldrums. Beginning with the Spanish-American War in 1898, a strong demand for Mississippi cotton and lumber ensued through World War I up until the Great Depression when the international cotton market collapsed. With the heyday of the lumber boom over, together with the state's economy still overly dependent on a single staple crop, all classes suffered through the Depression.

The New Deal programs of President Franklin Roosevelt began to bring some benefit to impoverished Mississippi in 1933 through the Cotton Production Section, the Rural Electrification Administration, and the Agricultural Adjustment Act (Stone 1975:36; Skates 1974:48). The most lasting impact of the Depression, however, was to point out indisputably the overall debilitating effects of one-crop agriculture based on sharecropping and the necessity of "balancing agriculture with industry" (Skates 1974:48).

World War II literally brought Mississippi into the modern age. The Allied demand for cotton brought enormous prosperity to Mississippi planters who were able to liquidate their debts and replace workers away in the military with mechanized equipment, thus signaling the decline of the demeaning sharecropping system (Stone 1975:36-37). Mississippians returned from war with a hitherto unknown knowledge of the world apart from the farm, and many came home to discover they were displaced by machinery. The result was inevitable. Many of the displaced farm workers left the state, mainly to northern urban industrial cities, while others moved into towns. Agricultural diversification finally became a reality and light industry moved into the state to support the new wave of "agribusiness." The lumber industry made a dramatic come back from the extensive exploitative lumbering of a half-century before. The forests are scientifically managed to insure a continuous supply of timber for a variety of wood-related industries which form a major segment of the state's economy. The energy business has additionally assumed a prominent position in the state's economy with large oil and gas fields located mainly in the southern half of the state. Other minerals, chiefly bentonite, clays, and gravel help round out the industrial picture and the prospect for other mineral sources looks promising.

The dawn of the nuclear age has brought Mississippi to realize a dramatic and irreversible break with her agrarian past. It was not without great emotion, not to mention some violence, that the last of Mississippi's ties with its past were broken. As stated by John Skates (1975:49):

One cannot conclude that the past is altogether dead in Mississippi. Yet one by one in the last three decades all of the basic themes of the previous hundred years have been altered -- King Cotton and agrarianism, sharecropping and segregation, a feeling of alienation and insulation from the world outside. In their places by 1970 have come modern transportation and communication, industrialization, recession of the race question, agricultural diversification -- institutions not unlike those in other states.

FOREST MANAGEMENT PRACTICES

The Forest Service, as stewards of nearly 200 million acres of public lands nation-wide, takes pride in its commitment to manage as effectively as possible the various resources which comprise the total natural as well as human environment. Such resources include recreation, timber, water, fish and wildlife, and range, which are the more obvious resources, as well as less obvious resources such as esthetics, air (impacts from burning), social concerns, and cultural. National Forests are working forests, in contrast to the National Parks which are preserves. As such, there is competition among and between the different classes of resources, and forest management must consider the effects attention given to one resource might have on the other. The following discussion focuses on the various impacts forest management poses to cultural resources. At the outset, it should be stated that little in the way of systematic attempts have been directed to assessing the degree to which forest management practices impact cultural resources. Some are fairly obvious, others a bit more subtle, while others will definitely require detailed analysis.

TIMBER PRACTICES

The most ubiquitous resource managed by the Forest Service is timber. The process of inventorying the timber resource, prescribing the type of harvest, intermediate treatments to improve stand vigor, as well as scheduling the preparation of an area for a timber sale and establishing new forest growth after harvest is a lengthy procedure. Forest management activities are labor intensive, involving unskilled to skilled hand-tool techniques, to highly skilled machine operations, each with varying degrees of potential impacts to cultural resources. Timber management falls into two general classes: (1) Timber itself as a marketable commodity, and (2) Silviculture, or the art of cultivating a forest for renewal.

TIMBER

Timber Marking: Prior to timber harvesting, and after having the quality, quantity and boundaries of a sale area determined by a forester, each tree to be cut is marked and tallied by a marking crew. This procedure creates a temporary influx of people in an area of otherwise low accessibility, and therefore may have a minor effect on cultural resources through inadvertent discovery (Wynn 1982:62).

Commercial Thinning: Stands of timber require periodic thinning of excess trees in order to reduce competition and promote vigor in the remaining trees so that the highest quality stock can develop. Often, trees thinned from a stand are marketable, and are used for a variety of wood products such as pulp or poles. These products are harvested in the same manner as the more desirable wood products, sawtimber and pole timber, although potential impacts to cultural resources would not be as severe as other forms of timber cuts due to the lesser intensity of harvest.

Logging Techniques: In the southern coastal plain logging techniques are fairly standard. Once a sale area is marked, log landings, skid trails, and temporary access roads are laid-out in a manner which minimizes adverse effects to the soil, water, timber, and wildlife resources. No matter what timber product is harvested, the technique involves felling the tree with a chain saw, lopping and trimming the top, attaching the tree by cable to an articulated rubber tire skidder, and dragging the tree, normally several trees at a time, to a centralized loading deck. At the loading deck, knuckleboom loaders lift the tree on a waiting truck, and the trucks, of course, then deliver the logs to the mill. This system varies only slightly depending on factors such as esthetics or highly erodable soils where rubber tire farm tractors are used to skid logs instead of articulated skidders. Harvesting pulpwood may differ in that the logs are bucked where felled and loaded directly onto bobtailed trucks, which meander throughout the harvest area obtaining a load, rather than being loaded from a stationary position as is the case with large pole or sawlogs.

Ground impacts from timber harvest are minimal providing operators follow the specifications for dry weather logging, use established skid trails to minimize soil compaction and rutting, and rehabilitate temporary haul roads to check subsequent erosion. More severe ground impacts result from permanent road construction and placement of log landings, however these activities are normally preceded with a cultural resource survey.

Regeneration Cutting: All National Forest timber is considered a renewable resource, therefore a variety of factors determine how to best ensure a continuous supply. Three methods are used in the National Forests in Mississippi which vary in intensity of logging, depending on the quality and volume of a given stand: clearcuts, seedtree cuts, and shelterwood cuts. Each method is limited in size to no more than 80 acres for pine, and 40 acres for hardwood, unless there are extenuating circumstances such as disease, fire, or hurricane damage over an extensive area. In addition, logging techniques do not differ from those presented above.

Clearcutting involves the removal of all marketable timber in a stand. It is done when the stand is too sparse, reaches maturity, genetically inferior, or where another species more properly fits the natural conditions of the growing site.

Seedtree cuttings are accomplished in stands where the desired species best fits the growing site, and where the quality and spacing of the mature stock will allow an adequate seed source for natural regeneration. Normally, depending on stand size and density, 6-10 trees are left per acre to reestablish the stand. After seedlings are established in two to three years, the seedtrees themselves are harvested.

Shelterwood cuttings are a type of seedtree cut, but differ in that a larger number of seedtrees are left per acre initially, and removal of the mature seedtrees occurs over more than one episode of harvesting, generally three.

SILVICULTURE

Precommercial Thinning: This technique rids a young stand of excessive seedlings in order to improve the growth and vigor of the remaining stand. Due to the youthful nature of the stand, it affords no marketable commodity. Thinning is accomplished both mechanically and manually. Mechanical thinning uses a steel rotary drum chopper which crushes stems in place leaving an organic mat. Other mechanical tools include the Hydro-Ax and Kershaw Trailblazer which act similar to a bush-hog. Manual thinning is accomplished with herbicide injectors, brush hooks, and chainsaws. Precommercial thinning is not considered a detrimental impact to cultural resources.

Site Preparation: This activity is any action taken to prepare a timber harvest site for natural or artificial regeneration. Most sites require preparation to insure adequate seed germination and growth. Site preparation reduces competition for soil moisture and nutrients and promotes the health and vigor of the new stand (Larson and Hallman 1980:5). In Mississippi, three methods are used: mechanical and hand site preparation, and prescribed burning.

Mechanical Preparation: This removes slash, scarifies the surface, exposes mineral soil, and removes competition. It also allows for more efficient planting, promotes proper seed germination as well as growth. In Mississippi, mechanical treatments include shearing, raking, chopping, discing and bedding, and often two or more methods are used in combination.

Shearing is using a modified bulldozer blade to cut tree stems off at ground level, which is normally followed by a rake mounted on a bulldozer which pushes the sheared slash into windrows.

Chopping is pulling a single drum or tandem drum chopper across the ground, which crushes and chops slash and organic material into the soil.

Discing is identical to that technique used in agriculture except the discs used in forestry are built to withstand more rugged use, and the prime mover is usually a crawler tractor rather than a farm tractor.

Bedding is a technique using a harrow pulled by a crawler tractor to form a raised bed for planting seedlings. It is used most often to improve drainage on flat, low-lying areas.

Of all classes of forest management activities, mechanical site preparation is considered to impact cultural resources the most, particularly on soils with a high moisture content where compaction, rutting, and puddling may occur. In view of the degree of impact, it is the policy of the National Forests in Mississippi to conduct cultural resource surveys on all areas proposed for mechanical site preparation. Each site preparation method does not affect cultural resources in the same manner, however. Table 1 shows the effect of site preparation methods on cultural resources, which is taken from Fox (1977: Table 1).

Hand Preparation is a technique where undesirable vegetation is individually treated with herbicide. As such heavy ground disturbing equipment is not used, therefore cultural resources are not impacted.

Prescribed Burning is a common method of site preparation. It reduces log slash and competing vegetation, and returns nutrients to the soil. Burning is also used after mechanical or hand site preparation methods. Since burning can expose mineral soil, erosion can occur which is a potential impact to cultural resources. Before fires are ignited, a line is plowed around the perimeter of the area to be burned which can disturb cultural resources. On the other hand, the width of a fire line is narrow enough to not excessively affect cultural sites and, in fact, if used systematically, can be a valuable locational tool.

Little is known of the effects of fire on cultural resources. During fiscal year 1981, approximately 1,000 burned-over acres were surveyed on the Homochitto National Forest, and it was found to be a potentially valuable manner for locating sites, due to the absence of forest litter. Though potential damage to those cultural resources were not ascertained, it was noted that artifacts occurring on the surface were mildly altered by the heat.

LAND EXCHANGE PROGRAM

Approximately 2,000 acres of land are exchanged with private landowners each year in order to consolidate National Forest ownership patterns. Under Executive Order 11593, federal lands entering private ownership are surveyed for cultural resources. This insures no potentially eligible National Register properties are released from federal ownership without proper consideration. Such consideration may include a program of data recovery, the selection of alternate lands thereby keeping the property in federal ownership, or, as occurred during one prior land exchange on the Delta National Forest, provisions to deed the property to the State of Mississippi. As of this writing, approximately 17,000 acres of federal land proposed for exchange have been surveyed.

FOREST ENGINEERING PROGRAM

Forest Engineers are responsible for the design, construction, and maintenance of a variety of facilities relating to National Forest administration and management. The bulk of the projects consists of road construction in conjunction with timber sales and fire management. Many existing wood trails are refurbished to accommodate logging traffic, which are closed and revegetated after the timber sale. Other projects include campgrounds, parking lots, office facilities, and so forth. Since nearly all engineering projects involve extensive ground disturbance, they are preceded by a cultural resource survey.

SPECIAL USES

An average of 650 special use permits are administered annually on the Forest. They include power and telephone rights-of-way, state aid road

easements, gravel pits, oil and gas activities, pastures and garden spots -- virtually any kind of non-federal use of National Forest requires a permit, and cultural resource surveys are conducted for many of the applications. The greatest number of surveys conducted for a special use application are connected with oil and gas operations, which are done by out-service professionals under personal services contracts to the applicant. Due to the incompleteness of the Forest cultural resource inventory, as well as the provisions of Executive Order 11593 in particular, all oil and gas wells must be preceded by a cultural resource survey. Ideally, all reports generated by special use applications should be reviewed for technical accuracy by the Forest Archaeologist; however, to date the review process has been somewhat spotty. This situation can be remedied by including a review provision in the special use stipulations.

In some cases, special use permits are needed for cultural resource activities conducted by out-service professionals on the Forest. Generally, it is Forest Service policy to not allow ground disturbing archaeological activities except by qualified institutions (such as a university) engaged only in academic research; such activities require a permit. Out-service professionals conducting surveys pursuant to a special use application do not need a permit providing the application falls under the concurrent jurisdiction of another federal agency. Examples of jurisdictional overlap include the Geological Survey, Federal Energy Regulatory Commission, and Department of Transportation. Most special use applications where a cultural resource survey would be required involve another federal agency.

RECREATION

Following the passage of the Multiple Use Sustained Yield Act of 1960, the Forest Service has increasingly involved itself with the management and creation of recreational facilities. This includes the interpretation of natural as well as cultural values inherent in the Forest (Wynn 1982:67). Clearly, interpreting historical and archaeological resources enhance recreational experiences (ibid). Since the cultural resource program is part of the recreation program, the integration of cultural with recreational values are assured. To date, interpretive materials are posted at Turkey Fork Campground on the Chickasawhay District, the Black Creek Trail on the Black Creek District, and on the Tuxachanie Trail on the Biloxi District.

Not only do recreational activities provide opportunities for the cultural resource program, they may also have an impact on cultural resources, through both the pursuit of recreational experiences as well as the development of facilities (which is treated under Engineering). In Mississippi, dispersed recreation predominates over developed sites. Activities like hunting, fishing, hiking, camping, leisure driving, trail bike riding, birdwatching, and so forth, bring people throughout the general forest environment. Here, potential impacts to cultural resources are ever-present, through incidental damage from off-road vehicles to outright vandalism from relic hunters. Indeed, to many people searching old homesteads with metal detectors and looking for Indian relics are bona fide recreational pursuits. Although there

always will be people who fail to see the logic behind preserving cultural resource values, increasing public awareness through interpretational programs will help alleviate damage to the resource.

TABLE 1
EFFECT OF SITE PREPARATION METHODS
ON CULTURAL RESOURCES

Site Prep Method	Ufect	Site Prep Method	"Effect"
Shear	-1	Double Chop	-2
Shear & Rake	-3	Chop & Disk	-3
Shear & Burn	-2	Chop & Burn	-1
Shear, Rake & Burn	-3	Prescribe Burn	+2
Single Chop	-1	Hand Site Prep	0

Range of Values: -3 = Least Desirable
0 = No Impact
+3 = Most Desirable

Source: Fox, Walter (1977) "SitePreparation -Impact ofHeavy Equipment." In Proceedings, Site Preparation Workshop. Edited by W. Balmer and G. Brooks. Atlanta: USDA Forest Service.

KNOWN CULTURAL RESOURCES ON THE FOREST

Bienville National Forest

Bienville Ranger District

No prehistoric archaeological sites have been found on this District. Although nearly 4% of the District acreage has been surveyed, it cannot be assumed that the lack of sites is due to lack of survey coverage. Since prehistoric sites are known to exist on surrounding private lands, as well as on the adjoining Ranger District to the south, environmental factors offer the best potential for accounting for the lack of prehistoric resources.

Cultural resources of the historic era are known for the District. The most noteworthy site is the location of the District Work Center, which was the center of operations for the old Bienville Lumber Company. Since the timber around the mill was accessible at any time, it was left uncut, and today represents the largest stand of residual timber to be found in the State. Nestled in the old timber is the work center complex which, built during the CCC era, is considered representative of the architectural style of the times. In addition, the work center is reported to have been the location of the manufacture of an early design of fire plow, which was used throughout the south during the early efforts at fire control.

Strong River Ranger District

Several prehistoric occupational locations have been recorded for this District. Only three, however, were extensive enough to warrant state site designations: 22-Sc-502, The Robinson Creek Mound; 22-Sm-509, Strong River No. 1; and 22-Sm-510, Strong River No.2.

The Robinson Creek Mound was assessed, following notification of its existence by the District Ranger, during the summer of 1978. Its location was revealed during the survey for FS Road 506-F, with the mound situated about 50 feet south of the turnaround. The finished road was eventually considerably shorter, with the turnaround a greater distance from the mound. The site may be characterized as an isolated conical mound measuring about 45 feet (13.7 M) in diameter by 6 feet (1.5 M) in height. The mound is situated on an old terrace of the Strong River, yet on a back swamp which was developed by Robinson Creek. A small auger hole was dug at the base of the mound to examine the stratigraphy, and a series of auger holes were placed in the ground away from the mound base. The mound matrix differed little from the surrounding soil and no culturally formed strata were observed. In addition, no artifacts were found anywhere. It is possible that the mound is natural; however, one investigator, the late Robert Neitzel, considers many of these apparently natural occurrences to be aboriginal in origin, in particular Late Woodland or Historic Choctaw (Personal Communication 1978).

Both the Strong River No. 1 and No. 2 sites are similar enough to warrant treatment together. Both sites were discovered while surveying proposed mechanical site preparation areas during the summer of 1981. They occupy long finger ridges flanked by small perennial streams and are approximately 164 square feet (50 M) in surface area. Recovered materials include projectile points and lithics typical of the Archaic Period as well as ceramics reflecting Early Woodland and Historic Choctaw occupations. Erosion has deflated the artifact bearing zone to no more than 10 centimeters, and the chances for encountering intact features are not promising. Therefore, no further investigations were considered warranted.

On this District, with a rolling, often hilly, terrain virtually every ridgetop evidences prehistoric use. Other than the two sites noted above, artifactual evidence rarely is diagnostic. Site integrity has suffered through erosion and occasional cultivation.

There are two areas of historical importance which pose opportunities for cultural resource interpretation: Shongelo and Marathon Recreation Areas which occupy historical sites. Shongelo was once a small community which centered on a grist mill. The exact date of initial settlement is not known due to the destruction of Smith County land records in a fire in 1892. The community consisted of scattered homesteads, churches, a store, and school. It became extinct during the 1920's (Horn 1976:98-109).

Marathon was the location for a logging community for the Marathon Lumber Company of Laurel, which operated during the 1920's. An average of 150 men worked the lumber, which along with their families and supporting facilities made for a fair-sized community (Murphy 1964). The old lumber industry is locally well-remembered, and one of the more visible cultural resources on the Forest.

Elsewhere on the District are several historical-era resources made known by local informants but not ground checked. These include:

Old Mill Site	T3N, R6E, Section 24 (SEiNWj)
Brick Kiln Site	T3N, R7E, Section 8 (SWiNWi)
Church Site	T3N, R7E, Section 14 (SWiNWi)
Brick Kiln Site	T3N, R7E, Section 33 (SEiSWi)
Old Mill Site	T5N, R7E, Section 35 (SEi)
Brick Kiln Site	T4N, R9E, Section 9 (SWiSEi)

Delta National Forest

The Mississippi Delta contains some of the most monumental prehistorical sites in eastern North America, and some rather impressive sites are situated in the vicinity of this Forest, notably the Lake George Site and Spanish Fort. Much of this Forest, however, occupies a terrain formed in fine textured slack-water sediments deposited by the Mississippi River. As a result the soils are highly susceptible to flooding and are highly plastic, sticky clays which are not considered conducive for prehistoric occupation. Three prehistoric sites have been found on this Forest, located on old terrace features with loam soils:

22-Sh-535, the Clark Lake Site; 22-Sh-546 and 22-Sh-547, the Dowling Bayou complex. The Clark Lake site was noted by a forest worker and assessed during the summer of 1977. The site is situated on an old levee and oxbow of the Sunflower River. Investigations were limited to a surface examination in which several ceramic sherds were recovered that are typical of Baytown and Mississippian occupations. Much of the site is covered with hardwood forest and is partially occupied by a primitive camping site. The site will require more detailed investigations if major surface disturbance activities are proposed.

The Dowling Bayou complex consists of two sites on opposite sides of a creek of that name, located in the northwest corner of the District. They were discovered by the University of Mississippi for the Vicksburg District, Corps of Engineers. Noteworthy is 22-Sh-546 which consists of a mound measuring 159 feet (48.4 M) in diameter by 8 feet (2.4 M) high, along with a buried intact midden. Similarly, 22-Sh-547 is a smaller site, without a mound, but with an intact midden. Both sites are considered eligible for the National Register, and plans are to evaluate and nominate the sites during fiscal year 1983. A more extensive discussion of the site is contained in the survey report by H. K. Curry (1981).

DeSoto National Forest

Biloxi Ranger District

Two prehistoric sites are recorded for this District, although previous surveys for land exchanges have recorded sites on lands which are no longer National Forest (cf. Howell 1978). In addition, there have been several isolated finds and non-diagnostic artifact scatters found on the District which did not warrant site designation.

The Boggy Branch Site, 22-St-511, was observed on a small clearcut area by a District Forester and reported to the Forest Archaeologist in the spring of 1981. The site is situated on a gentle upland slope adjacent to Boggy Branch, a low order, spring-fed branch. It consists of an artifact scatter over nearly two acres, including the occurrence of several hearths which are mostly below the surface. Even though the site area had been sheared and raked during 1980, the hearths were undisturbed by that activity. Artifacts recovered from the surface included ceramic sherds and lithics indicative of both Early and Late Woodland occupations. This site should receive more intensive investigations in order to better understand the nature of prehistoric sites in the pine uplands, since it is undoubtedly typical of the kind of sites found in the area.

The other recorded site, 22-St-513, was recorded during the fall of 1981 by David Heisler who was surveying the right-of-way for a gas pipeline, pursuant to a special use application by Florida Gas Transmission Company. The site is characterized as a small lithic scatter situated on a small rise on an upland slope overlooking Bluff Creek. The site was deemed unimportant (Heisler 1981).

An unusual historical site exists on this District: the POW Camp, which is a trailhead for the Tuxachanie hiking trail, and it is used for primitive camping. The following are excerpts from a series of memos by Mr. J. Lee Bardwell who was a forester on the District in 1968.

Originally the camp was under special use to the Navy Department as a machine gun and rifle range. It was called the Gulfport Advance Base. In May of 1946 the base was turned back to the Forest Service. In October of 1946 a special use permit was issued to International Paper Co. for use of the Camp. International Paper Co. used the camp as a P.O.W. base and used the prisoners to cut pulpwood on their land and other timber sales.

Labor was very scarce during the 2nd. World War and I.P. Co. was having difficulty getting pulpwood cut. Through the State Employment Agency at Gulfport, MS, they made arrangements to have German Prisoners of War cut pulpwood. In about October of 1946 they took out a special use permit on the Naval Base on the Biloxi Ranger District.

The U. S. Army brought in between 200 and 250 German P.O.W.'s and based them at the Old Naval Base. The care and supervision of the prisoners was carried out by the U. S. Army. International Paper Co. stationed one man on the camp, Mr. J. S. Williams. He was in charge of all equipment. Each prisoner was given a quota of one cord of pulpwood a day. In return International Paper Co. paid approximately \$3.00 per cord for the cutting. All cutting was on I.P.'s land.

Black Creek Ranger District

This District has received the most intensive cultural resource survey efforts of all Districts; yet, since it has the greatest acreage, coverage is proportionately less than other Districts. Accordingly, nearly 100 prehistoric cultural resource sites have been identified, ranging from isolated finds to sites exhibiting a high artifact density. Unfortunately, nearly all sites consist of merely artifact deposits restricted to the A horizon, with no subsurface deposits encountered except for hearth-like features as noted at the Boggy Branch Site, discussed above. Since a discussion of each site known on the District would be overly repetitive, the following will focus on one site which was investigated and considered to be representative of prehistoric sites on the District.

Site 22-Fo-508 was encountered while surveying lands proposed for exchange with the Crown-Zellerbach Corporation during the summer of 1978. The site was noted by the presence of a few flakes and ceramics eroding from a fire line and along the edge of high ground adjacent to the steep sideslope of a tributary drainage. Although a recent prescribed burn permitted good surface observational conditions, most of the artifacts were recovered from two main areas of concentration and from the fire line. Limited testing lasting one day was conducted at the site with the help of two YACC crewpersons.

The testing procedure involved shovel tests at five meter intervals along transect lines established with a transit. The shovel test holes measured 20 cm² by 40 cm deep, with soil screened through one-fourth inch (.64 cm) mesh hardware cloth.

The area selected for testing, at an elevation of 290 MSL, borders the edge of a ridge that slopes sharply to a small unnamed drainageway that flows northwesterly for approximately one-half mile, emptying into Potato Creek. The topographical setting of the site is referred to locally as a "branch-head." The initial cultural resource reconnaissance noted a sparse, scattered deposit of sherd artifacts on the southwestern edge of the branch-head. Testing was thus confined to a small area situated between the southern meridian of the exchange tract and the upper contour of the branch-head which trended generally northeast.

Artifacts, mostly chert flakes, were apparently confined from the surface to a depth of 20 centimeters (about 8 inches) as revealed by the test holes and the disturbance caused by a fire lane. The soils of the area are classed as McLaurin loamy sand. Because the soils are active in terms of the natural soil formation, the artifacts appear to have undergone vertical displacement, and the artifact density was generally low which made the excavation of large areas, such as two meters square, not advantageous. Only flakes from a local cobble source were found in the test holes. One projectile point, Gary variety, and five Tchefuncte ceramic sherds were found on the surface.

The results of the limited testing does not warrant the inclusion of 22-Fo-508 in the National Register of Historic Places.

Historical resources on the District are varied although, to date, attention to them has not been emphasized to the extent of prehistoric resources. Of importance locally is the old Federal Road which connected Mobile and New Orleans during the first quarter of the 1800's. Traces of the road, highlighted by its use by Andrew Jackson's army en route to the Battle of New Orleans in 1814, remain on the District. Appendix I discusses the road in greater detail.

The District lies in an area once extensively exploited for naval stores, and one which featured prominently in the early lumber industry in the state. Remains from these ventures are scattered across the District and represent a class of historic resources for future considerations.

Chickasawhay Ranger District

The prehistoric cultural resources on this District, like the Black Creek, thus far number about 50 known sites. In addition, the character of the sites are essentially identical. Therefore, the discussion of 22-Fo-508, above, is also appropriate for this District.

One site on the District, the Turkey Fork Site (22-Gn-505), was the focus of some of the earliest cultural resource investigations on the Forest which involved a survey during the summer of 1977 of a proposed

campground at Turkey Fork Lake, followed the following summer by a one week testing program with a YACC crew. The site was found to possess an Early Archaic Dalton component which was significant in that it represents the known southernmost occurrence for Dalton. Also, a Late Woodland component was present. Unfortunately, there were no intact deposits found, and site integrity was non-existent. The site, nevertheless, served a valuable interpretive function for visitors to the now existing developed campground.

Holly Springs National Forest

Grenada Unit

This small unit has received virtually no cultural resource investigations, except for a couple of land exchange projects which located no cultural resources. Very little management activities occur on the Unit which would necessitate surveys. Nevertheless, the relatively small size of the unit of around 20,000 acres would lend itself to an effective sample survey.

Holly Springs Ranger District

Surveys in the rugged, heavily eroded topography occupied by National Forest lands has produced only one prehistoric occupational area which warranted site designation, although scattered isolated finds occur. In addition, site 22-Mr-503, the Chewalla Lake Mound, has long been known of and was recorded during the mid 1960's by Robert Neitzel.

The former mentioned site, 22-Be-514, was found during a survey of an area proposed for mechanical site preparation in the spring of 1982. It was situated at the end of a long finger ridge, and consisted of a light surface scatter of lithic flakes and ceramics over an area of 100 square feet (30.5 M). There were no subsurface deposits as revealed by shovel tests.

Little is known of the Chewalla Lake Mound since prior to governmental acquisition the area was extensively farmed, and construction of the lake increased destruction of the mound and associated site. In fact, it is not even possible to find surface occurrences of artifacts on the site.

Like other Districts, little attention has yet been given to the historical sequence in the area. As noted by Wynn (1978:38), a thorough search of historical records would produce clues to important economic, social, and ideological activities of the inhabitants.

Homochitto National Forest

Bude Ranger District

Four prehistoric sites are recorded on the District, although, as is the case Forest-wide, isolated finds and non-descript artifact scatters are encountered frequently. Sites typically occur on ridges which are usually eroded.

