

**“YOU HAVE GUNS AND SO HAVE WE...”
AN ETHNOHISTORIC ANALYSIS OF CREEK AND SEMINOLE
COMBAT BEHAVIORS**

by

NATHAN R. LAWRES
B.A. University of Central Florida, 2008

A thesis submitted in partial fulfillment of the requirements
for the degree of Master of Arts
in the Department of Anthropology
in the College of Sciences
at the University of Central Florida
Orlando, Florida

Spring Term
2011

© 2012 Nathan R. Lawres

ABSTRACT

Resistance to oppression is a globally recognized cultural phenomenon that displays a remarkable amount of variation in its manifestations over both time and space. This cultural phenomenon is particularly evident among the Native American cultural groups of the Southeastern United States. Throughout the sixteenth through nineteenth centuries the European and American states employed tactics and implemented laws aimed at expanding the geographic boundaries of their respective states into the Tribal Zone of the Southeast. None of these groups, however, sat passively during this process; they employed resistive tactics and strategies aimed at maintaining their freedoms, their lives, and their traditional sociocultural structures. However, the resistive tactics and strategies, primarily manifested in the medium of warfare, have gone relatively unnoticed by scholars of the disciplines of history and anthropology, typically regarded simply as guerrilla in nature.

This research presents a new analytical model that is useful in qualitatively and quantitatively analyzing the behaviors employed in combat scenarios. Using the combat behaviors of Muskhogean speaking cultural groups as a case study, such as the Creeks and Seminoles and their Protohistoric predecessors, this model has shown that indigenous warfare in this region was complex, dynamic, and adaptive. This research has further implications in that it has documented the evolution of Seminole combat behaviors into the complex and dynamic behaviors that were displayed during the infamous Second

Seminole War. Furthermore, the model used in this research provides a fluid and adaptive base for the analysis of the combat behaviors of other cultural groups world-wide.

This work is dedicated to the Seminole Tribe of Florida, Seminole Nation of Oklahoma, the Creek Nation, and the Poarch Band of Creeks as their histories and cultures are what have brought life to this study... Shonabish!

ACKNOWLEDGMENTS

Many people are due acknowledgement for their help and support throughout the course of this research. First, and foremost, I would like to extend my gratitude to my committee members, especially Dr. Rosalyn Howard, a mentor and close friend, who spent tireless hours helping to guide my thoughts and edit this document. I am deeply indebted to her for her patience, understanding, and anthropological guidance. Second, I would like to extend my appreciation to the Seminole Tribe of Florida for the opportunity they have provided me in my employment within their Tribal Historic Preservation Office. Third, I would like to thank all of my colleagues at the Tribal Historic Preservation Office for their support and understanding throughout the course of this research, especially Dr. Paul Backhouse for his insight and support. Fourth, my appreciation is extended to my friends and family, who have provided unconditional love and support throughout the course of my education and, more importantly, my life. I would also like to thank Vanessa Poling, the love of my life, for all of her love and support throughout this project. Lastly (but certainly not least), I would like to extend my thanks and gratitude to Dr. David S. B. Butler, a mentor and friend, for his continual support and insight throughout my archaeological career.

TABLE OF CONTENTS

LIST OF FIGURES	ix
LIST OF TABLES	x
CHAPTER ONE: INTRODUCTION	12
CHAPTER TWO: CREEKS, SEMINOLES, AND WARFARE	19
CHAPTER THREE: METHODOLOGY	33
CHAPTER FOUR: ENVIRONMENTAL CONTEXT	46
The Coastal Plain Province	47
The Piedmont and Valley and Ridge Provinces.....	54
CHAPTER FIVE: RESISTING EXPANSION OF THE EUROPEAN STATE.....	58
Characteristics of Mississippianism.....	62
The Coosa Chiefdom	69
The Tascalusa Chiefdom.....	73
The Apalachee Chiefdom	76
Sixteenth Century Spanish Military	79
Resisting European Expansionism.....	81
The Decline of the Mississippian Chiefdoms	93
CHAPTER SIX: RESISTING EXPANSION OF THE AMERICAN STATE	95
The Historic Creeks	95
Resisting the Westward Expansion.....	104
Resisting the First Wave of Southern Expansion.....	120
Resisting the Second Wave of Southern Expansion	133
CHAPTER SEVEN: RESULTS OF ANALYSIS	173
Protohistoric Period Results.....	174

American Period Results.....	192
CHAPTER EIGHT: CONCLUSIONS	211
Protohistoric Period Warfare	211
American Period Warfare	214
Muskhogeian Patterns of Combat Behavior	215
The Evolution of Seminole Combat Behaviors	217
Strategy	227
Concluding Remarks and Future Research.....	231
REFERENCES	233

LIST OF FIGURES

Figure 1. Mesic temperate hammock surrounded by wet prairie.....	49
Figure 2. Pine flatwoods ecosystem.....	51
Figure 3. Locations of Mississippian Chiefdoms considered ancestral to the Creeks and Seminoles.....	60
Figure 4. Areas of Creek settlements during the Historic Period.	97
Figure 5. Diagram showing battle positions at the Dade Ambush.....	141
Figure 6. Diagram showing battle positions at the First Battle of the Withlacoochee.....	143
Figure 7. Diagram showing battle positions at the Battle of Okeechobee.	161

LIST OF TABLES

Table 1. Initial proposed model. From Lawres (2008:89).	36
Table 2. Amended model. From Lawres (2009).	37
Table 3. Proposed model for analyzing combat behaviors.	43
Table 4. Table of sources pertaining to the military <i>entradas</i>	81
Table 5. Classification of combat behaviors employed against the Narvaez <i>entrada</i>	85
Table 6. Classification of combat behaviors employed against the de Soto <i>entrada</i>	90
Table 7. Classification of combat behaviors employed during the march on the Napochies.	93
Table 8. Classification of combat behaviors employed during onset of First Creek War.	110
Table 9. Classification of combat behaviors employed during the Alabama River campaign. ..	111
Table 10. Classification of combat behaviors during the Georgia campaign.	113
Table 11. Classification of combat behaviors during Jackson's campaign.	117
Table 12. Classification of combat behaviors employed during the First Seminole War.	130
Table 13. Classification of combat behaviors employed during General Clinch's campaign.	144
Table 14. Classification of combat behaviors employed during General Scott's campaign.	151
Table 15. Classification of combat behaviors employed during General Call's campaign.	156
Table 16. Classification of combat behaviors employed during General Jesup's campaign.	164
Table 17. Classification of combat behaviors employed during General Taylor's campaign.	166
Table 18. Classification of combat behaviors employed during Gen. Armistead's campaign.	169
Table 19. Classification of combat behaviors employed during General Worth's campaign.	172
Table 20. Classification of combat behaviors (Class:Mode:Subtype) employed against the Narvaez <i>entrada</i>	174
Table 21. Class designations of combat behaviors employed against the Narvaez <i>entrada</i>	175
Table 22. Tactical subtypes employed by the Apalachee against the Narvaez <i>entrada</i>	176
Table 23. Ecosystems utilized during combat scenarios with the Narvaez <i>entrada</i>	177
Table 24. Crosstab. of Combat Behavior (Class:Mode:Subtype) and Environment attributes for the Narvaez <i>entrada</i>	177
Table 25. Bivariate correlation analysis of attributes of the Narvaez dataset.	178
Table 26. Classification of combat behaviors (Class:Mode:Subtype) employed against the de Soto <i>entrada</i>	180
Table 27. Class designations of combat behaviors employed against the de Soto <i>entrada</i>	181
Table 28. Combat modes employed against the de Soto <i>entrada</i>	181
Table 29. Tactical subtypes employed by the Apalachee against the de Soto <i>entrada</i>	182
Table 30. Ecosystems utilized during combat scenarios with the de Soto <i>entrada</i> dataset.	184
Table 31. Crosstab. of Combat Behavior (Class:Mode:Subtype) and Environment attributes from the de Soto <i>entrada</i> dataset.	184
Table 32. Bivariate correlation analysis of attributes of the de Soto dataset.	185

Table 33. Combat behaviors (Class:Mode:Subtype) employed during the Protohistoric period.	187
Table 34. Class designations of combat behaviors employed during the Protohistoric period. .	188
Table 35. Combat modes employed during the Protohistoric period.....	188
Table 36. Tactical subtypes employed during the Protohistoric period.....	190
Table 37. Ecosystems utilized during combat scenarios in the Protohistoric period.	191
Table 38. Crosstab. of Combat Behavior (Class:Mode:Subtype) and Environment attributes of the Protohistoric dataset.	191
Table 39. Bivariate correlation analysis of attributes of the Protohistoric dataset.	192
Table 40. Classification of combat behaviors (Class:Mode:Subtype) employed during the First Creek War.	193
Table 41. Class designations of combat behaviors employed during the First Creek War.....	194
Table 42. Combat modes employed during the First Creek War.....	195
Table 43. Tactical subtypes employed during the First Creek War.	196
Table 44. Ecosystems utilized during the First Creek War.....	197
Table 45. Crosstab. of Combat Behavior (Class:Mode:Subtype) and Environment attributes of First Creek War dataset.....	198
Table 46. Bivariate correlation analysis of attributes of the First Creek War dataset.....	199
Table 47. Combat behaviors (Class:Mode:Subtype) employed during the First Seminole War.	200
Table 48. Class designations of behaviors employed during the First Seminole War.....	200
Table 49. Combat modes employed during the First Seminole War.	201
Table 50. Tactical subtypes employed during the First Seminole War.	201
Table 51. Ecosystems utilized during the First Seminole War.	202
Table 52. Crosstab. of Combat Behavior (Class:Mode:Subtype) and Environment attributes of First Seminole War dataset.	202
Table 53. Bivariate correlation analysis of attributes of the First Seminole War dataset.	203
Table 54. Classification of combat behaviors (Class:Mode:Subtype) employed during the Second Seminole War.	204
Table 55. Class designations of behaviors employed during the Second Seminole War.	205
Table 56. Combat modes employed during the Second Seminole War.....	205
Table 57. Tactical subtypes employed during the Second Seminole War.	206
Table 58. Ecosystems utilized during the Second Seminole War.....	208
Table 59. Bivariate correlation analysis of attributes of the Second Seminole War dataset.....	210

CHAPTER ONE: INTRODUCTION

Resistance – “intentional... acts of defiance or opposition by a subordinate individual or group of individuals against a superior individual or set of individuals” (Seymour 2006:305) – is a cross-cultural phenomenon visible on a global scale. This phenomenon is a remarkable one in that it portrays a rich amount of variation, manifesting in a myriad of ways both over time and throughout space. Resistance, as a cultural phenomenon, has been explored by numerous scholars over the years, each of whom defined its attributes with slight differences in manner and context.

Notwithstanding these differences, most scholars of this subject have classified acts of resistance into two overarching categories. For example, Seymour (2006) classifies resistance into covert and overt acts of resistance that were employed by women in Nepal; Aptheker (1963) classifies resistance into individual and group acts of resistance in reference to African resistance to the institution of slavery; Bly (1998) uses the classifications of subtle resistance and band resistance to classify resistance aboard slaving vessels.

All of these examples make the distinction between two overarching forms of resistance based on certain characteristics. The first of these forms is subtle or covert. It occurs on the level of the individual or a diminutive group of individuals. It may not be

noticed by the dominant group as an act of resistance, such as when African or African American slaves would perform their work at a level below what they were capable of (Rivers 2000). The second of these forms, however, is the direct opposite of the first. It is overt, it happens on a large scale, and, without a doubt, it makes the dominant group aware that its oppressed charges are unhappy with their position. The second form of resistance is the subject of this research.

The cultural phenomenon of overt resistance is particularly evident among Native Americans in the southeastern United States. Within the geographic confines of this region, both Europeans and Americans employed strategies and implemented laws designed to subjugate the indigenous peoples of the region as well as appropriate their lands for the pleasure and expansion of the European and American states into the region (Lawres 2008). This research seeks to analyze the overt resistive behaviors displayed by Native Americans in the context of combat situations.

In the past, scholars have viewed Native American warfare as simplistic, employing only guerilla tactics, whereas Western warfare has always been viewed as a complex system of tactical operations. This view is biased and blatantly disregards tactics that repeatedly prevailed on battlefields in combat scenarios between Native Americans and both Europeans and Americans. Furthermore, many scholars have stated that Native Americans lacked a comprehension of military strategy; this statement holds true for the view of how warfare was waged by the Creek and Seminole peoples of the Southeastern United States (Weisman 2007; Owsley 1981). In fact, Owsley goes as far

as to claim “the Creek war chiefs... had no conception of military objectives and were unable to give any direction to their war” (1981:82).

Due to this disregard, there is a dearth of literature pertaining to the actual battlefield tactics of the Creek and Seminole peoples. The limited available documentation about these fascinating aspects of combat behavior is exceedingly vague. The majority of the literature pertaining to these behaviors is found within the historical narratives of the wars in which the Creek and Seminole peoples participated as combatants. This literature, however, merely mentions the actual tactics in passing as guerilla attacks on the U.S. military. There has been no attempt to accurately describe and analyze these combat behaviors; behaviors that were of great consequence to both the cultures and histories of these people.

This research seeks to transform the current view of Native American combat tactics by analyzing specific occurrences during combat scenarios. It is proposed that by utilizing both qualitative and quantitative data, garnered from both primary and secondary sources (soldiers’ journals and letters, official military reports, the archaeology of the battlefields, and historians’ narratives), it is possible to successfully describe and analyze the battlefield tactics employed by the Seminole peoples under the rubric of an analytical model. This model, discussed in detail in a Chapter Two, will be used to quantify specific attributes of the combat scenarios that occurred over multiple wars in which the Seminole peoples and their Creek predecessors were involved: the resistance to

the Spanish expeditions (i.e., Hernando de Soto and Pánfilo de Narváez), the First Creek War (1813-1814), and two of the Seminole Wars (1817-1818, 1835-1842).

By assessing combat behaviors over a broad spectrum of time it may be possible to identify and isolate changes, or adaptations, in Seminole combat behaviors through time as well as differences in behaviors between the Creeks and Seminoles. In order to strengthen the possibility of isolating these adaptations, this research is divided into two distinct temporal periods: the Protohistoric period (1539 – 1580 C.E.) and the American period (1776 - 1850). A practice approach, which involves contextualization of the combat behaviors both historically and culturally, will be taken to the analysis in order to attribute any proximate historical or cultural causes to any identifiable adaptations (Nielsen and Walker 2009). Contextualization will aid in both identifying the ways these behaviors were adaptive and in explaining the reasons for adaptation, whether due to culture, environment, historical forces, or simply due to the nature of a specific combat scenario. Furthermore, the assessment of the tactics employed in combat scenarios over time may shed light on the overall strategies employed by the Seminole peoples in warfare, strategies that have been posited to be adaptive and environmentally focused (Butler 2001; Watson 2011)

This research will strengthen assertions that Seminole warfare was waged strategically in order to achieve specific military objectives (Butler 2001; Watson 2011; Weisman 2007). The theoretical and methodological approaches to this research make it possible to: (1) Examine the ways in which these behaviors were adaptive, as Watson

(2011) posited. This will be achieved by analyzing the battlefield tactics employed during the resistance to the Spanish military expeditions of the sixteenth century as well as during the Creek Wars and Seminoles Wars of the nineteenth century; (2) Utilize a classification scheme similar to Butler (2001) with which tactics will be divided into large-scale and small-scale divisions, making it possible to test Watson's (2011) hypothesis that decentralization was a military strategy of the Seminoles; (3) Analyze these behaviors within the context of the environment making it possible to test the validity of Butler's (2001) claim that the Seminole preferred to utilize a "Woodland Fortress," and, by extension, apply this claim to the Creek peoples as well.

Overall, this research will provide a better appreciation for, and a more thorough understanding of, Seminole combat behaviors, which have been regarded in the past simply as guerilla warfare – a vague and unappreciative perspective on the complexity of indigenous warfare (Watson 2011; Weisman 2007). By providing a more thorough understanding of Seminole warfare strategies, this research aims to reconfigure the common perspective of them as simple guerilla tactics, to viewing them as part of an intricate, adaptive, and strategic process of how the Seminole peoples sought to recalibrate the order of their world through the medium of warfare (Wickman 1999).

Chapter Two presents a literature review that provides a brief overview of anthropological research on the subject of warfare as well as an overview of the literature pertaining to the wars involving the Seminole peoples and their Creek predecessors. This review also provides the background and theoretical approach of this research. Chapter

Three provides insight into the methodology and materials used in analyzing the combat behaviors of the Seminole peoples. This chapter defines and describes in detail the analytical model employed in this analysis, states the specific research questions integral to this study, and presents the methods employed in answering these research questions.

Chapter Four introduces the environmental context for this research. The study area encompasses the Deep South region: Florida, Georgia, and Alabama. Two major physiographic zones are present within the study area: the Atlantic Coastal Plain and the Appalachian Highlands (Piedmont Province and Ridge-and-Valley Province). A review of the various ecosystems within these physiographic zones provides the context for evaluating the specific ecosystems utilized by the Creek and Seminole peoples during combat scenarios.

Chapter Five focuses on the combat behaviors of the Muskogean peoples, of which the Creek and Seminole peoples are a part, during the Protohistoric period (1539-1580 C.E.). It was during this temporal period that Europeans began their military explorations of the North American continent. These behaviors were displayed in resistance to the initial attempt at the conquest of North America by Spanish military expeditions (i.e., Pánfilo de Narváez, Hernando de Soto, Tristan de Luna, and Juan Pardo). The chapter also provides a cultural context for the primary indigenous groups associated with the historic Creek Nation, as well as a Spanish military context. A historical narrative and analysis of the battles associated with these expeditions follows the cultural and military contexts.

Chapter Six focuses on the combat behaviors displayed by the Creek and Seminole peoples during the American period (1776 – 1850 C.E.). The wars discussed during this chapter include the First Creek War (1813 – 1814 C.E.) and the First and Second Seminole Wars (1817 – 1818 C.E. and 1835 – 1842 C.E., respectively). This chapter provides a cultural context for the nineteenth century Creek and Seminole peoples as well as an historical context for the U.S. military. Also presented are historical narratives and analyses of each combat scenario.

Chapter Seven discusses the analysis of the data obtained in this research. This analysis attempts to answer the research questions posed in Chapter Two. Chapter Eight presents the conclusions drawn from the statistical analyses and the contextualization of the wars, both cultural and historical. Cross-cultural comparisons based on the conclusions are discussed. The chapter concludes with a discussion of the implications of these findings for future research.

CHAPTER TWO: CREEKS, SEMINOLES, AND WARFARE

Warfare was a fundamental social institution for both the Creek and Seminole peoples, two cultural groups that are a part of the Muskogean language family (Weisman 1999, 2000, 2007; Wickman 1999; Wright 1986). Similar to the other institutions within Creek and Seminole society, warfare was a medium for restoring balance to the cosmos; it was a medium of recalibration (Wickman 1999). It is because of this recalibration ability that warfare was so important. In fact, it was so important that young males were not bequeathed an official name until they had successfully completed their first raid on an enemy (Debo 1941). This importance is demonstrated in other aspects of Creek and Seminole culture as well, such as in social structure and ritual and ceremony as well as in cultural identity.

Warfare became the primary medium for social mobility, with young males being able to climb in social rank based upon their valor in combat (Debo 1941; Ethridge 2003; Smith 2000; Weisman 1989; Wickman 1999). The degree of valor was based on the number of scalps and captives taken; the amount of bravery displayed; the ability to adequately provision oneself for a campaign; and the speed and stealth of a warrior (Ethridge 2003; Weisman 1989). Since scalping and taking captives were a means of demonstrating prowess in combat they were common practices and were a primary objective during combat (Corkran 1967; Swanton 1946; Wright 1986). Swanton (1946) claims that the importance placed upon scalping was due to its ability to placate the dead.

This idea fits with the recalibration concept. A warrior killed in battle is one less member of the clan and tribe, thus the recalibration of the clan and tribe must be sought to maintain order within society and the cosmos. In a culture that venerates ancestors, it is likely that the ancestors are viewed as needing to be placated for this loss. Furthermore, the taking of captives may fulfill this functional role as well. Frank (2005) claims that the treatment of captives may take one of four routes: adoption, death, enslavement, or ransom. Adoption and enslavement were the two routes most commonly taken as they allowed for the replacement of the lost clan member. Captives that were adopted into a clan most often took on the role of the lost clan member, fulfilling her or his exact duties within the clan. Enslavement of a captive often resulted in the adoption of the slave into the clan after a period of time.

Exploits in combat were the primary way for warriors to earn high social status as they were the ones who negotiated the equilibrium of the cosmos sought by Muskogean (both Creeks and Seminoles) societal institutions through recalibrating imbalances caused on the parts of humans (Wickman 1999). The social status achieved by warriors was measured in a ranking system. Scholars, however, disagree as to how many ranks actually existed and the correct terminology for the different ranks. Most of the literature points to four ranks of warriors: unranked warriors (little *emarthla* or *tasikyalgi*), warriors (big *emarthla* or *tastanagi*), war chiefs (*tustennuggee* or *tastanagi tako*), and the Great Warrior (*tustennuggee thlocco* or *isti puccanchau thlucco*) (Debo 1941; Ethridge 2003; Smith 2000). Warriors of higher ranking were provided seating at council meetings around the squareground, the center of Creek life and their *talwa* settlements.

In addition to the importance of warfare to the social structure of Creek and Seminole cultures, warfare was also integral to ritual and ceremony. Wickman (1999) claims warriors were important to Muskogee society due to their connection to medicine. This connection was recursive: medicine bundles and rituals were essential to the success of warfare and success in warfare allowed medicine to be used in positive ways which, in turn, led to the medicine becoming more powerful and more protective to the town. Further, the success of a campaign was dependent upon the successful completion of warfare related ritual and ceremony (Debo 1941). Prior to the departure of a contingent of warriors to the field of combat, two to three days of rituals and fasting occurred (Akers 1975; Smith 2000; Swanton 1946). These rituals sought to cleanse and purify the bodies of the warriors to remove any distractions and evils thus ensuring success in combat (Covington 1993; Mahon 1985; Swanton 1946). One of the primary ceremonies used for purification was the ritual imbibing of the black drink (Mahon 1985). The black drink is a highly caffeinated tea brewed from *Ilex vomitoria* (Yaupon Holly) that causes the drinker to vomit excessively, thus cleansing the body of impurities. Furthermore, warriors attempted to abstain from food and drink during a campaign. Upon returning from a successful campaign additional ceremonies were conducted in which a warrior's combat feats were tattooed on his body (Swanton 1946).

Prior to entering the field of battle, warriors had to properly attire and provision themselves. Their attire was comprised of a breechclout and moccasins; sometimes a buckskin vest and leggings (Swanton 1946). In the case of Seminole warriors this attire was utilized but some warriors also wore traditional Seminole long shirts that are known

for their vibrant colors. Covington, however, claims that warriors fought virtually in the nude, “possibly to avoid infection from clothing that would be carried into the body by buckshot” (1993:7). Warriors would also paint their bodies either black or red or a combination of the two (Akers 1975; Mahon 1985; Swanton 1946; Wright 1986). Warriors would carry enough weaponry, accoutrements, and provisions to last them through the immediate campaign. The primary weapon carried was the firearm, which was typically a flintlock shoulder arm (Akers 1975; Mahon 1985; Smith 2000; Swanton 1946; Wright 1986). Some warriors carried a bow and arrows in lieu of a firearm, but never the two technologies in tandem (Swanton 1946). Additional weaponry included war clubs, tomahawks, knives, and spears (Akers 1975; Mahon 1985; Smith 2000; Swanton 1946; Wright 1986). Strategy is an integral component of warfare. The Creek and Seminole warriors utilized combat strategies during conflicts. They sought to achieve specific goals on the battlefield, such as the capture of a baggage train for its supplies or to route a column of U.S. soldiers to prevent them from occupying a strategically positioned fortification. Watson (2011) discusses the strategies employed by the Seminoles during the Second Seminole War as being adaptive, changing to fit the cultural, political, and military context at the time. They changed from fighting large-scale battles to moving in small decentralized forces to make small-scale attacks. It is likely that strategies such as this were used in the past by the Creek peoples as well as other Muskogean groups throughout the southeast.

The war clubs carried by Creek and Seminole warriors were typically painted red in color, as this is the color that represents war (Wright 1986). Smith (2000) and Wright

(1986) state that the war club, or *atasa*, was a symbolic weapon by the eighteenth century. It represented war itself (Smith 2000). The *atasa*'s symbolic nature is demonstrated in its use as a call to arms. Covington (1993) states that to summon a war party the *tustenuggee* would place a red painted war club in the square ground and would send more of these to clan leaders of other villages. The people of these villages would be summoned to their respective council houses where warriors would be selected. Each town or village would contribute warriors to a campaign, the number from each town varying from two up to thirty warriors (Akers 1975; Corkran 1967; Smith 2000; Swanton 1946).

Warfare was also integral to cultural identity, especially in the case of the Seminole peoples. Weisman (1999, 2000, 2007) has written extensively on the importance of warfare to Seminole culture and identity. Warfare was important in many ways to Seminole culture. More importantly, though, warfare was a conduit for the ethnogenesis of Seminole identity. Due to the stresses of warfare with the United States, the Seminoles engaged in a nativistic movement that acted to strengthen the ties of unity between separate clans and towns located throughout the state of Florida. Weisman suggests that this is evidenced in the archaeological record in several ways. First, is the presence of native pottery styles and a lack of European and American ceramics at Seminole War period settlements. This shows a refutation of white culture. Second is the presence of trophy clothing (in the form of U.S. military buttons). This dates back to the practice of scalping as a form of trophy taking. Third, there is evidence at burial sites of a system of ceremonial exchange that could have acted as a means of strengthening

cultural ties. Fourth, is the presence of strong communications networks. These networks are displayed archaeologically at Seminole War battlefield sites. The fact that large groups of warriors gathered for these battles was the direct result of these communications networks. Furthermore, the concept of nativist movements have been applied to the First Creek War, or Redstick War, as well (Martin 1991).

The warfare waged by Creek and Seminole peoples has evolved over time. According to Corkran (1967), warfare was infrequent among Muskogean peoples (of which the Creek and Seminole peoples are a part of) prior to the arrival of Europeans. The archaeological record of the Mississippian southeast, however, displays a remarkable array of material cultural remains that are associated with warfare. This, however, does not demonstrate any frequency of warfare, just the presence of it. Corkran (1967) goes on to explain that Europeans explicitly fostered an increase in indigenous warfare through the employment of the divide and rule tactic. Historical evidence does point to this being the case. Not only did European contact have an effect on the frequency of warfare, it changed the behaviors associated with it. Prior to European contact Muskogean peoples engaged in pitched battles of massed armies. By the eighteenth century these tactics had changed. Muskogean people began using tactics such as “ambushes, slipping into enemy camps, prolonged sieges, and [fighting] alongside whites in their campaigns” (Wright 1986:39). Changes such as this have been documented in other areas of North America as well, such as among the indigenous peoples of the New England area (see Abler 1992; Keener 1998; Malone 1991). In addition, the motivations for warfare have changed since European contact. During the Mississippian period, the primary

motivations for warfare were conquest and tribute (Smith 2000). However, during the eighteenth and nineteenth centuries the primary motivations were revenge (Debo 1941; Smith 2000), glory (Debo 1941), and resistance to European and American expansionism. It is the purpose of this research to qualify and quantify exactly how Seminole warfare has changed over the course of time and to attribute any proximate historical causes to these changes.

There have been very few studies that have sought to place Creek and Seminole warfare within the purview of an anthropological context. Sources pertaining to the topic of warfare among the Seminole peoples from any disciplinary perspective are exceedingly scant (Watson 2011), and most of what is written about this topic is in the form of histories of the wars in which the Seminole were engaged (i.e. – the Seminole Wars). However, since the inception of the discipline of anthropology warfare has been a topic of interest. The level of interest in this particular topic, along with the definitions of warfare and the theoretical perspectives taken in studying it, has varied greatly over the years (Otterbein 1999, 2004). All of these theoretical perspectives attempt to explain the causes or origins of warfare. There is an ongoing debate among anthropologists as to whether warfare is an innate characteristic of our species and thus has origins that lie within the ancient genetic foundation of humanity or if it is a consequence of other factors that place its origins at a much later temporal period in the history of modern *Homo sapiens* (see Lambert 2002; McCauley 1990; Otterbein 1999, 2004; Simons 1999; Thorpe 2003 for detailed discussions of the theoretical explanations of warfare). This research does not seek to explain the causes or origins of warfare, however. Rather, the

focus of this research is the analysis of the specific combat behaviors employed on the battlefield, or the battlefield tactics, by the Seminole people and the ways in which they have changed through time and how either internal or external forces may have influenced these changes. There are only two previous studies conducted that sought to analyze the combat behaviors of the Seminole peoples. The first of these was Butler's (2001) thesis, "An Archaeological Model of Seminole Combat Behavior." In this study, Butler (2001) discusses the combat behaviors and strategies employed by the Seminoles during the Second Seminole War. The Seminoles engaged in three forms of combat during the course of the Second Seminole War: large-scale battles, small-scale battles, and attacks on U.S. Forts. By classifying these forms of combat thusly it is possible to analyze the implications these behaviors have on the development of a model that would aid in discovering the location of a Second Seminole War battlefield through archaeological methodologies. Butler's analysis included seven large-scale and eight small-scale battles. This analysis, however, described the battlefield tactics of the Seminoles as "guerrilla style" (Butler 2001:49). An important aspect of Butler's analysis on this research is the definition of the Seminole Woodland Fortress:

'[H]ammocks' ... served the Seminole as a sort of natural fort... The discrete borders served as the outline of an impromptu stockade. Additionally, the swamps or rivers served as natural moats... [and] as avenues of escape and natural barriers to hinder the advance of soldiers. (Butler 2001:50)

The only source that has undertaken a study seeking to analyze changes in combat behaviors through time among the Seminole peoples was my previous work, "Native and African Cultures and Their Resistance to Oppression Prior to 1850" (Lawres 2008). The

study proposed a model that was a modification of Butler's (2001) model for the analysis of specific combat behaviors. The model, which was divided into large-scale and small-scale, included categories for: assaults, ambushes, bait-and-attack, attacks on fortifications, and naval tactics. Using the same data set in Butler's (2001) analysis the study found that in large-scale battles assaults and ambushes comprised the two preferred tactics, while in small-scale battles, the assault was the preferred tactic. Furthermore, there was a change over the course of the first year of the Second Seminole War in the preference for large-scale tactics. Towards the beginning of the war ambushes were the preferred tactic in large-scale battles, whereas one year later it changed to assaults being preferred in a large-scale context.

In order to analyze what impacts any internal or external forces may have had on the combat behaviors of the Creek and Seminole peoples, this research employs the lens of tribal zone theory (term coined by Otterbein [2004]), which was first proposed by Ferguson and Whitehead (1992). This theory contends that warfare, while it was present prehistorically, was drastically altered and intensified along the peripheries, or tribal zones, of expanding states. The Seminole peoples occupied areas that were considered peripheral to the European and American states situated within the geographic confines of southeastern North America. The areas that they occupied are considered the "tribal zone" (Ferguson and Whitehead 1992). During the sixteenth and nineteenth centuries the European and American states propagated violent expansionist campaigns into the territories of these people, instigating a wide range of reactionary measures that ranged

from friendly relations for trade purposes to outright violent conflict against European and American expansion (Wickman 1999).

The reactions exhibited by the peoples of the tribal zone are largely impacted by what stage the state is in within the process of intrusion. Ferguson and Whitehead (1992) claim that this process consists of four stages that typically follow a logical progression: the first stage is indirect contact in which people within the tribal zone may hear of the state's establishment through trade relations with neighboring groups or may feel the effects of an epidemic that often precedes a state's intrusion (such as what happened in the Americas); the second stage is direct contact in which agents of the tribal zone have direct encounters with agents of the state; the third is encapsulation in which the tribal zone is condensed because the state surrounds it during expansion; the fourth stage is incorporation in which the tribal zone officially becomes part of the state and tribal peoples become citizens of the state. As this progression is logical, it is also logical that each stage may elicit a different response from the people that are peripheral to the expanding state.

Tribal zone theory employs a theoretical lens that is similar to world systems theory in many ways, yet differs from world systems theory in three major aspects. The first is that this theory is based on the fact that it criticizes world systems theory for placing a disproportionate amount of importance on the ability of a political power center on influencing peripheral cultures rather than on the peoples of the peripheral cultures as agents of change within peripheral structures. The second difference is in regards to the

focus of the manifestation of militaristic behaviors within the broader political context.

The third major difference is that tribal zone theory places a great amount of significance in the ways in which state expansion fits within the broader historical context from a global perspective. In other words, this theoretical lens advocates viewing warfare within the broader historical, political, and cultural contexts within which it takes place. This is one of the aspects that sets tribal zone theory apart from other anthropological theories concerning warfare. It allows for a holistic perspective to enter the researcher's analysis that would not be present in the traditional anthropological analysis of war, which tends to neglect the historical context (Ferguson and Whitehead 1992). By neglecting this context, the researcher leaves behind the diachronic perspective for a synchronic view that leaves the results wanting for something more.

The expansion of a state entity can have many effects on the people within the state's tribal zone. One of the major effects of this expansion is the restructuring of the social structures present within the tribal zone into structures that are consistent with anthropological definitions of a tribe (Ferguson and Whitehead 1992). This effect has been documented throughout southeastern North America. At the end of the Mississippian period and the beginning of the Protohistoric period in this region, the large, complex Mississippian chiefdoms saw a drastic decline in population due to the raging pestilence brought to the continent by the European military expeditions (Hahn 2004; Scarry 1994; Smith 1987, 2000). The decline was so drastic that many of the chiefdoms disintegrated, their peoples scattered. The scattered people eventually coalesced into several larger tribal organizations (Smith 1987). One such example is the

Creek Nation, which coalesced out of the Coosa, Tascalusa, Moundville, Shine II and several other chiefdoms along the Coosa, Tallapoosa, Alabama, and Chattahoochee River drainage systems (Blitz and Lorenz 2006; Hahn 2004; Jenkins 2009; Knight 1994; Smith 1987, 2000).

Another impact that the process of state expansion can have on the tribal zone is that it can alter the indigenous patterns of warfare. Tribal zone theory contends that European expansion drastically altered both the intensity of warfare and the form that warfare took. Ferguson and Whitehead (1992) state that warfare can take three different forms in the tribal zone: wars of resistance, ethnic soldiering, and internecine warfare. All three of these forms are demonstrated by the Creek and Seminole peoples. Wars of resistance occurred during the initial expansion of the European state into southeastern North America in the sixteenth century as well as during American expansion into Florida and Alabama during the nineteenth century. Ethnic soldiering was also displayed during both of these expansions. The European expeditions often elicited allies from the indigenous population in waging battle on other indigenous groups. The Americans did likewise during the Creek Wars and Seminole Wars, employing friendly Creek warriors against enemy Creek warriors during the Creek Wars and then against Seminole warriors during the Seminole Wars. Internecine warfare was also displayed during the Creek Wars and Seminole Wars, but especially during the First Creek War, or Redstick War. Internecine warfare is typically in reaction to a split in opinions concerning the state's wants or desires. This was effectively displayed when the Creek peoples split into Red

Stick and White Stick alliances and battled against both each other and the United States military.

By analyzing the wars that the Creek and Seminole peoples participated in (war against initial conquest, First Creek War, and the First and Second Seminole Wars) through the theoretical lens of tribal zone theory, it is possible for this research to provide a thorough, holistic analysis of the wars and the ways in which the combat behaviors employed during these wars were impacted by the expansion of the European and American states. Furthermore, due to the interconnectedness of these wars they will be analyzed as two distinct occurrences: the Protohistoric war against conquest and the Creek and Seminole war of resistance. The Creek and Seminole wars were interconnected in a multitude of ways. The first of these is that the Seminole peoples are a divergent cultural group of the Creeks. These two groups diverged as bands of Creek Indians began relocating into northern Florida during the early to mid-eighteenth century (Covington 1993; Mahon 1985; Milanich 1995, 1998; Milanich and Fairbanks 1980; Weisman 1989, 1999, 2000). The relocated bands eventually became known as the Seminoles. Second, the American state employed friendly Creek warriors in battle against enemy Creeks during the First Creek War and against enemy Seminoles during the First and Second Seminole Wars (Akers 1975; Buchanan 2005; Bunn and Williams 2008; Covington 1993; Ellisor 1996, 2010; Halbert and Ball 1995; Knetsch 2003; Mahon 1985; Martin 1991; Meltzer 2004; Missall and Missall 2004; Owsley 1981; Porter 1996; Sprague 2000; Waselkov 2006). Third, the United States government feared that the two groups would unite in their resistance, thus did everything in its power to keep these

groups divided (Mahon 1985; Missall and Missall 2004; Sprague 2000). Fourth, these wars were fought in response to the same primary reason: American expansion. While the wars took place at different times and in different places, the American state was attempting to do the same thing in all instances: expand into the sovereign territories of the Creek and Seminole peoples. Further, previous research has demonstrated this interconnectedness. Ellisor (2010) has demonstrated that the First and Second Creek War were part of the same process of conflict. Ellisor (2010) and Heidler and Heidler (2003) have also documented the fact that the First Seminole War was merely an extension of the First Creek War and General Jackson's campaign to appropriate Muskogean lands into the American state. Furthermore, Belko (2011) and Knetsch (2003) have demonstrated that all three Seminole Wars were part of the same process of resistance to American expansionism. However, due to the evolution of Seminole combat behaviors being the primary focus of this research only the First Creek War and First and Second Seminole Wars will be analyzed in this study. It should be noted, though, that I am a strong proponent of analyzing all of these wars as a singular occurrence due to their interconnectedness.

CHAPTER THREE: METHODOLOGY

In order to assess the behaviors of the Seminole peoples within the context of combat scenarios it was necessary to create an analytical model that meets several prerequisites. First, the model must act as a framework within which to view the behaviors in question. This framework must be fluid and adaptable, allowing the researcher to make amendments to the categorizations as new information is revealed in future studies of these behaviors. Second, the model must support quantitative research; each category should be able to be coded in a manner conducive to statistical analyses. Third, the model must aid in qualitative research. Each category should be defined in the best possible manner, yet still be fluid in nature in order to support future studies by other researchers. Fourth, the model must be thorough; each behavior must be accounted for within the overall framework. By creating a model that meets these prerequisites it is possible to analyze combat behaviors in a manner that is conducive to shedding new light on the subject of indigenous warfare patterns.

The initial manifestation of this model (Table 1) was proposed in 2008 in the author's undergraduate Honors in the Major thesis, "Native and African Cultures and their Resistance to Oppression in Florida Prior to 1850" (Lawres 2008). The impetus for this model was based on David Butler's thesis "An Archaeological Model of Seminole Combat Behavior" (2001). Butler's model analyzed Seminole combat behaviors within three classifications which were based upon specific attributes of the battle in question.

In his thesis, Class One Battles were defined as “[p]urposeful, planned, non-random event whereupon one group purposely engages another in an organized fashion” (Butler 2001:33). These battles further met the attributes of extending over an interval greater than one hour, having a minimum of two hundred combatants, and resulting in a minimum of twenty casualties. Class Two Battles were defined as “[u]nplanned, largely accidental engagements that occurred as opposing groups moved across the landscape” (Butler 2001:33). This battle type met the stipulations of persisting for an interval of less than one hour, having a minimum of one hundred combatants, and resulting in a minimum of eight casualties. Class Three Battles were defined as “[s]ignificant, organized, attacks on U.S. Army forts” (Butler 2001:33). This classification did not include any quantitative attributes.

While these classifications provided for a fascinating study of Seminole combat behavior, it was possible to modify this analytic model in order to assess the actual combat behaviors employed on the battlefield (Lawres 2008). In addition to Butler’s (2001) initial classification scheme, I added a fourth battle classification in order to account for any combat scenarios in a naval context. Classifications of tactical components were added to the Class One and Class Two battle classifications. These components included assaults, ambushes, and bait-and-attacks. Class Three and Class Four battle classifications did not include and tactical components.

By modifying Butler’s model to include the behaviors practiced in the context of combat, or the battlefield tactics, it was possible to further assess the combat behaviors of

the Seminoles and Black Seminoles during the Second Seminole War as well as those utilized by the indigenous cultural groups that inhabited the geographic region of Florida during the initial European Conquest (i.e., the expeditionary forces of de Leon, Narvaez, and de Soto). However, due to the dearth of quantitative descriptions of the indigenous combatants during the Spanish expeditions, it was necessary to abandon Butler's (2001) battle classification scheme and focus specifically on the tactical components present within the historical narratives of these expeditions. The analysis of the combat behaviors during the Second Seminole War was successful in demonstrating some change in combat behaviors from the beginning of the war to the end of the war. Although only a small sample of combat scenarios was used in the analysis, the analysis of the combat scenarios of the expeditions was successful in demonstrating differences in combat behaviors by geographic region. This change was from south to north, which correlates with changes in sociopolitical complexity in Preconquest and Protohistoric Florida.

Table 1. Initial proposed model. From Lawres (2008:89).

Type	Subtype	Definition
Class 1 Battle (Large-Scale)		“Purposeful, planned, non-random event whereupon one group purposefully engages another in an organized fashion... should involve at least 200 participants” (Butler 2001:33).
	A (Assault)	Planned engagements, involving more than two hundred combatants, in which the aggressors assault the opposing force from within view or while under cover but without the utilization of the element of surprise.
	B (Ambush)	Planned engagements in which two hundred or more combatants utilize the natural environment as a means of concealment that the aggressors may attack their opponents while in a state of being unawares.
	C (Bait & Attack)	Planned engagement in which the aggressors, numbering more than two hundred, utilized someone or something as bait to lure the enemy force to a location suitable for an attack.
Class 2 Battle (Small-Scale)		Planned or unplanned engagements involving less than two hundred individuals.
	A (Assault)	Planned engagements, involving less than two hundred combatants, in which the aggressors assault the opposing force from within view or while under cover but without the utilization of the element of surprise.
	B (Ambush)	Planned engagements in which two hundred or less combatants utilize the natural environment as a means of concealment that the aggressors may attack their opponents while in a state of being unawares.
	C (Bait & Attack)	Planned engagement in which the aggressors, numbering less than two hundred, utilized someone or something as bait to lure the enemy force to a location suitable for an attack.
Class 3 Battle (Attack on Fortified Position)		Organized attack upon a fortified position.
Class Four Battle (Naval Conflicts)		Organized engagement between two or more opposing forces in a naval context.

The second manifestation of this model (Table 2) was presented in a conference paper entitled, “Indigenous Combat Behavior: An Analysis of Battlefield Tactics Employed Against the Conquest of Florida” at the Southeastern Archaeological Conference held in Mobile, Alabama (Lawres 2009). This version of the model was

geared specifically towards analyzing the battlefield tactics employed against the de Leon, Narvaez, and de Soto expeditions in Florida. Due to the dearth of numerical estimates of indigenous military strength for many of the battles during the Protohistoric period, this model did not utilize the battle classification scheme presented in the earlier version. Rather, this version distinguished between the contexts of terrestrial and naval for combat scenarios. For the terrestrial type combat scenarios the same tactical components as the earlier model were employed. There were, however, two amendments to the tactical components. First, the designation of bait-and-attack was converted to ‘lure.’ Second, an additional tactical component was added: the use of fire. This version of the model, however, only accounted for the offensive measures employed by the indigenous cultural groups of Florida. By neglecting to include defensive measures, it portrays these peoples as the aggressors in this situation, which was not always the case. In order to account for this omission the model has been further refined for the current research endeavor.

Table 2. Amended model. From Lawres (2009).

Type	Subtype	Definition
1 (Terrestrial)	A (Assault)	Engagements in which the aggressors assault the opposing force without the utilization of the element of surprise.
	B (Ambush)	Engagements in which the aggressors utilize the natural environment or a manmade construction as a means of concealment that they may attack their opponents while in a state of being unaware.
	C (Lure)	Aggressors utilize someone or something as bait to lure the enemy force to a location suitable for an attack.
	D (Attack on Fortification)	Organized attack upon a fortified position.
	E (Use of Fire)	Use of fire in combat.
2 (Naval)		Engagement between opposing forces in a naval context.

The current manifestation of the model (Table 3) which is employed in this research attempts to meet each of the aforementioned prerequisites. It is a combination of the two previous versions of the analytical model with the addition of numerous amendments that allow for fluidity or adaptability. Each category of this model may be easily and properly coded for quantitative analysis, while also aiding in the qualitative aspects of this research. Further, the model is thorough; it accounts for each variable present in the context of a combat scenario.

The model has many components contained within its framework. A battle classification system, modified from Butler's (2001) system, categorizes each combat scenario into large-scale and small-scale battles, attacks on fortifications, and naval battles. This division into large-scale and small-scale is based on quantitative attributes of each combat scenario: large-scale battles should have a minimum of two hundred combatants, result in a minimum of fifteen casualties, and have a duration of at least one hour; small-scale battles should have a minimum of forty combatants (but no more than one hundred ninety nine), result in a minimum of eight casualties, and have a duration of less than one hour. In order to fit one of these classifications a battle must meet at least two of the criteria. The classification of 'attack on fortification' includes any organized attack of a Seminole force upon a fortified position held by United States soldiers. The classification of 'naval battle' includes any combat scenario that occurred when both parties were utilizing watercraft to engage in combat. There are, however, combat scenarios that do not meet any of the criteria to be considered battles and are, therefore,

not included in this analysis. Further, the scenarios that do not meet the qualifications of a battle should be analyzed in the future as they are a significant aspect of every war.

In order to account for the previous version's omission of defensive measures, the mode of combat is a component of the current model. This component includes categories for both offensive and defensive modes of combat. These two categories may be used in conjunction with each other. An engagement may begin offensively, but turn into a route, where the aggressor's tactics may be adapted into defensive measures. Both the offensive and defensive categories contain tactical components, labeled subtypes, to account for the actual behaviors in the combat scenario. These subtypes may be used in combination with each other as well. Offensive tactics include: ambush, assault, and flanking maneuver. Defensive tactics include: defense of a natural fortification (defensive ambush), fortification, and rearguard action/fighting retreat.

“Ambush” is defined by the United States Marine Corps as “the legitimate disposition of troops in concealment for the purpose of attacking an enemy by surprise” (United States Marine Corps 2009:41). Ambushes are further classifiable into offensive and defensive situations. These distinctions are dependent upon the ability to continue the aggressive maneuver after the initial volley of rifle fire:

An offensive ambush should be so located as to facilitate the assault after the initial burst of fire... A defensive ambush presupposes an inability to assault and the probable necessity of a rapid withdrawal. It should be so located as to facilitate defense, with natural obstacles between the position and the enemy, and routes of withdrawal should be carefully planned, reconnoitered, and prepared, if necessary (2009:41).

The defensive ambush, as defined above, is, for the purposes of this study, labeled ‘defense of a natural fortification.’ Fortification is defined as the modification of a position into one that is highly defensible against enemy attack, and may include the construction of breastworks, palisades, moats, ditches, or any number of elements that would increase the ability of the defenders to maintain their position against the enemy. In the case of the ‘natural fortification,’ it has been argued (Butler 2001) that the Seminoles utilized densely wooded hammocks as fortifications in lieu of constructing defensive fortifications themselves.

The “assault” is a conventional method of warfare, whereby a force of aggressors attacks without employing surprise as a stratagem. This tactic may be employed in the open or from behind protective cover. Many occasions throughout history have seen this tactic used in conjunction with flanking maneuvers, whereby the aggressing force will split (or may have initially been formed into separate companies) and will traverse to the right or left flank of the opposing force. This tactic is highly effective as it concentrates firepower from two angles towards a singular focal point. Further, firepower from the opposing force is less effective as it is dispersed in multiple directions on the battlefield, ultimately lessening the lethality of this force.

The “rearguard action/fighting retreat” is a tactic that involves a group of combatants who provide cover during the retreat of their comrades in the escape process. This sometimes involves a leapfrogging action in which a first group will provide covering fire until another group takes up position to provide covering fire while the first

group begins its retreat. Other times this tactic involves a group providing covering fire while noncombatants make their escape from a battleground (in cases such as this, the battleground usually involves a village or town).

An additional component was added to the current model to account for specific behaviors that are not always tactical in nature. This component is designated as “modifiers.” This category includes behaviors that enhance the tactics employed in combat as well as those that occur post-combat. These behaviors include: the use of bait, the use of fire, the use of horses, scalping, other trophy taking activities, and modification of the environment.

The final component of the model is perhaps the most important. This component is the environmental context within which each combat scenario occurred. It is general knowledge that Native American groups, including the Creek and Seminole, utilized the environment to their advantage in warfare, firing rifles and bows from the cover of trees and thick foliage. This is what made their method of warfare, known as “the skulking way of war” (Malone 2000), so successful against European and American combat tactics, which employed large lines of soldiers that faced off against a line of their enemies. These large lines were prime targets for hidden sharpshooters. Indeed, Butler (2001) notes the importance of the environment to Seminole strategies, claiming that they used specific environments as a means of both natural fortification and concealment (2001:50). As such, the environmental context of each combat scenario plays a pivotal role in the assessment of the combat behaviors of the Seminole peoples. The

environmental context for the entirety of the study area will be discussed in the forthcoming chapter.

The model in Table 3 will be employed to provide an in-depth analysis of the combat behaviors of the Seminole peoples. This analysis will utilize both primary and secondary sources, and will include both qualitative and quantitative data pertaining to the specific behaviors employed by the Seminole and Creeks during the context of combat scenarios. Furthermore, the analysis of these combat behaviors seeks to answer several questions that are fundamental to this research: 1) Are there notable differences between the combat behaviors employed by the Creek and Seminole peoples? Were these differences present between Seminole combat behaviors and those of their Protohistoric ancestors?; 2) Did the combat behaviors of the Seminoles change through time? If so, is it possible to isolate the causes of these changes?; 3) What roles did culture and environment play in these behaviors?; 4) Is Watson's (2011) assertion that decentralization was a military strategy of the Seminoles correct?; and 5) Is Butler's (2001) assessment of the use of the Seminole Woodland Fortress correct?

In order to identify the presence of any change in combat behaviors through time, this research is divided into two temporal periods: the Protohistoric Period and the American Period. The analysis of combat behaviors during these distinct temporal periods will provide a convenient medium for assessing changes over broad periods of time, and/or isolating changes within a distinct temporal frame. Simply isolating the

Table 3. Proposed model for analyzing combat behaviors.

Class	Combat Mode	Subtype	Definition	Modifiers
One: Large-scale	O: Offensive	A: Ambush	“[T]he legitimate disposition of troops in concealment for the purpose of attacking an enemy by surprise” (U.S. Marine Corps. 2009:41)	G: Use of bait
Two: Small-scale		B: Assault	A tactic whereupon a force of aggressors attacks the opposing force without employing surprise as a strategy	H: Use of fire
Three: Attack on Fortification		C: Flanking Maneuvers	A tactic in which the aggressing force splits and traverses to the right or left flank of the opposing force	I: Use of horses
Four: Naval	D: Defensive	D: Defense of Natural Fortification	Defense of an ecosystem that contains highly dense vegetation to replace the need for fortifications	J: Scalping
		E: Fortification	The modification of a position into one that is highly defensible against enemy attack	K: Trophy taking
		F: Rearguard Action	Action in which combatants provide leapfrogging cover during retreat	L: Environmental modification
Environmental Context		B:	Bay	
		CA:	Cleared Area	
		CS:	Cypress Swamp	
		EP:	Ephemeral Pond	
		FF:	Floodplain Forest	
		FW:	Forested Wetland (unspecified)	
		HM:	Highland Marsh	
		HH:	Hydric Hammock	
		L:	Lake	
		MTH:	Mesic Temperate Hammock	
		PF:	Pine Flatwoods	
		R:	River	
		S:	Slough	
		THH:	Tropical Hardwood Hammock	
XH:	Xeric Hammock			
WP/P	Wet Prairie			

presence of any changes in combat behaviors does not necessarily answer any significant questions. Therefore, identifying the causes of any changes observed will be a critical component of this research. In order to identify the causes of any changes in combat behavior, it is necessary to contextualize the combat behaviors within the broader historical and cultural contexts in which the wars were waged. Therefore, this research will provide a cultural and historical context for each of the wars being studied. Through the use of these contexts, it may be possible to identify specific historical events and any possible cultural causes that may have been catalysts for changes in these combat behaviors. The cultural contextualization for each temporal period will include sociopolitical organization and interaction, weaponry, iconography, and world-view.

The protohistoric period will focus on the temporal period ranging between 1513 and 1560 C.E. During this time frame, several European military expeditions traversed the North American Southeast. Several of these expeditions encountered peoples that were historically associated with the Creek Nation. These expeditionary forces included the Narvaez expedition, the de Soto expedition, the de Luna expedition, and the Pardo expedition (Bandera 1990; De Vaca 2003; Elvas 1904; Hoffman 1994; Hudson 1990, 1994, 1997; Pardo 1990; Priestly 2010).

The American period will focus on the temporal period ranging between 1813 and 1842 C.E. During this time frame, a plethora of wars were waged between the Americans and the indigenous cultural groups of North America. Many of these wars were fought over the issue of removal to the “Indian Territory” of Oklahoma. This

research, however, will focus on three of these wars: the First Creek War or Red Stick War; the First Seminole War; and the Second Seminole War. All three of these wars were crucial events in both Creek and Seminole history, as well as in the history of the Southeastern United States (Akers 1975; Butler 2001; Ellisor 1996, 2010; Hassig 1974; Mahon 1967; Martin 1991; Missall and Missall 2004; Porter 1996; Saunt 1999).

By employing the aforementioned analytical model it is possible to quantify and qualify data pertaining to the combat scenarios that the Seminole peoples, as well as their Creek and Protohistoric forebears, participated in as combatants. The specific tactics employed on the battlefield, as well as the use of specific environmental zones as battlefields, will be quantified based on specific attributes displayed in each combat scenario. The attributes of these combat scenarios were placed into spreadsheets for statistical analyses in PASW SPSS V.19. The statistical analyses will include basic descriptive statistics, crosstabulation between date of each combat scenario and the attributes of each scenario, crosstabulation between combat behavior and the environmental context of each scenario, and bivariate correlation analyses between various attributes in the dataset. These analyses will provide statistical results that will demonstrate the following: preference of tactics; differences in tactics between cultural groups; changes in tactics over time; correlations between various attributes of combat behaviors as well as with the environment; and preference of environmental type for battlefield use over time.

CHAPTER FOUR: ENVIRONMENTAL CONTEXT

The study area for this research lies within the geographic confines of three states: Florida, Georgia, and Alabama. These states are considered part of the Deep South region of North America and comprise part of two primary physiographic zones of the continent: the Atlantic Plain and the Appalachian Highlands (Fenneman 1928). These physiographic zones are comprised of numerous secondary physiographic zones, known as provinces, which are further divided into smaller sections. The study area encompasses: the Floridian and East Gulf Coastal Plain sections of the Coastal Plain Province of the Atlantic Plain; the Piedmont Upland section of the Piedmont Province of the Appalachian Highlands; and the Tennessee section of the Valley and Ridge Province of the Appalachian Highlands (Fenneman 1928). Each of the physiographic regions displays a remarkable amount of ecological diversity, and it is likely that the wars being studied as part of this research took place in a wide spectrum of the different ecosystems present within the study area. However, due to the lack of environmental details in many of the historic accounts of the wars it is not always possible to definitively categorize the ecosystem within which a battle took place. For this reason I will outline the primary ecosystems of the physiographic regions of the study area in this chapter.

The following discussion provides a broad description of the various ecosystems present in these sections. It is intended to provide general descriptions of the floristic characteristics of the ecosystems considered to be of primary interest to this research:

deciduous and temperate hardwood forests and wetlands. By providing these environmental descriptions, and thus an environmental context, it is possible to gain a fuller understanding of the relationships between the people, their behaviors, and the environment. It should be noted, however, that there are numerous variants of each of the ecosystems that are not discussed in this section. Furthermore, there are many other characteristics of the environments discussed below (i.e., soil types and moistures, hydrology, hydroperiod, annual rainfall and temperature, geomorphology, etc.) that are not mentioned here. This discussion is meant to provide the floristic characteristics of each ecosystem to enable the reader to better comprehend the environmental characteristics that are discussed later in this thesis.

The Coastal Plain Province

The Coastal Plain Province encompasses a large geographic area, extending from Long Island to Texas. This province is comprised of a raised continental shelf that runs from the coastline inward to the Fall Line, and is divided into six sections: the Embayed Section; the Sea Island Section; the Floridian Section; the East Gulf Coastal Plain Section; the Mississippi Alluvial Plain Section; and the West Gulf Coastal Plain Section (Fenneman 1928). Only two of these sections fall within the study area: the Floridian Section and the East Gulf Coastal Plain Section. The Floridian Section of the Coastal Plain Province consists of peninsular Florida; the East Gulf Coastal Plain Section of the Coastal Plain Province consists of the area east of the Mississippi Alluvial Plain and west of the Floridian Section (Fenneman 1928). These two sections of the Coastal Plain Province are the most ecologically diverse of the study area and roughly coincide with

the Atlantic & Gulf Coastal Plain floristic province, which is also known as the Southeastern Evergreen Forest Region (Braun 1967; Greller 2000, 2003).

Hammocks

The hardwood forests of the Floridian Section are known as hammocks.

Hammocks are defined as “dense, hardwood forests that occur in limited areas amid the wet prairies, marshes, and pine forests of the coastal plain” (Vince et al. 1989:1). There are numerous types of hammocks, each characterized by the dominant vegetation associations (see Greller 2003 for a detailed discussion of the various types). For the purposes of this research, three broad hammock types will be discussed based on Greller’s (1980) distributions: xeric hammocks, mesic hammocks, and hydric hammocks.

Xeric hammocks are mixed species hardwood forests that have a canopy dominated by beech (*Fagus* spp.), hickory (*Carya* spp.), oak (*Quercus* spp.), and pine (*Pinus* spp.) (Greller 1980, 2003; Platt and Schwartz 1990). Subcanopy vegetation varies from hammock to hammock but typically includes beauty berry (*Callicarpa americana*), chapman oak (*Quercus chapmanii*), and dwarf sumac (*Rhus copallina*) (Greller 2003; Platt and Schwartz 1990). They are characterized by a very dry soil moisture, hence the label of xeric. The distribution of these hammocks is limited to the upland areas of northern peninsular Florida and the Panhandle, which places this hammock type within both the Floridian Section and the East Gulf Coastal Plain Section.

Mesic hammocks are temperate broad-leaved forests that have a closed canopy dominated by live oak (*Quercus virginiana*), and sabal palm (*Sabal palmetto*) (Greller

1980, 2003). As with xeric hammocks, the subcanopy vegetation of mesic hammocks varies from hammock to hammock, but may include beauty berry (*Callicarpa americana*), saw palmetto (*Serenoa repens*), and myrsine (*Myrsine* spp.). This hammock type is characterized by soils that retain moisture annually due to their closed canopy and duff layer.



Figure 1. Mesic temperate hammock surrounded by wet prairie. Brighton Seminole Indian Reservation, Florida. Photograph taken by author.

Hydric hammocks are also temperate broad-leaved forests with a closed canopy. However, they are characterized by floristic associations and soil moistures that differ from mesic hammocks (Greller 2003; Vince et al. 1989). These hammocks have a

canopy that is typically dominated by live oak (*Quercus virginiana*), swamp laurel oak (*Quercus laurifolia*), and sabal palm (*Sabal palmetto*) (Greller 2003; Vince et al 1989). The distribution of hydric hammocks encompasses all of peninsular Florida and reaches a short distance into southern Georgia (Vince et al. 1989). They are usually situated in low lying areas that are subject to inundation at various times throughout the year, causing them to be classified as a wetland community. Vince et al. (1989:2) claim that hydric hammocks are often “situated on gentle slopes between mesic hammock or pine flatwoods and river swamp, wet prairie, or marsh.”

Flatwoods

Flatwoods are ecosystems that are defined as “open forests of... pine [*Pinus* spp.] with an undergrowth of saw palmetto (*Serenoa repens*), gallberry (*Ilex glabra*), wiregrass (*Aristida stricta*), and bearing the marks of frequent fires” (Abrahamson and Hartnett 1990:103). There are four dominant canopy trees in flatwoods ecosystems: longleaf pine (*Pinus palustris*), slash pine (*Pinus elliotti* var. *elliotti*), south Florida slash pine (*Pinus elliotti* var. *densa*), and pond pine (*Pinus serotina*). These dominant trees may co-occur in a flatwoods ecosystem or they may be single dominants; these species are distributed differentially throughout the Floridian and East Gulf Coastal Sections (Abrahamson and Hartnett 1990). Dry prairies are also considered to be a flatwoods ecosystem, but they lack a continuous canopy. Dry prairies are similar to both flatwoods and wet prairies. However, they have a very short hydroperiod when compared to wet prairies, which is reflected in their dominant vegetation of broomsedge (*Andropogon virginicus*), arrowfeather (*Aristida purpurascens*), and wiregrass (*Aristida stricta*) (Abrahamson and

Hartnett 1990).



Figure 2. Pine flatwoods ecosystem. Brighton Seminole Indian Reservation, Florida. Photograph taken by author.

Wetlands

Wetlands are ecosystems that characterized by hydroperiods long enough to drown upland adapted vegetation (Ewel 1990). Whitney et al. (2004) place wetlands as ecosystems that are intermediate to aquatic ecosystems and uplands. There are two overarching categories of wetlands within the Floridian and East Gulf Coastal Plain: forested wetlands and herbaceous wetlands.

Forested wetlands, commonly called swamps, are wetlands that are dominated by woody vegetation and include two categories: river swamps and stillwater swamps. River swamps include whitewater and blackwater floodplain forests as well as spring run swamps. Stillwater swamps include bay swamps, cypress savannas, cypress strands, cypress ponds, gum ponds, hydric hammocks, lake fringe swamps, melaleuca swamps, mixed hardwood swamps, and shrub bogs (Ewel 1990).

River swamps are characterized by a hydroperiod that is short, as it is correlated with river flooding (Ewel 1990). These swamps demonstrate a high level of species diversity and include multiple forest types that are defined by dominant vegetation associations. All three forms of river swamps are dominated by cypress, tupelo, or gum trees. Blackwater floodplain forests occur alongside the many slow moving, tannin stained rivers of Florida. Whitewater floodplain forests occur alongside fast moving alluvial rivers; there is only one such alluvial river in the Floridian and East Gulf Coastal Plain Sections: the Apalachicola River (Ewel 1990; Whitney et al. 2004). The floodplain forest associated with this river boasts an exceedingly high diversity, with four different types of forests (dominant vegetation associations) present within the floodplain (Ewel 1990). Spring run swamps are very similar to the other river swamps, with only subtle differences distinguishing them (Ewel 1990).

Stillwater swamps are characterized by long hydroperiods and low species diversity (Ewel 1990; Whitney et al. 2004). The various forms of cypress swamps are the most common found within the Floridian and East Gulf Coastal Plain Sections. These

swamps are dominated by cypress trees (*Taxodium* spp.) and the different forms are differentiated by amount of water flow (Ewel 1990). For example, cypress ponds are inundated depressions, with no water movement, in the landscape that are dominated by cypress, which form a domed appearance while cypress strands are sloughs, with exceedingly slow water movement (sometimes unobservable), that are dominated by cypress. Shrub bogs, bay swamps, and gum ponds are similar to cypress ponds in that they occupy inundated depressions, however, they consist of different dominant vegetation (Ewel 1990; Whitney et al. 2004). Shrub bogs are dominated by low vegetation, such as titi (*Cyrilla racemiflora*) or rusty lyonia (*Lyonia ferruginea*), that is exceptionally thick; bay swamps are dominated by bay trees (*Gordonia lasianthus* and *Magnolia virginiana*); gum ponds are dominated by gum trees (*Nyssa* spp.) (Ewel 1990).

Herbaceous wetlands, or marshes, are wetlands that are dominated by herbaceous vegetation and include six major categories: wet prairies, saw grass marshes, submersed marshes, cattail marshes, water lily marshes, and flag marshes (Kushlan 1990). Wet prairies are dominated grassy vegetation and have a relatively short hydroperiod; saw grass marshes are dominated by saw grass (*Cladium jamaicensis*) and have a relatively long hydroperiod; flag marshes, cattail marshes, and water lily marshes have long hydroperiods, are generally inundated year-round, and are dominated by the species contained in their names; submersed marshes are found in areas of water that is too deep for emergent vegetation to survive, have a hydroperiod that lasts annually, and dominated by species such as naiad (*Najas guadalupensis*) and primrose willow (*Ludwigia repens*) (Kushlan 1990; Whitney et al. 2004).

The Piedmont and Valley and Ridge Provinces

The northern terminus of the Coastal Plain Province gives way to the rolling hills of the Piedmont Province. The Piedmont Province “consists of the plateaus and plains lying between the Coastal Plain and the first mountain range inland” (Fenneman 1928:281). This province is divided into two sections: the Piedmont Upland Section and the Piedmont Lowland Section. The Piedmont Upland Section falls within the study area for this research, running through northern and central Georgia and into the east-central portion of Alabama, while the Piedmont Lowland Section runs through the Carolinas into northeastern North America (Fenneman 1928). This section is roughly correlated with the Gulf Slope Section of the Oak-Pine Forest Region (Braun 1967).

The Valley and Ridge Province is “the longitudinal belt of valleys and included mountains which traverses the Appalachian Highlands” (Fenneman 1928:281). This province encompasses a large geographic area that includes a unbroken chain of ridges and depressions running from Alabama to New England. Due to its large extent and the geologic variation within its extent, it is divided into three sections: the Tennessee Section; the Middle Section; and the Hudson Valley Section. The Tennessee Section is the only section falls within the study area for this research. This section comprises the southern portion of the Valley and Ridge Province. It is “characterized by longitudinal drainage... nearly straight, parallel mountain ridges and valleys produced by erosion” (Fenneman 1928:281). These parallel ridges, a characteristic that separates this section from the Middle Section and Hudson Valley Section, run from northeast to southwest. As with the Piedmont Uplands Section, the Tennessee Section is roughly correlated with

the Gulf Slope Section of the Oak-Pine Forest Region (Braun 1967). There are five primary ecosystems found within the Piedmont Upland and Tennessee Sections of the Appalachian Highlands that are of interest to this research: river bluff forest; alluvial forest; basic mesic forest; oak-hickory forest; and xeric hardpan forest (Spira 2011). Wetlands are also present within the Piedmont Province, however, they are of the same general classifications as those previously discussed for the Coastal Plain Province.

Deciduous Forests

River bluff forests are dense, closed canopy forests located, as their name suggests, along the bluffs of rivers (Spira 2011). The primary characteristic of these forests are that they have a dominant canopy vegetation of American beech (*Fagus grandifolia*), tulip tree (*Liriodendron tulipifera*) and red maple (*Acer rubrum*) and they contain no more than a small amount of scattered oaks (*Quercus* spp.). Common understory trees and shrubs vary throughout the region but may include flowering dogwood (*Cornus florida*), Carolina silverbell (*Halesia tetraptera*), and gorge rhododendron (*Rhododendron minus*). This ecosystem is distributed throughout the Piedmont Province.

Alluvial forests are closed canopy forests that have an open understory; they are located in the alluvial floodplains of the rivers throughout the Piedmont Province (Spira 2011). The canopy is dominated by sycamore (*Platanus occidentalis*), river birch (*Betula nigra*), and sweetgum (*Liquidambar styraciflua*) while the understory typically consists

of box elder (*Acer negundo*), American holly (*Ilex opaca*), spicebush (*Lindera benzoin*), pawpaw (*Asimina triloba*), and giant cane (*Arundinaria gigantea*).

Basic mesic forests are closed canopy forests with extremely dense and highly diversified herbaceous layers; they are characterized by the basic nature of their soils, which are the cause of their high species diversity (Spira 2011). Dominant canopy vegetation includes tulip tree (*Liriodendron tulipifera*), American beech (*Fagus grandifolia*), and northern red oak (*Quercus rubra*). The understory and herbaceous layer of these ecosystems are extremely diverse, with floral species being associated with the presence of specific minerals and nutrients in the soil (Spira 2011). These ecosystems are “patchily distributed from Virginia south to Georgia... basic mesic forest occurs on slopes or flats in the piedmont region” (Spira 2011:192-193).

Oak-Hickory forests are characterized by a closed canopy dominated by oaks (*Quercus* spp.) with hickories (*Carya* spp.) and pines (*Pinus* spp.) commonly interspersed within the canopy (Bolen 1998; Spira 2011). The understory is typically dense within this ecosystem, but herbaceous vegetation is typically sparse. This ecosystem type is the most prominent within the Piedmont Uplands Section and has a distribution that spreads throughout much of the southeast in a giant U-shape (Bolen 1998; Spira 2011).

Xeric hardpan forests are open-canopied forests that have a dominant canopy flora consisting of blackjack oak (*Quercus marilandica*) and post oak (*Quercus stellata*) (Spira 2011). These ecosystems typically appear to be stunted due to having a distributional pattern that locates them atop shallow soils underlain by hardpan or rock

formations. It is not a common ecosystem type, but is distributed throughout the piedmont region (Spira 2011).

CHAPTER FIVE: RESISTING EXPANSION OF THE EUROPEAN STATE

European Contact in the southeast began when Juan Ponce de Leon's first expedition landed on the east coast of Florida in 1513 C.E. There he met the Ais peoples in a violent encounter and subsequently the Calusa people on the southwest coast (Lawres 2008, 2009). Shortly afterwards other Europeans began exploring *La Florida*, as the southeast was known then, throughout the sixteenth and seventeenth centuries. This period of exploration is known as the Protohistoric period. This temporal period is transitional between the prehistoric and historic periods. It is extremely significant in the fact that drastic changes occurred in indigenous sociocultural patterns due to contact with Europeans. This is especially true of the Southeast region, within which our study area falls. During the late prehistoric period, known as the Mississippian period (C.E. 1000-1540), the Southeast region was dominated by chiefdom societies. It was these Mississippian chiefdoms that the Europeans initially encountered. European contact, however, drastically altered the sociopolitical structure within the entire region. This was accomplished through warfare, slavery, and disease. So vast was the death toll that these grandiose chiefdoms collapsed. Thus one of the primary characteristics of this important temporal period is the collapse and restructuring of indigenous societies as well as cultures. Much of this was accomplished through a process of coalescence in which multiple groups comprised of the fragmented chiefdoms would relocate and fuse together

(Jenkins 2009; Martin 1987). It was through this process that the Southeastern Tribes we know from the Historic period were formed.

During the Protohistoric period the Creek and Seminole peoples did not exist as distinct cultural groups. Rather, they are coalescent cultural groups that formed out of the Mississippian tradition (Hahn 2004; Jenkins 2009; Knight 1994; Smith 1987, 1994, 2000; Weisman 1989, 1999, 2000, 2007). Deciphering which cultures coalesced to form the historic Creeks, and later the Seminoles is a difficult task, though; it has led to contention among many archaeologists (Fairbanks 1952; Hahn 2004; Jenkins 2009; Knight 1994; Mason 2005; Sears 1955). Some researchers have attempted using Creek myths and folklores for this task; others have attempted using Historic and Protohistoric place names (Knight 1994). These methods have been demonstrated to be ineffective for making correlations between prehistoric cultures and the historic Creeks. However, by using the direct-historical approach we can trace the development of the historic Creek material assemblages backwards through time, associating them with specific chiefdoms from the Mississippian period (Jenkins 2009; Knight 1994). These chiefdoms were centered along several major waterways: the Coosa River; the Black Warrior River; the Tallapoosa River; the Chattahoochee/Apalachicola River; the Tombigbee River; and the Alabama

River Jenkins 2009; Knight 1994).

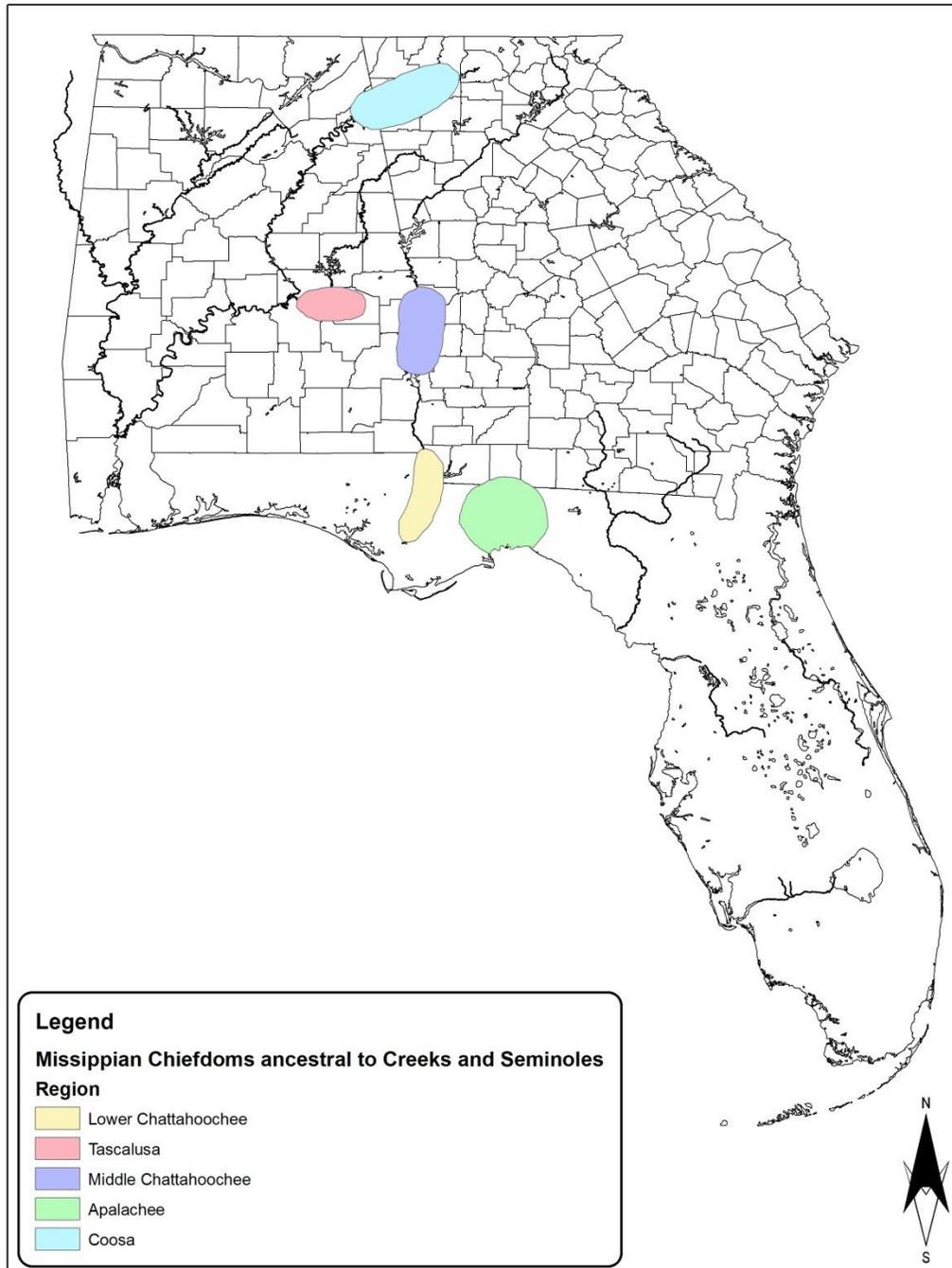


Figure 3. Locations of Missippian Chiefdoms considered ancestral to the Creeks and Seminoles. Data courtesy of Seminole Tribe of Florida Tribal Historic Preservation Office. Map created using ArcGIS 10.0.

Jenkins (2009) has created a formidable chronology that associates the historic Creeks with the Mississippian chiefdoms of these regions. He posits that the roots of the Creek coalescence are firmly entrenched within the Early Mississippian period, a temporal period in which coalescence was a common occurrence, much as in the Protohistoric period. The coalescence of the Mississippian period, however, was due to the instability of the political structure of Mississippian chiefdoms. Jenkins (2009) explains Mississippian coalescence as occurring through a process of cycling, budding, and fissioning. Anderson defines cycling as “the recurrent process of emergence, expansion, and fragmentation of complex chiefdoms amid a regional backdrop of simple chiefdoms” (Jenkins 2009:191). Budding and fissioning are part-and-parcel to cycling, however, they occur at different life stages of the chiefdom. Budding occurred at an early stage in a chiefdom’s lifespan when a lineage segment separated and moved a short distance to establish a new chiefdom that retained political, social, religious, and communal ties to the original chiefdom (Jenkins 2009). Fissioning occurred when a chiefdom collapsed and fragmented. Upon fragmentation, large segments of the population would fission into several separate groups that would establish chiefdoms at distances great enough to not retain ties to the parent community (Jenkins 2009).

Through the processes of cycling, budding, and fissioning, the chiefdoms of the aforementioned regions coalesced into complex chiefdoms that formed the core of the later historic Creeks. These core chiefdoms were centered on the Coosa River, Tallapoosa River, and Chattahoochee River (Jenkins 2009; Knight 1994). Jenkins (2009) claims that the specific prehistoric artifact assemblages that have been associated with the

historic Creeks are Lamar Variant and Moundville Variant which fused together in the Coosa River Valley; Shine II which is a Lamar Variant in the Tallapoosa River Valley, and the Blackmon Phase in the Chattahoochee River Valley. This chapter provides a cultural context for two these three core regions (Coosa River Valley and Tallapoosa River Valley) as well as for the Apalachee of Florida (part of whom were adopted into the Creek Nation after the destruction of the Spanish mission system and the Yamasee War [Hahn 2004]) based on the archaeological and historical records; a historical context for the Spanish military *entradas*; and an analysis of the combat behaviors employed against the Spanish *entradas*.

Characteristics of Mississippianism

All of the aforementioned artifact assemblages followed a general pattern of Mississippianism that is characteristic of the Southeastern Culture Area from approximately C.E. 1000 through European Contact (1540 for the Interior Southeast).

Scarry (1994:29) defines Mississippian societies as:

those societies that practice cleared-field agriculture with maize as the dominant crop, that had hierarchical political organizations with evidence of ascriptive status differentiation, and that shared a set of cult institutions marked by a consistent iconographic complex and pyramidal earthen mounds.

Mississippian cultures have a large geographical distribution, extending from the Florida peninsula westward into Oklahoma and northward into the Ohio River Valley (Bense 1994; Fagan 2005; Scarry 1994).

The political structure of Mississippian societies was characterized by chiefdom structures (Bense 1994; Blitz and Lorenz 2006; Polhemus 1990; Smith 2000; Widmer 1994). Carneiro (1981:45) defines chiefdoms as “autonomous political unit[s] comprising a number of villages... under the permanent control of a paramount chief” (Carneiro 1981:45). One of the primary characteristics of chiefdom societies is that they have a social structure with ascribed status (Bense 1994; Smith 2000; Widmer 1994). Further, the majority of Mississippian chiefdoms show evidence of matrilineal descent and inheritance. Thus, status was ascribed through the matriline.

Chiefdoms varied in size and complexity. The number of villages, geographical boundaries of political control and consolidation, and number of subjects varied drastically throughout the Southeast. Widmer (1994) provides an efficient framework for analyzing the variation in political complexity throughout the region. The framework divides chiefdoms into three classes based on size and level of political complexity: simple chiefdoms; intermediate chiefdoms; and complex paramount chiefdoms. Simple chiefdoms are those that are comprised of only a few villages and have a minimal amount of sociopolitical rank between clans and chiefs within the chiefdom’s settlements. Intermediate chiefdoms are those that are comprised of numerous settlements, clans, and chiefs that are part of an intricate system of rank under the political control of a single paramount chief. Both simple and intermediate chiefdoms followed a two-tiered settlement hierarchy in which satellite villages were spatially clustered around a mound center that was typically small (Blitz and Lorenz 2006). Further, some of the settlements in an intermediate chiefdom may act as secondary political centers if the geographical

boundaries of political consolidation and control are large enough. Complex paramount chiefdoms are those that are comprised of several chiefdoms under the political control of a single, dominant chiefdom. These chiefdoms were subjugated through military conquest or through complex alliances that may have arisen due to the need for greater military strength to defend against larger adversaries (Bense 1994; Smith 2000; Widmer 1994). Furthermore, complex paramount chiefdoms followed a three-tiered settlement hierarchy in which satellite villages are clustered around small mound centers that have one or two platform mounds; the small mound centers are then spatially situated as satellite centers around a large mound center with multiple large platform mounds (Blitz and Lorenz 2006). In this hierarchy the large mound center acted as the paramount center for the complex chiefdom while the smaller mound centers acted as secondary politicoreligious administrative centers (Blitz and Lorenz 2006).

Mississippian settlements were usually located in areas that were conducive to subsistence activities on a large scale (Polhemus 1990). The unpredictability of the environment, however, led to Mississippian peoples choosing settlement locations along ecotones that could provide multiple subsistence resources (Nance 1990; Shapiro 1990). The majority of Mississippian sites situated along the highly fertile bottomlands, or alluvial floodplains, of major rivers that were conducive to high levels of maize agriculture. Not only did these alluvial floodplains provide soils conducive to agriculture, they provided access to aquatic resources such as fish and shellfish. These locations allowed Mississippian peoples to maximize their subsistence patterns in a way that balanced resources in accordance with seasonal availability (Shapiro 1990). During

the spring and summer crops were tended and deer was scarce. To cope with the need for protein there was an increased reliance on aquatic resources, which are numerous during the spring and summer months. During the fall and winter, however, maize and other crops were ripe and harvested. Deer was in abundance during this time as well, fulfilling the primary protein niche of the Mississippian diet. Furthermore, in order to maximize the subsistence patterns of harvesting these specific resources there were outlying settlements or camps that were intended for the extraction and utilization of specific resources (Shapiro 1990). These included aquatic resource extraction camps at prime locations for the harvest of fish and shellfish as well as outlying farmsteads in areas with additional productive soils.

In addition to this, Mississippian peoples had organized a method to deal with the unpredictability of resources. Every so often, settlements would be moved to a new location. This is evidenced archaeologically by settlement centers in a clustered area being occupied at opposite times in a given temporal span yet showing continuity in artifact assemblages (Williams and Shapiro 1990). For example, settlement A would be occupied for several hundred years and then would be abandoned; settlement B would then be occupied for a hundred years before being abandoned and settlement A being reoccupied. Several explanations have been posited, but the most probable are soil exhaustion, wood exhaustion, and prey animal depletion (Williams and Shapiro 1990).

Religion comprised an important aspect of Mississippian culture. In fact Bense (1994) claims that religion and politics were inextricably bound to one another in

Mississippian society. The predominant religious system of the Mississippian peoples has been termed the Southeastern Ceremonial Complex or the Southern Cult (Bense 1994; Brown 1997; Knight 1986; Scarry 1994). This religious system is evidenced archaeologically by the presence of artifacts containing similar motifs and culturally created landscape features. Furthermore, this system is reflective of the stratified nature of Mississippian society and the ideology of Mississippian peoples. Knight (1986) provides an analysis of this religious system. There are three cults or complexes present within the Southeastern Ceremonial Complex: the warfare/cosmogony complex or chiefly warfare cult, the Mississippian mound complex or earth/fertility cult, and the temple statuary complex or ancestor worship cult. For the purposes of this research, the chiefly warfare cult is the complex of significance.

The chiefly warfare cult consists of artifacts that depict symbols of war, such as axes and maces, and mythological and/or anthropomorphic creatures. These artifacts were often constructed of rare or imported materials (such as copper); from this, we infer that these artifacts would have been more costly and thus less likely to have been available to people of lower social status. Furthermore, the concentration of these artifacts in archaeological contexts across the Southeast is alongside elite burials. This correlates these symbols of warfare with high-status individuals in Mississippian societies, suggesting that membership within this cult institution was restricted, possibly to specific lines of descent. Knight (1986:680) stated that:

The representational associations of warfare/cosmogony complex *sacra* [or sacred artifacts]... lead to the inference that such a clan-based or

lineage-based type of cult institution held a strict monopoly on two critically important kinds of esoteric knowledge and ritual manipulation: first, that associated with mythological beings, and second, that associated with the supernatural aspects of success in warfare. It also might be concluded that the officers of this form of cult institution... wielded corresponding political sway over non-members as well as members. Such a cult institution, having exclusive rights to the filling of chiefly offices, would have afforded its respective clan or lineage members additional privileges denied to other similar descent groups.

Due to the prevalence of warfare in Mississippian society settlements were typically located in defensible areas, had defensive fortifications, and utilized buffer zones between chiefdoms (Dye 2009). Defensible areas included: areas within meander bends of rivers in order to provide a natural moat surrounding three sides of the settlement; areas of higher elevation, such as the tops of bluffs or ridges, to provide better vantage as well as the advantage in defensive battle; islands in the middle of a river provide large natural moats encapsulating the entire settlement (Dye 2009).

Defensive fortifications were common throughout the Southeast during the Mississippian period as well as the preceding Woodland period. A common form of defensive fortification included palisade walls (Dye 2009). These walls were constructed of wood and encircled a settlement. Accounts from the de Soto *entrada* describe a remarkable array of different shapes and designs, some being relatively simplistic while others were ingeniously designed with multiple inner walls and tertiary inner defenses (Jones 2004). They generally had a rectangular, rounded, or spiral design; some settlements incorporated location and palisade into a single fortification, such as when three sides of a settlement were protected by the palisade while the fourth side was

protected by a river (Jones 2004). Some Mississippian palisades even include bastions and arrow slits or loop holes. Often palisades had an associated ditch and embankment, with the palisade itself being constructed atop the embankment (Dye 2009; Jones 2004).

The concept of buffer zones is an old one, as they were utilized worldwide and are even employed by chimpanzees (Wilson and Wrangham 2003). Buffer zones were also incorporated into defensive settlement patterns during the Mississippian period. Dye (2009:13) describes buffer zones as:

large, uninhabited areas between neighboring communities that are maintained through fear of raiding parties. Buffer zones may define cultural, linguistic, and political boundaries based on natural features such as ridge systems, rivers, or other physiographic divisions... The further one trekked into the buffer zones, the greater the risk of running into an enemy hunting or raiding group. The size of the buffer zone was dependent upon population densities of the groups in question

In addition to defining boundaries, buffer zones also offer defensive advantages. They acted as early warning systems as they were patrolled by warriors; they reduced the risk of warfare between neighboring polities by decreasing the amount of contact between groups; they acted as a crop defense mechanism as crops were a primary target in warfare (LeBlanc 2006). By placing crops within the center of a territory the enemy would be at a greater risk in attempting to destroy the target crops as they would have to pass through a large defended territory. Due to the crops being an important target in warfare LeBlanc (2006) posits that the size of buffer zones was correlated with the type of crops a society was cultivating rather than population densities, thus the type of crop likely dictated the size of the buffer zone.

The Coosa Chiefdom

The Spanish described the region of the Coosa as being densely settled. Elvas (1993), Rangel (1993), Biedma (1993), and Gracilaso (1993) claimed the towns were abundant and substantial in size. These towns were situated along river margins, or flood plains. This is consistent with findings from the archaeological record, which showed the settlements of Coosa to be located along these floodplains much as other Mississippian societies of the time (Hally 1994; Smith 2000). Coosa was located along the Coosawattee River in present day Georgia and Alabama, but its influence reached into eastern Tennessee and central Alabama (Langford and Smith 1990; Smith 2000). There are several archaeological sites within the core area of Coosa. These include, but are not limited to, the Brown Farm site (9GO67), the Baxter site (9GO8), the Thompson site (9GO4), the Poarch site (9GO1), the Swancy site (9GO70), the Little Egypt site (9MU102), the Potts' Tract site (9MU105), and the Sixtoe site (9MU100) (Langford and Smith 1990; Smith 2000). All of these sites are associated with the Lamar cultural assemblage and are situated along the alluvial floodplain of the Coosawattee River. Further, they are situated within 5.1 kilometers or less of one another along the stretch of the river (Langford and Smith 1990).

The evidence from these sites suggests the typical Mississippian subsistence pattern with maize constituting the primary source of subsistence. This was supplemented by various other vegetal and faunal items, such as beans, squash, and deer (Hally 1994). Elvas (1993:93) described immense fields of maize that “reached from one town to the other.” Elvas (1993:88) further described other subsistence items such as

bear fat that was “in melted form like olive oil,” walnut oil, honey combs, plums, and several varieties of grapes. The de Luna accounts also mention maize, beans, and copious amounts of bear fat in the Napochie village, which was a tributary of the Coosa chiefdom.

The chiefdom of Coosa exhibits all of the aforementioned characteristics of a Mississippian paramount chiefdom (Langford and Smith 1990; Scarry 1994; Smith 2000). Like other Mississippian chiefdoms, Coosa shows evidence of a settlement hierarchy. This hierarchy places the Little Egypt site as the paramount political center of this chiefdom by 1350 C.E. (Hally 1994; Smith 2000) with smaller mound centers acting as secondary political administration centers. According to Hally (1994), the peoples of Coosa constructed their villages in clusters that consist of large mound centers with constellations of villages within twenty four kilometers of the mound center. Within the Coosa chiefdom there are seven such clusters of sites that were occupied during the sixteenth century (Hally 1994; Smith 1994, 2000). The towns of the Coosa chiefdom were arranged around a central plaza that was used for ceremonial purposes as well as for political and entertainment purposes (Hally 1994). These plazas were surrounded by platform mounds and domestic habitation zones. These central plazas may have been the predecessor to the square grounds incorporated into the towns of the historic Creek peoples. Furthermore, the account of Elvas (1993) describes the chief of Tascalusa, which was a neighboring political entity of Coosa, as having his residence on a mound summit and consisting of a dwelling and a plaza. This is reinforced by archaeological data that shows the existence of both platform mounds as well as plazas accompanying

individual residences in the Coosa chiefdom (Hally 1994; Smith 2000). This also reinforces the idea of stratification within Coosa culture and society.

Elvas (1993:92) provides a passage that describes the way the chief of Coosa was treated as an elite ruler:

The Cacique came out to welcome him two crossbow flights from the town in a carrying chair borne on the shoulders of his principal men, seated on a cushion, and covered with a robe of marten skins of the form and size of a woman's shawl. He wore a crown of feathers on his head; and about him were many Indians playing and singing.

This passage serves to show the existence of a hierarchal society in which the chief was paramount in this society. Evidence of a hierarchal society is also prevalent in the archaeological record. Mounds and plaza areas were used for the interment of the elite individuals of society, while commoners were interred in the domestic habitation zones (Hally 1994). Elite burials also still contained high status grave goods; European trade goods became high status symbols found within elite interments (Hally 1994). Furthermore, elite burials showed less signs of physiological stress than those interments in the common areas (Hally 1994).

Sites from the area of the Coosa chiefdom yielded numerous burials (Hally 1994; Langford and Smith 1990; Smith 2000). These burials display the characteristics of both elite and common interments. According to Hally (1994) elite burials were confined to the mounds and plaza area, while common burials were located within the domestic habitation zones. Less than fifty percent of the interments were found to have grave goods in accompaniment with the burial. Where grave goods were found, the majority

were utilitarian items constructed of local materials. This further supports the idea of status differentiation. Furthermore, there is some evidence of nutritional stress that has been attributed to a reliance on maize (Hally 1994). The evidence of this stress, however, is absent from elite burials. This evidence suggests these individuals likely enjoyed a healthier diet due to their status.

Due to the prevalence of warfare in Mississippian culture, as evidenced by the Southeastern Ceremonial Complex as well as the proliferation of weaponry present in archaeological contexts, the Coosa peoples were well aware of military strategy and designed their settlements in a militarily advantageous way. Several of these settlements were located on small islands within rivers (Elvas 1993; Hudson 1997). The rivers acted as moats around the settlement, providing a natural fortification against invaders. Rangel (1993:285-288) also describes palisades being employed at many settlements:

they went to an old town that had double walls... and good towers. And those ramparts... are built in this manner: they sink many thick poles, tall and straight, next to one another; they weave them with some long sticks, and daub them within and without, and they make their loopholes at intervals, and they make their towers and turrets... spread out along the curtain and parts of the rampart as suits them; and at a distance, they appear to be one very excellent wall... and such walls are very strong.

This, too, is consistent with findings in the archaeological record. Hally (1994) describes multiple sites within the Coosa chiefdom as having been similarly fortified. These sites employed palisades, defensive ditches, or both (Hally 1994; Smith 2000). There is evidence that some of these sites also had bastions along the palisades to further enhance defensive fortifications (Hally 1994). Apica (the King site, 9FL5), a tributary village of

Coosa visited by de Soto, had a palisade on three sides of the village, while the fourth side abutted the Coosa River (Hally 2011; Hudson 1997).

The de Soto *entrada* accounts also describe the Coosa peoples as wielding both shock weapons and projectile weapons (Biedma 1993; Elvas 1993; Garcilaso 1993; Hudson 1993; Rangel 1993). The shock weapons employed by these peoples were war clubs, known to the historic Creeks as the *atasa* (Smith 2000); the projectile weapons included the bow and arrow. The de Luna accounts (Swanton 1922:233) provide detailed descriptions of the bows used by the Coosa peoples:

Every Indian uses a bow as tall as his body; the string is not made of hemp but of animal nerve sinew well twisted and tanned. They all use a quiver full of arrows made of long, thin, and very straight rods, the points of which are of flint... cut in triangular form, the wings very sharp and mostly dipped in some very poisonous and deadly substance. They also use three or four feathers tied on their arrows to insure straight flying... The force of the flint arrowheads is such that at a moderate distance they can pierce a coat of mail.

Swanton (1922) argued that the use of poison is inaccurate when discussing the indigenous peoples of the Southeast, but Jones (2007) discusses in length the uses of poison in both hunting and combat contexts for every Culture Area for North America.

The Tascalusa Chiefdom

The Tascalusa chiefdom was a paramount complex chiefdom, with two chiefdoms under Chief Tascalusa's political authority. These included the Tascalusa chiefdom and the Mabila chiefdom (Jenkins 2009). The accounts from the de Soto *entrada* also discuss the political maneuvers Chief Tascalusa was playing out in extending his authority, attempting to draw the Talisi chiefdom from their Coosa association and under his own

wing (Garcilaso 1993; Hudson 1997). Like the Coosa chiefdom, the Tascalusa chiefdom, located on the Tallapoosa River, also demonstrated the characteristics of Mississippianism. This paramount chiefdom neighbored the Coosa chiefdom. The Spanish describe the settlements of Tascalusa as being large and located along rivers (Biedma 1993; Garcilaso 1993; Elvas 1993; Rangel 1993). They are also described as having vast quantities of maize. In other words, this chiefdom followed the patterns demonstrated in the archaeological record that show Mississippian settlements being located along the floodplains of rivers and having subsistence patterns that focused primarily on maize agriculture. The Spanish further documented aspects of Mississippianism among Tascalusa:

The cacique was in his dwelling under a balcony. Outside, in front of his dwelling, on an elevated place, was spread a mat for him and on it two cushions, one above the other, where he came to seat himself. His Indians gathered about him, separated somewhat, so that they formed a courtyard and open space where he was – his most principal Indians being nearest him, and one holding a sort of fan of deerskin which kept the sun from him, round and the size of a shield, quartered with black and white, with a cross made in the middle. From a distance it looked like a caffeta, for the colors were very perfect. It was set on a small and very long staff. This was the device he bore in his wars. He was a man, very tall of body, large limbed, lean, and well built. He was greatly feared by his neighbors and vassals. He was lord of many lands and many people. (Elvas 1993:95-96)

This passage shows that the elite reside on mounds, they are elevated above commoners. Not only did the chief reside on the summit of a mound, his seat was elevated above the others of the elite class, further reinforcing his status in the political hierarchy. The deerskin standard also displays traits of historic Creek culture as well as elements of the Southeastern Ceremonial Complex. The way the standard was quartered

reflects the idea of the four cardinal directions being the center of the Muskogean world (Hudson 1976). Motifs depicting the cardinal directions are numerous throughout the Southeast and are considered a part of the Southeastern Ceremonial Complex. Further, the fact that the chief's standard was said to have been carried into combat infers that the Tascalusa chiefdom likely employed combat behaviors similar to those of the Coosa chiefdom, where multiple units were commanded by a single war chief.

Settlements of the Tascalusa chiefdom also demonstrate the presence of warfare and a strong familiarity with the tactics needed to defend against invaders. Settlements in this chiefdom were located along rivers, or on islands and peninsulas in rivers (Garcilaso 1993). Garcilaso (1993:329) describes the town of Tascalusa (called Atahachi by other Spanish accounts) as "being situated on a peninsula the river formed." Other settlements, such as Piachi, were located "upon the bluff of a rocky river" (Rangel 1993:291). Fortification of settlements was also common in this chiefdom. Palisades in this chiefdom were constructed in a similar manner to those in the Coosa chiefdom.

Garcilaso (1993:331) describes the settlement of Mabila as having:

an enclosure three estados high, which was made of logs as thick as oxen. They were driven into the ground so close together that they touched one another. Other beams, longer and not so thick, were placed crosswise on the outside and inside and attached with split canes and strong cords. On top they were daubed with a great deal of mud and packed down with long straw, a mixture that filled all the cracks and open spaces between the logs and their fastenings in such a manner that it really looked like a wall finished with a mason's trowel. At intervals of fifty paces around this enclosure were towers capable of holding seven or eight men who could fight in them. The lower part of the enclosure, to the height of an estado, was full of loopholes for shooting arrows at those on the outside. The pueblo had only two gates, one on the east and the other on the west.

In the middle was a spacious plaza around which were the largest and most important houses.

This demonstrates not only the presence of warfare but also the propensity of it in this region. If warfare were not a common occurrence in the region, the fortifications would not have been as elaborate or strategic. This level of fortification, with ramparts and loopholes at strategic intervals along the fortification, demonstrates an intimate knowledge of strategic defense, a knowledge that is garnered through experience in combat. The accounts from the de Soto expedition also claim that the warriors of the Tascalusa chiefdom utilized both shock and projectile weaponry in combat. As with the Coosa warriors, the bow and arrow comprised the projectile weaponry category and the war club comprised the shock weaponry (Biedma 1993; Elvas 1993; Garcilaso 1993; Hudson 1997; Rangel 1993).

The Apalachee Chiefdom

The Apalachee were a cultural group that resided in the eastern portion of the Florida panhandle, around the area of modern Tallahassee (Lawres 2008, 2009; Milanich 1994; Scarry 1994). The association of the Apalachee chiefdom with the historic Creek Nation is much later temporally than the Coosa or Tascalusa chiefdoms, and not all of the Apalachee have this association. After the destruction of the Spanish mission system of Florida, within which the Apalachee were an integral component, some of the Apalachee dispersed to the north and the west, taken as slaves by the Creek raiders that destroyed the missions; some of the more traditional Apalachee also joined the Creeks in these raids against the mission system because they disliked the Westernization of their kin (Hahn

2004). It should also be noted that the roots of the Apalachee lay within the chiefdoms along the Appalachicola River, which have been correlated with the Lower Creek population of historic times (Scarry 1994).

The Apalachee are correlated with the Mississippian Fort Walton archaeological culture (Lawres 2008; Milanich 1994, 1998; Scarry 1994). The Apalachee were politically and socially organized along the same lines as other Mississippian groups: into complex chiefdoms with ascribed status. Milanich (1994:361) states that the “Fort Walton culture in northwest Florida was never a single political unit but comprised several regional chiefdoms.” The archaeological record of this region shows that the regional chiefdoms can be easily divided into four regions based on geographic features, each separated by largely unpopulated buffer zones (Lawres 2008; Milanich 1994).

Within each of these regions there are site hierarchies that show four levels of settlement:

(1) small farmsteads... each consisting of one or two houses; (2) larger hamlet settlements with five to ten houses and larger building... (3) small mound centers... (4) and a major mound-village center with multiple mounds. (Milanich 1994:362)

At the top of the site hierarchy in the Protohistoric period was the Anhaica site, a large mound complex with multiple pyramidal mounds (McEwan 2000; Scarry 1994). This site would have acted as the primate political center of the chiefdom. The small mound centers would have acted as secondary political centers for the paramount chief.

Ascribed status was the basis of the social organization of the Apalachee and there was a clear division between elite and non-elite (Lawres 2008; McEwan 2000;

Milanich 1994). There was, however, a means for social advancement through feats in combat. Hudson (1997:140) states:

they were avid in taking the scalps of their victims... A scalp was proof that one had killed an enemy, and they advanced through their... organization by taking scalps. A warrior who had killed an enemy was a *tascaia*. One who had taken three scalps was a *noroco*. The highest title a warrior could attain was *nicoguada*. Attaining this fabled title required one to have killed ten enemies, and three of these had to be warriors who were themselves more than *tascaias*.

The paramount chief was situated at the top of the political hierarchy. Like other Mississippian chiefs he demanded the respect, obedience, and cooperation of his subjects, secondary center and village chiefs, and lineage heads (Lawres 2008; Milanich 1994; Scarry 1994). McEwan (2000:65) states that the chief was distinguished by “control of esoteric knowledge... possession of exotic material goods, and distinctive residential architecture.” Scarry (1994) states the control of esoteric knowledge allowed the chiefs to use ideological manipulation to create political stability within the chiefdom of the Apalachee, which accords well with Knight’s (1986) view of the chiefly warfare cult (discussed above). Furthermore, the distinction between elite and non-elite status is clearly visible in the archaeological record. This distinction is found within the context of interments. Grave goods alongside buried elite individuals were much more numerous than those alongside non-elite burials. McEwan (2000:60) further states that among Apalachee burials the “highest ranking individuals may be associated with symbolic items, while men who held lower offices or roles may be those... interred with weapons” or other utilitarian objects.

The Apalachee were highly militaristic, and were powerful enough in combat to deter two Spanish *entradas*. Like many Mississippian groups, the Apalachee employed the use of fortifications on their settlements. The archaeological record demonstrates that many settlements in the Apalachee's region incorporated ditches and palisades (Lawres 2008; Milanich 1994). Jones (2004) points out that the Apalachee also employed on-the-run fortifications. As de Soto's *entrada* was marching through the Apalachee territory, warriors would construct barriers of logs, branches, and brambles woven across the paths to obstruct the progress of the *entrada*. Just as the Coosa and Tascalusa, the Apalachee wielded both shock and projectile weapons in combat; the bow and arrow comprising the projectile category and the war club comprising the shock category. Cabeza de Vaca (2003:68) describes the bows used by the Apalachee as being "as thick as an arm [and] eleven or twelve spans long so that they can shoot arrows at two hundred paces with such great skill that they never miss their target." He further described the strength of the bows, stating that they were able to penetrate oak trees "as thick as a man's lower leg" (2003:68). Hudson (1997:142) commented on the tactics employed by the Apalachee, stating that they most commonly "attacked in frequent small ambushes from concealment, rather than in frontal assaults."

Sixteenth Century Spanish Military

The Spanish military of the sixteenth century was well trained and highly experienced (Hudson 1997). According to Hudson (1997) the men of the Spanish military were not professional soldiers, they were recruited from the ranks of civilians and clergymen; all were well versed in the use weaponry, from sword to crossbow to

harquebus. Civilians were recruited on the basis that their salary would be a portion of any treasure collected during the expedition.

Hudson (1997) claims that the foot soldiers of the sixteenth century Spanish military were admirable in combat. He attributes this to the Reconquest (war to reconquer lands held by Muslims in the Iberian Peninsula), “because the characteristic military engagements throughout the Reconquest were skirmishes and surprise attacks” (Hudson 1997:7). The foot soldiers were outfitted with steel helmets and garments with attached steel plates or padded doublets stuffed with cotton fiber. Their armor and clothing was largely mismatched, as opposed to that of a professional military outfit. The weaponry carried by foot soldiers included *harquebus*, crossbows, double-edged swords and halberds.

Mounted soldiers were the bread and butter of the Spanish military *entradas*. The indigenous peoples of the Americas did not have a familiarity with horses, thus were fearful of them. Hudson (1997:7) claims that the “tactical advantage conferred by the horsemen in the conquest of New World peoples can hardly be overstated” (Hudson 1997:7). The mounted soldiers of this time were outfitted with a combination of armor. They wore steel helmets, steel cuirasses, steel vambraces and greaves, chainmail, gauntlets, and steel boots (Hudson 1997). For weaponry, the mounted soldiers were equipped with steel tipped lances that varied in length coupled with small circular shields. Shields were variable, being comprised of metal, wood, leather, or a combination of these materials (Hudson 1997).

Resisting European Expansionism

Three military *entradas* made contact with the predecessors of the Creeks and Seminoles: the Narvaez *entrada* (1528 C.E.), the de Soto *entrada* (1539-1540 C.E.), and the de Luna *entrada* (1559-1560 C.E.). Each of the *entradas* had different orders and objectives; they successively adapted their tactics based on the failures of those that went before them. Each *entrada* were also of different sizes and brought with them different supplies, both of which were dependent upon the orders and objectives of the *entrada*. In analyzing the combat behaviors employed in resisting the initial conquest of the southeast I used both primary and secondary sources. Table 4 provides a summary of these sources and their status as either primary or secondary in nature.

Table 4. Table of sources pertaining to the military *entradas*.

<i>Entrada</i>	Author	Source Type	Cultural Group Discussed
Narvaez	De Vaca (2003)	Primary	Apalachee
De Soto	Biedma (1993)	Primary	Apalachee, Coosa, Tascalusa
De Soto	Elvas (1993)	Primary	Apalachee, Coosa, Tascalusa
De Soto	Garcilaso (1993)	Secondary	Apalachee, Coosa, Tascalusa
De Soto	Hudson (1997)	Secondary	Apalachee, Coosa, Tascalusa
De Soto	Rangel (1993)	Primary	Apalachee, Coosa, Tascalusa
De Luna	Swanton (1922)	Secondary	Coosa

The Narvaez *Entrada*

The Narvaez *entrada* was granted a royal *cedula* that gave Narvaez orders to “conquer and govern the provinces that are found from the Río de las Palmas to the cape of *Florida*... [with] a fleet that... was composed of five ships, in which there went about six hundred men, more or less” (de Vaca 2003:48). The expedition was doomed from the beginning, however. Suffering heavy losses from desertion and deaths due to a hurricane, the *entrada*, approximately two hundred men short of the initial crew, did not make landfall in Florida until April 12, 1528. The *entrada* took a northerly inland route that generally paralleled the Gulf Coast.

The Narvaez *entrada* first made contact with the Apalachee on June 25, 1528. The Apalachee displayed a pronounced militancy towards the *entrada*, constantly keeping pressure on the soldiers to hasten their departure or death. In fact, the first encounter between the Apalachee and the *entrada* was a violent one. As the *entrada* members walked through a settlement full of women and children the warriors attacked. They employed class three offensive mode behaviors with subtype A (ambush) tactics. Three days later, on June 28, the Apalachee attacked again, this time employing class three offensive mode behaviors with a combination of tactical subtypes A (ambush) and H (use of fire). On June 29, the Apalachee again attacked employing class three offensive mode behaviors with a combination of tactical subtypes A (ambush) and H (use of fire).

Throughout the period from June 30 to July 19 the Apalachee attacked the *entrada* multiple times. However, de Vaca (2003:67) stated that the Apalachee “made war on us continually... when we were at the places where we went to get water.” Due to a blanket statement such as this it is impossible to accurately quantify the combat behaviors of the Apalachee for this short period. It is likely they had to acquire fresh water on a daily basis, or at least every other day. However, there are no descriptions of how often this occurred or how often de Vaca (2003:67) meant when he said “continually.” For this reason, I am quantifying this based on the assumption that the *entrada* had to obtain fresh water at least every other day. This results in ten occurrences of combat. During all of these instances, the Apalachee employed class two offensive mode behaviors with subtype A (ambush) tactics. Further, during these ten instances forested wetlands were utilized to maximize the effectiveness of the ambushes as well as to provide escape routes for the warriors.

On July 19, the *entrada* began its march south towards the Gulf of Mexico to escape. On July 20 the Apalachee attacked, employing class one offensive mode behaviors with a combination of tactical subtypes A (ambush) and C (flanking maneuvers). On July 21 the Apalachee employed combat class one offensive mode behaviors with subtype B (assault) tactics. On July 26, as the *entrada* reached the village of Aute, the Apalachee attacked the rear guard employing class one offensive mode behaviors with subtype A (ambush) tactics. There are four instances of combat that occurred between August 4 and September 20, during excursions into Aute to gather food, that are unclassifiable. De Vaca describes them simply as “fights and skirmishes

with the Indians” (2003:72). This is the only detail we have regarding these four instances. There are two final instances of combat between the Narvaez *entrada* and the Apalachee. The exact dates are not known, but they occurred sometime between August 4 and September 20. The combat behaviors employed during these two instances are more difficult to classify as de Vaca simply stated “the Indians attacked them” (2003:73). However, the evidence provided by de Vaca’s account suggests that they were ambushed. He claimed that in each incident ten men were killed, “shot through and through with arrows” (2003:73). The use of arrows suggests that the soldiers were killed from a distance. It also implies that concealment and surprise were used in the attack, as the soldiers obviously did not have time to defend themselves or reposition to areas of relative protection.

Table 5. Classification of combat behaviors employed against the Narvaez *entrada*.

Date	Name of Battle	Class	Mode	Subtype	Environment
6/25/1528	First Battle of Palachen	3	O	A	Settlement
6/28/1528	Second Battle of Palachen	3	O	A, H	Settlement
6/29/1528	Third Battle of Palachen	3	O	A, H	Settlement
6/30- 7/19/1528	Water Retrieval Ambushes ¹	2	O	A	FW
7/20/1528	First Battle of the Swamp Crossing	1	O	A, C	FW
7/21/1528	Second Battle of the Swamp Crossing	1	O	B	FW
7/26/1528	Rearguard Ambush	1	O	A	FW
8/4- 9/20/1528 ²	N/A	N/A	N/A	N/A	N/A
8/4- 9/20/1528 ³	Ambushes at the Inlets	2	O	A	N/A

The de Soto *Entrada*

The de Soto *entrada*'s objective was to conquer and found settlements in the Southeast. He was granted the all of the rights and contracts that had been given to the failed Narvaez expedition (Hudson 1997). The royal *cedula* shows that the primary objectives for the *entrada* were god, gold, and land, which were the primary objectives for all the *entradas*. It should be noted that de Soto also did not follow the royal *cedula* to a tee. The *cedula* allowed him to procure five hundred soldiers along with the armaments, munitions, and supplies for them. De Soto, however, went a step above and brought between six hundred and seven hundred men (Hudson 1997; Lawres 2008, 2009).

¹ Exact dates and number of observances are not known, but there are at least ten observances of these behaviors.

² Exact dates are unknown, but there are four instances that are unclassifiable due to lack of details.

³ Exact dates are unknown, but this instance of combat behaviors occurred twice during this temporal span.

The de Soto *entrada* landed in the Tampa Bay area of Florida in 1539. They took an inland route through Florida that largely mirrored that of the Narvaez *entrada*, in which they wintered in Apalachee territory before taking a winding route through the southeast and making contact with three of the cultural groups associated with the historic Creek Nation: the Apalachee, the Coosa, and the Tascalusa. The accounts of the de Soto expedition described the relations between the Europeans and the Coosa peoples as peaceful for the most part (Biedma 1993; Elvas 1993; Hudson 1997; Rangel 1993; Smith 2000). There were times when the Coosas brandished arms towards the *entrada*, but they were urged by the Chief of Coosa to relinquish and maintain a friendly relationship. Hudson (1997) posits that this may have been a political strategy by the chief of Coosa to establish a politico-military alliance with the Europeans. Relations with the Apalachee and the Tascalusa, however, were far from amicable. Both of these cultural groups displayed pronounced militancy towards the *entrada*.

The de Soto *entrada* reached Apalachee territory on September 30, 1539 (Elvas 1993; Garcilaso 1993; Hudson 1997; Lawres 2008, 2009). Upon reaching the village of Asile, the first village under the political umbrella of the Apalachee chiefdom, the Apalachee fled into the surrounding woods. After this first encounter, the *entrada* was met with constant resistance from the Apalachee. On October 1, 1539 (Battle of Ivitachuco Swamp) the Apalachee employed class one (Large-scale) offensive mode behaviors with subtype B (Assault) tactics. During this combat scenario the Apalachee utilized a forested wetland. On October 2, 1539 (Battle of the Aucilla River) the Apalachee employed class one (Large-scale) offensive/defensive behaviors with tactical

subtypes B (Assault) and F (Rearguard Action) within forested wetland and river ecosystems (Garcilaso 1993; Hudson 1997). On October 5, 1539 (Battle of Burnt Mill Creek) the *entrada* was met with class one (Large-scale) offensive/defensive behaviors with tactical subtypes B (Assault) and E (Fortification). These tactics further utilized a river and forested wetland to further impede the *entrada*'s progress (Garcilaso 1993; Hudson 1997).

After reaching the village of Anhaica, the primate center of the Apalachee chiefdom, on October 6 de Soto sent thirty horsemen back to the initial camp set in the Tampa Bay region (Elvas 1993; Garcilaso 1993; Hudson 1997; Lawres 2008, 2009; Rangel 1993). On their return to Apalachee the horsemen, along with approximately ninety other soldiers picked up from the Tampa camp, were met with resistance in the Apalachee territory. The exact dates for these battles are not known, but the combat behaviors displayed during the battles are. During the Second Battle of Ivitachuco Swamp the Apalachee warriors employed class two (Small-scale) offensive mode behaviors (Garcilaso 1993; Hudson 1997). The tactical subtypes employed included a combination of subtypes A (Ambush), C (Flanking Maneuvers), and F (Rearguard Action) tactics. These were employed within a forested wetland ecosystem. During the Second Battle of Burnt Mill Creek the warriors employed class two (Small-scale) offensive mode behaviors with a combination of tactical subtypes A (Ambush) and E (Fortification) (Garcilaso 1993; Hudson 1997). These behaviors were employed within forested wetland and river ecosystems.

While the contingent of horsemen was travelling to the Tampa Bay region camp, de Soto took a small contingent of horsemen and foot soldiers to attempt to capture the Apalachee chief, Capafi. The chief and his warriors were firmly entrenched in the Ochlockonee Valley (Hudson 1997). The encampment was heavily fortified in several levels. De Soto and his contingent attacked the entrenched encampment with an inhuman persistence. The Apalachee defended their chief to the last breath, however. They employed class two (Small-scale) offensive and defensive behaviors with tactical subtypes B (Assault) and E (Fortification). In the end de Soto and his men broke through all of the fortifications and captured Capafi in the hopes of ending Apalachee hostilities.

After the contingent of horsemen returned from the camp in the Tampa Bay region de Soto sent a small contingent to the Bay of Horses, where the Narvaez *entrada* departed from Florida, to construct a “piragua large enough to hold thirty well-armed men” (Elvas 1993:72). This piragua was to row out into the bay every day to wait for the brigantines. The soldiers in this vessel were attacked on several occasions by Apalachee “who were going along the keys in canoes” (Elvas 1993:73). Due to a lack of an exact number of occurrences being available this will be quantified as two instances. These instances are consistent with class four (Naval) offensive mode behaviors. It is not known what tactical subtypes were employed during these occurrences. Furthermore, the dates of these occurrences are not known.

The Apalachee also attacked the *entrada* while it was encamped in the settlement of Anhaica. According to Garcilaso (1993), de Soto ordered his men to fortify the

settlement for additional protection against the bellicose Apalachee. The Apalachee made multiple attacks during the winter of 1539-1540. The number of these attacks, however, is not known. Garcilaso (1993) stated that the attacks were continuous throughout the *entrada*'s tenure in Anhaica. He claims that the Apalachee were "so astute and diligent in their stratagems that they at once assaulted or wounded any Spaniard who strayed even a little distance from the camp" (1993:213). Elvas (1993) provides a date for one of the instances of an attack in which a single Apalachee warrior was able to break through defenses and set fire to the settlement. This occurred on November 29, 1539. Due to the lack of details concerning the number of attacks on the *entrada* I am quantifying this occurrence at the minimum number: two. There are more occurrences of these attacks, but it is impossible to accurately quantify the exact number of attacks due to the lack of details. Nonetheless, during these combat scenarios the Apalachee employed class three designated offensive behaviors along with tactical subtypes A (Ambush) and H (Use of Fire).

De Soto's *entrada* initially made contact with the Tascalusa in Talisi, a settlement with wavering allegiance between Coosa and Tascalusa. While in Talisi an envoy from Tascalusa brought the *entrada* to the primate center of their chiefdom, known as Atahachi. Initial relations with the Tascalusa were peaceable, but the demands of de Soto brought about the deterioration of any potential alliance. The paramount chief of the chiefdom, whose name was given to the chiefdom, lead the *entrada* to the outskirts of his territory to a large fortified settlement known as Mabila. It was at this settlement that relations between the *entrada* and the Tascalusa completely deteriorated. Provoked by

the behavior of the *entrada*, the Tascalusa attacked. They employed class one (Large-scale) offensive and defensive behaviors with a combination of tactical subtypes A (Ambush), B (Assault), E (Fortification), and H (Use of Fire). This was the most destructive battle during the *entrada*'s march throughout the southeast. This was also the last time de Soto's *entrada* would encounter the peoples associated with the historic Creeks.

Table 6. Classification of combat behaviors employed against the de Soto *entrada*.

Date	Name of Battle	Class	Mode	Subtype	Environment
10/1/1539	Battle of Ivitachuco Swamp	1	O	B	FW
10/2/1539	Battle of the Aucilla	1	O/D	B, F	FW, R
10/5/1539	Battle of Burnt Mill Creek	1	O/D	B, E	FW, R
Unknown	Second Battle of Ivitachuco Swamp	2	O	A, C, F	FW
Unknown	Second Battle of Burnt Mill Creek	2	O	A, E	FW, R
Unknown	Calderon's Ambushes	2	O	A	N/A
Unknown	Battle of the Ochlockonee Valley	2	O/D	B, E	N/A
Unknown ⁴	Piragua Battles	4	O	N/A	N/A
Unknown ⁵	Anhaica Attacks	3	O	A, H	Settlement
10/18/1540	Battle of Mabila	1	O/D	A, B, E, H	Fortified Village

The Tristan de Luna *Entrada*

The de Luna *entrada* landed in Pensacola Bay in 1559 and was the first of the *entradas* that was properly equipped and prepared to establish a settlement in the interior

⁴ The exact dates for the attacks on the piragua are unknown, but there were at least two instances of this happening during the *entrada*'s stay in Apalachee territory.

⁵ The exact dates for the attacks on the encampment at Anhaica are unknown, but it is known that class three offensive mode behaviors were employed at least twice during the *entrada*'s stay in Anhaica.

southeast (Curren et al. 1989). This *entrada* consisted of approximately fifteen hundred people in total, about five hundred of which were soldiers (Milanich 1995). However, this *entrada*, like that of Narvaez, was doomed from the beginning. A few days after the *entrada* made landfall a hurricane hit, destroying the majority of their ships and supplies before they were able to unload them (Milanich 1995). In order to obtain necessary supplies de Luna sent a contingent of about one hundred fifty to two hundred horsemen and foot soldiers to Coosa (Milanich 1995).

The de Luna *entrada* only made contact with one cultural group associated with the historic Creeks: the Coosa. The relations between the Coosa and the *entrada* were peaceful. However, the account detailing the contingent's expedition to Coosa described the combat behaviors of the Coosa peoples in great detail. The contingent aided the Coosas in a campaign against the Napochies, who were tributaries of the Coosa chiefdom that were in rebellion:

The Indians set forward, and it was beautiful to see them divided up in eight different groups, two of which marched together in the four directions of the earth... Each group had its captain, whose emblem was a long stave of two brazas in height and which the Indians call Otatl and which has at its upper end several white feathers. These were used like banners, which everyone had to respect and obey. This was also the custom among the heathens who affixed on such a stave the head of some wild animal they had killed on a hunt, or the one of some prominent enemy whom they had killed in battle. (Swanton 1922:233)

This classifies as class one offensive mode behaviors with subtype B and C tactics. The tactic of marching in separate contingents would have allowed for greater maneuverability among troops on the battlefield. Along with greater maneuverability, this tactic would have allowed for the employment of flanking tactics in order to surround

an enemy force with great efficiency. It further implies that a frontal assault would have been used. The fact that the Coosas employed such a behavior shows that they were familiar with warfare. Furthermore, Otterbein (2007) claims that greater military complexity is indicative of a more complex society, further adding to the theory that Coosa was a complex paramount chiefdom at the time of European contact.

The Napochies, however, employed strategic abandonment. When the Coosa warriors and *entrada* contingent arrived at the primate Napochie settlement, it was devoid of life. Not only did the Napochies employ strategic abandonment, they also employed the practice of scalping in warfare. The account of Fray Augustin Davilla Padilla describes:

a pole of about three estados in height which served as gallows or pillory where they affronted or insulted their enemies and also criminals. As in the past wars had been in favor of the Napochies, that pole was full of scalps of people from Coza. It was an Indian custom that the scalp of the fallen enemy was taken and hung on that pole. The dead had been numerous and the pole was quite peopled with scalps. It was a very great sorrow for the Coza people to see that testimonial of their ignominy which at once recalled the memory of past injuries. (Swanton 1922:236-237)

After seeing this pole full of scalps the Coosa warriors started burning the settlement but were stopped by the friar that accompanied them. The demonstration of these behaviors shows that they were present within the cultural repertoire of these groups. However, since they were not employed in the context of combat they are not quantified in this study.

The Coosa warriors and *entrada* contingent tracked the Napochies to a large river. While fording the river one of the *entrada* members fired his arquebus and killed a

single Napochie. The Napochies immediately surrendered. Following this incident, the contingent waited for word from de Luna before returning to the primary encampment.

Table 7. Classification of combat behaviors employed during the march on the Napochies.

Date	Name of Battle	Class	Mode	Subtype	Environment
Unknown	March on the Napochies	1	O	B, C	N/A

The Decline of the Mississippian Chiefdoms

The narratives of the de Soto and de Luna expeditions provide fascinating details about the culture of the Coosa peoples in the mid-sixteenth century, but they also provide a glimpse into the collapse of this society from its Mississippian grandeur. The contrasts between these two accounts provide this glimpse. The de Soto narratives describe the Coosa chiefdom as densely populated with vast amounts of food growing in and between the villages within the chiefdom (Biedma 1993; Elvas 1993; Garcilaso 1993; Hudson 1997; Rangel 1993; Smith 2000). The de Luna narratives, however, describe the chiefdom as being less populated than once believed, with little in the way of superfluous subsistence items that the Europeans could procure (Smith 2000; Swanton 1922). Furthermore, several members of the de Luna expedition had been party to the de Soto expedition twenty years before and were surprised at how much the chiefdom had disintegrated during that temporal span between visits (Smith 2000; Swanton 1922). This decline is also supported archaeologically.

Archaeological sites within the Coosa chiefdom show evidence of massive depopulation (Hally 1994; Langford and Smith 1990; Smith 1994, 2000). Several of the sites within this area contain multiple burials and mass burials (Hally 1994; Smith 1994, 2000). Other evidence from the archaeological record supports mass depopulation in the area subsequent to European Contact. The number of sites in the area decreased dramatically; space between houses at sites was greater; and individual house sizes diminished (Smith 1990; 1994; 2000).

There is also some evidence of coalescence during this time. Whereas the total number of sites occupied decreased during this temporal span, there are some sites that actually increased in size (Smith 1994). According to Smith (1994), site complexity and cultural complexity decreased during this time as well. Mound construction came to an end, towns became more dispersed and the fortifications employed in earlier times were no longer utilized, and societal hierarchy began to disappear. The latter is evidenced by burials with high status grave goods being interred alongside burials without grave goods. It is during this time that the Coosa peoples began to migrate in a southwesterly direction along the Coosa River into Alabama where they historically became the core population of the Upper Creeks (Smith 1990, 1994, 2000).

CHAPTER SIX: RESISTING EXPANSION OF THE AMERICAN STATE

The *entradas* of the sixteenth century introduced great change to the indigenous cultural groups of the Southeast. Populations decreased exponentially, shifted, and coalesced into new cultural groups with different cultural identities; mound building ceased; political structures collapsed and were reframed to fit the emerging social structures (Jenkins 2009; Smith 1987, 2000; Waselkov and Smith 2000). Through the processes of political collapse and cultural coalescence emerged the historic cultural groups that were popularized as the Five “Civilized” Tribes: the Cherokees, Chickasaws, Choctaws, Creeks, and Seminoles. These were the cultural groups that witnessed firsthand and attempted to resist the expansion of the American state in the nineteenth century. It was this expansion that led to the infamous Trail of Tears, a truly sorrowful and disgraceful point in American history.

The Historic Creeks

Following the de Luna *entrada* of 1559 C.E., no other Europeans made direct contact with the Creek peoples until 1670 C.E., when the English settled Charlestown (Corkran 1967). Between 1670 C.E. and 1836 C.E., the year of the mass removal of Creek peoples to the “Indian Territory” of Oklahoma, there were several individuals that documented the culture of the Creek peoples. Two of the most prominent of these firsthand observers were the botanist William Bartram, who had much contact with the Creeks in the late eighteenth century, and Captain Thomas Nairne, who journeyed among

the Creek territory in 1708 C.E. There is also much historical documentation of dealings with the Creeks during this temporal span, but these primary sources provide a plethora of data pertaining to the Creeks and their settlements. The archaeological record also provides us with rich details pertaining to historic Creek life and culture.

The historic Creeks were an amalgamation of many different cultural groups that had coalesced into a larger whole known as the Creek Nation. Knight (1994:388) described the Nation as a “politico-military alliance network.” Hahn (2004) and Knight (1994) claim that Creek Nation coalesced in the late eighteenth century. The Creek Nation was divided into two groups based on geography: the Upper Creeks and the Lower Creeks (Foster 2007; Hahn 2004). The Upper Creeks resided along the Coosa, Tallapoosa, and Alabama River systems while the Lower Creeks were concentrated along the Chattahoochee River (Foster 2007; Smith 2000; Waselkov and Smith 2000). While these groups were referred to as two distinct peoples, they followed a similar set of cultural patterns. Due to this fact, heretofore they will both be discussed as Creeks as a whole, only distinguishing between Upper and Lower where considerable differences call

for it.

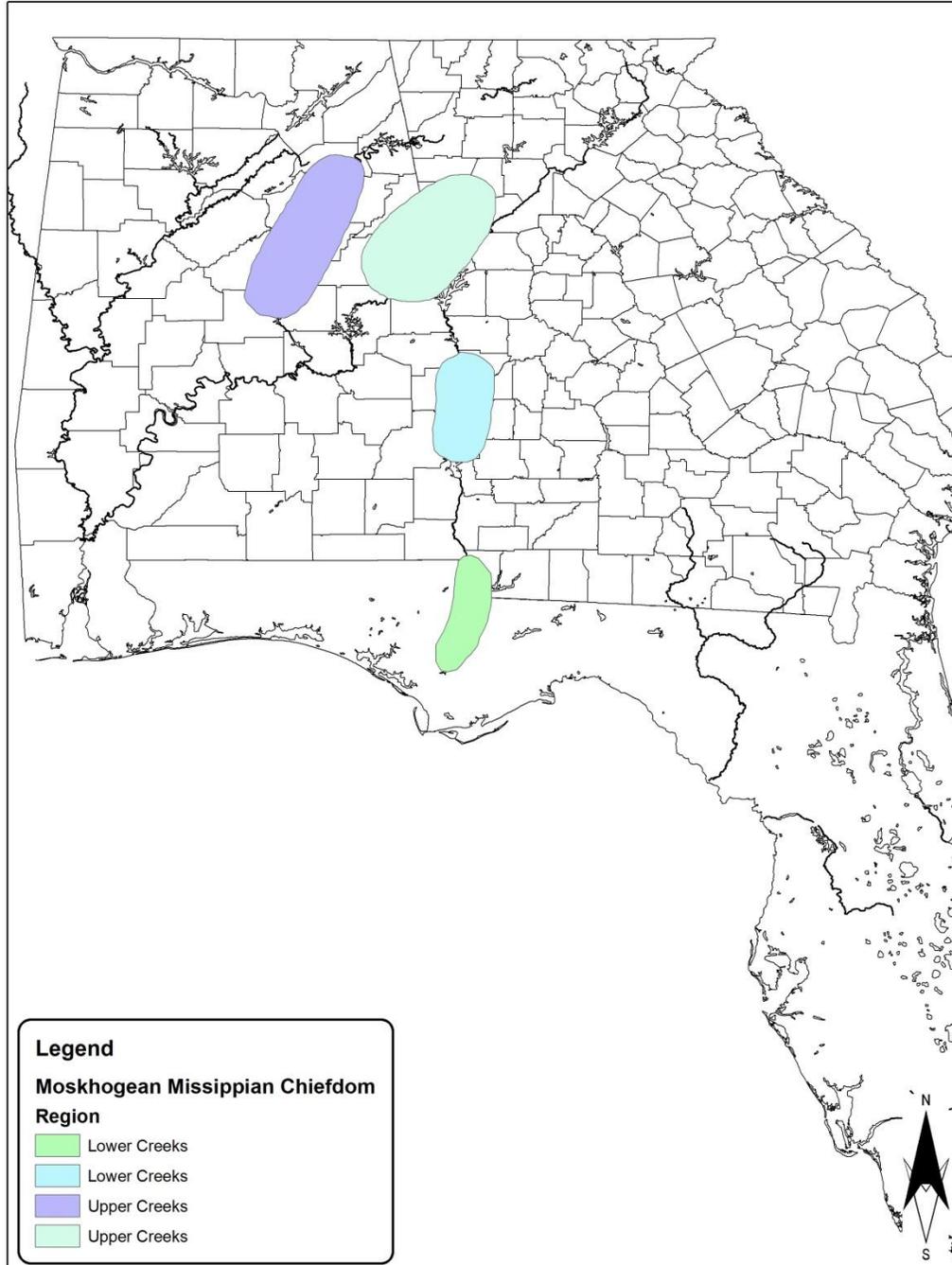


Figure 4. Areas of Creek settlements during the Historic Period. Data courtesy of Seminole Tribe of Florida Tribal Historic Preservation Office. Map created using ArcGIS 10.0.

The settlement patterns of the historic Creeks still included the placement of towns and villages along the flood plains of major rivers. The layout of the towns and villages were dispersed over large areas rather than the tightly compacted towns of the Mississippian and Protohistoric period (Smith 1994, 2000; Weisman 1989). The towns were centered around a large public area known as the chunky yard. This yard was a playing field for various games. The field itself was slightly sunk into the ground and surrounded by earthen embankments. In the exact center of the chunky yard was a large pole that was used for various purposes that included attaching targets for games (Smith 2000; Waselkov and Braund). Bartram further claimed that at the four corners of the chunky yard were smaller poles that were used to for attaching the scalps of victims of war as well as for torture and execution of captives (Waselkov and Braund 1995).

Adjacent to one end of the chunky yard was the square ground, which consisted of four shed-like structures arranged around a central square. Each of these sheds was associated with a cardinal direction and was open-aired in construction. Bartram described the sheds-like structures as:

constructed of a wooden frame, fixed strong in the earth, the walls filled in, and neatly plastered with clay mortar; close on three sides, that is the back and two ends, except within about two feet of the wall plate or eaves, which is left open for the purpose of a window and to admit free passage of air; the front or side next to the area is quite open like a piazza
(Waselkov and Braund 1995:104)

These structures were also painted in various designs that depicted various flora and fauna as well as many anthropomorphic figures (Waslkov and Braund 1995).

Furthermore, the columns of these structures were carved to resemble snakes. In the

center of the square was the sacred fire, which was kept aflame year-round, until its ceremonial relighting during the busk, or Green Corn, ceremony (Hudson 1976; Smith 2000). The square grounds acted as the council house during the summer months. Bartram further claimed that one of the square ground structures acted as a sort of priestly sanctuary (Waselkov and Braund 1995). The structure in which sat the chief and head warriors had a partition that closed off the back. In this closed off area was stored various ceremonial items such as a physic pot, the chief's eagle tail standard, rattles, and a peace pipe.

Adjacent to the opposite end of the chunky yard was the Great Council House, which was employed during the winter months. Bartram described the Great Council House as “vast conical building or circular dome, capable of accommodating many hundred people” (Waselkov and Braund 1995:102). Furthermore, he claims that this structure is employed in the same manner as the square ground and that only men are allowed to enter. “[W]omen and youth are never admitted; and I suppose it is death for a female to presume to enter the door, or approach within its pale” (Waselkov and Braund 1995:102).

The domestic structures of the historic Creeks were similar to those seen in the archaeological record of the Coosa peoples, who constructed square structures in pairs around a courtyard (Hally 1994; Polhemus 1990). These individual domiciles consisted of two to four structures centered around a square courtyard. Bartram described the domestic structures as:

consist[ing] of Little Squares, or four oblong square houses, encompassing a square area, exactly on the plan of the Publick Square, – every Family however have not four of these Houses – some 3, – some 2, – and some but one... they have a particular use for each of these buildings – One serves for a Cook Room & Winter Lodging House – another for a Summer Lodging House & Hall for Receiving Visitors – and a 3d for a Granary, or Provision House... This is commonly two Stories high and divided into two apartments transversely – the lower story of one end being a potatoe house & for keeping other roots & fruits... The chamber over it is the Corn Crib – The other end of this building, both lower & upper stories are open on 3 sides – The lower story serves as a shed [for storage]; the loft over it is a very spacious airy pleasant Pavilion – where the Chief of the Family reposes in the hot seasons & receives his Guests... And the Fourth House... is a Skin House or Ware-house... Smaller or less Wealthy Families, make one, two or 3 houses serve all these purposes as well as they can (Waselkov and Braund 1995:180)

Bartram further describes the construction of these domestic structures:

neat, commodious buildings, a wooden frame with plaistered walls, and roofed with Cypress bark or shingles; every habitation consists of four oblong square houses, of one story, of the same form and dimensions, and so situated as to form an exact square, encompassing an area or court yard of about a quarter acre of ground, leaving an entrance into it at each corner (Waselkov and Braund 1995:93)

The layout of these domestic structures is indicative of the importance of the square ground to Creek culture and life. By mimicking the layout of the square ground in their individual homes they tied the spirituality of the square ground into their individual lives. This pattern of squared domestic structures is also evidenced archaeologically at numerous sites (Foster 2007; Mason 2005).

The subsistence pattern of the historic Creeks followed the same basic pattern as that of their protohistoric and prehistoric ancestors. Maize was the primary food crop (Corkran 1967; Foster 2007; Smith 2000; Waselkov and Braund 1995). This was supplemented by squash, beans, and other cultigens as well as by various wild fruits and

nuts. Botanical evidence from the archaeological record provides additional evidence that suggests the Creek peoples were ingesting European introduced foods such as cereal grains and fruits (Bonhage-Freund 2007).

Hunting and fishing were also integral components of the subsistence pattern of the historic Creeks. Bear, deer, and turkey were still the principal components of terrestrial faunal subsistence. Bartram made an interesting note on the use of fire in hunting patterns (Waselkov and Braund 1995). Fire would be set to forested areas as well as savannah areas. This provided pre-cooked meals of many different small animals that were readily harvested for consumption. Trade with Europeans also brought additions to the diet of these peoples. Cattle and pigs were raised during the eighteenth and nineteenth centuries (Smith 2000; Waselkov and Braund 1995; Wesiman 1989). However, these animals were not important to the diet except during times of drought and famine. Archaeological evidence, on the other hand, shows that at several sites, cattle were ingested in abundance between 1750 C.E. and 1820 C.E. (O'Steen 2007). It is not known whether or not this temporal span represented a time of famine at these locations.

The primary unit of political organization of the historic Creeks was the *talwa*, or town (Foster 2007; Knight 1997; Smith 2000). A *talwa* consisted of a dispersed arrangement of “a politico-religious center and a supporting population” (Smith 2000:58). Each *talwa* had its own political hierarchy, separate from the Creek Nation as a whole (Foster 2007; Knight 1994; Nairne 1988; Smith 2000; Waselkov and Braund 1995; White 2002). Each hierarchy consisted of the town chief, known as a *mico*, and a

talwa council (Corkran 1967; Nairne 1988; Smith 2000; Waselkov and Braund 1995; White 2002). The *mico* did not have absolute power and control of his subjects like the chiefs of the prehistoric and protohistoric periods, but played a role that was more of a persuasive spokesman of the council (Corkran 1967; Nairne 1988; Smith 2000; Waselkov and Braund 1995; White 2002). The council was comprised of every adult male in the *talwa*, although there were several divisions of rank within. The principal advisor, known as a *heniha* (Second Men), *istechaque* (Beloved Old Men), and warriors comprised the different ranks within the council (Corkran 1967; Nairne 1988; Smith 2000; Waselkov and Braund).

During the historic period the Creeks employed a moiety system that divided the towns into one of two parties: the Red Stick moiety or the White Stick moiety (Hudson 1976). Each Creek town had a moiety designation, and each designation had a specific connotation. White Stick towns were aligned with peace and sanctuary, whereas Red Stick towns were aligned with warfare and defense. However, Chaudhuri and Chaudhuri (2001), members of the Mukogee Creek Nation, state that traditional anthropological interpretations of Red Stick and White Stick designations are wrong and that these designations lie within the level of the individual rather than of the town.

Warfare was an integral component of historic Creek culture and society. It provided one the means of ascension in social rank (Smith 2000). There were three classes of warriors: *tastanagi* or war chief, Big Warriors, and Little Warriors (Corkran 1967; Smith 2000). Warriors achieved their rank through prowess in warfare. Corkran

(1967) and Smith (2000) claimed that warfare among the historic Creeks involved relatively small groups, usually numbering thirty or less warriors. The favored weapon of the Creek warrior during the historic period was the rifle, which they would go to great means to procure. One of the primary methods of obtaining this coveted weapon was through the capture and trading of slaves, of both indigenous and African descent (Hahn 2004; Martin 1994). This became a primary motive for the trade of slaves among the Creeks. Other weaponry employed by historic Creek warriors included the bow and arrow and the war club, which was referred to as the *atasa*. According to Smith (2000) the *atasa* was the symbol of warfare. This weapon was used by the *tastanagi* as a call to arms within the towns (Corkran 1967). When war was imminent the *atasa* would be painted red and hung in the public square. It is possible that the historic Creeks still employed the tactic of utilizing separate contingents in warfare. Bartram discussed the use of a standard in battle that resembles what was discussed in the de Luna chronicles:

The Creeks or Muscogulges construct their royal standard of the tail feather of this bird, which is called by a name signifying the eagle's tail; this they carry with them when they go to battle, but then it is painted with a zone of red within the brown tips; and in peaceable negotiations it is displayed new, clean and white, this standard is held most sacred by them on all occasions; and is constructed and ornamented with great ingenuity (Waselkov and Braund 1995:49)

However, it is not known to the author for certain whether or not this tactic was employed in fact. Though, the use of such a standard suggests that a *tastanagi*, or other high ranking warrior, who carried such a standard would have used it in a similar manner to direct the combat maneuvers of his warriors. In addition, Creek warriors would paint themselves red and black during combat and would adorn themselves in breechclout and

moccasins (Akers 1975; Mahon 1985; Swanton 1946; Wright 1986). The weaponry of the Creek warrior at this time consisted of firearms, bow and arrows, war clubs, and knives (Akers 1975; Mahon 1985; Smith 2000; Swanton 1946; Wright 1986).

Resisting the Westward Expansion

The Redstick War, or First Creek War, was the first resistance displayed during the American period in resisting the expansion of the American state into Muskogee territory. This war was waged during the purview of the larger, international War of 1812, which pitted the United States against Britain. During this international struggle, the United States and Britain both attempted to gain the Southeastern cultural groups as allies in the war (Owsley 1981). Spain also attempted to gain the favor of the Creeks and Seminoles as a buffer between Spanish Florida and the United States. The Creeks, however, were becoming increasingly agitated with the United States due to the continual harassment of American settlers encroaching into Creek territory. There was a constant struggle between the Creeks and settlers that usually culminated in cattle raids on either side of the border of Creek territory (Martin 1991; Owsley 1981). To further agitate the tensions, the United States government planned to construct a road through Creek territory that would connect the Georgia settlements with those in Alabama. The Creeks were highly opposed to this for several reasons: the road would bring more Americans into Creek territory, thus increasing the number of hostile incidents; the road would bring additional trade, and thus acculturation; the road would allow for a larger distribution of whiskey and other alcoholic beverages into Creek territory (Martin 1991; Owsley 1981).

In addition to the growing tensions between the Creeks and United States, the Shawnee, Tecumseh, was traversing the Southeast and Northeast attempting to incite a nativist movement that would culminate in a Pan-Indian alliance against the European and American states (Martin 1991; Owsley 1981). This movement sought to remove the shackles of acculturation and bring about a return to a more traditional lifestyle that did not make use of European or American technologies or lifestyles. Tecumseh, along with his brother the Prophet, visited the Upper Creeks in October of 1811 (Martin 1991; Owsley 1981). His visit incited a civil war among the Creeks. It created factions between those that were against incorporating American culture into their own and those that were for it (Martin 1991; Owsley 1981). The faction against acculturation gained the moniker of Red Sticks, while those disposed towards peace were given the moniker of White Sticks. It seems to have been relatively isolated among the Upper Creeks, however.

It was in this way that the war started. The Red Sticks vehemently attempted to gain support among the Upper Creek towns; those that did not join their cause were slaughtered wholesale:

Persons who were not willing to support the war party were often murdered in their sleep by what seemed to be supernatural means. Others, including many who were disposed to peace, were tied to trees and burned alive. (Owsley 1981:14)

In addition to killing their White Stick counterparts, the Red Sticks also began killing American settlers. The killing of American settlers caused a growing unrest among the

Americans. They feared a large Creek uprising and thus for their lives. The unrest eventually led to the Red Sticks being drawn into war with the American military.

In 1812 the United States military was in flux, with many additions being made to the ranks and organization due to the threat of British attack (Mahon 1972). The government sanctioned the addition of multiple new regiments to the infantry, artillery, and dragoon divisions of the Army for a total of 35,925 enlisted men (Mahon 1972). In addition to the accumulation of the new regiments, Congress authorized the President to put on alert 50,000 volunteers and 100,000 militiamen. The numbers, however, were never filled (Mahon 1972). Of the allotted 35,925 enlisted positions, only about six thousand five hundred were ever filled; of the roughly eight million people living in the United States during 1812, less than seven hundred thousand were registered in the state militias (even though the majority were never called upon) (Mahon 1972). Additionally, within the militias 13,500 were designated as artillery, and 20,000 as cavalry (Mahon 1972).

The uniforms of the U.S. military during this time consisted of dark blue single breasted tail-coats and white overalls, both of cotton (Field 2009). The collars of the coats were used to distinguish between infantry and artillery: white edging for infantry, yellow edging for artillery (Field 2009). In addition, white cross straps adorned every soldier's chest. The leggings of the overalls of every soldier were tucked inside black leather gaiters. Headgear was of the 1813 pattern, which was a cylindrical shako made from leather and was nicknamed the "tombstone cap" (Field 2009:36). Headgear

was also used to distinguish infantry from artillery: infantry caps had a white metal plate with an eagle, flag, and drum motif with the word infantry above and the soldier's regiment number below; artillery caps had a brass plate with a flagstaff, canon, and cannonball stack motif with the word artillery above and the soldier's regiment number below (Field 2009). Officers wore the same uniforms as enlisted soldiers, but were distinguished by "silver epaulettes and a red waist sash" as well as headgear that was black bicorn in style (Field 2009:36).

The M1795 flintlock musket, also known as the Springfield musket, was the primary weapon utilized by the United States military at this time (Field 2009; Mahon 1972). This model, based on the popular French Charleville design from the Revolutionary War, was a muzzleloading, single-shot flintlock (Mahon 1972). It was typically .69 caliber (or close to), ten pounds in weight, and measured between fifty four to fifty seven inches in length (Mahon 1972). Of particular note is that these rifles had an accuracy of only 75 yards (Mahon 1972). The Hall's musket, a single shot breechloader, was also in use but only in limited quantities due to the high rate of malfunction and injury (Mahon 1972).

American unrest with the Red Sticks came to fruition with the Battle of Burnt Corn Creek. A band of Red Stick warriors had travelled to Pensacola to obtain supplies, quite unsuccessfully, from the Spanish. On their way back to their territory, a contingent of local militia launched an attack that caught the Creek warriors off guard. During this attack, which occurred on July 27, 1813, the warriors employed class one offensive and

defensive behaviors with tactical subtypes B (assault) and D (defense of a natural fortification) (Buchanan 2005; Bunn and Williams 2008; Halbert and Ball 1995; Mahon 1972; Martin 1991; Owsley 1981; Waselkov 2006; Wright 1986). In addition to the combat behaviors employed by the warriors, they strategically utilized the immediate environment to their advantage: a pine flatwoods where their camp had been located and a forested wetland on the opposite bank of Burnt Corn Creek. It should also be noted that the majority of the weaponry employed by the Red Stick warriors in this battle consisted of war clubs and bows and arrows. Owsley (1981:32) stated that “only about 13 of the Indians at Burnt Corn had any guns; the rest whooped and made whatever noise they could to add to the confusion.”

Following the Battle of Burnt Corn Creek, the American settlers in the Tensaw region of modern Alabama began to congregate at the local forts that had been hastily constructed throughout the region due to the unrest (Bunn and Williams 2008; Halbert and Ball 1995; Mahon 1972; Martin 1991; Owsley 1981; Waselkov 2006; Wright 1986). These forts were simply fortified plantation ranches, but they were the primary defensive measure of the local settlers. The largest and best fortified of the forts was known as Fort Mims. In retribution for the unprovoked attack at Burnt Corn Creek, the Red Stick warriors devised a two prong approach to attack: to attack Fort Mims and Fort Sinquefield simultaneously. On August 30, 1813, Red Stick warriors attacked Fort Mims (Buchanan 2005; Bunn and Williams 2008; Halbert and Ball 1995; Mahon 1972; Martin 1991; Owsley 1981; Waselkov 2006; Wright 1986). During the attack they employed class three offensive mode behaviors with tactical subtype C (flanking maneuvers) and

subtype modifiers H (use of fire) and J (scalping). The flanking maneuvers demonstrated during this combat scenario were unique. The warriors surrounded the entirety of the fort and took control of the loopholes around the fort. This successfully prevented the Americans from utilizing this effective defensive tool and turned it into a highly effective offensive tool.

Three days later, on September 2, a contingent of Red Stick warriors attacked Fort Sinquefield (Bunn and Williams 2008; Halbert and Ball 1995; Martin 1991; Owsley 1981; Waselkov 2006). While the initial two pronged plan didn't occur simultaneously, the Red Sticks were able to bring surprise back to their aid. The previous day, September 1, the band of warriors killed the Kimbell and James families. The garrison of Fort Sinquefield, only fifteen soldiers plus their families, retrieved the bodies for burial at the fort. During the funeral ceremony the warriors struck. The warriors effectively used the burial of the Kimbell and James families as a way to draw the soldiers from the fort in order to attack them. They employed class three offensive behaviors with tactical subtypes B (assault) and C (flanking maneuvers), in addition to subtype G (use of bait) and J (scalping) modifiers.

These three combat scenarios brought the tensions between the Red Sticks and Americans to a rolling boil and the war was now waged in full. The American response coalesced into a three pronged strategy of attack. It consisted of three separate campaigns that were to converge into one final strike. The campaigns can be divided into the Alabama River campaign, the Georgia campaign, and Jackson's campaign.

Table 8. Classification of combat behaviors employed during onset of First Creek War.

Date	Name of Battle	Class	Mode	Subtype	Environment
07/27/1813	Battle of Burnt Corn Creek	1	O, D	B, D	PF, FW
08/30/1813	Battle of Fort Mims	3	O	C, H, J	Fort
09/02/1813	Battle of Fort Sinquefield	3	O	B, C, G, J	Fort

The Alabama River Campaign

The first campaign against the Creeks was commanded by General Claiborne of the Mississippi militia. General Claiborne had approximately eight hundred militiamen under his command (Owsley 1981). The main objective of this campaign was to progress in a northerly fashion along the Alabama River to the confluence of the Alabama and Tombigbee Rivers, destroying Creek settlements and crops as well as battling any Creek warriors encountered along the way. Once Claiborne and his troops reached this point he was to await reinforcements of approximately one thousand two hundred United States infantry (Owsley 1981). Once reinforcements arrived they would launch a combined attack on the Creek settlement of Holy Ground, which was thought to be the primary stronghold of the Red Stick leaders. This campaign, however, failed to engage in any large scale encounters other than the Battle of Holy Ground.

While there were several small combat scenarios that occurred during the campaign only the Bashi Creek Ambush fits within the criteria of the analytical model. On October 12, 1813 a small contingent of mounted soldiers broke away from the main column to track a band of Red Stick warriors near Bashi Creek (Halbert and Ball 1995;

Waselkov 2006). The warriors ambushed the contingent, employing class two offensive mode behaviors with tactical subtype A (ambush).

On December 23, 1813 the American force under General Claiborne made their assault on the Creek settlement of Holy Ground (Eccanachaca) (Bunn and Williams 2008; Halbert and Ball 1995; Martin 1991; Owsley 1981; Waselkov 2006). By this time the campaign force numbered approximately one thousand men (militia, infantry, volunteers, and allied Choctaws under Chief Pushmataha) (Bunn and Williams 2008; Waselkov 2006). Claiborne divided his force into three columns to encircle the settlement. The Red Stick Prophet, Josiah Francis, had placed an enchantment on the fortified Holy Ground settlement that was supposed to create a barrier of protection against the American forces (Martin 1991; Owsley 1981; Waselkov 2006). When the Americans crossed this barrier, the Prophets band fled leaving a band of approximately thirty warriors under William Weatherford to defend the town. They employed class one defensive mode behaviors with tactical subtypes E (fortification) and F (rearguard action).

Table 9. Classification of combat behaviors employed during the Alabama River campaign.

Date	Name of Battle	Class	Mode	Subtype	Environment
10/12/1813	Bashi Creek Ambush	2	O	A	N/A
12/23/1813	Battle of Holy Ground	1	D	E, F	Settlement

The Georgia Campaign

While the Alabama River campaign was being conducted, the Georgia campaign was well underway. The military force of Georgia, under the command of General John Floyd, numbered approximately two thousand three hundred soldiers (Owsley 1981). However, due to numerous exigencies, such as sickness and a shortage of rations, the force only consisted of approximately one thousand five hundred soldiers, including allied Creeks (White Sticks), in fighting condition (Owsley 1981). The primary objective of the Georgia campaign was to establish a fortified supply base on the Chattahoochee and then join with the forces of Claiborne and Jackson at the confluence of the Coosa and Tallapoosa Rivers. Like the Alabama River campaign, the Georgia campaign did not culminate in many large scale combat scenarios. Two scenarios, however, do fit within the parameters of the analytical model: the Battle of Atasi and the Battle of Calabee Creek.

On the morning of November 29, 1813, General Floyd's military force reached the paired Creek settlement of Atasi (Buchanan 2005; Bunn and Williams 2008; Halbert and Ball 1995; Martin 1991; Waselkov 2006; Wright 1986). In order to encircle both of the settlements, Floyd divided his force into two large columns (Buchanan 2005; Bunn and Williams 2008; Waselkov 2006). The Americans attacked furiously, driving the Red Sticks across the Tallapoosa River. The warriors employed class one defensive mode behaviors with subtype A (ambush) and E (fortification) tactics.

During the darkness before dawn on January 27, 1814, a large contingent of Red Stick warriors attacked Camp Defiance on Calabee Creek (Buchanan 2005; Bunn and Williams 2008; Halbert and Ball 1995; Martin 1991; Waselkov 2006). This attack has been hailed by historians as displaying the best military strategy throughout the Creek War (Bunn and Williams 2008; Owsley 1981). The warriors advanced in the darkness and launched an assault from within the camp before the soldiers knew what was happening. What really made this assault so significant, however, was the fact that a group of warriors broke off from the main body and attempted to wrest control of the two artillery pieces that were off to the side. If they had gained the artillery, the warriors would have likely partaken in wholesale slaughter of the American troops. During this combat scenario the Red Stick warriors employed class one offensive mode behaviors with tactical subtypes A (ambush), B (assault), and C (flanking maneuvers). During the combat scenario, the Red Sticks made effective use of not only the predawn darkness, but also of the vegetation of a forested wetland that they used to cover their entrance and retreat (Buchanan 2005; Halbert and Ball 1995).

Table 10. Classification of combat behaviors during the Georgia campaign.

Date	Name of Battle	Class	Mode	Subtype	Environment
11/29/1813	Battle of Atasi	1	D	A, E	Settlement
01/27/1814	Battle of Calabee Creek	1	O	A, B, C	FW, R

Jackson's Campaign

While the Alabama River and Georgia campaigns were being waged, General Andrew Jackson mobilized and began the main thrust of the campaign against the Creeks. General Jackson led the Tennessee army, militia, and volunteers, which together totaled approximately three thousand five hundred soldiers, southward to the confluence of the Coosa and Tallapoosa Rivers (Buchanan 2005; Bunn and Williams 2008; Halbert and Ball 1995; Mahon 1972; Martin 1991; Waselkov 2006; Wright 1986). The primary objective of Jackson's campaign was travel southward to the rendezvous point while destroying settlements, crops, and bands of warriors along the way. Due to mistiming of all three campaigns, however, the rendezvous was not made. Jackson's campaign was the only of three campaigns that participated in multiple combat scenarios that fit within the parameters of the analytical model.

The first of these combat scenarios occurred on November 3, 1813 at the Battle of Tallushatchee (Buchanan 2005; Bunn and Williams 2008; Halbert and Ball 1995; Mahon 1972; Martin 1991; Waselkov 2006; Wright 1986). General Coffee led this assault by dividing the force into two columns to encircle the settlement with a small contingent left in the middle to draw enemy fire. The center contingent drew the Red Stick warriors out of the town and into a frontal assault while the remainder of the American force employed the noose effect, effectively incapacitating the entirety of the settlement's warriors. The warrior employed class one offensive and defensive behaviors with subtype B (assault) tactics.

On November 9, 1813, Jackson's force came to the aid of an allied Creek town, known as Talladega, under siege by the Red Sticks (Buchanan 2005; Bunn and Williams 2008; Halbert and Ball 1995; Owsley 1981). The Red Stick warriors had completely encircled the fortified settlement of Talladega. The Americans, however, completely encircled the Red Sticks and drew them from the siege into a frontal assault, many of them escaping the battlefield through a breach in the American line (Buchanan 2005; Owsley 1981). Prior to the arrival of the American force, the Red Stick warriors employed class three offensive behaviors. When the Americans joined the fray, the warriors adapted their tactics and employed class one offensive behaviors with tactical subtype B (assault).

On January 22, 1814, a large contingent of Red Stick warriors attacked the left flank of Jackson's force while they were preparing to attack a Creek encampment (Buchanan 2005; Bunn and Williams 2008; Owsley 1981). The encampment of warriors had been fortified, so while the American force was attempting to muster the artillery to attack the camp, a second contingent of warriors attacked the right flank. Each flank was attacked from cover and by surprise, awarding a designation of ambush. A contingent of warriors also charged the American force. During this combat scenario the warriors employed class one offensive behaviors with tactical subtypes A (ambush), B (assault), C (flanking maneuvers), and E (fortification). Furthermore, they effectively utilized the cane breaks of Emuckfou Creek and the surrounding forested wetland to their advantage.

On January 24, 1814, as the American force was marching back to Fort Strother, a large contingent of Red Stick warriors laid an ambush for the Americans at the Enitachopco Creek crossing (Buchanan 2005; Bunn and Williams 2008; Owsley 1981; Waselkov 2006). However, Jackson had suspected as much and chose to cross the creek at a point of his choosing (Buchanan 2005). The warriors followed the force down the creek and attacked when all but the rear guard had crossed the waterway. The warriors employed class one offensive behaviors with tactical subtype B (assault).

On March 27, 1814, the deciding battle of the first American campaign against Creek peoples was fought. This battle is known as the Battle of Horseshoe Bend. The fortified settlement of Tohopeka was located on a peninsula in a bend of the Tallapoosa River (Buchanan 2005; Owsley 1981). The peninsula formed a bottleneck shape and across the neck, from river bank to river bank, was constructed a low fortification with numerous loopholes; the only terrestrial entrance into the settlement was through the neck (Buchanan 2005; Bunn and Williams 2008; Halbert and Ball 1995; Mahon 1972; Martin 1991; Waselkov 2006; Wright 1986). The American force was split into three contingents: the main force was to cut through the bottleneck; a second force of allied Creeks (White Sticks) and Cherokees was to occupy a small island in the river to prevent Red Stick occupancy; and a third contingent of mounted soldiers was to occupy the river bank opposite of Tohopeka to prevent escape in this direction. The Red Stick warriors employed class one defensive behaviors with tactical subtypes E (fortification) and F (rearguard action).

Table 11. Classification of combat behaviors during Jackson's campaign.

Date	Name of Battle	Class	Mode	Subtype	Environment
11/03/1813	Battle of Tallushatchee	1	OD	B	Settlement
11/09/1813	Battle of Talladega	1, 3	O	B	Settlement
01/22/1814	Battle of Emuckfou Creek	1	O	A, B, C, E	FW, R
01/24/1814	Battle of Enitachopco Creek	1	O	B	R, Unspecified (Open Forest)
03/27/1814	Battle of Horseshoe Bend	1	D	E, F	Settlement

Following the defeat of the Red Sticks at the Battle of Horseshoe Bend, the Treaty of Fort Jackson was drafted and signed. This treaty ceded more than twenty two million acres of Creek land to the United States, and included areas of Alabama and Florida (Bunn and Williams 2008; Owsley 1981). Jackson's campaign, however, was far from over. The Creek War was waged in the midst of the War of 1812, and the British had incorporated a southern front to the war that Jackson had to deal with. Furthermore, bands of defeated Red Stick warriors had moved to the Pensacola area to try to obtain arms and ammunition from the British (Buchanan 2005; Bunn and Williams 2008; Mahon 1972; Owsley 1981). Over the course of the next two years of his career, General Jackson waged war against the British in New Orleans, Pensacola, and Mobile. His objective in fighting off the British invasion was two-fold: to protect American lands and sovereignty, and to permanently prevent the rearmament of the Creeks by the British.

Many of the Red Stick warriors that fled south after their defeat by Jackson flocked to the British fort at Prospect Bluff, along the Apalachicola River in Florida

(Heidler and Heidler 2003; Owsley 1981). The exact number of warriors is uncertain, but historic accounts give a variable range of figures from one thousand five hundred to over three thousand (Heidler and Heidler 2003; Owsley 1981). Freedom seeking peoples of African descent as well as Seminole warriors also flocked to the British safe haven of Prospect Bluff, furthering the total number of fighting men at the fort. The British soldiers at the fort began training warriors (Red Sticks and Seminoles) and Freedom Seekers in the Western ways of war in order to both incite attacks along the Florida/Georgia border and into interior Georgia as well as to turn them into what they believed would be a military force to be reckoned with (Covington 1993; Heidler and Heidler 2003; Owsley 1981).

The fact that Creek warriors gathered in a British fort and underwent additional martial training demonstrates that the Creeks were not satisfied with the Treaty of Fort Jackson. The treaty robbed them, including the Creeks that allied with the United States during the war, of millions of acres of ancestral lands. This would understandably upset any group of people, and the British further fomented this disaffection. The British included in the Treaty of Ghent, which was signed to conclude the War of 1812, Article IX which was an attempt to make null and void the cession of land from the Treaty of Fort Jackson (Owsley 1981). This article provided a clause that stated that any Native American groups that allied with the British that were still at war with the United States when the Treaty was signed would have all territory as it was held in 1811 returned to them. However, the United States viewed the Treaty of Fort Jackson as concluding peace

with the Creeks, even though it was only signed by a small handful of Creek chiefs. This further fomented the disaffection felt by the Creeks.

The British force at Prospect Bluff evacuated in June of 1815, leaving the fort in the hands of the Creeks, Seminoles, and Freedom Seekers (Owsley 1981). Many of the Creeks and Seminoles, however, migrated to the east and south, leaving Prospect Bluff largely in the hands of the Freedom Seekers (Covington 1993; Heidler and Heidler 2003; Owsley 1981). Due to continued disaffection with the United States the Creeks, Seminoles, and Freedom Seekers conducted numerous raids along the Florida/Georgia border over the course of the next few years (Covington 1993; Heidler and Heidler 2003; Owsley 1981). Unrest among American settlers continued to grow due to these raids as well as the prospect of armed Freedom Seekers in their backyard. They thought that the mere presence of armed Freedom Seekers would incite and foment revolts among the enslaved populations of the southeast. This brought Jackson to finally order the destruction of the fort. This task had to be done carefully, however, due to the fort being located on Spanish soil (Jackson had unsuccessfully attempted to get the Spanish to complete this task for him previously). Jackson ordered American naval vessels to traverse the Apalachicola northward into Georgia to supply the newly established Fort Scott, passing directly underneath the walls of the fort, which by this time had garnered the name of Negro Fort (Covington 1993; Heidler and Heidler 2003; Porter 1996). The naval vessels were not to attack unless in defense, with the hope that they would be attacked and thus be able to legally defend themselves and destroy the fort. The Americans got their wish; the fort was destroyed on July 27, 1816 by a lucky hot shot that

ignited the stores of gunpowder within the fort, instantly killing hundreds of people (Covington 1993; Heidler and Heidler 2003; Porter 1996). This act was the first of what was the continuation of Jackson's campaign against the Creeks. His continued campaign, however, was highly controversial as it was an illegal foray onto foreign soil (Covington 1993; Heidler and Heidler 2003; Missall and Missall 2004; Porter 1996). This portion of Jackson's campaign has garnered the moniker of the First Seminole War by numerous historians, however, in reality it was a continuation of Jackson's War against the Creeks (Ellisor 2010; Heidler and Heidler 2003). Not only was it a continuation of Jackson's previous campaign, it was also an extension of the Patriot War of 1812, during which Georgia settlers attempted to annex East Florida from the Spanish and the Seminoles (Lawres 2008).

Resisting the First Wave of Southern Expansion

The Seminoles from 1763-1817 C.E.

During the early years of the eighteenth century bands of Lower Creek peoples began migrating into the Florida Peninsula for hunting purposes as well as to found new settlements. These were the people who would eventually become known as the Seminoles. These earliest migrations, however, were essentially Lower Creek peoples that had immigrated to Florida and have been labeled by anthropologists as the Proto-Seminoles (Weisman 1989).

Due to this fact these Proto-Seminole groups followed the same life ways and cultural patterns as their kin to the north. Matrilocal residence was practiced. This meant

that married couples resided in domiciles clustered near or with the wife's mother's family. They also practiced matrilineal descent, where everything was inherited through the mother's hereditary line. This included everything from personal items to social status to clan membership. Susan Miller defined a clan as "a set of people descended from a common ancestor whose identity has been forgotten" (2003:4). James Covington (1993:7) claimed that these clans were the most important aspect of social organization to the Creeks and Proto-Seminoles. They set social boundaries for marriage, the dispensing of justice, among many other things:

Creek could not marry within a clan, and clan kinship was acknowledged from the female side. That is, a male Deer [clan member] married a female Raccoon [clan member], and all children born of the union were Raccoons. A Raccoon [clan member] could not marry another Raccoon [clan member] but had to choose from the ranks of other clans.

One of the most important functions of the clan, however, was the determination of the *micco*, or chief. Each town, or *talwa*, would have its own *micco* who would be part of the Wind Clan, which was the most powerful clan among the Creeks and Seminoles (Covington 1993; Miller 2003). Like everything else, this position as *micco* is inherited through the female line. For example, *Micco* B inherited his position from his mother's brother, *Micco* A, and, when it is time, his position will be passed on to either his brother (because they have the same mother) or to his eldest sister's eldest son (Miller 2003).

The Proto-Seminole peoples brought with them the political structure of the Creeks. This style of government placed the *micco* at the top of the political pyramid. The position of the *micco*, however, was only one of the three forms of political offices among the Creeks and Proto-Seminoles (Lawres 2008; Smith 2000; Weisman 1989).

There were additional hierarchies of military leaders and councilors. Those within the military hierarchy were divided into four separate divisions, or classes: “*imala*, low; *labotskalgi*, higher; *imala lakalgi*, still higher; and *tustenuggee*, highest” (Covington 1993:6). Miller (2003) claimed that at the top of the military hierarchy sat the *tustenuggee thlacco*, a position usually held by the *micco*’s brother. The councilors, who were the head men of their respective clans, were known as *henihas* and would provide the *micco* with advice.

The major ritual of the Proto-Seminoles and their Creek kin, as well as the majority of the indigenous groups throughout the Southeast, was the Green Corn Ceremony, which was also known as the busk or *puskita* or *buskita* (Covington 1993; Hudson 1976; Weisman 1989, 1999, 2000). This series of rituals lasted eight days, during which judicial decisions were made (the only ones made during the year), sacred fires were rekindled, rituals and feasting were partaken in, and communal dances were performed (Covington 1993; Weisman 1989, 1999). This ritual celebrated the growth of the new corn, or green corn, which was a staple amongst the subsistence items of these people, and served to strengthen the social bonds of the community. Charles Hudson claimed that this ceremony’s main function was to purify the community as a whole, which he claimed was evidenced in the Creek name for it: “*poskita*, literally ‘to fast’” (1976:367). He claimed that this fasting lasted for two nights and was followed by feasting. Along with purifying the body through fasting, the entire community was purified through cleaning. Houses were cleaned and swept, pottery was scrubbed and broken pieces discarded or mended, the squareground was swept clean; central to all of

this was the extinguishing, cleaning, and rekindling of the sacred fire. This series of rituals was held in the squareground area of the town, or *talwa* (Hudson 1976; Weisman 1989, 1999, 2000). Indeed, Melinda Micco stated that these squaregrounds and the ceremonies held within them served to join clan members “as ‘people of one fire,’ a reference to the sacred fire that was the center of the annual *busk* ceremony” (1995:4).

During this time, the majority of the Seminole population was centered in north-central peninsular Florida (Covington 1993; Weisman 1989). The primary area of occupation was centered in the Alachua area but there were also strong populations along the Suwanee River and the Tallahasee area (Covington 1993; Weisman 1989).

Covington (1993) states that some groups established settlements in the circum-Tampa Bay area during this time as well. Settlement patterns of the Proto-Seminole present during this temporal period were also the same as that of their Creek kin. This settlement pattern is the Creek *talwa*-styled settlement that revolved around the squareground.

Charles Hudson (1976) claims that these *talwa* settlements were actually small chiefdom societies. This squareground was the center of both the social life and settlements of the Creek and Proto-Seminole (Covington 1993; Weisman 1989, 1999, 2000a, 2000b). The central squareground would be surrounded by four pavilions, constructed on the North, South, East and West sides of the square. In some villages, the squareground was covered with a palmetto thatch canopy (Weisman 1989). However, towards the end of the eighteenth century a new settlement pattern began to emerge. This new pattern was better-suited for an agropastoralist subsistence lifestyle. This agropastoralist settlement style featured domiciles that were more widely dispersed and not centered around a

squareground. Along with these more dispersed domiciles there were multiple outbuildings that were historically documented to have been used as corn cribs, stables, dairies, and a “‘physic’ house, where the sacred medicines were stored,” as well as large, cleared agricultural fields (Weisman 2000b:145). These settlements would be situated as to maximize the subsistence potential of the land: they would include well-drained upland soils for crops such as maize, wetlands for rice agriculture, and pasture land for horses and cattle (Covington 1993; McReynolds 1957; Milanich 1995, 1998; Weisman 1989, 1999, 2000a, 2000b).

The change in settlement patterns was not the only change to occur towards the end of this temporal period. This new trade in agropastoralism was becoming quite lucrative for the Proto-Seminole and they were accumulating more and more wealth as they perfected their new craft. This increase in wealth had several effects on Seminole culture and society. First was the aforementioned change in settlement patterns. They were increasingly constructing settlements more along the lines of plantations to maximize their yields and their profits. Secondly, the authority of the *micco* was corroded by the prioritization of profit. Weisman (1989:80) states:

Leadership became very local in scope and increasingly reflected ability, not inheritance. As traders and trade opportunities proliferated... so did Seminole towns, founded by individuals... who departed from the traditional talwa... settlement organization. The real authority of the chief was undermined as people found that they could strike their own deals.

Third, the traditional lines of matrilineal descent eroded. Weisman (1989, 1999, 2000b) cited the historical fact that Opauney, who owned a large farmstead, left his material wealth to his son rather than his nephew.

Jackson's Campaign, Reignited

Following the destruction of the Negro Fort in 1816, American unrest continued to rise due to fear of Seminole and Red Stick retaliation for the destruction of the fort (Covington 1993; Heidler and Heidler 2003; Missall and Missall 2004). To add to the rising tensions bands of greedy settlers and angry warriors continued raiding cattle and farms on both sides of the border. To make matters worse, these raids culminated in retaliatory murders of both Americans and Seminoles (Covington 1993; Heidler and Heidler 2003). The United States government, however, stayed aloof of these matters as much as possible due to the Seminoles being in Spanish Florida as the relationship between the Spanish and Americans was deteriorating. General Jackson wanted nothing more than to take matters into his own hands and invade Spanish Florida and appropriate it from the Spanish and Seminoles for the United States. Congress would not grant him his wish, though.

The relationship between the Seminoles and Americans continued on its downward spiral; accusations of murder and cattle theft were thrown back and forth to the point where Neamathla, the Seminole leader of Fowltown (located approximately fourteen miles from Fort Scott), told Major Triggs (commander at Fort Scott) that if any armed Americans crossed into Fowltown territory there would be military repercussions (Covington 1993; Heidler and Heidler 2003; Missall and Missall 2004). This proclamation provided the American force at Fort Scott with Jackson's permission to attack Fowltown (because it was located on American soil ceded by the Fort Jackson treaty), thus officially reigniting Jackson's campaign on the Muskogean peoples.

On November 21, 1817 Major Twiggs led an American force to attack Fowltown (Covington 1993; Heidler and Heidler 2003; Mahon 1998; Missall and Missall 2004). When the American force split into two columns to surround the town, Neamathla and his warriors fired on the left flank of the Americans, effectively disrupting the surrounding of Fowltown (Heidler and Heidler 2003). The warriors put up a fighting retreat into the surrounding forested wetlands with the Americans in hot pursuit. During this combat scenario the Seminole warriors employed class one defensive behaviors with subtype F (rearguard action) tactics. It is not certain from where the warriors fired. However, they did utilize an unspecified type of forested wetland for their escape. Due to this fact, it is likely that they were firing from the edge of the wetland as the women and children escaped behind them.

On November 23, 1817 a second force of American soldiers marched against Fowltown (Covington 1993; Heidler and Heidler 2003; Missall and Missall 2004).⁶ This time the warriors were ready and the settlement had been evacuated (Heidler and Heidler 2003). The warriors, taking aim from the cover of the forested wetland, employed class one offensive and defensive behaviors with tactical subtype D (defense of a natural fortification). When the warriors retreated the American force razed Fowltown to the ground.

⁶ The exact date of this attack is unknown, but it was likely November 23 or 24, 1817. According to Missall and Missall (2004), General Gaines ordered a second attack on November 22. Giving the soldiers a day to prepare and march would place the attack on November 23. Heidler and Heidler (2003:104) claim “a few days” while Covington (1993:42) claims “several days later.”

On November 30, 1817 a group of Seminole and Red Stick warriors retaliated for the Fowltown attacks (Covington 1993; Heidler and Heidler 2003; Mahon 1998; Missall and Missall 2004). This retaliation was focused on an armed boat full of supplies, soldiers, and citizens. The warriors employed class two offensive behaviors with subtype A (ambush) tactics and a subtype J (scalping) modifier against the soldiers and citizens on the boat (Heidler and Heidler 2003; Missall and Missall 2004). They utilized the densely wooded bank (a form of forested wetland) of the river to conceal themselves for the ambush. This combat scenario had grave effects for the Seminoles. It provided the United States government with the excuse it needed to invade Spanish Florida (Covington 1993; Heidler and Heidler 2003; Mahon 1998; Missall and Missall 2004).

The American military retaliated in force; by March 9, 1818 General Jackson arrived at Fort Scott with approximately five hundred Army infantry, one thousand militiamen, and one thousand eight hundred allied Creeks (Covington 1993; Heidler and Heidler 2003; Mahon 1998; Missall and Missall 2004). On March 19, 1818 a detachment of allied Creeks (White Sticks) attacked the Red Stick settlement of Red Ground (Heidler and Heidler 2003). However, the combat behaviors employed in during this combat scenario are unclassifiable due to the lack of details concerning this affair.

On April 1, 1818 Jackson's entire force descended on the settlement of Miccosukee, the largest Seminole town at the time (Covington 1993; Heidler and Heidler 2003; Mahon 1998; Missall and Missall 2004). The Seminole warriors were badly outnumbered, however, and put up just enough resistance for the noncombatants and

themselves to escape the slaughter Jackson intended for them (Covington 1993; Heidler and Heidler 2003). During this combat scenario the warriors employed class one defensive behaviors with tactical subtype F (rearguard action) before utilizing a forested wetland for their escape. On April 2, 1818 another scenario occurred in which the combat behaviors are unclassifiable due to a lack of details (Covington 1993; Heidler and Heidler 2003; Mahon 1998; Missall and Missall 2004).

On April 12, 1818 a large contingent of White Sticks waged a battle against a much smaller contingent of Red Sticks (Heidler and Heidler 2003; Mahon 1998; Missall and Missall 2004). The Red Stick warriors were initially hidden in the dense foliage of a forested wetland, but were drawn out into a fighting retreat. During this combat scenario, the Red Stick warriors employed class one defensive behaviors with tactical subtypes D (defense of a natural fortification) and F (rearguard action).

On April 16, 1818 Jackson's force descended on Bowlegs Town (Covington 1993; Heidler and Heidler 2003; Mahon 1998; Missall and Missall 2004). The Seminoles had received an early warning about the arrival of Jackson's force so they had begun the retreat of the women and children prior to Jackson's arrival (Covington 1993; Heidler and Heidler 2004). During this combat scenario the Seminole warriors employed class one defensive behaviors with tactical subtype F (rearguard action) to cover the remainder of the retreat of the noncombatants as well as themselves. They utilized the Suwannee River as a barrier against the American force. The war was finally over; the Seminoles

and Red Sticks had been dispersed deeper into peninsular Florida and Jackson's force moved to Pensacola. Covington (1993:47-48) states that:

The Fowltown Indians moved to the west bank of the Appalachicola. Part of the Lake Miccosukee bands moved... west of the upper Suwannee, and others went to Alachua. Most of the Red Sticks migrated to the Tampa Bay area and Bowleg's band moved from Suwannee to a point west of Lake Harris... [Other Red Sticks] moved to the Peace River and later to the area near present-day Ocala... [some] may have gone as far south as present-day Miami... [Other] bands deemed a move to central Florida necessary, for the area seemed to provide a safe haven several hundred miles distant from Georgia.

Jackson's campaign had other drastic impacts on the fate of Florida. During the campaign against the Seminoles his force took both St. Marks and Pensacola uncontested by the Spanish (Heidler and Heidler 2003). This led the Spanish to realize their power in Florida had waned to the point of no return and eventually gave rise to the signing of the Adams-Onís treaty of 1819 that ceded Florida to the United States in 1821. When the United States took control of Florida, it also took on the guardianship of the Seminoles and Red Sticks in the territory. Thus, Jackson's campaign also led to the Treaty of Moultrie Creek, which established the first Seminole Reservation lands.

Table 12. Classification of combat behaviors employed during the First Seminole War.

Date	Name of Battle	Class	Mode	Subtype	Environment
11/21/1817	First Attack on Fowltown	1	D	F	FW
11/23/1817	Second Attack on Fowltown	1	D	D	FW
11/30/1817	Lt. Scott Ambush	2	O	A, J	FW, R
03/19/1818	Battle of Red Ground	1	N/A	N/A	N/A
04/01/1818	Attack on Miccosukee	1	D	F	FW
04/02/1818	Lake Miccosukee Scout Battle	2	N/A	N/A	N/A
04/12/1818	Battle of Econfina	1	D	D, F	FW
04/16/1818	Battle of Bowlegs Town	1	D	F	R

The Seminoles from 1835-1842

Following the First Seminole War the Seminole peoples underwent a turbulent time in which they suffered from lack of food as well as further American depredations, such as cattle theft. Due to the amount of strife and turbulence for the Seminoles during this temporal period, there was a large amount of change and adaptation to their culture. While this was a period of great strife, Weisman (2000a:308) argues that this is when the Seminole actually came to think of themselves as Seminole. He stated that:

The formulation of Seminole ethnic or cultural identity [was] a direct response to various external stresses brought about by the circumstances of the Second Seminole War. A crucial aspect of this new identity is its opposition to the 'other,' in this case dominant American society as personified by the military. Put simply... the Indians of Florida did not consider themselves Seminole until they met and resisted an invading force that was not Seminole.

One line of evidence that supports this idea of Seminole ethnogenesis occurring during this time is that there is evidence that they reverted to older traditions. Weisman (2000a)

called this a nativistic movement. This would have allowed the Seminole peoples to revel in their indigenous roots, as they seem to have been on the road to assimilation into the dominant American culture prior to the war. Both historic documents and the archaeological record provide evidence for this reversion to the traditions of their Creek forebears.

Prior to the Second Seminole War, settlement patterns continued to follow the profit-maximizing dispersed plantation-style settlements. The war, however, brought a disruption to this pattern. During, as well as after, the war the Seminoles in Florida began following a settlement pattern that was traditional of their Creek forebears. They began to utilize what Weisman (1989, 1999, 2000a) calls the clan camp. This settlement form was based on the Creek *huti*, which were the matrilineal residences that made up a *talwa*. Alexander Spoehr (1941) called these *istihapo*. These clan camps were centered around a squareground (MacCauley 2000; Weisman 1989, 1999). This is clearly a reversion to former traditions. One change from the older squareground pattern was that rather than utilizing framed domiciles, we see the rise of the famous Seminole chickee, an open-aired structure that was much easier to construct while prioritizing the mobility needed in warfare (Missall and Missall 2004). These constructions greatly resemble the buildings that surround the actual squareground in the traditional Creek *talwa* settlements in that they are basically a thatched roof over a wooden platform (these would have been wooden benches in the constructions that surrounded the *talwa* squareground).

Another of these reversions lies in the realm of material culture. Prior to the Second Seminole War the Seminole used European and American ceramics in overwhelming percentages over their indigenous brushed form of pottery. During and after the war, however, European and American ceramics are completely lacking from Seminole archaeological sites, while Seminole brushed pottery is found in abundance (Weisman 2000a).

The war also seems to have reinvigorated the need for political leadership, as during the war we see the rise to prominence many of the *miccos* such as Micanopy and Coacoochee, as well as war leaders such as Asi Yahola. Prior to the war, the Seminoles continued to have a decentralized political system, with families being more intrigued by the offer of trade than of large-scale communal relations. The onset of war and the idea of removal seem to have shaken them, though. