ARCHAEOLOGICAL SUBSURFACE SURVEY IN B. F. GRANT MEMORIAL FOREST:

AREA 4, STAND 217

By

#### LUAN THANH CAO

(Under the Direction of Mark Williams)

#### **ABSTRACT**

This study aims to compare the subsurface and pedestrian methods used in Phase I archaeological survey in B. F. Grant Memorial Forest, Putnam County, Georgia. The goal is to determine the most efficient and effective method of survey for the identification of archaeological sites for the B. F. Grant Memorial Forest environment. The project was conducted in Area 4 at Stand 217, a 19.91 hectare pine tree stand. A subsurface survey method was employed at 30 meter intervals. A total of 226 shovel test pits were dug with seven archaeological sites identified. Three sites were Late Mississippian, Lamar phase, one was 19<sup>th</sup> century historic, and three were historic rock piles. It was determined that within cleared environments where the substrata is disturbed from machinery approximately seven times more sites were yielded with the pedestrian survey method.

INDEX WORDS: Archaeology Survey, Phase I, Putnam County, Shovel Testing, Bishop F. Grant Memorial Forest

# ARCHAEOLOGICAL SUBSURFACE SURVEY IN B. F. GRANT MEMORIAL FOREST: AREA 4, STAND 217

by

# LUAN THANH CAO

B.A., University of Mary Washington, 2011

B.S., University of Mary Washington, 2012

A Thesis Submitted to the Graduate Faculty of The University of Georgia in Partial Fulfillment of the Requirements for the Degree

MASTER OF SCIENCE

ATHENS, GEORGIA

2013

© 2013

Luan Thanh Cao

All Rights Reserved

# ARCHAEOLOGICAL SUBSURFACE SURVEY IN B. F. GRANT MEMORIAL FOREST: AREA 4, STAND 217

by

# LUAN THANH CAO

Major Professor: Mark Williams

Committee: Ervan Garrison

Cari Goetcheus

Electronic Version Approved:

Maureen Grasso Dean of the Graduate School The University of Georgia August 2013

# To my fiancée Jordan Elizabeth Brothers

# Acknowledgements

I would like to first thank my graduate advisory committee consisting of Dr. Mark Williams, Dr. Ervan Garrison, and Ms. Cari Goetcheus for the experiences and guidance while studying here in Athens, Georgia. I would also like to thank Mr. Dustin Thompson of the Bishop F. Grant Memorial Forest staff for giving me the permission to conduct research in the forest land and aiding me with maps of the research area.

Foremost I would like to thank Matt Wynn, fellow graduate peer, for whom without I would not have been able to complete this project. Through the thick, thorny briers, poison ivy, mud and stomachs full of bar-b-que we persisted. I still feel bad that you dug almost all of the shovel test pits while I screened, but you insisted to do so.

In addition I would like to thank my other fellow graduate peers, Maran Little, her dog
Ham, and Christina McSherry, for your assistance when possible. Thanks to the volunteers
Travis Jones, Jessica Freeman, and Shannon Lowman for assisting in the survey, although
fruitless in finds, your assistance was invaluable. I would also like to thank Brittany Barnhill,
Aimee Sonnier, and Rose Acres Egg Farm for towing my vehicle when we got stuck in the mud.

I would to thank Dr. Douglas W. Sanford and Andrew P. Wilkins, M.A., for their influence as I travelled forth into the field of archaeology. Without the both of them I would not be where I am today. Last but not least, I would like to thank my mother, Lieu T. Cao, and my fiancée, Jordan Brothers, for supporting me while I worked on this degree so far away from home.

# TABLE OF CONTENTS

		Page
ACKNOV	WLEDGEMENTS	v
LIST OF	TABLES	viii
LIST OF	FIGURES	ix
СНАРТЕ	R	
1	INTRODUCTION	1
	Purpose of Project	1
	The Project	2
2	PREVIOUS RESEARCH	4
3	BACKGROUND AND ENVIRONMENTAL HISTORY	6
	Background History of Bishop F. Grant Memorial Forest	6
	Environmental Setting	8
4	REGIONAL CULTURAL HISTORY	12
	Prehistoric Periods	12
	Historic Period	18
5	FIELD METHODS	21
	Site Planning and Grid	21
	Subsurface Survey Method for High Probability Areas	22
6	LABORATORY METHODS AND ANALYSIS	24
	Artifact Processing Data Analysis and Curation	24

	Artifact Terminology	25
7	THE PROJECT AREA	31
	Area 4, Stand 217 and Stand 255	31
8	RESULTS	32
	Phase I Survey Results of Area 4, Stand 217	32
9	DISCUSSION	44
	Effectiveness of the Subsurface Survey Method	44
	Artifact Distribution and Analysis	47
	Stratigraphic Analysis	51
	Definition of an Archaeological Site	57
10	CONCLUDING REMARKS	58
	Summary	58
	Limitations	60
	Recommendations	61
WORKS CITED		62
APPEND	ICES	69
A	SURVEY DATA	69
В	SITE FORMS	75

# LIST OF TABLES

	Page
Table 1: Site Designation, Type, and Cultural Period found in Area 4, Stand 217	32
Table 2: Artifacts Found in Area 4, Stand 217	32
Table 3: 9PM2232, Artifacts	35
Table 4: 9PM2233, Artifacts	37
Table 5: 9PM2281, Artifacts	39
Table 6: 9PM2282, Artifacts	40
Table 7: Pedestrian Survey Results	45
Table 8: Subsurface Survey Results	45
Table 9: Stratigraphy of Area 4, Stand 217	51

# LIST OF FIGURES

	Pa	ige
Figure 1:	Satellite Image of Bishop F. Grant Memorial Forest and its Boundary	7
Figure 2:	Physiographic Map of Georgia (Clark and Zisa 1976)	9
Figure 3:	Soil Map of a Portion Bishop F. Grant Memorial Forest, USDA Web Soil Survey	.10
Figure 4:	Typical Ultisol Profile	.11
Figure 5:	Distribution of Ultisols	.11
Figure 6:	Partial ArcGIS Map of Area 4, Showing Stand 217	.31
Figure 7:	Satellite Image of Stand 217 outlined	.31
Figure 8:	Stand 217's tree line and Stand 256 (Clear cut stand) Facing South	.31
Figure 9:	Area 4, Stand 217, Sites	.33
Figure 10:	Area 4, Stand 217, Shovel Test Pits.	.34
Figure 11:	9PM2232, Site Boundary	.35
Figure 12:	9PM2232, Photograph of Site	.35
Figure 13:	9PM2232, Artifacts	.36
Figure 14:	9PM2233, Site Boundary	.37
Figure 15:	9PM2233, Photograph of Site	.37
Figure 16:	9PM2233, Artifacts	.38
Figure 17:	9PM2281, Site Boundary	.39
Figure 18:	9PM2281, Photograph of Site	.39
Figure 19.	9PM2282 Artifact	39

Figure 20: 9PM2282, Site Boundary	40
Figure 21: 9PM2282, Photograph of Site	40
Figure 22: 9PM2282, Artifacts	40
Figure 23: 9PM2283, Site Boundary	41
Figure 24: 9PM2283, Photograph of Site	41
Figure 25: 9PM2284, Site Boundary	42
Figure 26: 9PM2284, Photograph of Site	42
Figure 27: 9PM2285, Site Boundary	43
Figure 28: 9PM2285, Photograph of Site	43
Figure 29: 9PM2233, Stand 256, Bulldozer Track	46
Figure 30: 9PM2233, Surface Finds	46
Figure 31: Area 4, Stand 217, Ceramic Sherd Distribution by Weight	50
Figure 32: Area 4, Stand 217, Percent Slope	53
Figure 33: Area 4, Stand 217, Topographical Zones	54
Figure 34: Area 4, Stand 217, Depth to Sterile Subsoil	55
Figure 35: Area 4, Stand 217, Topographical Zones and Depth to Sterile Subsoil	56

#### CHAPTER 1

#### INTRODUCTION

# Purpose of Project

The Georgia Council of Professional Archaeologist's Georgia Standards and Guidelines for Archaeological Surveys states that an, "Archaeological survey, often referred to as a Phase I or intensive survey, is a systematic, detailed examination of an area designed to gather information about archaeological sites. The goal of an archaeological survey is to identify all archaeological sites within the area of potential effects."

This project examines three topics. First, the project will look at the effectiveness of the subsurface survey method compared to the surface (pedestrian) survey method in the identification of archaeological sites. Subsurface surveying is the dominant method used in cultural resource management (Bigman et al 2009; McSherry, Wynn, and Cao 2013). Guest (2009) suggests that both methods are equitable while other researchers (Elliott 1981; Ives 1982; Keller 1982) suggest that pedestrian surveys yield significantly more artifacts in the right environment. Both methods have their strengths and weakness and it is likely that using a combination of the two would be more effective.

Second, the project will approach the definition of an archaeological site. Previous research (McSherry, Wynn, and Cao 2013) has suggested that the use of an "isolated find" is detrimental to the identification and recording of archaeological sites. The Georgia Standards and Guidelines for Archaeological Surveys defines an "isolated find" as,

"...no more than two historic or prehistoric artifacts found within a 30-meter radius. Isolated finds are, by definition, not considered eligible for listing on the NRHP. For

cases where an isolated find is unique, and potentially may be considered eligible for inclusion in the NRHP, it should be defined as a site. Deposits of cultural artifacts that have no integrity, such as road fill, stream gravels, or other situations where artifacts clearly are re-deposited, also should be considered isolated finds."

For the purposes of this project, an archaeological site is considered, "Anywhere anybody has done anything at any time (Williams, personal communication 2013). Although an "isolated find" may not have national significance, it is still an archaeological site and has the potential to contribute to local and regional levels of research.

Third, this project attempts to contribute data to the subject of settlement patterns.

Depending on the spatial and temporal characteristics of the sites identified in this project, the relationship of new sites to previously identified sites would either reaffirm settlement patterns or deviate from the norm. Studies in settlement patterns and archaeological site distributions (Pluckhahn 1994; Williams 1994; Williams 2000; Williams et al 2010) in Georgia are dependent on what data are recorded and available at the Georgia Archaeological Site File.

## The Project

A subsurface shovel test pit survey was conducted at The Bishop F. Grant Memorial Forest in Putnam County, Georgia, in Area 4, Stand 217 (pine stand). The tree stand is 49.20 acres (19.91 hectares). This area was chosen for many reasons. First, the property is owned by The University of Georgia's Warnell School of Forestry and Natural Resources. Permission to conduct the survey was readily available thanks to Mr. Dustin Thompson.

Second, there has been a considerable amount of archaeological research and survey previously in Bishop F. Grant Memorial Forest. In relation to this project, two adjacent clear-cut tree stands, one located to the north (Stand 256) and the other to the south (Stand 244), have been surveyed with a pedestrian survey method in 2012 by the University of Georgia's Department of

Anthropology's Archaeology Field School. This made Stand 217 an ideal location to conduct a subsurface survey for comparative purposes.

Third, the current use for each area and tree stand in the Bishop F. Grant Memorial forest is well documented. The 12,000 plus acres of Bishop F. Grant Memorial Forest are chiefly undeveloped with the exception of a few dirt and gravel roads since its acquisition in by the Warnell School of Forestry and Natural Resources. Although plowing has occurred on these lands for well over 200 years if not more, prior to its acquisition by the University of Georgia, the disturbance is minimal in conjunction with the modern operations conducted at Bishop F. Grant Memorial Forest.

Lastly, concurrent to this project is a thesis study conducted by Matt Wynn (2013) who is specifically using the pedestrian survey method in clear-cut tree stands. Although the focus of Wynn's (2013) thesis is the identification of Archaic period sites and settlement patterns, his project recorded and submitted any and all types of sites found during survey with the same definition adapted for this project.

#### CHAPTER 2

## PREVIOUS RESEARCH

The first known archaeological survey of the Bishop F. Grant Memorial Forest was completed in the 1970s by Dean Wood (Williams, Personal Communication 2013). It was not until the early 2000s that many of the sites discovered by Dean Wood were revisited as well as recurring summer archaeology field schools by the University of Georgia's Department of Anthropology. The field schools focused on surveying clear cut tree stands.

Several projects have been conducted in or near the B. F. Grant Memorial Forest. In 1984, 1987, and 1991 to 2001, mapping and test excavations were conducted at the Little River site, 9MG46, (Williams 1990; Williams 2002; Williams 2004). In 2002 to 2004 testing and excavations were conducted at the Bullard Bottom Site, 9PM169 (Williams 2005). In 2002, 2004 to 2006, five archaeological sites were excavated, The Mohone Site, 9PM164, the RIP Site, 9PM161, the Other Site, 9PM182, the Evans Site, 9PM1417, and the Wood Site, 9PM162 (Williams 2006a; Williams 2006b; Williams 2006c; Williams 2006d). All of the sites listed were dated to the Late Mississippian, Lamar phase.

Guest (2009) conducted a shovel test pit survey in the Oconee National Forest and pedestrian survey in Bishop F. Grant Memorial Forest to research the question of which method is more effective in identifying archaeological sites. It was concluded that there are not dramatic differences between the two methods. In addition to Guest, several University of Georgia archaeology field schools have conducted pedestrian surveys including the previously mentioned Stand 224 and Stand 256 (Williams, Personal Communication 2013).

Wood and Lucas (2005) compared the two methods across Georgia with a focus on physiographic regions. It was concluded that, "...visual surveys on clear-cut areas have reported roughly two to three times the number of sites as those conducted with shovel testing in the same physiographic district" (Wood and Lucas:57-58). Other researchers such as Elliott (1981), Ives (1982), and Keller (1982) prior to Wood and Lucas also believe that walking surveys on clear-cut areas yield more sites. Other projects that included walking surveys can be found in Gresham (1987), Elliott (1981), Freer (1989), Chamblee (1997), and Waggoner (2002).

McSherry, Wynn, and Cao (2013) analyzed cultural resource management reports from 74 archaeological surveys conducted in Putnam County. Although the intent of the analysis was not to compare the two survey methods, it did generate data that was useful in this subject. It was concluded that from the 74 reports analyzed, all of the cultural resource management groups used subsurface surveys. Bigman et al. (2009) also came to the same conclusion that subsurface survey is the primary method used is cultural resource management. Other master thesis projects that utilized shovel test pit surveys or both methods include Basile (2011), Woodliff (2010), Freer (1989), and McKay (2011) in nearby the Oconee National Forest.

#### CHAPTER 3

#### BACKGROUND AND ENVIRONMENTAL HISTORY

# Background History of Bishop F. Grant Memorial Forest

The Bishop F. Grant Memorial Forest is comprised of 12,250 acres in the Piedmont region of east-central Georgia in Putnam County and Morgan County (33°24'36.62"N, 83°28'20.17"W)(Figure 1). During the Great Depression of the 1930's the land that encompasses B. F. Grant Memorial Forest and the Oconee National Forest today was originally privately owned. The lands were lost due to the previous owners' incapacity to pay taxes.

About 13,000 acres were purchased by the Federal Government and was then given to the University of Georgia's Board of Reagents informally in the 1940s and formally in the 1950s. The land was then distributed to the University of Georgia's College of Agriculture by the Board of Reagents. Eventually the 12,250 acres encompassed by Bishop F. Grant Memorial Forest today was redistributed to The University of Georgia's Warnell School of Forestry and Natural Resources from The University of Georgia's College of Agriculture as part of a land exchange. This left the College of Agriculture about 1,000 acres of the original plot today.

At present the Bishop F. Grant Memorial Forest is managed by the University of Georgia's Warnell School of Forestry and Natural Resources. It is also a designated state Wildlife Management Area. The forest consists of natural pine, pine plantations, pine hardwood, upland hardwood, and bottomland hardwood tree stands as designated by the Warnell School. The forest serves as an area for research, teaching, outreach, and revenue for Warnell the School of Forestry and Natural Sources and its programs.

The forest is divided into a two tier system. First the forest is composed of multi-acre lots called "stands". Second is composed of larger "areas" that contain multiple stands. These stands separate the whole of Bishop F. Grant Memorial Forest into different sections by species and use and they vary in size. There are upwards of 500 tree stands total distributed in 10 separate areas. Overall each stand can range from 20 acres in size to upwards of 200 acres. The pine plantation stands go through the cycle of being cut, burned, and then replanted in scheduled cycles. These cycles are on average 30 years.



Figure 1: Satellite Image of Bishop F. Grant Memorial Forest and its Boundary (User Generated from Google Earth

# **Environmental Setting**

# Climate

The climate of the area is characterized by an annual precipitation of 44 to 60 inches of rain. Autumn is typically a drier season with spring, summer, and winter with an equal amount of rainfall. There is a frost free period anywhere between 190 to 230 days out of the year. Snow is not unusual, but an accumulation of over one inch of snow is uncommon for this area. The mean annual temperature ranges from 59 to 64 degrees Fahrenheit. This area experiences cool winters (57 degrees Fahrenheit on average) and hot summers (89 degrees Fahrenheit on average). Topography

Putnam County is in the Washington Slope District of the southern Georgia Piedmont (Figure 2). It is characterized by a gently undulating surface which descends gradually from about 700 feet above sea level to about 500 feet above sea level (Clark and Zisa 1976). In addition Clark and Zisa (1976) note that streams occupy broad, shallow valleys with long gentle slopes separated by rounded divides. For Bishop F. Grant Memorial Forest specifically, the elevation ranges from a maximum of 620 feet above sea level to a minimum of 420 feet above sea level with Big Indian Creek running through the forest, a tributary of the Oconee River.

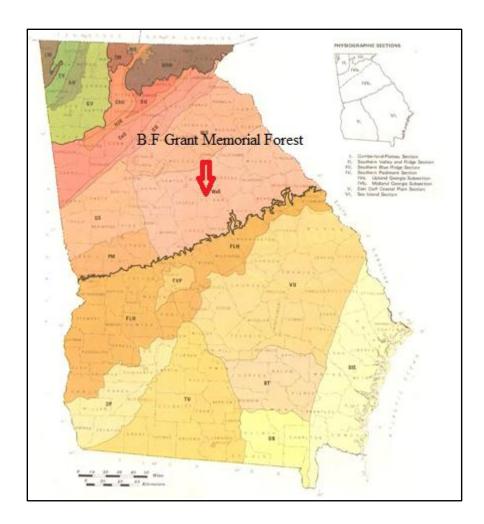


Figure 2: Physiographic Map of Georgia (Clark and Zisa 1976)

# Geology and Soil

From the United States Department of Agriculture's Natural Resources Conservation Service Web Soil Survey online application it was determined that the majority of Bishop F. Grant Memorial Forest is a Davidson ultisol loam and clay with a slope percent range of 2 to a maximum of 25 (Figure 3).

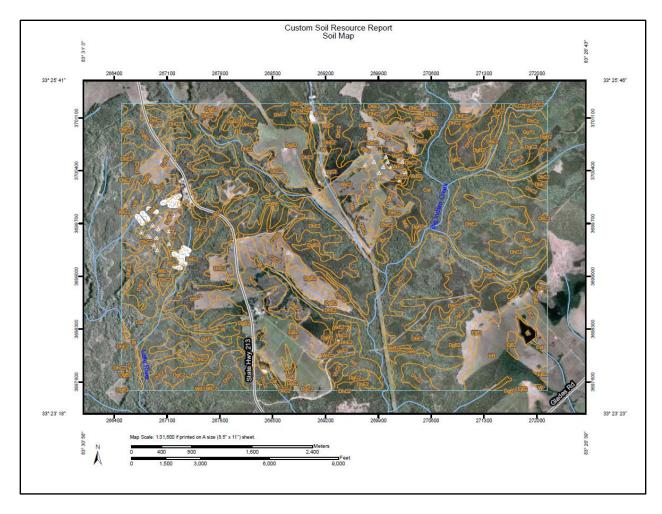
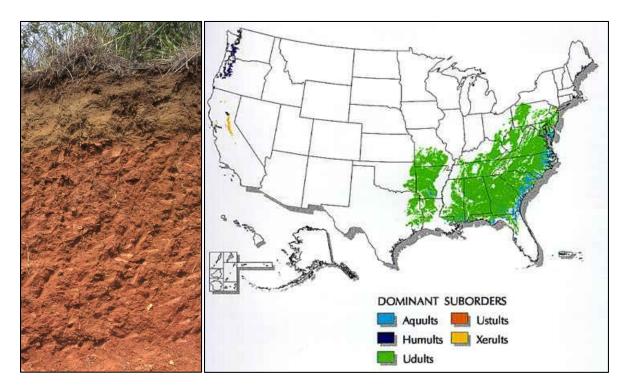


Figure 3: Soil Map of a portion of Bishop F. Grant Memorial Forest, USDA Web Soil Survey

Ultisols in general are characterized by occurring in a humid subtropical environment, with red clay soils (Figure 4 and 5). A typical soil profile in Bishop F. Grant Memorial Forest is characterized from the top up by 0 to 12 inches as a clay loam and 12 inches to 72 inches as clay.



Figures 4 and 5: Typical Ultisol Profile (Left) and Distribution of Ultisols (Right), (United States Department of Agriculture Natural Resources Conservation Service)

Saprolite is the primary subsoil present in the Georgia Piedmont. It is the parent regolithic material that forms the ultisol in this region. The saprolite is formed from metamorphic rocks by high-grade regional metamorphism. The majority bedrock found in this area is gneiss with variations ranging from biotite granite gneisses, feldspathic biotite gneisses, and amphibolite hornblende gneisses. According to the United States Geologic Survey 43% of the surface is covered by this material in Putnam County.

#### **CHAPTER 4**

#### REGIONAL CULTURAL HISTORY

#### Prehistoric Periods

# Paleoindian Period (ca. 10,000 B.C. – 8,000 B.C.)

Anderson et al. (1996:3) places the beginning of human occupation in the Southeast between 15,000 to 11,000 years before present. Diagnostic lithic material from this context is not specifically found in the southeastern United States. What can be found in Georgia are lanceolate Clovis, Folsom, Cumberland, Suwannee, Santa Fe, Simpson and Quad varieties of lithic industry. For this reason the history of Paleoindian period was extensively summarized and divided into its typical Early, Middle, and Late periods.

Along the Oconee River, O'Steen (1996) stated that the Early Paleoindian lithic materials were characterized by non-local origin, whereas the Middle and Late Paleoindian lithics were dominantly local quartz and chert. In addition, Dalton points occur at the end of the Paleoindian period and signify a transition into the Early Archaic period (Goodyear 1982).

Anderson et al. (1996:6) notes that during the Early Paleoindian period (11,500 – 11,000 B.P.) is characterized by chipped stone projectile points (similar to Southwestern Clovis forms). They were relatively large lanceolates with paralleled ground haft margins, slightly concave bases and single or multiple flutes (Anderson et al. 1996:6). Smaller forms are grouped under Clovis Variants and exhibit an extensive level of sharpening. At this time human populations were likely exploring and settling the region for the first time (Anderson et al. 1996:9)

During the Middle Paleoindian (11,000 – 10,500 B.P.), Anderson et al. (1996:6-7) notes that this period is characterized by smaller fluted points, unfluted lanceolate points, and fluted or unfluted points with broad blades and constricted haft elements. Some more specific points have been identified in Georgia including Cumberland, Suwannee, and Simpson types as well as Clovis variants and Clovis/Simpson forms. At this time human populations were likely establishing regional population concentrations and cultural variants (Anderson et al. 1996:9).

The last period, the late Paleoindian (10,500 – 9,900 B.P.) is characterized by Dalton projectile points and knives (Anderson et al. 1996:8). This includes points such as Quad and Beaver Lake types. The Classic Dalton is noted by its lanceolate blade outline and concave base and ground with lateral or basal margins. The blade edges were typically incurvate, straight, or excurvate. The Quad type are small lanceolates with ears, concave base, and pronounced basal thinning while Beaver Lake are small, waisted lanceolates with ears, weak concave base, and moderate basal thinning. At this time the human populations were likely transitioned to the Archaic period due to the environmental changes during the Holocene (Anderson et al. 1996:9).

Archaeological evidence suggests that Paleoindian occupations in Georgia were overall scarce, but for the sites that existed they are generally characterized by fluted and unfluted lanceolate projectile points, scrapers, gravers, burins, and spokeshaves (Anderson et al. 1990:25). These sites, based on the artifacts, are generally categorized into four types (Anderson et al. 1990:33-34), short term camps, quarry camps, residential camps, and kill sites. It is suggested that the subsistence patterns for Paleoindians was primarily hunting and gathering. These groups were small and highly mobile bands following wild foods and Pleistocene mammals and modern species such as deer and small game (Anderson et al. 1990:3).

# Early Archaic Period (8,000 B.C. – 6,000 B.C.)

Stanyard (2003:13) signifies the end of the Ice Age and extinction of megafauna as the beginning of the Archaic period. Forest shifted from a spruce and pine boreal species to oak and hickory species. With the extinction of megafauna hunting shifted to modern species (O'Steen 1996:8). In addition to this, people at this time had a seasonal foraging-migration strategy and did not practice horticulture (Stanyard 2003:14).

The point typically associated with this period is the side notched Big Sandy. In addition, corner-notched varieties were found including Bolen, Palmer, and Kirk. Later stemmed varieties appeared and in some cases bifurcated (St. Albans and LeCroy) (O'Steen 1996:52). Other lithic tools during this period were end scrapers, choppers, and wedges.

# Middle Archaic Period (6,000 B.C. – 3,500 B.C.)

The Middle Archaic period is correlated with the Altithermal period. This period is characterized by a warmer and wetter climate in the southeast which lasted approximately 2000 years (Dowd 1989). In relation to Georgia, there was a marked increase in population and an increase in local material – especially those related to lithic industry. In particular, Stanly, Morrow Mountain, and Guilford points are diagnostic of the Middle Archaic (Ledbetter et al. 1981). Among this lithic industry were bifaces, informal tools, and debitage. For the first time grinding stones made their appearance into the material culture (Dowd 1989).

In the Piedmont of Georgia, Middle Archaic sites are found in upland settings such as ridge crests (O'Steen et al. 2002). Sites of this period also appeared less frequently than they did in the Piedmont (O'Steen et al. 2002). Hunting and gathering was still a main staple for sustenance and shelters were likely temporary in nature (O'Steen et al. 2002).

## Late Archaic Period (3,500 B.C. – 1,000 B.C.)

The Late Archaic period is characterized by a progressively more sedentary way of life with the development of trade and exchange networks as well as the beginnings of domestication of plants (O'Steen et al. 2002). Settlements were often near rivers and the diet included freshwater shellfish.

Characteristic of the artifact assemblage of this period are large stemmed projectile points such as Savannah River, Maple, Gary, and Abbey (Coe 1964). Included in this are bowls, slabs, and perforated disks made out of soapstone – all of which were very common in the Piedmont and Appalachian mountain area where soapstone occurs naturally (Stanyard 2003). Other materials in the lithic industry of this period include grinding stones, atlatl weights, and pitted stones.

For ceramics, fiber tempered pottery makes its appearance towards the end of this period. It should be noted that instances of this ceramic has been seen as early as the Middle Archaic. This ceramic in particular marks the beginnings of the transition from the Archaic period to the Woodland period. Fiber tempered ceramics are most common in the Savannah River drainage (Elliott and Sassaman 1995) with plain and punctuated fiber tempered wares common along river systems and smaller creeks in the Ocmulgee Big Bend region (Snow 1977).

# Early Woodland Period (1,000 B.C. – 300 B.C.)

The Early Woodland period began with the widespread adoption of pottery and ends with the appearance of Hopewellian ceremonialism and exchange systems (Anderson and Mainfort 2002). During this time, settlement and subsistence are characterized by villages along creeks and river plains as well as some smaller sites interspersed in a variety type of environments (Caldwell 1950, 1957, 1958; Wauchope 1966). Hunting and gathering was still common, however there was an increasing number of other domesticated plants that were utilized such as

squash. Trading networks at this time were well established and mortuary practices become significantly more apparent or survive more readily in the archaeological record (Wood 1995).

For ceramics, the Early Woodland is commonly characterized by fabric impressed, sand tempered (Dunlap), simple stamped, bold check stamped, linear checked stamped, with sand and grit tempered (Deptford) (Snow 1977). Diagnostic projectile points of this period include small stemmed Thelma, large triangular Badin, and Yadkin types. Bowen (1989) expands extensively on other phases found within this period as well as cultural areas.

# Middle Woodland Period (300 B.C. – A.D. 500)

The Middle Woodland period is characterized by sites found in the lower Piedmont which were primarily small, seasonal occupations found along levees and terraces (Southern Research 2008). At this time period villages, as well as single households with possible year round occupation become evident (Williams 2006; Windham et al. 2008). It should be noted that a high percentage of Middle Woodland sites are found on sandy, fertile soil adjacent to rivers and creeks – especially in floodplains. This suggests that horticulture began to gain momentum in its importance for subsistence over hunting and gathering (Kohler et al. 1980).

Ceramics by this period come under the influence of Deptford ceramics (Caldwell and Waring 1939; Caldwell and McCann 1941). Simple stamped and fabric marked wares are dominant in this region. Deptford Check Stamped, Cartersville phase, became predominant by AD 100. Other wares include Cartersville Check Stamped and Swift Creek Complicated Stamped (Garrow 1975). By the latter portion of this period early Swift Creek complicated stamped have been introduced in this part of Georgia.

Other artifacts in the assemblage include copper pan pipes, prismatic blades, and cut mica. Many of these items are exotic due to the lack of natural occurrence in Georgia. Some

long distance trade must have been conducted – especially with areas such as Michigan and Wyoming.

# Late Woodland Period (A.D. 500 – A.D. 1,000)

In the lower Piedmont, late Swift Creek and Napier Complicated Stamped ceramics characterize the Late Woodland period (Wood 1995). Numerous sites in the lower Piedmont and upper Coastal Plain contained a simple stamped ceramic known as Vining Simple Stamped and are intercepted as a distinct cultural group during the Late Woodland (Kelley 1938).

Projectile points during this time were generally small and triangular – a probable indication of bow and arrow technology (Espenshade 2008). Unlike the Middle Woodland, it is believed that people during the Late Woodland primarily survived on hunting and gathering (Wood 1995). An example at Hiwassee Island in Tennessee it was found that people during this time period lived upon and in close proximity to shell mounds unlike the Late Archaic groups (Lewis and Kneberg 1946).

# Mississippian Period (A.D. 1000 – A.D. 1539)

At this period population pressure led to changes in the social systems. For example the appearances of flat-topped temple mounds and elaborate levels of ceremonialism. People of this period typically lived in large – sometimes palisaded – villages in floodplains or in farmsteads.

Ceramics of this time period are characterized by rim folds or flares, complicated stamping, and red film in the lower Piedmont. As for the previously mentioned Vining Simple Stamped associated with the Late Woodland and Early Mississippian periods, they have been identified in the Macon area (Kelley 1938) and as far north as Madison (Elliott and Wynn 1991) and restricted to the Oconee and Ocmulgee drainages.

Mound buildings at the Piedmont Oconee River drainage span from about A.D. 1100 to A.D. 1600. It begins with the Armor phase and progressing through to Stillhouse, Scull Shoals, Duvall, Iron Horse, and Dyar phases (Williams and Shapiro 1990). Overall early phases of the Mississippian are characterized by Etowah Rectilinear Complicated Stamped ceramics and later Savannah Check stamped and cob impressed ceramics. Later phases are characterized by Lamar Incised and Complicated Stamped ceramics with folded rims that are sometimes decorated.

# Historic Period (A.D. 1539 to Present)

In 1539-1549, Spanish explorer Hernando De Soto led an army of 600 through the interior of the Southeast. Prior to contact, the Oconee Valley is characterized by peace with people living in farmsteads away from fortified towns. Two prospering chiefdoms – the Tama and Ocute – prospered during this time period and were visited on at least five different recorded expeditions (Worth 1993:43; O'Steen et al 1994:59).

By the 1670s, the slave-raiding Westos brought destruction to the province. To escape slave raids, many groups moved closer towards Charleston or joined more powerful groups to repel against the raiders. Repopulation is noted in the last quarter of the 17<sup>th</sup> century in this portion of the Oconee Valley.

By the 1700s, relations between the Natives and the English have been strained. Those Natives who were allied with the English were provided with goods such as guns in exchange for deerskins and slaves. As previously noted, slave raiding become a primary cause for abandonment in the Southeast. In 1715 Yamasee War began centering on cheating by English Traders of Charleston and the Natives including the Yamasee, Ochese Creeks, Catawba, Cherokee, Waxhaw, and Santee. The English retaliated and many tribes sought refuge in

western Georgia and eastern Alabama. Although many Natives had moved away from the Oconee River drainage, the Creek Indians continued to claim the region.

From 1784 to about 1800 the struggle between Creek Indians and English settlers broke out into the Oconee Wars (Hunt 1973:15; Shivers 1990:7). The war ended with the Treaty of Colerain in 1796 which established the Apalachee River as a boundary between Creek hunting grounds and English settlers. In 1831 the famous Trail of Tears removed the Cherokee, Chickasaw, Choctaw, and Muscogee-Creek from their lands to Oklahoma.

The invention of the cotton gin by Eli Whitney in 1794, had a profound effect on the development of cotton cultivation in Georgia. With the international demand for cotton rising, there was a massive expansion of this cash crop industry. The result left large portions of the Georgia with poor soils due to farming practices focusing on mass quantity of product in lieu of soil health. Baldwin County was created from the land ceded by the Creek Indians and distributed through a land lottery in 1803. In 1807 Putnam County was formed from a portion of Baldwin County. Eatonton became the county seat of Putnam County in 1808. By 1820 most of the settled Piedmont had converted from small subsistence to large plantations. By 1849, George White's Statistics of the State of Georgia noted that the majority of Georgia had poor and wasted soils.

In 1861, the Civil War brought economic devastation to the area. A national depression that occurred during the 1870s which added strain to Georgia's recovery from the war. The war left the Oconee River area hardly unscathed, social, political, and economic repercussions of the war affected the area.

During the Reconstruction period, agricultural reform increased significantly. Although cotton continued be a major staple, agriculture branched into other industries such as dairy and

fruit. Similar to the cotton gin, the introduction of the boll weevil in the 1920s skyrocketed cotton production. Specifically to Putnam County, the area remained rural with a massive migration out during the 1930s due to the depression. Much of the land was lost due to taxation or other reasons were purchased by the federal government

#### CHAPTER 5

#### FIELD METHODS

# Site Planning and Grid

A grid system was used for the survey area. The purpose of the grid system was to establish a coordinate system that is more easily translatable than GPS coordinates while in the field. The grid nail, designated as 500 Meters North, 500 Meters East in the survey area was established at UTM 17S 273265 3702803. From the grid nail the baseline was established going East-West. For the baseline a pin flag was placed at every 10 meters for accuracy. Each pin flag had the grid coordinate written on it.

At every 30 meters marked a transect going East-West from the baseline. From these transects the shovel test pits were dug. Going perpendicular or North-South from the baseline a shovel test pit was placed and dug at 30 meter intervals. In addition to the grid coordinates, the transect number and shovel test pit number was written on the flag.

Due to the level of vegetation of the stand, a total station would have been rendered useless without a significant amount of clearing. Therefore compass and measuring tapes were used. The survey was conducted from January 2013 to May 2013. The magnetic declination was checked at the National Oceanic and Atmospheric Administration's National Geophysical Data Center's Magnetic Field Calculators (http://www.ngdc.noaa.gov/geomag-web/#declination, Accessed June 2013) prior to every survey period. The declination fluctuated between 5.20° west and 5.45° west and the compasses used were adjusted to the nearest degree (5° or 6° west declination). Even when adjusting for magnetic declination and placing a pin flag at every 10

meters between shovel test pit and transect, the location of each shovel test was slightly askew from true north due to topographic and vegetal obstacles. When necessary the distance was checked with previously marked shovel test pits to make sure each new shovel test pit was 30 meters away.

# Subsurface Survey Method for High Probability Areas

The Georgia Standards and Guidelines for Archaeology Surveys as defined by the Georgia Council for Professional Archaeologist defines a high probability area for human occupation and archaeological sites as one with slopes no greater than 10 percent, good drainage, little disturbance, and outside of permanently or seasonally inundated zones such as tidal areas, flood plains, and so forth. A pedestrian survey prior to subsurface surveying determined that Stand 217 had the necessary qualities to be considered a high probability area.

A shovel test pit survey was conducted at 30-meter intervals (White and King 2007:107) in Area 4, Stand 217, within the Bishop F. Grant Memorial Forest. The project resulted in 23 transects with 226 shovel test pits (Figure 10). Because the stand is amorphous in shape, the number of shovel test pits varied for each transect.

Each shovel test pit was excavated to the level of sterile clay and was screened through a 0.6 centimeter (0.25 inch) mesh screen. In addition to this each test pit was marked with GPS coordinates using a Garmin Rino 655t. Points were taken when the accuracy of the unit was at least 2-meters. A Site Grid Coordinate based on the distance from the grid nail was also given for each shovel test pit.

Shovel test pits that yielded no artifacts were considered "negative" and the next shovel test pit was conducted 30 meters away along the same transect. When a shovel test pit yielded any artifacts it was considered "positive". When this occurred, four additional shovel test pits

were conducted 15 meters from the positive shovel test pit at 90 degrees relative to the positive shovel test pit. Shovel test pits are continued at 15 meter intervals until two negative shovel test pits in row are expected and then therefore defining the extents of a possible archaeological site (Wettstaed and Wettstaed 2009:16). Any artifacts found were placed into a labeled bag. The label consisted of the date of the excavation, the surveyor(s), transect number, and shovel test pit number, grid coordinates, GPS coordinates, and field site number (White and King 2007:130).

Each shovel test pit had its own shovel test pit form filled out. The shovel test pit form included the date, who excavated, the location of the shovel test pit (site grid and GPS coordinates), any artifacts found, stratigraphy, soil description and general notes about the environment.

#### CHAPTER 6

#### LABORATORY METHODS AND ANALYSIS

# Artifact Processing, Data Analysis, and Curation

Artifacts and data generated from this project will be curated at the University of Georgia's Laboratory of Archaeology. For this project the guidelines defined by the Georgia Council of Professional Archaeologists' Georgia Standards and for Archaeological Survey in section IV titled "Artifact Processing, Data Analysis, and Curation" will be used. In addition whatever guidelines that are outlined specifically by the University' of Georgia's Laboratory of Archaeology's requirements for curation will be utilized.

# **Processing**

Artifacts found during the archaeological survey were processed at the University of Georgia's Laboratory of Archaeology. The artifacts were kept in their original bags when they were found during the archaeological survey. Each artifact was hand washed in tap water and cleaned with a soft toothbrush. Once dried the artifacts were placed into an archival plastic bag with its provenance. Written on the bag was the provenance information included the overall property where the survey took place, the area and tree stand as designated by the Warnell School of Forestry and Natural Resources, the transect, the shovel test pit, the site grid coordinates, the UTM coordinates, the initials of the individual who processed and cleaned the artifact(s), and the date the artifacts were processed.

# Cataloging

Artifacts were first cataloged by their type. For this project only ceramics and lithic type groups were used designated as either prehistoric or historic. For prehistoric ceramic artifacts the characteristics of temper and surface were used to identify their typological category. Prehistoric lithic material were categorized into various groups including points-knives, flakes, shatter, cores, and debitage. Historic ceramic artifacts were categorized by their paste (earthenware, stoneware, porcelain) and glaze. With these characteristics their typological category was identified.

Once all the artifacts were identified they were cataloged using Microsoft Excel 2013. The database contained the official site number, its provenance, which included the projects site coordinates and UTM coordinates, the number of artifacts found, and the weights of the artifacts in grams.

# **Analysis**

The effectiveness of the subsurface survey method versus the surface survey is measured by the number of sites identified per hectare from each project. The data set include sites identified in this project's survey, sites identified by Matt Wynn (2013), and sites identified by Stefan Brannan during The University of Georgia's Department of Anthropology's summer 2012 archaeological field school. Other datasets include previous thesis projects conducted in or near the B. F. Grant Memorial Forest as well as data form the analysis of cultural resource management reports of projects conducted in Putnam County.

## Artifact Terminology

Artifacts were briefly noted in the shovel test pit form during survey. Once at the lab the artifacts were properly identified and categorized. Artifacts were first categorized by their

period, either prehistoric or historic. Then they were categorized by type. These type groups included ceramics, lithics, metals, glass, and miscellaneous. Miscellaneous primarily consisted of more modern material such as plastics and rub.

### Prehistoric Ceramic Terminology

Prehistoric ceramic material are primarily identified by their surface treatment and temper. Tempers found in prehistoric ceramics include shell, sand, grit, clay, and fiber. Surface treatments include plain, simple and complicated stamps, and incised.

- 1.) Plain surface treatment refers to no visible surface treatment. The period of phase of a ceramic is determined by its temper and thickness. Plain ceramics are not generally considered unknown or unidentified prehistoric unless associated with a diagnostic ceramic.
- 2.) Simple stamped ceramics have fine, parallel line stamping.
- 3.) Complicated stamped ceramics have complex designs that are carved into paddles and the slapped or pressed onto the ceramic body. Designs are usually rectilinear or curvilinear. The former is more common to the Late Mississippian, Lamar phase, while the latter is typically associated with the Woodland and Early to Middle Mississippian periods.
- 4.) Unidentified Complicated Stamped ceramics are those that are indistinguishable.
  This is due to poor ceramic making or surficial erosion.
- 5.) Incised ceramics have lines or incisions pressed into them. The incisions range from fine (< 1 millimeter), medium (1-2 millimeters), and bold (< 2 millimeters).

Ceramics from the Late Woodland to the Late Mississippian have two different rim form simple and folded. Simple rims with no modifications are believed to date to the Late Woodland

and Early Mississippian period while folded rims are believed to date to the Late Mississippian Lamar period. Folded rims may also have other modifications including pinched or notched rims.

## Prehistoric Lithic Terminology

Lithic classification can be very detailed and extensive. Overall a stone material can be summarized by the material, its use, and if is not a tool, which part from the processing of lithic technology is it associated with (debitage) produced from a core. A core is a parent piece of lithic material from which flakes are removed to produce a tool.

Debitage is the debris resulted from stone working activities. The levels of category include flakes, primary flakes, secondary flakes, tertiary flakes, bifacial thinning flakes and shatter.

- 1.) Flakes are a piece of stone removed from a core or parent piece that exhibits removal e.g. percussion bulbs, platforms, ripples, and so on.
- 2.) Primary flakes are from the cortex or weathered material covering at least 90<sup>^</sup> of one whole side. This is typical of the first part of stone working activity
- 3.) Secondary flakes has some cortex or weathered material on one side, but is much less than 90% like a primary flake. Secondary flakes represent the intermediate part of stone working.
- 4.) Tertiary flakes have no cortex or weathered material. These flakes are generally smaller and indicate the fine work or final stage of tool making.
- 5.) Bifacial thinning flakes are typically oblong, and flat and can exhibit feathered lateral margins. These flakes are typically associated with the thinning or sharpening of bifacial tools.

6.) Shatter is typically undistinguishable debris which cannot be associated with any of the aforementioned flake types.

Stone tools are considered to be purposely shaped lithic material that serve a specific form and function. These forms include bifaces, projectile points, and scrapers.

- 1.) Bifaces are tools that have been shaped by removing flakes from both sides of a lithic evenly and is generally used for cutting or as a step toward projectile point.
- 2.) Projectile points are tools designed to be hafted as a knife or tip for a spear or arrow.

  These lithics tools are typically abbreviated as PPK or projectile point-knife.
- Scrapers are unifacial and sometimes bifacial tools characterized by a flat underside and steep angled sides.

The raw material of the tool can determine its point of origin based on geological regions. In the Georgia Piedmont quartz is the predominate material. Chert is migrated from other parts.

The raw material is readily identified by its overall crystal structure/texture and occasional its color.

- Quartz is a macro- or cryptocrystalline silica that comes in different forms and colors and
  is typically transparent to translucent. Color is highly variable. Hardness and conchoidal
  fracturing are key features in identification
- 2.) Chert is cryptocrystalline silica typically associated with limestone and vary by color, surface finish, texturing, fracturing, and heat treatment. In Georgia there are three major groups of chert including Ridge and Valley, Piedmont, and Coastal Plain cherts.
  - a. Ridge and Valley Chert is predominantly gray to black and sometimes blue-gray.
     There are a wide variety of secondary colors.
  - b. Piedmont Chert is metamorphosed material formed from hydrothermal processes.

c. Coastal Plain Cherts vary greatly but are typically identified by a white to brown color. This chert can also be pink or red from heat treatment.

Lastly there are smashing or grinding tools. Typically associated with shells, nuts, and other rock for grinding and cracking. In general these tool type can be typed as a hammerstone, nutting stone, and ground stone.

- Hammerstones are cobble sized and are hard stones specifically used for smashing objects.
- 2.) Nutting stones are gravel to cobble sized that are used to crack open smaller items such as nuts.
- 3.) Ground stones are highly course tools specifically used for grinding. Ground stones are typically made out of harder rock such as basalt, rhyolite, and granite.

# <u>Historic Ceramics Terminology</u>

Although 19<sup>th</sup> century historic ceramics are highly diagnostic and range in considerable variety, only two major ceramic types, stonewares and earthenwares, will be briefly summarized. In general historic ceramics can either be refined or course and either earthenware, stoneware, or porcelain based on the thickness and overall firing temperature. The glaze, thickness, and paste texture and color are typically the diagnostic features.

- Stonewares are highly fired clay that resemble fine textured stone. These ceramics
  can be brown, blue, gray, or white and were primarily utilitarian wares. Stonewares
  may exhibit salt glazing.
- 2.) Whiteware is a refined earthenware associated with dining ware. The glaze of the whiteware typically exhibits a crazing texture and glazes vary greatly from hand painted to transfer printed.

3.) Pearlware is a refined earthenware associated with dining ware. Predating whitewares and eventually overlapping with, pearlwares have a light blue tint to an overall white color. Pearlwares are typically hand painted and can have decorated edges as well as transfer printing.

### CHAPTER 7

### THE PROJECT AREA

# Area 4, Stand 217 and Stand 255

The project area is located in Area 4 in Stand 217 and Stand 255 (Figure 6-8). Together both stands equate to 49.2 acres of land or 19.91 hectares. Stand 217 is designated as a natural pine area while stand 255 is designated as a pine plantation. During the survey stand 255 was indistinguishable from stand 217 and for the purposes of this project it will be considered a part of stand 217.

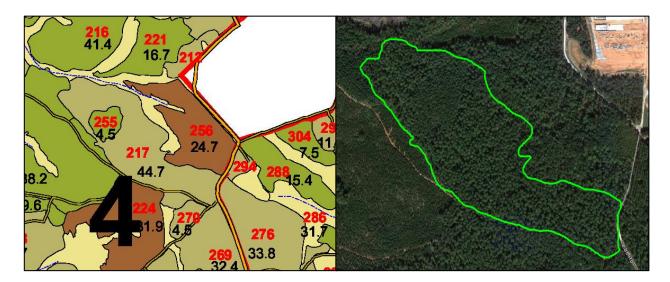


Figure 6 and 7: Partial ArcGIS Map of Area 4, Showing Stand 217 (Left) and Satellite Image of Stand 217 outlined (Right)



Figure 8: Stand 217's tree line and Stand 256 (Clear cut stand). Facing South.

### **CHAPTER 8**

### **RESULTS**

# Phase I Survey Results of Area 4, Stand 217

The Phase I survey in The Bishop F. Grant Memorial Forest at Area 4, Stand 217 yielded seven archaeological sites (Table 1, Figure 9). A total of 226 shovel test pits were dug with 10 that were positive (yielding at least one artifact) (Figure 10). With a survey area 19.91 hectares and seven archaeological sites identified there were 0.36 sites identified per hectare or one site per 2.86 hectares. A total of 96 artifacts were recovered from both prehistoric and historic periods from the survey (Table 2).

Site Number	Site Type	Cultural Period
9PM2232	Ceramic Scatter	Late Mississippian, Lamar phase
9PM2233	Ceramic Scatter	Late Mississippian, Lamar phase
9PM2281	Ceramic Scatter	Late Mississippian, Lamar phase
9PM2282	Ceramic Scatter	19 <sup>th</sup> Century Historic
9PM2283	Rock Pile	Unknown
9PM2284	Rock Pile	Unknown
9PM2285	Rock Pile	Unknown

Table 1: Site Designation, Type, and Cultural Period found in Area 4, Stand 217

Artifacts	Type	Period	Phase	Count	Weight (Grams)
Lamar Plain	Ceramic	Late Mississippian	Lamar	72	378
Lamar Plain, Folded Rim, Pinched	Ceramic	Late Mississippian	Lamar	3	25
Lamar Incised, Fine	Ceramic	Late Mississippian	Lamar	14	110
Quartz PPK	Lithic	Unknown Prehistoric	N/A	1	2
Whiteware	Ceramic	Historic	19 <sup>th</sup>	6	6
	96	521			

Table 2: Artifacts Found in Area 4, Stand 217

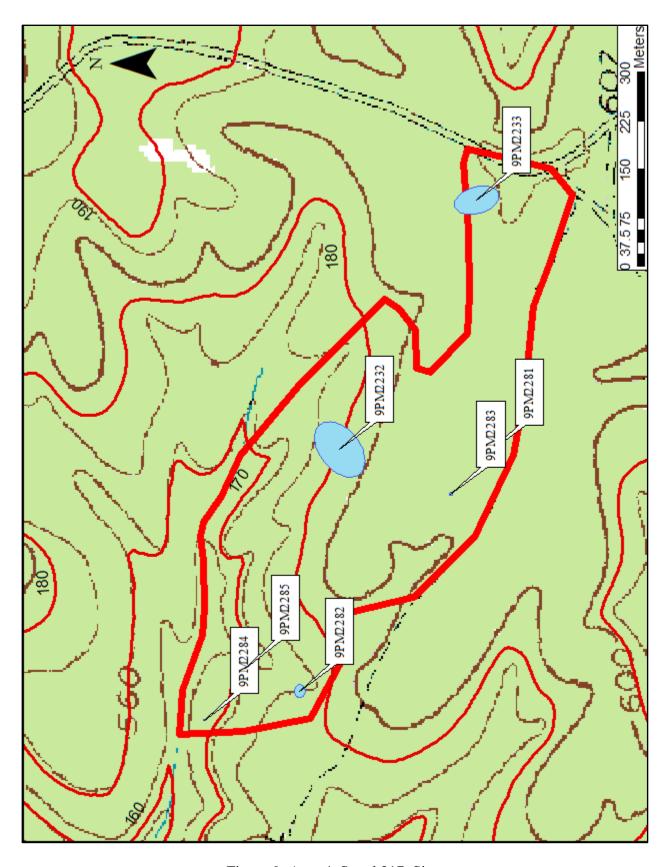


Figure 9: Area 4, Stand 217, Sites

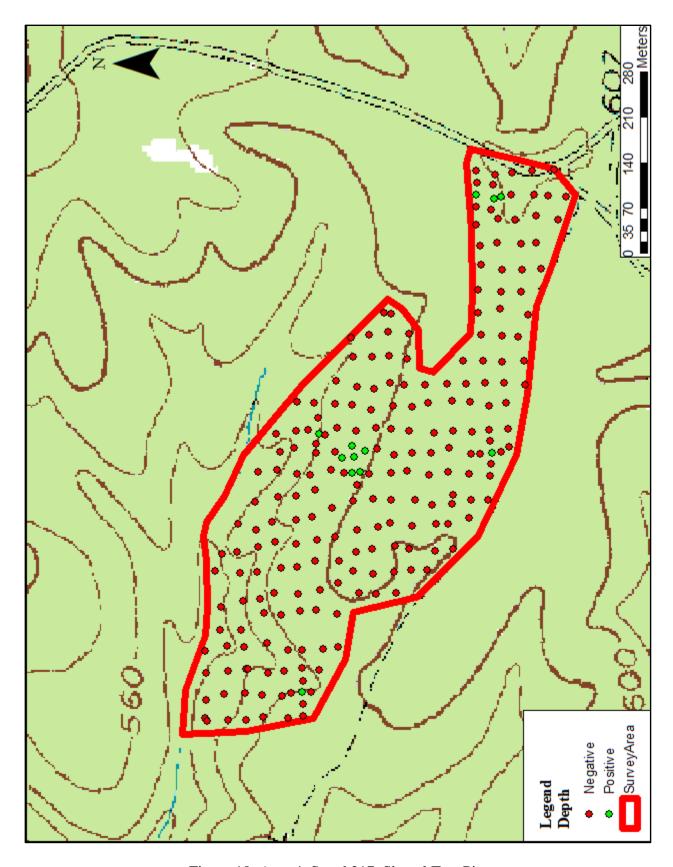


Figure 10: Area 4, Stand 217, Shovel Test Pits

Site 9PM2232 (Figure 11 and 12) is a Late Mississippian Lamar phase, ceramic scatter (Table 3 and Figure 13). It is 50 meters East-West and 50 meters North-South located on the edge of a ridge top. This site is potentially a single farmstead. It will require further research to confirm this with the presence of post features.

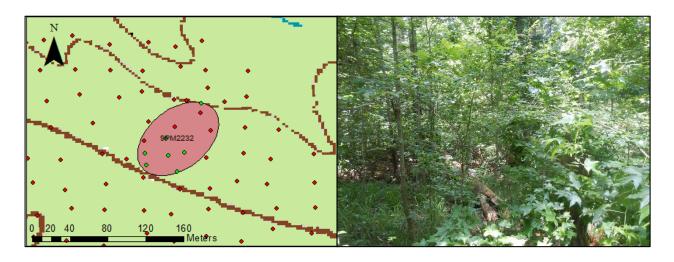


Figure 11 and 12: 9PM2232, Site Boundary (Left) and 9PM2232, Photograph of Site

9PM2232						
Artifact	Type	Period	Phase	Count	Weight (Grams)	
Lamar Plain	Ceramic	Late Mississippian	Lamar	12	59	
Lamar Plain, Folded Rim, Pinched	Ceramic	Late Mississippian	Lamar	1	8	
Lamar Incised, Fine	Ceramic	Late Mississippian	Lamar	1	5	
Lamar Medium Incised	Ceramic	Late Mississippian	Lamar	1	6	
Totals					78	

Table 3: 9PM2232, Artifacts



Figure 13: 9PM2232, Artifacts

# Site 9PM2233, The Muddy Tractor Site

Site 9PM2233, The Muddy Tractor Site (Figure 14 and 15), is a Late Mississippian,
Lamar Phase, ceramic scatter (Table 4 and Figure 16). It is 15 meters East-West and 35 meters
North-South and located on a ridge top. This site is potentially a single farmstead. It will require further research to confirm this with the presence of post features.

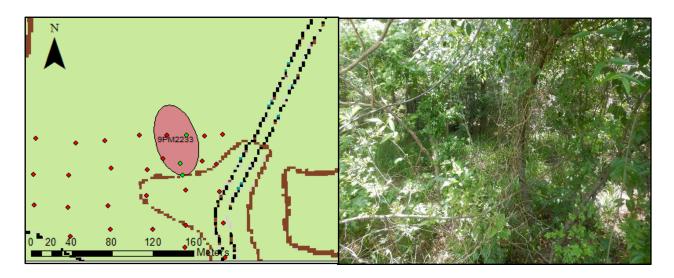


Figure 14 and 15: 9PM2233, Site Boundary (Left) and 9PM2233, Photograph of Site

9PM2233, The Muddy Tractor Site						
Artifact	Type	Period	Phase	Count	Weight (Grams)	
Lamar Plain	Ceramic	Late Mississippian	Lamar	59	312	
Lamar Plain, Folded Rim, Pinched	Ceramic	Late Mississippian	Lamar	2	17	
Lamar Incised, Fine	Ceramic	Late Mississippian	Lamar	10	49	
Lamar Incised, Bold	Ceramic	Late Mississippian	Lamar	2	50	
Quartz PPK	Lithic	Unknown Prehistoric	N/A	1	2	
Totals					430	

Table 4: 9PM2233, Artifacts



Figure 16: 9PM2233, Artifacts

# Site 9PM2281, The Benny Ridge Site

Site 9PM2281, The Benny Ridge Site (Figure 17 and 18) is a Late Mississippian, Lamar phase, single sherd (Table 5 and Figure 19). It is 1 meter East-West and 1 meter North South and located on a ridge top. The site type is indeterminate by the lack of any features and the presence of only one artifact.

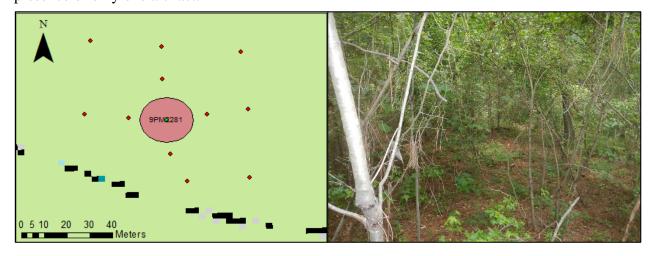


Figure 17 and 18: 9PM2281, Site Boundary (Left) and Photograph of 9PM2281

9PM2281, The Benny Ridge Site						
Ceramic Type	Type	Period	Phase	Count	Weight (Grams)	
Lamar, Plain	Ceramic	Late Mississippian	Lamar	1	7	
Totals					7	

Table 5: 9PM2281, Artifacts



Figure 19: 9PM2281, Artifact

# Site 9PM2282, The Rose Acre Site

Site 9PM2282, The Rose Acre Site (Figure 20 and 21) is a 19<sup>th</sup> century historic ceramic scatter (Table 6 and Figure 22). Its site boundary is defined as 1 meter East-West and 1 meter North-South. The type of site is indeterminate by the lack of identifiably features in the stratigraphy and the presence of only one artifact.

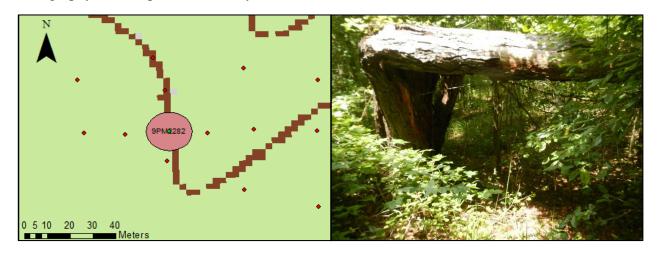


Figure 20 and 21: 9PM2282, Site Boundary (Left) and 9PM2282, Photograph of Site (Right)

9PM2282, The Rose Acre Site						
Ceramic Type	Type	Period	Phase	Count	Weight (Grams)	
Whiteware	Ceramic	Historic	19 <sup>th</sup>	6	6	
Totals 6					6	

Table 6: 9PM2282, Artifacts



Figure 22: 9PM2282, Artifacts

Site 9PM2283 (Figure 23 and 24) is a rock pile consisting of cobble and boulder sized quartz (30 cm – 60 cm in length). The rock pile was 4 meters East-West and 4 meters North-South and was 65 cm high. No artifacts were found associated with this site. Its period of origin is unknown. The rock pile could potentially be prehistoric associated with mortuary practices or historic associated with the clearing of stones for farming (Gresham 1990). It is likely historic considering all three rock piles were abutted against a tree oriented North-South.

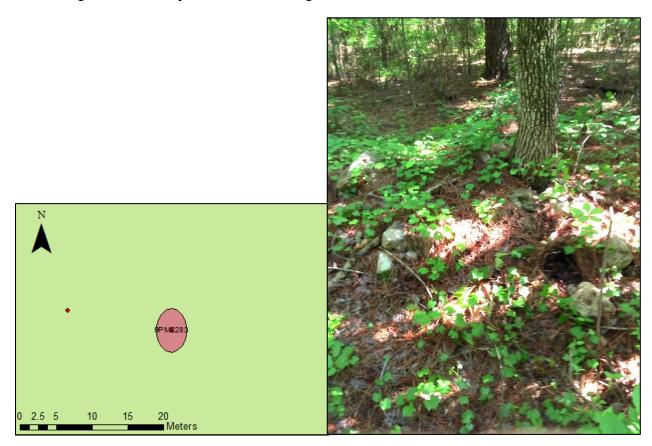


Figure 23 and 24: 9PM2283, Site Boundary (Left) and 9PM2282, Photograph of Site (Right)

Site 9PM2283 (Figure 25 and 26) is a rock pile consisting of cobble and boulder sized quartz (30 cm – 60 cm in length). The rock pile was 2.5 meters East-West and 2.5 meters North-South and was 65 cm high. No artifacts were found associated with this site. Its period of origin is unknown. The rock pile could potentially be prehistoric associated with mortuary practices or historic associated with the clearing of stones for farming (Gresham 1990). It is likely historic considering all three rock piles were abutted against a tree oriented North-South.



Figure 25 and 26: 9PM2284, Site Boundary (Left) and 9PM2284, Photograph of Site (Right)

Site 9PM2283 (Figure 27 and 28) is a rock pile consisting of cobble and boulder sized quartz (30 cm – 60 cm in length). The rock pile was 4 meters East-West and 3.4 meters North-South and was 67 cm high. Its period of origin is unknown. The rock pile could potentially be prehistoric associated with mortuary practices or historic associated with the clearing of stones for farming (Gresham 1990). It is likely historic considering all three rock piles were abutted against a tree oriented North-South.



Figure 27 and 28: 9PM2285, Site Boundary (Left) and 9PM2282, Photograph of Site (Right)

#### **CHAPTER 9**

#### DISCUSSION

### Effectiveness of the Subsurface Survey Method

As previously noted a total of 19.91 hectares were surveyed in Stand 217. A total of seven archaeological sites were identified from the project. From this result a total 0.36 sites were identified per hectare or one site was identified for every 2.86 hectares. To compare the effectiveness of the subsurface survey method several results from prior studies and projects will be referred to.

The results from Table 7 and 8 are a combination of previous research primarily in Putnam County, Bishop F. Grant Memorial Forest, and Oconee National Forest. The areas listed share the same characteristics of either being a forested area that had recently been clear-cut and harvested, open grassy areas, or forested areas with lower underlying brush and significant ground coverage.

The sites identified in the two adjacent clear-cut stands, Stand 224 and Stand 256, were found during summer field school through The University of Georgia in 2012. The data generated from McSherry, Wynn, and Cao (2013) were from archaeological survey reports from Putnam County since 1975. The sites identified from Guest (2009), Woodliff (2010), Basile (2011), McKay (2011), and Wynn (2013) were from thesis projects.

Pedestrian Surveys					
Source	Sites Identified	Area Surveyed (Hectare)	Sites per Hectare	Hectares per Site	
Guest (2009)	35	88.74	0.39	2.54	
Wynn (2013)	45	8.25	5.45	0.18	
Area 4, Stand 224	21	12.90	1.63	0.61	
Area 4, Stand 256	13	10.00	1.30	0.77	
Total	114	113.38	8.77	4.10	
Average	28.50	28.35	2.19	1.03	

Table 7: Pedestrian Survey Results

Subsurface Surveys					
Source	Sites Identified	Area Surveyed (Hectare)	Sites per Hectare	Hectares per Site	
Area 4, Stand 217	7	19.910	0.35	2.84	
Guest (2009)	16	32.27	0.50	2.02	
Woodliff (2010)	19	80.50	0.24	4.24	
Basile (2011)	16	60.70	0.26	3.79	
McKay (2011)	21	60.70	0.35	2.89	
McSherry et al. (2013)	1433	16365.00	0.09	11.42	
Total	1512	16619.07	1.78	27.20	
Average	252.00	2769.85	0.30	4.53	

Table 8: Subsurface Survey Results

Pedestrian surveys had an average of 2.19 sites identified per hectare while subsurface surveys had an average of 0.30 sites identified per hectare. From these results pedestrian surveys identified about seven times more sites than subsurface surveys.

Wynn' (2013) was relatively higher than the rest and his data was tested to see if it was an outlier. Outliers are generally defined as any data two standard deviations above the mean. The standard deviation of the sites per hectare for pedestrian surveys is 10.04. This places Wynn's results 1.7 standard deviations above the average and therefore not an outlier.

This result is likely due to how Wynn's (2013) survey was approached compared to previous research and field schools using a pedestrian survey. The original project for Wynn (2013) was to survey clear-cuts tree stands after replanting preparation, while previous researchers surveyed the area shortly after it was harvested. Clear-cut tree stands prepared for

replanting have considerably less vegetation, debris, and includes a wide bulldoze track around the entire boundary.

The process of preparing a tree stand for replanting currently begins with a bulldozer track creating a boundary of about 5-meters width. These bulldozer tracks serve as a visible boundary for aerial de-vegetation spraying. Prior to spraying, the tree stand is burned to remove any vegetation that was not destroyed during the harvesting process. Unfortunately there was a high level of precipitation every week at the beginning of the survey period in January 2013 and the tree stands were never burned.

Because of this, the interior of the clear-cut stands were not surveyed due to complete coverage of timber, bark, and various other debris from harvesting. Wynn (2013) decided to only survey the bulldozer tracks that had adequately cut into the occupational layer just above sterile subsoil and had no debris on the surface (Figure 29). These bulldozer tracks yielded a significant quantity of artifacts (Figure 30).



Figure 29 and 30: 9PM2233, Stand 256, Bulldozer Track (Left) and 9PM2233, Surface Finds

It should be noted that Wynn's (2013) survey included nine clear-cut tree stands totaling

103 hectares. Since the method had to be altered to surveying only the bulldozer tracks, the total

103 hectares that would have been surveyed was reduced to 8.25 hectares or about 8%. Even

with sites already identified at these tree stands from previous projects, an additional 45 new sites were identified as well as some revisions to site boundaries for previously located sites.

Guess (2009) stated in her study that, "... there is not as great as a divide between surface and subsurface survey as previously thought." Based on the number of sites identified by Wynn (2013) the complete opposite is true. As noted by Elliott (1981), Ives (1982), and Keller (1982) walking surveys are more effective at identifying sites. Looking at the total results from Table 7 and 8, pedestrian surveys identified about 24 times more sites than subsurface surveys.

Although there is such a large discrepancy between the two methods, the use of one method over the other is highly dependent on the survey environment. Pedestrian surveys have proven to be more effective in identifying sites in a specific environment. However there is a lack of stratigraphic data that is gained from subsurface testing. Even though it is recommended in the Georgia Councils of Professional Archaeologist's Georgia Standards and Guidelines for Archaeological Surveys to include subsurface testing after identifying a site with a pedestrian survey, in no instance was it conducted for projects cited in Table 7. The potential use of gathered stratigraphic data will be discussed. Overall it is highly recommended that if research is to be continued in B. F. Grant Memorial Forest the pedestrian method should be employed for preliminary identification and that shovel testing be completed to identify stratigraphy sequences and site boundaries down to the sterile subsoil.

#### Artifact Distribution and Analysis

The overwhelming majority of artifacts recovered from the survey (Cao 2012) were Late Mississippian, Lamar phase ceramic sherds. Considering the only other type of artifacts found were six pieces of historic whiteware and a quartz projectile point or knife of unknown time

period, the topic of discussion will primarily be on Late Mississippian, Lamar phase farmsteads and its overall site structure and patterns.

In general, the correlation of differences in soil stratigraphy with artifact density across a site is indicative of different uses of space. Areas of lower artifact density nearby or adjacent to areas with high artifact density can potentially reveal features which in turn would outline structures, middens, and other cultural features. Hatch (1995:141) notes that Lamar phase farmstead sites typically include a large, dense concentration of surface ceramics, lobes of intermediate concentrations, and declining densities at the margins of a site. Major concentrations are typically large, basin-shaped features filled with domestic refuse and are likely to be middens. The lobes of secondary, intermediate concentrations typically correspond to the location of domestic structures.

The two Lamar phase farmsteads, 9PM2232 and 9PM2233 are likely affected by natural erosion and anthropogenic destruction, e.g. plowing, logging, and other forms of land clearance as evident by the considerable lack of artifacts and erratic stratigraphy (Hally and Rudolph 1986). Considering that the three rock piles identified in the survey are likely from historic practices of clearing fields for farming, it would be no surprise that sites identified within the survey area were considerably damaged (Gresham 1990).

Regardless of any potential destruction of features, distribution of artifacts at 9PM2232 and 9PM2233 defined the site boundary to approximately 35 meters by 35 meters which is the model size of a typical Lamar phase farmstead (Hatch 1995). It is well known that the vertical stratigraphy is highly disturbed but the overall horizontal disturbance is minimal (King 2004). Therefore it is likely that the site boundary is generally sound and intact.

With such a small survey area conforming to settlement patterns outlined by Hatch (1995) for Late Mississippian, Lamar phase farmsteads, this is a rather profound conformity. It should be noted that 9PM2281, the single ceramic sherd, is likely associated with another Lamar site identified nearby. If this is the case 9PM2232, 9PM2233, and 9PM2281 fall into the pattern of being located on ridge tops surrounding head waters, are approximately 30 to 40 meters wide in size, and are approximately 100 meters a part from one another. This also fits into the trend that farmsteads during this period are numerous.

An artifact distribution map was created for the survey area (Figure 31). However, the number of artifacts identified for each site was so few that a distribution map is not very useful. For 9PM2232 only 15 artifacts were recovered. On average there about two artifacts per shovel test pit. For 9PM2233 a total of 74 artifacts were recovered. It should be noted that only 10 of those 74 artifacts were found shovel testing. The majority was recovered from a walking survey in the adjacent clear-cut stand to the north.

This begs the question on how many ceramics could have potentially been recovered. The bulldozer tracks cut well into the transitional/occupational layer of the stratigraphy. Coupled with tree and vegetation removal from plantation pine farming you have the perfect recipe for recovering artifacts. Shovel testing at 30 meter intervals leaves a considerable gap in unexcavated area. Even though there was a considerably lack of artifacts recovered for both 9PM2232 and 9PM2233, the distribution and artifact types are satisfactory to determine occupation as a Late Mississippian, Lamar phase, farmstead.

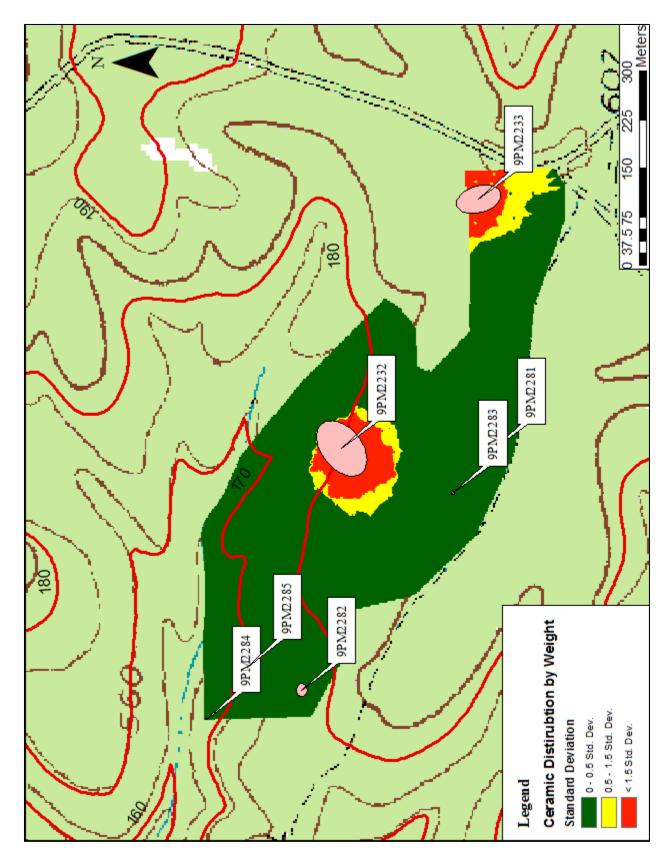


Figure 31: Area 4, Stand 217, Ceramic Sherd Distribution by Weight

# **Stratigraphic Analysis**

During the course of the survey the stratigraphy was recorded for each shovel test pit. The data included overall depth, layers, color, and texture. Overall there were 226 shovel test pits with an average depth of 38 cm. From this it can be determined that the standard deviation is 17 cm. The depth ranged from 1 cm to 95 cm. The occasions where possible sterile was reached at 1 cm – 5 cm, the shovel test pit was excavated deeper by an additional 10 cm to 20 cm to confirm sterility.

Five distinct stratigraphic layers were identified (Table 9). It should be noted that the depth range for sterile is considered indeterminate due to the excavation method. Once sterile was reach an additional 5 to 10 centimeters were excavated to confirm sterility.

Layer	Color	Texture	Depth Range
Top Soil	Dark Grey Brown	Silty Sand Loam	1 cm – 15 cm
Transition 1	Orange Brown	Sandy Clay Loam	10  cm - 30  cm
Transition 2	Red Brown	Sandy Clay Loam	10  cm - 30  cm
Waterlogged	Grey Blue	Mud and Clay	15 cm – 30 cm
Sterile	Clean Red or Orange	Clay	Varies

Table 9: Stratigraphy of Area 4, Stand 217

The survey topography can be categorized into three major zones, Ridge Top, Transition, Flood Plain based on the overall slope percent and stratigraphy (Figure 32 and Figure 33). The most common stratigraphy included top soil, Transition 1, and red clean sterile clay. Instances of waterlogged stratigraphy only occurred in the floodplain which extended approximately 40 to 100 meters from the edge of the creek. Areas with Transition 2 were deeper by one to two standard deviations than the average 38 cm depth and typically occurred in the transition zone between the flood plain and the broad ridge top.

As mentioned previously, stratigraphic variation may be indicative of occupational surfaces. It should be noted that the transition zone and flood plain would naturally have deeper

stratigraphy from natural sedimentation and erosion. A distribution map of depths to sterile subsoil was generated for analytical purposes (Figure 34). More useful is when this map is overlaid with the topographical zones (Figure 35).

As expected the transitional zone and flood plain had deeper stratigraphy. The concentration of deeper shovel test pits surrounding 9PM2232 is partially natural. Of all the sites identified the stratigraphy for this site was the most unusual. It is difficult to discern whether this is a natural process of sedimentation and erosion or modern human occupation. The tests were generally deeper by one to two standard deviations or 17 cm to 34 cm deeper than any other site. This particular area was also where a secondary transitional layer was identified.

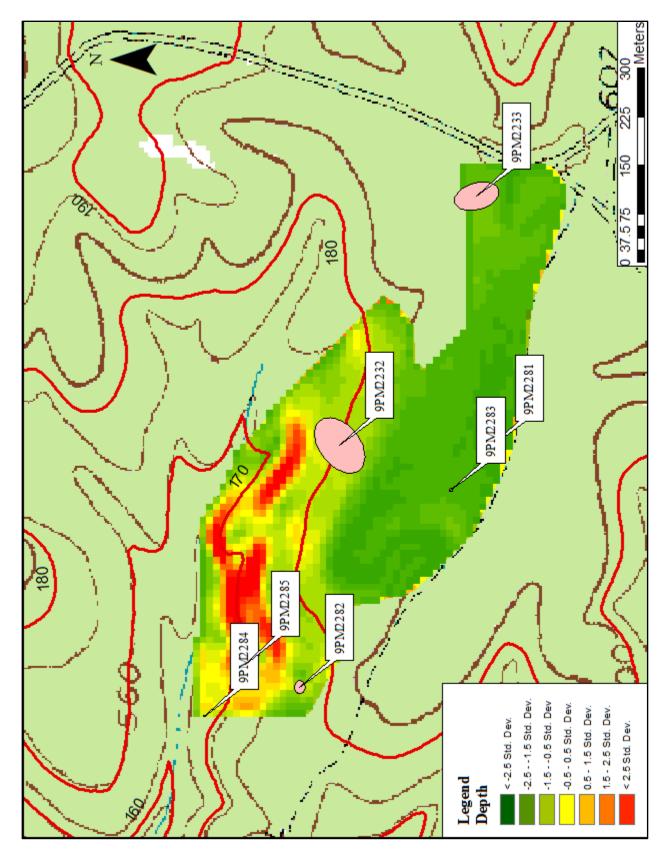


Figure 32: Area 4, Stand 217, Percent Slope

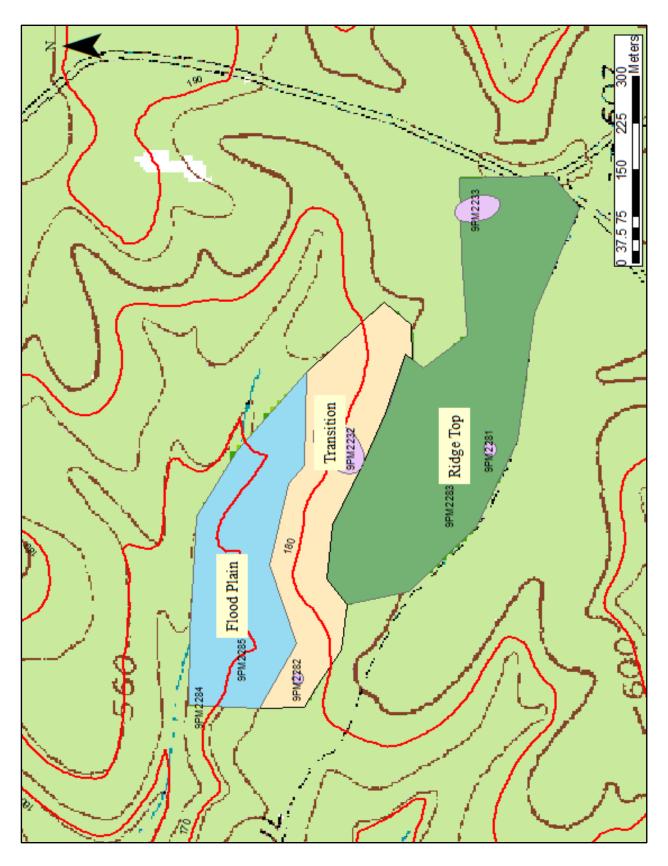


Figure 33: Area 4, Stand 217, Topographical Zones

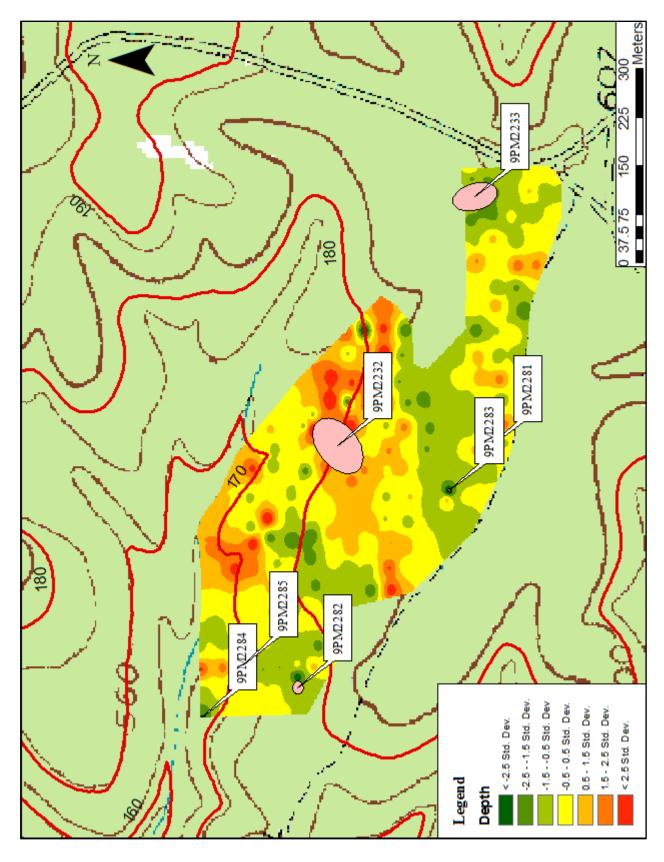


Figure 34: Area 4, Stand 217, Depth to Sterile Subsoil

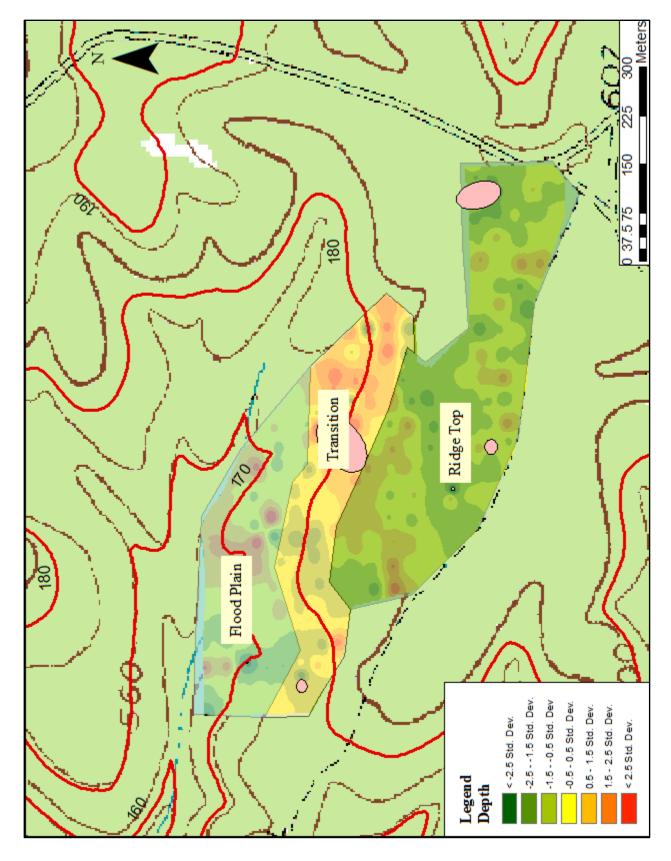


Figure 35: Area 4, Stand 217, Topographical Zones and Depth to Sterile Subsoil

## Definition of an Archaeological Site

The discussion here on isolated finds and the definition of archaeological sites will be brief. A lengthy discussion on the definition of archaeological sites can be found in McSherry, Wynn and Cao (2013). This topic would have changed the useable dataset considerably. As previously stated, the definition of an archaeological site used for this project is "anywhere anybody has done anything at any time in the past (Williams, Personal Communication 2013)."

The use of an isolated find is a category widely practiced and the definition also ranges widely. Based on the average definition of an isolated find by some archaeologists, sites 9PM2281 – 9PM2285 would have not been considered archaeological sites. This is either because the number of artifacts were too few or the distribution across a given space was too restricted. For the rock piles in particular, even though they were definitely man-made, there was nothing diagnostic associated with them to pinpoint a time period. Disqualifying five sites from the original seven would have dropped the number of sites identified per hectare to 0.10 from 0.35.

#### CHAPTER 10

#### CONCLUDING REMARKS

#### Summary

A total of seven archaeological sites were identified from this project. The survey area was 19.91 hectares and contained three topographical zones. The zones were categorized as ridge top, transition, and flood plain. In general the closer to the flood plain the deeper the sterile clay layer was. Most instances included top soil, transitional, and sterile clay. The transitional zone contained two distinctly different transitional layers which is likely due to natural erosion from the ridge top and sedimentation. Most instances in the flood plain either reached the water table or a waterlogged layer. The sterile clay was unreachable in this zone. There were no particular unique stratigraphic instances that would have correlated to possible features or structural features associated with archaeological occupation. Block excavations are recommended to confirm this speculation.

The sites identified from this area were three Late Mississippian Lamar phase sites, one 19<sup>th</sup> –century historic site, and three rock piles likely historic without a more precise defined period. From the 19.91 hectares and seven archaeological sites identified, it can be said that 0.35 sites were identified per hectare or one site for every 2.85 hectares surveyed. Compared to pedestrian surveys this number is approximately 17 times less.

Although the data analyzed was from both B. F. Grant Memorial Forest and Oconee National Forest, the proximity of the two areas demand comparison. If more research is to be conducted in the B. F. Grant Memorial Forest, it is highly recommended to survey with the pedestrian method in clear-cut areas prior to replanting where bulldozer tracks or generally cleared land is readily visible and available to survey. Coupled with shovel testing a more complete sample of an area would be recorded.

For the definition of sites the use of isolated finds is not recommended. Within the rules of the Georgia Archaeological Site File, there is simply no reason to use an isolated find. Sites not registered in a larger database would simply be lost as well as its potential to be a part of larger regional studies.

This project did not reveal anything partially new about prehistoric occupation in the Georgia Piedmont. The shovel test pits have reaffirmed the general theory that Lamar phase farmsteads range from 30 to 40 meters in diameter and that occupation was permanent (Hatch 1995) and that generally found on ridge tops surrounding headwaters and are numerous. This is rather profound that within such a small survey area Late Mississippian, Lamar phase farmsteads fit into the settlement model outlined by Hatch (1995).

Overall these individual Lamar farmsteads were a part of a larger dispersed settlement system as well as a chiefdom-level society. These farmsteads were numerous and concentrated around headwaters. These farmsteads surround mound centers or chiefly compounds that extend to as a far as 10 miles in radius in association. These chiefly compounds likely served a political and/or religious purpose. The two farmsteads identified during this survey, 9PM2232 and 9PM2233, are likely associated with the Little River mound chiefdom (9MG46) located approximately 10 kilometers north west which would date these sites to about 1500 to 1550 A.D. (Williams, Personal Communication 2013).

### Limitations

In comparing pedestrian surveys to subsurface surveys the datasets were uneven. Even with the exclusion of McSherry, Wynn and Cao (2013) data, there are approximately 100 more hectares accounted for by subsurface surveys than walking surveys. Although in reality there is a considerably higher area surveyed by the pedestrian method in B. F. Grant Memorial Forest, the data primarily used were from previous researchers in nearby Oconee National Forest.

The two methods in B. F. Grant Memorial Forest it would be necessary to take into account all sites identified within the property and the method used to find it. For the analysis in this project only the data from two adjacent clear-cut stands, Stand 224 and Stand 256 were accounted for. Even when just comparing stands 217, 224, and 256, pedestrian surveys still yielded more sites per hectare than subsurface surveys.

Shovel testing for high probability areas has a significantly higher chance of missing sites. Based on what the results identified from pedestrian surveys only about 20% of the sites have been potentially identified in stand 217. In the future a higher resolution subsurface survey is recommended, perhaps 15 meter intervals. Although this would take four times the labor to complete. At lower intervals there is a higher chance of identifying much smaller concentrations of artifacts.

The definition for an archaeological site used for this project encompasses a significantly higher number of sites as projects that use isolated finds. McSherry, Wynn and Cao (2013) found that around 25% of finds were considered isolated finds and were not designated as an archaeological site. Future research on this topic should continue to use the definition of an archaeological site used for this project. If not, accounting for the variance between research methods is necessary.

#### Recommendations

Based on the criterion from the National Register of Historic Places, none of the sites identified from this survey are eligible for nomination. However sites 9PM2232 and 9PM2233 have local and regional significance in the Oconee River valley. These two sites have the potential to contribute more information to regional and local settlement patterns during the Late Mississippian period. Ceramics of this time period would potentially refine ceramic sequencing. It is recommended that 9PM2232 and 9PM2233 be properly excavated with test units to find potential features and structures. Based on the stratigraphic analysis there is likely some integrity of occupational features exist.

#### WORKS CITED

Anderson, David G., Lisa D. O'Steen, and Kenneth E. Sassaman

1996 Environmental and Chronological Considerations. *The Paleoindian and Early Archaic Southeast*. Edited by David G. Anderson and Kenneth E. Sassaman. Pp. 1-15. The University of Alabama Press, Tuscaloosa.

Anderson, David G., R. Jerald Ledbetter, and Lisa D. O'Steen

1990 Paleoindian Period Archaeology of Georgia. Laboratory of Archaeology Series Reports Series, Report No. 28, Department of Anthropology, University of Georgia, Athens, Georgia.

Anderson, David G., and Robert C. Mainfort, Jr., editors

2002 The Woodland Southeast. The University of Alabama Press, Tuscaloosa.

## Basile, Kristin

2011 Survey in the Oconee National Forest: Historic Pearson Plantation. Master's Thesis, Department of Anthropology, University of Georgia. Athens, Georgia.

Bigman, Dan, Stefan Brannan, Kevin Gibbons, Kelli Guest, Nate Mountjoy, Ben Storey, and Stephen Kowalewski

2009 Theory in Cultural Resource Management Reports. Unpublished Manuscript. University of Georgia, Department of Anthropology. Athens, Georgia.

## Caldwell, Joseph R.

1958 Trend and Tradition in the Prehistory of the Eastern United States. Memoir No. 88, *American Anthropological Association and Illinois State Museum Scientific Papers Volume X*, Springfield.

2011 Survey and Excavations of the Archaeological Resources of the Allatoona Reservoir. *Laboratory of Archaeology Series Reports*, Report No. 63, Department of Anthropology, University of Georgia, Athens, Georgia.

Caldwell, Joseph R., and Antonio J. Waring, Jr.

1939 Pottery Type Descriptions. Southeastern Archaeological Conference Newsletter 1(6).

Cambron, James W., and Hulse, David C.

1964 *Handbook of Alabama Archaeology: Part I: Point Types*. Archaeological Research Center Association of Alabama, Inc. Birmingham.

#### Chamblee, John F.

1997 The Fishing Creek Survey. Early Georgia 25(1).

#### Clark, William Z., and Arnold C. Zisa

1976 Physiographic Map of Georgia. Department of Natural Resources, Geologic and Water Resources Division, Atlanta.

#### Coe, Joffre Lanning

1964 Transactions of the American Philosophical Society: The Formative Cultures of the Carolina Piedmont. The American Philosophical Society, Independence Square, Philadelphia.

#### Dowd, John T.

1989 The Anderson Site: Middle Archaic Adaptation in Tennessee's Central Basin. *Miscellaneous Paper* No.13, Tennessee Anthropological Association.

#### Elliott, Daniel T.

1981 Finch's Survey. *Early Georgia* 9(1,2):14-24.

### Elliott, Daniel T., and Kenneth E. Sassaman

1995 Archaic Period Archaeology of the Georgia Coastal Plain and Coastal Zone. *Laboratory of Archaeology Series*, Report No. 35, Department of Anthropology, University of Georgia Athens, Georgia.

## Elliott, Daniel T., and Jack Wynn

1991 The Vining Revival: A Late Simple Stamped Phase in the Central Georgia Piedmont. *Early Georgia* 19(1).

#### Espenshade, Christopher T.

2008 Woodland Period Archaeology of Northern Georgia: Update 2008. New South Associates, Stone Mountain, Georgia.

## Freer, Jennifer Anne

1989 Archaeological Settlement Patterns in Oglethorpe County, Georgia. Master's Thesis, Department of Anthropology, University of Georgia. Athens, Georgia.

#### Garrow, Patrick H.

1975 The Woodland Period North of the Fall Line. Early Georgia 3:1-16.

Garrow, Patrick H., Barbara A. Garrow, Paul E. Brockington, and Paul A. Webb 1984 Cultural Resource Management Vogtle-Plant Scherer Transmission line Wadley – Wallace Dam Section Jefferson, Washington. Hancock, and Putnam Counties Resource Inventory II: Final Report.

#### Gresham, Thomas H.

1990 Historic Patterns of Rock Piling and the Rock Pile Problem. Early Georgia 18(1)

1987 *The Wallace Mitigation Survey: An Overview*. Wallace Reservoir Project Contribution Number 32. University of Georgia, Department of Anthropology. Athens, Georgia.

#### Goodyear, Albert C., III

1982 The Chronological Position of the Dalton Horizon in the Southeastern United States *American Antiquity* 47(3):82-95.

#### Guest, Kelli

2009 A Comparison of Surface and Subsurface Archaeological Survey Methods in Putnam County, Georgia. University of Georgia, Department of Anthropology, Athens, Georgia. Thesis.

## Hally, David J., and James L Rudolph

1986 Mississippi Period Archaeology of the Georgia Piedmont. *Lab Series Publication* 24. University of Georgia, Laboratory of Archaeology, Athens. Georgia.

### Hatch, James W.

1995 Lamar Period Upland Farmsteads of the Oconee River Valley, Georgia. *Mississippian Communities and Households*. Edited by J. Daniel Rogers and Bruce D. Smith. pp 35-155. University of Alabama Press, Tuscaloosa.

## Hunt, Caroline C.

1973 Oconee: Temporary Boundary. *Laboratory of Archaeology Series Reports*, Report No. 10, Department of Anthropology, University of Georgia, Athens, Georgia.

#### Ives, J. W.

1982 Evaluating the Effectiveness of Site Discovery Techniques in Boreal Forest Environments. In Directions in Archaeology: A Question of Goals, edited by P. Francis and E. Poplin, pp. 95-114. University of Calgary, Alberta.

## Keller, John E.

1982 Lithic Scatters and Longleaf Pine: Limited Activity Areas in Pyrogenic Environments. *Southeastern Archaeology* 1:40-51.

#### Kelly, Arthur R.

1938 A Preliminary Report on Archeological Explorations at Macon, Georgia. *Anthropological Papers*, No.1, Smithsonian Institution Bureau of American Ethnology Bulletin 119:1-68

#### King, Julia

2004 The Importance of Plow Zone Archaeology. A Review and Assessment of Archaeological Investigations at 44RD183, Warsaw, Virginia. Council of Virginia Archaeologists.

## Kohler, Tim A., Thomas P. DesJean, Carl Feiss, and Donald E. Thompson

1980 An Archaeological Survey of Selected Areas of the Fort Benning Military Reservation, Alabama and Georgia. Report submitted to Interagency Archeological Services, National Park Service, Southeast Region, Atlanta.

#### Ledbetter, R. Jerald and John Schoettmer

1998 Intensive Archaeological Survey of the Undeveloped Portions Reynolds Plantation, Greene and Putnam Counties, Georgia. The Georgia Archaeological Site File. Report # 414. Athens, Georgia.

## Lewis, Thomas M.N., and Madeline Kneberg

1946 *Hiwassee Island: An Archaeological Account of Four Tennessee Indian Peoples*. The University of Tennessee Press, Knoxville, Tennessee.

#### McKay, Melissa C

2011 Subsurface Archaeological Survey of the Head Family Plantation in the Oconee National Forest, Putnam County, Georgia. Master's Thesis, Department of Anthropology, University of Georgia. Athens, Georgia.

## McSherry, Christina, Matthew Wynn, and Luan Cao

2013 An Analysis and Critique of Cultural Resource Management Reports from Putnam County, Georgia. Unpublished Manuscript. University of Georgia, Laboratory of Archaeology. Athens, Georgia.

#### O'Steen, Lisa D.

1996 Paleoindian and Early Archaic Settlement Along the Oconee Drainage. *The Paleoindian and Early Archaic Southeast*. Edited by David G. Anderson and Kenneth E. Sassaman. Pp. 92-106. The University of Alabama Press, Tuscaloosa.

#### O'Steen, Lisa D., R. Jerald Ledbetter, and Daniel T. Elliott

2002 Archaic Period: Overview. The New Georgia Encyclopedia.

<a href="http://www.georgiaencyclopedia.org/nge/Article.jsp?id=h-580">http://www.georgiaencyclopedia.org/nge/Article.jsp?id=h-580</a>. Updated August 8, 2002. Accessed November 12, 2012.

#### Pluckhahn, Thomas J.

1994 Mississippian Settlement in the Upper Oconee and Upper Broad River Valleys. *Early Georgia* 22(1).

## Shivers, Forrest

1990 *The Land Between: A History of Hancock County, Georgia to 1940.* The Reprint Company, Spartanburg, S.C.

## Smith, Betty A.

1981 Archaeological Survey of the Proposed Lick Creek Substation and Transmission Line, Putnam County, Georgia. The Georgia Archaeological Site File. Report # 414.

## Snow, Francis H.

1977 An Archaeological Survey of the Ocmulgee Big Bend Region. *Early Georgia* 5(1-2):37 60.

#### Southern Research

2008 Leake Site Archaeological Data Recovery Web Site at <www.bartowdig.com>. Funded by the U.S. Federal Highway Administration and Georgia Department of Transportation; Content and Design by Southern Research, Historic Preservation Consultants, Inc. Accessed November 14, 2012.

#### Stanyard, William F.

2003 Archaic Period Archaeology of North Georgia. *Laboratory of Archaeology Series*, Report No. 38, Department of Anthropology, University of Georgia, Athens, Georgia.

#### Waggoner, James C., Jr.

2002 The Ridgeway Road Survey: Implications of Upland Use Among Archaic Period Social Groups in West-Central Georgia. Unpublished Master's Thesis, Department of Anthropology, Florida State University.

## Wauchope, Robert

1966 Archaeological Survey of Northern Georgia. American Antiquity 32(5).

#### Webb, Robert S.

1985 Cultural Resource Survey Compartments 146 and 147, Oconee National Forest Jasper and Putnam Counties, Georgia. Georgia Archaeological Site File. Report Number 685. Athens, Georgia.

## Wheaton, Thomas R.

1979 Wallace Dam-Eatonton Transmission Line Archaeological Survey Putnam County, Georgia. Georgia Archaeological Site File. Report Number 195. Athens, Georgia.

#### Wettstaed, James R., and Judith H. Wettstaed

2009 Investigations at Sites 9PM1070 and 9PM1072, a Passport in Time Project, Putnam County, Oconee Ranger District, Chattahoochee-Oconee National Forests, Georgia. Georgia Archaeological Site File. Report Number 5106. Athens, Georgia.

#### White, Gregory G., and Thomas F. King

2007 The Archaeological Survey Manual. Left Coast Press Inc., Walnut Creek, California.

#### Williams, Mark

2013 Personal Communication.

2006a Archaeological Testing of Five Lamar Period Farmsteads in the B.F. Grant Forest, Putnam County, Georgia. *Lamar Institute Publication* 71. Lamar Institute, Savannah, Georgia.

2006b Archaeological Excavations at the Monroe Site. *Lamar Institute Publication* 120. Lamar Institute, Savannah, Georgia.

- 2006c Archaeological Excavations at the Lauren Site. *Lamar Institute Publication 121*. Lamar Institute, Savannah Georgia.
- 2006d Archaeological Excavations at the Gladys Site, 9PM1568. *Lamar Institute Publication* 122. Lamar Institute, Savannah Georgia.
- 2005 Archaeological Testing and Excavations at the Bullard Bottom Site, 9PM169 2002-2004. *Lamar Institute Publication* 69. Lamar Institute, Savannah Georgia.
- 2004 Archaeological Excavations at the Little River Site: The 2001 Season. *Lamar Institute Publication 66*. Lamar Institute, Savannah Georgia.
- 2002 Archaeological Excavations at Little River: The 1998-2000 Seasons. *Lamar Institute Publication 49*. Lamar Institute, Savannah Georgia.
- 2000 Archaeological Site Distributions in Georgia: 2000. Early Georgia 28(1)
- 1994 Archaeological Site Distributions in Georgia: 1994. Early Georgia 22(1)
- 1990 Archaeological Excavation at Little River (9MG46): 1984 & 1987. *Lamar Institute Publication* 2. Lamar Institute, Savannah, Georgia.

## Williams, Mark, and Gary Shapiro eds.

1990 Lamar Archaeology, Mississippian Chiefdoms in the Deep South. The University of Alabama Press, Tuscaloosa.

#### Williams, Mark, John A. Turck, and John F. Chamblee

2010 New Data on the Number and Distribution of Archaeological Sites in Georgia by Time and Space. *Early Georgia* 38(1).

#### Wood, Dean

1995 Woodland Period Archaeology of Northern Georgia. *Laboratory of Archaeology Series*, Report No. 33, Department of Anthropology, University of Georgia, Athens, Georgia.

## Wood, Jared, and Gregory Lucas

2005 Land-Use Change and Impact of Archaeological Sites in Georgia. Early Georgia 33(1)

### Woodliff, John Dylan

2010 Site Distribution In The Oconee National Forest: A Comparison of Shoal Areas and Nearby Upland Tracts. Master's Thesis, Department of Anthropology, University of Georgia. Athens, Georgia.

## Worth, John E.

1993 Prelude to Abandonment: The Interior Provinces of Early 17<sup>th</sup> Century Georgia. *Early Georgia* 21:24-58.

## Wynn, Matthew

2013 Surface Survey and Archaic Settlement Patterns in the B.F. Grant Forest. Master's Thesis, Department of Anthropology, University of Georgia. Athens, Georgia.

## Wynn, Jack T.

1980 Archaeological Investigations of Resseau Dump Site (79-OC-132-7) Putnam County, *Georgia Archaeological Site File*, Report Number 675, Athens, Georgia.

1985 Cultural Resources Survey Kelly and Resseau Exchanges Jasper and Putnam Counties, Georgia. *Georgia Archaeological Site File*, Report Number 685, Athens, Georgia.

## APPENDIX A

## **SURVEY DATA**

## **Brief Description**

The survey data was recorded using Microsoft Excel 2013. The table includes the essential data from the project including shovel test pit designations, their grid location, their GPS coordinates, and the number of artifacts founds as well as their weights in grams. The data from this table is the source used to generate all of the maps for this project in ArcGIS 10.1

Tuonasat	Shovel	Combined	Grid Coo	rdinates	UTM Co	oordinates	Sherd	Weight Count
Transect	Test Pit	Combined	Northing	Easting	Easting	Northing	Count	(grams)
	1	TR1STP1	500	500	273265	3702803	0	
4	2	TR1STP2	510	500	273266	3702813	0	
1	3	TR1STP3	360	500	273267	3702634	0	
	4	TR1STP4	330	500	273263	3702668	0	
	1	TR2STP1	500	470	273241	3702808	0	
	2	TR2STP2	530	470	273239	3702837	0	
	3	TR2STP3	560	470	273235	3702865	0	
2	4	TR2STP4	470	470	273238	3702775	0	
	5	TR2STP5	360	470	273235	3702665	0	
	6	TR2STP6	330	470	273232	3702633	0	
	7	TR2STP7	300	470	273231	3702608	0	
	1	TR3STP1	500	440	273210	3702807	0	
	2	TR3STP2	530	440	273210	3702833	0	
	3	TR3STP3	560	440	273210	3702863	0	
3	4	TR3STP4	570	440	273206	3702780	0	
3	5	TR3STP5	390	440	273202	3702694	0	
	6	TR3STP6	360	440	273201	3702663	0	
	7	TR3STP7	330	440	273199	3702633	0	
	8	TR3STP8	300	440	273199	3702600	0	
	1	TR4STP1	500	410	273176	3702807	0	
	2	TR4STP2	530	410	273168	3702832	0	
	3	TR4STP3	560	410	273172	3702858	0	
	4	TR4STP4	590	410	273180	3702889	0	
	5	TR4STP5	470	410	273172	3702785	0	
4	6	TR4STP6	440	410	273172	3702752	0	
	7	TR4STP7	410	410	273172	3702719	0	
	8	TR4STP8	380	410	273171	3702689	0	
	9	TR4STP9	350	410	273172	3702660	0	
	10	TR4STP10	320	410	273171	3702631	0	
	11	TR4STP11	290	410	273168	3702599	0	
	1	TR5STP1	500	380	273146	3702803	0	
	2	TR5STP2	530	380	273142	3702836	0	
	3	TR5STP3	560	380	273148	3702865	0	
	4	TR5STP4	590	380	273150	3702892	0	
	5	TR5STP5	620	380	273152	3702924	0	
5	6	TR5STP6	650	380	273154	3702951	0	
	7	TR5STP7	470	380	273144	3702773	0	
	8 9	TR5STP8 TR5STP9	440	380	273149	3702749	0	
		TR5STP9	410	380 380	273150	3702711	0	
	10 11	TR5STP10	380 350	380	273148	3702683 3702654	0	
	12	TR5STP11	320	380	273142 273145	3702634	0	
	12	TR6STP12	500	350	273143	3702829	0	
6	2	TR6STP1	530	350	273118	3702807	0	
U	3	TR6STP2	560	350	273118	3702829	0	
	3	11/02112	200	550	2/3113	3/02001	U	

	4	TR6STP4	590	350	273120	3702890	0	1
İ	5	TR6STP5	620	350	237112	3702918	2	6
İ	5N	TR6STP5N	635	350	273118	3702934	0	
Ī	5E	TR6STP5E	620	365	273133	3702919	0	
İ	5S	TR6STP5S	605	350	273111	3702908	0	
	5W	TR6STP5W	620	335	273099	3702922	0	
	6	TR6STP6	650	350	273117	3702953	0	
-	7	TR6STP7	680	350	273114	3702984	0	
-	8	TR6STP8	470	350	273113	3702779	0	
	9	TR6STP9	440	350	273110	3702740	0	
-	10	TR6STP10	410	350	273112	3702711	0	
-	11	TR6STP11	380	350	273110	3702681	0	
-	12	TR6STP12	350	350	273112	3702656	0	
-	13	TR6STP13	320	350	273112	3702626	0	
	1	TR7STP1	500	320	273083	3702803	0	
	2	TR7STP2	530	320	273091	3702829	0	
	3	TR7STP3	560	320	273082	3702864	4	14
	3E	TR7STP3E	590	320	273096	3702867	1	4
	3N	TR7STP3N	530	350	273080	3702882	1	18
	3S	TR7STP3S	530	290	273089	3702847	2	14
	4	TR7STP4	590	320	273088	3702894	0	
	5	TR7STP5	620	320	273088	3702923	0	
	6	TR7STP6	650	320	273095	3702957	0	
_	7	TR7STP7	680	320	273091	3702978	0	
7	8	TR7STP8	470	320	273085	3702774	0	
	9	TR7STP9	440	320	273084	3702745	0	
	10	TR7STP10	410	320	273089	3702718	0	
ľ	11	TR7STP11	380	320	273081	3702684	0	
	12	TR7STP12	350	320	273082	3702652	1	7
	12E	TR7STP12E	320	320	273097	3702654	0	
	12N	TR7STP12N	350	320	273081	3702670	0	
	12S	TR7STP12S	290	320	273083	3702637	0	
	12W	TR7STP12W	380	320	273068	3702653	0	
	13	TR7STP13	320	320	273089	3702625		
	1	TR8STP1	500	290	273059	3702807	0	
	2	TR8STP2	530	290	273059	3702842	0	
	3	TR8STP3	560	290	273061	3702867	1	5
	3N	TR8STP3N	560	320	273061	3702880	0	
	3S	TR8STP3S	560	260	273062	3702855	4	17
	3W	TR8STP3W	530	290	273045	3702861	0	0
0	4	TR8STP4	590	290	273065	3702900	0	
8	5	TR8STP5	620	290	273060	3702932	0	
	6	TR8STP6	650	290	273061	3702953	0	
	7	TR8STP7	680	290	273067	3702983	0	
	8	TR8STP8	710	290	273065	3703013	0	
	9	TR8STP9	470	290	273061	3702783	0	
	10	TR8STP10	440	290	273055	3702749	0	
	11	TR8STP11	410	290	273058	3702720	0	

	12	TR8STP12	380	290	273055	3702687	0	I
	13	TR8STP13	350	290	273052	3702655	0	
	1	TR9STP1	500	260	273024	3702809	0	
	2	TR9STP2	530	260	273024	3702836	0	
	3	TR9STP3	560	260	273024	3702867	0	
	4	TR9STP4	590	260	273016	3702900	0	
	5	TR9STP5	620	260	273016	3702900	0	
	6	TR9STP6	650	260	273003	3702956	0	
	7	TR9STP7	680	260	273002	3702992	0	
9	8	TR9STP8	710	260	272990	3703018	0	
	9	TR9STP9	740	260	272999	3703016	0	
	10	TR9STP10	470	260	273023	3703043	0	
	11	TR9STP11	440	260	273023	3702771	0	
	12	TR9STP12	410	260	273017	3702740	0	
	13	TR9STP13	380	260	273021	3702713	0	
	14	TR9STP14	350	260	273021	3702683	0	
	14	TR9STP14 TR10STP1	500	230	272995	3702839	0	
	2	TR10STP1	530	230	272990	3702811	0	
	3	TR10STP2	560	230	272987	3702830	0	
	<u>3</u>	TR10STP4	590	230	272979	3702802	0	
	5	TR10STP5	620	230	272976	3702890	0	
	6	TR10STP6	650	230	272970	3702924	0	
	7	TR10STP7	680	230	272971	3702930	0	
10	8	TR10STP8	710	230	272968	3702988	0	
	9	TR10STP9	740	230	272963	3703013	0	
	10	TR10STP10	770	230	272961	3703047	0	
	11	TR10STF10	470	230	272990	3703071	0	
	12	TR10STF11	440	230	272992	3702777	0	
	13	TR10STF12	430	230	272992	3702740	0	
	14	TR10STP14	410	230	272999	3702722	0	
	1	TR10S1F14	500	200	272965	3702889	0	
	2	TR11STP2	530	200	272962	3702804	0	
	3	TR11STP3	560	200	272958	3702864	0	
	4	TR11STP4	590	200	272947	3702804	0	
	5	TR11STP5	620	200	272948	3702890	0	
	6	TR11STP6	650	200	272941	3702927	0	
11	7	TR11STP7	680	200	272941	3702930	0	
11	8	TR11STP8	710	200	272941	3702980	0	
	9	TR11STP9	740	200	272936	3703017	0	
	10	TR11STP10	770	200	272939	3703043	0	
	11	TR11STF10	470	200	272961	3703081	0	
	12	TR11STF11	440	200	272957	3702782	0	
	13	TR11STF12	410	200	272959	3702742	0	
	13	TR11STF13	500	170	272932	3702714	0	
	2	TR12STP2	530	170	272930	3702800	0	
12	3	TR12STP2 TR12STP3	560	170	272934	3702838	0	
12	4	TR12STP4	590	170	272934	3702809	0	
	5	TR12STP5	620	170	272919	3702893	0	
	3	1K12S1F3	020	170	414711	3104940	U	1

	6	TR12STP6	650	170	272907	3702954	0	I
-	7	TR12STP7	680	170	272909	3702991	0	
-	8	TR12STP8	710	170	272901	3703013	0	
-	9	TR12STP9	740	170	272899	3703040	0	
-	10	TR12STP10	770	170	272893	3703073	0	
-	11	TR12STP11	470	170	272933	3702780	0	
-	12	TR12STP12	440	170	272933	3702755	0	
	1	TR13STP1	500	140	272904	3702804	0	
-	2	TR13STP2	530	140	272904	3702835	0	
-	3	TR13STP3	560	140	272905	3702861	0	
-	4	TR13STP4	590	140	272879	3702895	0	
-	5	TR13STP5	620	140	272885	3702928	0	
13	6	TR13STP6	650	140	272885	3702928	0	
-	7	TR13STP7	680	140	272880	3702982	0	
-	8	TR13STP8	710	140	272883	3703007	0	
-	9	TR13STP9	740	140	272862	3703007	0	
	10	TR13STP10	770	140	272863	3703043	0	
	10	TR13STP10	790	110	272836	3703076	0	
-	2	TR14STP1	760	110	272842	3703100	0	
-	3	TR14STF2	730	110	272842	3703063	0	
-	4	TR14STP4	700	110	272844	3703040	0	
14	5	TR14STP5	670	110	272835	3703004	0	
-	6	TR14STP6	640	110	272833	3702972	0	
-	7	TR14STP7		110	272834	3702930	0	
-	8	TR14STP8	610 580	110	272836	3702917	0	
	1	TR15STP1	790	80	272808	3702894	0	
-	2	TR15STP2	760	80	272808	3703098	0	
-	3	TR15STF2	730	80	272811	3703003	0	
15	4	TR15STP4	700	80	272805	3703037	0	
13	5	TR15STP5	670	80	272803	3703003	0	
-	6	TR15STP6	640	80	272811	3702978	0	
-	7	TR15STP7	610	80	272807	3702931	0	
	1	TR16STP1	790	50	272773	3702923	0	
-	2	TR16STP2	760	50	272780	3703072	0	
	3	TR16STP3	730	50	272780	3703072	0	
	4	TR16STP4	700	50	272777	3703040	0	
	5	TR16STP5	670	50	272775	3703013	0	
16	6	TR16STP6	640	50	272780	3702983	6	6
	6N	TR16STP6N	640	80	272779	3702931	0	
	6S	TR16STP6N	640	30	272779	3702909	0	
	6E	TR16STP6E	670	50	272794	3702938	0	
	6W	TR16STP6W	310	50	272764	3702930	0	
	1	TR17STP1	790	20	272749	3702930	0	
	2	TR17STP2	760	20	272746	3703101	0	
	3	TR17STP3	730	20	272746	3703007	0	
17	4	TR17STP3	700	20	272749	3703039	0	
	5	TR17STP4	670	20	272747	3703012	0	
	6	TR17STP6	640	20	272749	3702974	0	
	U	11/2110	040	20	414149	3702931	U	

	1	TR18STP1	330	530	273289	3702632	0	
18	2	TR18STP2	360	530	273292	3702668	0	
	3	TR18STP3	300	530	273289	3702602	0	
	1	TR19STP1	330	560	273318	3702631	0	
	2	TR19STP2	360	560	273325	3702662	0	
19	3	TR19STP3	300	560	273317	3702599	0	
	4	TR19STP4	270	560	273318	3702571	0	
	1	TR20STP1	330	590	273353	3702637	0	
	2	TR20STP2	360	590	273349	3702664	0	
20	3	TR20STP3	300	590	273350	3702600	0	
	4	TR20STP4	270	590	273351	3702577	0	
	1	TR21STP1	330	630	273383	3702635	0	
	2	TR21STP2	360	630	273377	3702669	0	
21	3	TR21STP3	300	630	273382	3702609	0	
	4	TR21STP4	270	630	273386	3702576	0	
	5	TR21STP5	240	630	273380	3702542	0	
	1	TR22STP1	330	660	273410	3702640	1	7
	1S	TR22STP1S	330	630	273412	3702629	2	5
	1E	TR22STP1E	360	660	273428	3702642	0	-
	1W	TR22STP1W	300	660	273396	3702645	0	
	2	TR22STP2	360	660	273416	3702668	4	14
22	2E	TR22STP2E	390	660	273431	3702667	0	
	2W	TR22STP2W	330	660	273400	3702668	0	
	3	TR22STP3	300	660	273414	3702614	0	
	4	TR22STP4	270	660	273413	3702579	0	
	5	TR22STP5	240	660	273412	3702558	0	
	6	TR22STP6	210	660	273410	3702530	0	
	1	TR23STP1	330	690	273440	3702639	0	
	2	TR23STP2	360	690	273446	3702668	0	
23	3	TR23STP3	300	690	273442	3702612	0	
	4	TR23STP4	270	690	273444	3702581	0	
	5	TR23STP5	240	690	273445	3702547	0	
	1	Aux1			273040	3702926	0	
	2	Aux2			273033	3702955	0	
Aux	3	Aux3			273033	3702982	0	
	4	Aux4			273027	3703018	0	
	5	Aux5			273259	3702592	0	
Rock Pile		Rock Pile			272812	3703034	0	
Rock Pile		Rock Pile			272746	3703099	0	
Rock Pile		Rock Pile			273029	3702712	0	

#### APPENDIX B

#### SITE FORMS

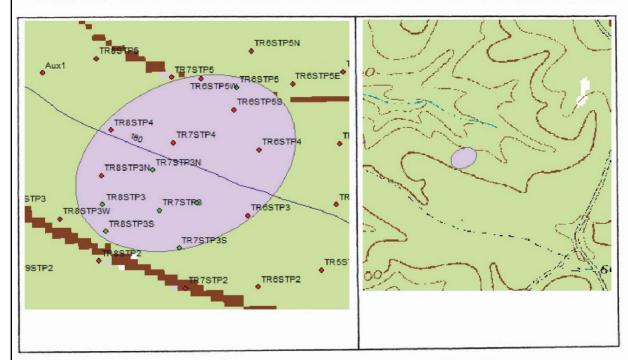
## **Brief Description**

The forms used are the official ones used by the Georgia Archaeological Site File. This form includes all essential information about the archaeological sites identified from this project. This information includes the size of the site, where it is located, what was found, its time period, where the collection is curated, who surveyed it, and other relevant information.

Once the information is filled out on the form and submitted to the Georgia Archaeological Site File it is given a designated site number. This site number includes the states designation, the county, and its site number. For example, for site 9PM2232, the number nine is designated as Georgia, PM stands for Putnam County, and 2232 means that it is the 2,232 site designated in Putnam County.

1990

County: Putnam Map	Name: Rock Eagle L	ake	USGS or USNOAA
UTM Zone: 17 UTM East: 273	107	UTM North: 370	3093
Owner: The University of Georgia	Address: 1269 Go	dfrey Road, Eatonton	, Georgia
	lth: 66 m		
Orientation: 1. N-S□ 2. E-W□	3. NE-SW⊠ 4.	NW-SE $\Box$ 5. 1	Round ☐ 6. Unknown
Kind of Investigation: 1. Survey □	2. Testing □ 3.	Excavation	<ol> <li>Documentary □</li> </ol>
<ol><li>Hearsay □</li></ol>	<ol> <li>Unknown ☐ 7.</li> </ol>	Amateur	
Standing Architecture: 1. Present □	2. Absent □		
Site Nature: 1. Plowzone 2. Subs	urface 3. Both [	4. Only Surface	Known □
<ol><li>Unknown□6. Und</li></ol>	erwater		
Midden: 1. Present □ 2. Absent □ 3. 1	Unknown 🗖 Featur	es: 1. Present 🗆 2	<ol> <li>Absent  3. Unknown</li> </ol>
Percent Disturbance: 1. None   2. 0	Greater than 50 🗆	3. Less than 50□	4. Unknown 🗆
Type of Site (Mill, Mound, Quarry, L.	ithic Scatter, etc.):_	Late Mississippian, La	amar Phase ceramic scatter.
Possible farmstead.			
Topography (Ridge, Terrace, etc.): Ric	dge.		
Current Vegetation (Woods, Pasture,	etc.):Wooded with nat	ural pine. Briers and	vines. Lots of low lying
vegetation			
Additional Information: B.F. Grant Men			
natural pine area by UGA Warnell School of			
shovel test pit 5, TR7STP3, TR8STP3. 15-m	- t		



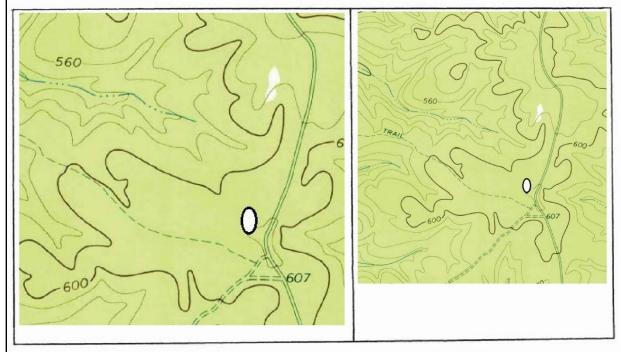
SKETCH MAP (Include sites, roads, streams, landmarks)

OFFICIAL MAP (Xerox of proper map)

State Site Numb	ber: 9PM2232 Institutional Site Number: FS_2013_0001
	. National Historic Landmark ☐ 2. National Natural Landmark ☐ . Georgia Register ☐ 4. Georgia Historic Trust ☐ 5. HABS ☐ 6. HAER ☐
	er Standing: 1. Determined Eligible  2. Recommended Ineligible
National Registe	er Level of Significance: 1. Local □ 2. State □ 3. National □
4. Subm	ate (Select up to Two): 1. Undisturbed □2. Cultivated □3. Eroded □ erged □5. Lake Flooded □6. Vandalized □7. Destroyed □8. Redeposited □ed □0. Razed □
Preservation Pro	ospects: 1. Safe 2. Endangered by: Possible Pine Farming 3. Unknown
	RECORD OF INVESTIGATIONS  Thanh Cao Affiliation: The University of Georiga Date: 06/16/2013  RCHAEOLOGICAL SUBSURFACE SURVEY IN B. F. GRANT MEMORIAL FOREST  17
Other Reports:	
Artifacts Collect	ted: 15 Ceramics. Late Mississippian, Lamar Phase. 13 Plain, 2 Fine Incised ed.
Location of Fiel	lections: The University of Georgia, Laboratory of Archaeology d Notes: The University of Georgia, Laboratory of Archaeology ons:
Name:	Address:
Cultural Periods	CULTURAL AFFINITY  Late Mississippian
Phases: Lamar	
Date	FORM PREPARATION AND REVISION Name Institutional Affiliation

1990

Institutional Site Number: FS_2013_0002 Site Name: Muddy Tractor
County: Putnam Map Name: Rock Eagle Lake USGS or USNOAA
UTM Zone: 17 UTM East: 273416 UTM North: 3702668
Owner: The University of Georgia Address: 1269 Godfrey Road, Eatonton, Georgia
Site Length: 35 meters Width: 15 meters Elevation: + - 193 meters
Orientation: 1. N-S⊠ 2. E-W□ 3. NE-SW□ 4. NW-SE□ 5. Round⊠ 6. Unknown□
Kind of Investigation: 1. Survey   2. Testing   3. Excavation   4. Documentary
5. Hearsay ☐ 6. Unknown ☐ 7. Amateur ☐
Standing Architecture: 1. Present □ 2. Absent □
Site Nature: 1. Plowzone 2. Subsurface 3. Both 4. Only Surface Known □
5. Unknowr□6. Underwater □
Midden: 1. Present □ 2. Absent □ 3. Unknown ☑ Features: 1. Present □ 2. Absent □ 3. Unknown ☑
Percent Disturbance: 1. None ≥ 2. Greater than 50 □ 3. Less than 50 □ 4. Unknown □
Type of Site (Mill, Mound, Quarry, Lithic Scatter, etc.): Late Mississippian, Lamar phase, single farmstead
Topography (Ridge, Terrace, etc.): Ridge
Current Vegetation (Woods, Pasture, etc.): Natural Pine. Light to thick undergrowth of saplings, briers, and
vines.
Additional Information: B.F. Grant Memorial Forest, Area 4, Stand 217 AND 256. Stand 217 is designated as a
natural pine area by UGA Warnell School of Forestry and Natural Resources. Shovel Test Pit Survey (Transect 22,
Shovel Test Pit 1 and 2). 15-Meter radial testing to determine site boundaries. Site was at the edge of stand. A walk
-ing survey was conducted in adjacent Stand 256 due north in a bulldozer track.



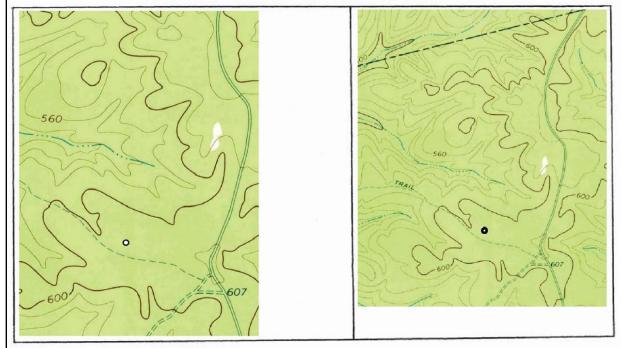
SKETCH MAP (Include sites, roads, streams, landmarks)

OFFICIAL MAP (Xerox of proper map)

State Site Nu	Institutional Site Number: FS_2013_0002	
Public Status	<ol> <li>National Historic Landmark □ 2. National Natural Landmark</li> <li>Georgia Register □ 4. Georgia Historic Trust □ 5. HABS □ 6. H</li> </ol>	
National Reg 3. Re	rister Standing: 1. Determined Eligible 2. Recommended Ineligible commended Eligible 4. Nominated 5. Listed 6. Unknown 7. Recommended Eligible 1. Recommended Eligible 1. Recommended Eligible 1. Recommended Eligible 7. Recommended Eligible 1. Recommended Eligible 1. Recommended Eligible 1. Recommended Eligible 1. Recommended Eligible 2. Recommended Eligible 3. Rec	le□ emoved□
National Reg	rister Level of Significance: 1. Local ⊠ 2. State □ 3. National □	]
4. Sul	State (Select up to Two): 1. Undisturbed □2. Cultivated □3. Erodecomerged □5. Lake Flooded □6. Vandalized □7. Destroyed □3. Redeaded □0. Razed □	
Preservation	Prospects: 1. Safe ☐ 2. Endangered by: Timber Harvesting 3. Unknown ☐	
	RECORD OF INVESTIGATIONS	
Supervisor: L Report Title:	uan Thanh Cao  Affiliation: The University of Georgia  Date: 05/	/07/2013
Other Report	is:	
	lected: 75 Ceramic Sherds. All Lamar Phase. 59 Plain, 14 Bold Incised, 2 rim sher artz PPK, broken, likely Late Woodland or maybe very early Mississippian	ds
Location of F	Collections: The University of Georgia, Laboratory of Archaeology Field Notes: The University of Georgia, Laboratory of Archaeology ctions:	
Name:	Address:	
Cultural Perio	CULTURAL AFFINITY ods: Late Mississippian	
Phases: Lamar		
Date	FORM PREPARATION AND REVISION Name Institutional Affiliation	

1990

Institutional Site Number: FS_2013_0003 Site Name: Benny Ridge	11000 110110
County: Putnam Map Name: Rock Eagle Lake UTM Zone: 17 UTM East: 273082 UTM North	
UTM Zone: 17 UTM East: 273082 UTM North	
Owner: The University of Georgia Address: 1269 Godfrey Road, Eat	onton, Georgia
Site Length: 1 meters Width: 1 meters Elevat	
Orientation: 1. N-S□ 2. E-W□ 3. NE-SW□ 4. NW-SE□	<ol> <li>Round ☐ 6. Unknown 区</li> </ol>
Kind of Investigation: 1. Survey   2. Testing   3. Excavation	□ 4. Documentary □
<ol> <li>Hearsay □ 6. Unknown □ 7. Amateur □</li> </ol>	
Standing Architecture: 1. Present □ 2. Absent □	
Site Nature: 1. Plowzone 2. Subsurface 3. Both 4. Only St	rface Known □
5. Unknown□6. Underwater □	
Midden: 1. Present □ 2. Absent □ 3. Unknown ☑ Features: 1. Preser	it □ 2. Absent□ 3. Unknown \
Percent Disturbance: 1. None □ 2. Greater than 50 □ 3. Less than	
Type of Site (Mill, Mound, Quarry, Lithic Scatter, etc.): Ceramic Scatte	
-,,,,,,,,,,,	
Topography(Ridge, Terrace, etc.): Ridge	
Current Vegetation (Woods, Pasture, etc.): Natural pine. Light to thick under	growth of saplings, briers, and
vines.	
Additional Information: B.F. Grant Memorial Forest, Area 4, Stand 217. Stand	217 is designated as a natural
pine area by UGA Warnell School of Forestry and Natural Resources. Shovel Test	
Shovel Test Pit 12.) 15-Meter radial testing around single ceramic find yielded no m	ore additional artifacts.



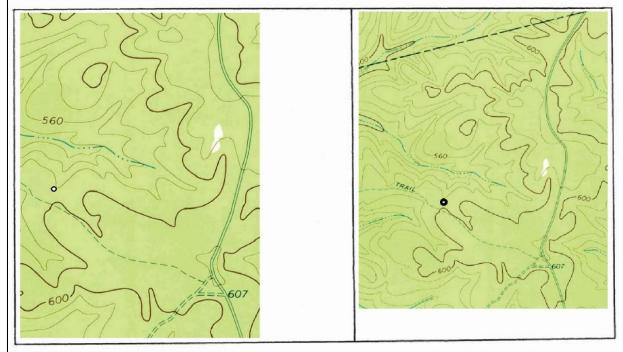
SKETCH MAP (Include sites, roads, streams, landmarks)

OFFICIAL MAP (Xerox of proper map)

State Site Nu	Institutional Site Number: FS_2013_0003
Public Status:	<ol> <li>National Historic Landmark □</li> <li>National Natural Landmark □</li> <li>Georgia Register □ 4. Georgia Historic Trust □ 5. HABS □ 6. HAER □</li> </ol>
National Reg 3. Red	rister Standing: 1. Determined Eligible  2. Recommended Ineligible  commended Eligible  4. Nominated  5. Listed  6. Unknown  7. Removed
National Reg	ister Level of Significance: 1. Local   2. State   3. National
4. Sub	State (Select up to Two): 1. Undisturbed □2. Cultivated □3. Eroded □ omerged □5. Lake Flooded □6. Vandalized □7. Destroyed □8. Redeposited aded □0. Razed □
Preservation 1	Prospects: 1. Safe ☐ 2. Endangered by: Timber Harvesting 3. Unknown ☐
	RECORD OF INVESTIGATIONS
Supervisor: Lu	uan Thanh Cao Affiliation: The University of Georgia Date: 05/10/2013
Report Title:	
Other Report	is:
Artifacts Coll	ected: 1 Ceramic Sherd. Plain Lamar.
Location of C	Collections: The University of Georgia, Laboratory of Archaeology
Location of F	Field Notes: The University of Georgia, Laboratory of Archaeology
	ctions:
Name:	Address:
C 11 P	CULTURAL AFFINITY
Cultural Perio	ods: Late Mississippian
Phases: Lamar	
	FORM PREPARATION AND REVISION
Date	Name Institutional Affiliation
	THE PART OF THE PA

1990

Institutional Site Number: FS_2013_0004 Site Name: Rose Acre
County: Putnam Map Name: Rock Eagle Lake USGS or USNOAA
UTM Zone: 17 UTM East: 272780 UTM North: 3702951
Owner: The University of Georgia Address: 1269 Godfrey Road, Eatonton, Georgia
Site Length: 1 meters Width: 1 meters Elevation: + - 177 meters
Orientation: 1. N-S 2. E-W 3. NE-SW 4. NW-SE 5. Round 6. Unknown
Kind of Investigation: 1. Survey   2. Testing   3. Excavation   4. Documentary
<ol> <li>Hearsay ☐ 6. Unknown ☐ 7. Amateur ☐</li> </ol>
Standing Architecture: 1. Present □ 2. Absent □
Site Nature: 1. Plowzone 2. Subsurface 3. Both 4. Only Surface Known □
5. Unknown □6. Underwater □
Midden: 1. Present □ 2. Absent □ 3. Unknown ☑ Features: 1. Present □ 2. Absent □ 3. Unknown ☑
Percent Disturbance: 1. None □ 2. Greater than 50 □ 3. Less than 50 ⋈ 4. Unknown □
Type of Site (Mill, Mound, Quarry, Lithic Scatter, etc.): Ceramic Scatter
Topography(Ridge, Terrace, etc.): Ridge
Current Vegetation (Woods, Pasture, etc.): Natural pine. Light to thick undergrowth of saplings, briers, and
vines.
Additional Information: B.F. Grant Memorial Forest, Area 4, Stand 217. Stand 217 is designated as a natural
pine area by UGA Warnell School of Forestry and Natural Resources. Shovel Test Pit Survey (Transect 16
Shovel Test Pit 6.) 15-Meter radial testing around single ceramic find yielded no more additional artifacts.
Additional testing recommended to define site boundaries.



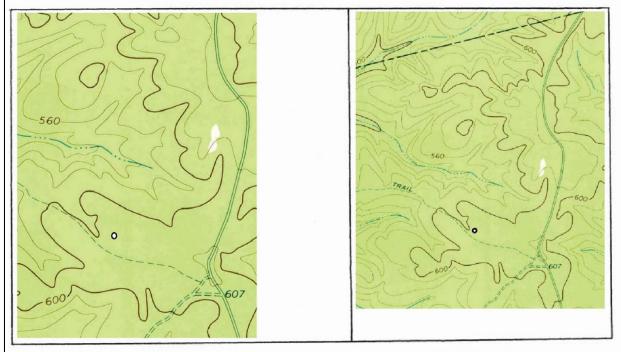
SKETCH MAP (Include sites, roads, streams, landmarks)

OFFICIAL MAP (Xerox of proper map)

State Site No	umber: 9PM2282 Institutional Site Number: FS_2013_0004
Public Status	s: 1. National Historic Landmark ☐ 2. National Natural Landmark ☐ 3. Georgia Register ☐ 4. Georgia Historic Trust ☐ 5. HABS ☐ 6. HAER ☐
	gister Standing: 1. Determined Eligible  2. Recommended Ineligible commended Eligible 4. Nominated 5. Listed 6. Unknown 7. Removed □
National Reg	gister Level of Significance: 1. Local   2. State   3. National □
4. Su	State (Select up to Two): 1. Undisturbed □ 2. Cultivated □ 3. Eroded □ bmerged □ 5. Lake Flooded □ 6. Vandalized □ 7. Destroyed □ 8. Redeposited □ aded □ 0. Razed □
Preservation	Prospects: 1. Safe ☐ 2. Endangered by: Timber Harvesting 3. Unknown ☐
	RECORD OF INVESTIGATIONS
Supervisor:	uan Thanh Cao Affiliation: The University of Georgia Date: 05/10/2013
Report Title:	
Location of (	Collections: The University of Georgia, Laboratory of Archaeology Field Notes: The University of Georgia, Laboratory of Archaeology ections:
Name:	Address:
Cultural Peri	CULTURAL AFFINITY iods: 19th Century
Date	FORM PREPARATION AND REVISION Name Institutional Affiliation

1990

County: Putnam Map Name: Rock Eagle UTM Zone: 17 UTM East: 273029	
	UTM North: 3702712
Owner: The University of Georgia Address: 1269 G	odfrey Road, Eatonton, Georgia
Site Length: 4 meters Width: 4 n	
Orientation: 1. N-S 2. E-W 3. NE-SW 4	4. NW-SE□ 5. Round⊠ 6. Unknown
Kind of Investigation: 1. Survey   2. Testing   3	<ol> <li>Excavation □ 4. Documentary □</li> </ol>
<ol> <li>Hearsay ☐ 6. Unknown ☐ ?</li> </ol>	7. Amateur 🗆
Standing Architecture: 1. Present □ 2. Absent □	
Site Nature: 1. Plowzone 2. Subsurface 3. Both	✓ 4. Only Surface Known
<ol><li>Unknown□6. Underwater □</li></ol>	Commission of the commission o
Midden: 1. Present □ 2. Absent □ 3. Unknown ☑ Featu	ires: 1. Present □ 2. Absent □ 3. Unknown
Percent Disturbance: 1. None 2. Greater than 50 □	3. Less than 50
Type of Site (Mill, Mound, Quarry, Lithic Scatter, etc.):	Quartz Cobble and Boulder Pile.
Topography (Ridge, Terrace, etc.): Ridge	
Current Vegetation (Woods, Pasture, etc.): Natural pine. Li	ght to thick undergrowth of saplings, briers, and
vines.	
Additional Information: B.F. Grant Memorial Forest, Area 4,	Stand 217. Stand 217 is designated as a natural
pine area by UGA Warnell School of Forestry and Natural Resour	ces. Found while conducting shovel testing
along Transect 9.Found south east Transect 9 Shovel Test Pit 12	by approximately 10-meters. Partial cleaning of
overgrowth yielded no artifacts. Quartz cobbles and boulders 30-6	Oom Pook Bile 65cm high Pocommonded revisit



SKETCH MAP (Include sites, roads, streams, landmarks)

OFFICIAL MAP (Xerox of proper map)

State Site Nu	mber: 9PM2283 Instit	utional Site Number: FS_20	13_0005
Public Status:	<ol> <li>National Historic Landma</li> <li>Georgia Register □ 4. Ge</li> </ol>		
National Regi	ister Standing: 1. Determined commended Eligible □ 4. Nom	l Eligible□ 2. Recommen inated□5. Listed□6. Unk	nded Ineligible□ nown□7. Removed□
National Regi	ister Level of Significance: 1.	Local   2. State   3	3. National □
4. Sub	State (Select up to Two): 1. Umerged ☐ 5. Lake Flooded ☐ 0. Razed ☐		
Preservation 1	Prospects: 1. Safe ☐ 2. Enda 3. Unknown ☐	ngered by: Timber Harvesting	
	RECORD OF I	INVESTIGATIONS	
Supervisor: Lu Report Title:_	an Thanh Cao Affiliation	n: The University of Georgia	Date: 05/10/2013
Other Reports	s:		
Artiforta Calle	astadi None		
Armacis Con	ected: None.		
I	collections: The University of Geo	uraia Laboratory of Arabaaalaay	
Location of F	ield Notes: The University of Geo	orgia, Laboratory of Archaeology	
	tions:		
Name:	Address:		
Cultural Perio		AL AFFINITY	• .
Di			
Phases:			
Date	FORM PREPARA	ATION AND REVISION Institutional Affil	liation

1990

Institutional Site Number: FS	2013 0006 Site Nam	a•	
County: Putnam			USGS or USNOAA
UTM Zone: 17 UTM E		UTM North: 37030	034
Owner: The University of Georgia	Address: 1269	Godfrey Road, Eatonton, G	Georgia
Site Length: 2.5 mete	rs Width: 2.5	meters Elevation: +	- 185 meters
Orientation: 1. N-S 2.	E-W□ 3. NE-SW□	4. NW-SE ☐ 5. Ro	ound⊠ 6. Unknown□
Kind of Investigation: 1. Su			Documentary □
	earsay ☐ 6. Unknown ☐	7. Amateur	
Standing Architecture: 1. Pr		LE 4 O-1-C-C	v = 0
Site Nature: 1. Plowzone   5. Unknown   5. Unknown   6.	2. Subsurface 3. Bot 6. Underwater □	n ⊠ 4. Only Surface	Known ∐
Midden: 1. Present□2. Abse	nt □3. Unknown 🗵 Fea	tures: 1. Present \( \square\) 2.	Absent□ 3. Unknown \(\bar{\bar{\bar{\bar{\bar{\bar{\bar{
Percent Disturbance: 1. Non	e □ 2. Greater than 50	□3. Less than 50× 4	. Unknown 🗆
Type of Site (Mill, Mound, Qu	uarry, Lithic Scatter, etc.	): Quartz Cobble and Bou	lder Pile.
Topography(Ridge, Terrace, e	etc.): Ridge		
Current Vegetation (Woods, F	'asture, etc.):Natural pine.	Light to thick undergrowth	of saplings, briers, and
vines.			
Additional Information: B.F. G			
pine area by UGA Warnell School of			
along Transect 15.Found south eas			
overgrowth yielded no artifacts. Qua	artz cobbles and boulders 30	-60cm. Rock Pile 65cm hig	gh. Recommended revisit.



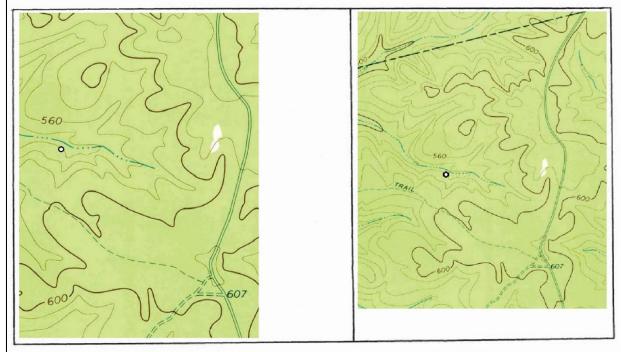
SKETCH MAP (Include sites, roads, streams, landmarks)

OFFICIAL MAP (Xerox of proper map)

State Site Nu	Institutional Site Number: FS_2013_0006
Public Status	<ol> <li>National Historic Landmark □</li> <li>National Natural Landmark □</li> <li>Georgia Register □ 4. Georgia Historic Trust □ 5. HABS □ 6. HAER □</li> </ol>
	gister Standing: 1. Determined Eligible 2. Recommended Ineligible commended Eligible 4. Nominated 5. Listed 6. Unknown 7. Removed
National Reg	gister Level of Significance: 1. Local   2. State   3. National   □
4. Su	State (Select up to Two): 1. Undisturbed ≥ 2. Cultivated 3. Eroded bmerged 5. Lake Flooded 6. Vandalized 7. Destroyed 8. Redeposited aded 0. Razed 1
Preservation	Prospects: 1. Safe ☐ 2. Endangered by: Timber Harvesting 3. Unknown ☐
	RECORD OF INVESTIGATIONS
Supervisor: L Report Title:	uan Thanh Cao Affiliation: The University of Georgia Date: 05/10/2013
Other Repor	ts:
Location of C	Collections: The University of Georgia, Laboratory of Archaeology Field Notes: The University of Georgia, Laboratory of Archaeology
Colle	ctions:
Name:	Address:
Cultural Peri	CULTURAL AFFINITY ods: Unknown.
Phases:	
Date	FORM PREPARATION AND REVISION Name Institutional Affiliation

1990

Institutional Site Number: FS_2013_0007 Site Name:
County: Putnam Map Name: Rock Eagle Lake USGS or USNOAA
UTM Zone: 17 UTM East: 272746 UTM North: 3703099
Owner: The University of Georgia Address: 1269 Godfrey Road, Eatonton, Georgia
Site Length: 3.4 meters Width: 4 meters Elevation: + - 182 meters
Orientation: 1. N-S□ 2. E-W□ 3. NE-SW□ 4. NW-SE□ 5. Round 6. Unknown□
Kind of Investigation: 1. Survey   2. Testing   3. Excavation   4. Documentary   5. Heaven   7. Asserting   7.
5. Hearsay ☐ 6. Unknown ☐ 7. Amateur ☐
Standing Architecture: 1. Present □ 2. Absent □
Site Nature: 1. Plowzone□2. Subsurface□ 3. Both ☑ 4. Only Surface Known□
5. Unknowr□6. Underwater □
Midden: 1. Present □ 2. Absent □ 3. Unknown ☑ Features: 1. Present □ 2. Absent □ 3. Unknown ☑
Percent Disturbance: 1. None □ 2. Greater than 50 □ 3. Less than 50 □ 4. Unknown □
Type of Site (Mill, Mound, Quarry, Lithic Scatter, etc.): Quartz Cobble and Boulder Pile.
Topography(Ridge, Terrace, etc.): Ridge
Network size Liebtte thield wedgewoods of earliest being
Current Vegetation (Woods, Pasture, etc.): Natural pine. Light to thick undergrowth of saplings, briers, and vines.
Additional Information: B.F. Grant Memorial Forest, Area 4, Stand 217. Stand 217 is designated as a natural
pine area by UGA Warnell School of Forestry and Natural Resources. Found while conducting shovel testing
along Transect 17. Found south west Transect 15 Shovel Test Pit 1 by approximately 10-meters. Partial cleaning of
overgrowth yielded no artifacts. Quartz cobbles and boulders 30-60cm. Rock Pile 67cm high. Recommended revisit.



SKETCH MAP (Include sites, roads, streams, landmarks)

OFFICIAL MAP (Xerox of proper map)

State Site Nu	Institutional Site Number: FS_2013_0007
Public Status	<ol> <li>National Historic Landmark □</li> <li>National Natural Landmark □</li> <li>Georgia Register □ 4. Georgia Historic Trust □ 5. HABS □ 6. HAER □</li> </ol>
	gister Standing: 1. Determined Eligible 2. Recommended Ineligible commended Eligible 4. Nominated 5. Listed 6. Unknown 7. Removed
National Reg	gister Level of Significance: 1. Local   2. State   3. National
4. Su	State (Select up to Two): 1. Undisturbed   2. Cultivated  3. Eroded  bmerged  5. Lake Flooded  6. Vandalized  7. Destroyed  Redeposited  aded  0. Razed  □
Preservation	Prospects: 1. Safe ☐ 2. Endangered by: Timber Harvesting 3. Unknown ☐
	RECORD OF INVESTIGATIONS
Supervisor: L Report Title:	uan Thanh Cao Affiliation: The University of Georgia Date: 05/10/2013
Other Repor	ts:
Artifacts Col	lected: None.
Location of I	Collections: The University of Georgia, Laboratory of Archaeology Field Notes: The University of Georgia, Laboratory of Archaeology actions:
Name:	Address:
Cultural Peri	CULTURAL AFFINITY ods: Unknown.
Phases:	
Date	FORM PREPARATION AND REVISION Name Institutional Affiliation