Several years ago, after the issuance of Executive Order 11593 when Districts were asked to inventory properties potentially eligible for the National Register, this District submitted the nomination of a historical site, the location of the original homestead of Dr. Jose Rodriquez. Although the intent of the nomination was admirable, unfortunately the Register does not accept locations; there must be remaining physical evidence. Excerpts from the nomination form are given below since the site of the homestead is still of significance locally. The form was written by Mr. Ralph Posey, retired District land surveyor.

When Dr. Rodriquez moved to the area this was virgin timber land. Parts of the homestead were cleared and a home built on the property at the location.

All cultivation of the area was abandoned by descendants of Dr. Rodriquez approximately 60-70 years ago. The area is now in second growth pine timber. The rows in the original garden site are clearly evident. An all weather county maintained gravel road passes the site. This is a good location for a historical marker. The gravel road intersects a blacktop county road 1 mile west of the site. The blacktop road intersects U.S. Highway 84 at McCall Creek which is 12 miles east of Meadville, the county seat of Franklin County and 17 miles west of Brookhaven, the county seat of Lincoln County.

Dr. Rodriquez was born of Spanish parentage in Tepian, Cuba on May 27, 1817. He had the equivalent of a junior college education in Cuba. He had an ambition to achieve a better way of life than could be found in Latin America, which was continually in a state of revolution and uprisings. He stowed away on a sugar boat bound for New Orleans. (Folklore has it that he had to flee for his life because of political activities and that he was placed in a sugar barrel and carried on the boat). He worked his way up the Mississippi River to Natchez where a friendly priest, a former classmate, taught him the English language.

His ambition was to be a doctor. He taught himself medicine by reading and studying medical books and by work in the old Charity Hospital at Natchez, and was eventually licensed to practice medicine in the State of Mississippi.

He married Elizabeth Rebecca Lazarus who was from Franklin County and they moved to this rural area about 1850, established a home and later homesteaded the proposed historical site. He pioneered the practice of medicine in rural Franklin County for 30 years. He served in the Medical Corps of the Confederate Army in a hospital at Summit. The long hours, hard work, sacrifice, and dedication which he and his wife put into their chosen work is an outstanding example of people that made this Nation great.

Before his death, at the age of 72, he sought out and brought in to work with him young Dr. A. M. Dodds, who carried on the work after Dr. Rodriguez died. Many of Dr. Dodd's descendants became prominent in the political, social, and economic life of the area.

Dr. Rodriguez and his wife, Rebecca Lazarus, had eight children and they are the foreparents of numerous Southwest Mississippi families, who are active in the fields of education, medicine, public service, and all other phases of community life. A historical marker would be of general interest throughout the area.

Homochitto Ranger District

Seven prehistoric sites are recorded for the District: 22-Am-501, the Red Prong Site; 22-Am-505, 22-Am-506, 22-Am-509, the Brown Branch Site; 22-Am-521; and 22-Wk-528. Of these, the Red Prong and Brown Branch Sites warrant further discussion.

The Red Prong Site was discovered during a survey for the proposed Brushy Creek Reservoir in the fall of 1978. It is situated atop a high bluff overlooking Brushy Creek where Red Prong enters the creek. Numerous waste flakes were recovered from shovel test pits and were found to a depth of 20 centimeters. Although no diagnostic materials were recovered, the high density of flakes presupposes that a moderate cultural deposit is present, which will require further investigation.

The Brown Branch Site, situated near the Red Prong Site, was discovered during the winter of 1980 by Shan Winn who was surveying in advance of a pipeline for Texas Eastern Transmission Company. The site was excavated after shovel tests indicated the possibility for undisturbed midden. The results of the excavation yielded hearth areas and numerous stone tools indicating a middle Archaic occupation; however, the site was too disturbed to warrant additional excavation or preservation (Winn 1981).

Like most Districts, historical-era resources have been overlooked on this District.

Tombigbee National Forest

Ackerman Unit

No prehistoric cultural resources have yet been found on this Unit, although they are known to occur on adjacent private lands, particularly along the Noxubee River.

Of historical interest is the route of the Robinson Road, an early settlers' path authorized by Congress in 1821 to provide a more direct route between the newly formed Monroe County and the state capitol at Jackson (Phelps 1950:154-156). Up to that time, the only route between Columbus and Jackson was a circuitous route up the Tombigbee River to Cotton Gin Port, then overland via the Gaines Trace to Pontotoc, then down the Natchez Trace to Jackson — a distance of about 260 miles

(ibid.) A more direct route would cut the distance in half. The route of the road was surveyed by Raymond Robinson, one of the founders of the town of Raymond, and accordingly the road was named after him. As new communities and towns grew up some distance from the Robinson Road, as well as from the Natchez Trace, travel patterns diverged and shifted from the main road. Ultimately sections were abandoned or incorporated into other routes to serve local needs.

Portions of the old road remain as wood trails on the Ackerman Unit. The remaining stretches of road on the adjacent Noxubee Refuge were nominated to the National Register in 1974 (McDaniel 1974), and those vestiges on the National Forest are similarly eligible for nomination. Tracing the road from 1832 GLO surveys, the road occupies T15N, R13E, Sections 4 and 5; and T16N, R13E, Sections 33, 28, 27, and 26 to the intersection of Forest Service roads 987 and 954, thence east along road 954 to the Noxubee Refuge.

Trace Unit

Five prehistoric sites are recorded for the unit: 22-CS-502, the Owl Creek Site; 22-Cs-523, the Hill Top Site; 22-Cs-524, Paden Mound Field; 22-Cs-534, the third leftsite; and 22-Cs-535, the Gregory Site.

The Owl Creek Site is a mound-village complex listed on the National Register. The site consists of five mounds around a central plaza, with the two largest mounds located on Forest property. Excerpts from the National Register form, prepared by Sam Brookes (1975), of the Mississippi Department of Archives and History, are presented below:

The earliest written description of the site is furnished by Rush Nutt who was there in the early 1800's. Nutt mentions the presence of seven mounds and a ditch encircling the site (Jennings 1947). In 1935 five mounds were reported by Moreau Chambers, and the presence of an encircling ditch was not mentioned (Chambers 1935).

Available evidence suggests that the Owl Creek Site was a large palisaded village of the Mississippian culture with an earlier Miller II occupation. Suggested dates for these occupations are: Miller II A.D. 1 - A.D. 300 and Mississippian A.D. 1000 - A.D. 1300 (Rucker 1974:17).

The site is now ... under the jurisdiction of the U.S. Forest Service. The large mound has been enhanced by the placement of logs on the ramp. Three of the other mounds have been greatly reduced by plowing. The fifth mound, which is located near the large mound, is covered with grass, but is in poor condition as digging over the years has disfigured it. The settlement at Owl Creek is reflected in a concentrated group of mounds arranged symmetrically.

Mound groupings of this nature are rare in this area. Our chronology is poor for the hill areas, most previous work having been done there in the Work Projects Administration

era. There is no synthesis of settlement-subsistence strategies for any time period in northeast Mississippi. Excavation could yield valuable information along these lines. Archaeological work was done at the site by the Mississippi Department of Archives and History in 1935. Three mounds were excavated by a crew under the direction of Moreau Chambers. Excavation profiles, notes, and artifacts have been lost over the years. Some findings are described in the preserved diary kept by Chambers, and a few photographs of the work are extant.

The value of this site lies in its location and in the fact that there is still a great potential for excavation. Chambers' excavation indicates a Miller II period occupation (A.D. 1 - A.D. 300). The ecological setting of the Owl Creek Site is indeed similar to that of the other sites of the Miller II periods. Most mound construction appears to date from A.D. 800 - A.D. 1500.

The Hill Top Site and Paden Mound were recorded by James Atkinson in 1973, then with Mississippi State University. They have not been evaluated, or even located, and there is a question as to being on National Forest land.

The Third Left Site, located north of Owl Creek is a small lithic/ceramic scatter warranting no further investigation. The Gregory Site, situated northwest of Owl Creek, was reported by Mr. Herbert Gregory of Houston whose family owned the land prior to governmental acquisition. It has not been ground-checked, but will be when management activities are proposed in the area.

SUMMARY OF CULTURAL RESOURCE INVESTIGATIONS

There has been a considerable amount of cultural resource investigations conducted on the National Forests in Mississippi, beginning in 1975 and increasing in frequency since 1977. Listed in this section are reports documenting much of that work. Table 2, below, indicates a summary of acres surveyed according to function, as well as indicating the proportion of surveyed acres per District or Unit. Those acres under "other" refer to road construction, special uses, and recreation related surveys.

TABLE 2

Summary of Surveyed Acres

District or NF Unit	Acres Site Prep	Acres Exchange	Acres Other	Total	District Acreage Surveyed	% Surveyed	% Acres
Bienville	1,494	1,635	134	3,263	85,984	3.8	7.5
Strong River	1,825	565	167	2,561	92,390	TTT	8.1
Delta	—	1,078	3,539	4,617	5975'ir	~TTT	5.2
Black Creek	1,615	4,797	1,744	8,157	232,853	TT	20.4
Biloxi T,	348	1,497	m~	4,574	1177454 "	σ	10.3
Chickasawhay	2,854	403	243	3,500	mjur	YY	13.1
Homochitto	619	—	2,995	3,614	977153"	3.7	8.5
Bude	531	193	4,489	5,213	91,780	5.6	TT0
Holly Springs	1,706	47557	—	6,693	T2T3TT	57X	11.1
Ackerman	202	1,653	—	1,855	40,015	O"	3.5
Trace	—	—	II" 1,078	1,091	27103T	XI	2.3
Grenada	—	141	—	141	20,422	0.7	1.8
	13,199	16,962	15,118	45,229	1,140,373	3.96	99.8

ACKERMAN UNIT

Howell, John A.

- (6/77) Archaeological Survey in the Tombigbee National Forest, SW\$ of Section 15, T16N, R12E, Winston County, Mississippi. 1 pg, map.
-- Survey of 160 acre tract; no cultural resources.
- (12/77a) Cultural Resource Survey of the Proposed Warner Land Exchange, T16N, R12E, Section 13, and T16N, R13E, Section 7, Winston County, Mississippi. 1 pg, map.
-- Survey of 80 acre tract; no cultural resources.
- (12/77b) Cultural Resource Survey of the Proposed Bryce Griffis Land Exchange, Si Section 12, T16N, R12E, Tombigbee National Forest, Winston County, Mississippi. 1 pg, map.
-- Survey of about 45 acres; no cultural resources.
- (12/77c) Cultural Resource Survey of the Proposed Bryce Griffis Land Exchange, T15N, R12E, Section 9, and T16N, R12E, Section 10, Winston County, Mississippi. 1 pg, 2 maps.
-- Survey of 85 acre tract; no cultural resources.
- (1/78) Cultural Resource Survey of the Proposed Reid Exchange, TUN, R11E, Section 34, Chickasaw County, Mississippi. 1 pg, map.
-- Survey of 25 acre tract; no cultural resources.
- (12/79) Cultural Resource Survey, Tract T-43e, Tract T-43f, and Tract 43-g, Bryce Griffis - U.S. Forest Service Land Exchange, Winston County, Mississippi. 2 pp, 2 maps.
-- Survey of three tracts totaling 150 acres; no cultural resources.
- (3/80) Cultural Resource Survey of the U.S. Forest Service - Mrs. Mckenzie Land Exchange, Choctaw County, Mississippi. 2 pp, map.
-- Survey of 30 acre tract; no cultural resources.

Wynn, Jack T.

- (4/75) Letter reporting survey of 82 acre tract for Haines exchange. 2 pp.
- (8/76) Letter reporting survey of two parcels totaling 241 acres for Griffis exchange. 2 pp.

- (4/77) Letter reporting survey of 65 acre tract for Bowie & McClure exchange. 1 pg.
- (5/77) Letter reporting survey of four parcels of land for exchanges proposed with Troskey, Van Fossom, Bowie & McClure. 2 pp.
- (4/78) Cultural Resource Survey of National Forest land in Choctaw County, Mississippi. 3 pp, map.
 -- Survey of 90 acre tract produced no cultural resources.
- (8/78) Cultural Resource Survey of National Forest Lands in Winston County, Mississippi. 3 pp, map.
 -- Survey of 40 acres; no cultural resources.
- (5/79) A Cultural Resource Reconnaissance of the Roland Woodward Land Exchange, Tombigbee National Forest. 3 pp, map.
 -- Survey of two parcels of land totaling 480 acres recovered no cultural resources.
- (6/79) A Cultural Resource Reconnaissance of the Gil 1is Land Exchange and Adjacent Property in Sections 11 and 12, T16N, R12E, Winston County, Mississippi. 2 pp, map.
 -- Survey of a 160 acre tract recovered no cultural resources.

BIENVILLE DISTRICT

DeLeon, Mark

(7/77a) Cultural Resource Reconnaissance on the Bienville District of the Bienville National Forest. 1 pg.

-- Survey of two timber roads totaling approximately 3 miles of right-of-way recovered no cultural resources.

(7/77b) Cultural Resource Survey of the Hornsby Land Exchange, Bienville National Forest. 1 pg, map.

-- Survey of a 44 acre tract recovered no cultural resources.

(2/80) Cultural Resource Survey on the Bienville District, Bienville National Forest; Proposed J. S. Miles Exchange. 4 pp, 3 maps.

-- Survey of a 720 acre tract recovered no cultural resources.

(12/80) MEMORANDUM: Survey of Special Use Permit for right-of-way for Scott County Board of Supervisors for road 506 realignment, involving one acre. 1 pg, map.

(6/81) Cultural Resource Survey on the Bienville District, Bienville National Forest: Proposed L. B. Porter Exchange. 1 pg, map.

-- Survey of a 122 acre tract recovered no cultural resources.

(2/82) Cultural Resource Survey, Proposed Bienville Ranger District Office, Bienville National Forest. 1 pg, map.

-- Survey of 40 parcel proposed for development of an office complex recovered no cultural resources.

Howe!1, John A.

(6/77) Letter reporting survey of 63 acre tract of National Forest proposed for exchange with Central By-Products, Ltd. 1 pg.

Lauro, James T.

(12/81) Letter reporting survey of an oil well site and access road, prepared for Cal Ion Oil Company, Natchez, MS, by the author. 1 pg, map.

BILOXI DISTRICT

Atkinson, James R. and John H. Peterson

1981 Historical and Social Trends in Southern Forest Grazing: An overview based on historical sources and oral interviews for the Southern Evaluation Project. Unpublished report prepared for the Southern Forest Experiment Station, Pineville, LA, by the Department of Anthropology, Mississippi State University.

DeLeon, Mark

(4/78) Cultural Resource Surveys on the Biloxi District, DeSoto National Forest; the Parsons Exchange and the Gardner Exchange. 2 pp, 2 maps.

-- Survey of 3 tracts totaling 256 acres recovered no cultural resources.

(12/78) Cultural Resource Survey on the Biloxi District, DeSoto National Forest: Proposed Gerald Miller Exchange. 1 pg, map.

-- Survey of 40 acre tract recovered no cultural resources.

(3/79) Cultural Resource Survey on the Biloxi Ranger District: Proposed R. E. Lee Exchange. 1 pg, map.

-- Survey of 27 acre tract recorded no prehistoric cultural resources, although foundational remains from military facilities were observed.

(2/82) Cultural Resource Survey on the Biloxi Ranger District, DeSoto National Forest: Proposed Porter Land Exchange. 1 pg, map.

-- Survey of three tracts totaling 120 acres recovered no cultural resources.

Heisler, David M.

(2/80) Cultural Resource Survey, Section 25, T5S, R11W, Performed for the U.S. Forest Service, Jackson, MS by the author. 1 pg, map.

-- Survey of 560 acres proposed for exchange recovered no cultural resources.

(10/81) Archaeological Assessment Survey, Extension to Black Creek Lateral Pipeline, Stone County, Mississippi. Prepared for Florida Gas Transmission Company, Winter Park, FL by the author. 2 pp, map.

-- Survey of approximately 1 mile of pipeline right-of-way recorded one prehistoric site, not considered eligible for the National Register.

Howell, John

(2/78) Cultural Resource Survey of National Forest Service, Parsons Land Exchange, Harrison County, Mississippi. Prepared for the U.S. Forest Service, Jackson, MS, by the author. 2 pp, map.

- Survey of three tracts totaling approximately 500 acres recorded four prehistoric sites dating to the Woodland Period, none of which were considered eligible for the National Register.

Marshal 1, Richard A.

1981 A Cultural Resource Survey of Study Area 4, DeSoto National Forest, Mississippi. Prepared for Southern Evaluation Project, Southern Forest Experiment Station, Pineville, LA, by Mississippi State University. 22 pp, 2 maps, 2 illus., 6 photos, biblio.

- Random sample survey involving nine 40-acre units, eight of which were located on National Forest. No cultural resources were found in the sample units. Suggestions for cultural resource management on National Forest are offered.

BLACK CREEK DISTRICT

Espey, Huston and Associates, Inc.

- (12/80) Cultural Resource Inventory and Assessment of the Zachary - Ft. Lauderdale Pipeline. Alternative II, Southeastern Mississippi. Report prepared for Florida Gas Transmission Co., Winter Park, Florida by Espey, Huston and Associates, Inc., Austin, Texas.
- Survey of approximately 35 miles of proposed right-of-way across south Mississippi, which included a small portion of National Forest land. A total of 29 cultural resource sites were recorded for the entire project, three of which were situated on National Forest. No further work was recommended.

Greenwell, Dale

- (4/75) NOTES -- report on cultural resource survey for Shell Oil Company, Well 8-14 USA. 1 pg.
- Statement reporting survey of approximate 5 acre plot for an oil well. No cultural resources were identified.
- (n.d.) NOTES -- Report on survey of Saga Petroleum Well USA 10-15. 1 pg, map.
- Statement reporting survey of approximately 5 acre plot for an oil well. No cultural resources were detected.

Heisler, David M.

- (12/80) Archaeological Assessment Survey, Black Creek Lateral Pipeline, Perry and Stone Counties, MS. Report prepared for Florida Gas Transmission Company, Winter Park, FL, by the author. 4 pp, 3 maps, appendix.
- Survey of 3.1 miles (5 km) of proposed right-of-way for a gas line roughly half of which situated on National Forest land. Five prehistoric sites were identified, none of which were considered eligible for the National Register.

Howell, John A.

- (4/78) Cultural Resource Survey of the Proposed U.S. Forest Service - White Land Exchange, Forrest and Perry Counties, MS. Report prepared for the U.S. Forest Service, Jackson, by the author. 2 pp, map.

- Survey of three parcels of National Forest land comprising approximately 340 acres proposed for exchange. No cultural resources were identified.
- (7/79) Cultural Resource Survey of the Proposed J. W. McArthur et al. - U.S. Forest Service Land Exchange. Report prepared for the U.S. Forest Service, Jackson, by the author. 1 pg.
- Survey of an 80 acre tract proposed for exchange. No cultural resources were found.
- (2/80) Cultural Resource Survey, U.S. Forest Service - Perry County School Board Land Exchange, Perry County, MS. Report prepared for the U.S. Forest Service, Jackson, by the author. 2 pp, map.
- Survey of 80 acres of National Forest land proposed for purchase by Perry County for a new school. No cultural resources were identified.

Hyatt, Robert D.

- (3/78) Preliminary Cultural Resource Survey of proposed improvements to U.S. Highway 98 from New Augusta to Lucedale; Perry County, Greene County, George County. Prepared by Mississippi State Highway Department. 1 pg.
- Statement documenting survey of proposed Department of Transportation easement across a small portion of National Forest land in Perry County. No cultural resources were identified.
- (5/79) Cultural Resource Survey of proposed U.S. Highway 98 between Ralston and Forrest-Perry County line, and U.S. Highway 98 between Forrest-Perry County line and New Augusta, Forrest and Perry Counties. Prepared by Mississippi State Highway Department, Jackson. 1 pg.
- Statement documenting survey of proposed Department of Transportation easement across National Forest land. One small lithic scatter was found and no further investigations were considered necessary.

Keller, John. E.

- (3/80) An Archaeological Survey of Certain Road Projects, Black Creek Ranger District, DeSoto National Forest, Mississippi. 4 pp.
- Survey of six proposed timber haul roads found one small lithic scatter not considered worthy of additional work.

Winn, Shan M. M.

- (10/78) Cultural Resource Survey of Four Boring Locations in Perry and

Forrest Counties, Mississippi. Report prepared for Law Engineering Testing Company, Marietta Georgia by the author. 8 pp, 11 illustrations.

- Survey of boring sites for south Mississippi salt dome study, two locations of which are on National Forest land. No prehistoric sites were recorded; however, several military training features were recorded, none of which were considered eligible for the National Register.

DeLeon, Mark

(5/78) Cultural Resource Survey of the McNeill Experimental Forest: Proposed Currie Exchange. 2 pp, map.

- Survey of a 1,205 acre tract of isolated National Forest land in Pearl River County, MS, which was used by the Southern Forest Experiment Station until Hurricane Camille in 1969. Two isolated find spots were noted, one situated on the tract. No further investigations were warranted.

(6/78) Cultural Resource Survey of the Proposed Job Corps Training Center Site, Black Creek Ranger District, DeSoto National Forest. 3 pp, map.

- Survey of approximately 136 acres proposed for development. One isolated find spot was noted. Report documents prior land use based on research of old land acquisition records.

(7/78) Cultural Resource Survey on the Black Creek Ranger District, DeSoto National Forest: The Crown Zellerbach Corporation Exchange. 5 pp, 2 maps.

- Survey of several parcels of National Forestland comprising 730 acres. Four isolated find spots were encountered, three of which were on Forest property, and one prehistoric archaeological site was recorded and tested. Limited testing of the site 22-Fo-508 revealed an Archaic and Woodland occupation. The site was found to contain no preserved deposits and was not considered eligible for the National Register.

(1/79) Cultural Resource Survey on the Black Creek Ranger District, DeSoto National Forest: Proposed Boy Scouts of America Exchange. 1 pg, map.

- Survey of 560 acre tract proposed for exchange. No cultural resources were identified.

(2/79) Cultural Resource Survey on the Black Creek Ranger District, DeSoto National Forest: Proposed J. W. McArthur Exchange. 1 pg, 2 maps.

- Survey of two tracts of National Forest land comprising 360 acres proposed for exchange. Two prehistoric isolated find spots were identified with no additional investigation considered necessary.
- (3/79) Cultural Resource Surveys on the Black Creek District, DeSoto National Forest: Proposed Timber Roads 317, 317A, 309B, and 3154. 1 pg, map.
 - Memorandum reporting survey of proposed timber roads. No cultural resources were identified.
- (3/79) Cultural Resource Survey on the Black Creek Ranger District, DeSoto National Forest: Proposed York Exchange. 3 pp, map.
 - Survey of two parcels of National Forest land totaling 527 acres proposed for exchange. Five cultural resource sites were identified: two historic era sites evidencing scattered refuse from turpentine activities and one prehistoric lithic scatter, all on the exchange tract; two prehistoric sites adjacent to the National Forest lands were also recorded.
- (1/81) Descriptive Cultural Resource Overview of the Black Creek Basin, DeSoto National Forest. Jackson: U.S. Forest Service. 12 pp, map.
 - Narrative written for a general audience summarizing the prehistory, ethnohistory, and recorded history of the Black Creek Basin, pursuant to the proposed designation of the stream as a wild and scenic river.
- (2/81) Cultural Resource Survey on the Black Creek Ranger District, DeSoto National Forest: York/Faler Land Exchange. 2 pp, 3 maps, biblio.
 - Survey of several parcels of National Forest land totaling 1,620 acres proposed for exchange. Only one prehistoric site was identified, a very small lithic scatter, and no further investigations were warranted.
- (3/81) Cultural Resource Survey on the Black Creek Ranger District, DeSoto National Forest: York/Faler Land Exchange. 1 pg, map.
 - Survey of a 75 acre tract of isolated National Forest land. No cultural resources were identified.
- (6/81a) Cultural Resource Survey of the Proposed Seedling Bed Expansion, W. W. Ashe Nursery, DeSoto National Forest. 1 pg, map.
 - Report on survey of two areas totaling 80 acres. No cultural resources were identified.

(6/81b) Cultural Resource Survey on the Black Creek District, DeSoto National Forest: Proposed J. S. McArthur Land Exchange. 1 pg, map, biblio.

-- Survey of an 80 acre tract proposed for exchange. No cultural resources were identified.

(2/82) Cultural Resource Survey on the Black Creek Ranger District, DeSoto National Forest: Proposed Perry Land Exchange. 1 pg, map.

-- Survey of three parcels of National Forest land totaling 160 acres proposed for exchange. No cultural resources were identified.

BUDE DISTRICT

Blitz, John H. and Cyril B. Mann, Jr.

(2/82) Cultural Resource Survey of the Facility Sites of Triangle Oil Producers, Inc.; No. 1 USA, 28-8 and 28-11. Prepared for Triangle Oil Producers, Inc., Natchez, MS, by the authors. 2 pp and map.

- Survey of two oil well sites and access roads recovered no cultural resources.

DeLeon, Mark

(9/78a) Report of Cultural Resource Investigations in the Bude District, Homochitto National Forest: Compartment 44.2pp, appendix.

- Survey to assess a presumed aboriginally modified ridge similar to the Emerald Mound. Ridge was determined to be natural with no man-made alterations. Also noted was an Archaic Period occupation of the ridge top.

(9/78b) Report of Cultural Resource Investigations in the Bude District, Homochitto National Forest: Compartment 13.1pg.

- Recording and assessment of archaeological site 22-Li-505, situated along the Homochitto River.

(9/78c) Cultural Resource Survey in the Bude District, Homochitto National Forest: Franklin County Gravel Pit. 1 pg, map.

- Survey of 4 acres proposed for a borrow pit recovered no cultural resources.

(3/80) Cultural Resource Surveys on the Bude District, Homochitto National Forest: Various Proposed Special Use Permits for the Franklin County Board of Supervisors. 2 pp, map.

- Survey of a proposed sanitary land fill, access road, and gravel pit recovered no cultural resources.

(4/82) Cultural Resource Survey, Bude Ranger District, Homochitto National Forest: Proposed Gravel Pits for Franklin County Board of Supervisors. 1 pg, 2 maps.

- Survey of three proposed gravel pits recovered one archaeological site, determined to represent a small lithic scatter not considered eligible for the National Register.

Greenwell, Dale

(6/75) NOTES: Report on survey of site for well USA 15-7 No. 1 for James B. Furrh, Jackson, MS. 1 pg.

- Survey of drilling site revealed a prehistoric site evidencing only lithic materials, with "Occupation living floor density exists throughout." Author recommended moving well.

(10/75) NOTES: Report on survey of a 40 acre tract proposed for exchange recorded an old wagon trace, railroad tram, and a ridge believed to have been aboriginally modified to resemble the Emerald Mound. Subsequent investigations proved the mound to be naturally shaped.

Howe!1, John A.

(5/77) Letter reporting results of survey of lands selected for exchange. Prepared for the U.S. Forest Service, Jackson, MS. 1 pg.

- Survey of approximately 20 acres of National Forest land recovered no cultural resources.

Hyatt, Robert D.

(8/76) Letter reporting results of survey of lands selected for exchange with Brookhaven Bank and Trust. Prepared for the U.S. Forest Service, Jackson, MS. 1 pg.

- Survey of 124 acres of National Forest land proposed for exchange recovered no cultural resources.

Lauro, James T.

(3/82) Letter reporting survey of USA well 12-2 for John Dale IV and Associates, Vidalia, LA. 1 pg.

Lehmann, Geoffrey R.

(4/82) An Archaeological Survey of Proposed Oil Well Federal "EK" #1 in Franklin County, Mississippi. Prepared for Cal Ion Petroleum Company, Natchez, MS. 3 pp, map.

Neuman, Robert W. and Kathleen M. Byrd

(1977) An Archaeological Survey of Sections of the Southern Porter Creek Unit, Homochitto National Forest, Mississippi. Report prepared for the U.S. Forest Service, Jackson, MS, by Louisiana State University, Baton Rouge, LA.

- Sample survey of 10,000± acre planning unit designed to offer management options regarding the predictability of

determining the existence of cultural resources. No cultural resources were found on National Forest, although sites were recorded on private lands.

Wynn, Jack T.

(3/78) Cultural Resource Survey for Texas Eastern Transmission Corporation, Proposed Pipeline Right-of-Way in Lincoln and Jefferson Counties, Mississippi. Prepared for Texas Eastern Transmission Corp., Houston, TX, by the author. 3 pp, map.

-- Survey of a 6,752 foot by 75 foot right-of-way. No cultural resources were found.

CHICKASAWHAY DISTRICT

DeLeon, Mark

(8/77) Cultural Resource Survey, Chickasawhay District, DeSoto National Forest: Turkey Fork Reservoir. 5 pp, 2 maps.

- Survey of approximately 40 acre site of a new campground found one archaeological site which was recommended for further investigations.

(9/78) Archaeological Investigations in the Chickasawhay District, DeSoto National Forest: The Turkey Fork Camp Site, 22GN505. 8 pp, 3 photos, 2 maps.

- Report of one week testing at site located during earlier survey. Site evidence no intact deposits or features, and experienced Early Archaic (Dalton) and Woodland period occupation. Additional investigations were not warranted and site was not considered eligible for the National Register.

(2/82) Cultural Resource Survey, Chickasawhay Ranger District, DeSoto National Forest: Proposed Shannon Clark Exchange. 1 pg, map.

- Survey of 165 acre tract proposed for exchange recovered no cultural resources.

Jordan, Paul

(6/81) Cultural Resource Survey, Chickasawhay Ranger District, DeSoto National Forest: Proposed Palmer Exchange. 1 pg, map.

- Survey of 238 acre tract proposed for exchange recovered no cultural resources.

DELTA NATIONAL FOREST

Curry, H. K.

(3/81) Cultural Resource Survey of Dowling Bayou, Humphreys and Sharkey Counties, MS. Report submitted to the Corps of Engineers, Vicksburg District, by the Center for Archaeological Research, University of Mississippi. 17 pp, 2 maps, biblio.

- Survey included approximately 425 acres of National Forest lands along Dowling Bayou, which was conducted pursuant to proposed channel dredging and realignment. Two prehistoric archaeological sites were recorded on National Forest land, one of which included the Dowling Bayou Site, a mound/midden evidencing Woodland through Mississippian occupations, and which was considered eligible for nomination to the National Register.

DeLeon, Mark

(12/78) Cultural Resource Survey of Fifteen Mile Island: Proposed Houston Brothers Exchange. 5 pp, 2 maps, biblio.

- Survey of 1,078 acres of Yazoo River backswamp in Sharkey County, MS. A historic era site, the locale of a CCC camp was recorded but not considered eligible for the National Register. No prehistoric sites were found, and a hypothesis is offered to explain the lack of such sites in the given environmental situation.

Heisler, David M.

(11/80) Archaeological Survey, Drill Sites USA LS ES 8484 No. 1, USA LS ES 1065 No. 1, Sharkey County, MS, Continental Oil Company. 1 pg, 2 maps.

- Survey included two drill sites on National Forest land comprising a total of 5 acres. No cultural resources were found.

Wynn, Jack T.

(11/78) Cultural Resource Reconnaissance of Proposed Green Tree Reservoirs 7 & 8, Delta National Forest, Sharkey County, MS. Report submitted to the Corps of Engineers, Vicksburg District by the author. 18 pp, 2 maps.

- Sample survey of 3,110 acres of bottomlands proposed for us as greentree reservoirs by the Corps of Engineers. No cultural resources were found on the generally low and marshy terrain.

GRENADA UNIT

Howell, John A.

(7/77) A cultural resource survey in the Grenada Unit National Forest, Section 26, T25N, R4E, Yalobusha County, Mississippi. Prepared for USFS. 1 pg.

-- Survey of 141 acre tract proposed for exchange produced no cultural resources.

Wynn, Jack T.

(5/77) Letter reporting survey of a 40 acre tract proposed for the Davidson exchange involving 40 acres. Prepared for the U. S. Forest Service, Jackson, MS, by the author. 2 pp.

HOLLY SPRINGS DISTRICT

DeLeon, Mark

(3/78) Cultural Resource Survey of Various Land Exchange Parcels on the Holly Springs National Forest. 6 pp, 3 maps, biblio.

- Survey of three parcels of land proposed for exchange totaling 1,017 acres. No cultural resources were found, with the exception of two isolated finds outside of the Forest boundaries.

(5/78) Cultural Resource Survey, Holly Springs National Forest: King-Rogers Exchange. 2 pp, map.

- Survey of a 290 acre parcel of land proposed for exchange. No cultural resources were found.

(6/78) Cultural Resource Surveys in the Holly Springs National Forest: FS Road 837G and FS Road 827X. 2pp, map.

- Survey of approximately 2 miles of new timber haul road construction. No cultural resources were found.

(12/78) Cultural Resource Survey on the Holly Springs National Forest: Proposed J. F. Rogers Exchange. 1 pg, map.

- Survey of a 14 acre parcel of land proposed for exchange. No cultural resources were found.

(11/80) Cultural Resource Survey on the Holly Springs National Forest: Proposed O. M. Burch Exchange. 1 pg, map.

- Survey of 55 acres of land proposed for exchange. No cultural resources were identified.

(4/82) Cultural Resource Survey, Holly Springs National Forest: Proposed J. M. Ash Exchange. 1 pg, map.

- Survey of 133 acres of land proposed for exchange. No cultural resources were identified.

Keller, John E.

(3/79) Cultural Resource Survey on the Holly Springs National Forest, Proposed Winnet Land Company Exchange. 2 pp.

- Survey of a 520 acre parcel of land proposed for exchange. No cultural resources were located.

(1/80) A Cultural Resource Survey of Two Exchange Tracts on the Holly Springs National Forest, Marshall County, Mississippi. 4 pp.

- Survey of two parcels and land proposed for exchange. No cultural resources were identified. Reasons why no sites were located are offered.

(5/80) Cultural Resource Surveys on Two Proposed Exchange Tracts on the Holly Springs National Forest. 2 pp.

- Survey of two exchange tracts totaling 265 acres. No cultural resources were found.

Peterson, Drexel A.

(6/75) Letter reporting survey of two parcels of land totaling 152 acres proposed for exchange. No sites were found.

(6/75) Letter reporting survey of a 240 acre parcel of land proposed for exchange. No cultural resources were found.

(6/76) Letter reporting survey of two parcels totaling 768 acres proposed for exchange. No cultural resources were found.

(7/76) Letter reporting survey of two parcels of land totaling 113 acres proposed for exchange. No cultural resources were found.

(11/76a) Letter reporting survey of a 181 acre tract of land proposed for exchange. No cultural resources found.

(11/76b) Letter reporting survey of a 90 acre tract of land proposed for exchange. No cultural resources were found.

(3/77) Letter reporting survey of a 20 acre tract of land proposed for exchange. No cultural resources were found.

(7/77) Letter reporting survey of a 109 acre tract proposed for exchange. No cultural resources were found.

Thorne, Robert M.

(3/76) Letter reporting survey of a 30 acre parcel of land proposed for exchange. No cultural resources were found.

Wynn, Jack T.

(9/79) Cultural Resource Reconnaissance of Morrison Exchange Tract, Union County, Mississippi. Report prepared for the U.S. Forest Service by the author. 5 pp, map, biblio.

- Survey of 170 acre tract proposed for exchange. No cultural resources were identified.

(10/79) Cultural Resource Reconnaissance of Whaley Exchange Tract, Marshall County, Mississippi. Report prepared for the U.S.

Forest Service, Jackson, Mississippi, by the author. 4 pp, map, biblio.

-- Survey of three parcels of land encompassing 400 acres proposed for exchange. No cultural resources were located.

(11/79) Cultural Resource Reconnaissance of Roland Exchange Tract, Benton County, Mississippi. Report prepared for the U.S. Forest Service, Jackson, Mississippi, by the author. 4 pp, map, biblio.

-- Survey of a 120 acre tract proposed for exchange. No cultural resources were found.

(12/79) Cultural Resource Reconnaissance of Joe Lowe Exchange Tract, Lafayette County, Mississippi. Report prepared for the U.S. Forest Service by the author. 6 pp, map, biblio.

-- Survey of two parcels of land proposed for exchange totaling 320 acres. No cultural resources were found.

HOMOCHITTO DISTRICT

Bogges, Elizabeth M.

(7/79) Cultural Resources Report, Proposed Well Locations 1 through 6, Dry Bayou Field, USA - Jack H. Ewing "A" lease BLM-A 013579, Sections 10, 12, and 14, T5N, R1E, Franklin County, MS. Report prepared for Kay Operating Company, Inc., Natchez, MS by the author. 4 pp, map.

-- Survey of six oil well sites produced no cultural resources.

DeLeon, Mark

(10/78) Cultural Resource Survey of the Proposed Brushy Creek Reservoir, Homochitto National Forest, Mississippi. 10 pp, 2 maps, biblio, App.

-- Survey of proposed 240 acre reservoir in Amite County, MS, recorded on historic era house site, an isolated historic era grave, two prehistoric isolated find spots, and one prehistoric site, 22-Am-501. The site will require further investigation should the proposed reservoir project proceed beyond the preliminary design stage.

(4/79) Cultural Resource Survey of Proposed Well Locations USA "LH" No. 1 and USA "PB" No. 1. Prepared for ADCO Producing Co., Inc., Natchez, MS, by the author. 3 pp.

-- Survey of two oil well sites and access roads produced no cultural resources.

Greenwell, Dale

(9/75) NOTES: Report on survey of oil well site, Forman USA #1 in Franklin County, MS. 2 pp, sketch map.

-- Survey produced evidence of one prehistoric site. Testing revealed an Early Woodland occupation as indicated by "living floor," "one cache area containing 107 pebble," and "one deep fire pit." Additional investigations not considered necessary.

(11/76) NOTES: Report on survey for Walter J. Heard, Jr. Well USA 8-6. Prepared for Frank Moran, Natchez, MS. 1 pg.

-- Survey of an oil well site and access road produced no cultural resources.

Howell, John A.

(6/80) Cultural Resource Survey, Proposed Well Location, ADCO Producing Company, Amite County, Mississippi. 1 pg.

Howell, John and Mark DeLeon

(7/80) Cultural Resource Survey of the Proposed Sandy Creek Wilderness Area, Homochitto National Forest, Mississippi. 14 pp, 2 maps, biblio.

-- Survey of a proposed 2,375 acre wilderness area yielded one lithic scatter containing no diagnostic artifacts, and was not considered eligible for the National Register, nor was additional investigations warranted. Report focuses on environmental reasons for the apparent lack of cultural resources.

Hyatt, Robert D.

(7/77) Letter reporting survey of an oil well site in Franklin County, Mississippi, for James F. Furrh, Jackson, Mississippi. 1 pg, map.

-- Survey of oil well site revealed no cultural resources.

Jordan, Paul

(7/81) MEMORANDUM: Report on Survey of two gas Wells in Amite County, Mississippi. 2 pp, 2 maps.

Lauro, James T.

(11/81) Letter reporting survey of an oil well site for U.S. Operating, Inc., Vidalia, Louisiana. 1 pg.

(12/81) Letter reporting survey of well Miller No. 1 and well USA No. 29-8 No. 1, for James B. Furrh, Jackson, Mississippi. 1 pg.

(2/82a) Letter reporting survey of Well 29-3 No. 1, Well 18-10 No. 1, and Well 35-4 No.1 for Cal to Oil Co., Natchez, Mississippi. 2 pp, map.

(2/82b) Letter reporting survey of Well USA 38-15 No. 1, for John Dale IV & Associates, Vidalia, Louisiana. 1 pg.

(3/82) Letter reporting survey of Well USA "GCP" No. 1 and access road, for Hughes & New Oil Co., Inc., Natchez, Mississippi. 2 pp.

(5/82) Letter reporting survey of Well USA No. 29-9, for James B. Furrh, Jackson, Mississippi. 1 pg.

(6/82) Letter reporting survey of wells USA 25-14 and USA 37-10, for Paul J. Gribas, Jackson, Mississippi. 2 pp.

Lehmann, Geoffrey R.

(7/81) An Archaeological Survey of an Oil Drilling Site in Franklin County, Mississippi. Prepared for Del-Tex Petroleum Co., Inc., Natchez, Mississippi. 2 pp, map.

-- Survey of well USA 41-1 and access road. No cultural resources were found.

(2/82a) An Archaeological Survey of a Proposed Oil Well Site in Franklin County, Mississippi. Prepared for Callon Petroleum Co., Natchez, Mississippi. 3 pp, map.

-- Survey of well SKT #2. No cultural resources were found.

(2/82b) And Archaeological Survey of Two Proposed Oil Well Sites in Franklin County, Mississippi. Prepared for Callon Petroleum Co., Natchez, Mississippi. 3 pp, map.

-- Survey of wells Federal-Serio #1 and Federal RD #2. No cultural resources were found.

(4/82) An Archaeological Survey of Oil Well USA 33-12 No. 1 in Wilkinson County, Mississippi. Prepared for Petrovest, Inc., Natchez, Mississippi. 3 pp, map.

-- Survey of oil well site found no cultural resources.

(6/82) An Archaeological Survey of Two Proposed Oil Wells, USA "CC" No. 1 and No. 2, in Wilkinson County, Mississippi. Prepared for Bob Foley, Natchez, Mississippi. 5-pp, map.

Neitzel, Robert S.

(3/78) Archaeological Survey of Cultural Resources. Prepared for Ogden Oil Corporation, Natchez, Mississippi. 1 pg, map.

-- Survey of a 40 acre tract in Franklin County, Mississippi for an oil field recovered no cultural resources.

Thorne, Robert M.

(2/77) NOTES: Report on survey on well USA-Graves No. 1, in Franklin County, Mississippi, for Callon Petroleum Co., Natchez, Mississippi. 1 pg.

-- Survey of oil well site and tank battery produced no cultural resources.

Weinstein, Richard A. and Melanie Thigpen

(1981) A Cultural Resource Survey of Ashland Pipeline Company Three-Inch Crude Oil Pipelines, Wilkinson and Amite Counties, Mississippi. Report prepared for Ashland Pipeline Company, Ferriday, Louisiana by Coastal Environments, Inc., Raton Rouge, Louisiana.

- Survey of a 12.5 mile (20 km) right-of-way for two three-inch crude lines, which included about 7 acres of National Forest land. Several prehistoric and historic sites were recorded along the right-of-way, two of which were found on Forest Service land. Both of these sites were disturbed lithic scatters and not considered eligible for the National Register.

Winn, Shan M. M.

(2/81) Cultural Resource Survey of Corridor for Gas Transmission Line, Homochitto National Forest. Report prepared for Texas Eastern Transmission Corporation, Houston, Texas, by the author. 16 pp, 3 maps, 3 fig., 11 photos.

- Survey of right-of-way for 8 mile gas line in Amite County, MS, which included portions of National Forest land, recorded two prehistoric sites and several areas of potential site locations. One prehistoric site was located on National Forest, and limited excavation recovered a fire hearth and artifacts typical of the Archaic Period which was not recommended to the National Register.

Yarbrough, Kate Huckabay

(11/81) A Cultural Resource Survey of a Proposed Well Location, Wilkinson County, Mississippi. Prepared for Credo Oil Co., Jackson, MS, by the author. 2 pp, map.

- Survey of a well location, access road, flowline, tank battery and treater site. No cultural resources found.

(5/82) A Cultural Resource Survey of a Proposed Well Location, Franklin County, MS. Prepared for Hayes Petroleum Co., Natchez, MS, by the author. 2 pp, map.

- Survey of proposed oil well site and access road. No cultural resources were found.

STRONG RIVER DISTRICT

Connaway, John

- (2/75) Report of Survey of SCS Reservoir Projects in Scott and Smith Counties, Mississippi, February 23-28, 1975. 1 pg.
- Survey of several proposed flood control reservoirs included reservoir No. 5 which would be situated on National Forest land, and comprising 102 acres. No cultural resources were found.

DeLeon, Mark

- (7/77) Cultural Resource Reconnaissance on the Strong River District, Bienville National Forest. 1 pg.
- Survey of three timber roads which totaled 4 miles of right-of-way recovered no cultural resources.
- (3/78a) Cultural Resource Survey of the Carr Exchange, Bienville National Forest. 1 pg, map.
- Survey of 23 acres recovered no cultural resources.
- (3/78b) Cultural Resource Survey of the Guy McIntyre Exchange, Bienville National Forest. 1 pg, map.
- Survey of 33 acres recovered no cultural resources.
- (4/78) Cultural Resource Survey of FS Road 528-A, Compartment 249, Strong River District, Bienville National Forest. 2 pp, map.
- Survey of one mile of road right-of-way recovered no cultural resources.
- (12/78) Cultural Resource Survey on the Strong River District, Bienville National Forest; Proposed Crosby Exchange. 1 pg, 2 maps.
- Survey of 11 acres recovered no cultural resources.
- (7/81) Cultural Resource Survey on the Strong River District, Bienville National Forest: Proposed Bay Springs Exchange. 1 P9, map.
- Survey of 120 acre tract recovered no cultural resources.

Howell, John A.

- (5/77) Letter reporting results of survey of proposed Currie Exchange. 1 pg.
- Survey of 56 acre tract recovered no cultural resources.

- (6/77) Letter reporting survey of Tract B-697. 1 pg, map.
-- Survey of 68 acre tract recovered no cultural resources.
- (7/77) A Cultural Resource Survey of the Bennie Batte Tract,
Bienville National Forest, Smith County, MS. 1 pg, map.
-- Survey of 50 acre tract recovered no cultural resources.
- (8/77) Cultural Resource Survey in the SWiSW^, Section 1, T3N-R9E,
Bienville National Forest, Smith County, MS. 1 pg, map.
-- Survey of 33 acre tract recovered no cultural resources.
- (9/77) Cultural Resource Survey of the Carr Exchange, T4N, R9E,
Section 18, and T6N, R8E, Section 33.1 pg.
-- Survey of 20 acre tract recovered no cultural resources.
- (4/79) Cultural Resource Survey of the Proposed Joe Tally - U. S.
Forest Service Land Exchange, Bienville National Forest, Smith
County, Mississippi. 1 pg, map.
-- Survey of 40 acre tract recovered no cultural resources.
- (4/80) Cultural Resource, Survey, 5430 Exchange, Georgia Pacific
Corporation, Bienville National Forest, Scott, Smith, Newton,
and Jasper Counties, MS. 8 pp, 5 maps.
Survey of 9 tracts of land comprising approximately 800
acres recovered no cultural resources.

Hyatt, Robert D.

- (9/78) Letter reporting survey of oil drilling site USA 25-5 #1, for
NRM Petroleum Corporation, Jackson, MS. 1 pg, map.
-- Survey of small plot for drill site and access road
recovered no cultural resources.

TRACE UNIT

DeLeon, Mark

(7/77a) Cultural Resource Survey of FS Road 906, Trace Unit, Tombigbee National Forest, Chickasaw County, MS. 8-pp, map, 2 photos.

- Survey of 3.5 miles of road right-of-way found no cultural resources on National Forest land, although recorded was one prehistoric site, the Long Creek Mound, situated adjacent to government ownership on private land. Also preliminarily documented was the site of an abandoned community, Sycamore, situated in the vicinity of the project.

(7/77b) Cultural Resource Survey of Compartment No. 1, Tract Unit, Tombigbee National Forest. 14 pp, 2 photos, 3 maps, biblio.

- Timber activities around the Owl Creek Site, a mound complex listed on the National Register prompted an intensive survey to define the actual limits of the site so not to affect the property. A 30-acre area was delimited in order to protect the site. A survey of the entire 1078 compartment recorded 3 additional sites, and two isolated finds. A history of work and previous thought on the Owl Creek Site is presented.

Howell, John A.

(12/77) Cultural Resource Survey of the Proposed Gann Exchange, T12S, R13E, Section 1, Chickasaw County, MS. 1 pg.

- Survey of a 1 acre plot proposed for exchange recovered no cultural resources.

Wynn, Jack T.

(5/77) Letter reporting survey of proposed Van Fossom exchange, involving 12 acres. Prepared for the U.S. Forest Service, Jackson, MS, by the author. 2 pp.

SUMMARY *

DIRECTIONS FOR FUTURE CULTURAL RESOURCE INVESTIGATION

Introduction

The National Forests in Mississippi is located in an area rich in both historic and prehistoric cultural phenomena. Previous chapters have documented the extent of these resources, and their exploration to date. A considerable amount of cultural resource investigation has occurred in and near the Forest, mostly within the past ten years. Some of the major problem domains facing archaeologists in the area are presented in this section in an effort to help guide future investigations.

Such a review serves a variety of purposes. Since most cultural resource work in the Forest area has only recently occurred, little in the way of synthesis has appeared. Individual reports have focused on a number of research topics and problem domains, but even the most comprehensive efforts have been bounded by fairly restricted geographic areas, time periods, or research orientations. Efforts to explore, or document the range of problem domains facing archaeologists working in the area are needed.

Another reason for detailing major problem domains is that it allows land managers to better understand why the cultural resources they are responsible for may be important. Cultural resources are considered significant, or eligible for nomination to the National Register of Historic Places, if they (1) are associated with events that have made a significant contribution to the broad patterns of our history; or (2) are associated with the lives of persons significant in our past; or (3) embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possesses high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or (4) have yielded, or may be likely to yield, information important in prehistory or history.

Archaeological sites, using these criteria, may be considered important if they can provide information that can contribute to a better understanding of local history and prehistory. Sites which can help answer major questions about the past occupation of an area are also considered significant sites. It must be emphasized that this overview is designed to both guide future investigations and to offer a perspective for evaluating the importance of cultural resources in the Forest. It must be viewed as an initial effort, and not as a final, definitive statement. It is not possible to provide a comprehensive checklist of all relevant cultural resource problem domains, since these topics change as old problems are solved and new ones are identified. Nor is it possible, for the same reason, to provide a set of criteria that can be used to evaluate all known cultural resources in the Forest area.

* Adapted from Anderson and Logan (1981): "Francis Marion National Forest Cultural Resources Overview."

What is attempted is to provide some understanding of the importance of the cultural resources in the Forest, and the kinds of questions they can help us answer about the past. The overview will be revised to reflect advances in knowledge as they occur.

Inventory and Evaluation of Cultural Resources

The primary goal of the cultural resource program of the Forest will be in inventory and the evaluation of cultural resources on National Forest lands in order to comply with existing legislation. Chief Max Peterson has recognized the need for an inventory of cultural resources:

A comprehensive inventory is basic to the cultural resource management program on the National Forests as well as other lands. An inventory is an efficient and effective mechanism to recognize important cultural resources in advance of other planned or ongoing activities, thus allowing for protection and public enjoyment of the resource at the same time that other resource objectives are met. A complete inventory makes it possible to coordinate with other programs in advance of impact, thereby achieving the desired management goals. An adequate data base is essential for sound and orderly land management planning, for meeting our responsibilities under the National Environmental Policy Act, and for other aspects of multiple resource management. Inventory is a major tool for the avoidance of resource conflicts (1980:3-4).

To improve the cultural resource decision making framework, it is important to both managers and archaeologists to determine where cultural resources occur in the Forest.

Predicting Site Occurrence

Knowledge of where sites are (and are not) located can greatly facilitate both land management and knowledge of the past. Only a small fraction of the Forest has been surveyed for historic and prehistoric remains, and virtually nothing is known about what lies in the unsurveyed areas. Currently, archaeological surveys are needed prior to ground disturbing projects which may affect cultural resources. Chief Max Peterson has stated:

It is Forest Service policy that potentially ground disturbing activities may take place only after insuring that cultural resource values are identified and addressed, and the adverse impacts are mitigated and minimized. Generally, this means avoidance -- redesigning a timber sale or re-routing a road -- so that the area of concern may be left undisturbed (1980).

By conducting controlled survey and testing programs across the Forest it should be possible to develop predictive models identifying where sites are likely to occur. Such information can be gathered fairly easily given long range planning. Until surveys can be conducted that encompass the total range of environmental variability within the

Forest, our knowledge of site occurrence in the area will remain incomplete.

Technological Improvements

In order to achieve quality management of cultural resources, current methods of site detection must be refined: "We need to develop cultural resource inventory strategies which are workable in forested areas" (Cutler 1980). Sampling techniques and collection methods should be improved to increase accuracy and reduce time and costs involved.

Dating techniques need to be refined: "to establish the importance and value of archaeological sites" (Cutler 1980). For example, the Thermoluminescence Laboratory at Washington University, St. Louis, is developing a method of dating ancient heated rocks for archaeological sites.

Remote sensing has been proposed as a non-destructive method of cultural resource inventory (Cutler 1980). Lyons and Scoville describe remote sensing as "a sophisticated set of tools which can be efficient and cost-effective when applied to inventorying, evaluating, planning, managing, and conserving cultural resources" (1978:10). They go on to discuss the benefits of using remote sensing in cultural resource management: "A most practical application of the concepts of remote sensing in non-destructive archeology is in the administration and management of our cultural resources. The data and information derived from the techniques described provide managers with substantial input to their working base for use in planning, developing and administrating cultural resources, particularly for those agencies ... in control of large landholdings" (1978:8-9).

The non-destructive approach to the discovery and investigation of cultural resources employs remote sensing techniques as its primary tools, with traditional field work (survey, collecting, excavation) utilized as a method of validating and testing this pre-fieldwork research. Remote sensing uses an approach which includes geology, geomorphology, biology, hydrology, climatology and anthropology. Techniques include aerial imagery, photogrammetry and subsurface probes.

An exciting new technique for obtaining subsurface data involves the use of Subsurface Interface Radar (SIR). SIR is a sophisticated electronic system used to detect buried cultural features. This system has been used successfully at the Trudeau Site in the Lower Mississippi Survey (Brain 1980:23-32). The SIR system has adapted the principles of radar detection to subsurface applications. Brain gives this description of the process:

The SIR system performs an advanced impulse radar procedure which gives an electronic subsurface profile. In operation, the transducer is moved along a predetermined line (in this report referred to as a "transect") on the surface of the site while propagating an electromagnetic impulse into the ground. When the impulse strikes an interface between two materials of differing electrical properties -- whether natural soils.

cultural features, or even artifacts -- some of the impulse energy is reflected and the rest continues on through the ground to other interfaces. The reflected signals are received by the transducer which transmits the information back to the control unit where it is monitored on an oscilloscope and then recorded on magnetic tape and printed out on the graphic recorder (1980:23-24).

Once the electronic results are plotted, test excavation is necessary to correlate cultural features with the SIR results. The SIR system requires minimal field time and produces data which allows the archaeologist to focus on the most productive areas of the site. The Trudeau Site field survey was completed in three days using a crew of three resulting in considerable savings as opposed to traditional test excavation based on a systematic sampling plan.

The Forest Service can benefit by incorporating the use of such technological advances into the cultural resource program.

Evaluating Research Procedures

The evaluation of methods used to discover, record, and analyze cultural resources is an important problem area. Through careful evaluation, the strengths and weaknesses of specific techniques may be discerned, with conclusions useful to future investigations along the same or related lines. Through examination of specific field or laboratory procedures, or analytical constructs, such as ceramic or projectile point typologies for example, archaeologists should be able to increase project efficiency. Proper concern for evaluation prevents the repetition of mistakes and ensures a maximum return for available time and resources. This concern with research cost effectiveness is increasingly important in light of the massive upsurge in public funding, and scrutiny of that funding, for archaeological research.

A good example of procedural evaluation concerns the effectiveness of shovel testing operations. In recent years shovel testing, or similar methods of subsurface testing, have been increasingly advocated as a site discovery procedure (Lovis 1976). While highly touted and widely adopted there have been few published evaluative statements, and the actual usefulness of the procedure remains undocumented.

Differences in artifact recovery are apparent when shovel test fill is screened rather than troweled, yet this remains to be thoroughly documented. What is indicated is that shovel testing tends to be labor intensive, with an undocumented return on the investment. Effective subsurface testing procedures must be developed since a number of recorded sites could have only been found by some sort of excavation strategy. Until alternative methods have proven to be successful, shovel testing will continue to be used on the Forest.

The use of fireplows has been considered as an alternative to shovel testing. Fireplows have been used effectively by the Forest Service in locating and determining the extent of archeological sites (Logan 1980). A fireplow is pulled behind a small dozer, making a cut approximately

three feet in width and about one foot in depth. This method is especially useful in areas of low ground visibility. Fireplows cause minimal damage to cultural resources and the efficiency of this method far exceeds that of shovel testing.

Forest Management Impact Studies

There is a need to evaluate the various forest management practices for the potential of site disturbance caused by each activity. As former Assistant Secretary of Agriculture Rupert Cutler (1980:6) states. "We need improved methods for assessing and predicting potential impacts upon cultural resources ..." Recent work in the Forest Service Northwest Region has focused on quantifying the extent and duration of adverse effects created by various forest management practices (Wildesen 1978). Studies which quantify resource damage created by Forest management activity need to be conducted in the Southeastern Forests.

The effects of forest management activities on cultural resources have not been well documented. The amount of disturbance expected can vary with the landform, the moisture content, and the physical properties of the soil. Studies are needed which correlate these variables with activities such as timber harvesting and site preparation.

Archaeological Site Management

Once archaeological sites have been located they should be thoroughly documented. Cultural resource reports for projects conducted within the Forest document field and laboratory procedures and results, together with encountered sites, their location, content, and general environmental associations. There are a number of reasons for such a policy. First, the careful and complete documentation of field and laboratory activity is the responsibility of every professional archaeologist. This provides the cultural resource manager with the information necessary to evaluate or expand upon previous work.

Additional reasons why effective documentation is important in the vicinity of the Forest is that very little is known about the archaeological resources in the Mississippi coastal plain. Descriptive summaries of anything more than the most general nature are lacking, and any detailed report on the archaeological resources that occur in the area is of value. Since site information is the basis upon which all subsequent archaeological research is built, it is important that data be professionally documented. Accurate site records are essential to the development of a larger, areal perspective. All archaeological sites which are located on National Forest lands, whether they meet the criteria necessary for nomination to the National Register or not, will be placed on the Mississippi State-wide Inventory maintained at the Mississippi Department of Archives and History.

Archaeological Site Preservation

Emphasis will be placed on the in-site preservation of cultural properties whenever possible. As a result of its long term commitment to

land management, the Forest Service offers the opportunity to manage cultural resources as opposed to the mere salvage of archaeological data. The Forest Service often has the alternative of site avoidance, thereby allowing us to "bank" archaeological resources (Peterson 1980). Forest Service cultural resource specialists, as a result of close cooperation with the other functional units within the agency (engineering, timber, etc.), can often recommend the use of less destructive methods and/or equipment. In resolving resource conflicts involving incompatible uses of lands which contain cultural resources the concept of archaeological values should be utilized. Wildesen (1978) has pointed out the advantages of using a site conservation framework as opposed to the traditional salvage archaeology framework in assessing cultural resources. In other words, the option of preserving and managing the site instead of salvaging it should be given priority. The traditional salvage archaeology framework is "based on a limited view of archaeological values" which results in site exploitation (Wildesen 1978). The site conservation framework is based on the broader concept of archaeological values, including aesthetic, recreational, interpretive and scientific values. The utilization of this framework insures that all potential values will be considered in the resolution of land-use conflict situations, assuring us that the future supply of interpretive sites will not be sacrificed for current limited research goals (Wildesen 1978).

Because of the non-renewable nature of cultural resources every reasonable attempt will be made by the Forest Service to preserve them in place. When cultural resources are threatened by other resource activities, a reasonable effort should be made to redesign the activity to avoid adverse effects to the resource. When avoidance is not possible, the cultural resource values should be conserved through scientific removal, analysis, and reporting.

In determining the effects of an undertaking on cultural resources both direct and indirect impacts should be considered. Direct impacts include the effects an action has on resources as a direct and immediate result of construction and development. Destruction of archaeological sites and their environment by earth moving, plowing, flooding, and building construction are direct impacts. Indirect impacts include those which are not an immediate or direct result of an action, but which would not occur without it. These include actions which expose resources within and adjacent to the development to adverse effects such as accelerated erosion, and road building which creates better accessibility and leads to increased vandalism.

Use of Computers for the Storage and Manipulation of Data

The computer has become an important tool for the storage and analysis of data gathered by the archeologist. Former Assistant Secretary of Agriculture Rupert Cutler (1980) also recognized the need for improved data management: "We need better data base systems, more complete cultural resource inventories, and better means of managing and exchanging data and other information."

The Southeastern Region of the Forest Service is presently developing a regional Cultural Resource Management data base system using System 2000. If developed properly this system should allow manipulation of large amounts of data which can be utilized in forming predictive site locational models. It should be recognized that the Forest Service is entering the initial phase of computer programming - the storage of large amounts of raw data. Before site prediction models can be formulated, large area surveys representative of the various ecological zones of the Forest must be completed. Once formulated, site prediction models must be field tested for feasibility.

Computer storage provides a readily accessible data assemblage which can be used to predict the probability of site density in specified areas. Current methods of assessing the archeological significance of an area utilize subjective, non-quantified information which cannot be verified. The development of an accurate land use system for cultural resources will require the collection of large amounts of additional raw data and the formulation, testing, and modification of settlement models.

Another major use of computer technology, linear programming, is being utilized by the Forest Service in developing Land Management Plans. Linear programming is a method used to allocate limited resources among competing activities in an optimal manner. Presently, the linear program in use in Land Management Planning, Forplan, does not contain cultural resource data in developing constraints. The model does not, therefore, consider the cost of cultural resources management in economic analyses of project feasibility. The optimal management solutions are reached without cultural resource input. Inclusion of cultural resource data during planning stages will insure the early consideration of cultural resource costs and benefits in making management decisions. The value of cultural resources is not easily quantified, however, it is possible to enter other subjective variables into the program (e.g., landscape architecture). The incorporation of cultural resource variables into Forplan and other linear programming models to consider cultural resources in developing the original optimal management solution, rather than considering these resources after this solution has been identified, is a major task.

Interdisciplinary Approaches to Archeological Research

Watson *et al.* (1971:153) have identified long term interdisciplinary studies of regions as the "single most obvious trend in contemporary archaeology ..." Interdisciplinary efforts involving an areal as opposed to a site specific orientation have become more common since the 1960's. Interdisciplinary archeological projects:

... should be conceived and handled as a completed cooperative affair among the full-time collaborators (archaeologist working with botanists, ethnologists, zoologists, geologists, physical anthropologists, and so on). The ideal archaeological project of the future should also have ready access to the services of a variety of technicians who might be consulted about plant and animal remains, the identification of raw materials used to manufacture artifacts.

details of the history or ethnohistory of the region, the source areas of imported items, the nature of the prehistoric climate and land forms, or certain aspects of the social and political organization of contemporary local communities.

There should also be excavation technicians who might be called in to exercise their special skills as bulldozer operators, flotation experts, burial experts, and so on (Watson et al 1971).

The Forest Service Cultural Resource Specialist has a number of specialists available for consultation. These include soil scientists, geologist, hydrologists, wildlife biologists, foresters, aerial photograph interpreters and illustrators. Close cooperation between these specialists will be mutually beneficial in carrying out the goals of the Forest Service.

Awareness and Understanding of Cultural Resources

The Forest Service encourages the use of cultural resource values for public education and interpretation: "The Forest Service also is developing a program of enhancement, development, and interpretation -- using the resource for the education, interest and enlightenment of the public" (Peterson 1980:5). Chief Max Peterson has stated that: "Forest Service use of the cultural resource includes research studies designed to inform and educate the interested public. Resource overviews, archaeological assessments, and research reports are produced and made available for public use and benefit" (1980).

Former Assistant Secretary of Agriculture Cutler recognized the need for Forest Service cultural resource training: "If the Department of Agriculture is to carry out its cultural resource responsibilities, we must first open the eyes of our own people" (1980). To accomplish this, awareness training sessions on cultural resources have been presented on the Forest. When District personnel are aware of the presence and importance of cultural resources, they can often assist the archaeologist in managing cultural properties. Often, District personnel can notify the Cultural Resource Specialist of the existence of archaeological sites early in the planning process. Such an early warning system will facilitate project completion, allowing alterations in project design to be made, when necessary, with minimal effect on the overall project.

The Forest Service plans to continue to provide cultural resource training for Forest Service employees. For example, this overview should be required reading for professionals on the Districts. Technicians involved in cultural resource management should also become familiar with this document.

A program of education and awareness of cultural values and federal cultural resource legislation aimed at the public would help in reducing vandalism. Information located at the Ranger Stations, trailheads, and recreation areas can be used to educate the public thereby lessening vandalism of cultural resources.

Interpretation of Cultural Resources

Man has lived on what is now the National Forests in Mississippi for thousands of years. The history is written in the ground and in the artifacts he left behind. This panorama of man's occupation should be incorporated into interpretive and recreation site designs to complement both the cultural and recreational values (Lalande et al. 2977:63).

A number of historic and archaeological sites are located on the Forest which offer unusual recreational potential for public use. Close cooperation between the managers of cultural resources and recreation in developing the interpretive aspects of the forest will result in offering the forest visitor a broader appreciation of his or her national heritage.

Cultural Resource Protection

A study and cultural resource vandalism reported that there are two major groups responsible for destruction of archaeological sites (Williams 1978:130). The first consists of people living in the vicinity who know the land and its resources. These are generally adults who travel in off-road vehicles. A large percentage of the vandalism that occurs on National Forests, however, is done by people who have no intention of being destructive. Because of their ignorance, curiosity, and carelessness they destroy sites without being aware of the impact. The incidence of vandalism is positively correlated with the level of visitation. Improved access to what were once isolated areas has increased this problem.

In order to reduce the impact of cultural resource vandalism, personnel at both the field level and the administrative level must coordinate their efforts using a twofold approach. For those persons who inadvertently destroy cultural resources, an educational approach is most useful. Strong on-site interpretive programs will help to reduce vandalism caused by ignorance and carelessness. Maintaining or creating difficult access to unprotected resources by closing roads and erecting barriers will cut down on site destruction. The public should be made aware that legislation exists to protect cultural resources through pamphlets similar to the Forest Service "Protecting Your Heritage" publication. Personal contact with the public should be stressed instead of using a hard-line authoritative approach.

Dealing with the persons who knowingly destroy archaeological sites, motivated by the personal desire to collect or monetary gain, is more difficult. A more authoritative approach is needed in these cases. These people must be made aware of the possible consequences of their actions. The Archaeological Resources Protection Act of 1979 should be publicized. This act provides strong protection for archaeological sites located on federal lands. It contains substantial civil and criminal penalties designed to halt the destruction of archaeological resources. Criminal penalties for persons convicted of knowingly violating this law can go as high as \$20,000 and/or two years imprisonment for a first conviction. In case of a second conviction or

subsequent violation, penalties can reach \$100,000 and/or five years imprisonment.

Training for Forest Service employees should be continued. Federal employees who are collectors themselves not only destroy sites but fail to provide a positive example to the public they serve. The Washington Office is expanding the USDA Employees Responsibilities and Conduct Handbook to include cultural site vandalism among the prohibited behavior defined for employees. The Washington Office has proposed a Cultural Resource Law Enforcement Notebook and Training Session for Forest Service Law Enforcement Officers.

Cultural Ecological Questions

Cultural ecology is the study of how human populations live within and make use of their surrounding environment (Flannery 1967, 1968; Vayda, ed. 1969). A primary emphasis on such an approach involves the determination of how natural environmental conditions shape and constrain human behavior. The occurrence and distribution of archaeological sites is an important factor. Site locations and contents may be examined, for example, for clues about settlement patterning and the selection and procurement of food and other resources. Through careful examination, recognizable adaptational patterns may be noted, and through further examination, explanations for these patterns may be proposed. In the vicinity of the Forest work along these lines is beginning to emerge as the basic culture-history of the area becomes better understood. Much of this activity has been inductively oriented, however, consisting of the inspection of data sets to see if environmental associations are present. Currently four major problem areas are under investigation in the lower coastal plain that might be considered cultural-ecological in orientation:

- 1) The nature of prehistoric sites in the riverine and interriverine areas of the lower coastal plain.
- 2) The nature of prehistoric sites along the coast and in the interior areas of the lower coastal plain.
- 3) The nature of prehistoric lithic raw material procurement and use in the lower coastal plain.
- 4) The evidence for and against a prehistoric transhumant settlement pattern, between the coast and the interior, in the lower coastal plain.

Cultural-Historical Questions

The reconstruction of local culture-history is another major archaeological orientation applicable to cultural resource work in the Forest. For the prehistoric era this approach refers, generally, to the development of descriptive syntheses, or archaeologically derived "histories," of the human occupation of the area. At present little is known about even the occurrence of specific archaeological materials in the lower coastal plain. Although inductive attempts at pattern

recognition have appeared using large sites, little is known about individual site size, content, or function (cf. DeLeon 1981).

From a cultural historical perspective, resolving the distributions of specific artifact categories should help indicate the geographical extent of prehistoric populations, or minimally of shared technologies or styles. A period by period examination of these distributions, furthermore, might indicate changes related to increased or decreased group size or interaction, as well as data about group adaptation, and adaptational shifts. Comparison of coastal and interior assemblages would also be important, particularly since little is known about the occupation of each area or the possible history of interaction between these areas.

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APPENDIX A

The Old Federal Road and Andrew Jackson's March Across the Area of the DeSoto National Forest in 1814

One cultural resource of local historical significance is the path of General Andrew Jackson's army across south Mississippi during November 1814 while en route from Mobile to the Battle of New Orleans, which concluded the War of 1812. The path the army took for the campaign led them across the general center of the Black Creek District of the DeSoto National Forest. Very few vestiges of the path remain today, although parts of the route can be traced from historical documents and maps. This report will attempt to document the army's path across the DeSoto National Forest from the available literature. It should be emphasized however, the the documents assign very little historical import to this event which involved but three days of travel. Jackson's army had up to this point in time attacked the British in Pensacola from Mobile. Immediately prior to that campaign, Jackson effectively concluded the Creek Wars with the Battle of Horseshoe Bend. Jackson's March across south Mississippi was essentially a transient event, overshadowed by more pressing military concerns.

Although the route Jackson's army traveled was an established trail at the time, local historical folklore has tended to overly emphasize the actual historical relevance of the event. Accordingly, the local perceptions of the event relates that Jackson's army, in fact, built not only the road but several improvements as well, such as bridges and corduroy fords. Local discoveries of corduroy in apparently strategic locations, preserved in creek beds, are summarily assigned to Jackson's march. It is doubtful, however, that the relict corduroy fords encountered today can be tied positively with Jackson's march, particularly in the area in question, for several reasons. These include the questionable usage of corduroy along the trail at the time because the trail was essentially a "Frontier" path with little expectation for heavy usage. The narrative of the event by Major Tatum, discussed more in detail below, indicated that the army moved through the area rather quickly without taking time to construct such fords, and no mention is made of having constructed fords and bridges. Corduroy ford construction is mentioned in Civil War related documents, particularly those of General Davidson's Raid of 1864 which was a Federal expedition against the Mobile and Ohio Railroad, and which involved travel through the vicinity, though northerly, of the route of Jackson's March (W.P.A. 1939). Davidson's report mentions: "repaired and built upward 15 bridges _ and laid miles of corduroy over the swamps of Louisiana and Mississippi" (Davidson 1864). Because corduroy fords were built and used into the twentieth century, it is very improbable that any can be dated with certainty. Other variations of the local tale of Jackson's March stress that the army was in such a hurry to get to New Orleans that they literally followed a compass line westward without following existing pathways.

In Mississippi two "Jackson's Military Roads" or trails are recognized, one being the east-west route of 1814 described herein and only locally called by that designation, and the other "Jackson's Military Road"

proper crossing the state in a northeast-southwest direction. The origin and exact location of the latter road is yet an enigma (Bailey 1973). Disregarding the local historical folklore, the route taken by Jackson's Army across south Mississippi, with minor exception, followed the old Federal Road, which was authorized by Congress and established in 1806 to extend the federal mail route from Fort Stoddart on the Alabama River to the Pearl River (Carter 1937:461-477). This road was also known as the "Old Post Road" in the G.L.O. surveyors' records of 1810 by C. C. Stone; however, the plats of the townships constructed from the field notes in 1810 and 1823 fail to indicate the location of the post road which was ordinarily done. The only exception is in TIN R10W which has the road located on the plat. The road appears on the John Melish map of 1819, which is constructed from the G.L.O. survey notes; the Finley map of 1822, and anonymously published map of Mississippi ca. 1842; and the Thomas Cowperthwait map of 1852. Graphic evidence for the road does not appear to exist beyond the latter date, and it undoubtedly fell into disuse by the Civil War period. The Gray's Atlas map of 1873 does not even show the road, although by this time the route from Mobile to New Orleans was shortened and facilitated by the Mobile and New Orleans Railroad, built during the period between 1860 and 1870.

A brief description of Jackson's route is provided in the journal of Major Howell Tatum who served as General Jackson's topographical engineer during 1814 (Bassett and Fay 1921:89-93). Tatum devotes little space in his journal describing the expedition through the area in contrast to lucid and lengthy notations concerning other aspects of the campaign. Similarly, Major A. LaCarriere Latour, Jackson's chief engineer for the battles of Pensacola and New Orleans constructed several maps of those campaigns, none of which indicate Jackson's path across south Mississippi. Latour's lengthy account of the battles in his book, Historical Memoir of the War in West Florida and Louisiana in 1814-15, omits entirely the interlude between Mobile and New Orleans (Latour 1964). The study by Mrs. Dunbar Rowland (1968) in Mississippi Territory in the War of 1812 also fails to supply historical descriptions of the march in the area under consideration. Such omissions should be viewed as indicative of the unimportance given the event by the historical chroniclers.

According to Tatum the army departed Mobile for New Orleans on November 22, 1814 and initially traveled north from Mobile in order to meet the Federal Road which headed west from Fort Stoddart. Upon entering the Federal Road the army, traveling west, reached Gattin's Ferry on the Chickasawhay River, in the vicinity of Leakesville, by the evening of November 24, where they met with General Coffee's brigade en route to Baton Rouge, and halted for the night. Major Tatum observes that even by this time portions of the Federal Road were seldom used and were falling into disuse, as indeed the area was very sparsely settled (Bassett and Fay 1921:90-91). On November 25 the army departed from their encampment on the west bank of the Chickasawhay to "Otebbayhay Creek" (Big Oktibee Creek), then down the creek to Hogan's Ferry on the Leaf River. The location of Hogan's Ferry is known locally as Ollie's Ferry, located about two miles north of the Leaf community in Greene County, SEiSEi Section 10, TIN R8W.

The route taken from Gattin's Ferry on the Chickasawhay to the Leaf River crossing was apparently one instance where the army departed slightly from the path of the Federal Road. The old maps show the road extending nearly due west from Fort Stoddart to the Leaf River at present-day McClain, then trending southwest to the Black Creek crossing. McClain is identified on the Melish and Finley maps as Green County Court; on the 1842 anonymously published map as McMann's Cross Roads; and on the Cowperthwait map as Tatum Post Office. However, Major Tatum writes that their course from the Leaf to Black Creek was nearly due west, instead of southwest, the course the road takes from McClain. From Hogan's Ferry, the army evidently again entered the Federal Road and traveled 18 miles west to Joseth Mimm's Ferry on Black Creek where they camped for the night of November 25. Part of the path of the Federal Road between Hogan's and Mimm's Ferries is documented on the 1810 survey plat of TIN R10W, where it appears to meander in an east-west direction across the line for the first mile north.

Since Mimm's Ferry is not preserved in a place name, its exact location is speculative. Locally, it is believed that Jackson's army crossed Black Creek in the vicinity of present-day Moody's Landing, however, based on Tatum's account, which is extremely brief, of the Black Creek crossing, the army crossed the creek a considerable distance downstream from Moody's Landing. Tatum states that they approached Black Creek from the east, having traveled 18 miles from the Leaf River; Moody's Landing is on the north bank of the creek. It is more probable that Mimm's Ferry was situated about 11 miles upstream from Janice Landing in the NEiNEi, Section 35, TIN R11W, which aligns more directly with the Federal Road as indicated on the plat for TIN R10W as well as with Hogan's Ferry given the 18 miles distance. In addition, Black Creek trends more southerly in this area, allowing for an eastern approach. This location for the Black Creek crossing also fits comfortably with the route of the Federal Road as depicted on the Melish, Finley, and Cowperthwait maps.

The army's route from Black Creek to the Pearl River becomes even more problematic due to the extremely brief narrative for this aspect of the march given by Tatum. The Melish, Finley, and Cowperthwait maps all show the Federal Road north of, but generally paralleling the 31st meridian, with a minor exception of the road dipping slightly below the meridian at the present-day location of the point where the Forrest, Stone, and Pearl River county lines meet. Unfortunately the old maps are not in total agreement locating the road with reference to existing points. The brief account by Tatum sheds no light on the location of the road from Black Creek. The army crossed the creek on the morning of November 26, and halted early for the night. Tatum gives no distance or direction from Black Creek to their encampment, however they proceeded the next morning to Red Creek ("Bogue Homa") which was 11 miles from their overnight camp. At this point the record becomes cloudy, due in part to the slight inconsistencies depicting the road on the old maps, lack of detail in Tatum's journal, and conflicting local versions of the event. For example, Tatum notes that Red Creek is a fork of Wolf Creek, or Wolf River, which is erroneous; Red Creek is a fork of Black Creek. Local historical lore presents two versions of the route from Black Creek. One version places the path from Black Creek as southwesterly.

while the other considers the route to have been more westerly oriented, through modern-day Lumberton. The truth probably lies in between, which when reference is made to the old maps particularly the Melish maps of 1819, the road dips southwesterly from Black Creek then trends northwesterly, and assumes a more western orientation in the area of Lumberton, where Red Creek could also have been crossed.

The story of Jackson's march across south Mississippi as assembled from official records and historical documents is a very brief one. From all accounts it can be summarily stated that the march of Jackson's army from Mobile to New Orleans was hardly the high point of the events of 1814. In addition, the broad pattern of south Mississippi history assigns little importance to the Old Federal Road, in contrast to historical trails elsewhere in the state (such as the Natchez Trace or the Three Chopped Way).

Perhaps the reason for the lack of emphasis given to early settlement routes in southeast Mississippi generally is the ease of travel afforded by the open character of the piney woods, unlike other parts of the state during the early periods. Such a notion is attested to, in part, by the relatively short time it took for the early township surveys in the area, as well as the later accounts by J.F.H. Claiborne who traveled through the area during the 1840's (1862, 1906).

Nevertheless, it can't be denied that Jackson's March across south Mississippi was significant to the corpus of historical lore for the local area. However, the events preceding and following the Mississippi excursion are immeasurably more historically relevant to the state and nation as a whole; yet the event of the march will continue to provide another anecdote to the colorful history of the piney woods.

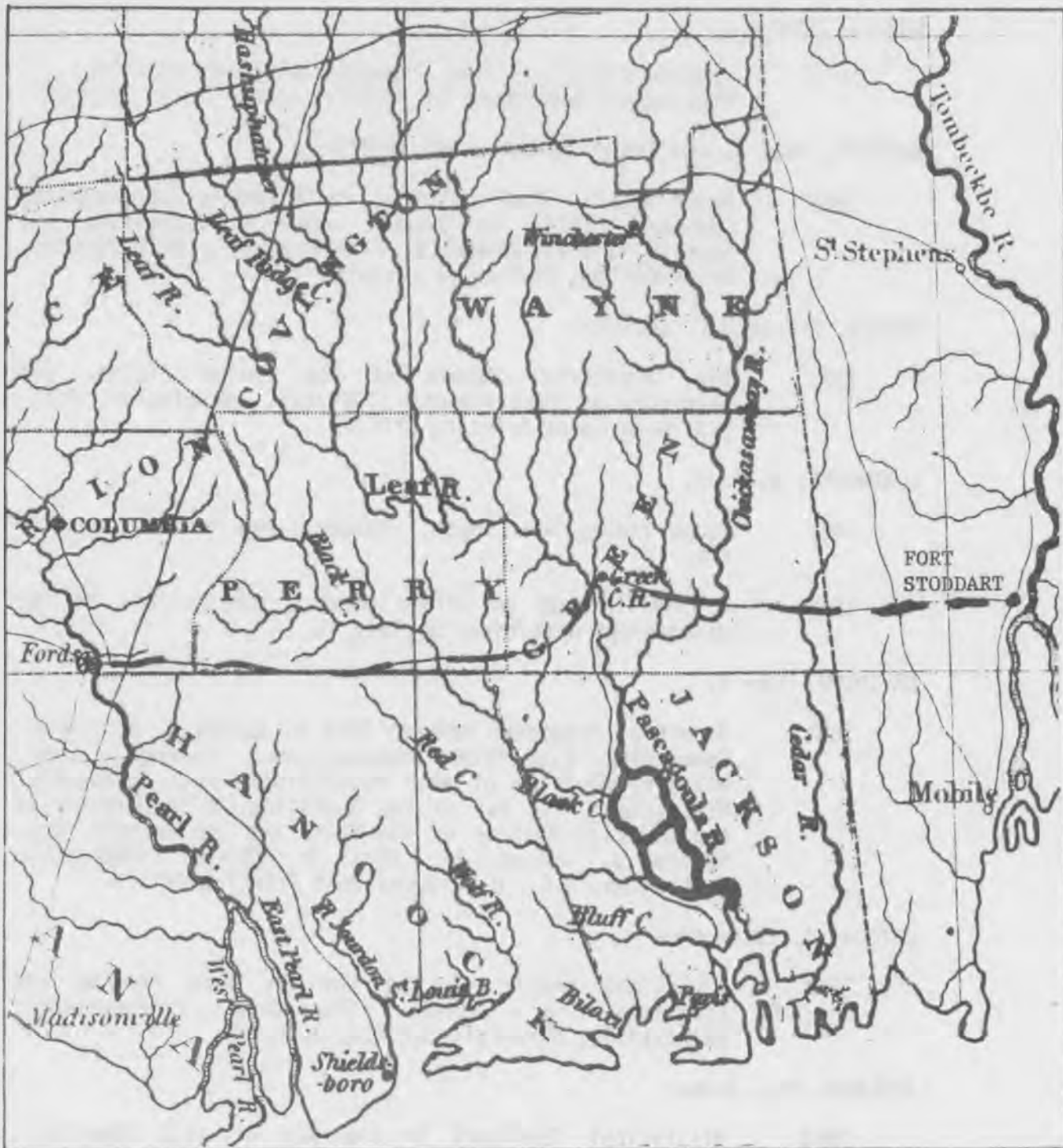


Figure 3

ENLARGEMENT OF A PORTION OF THE FINLEY MAP OF **1822**
 DEPICTING THE ROUTE OF THE FEDERAL ROAD ACROSS SOUTH MISSISSIPPI
 FROM FORT STODDART ON THE ALABAMA RIVER TO FORD'S CROSSING ON THE PEARL RIVER

SCALE: ONE INCH EQUALS APPROXIMATELY 16.5 MILES

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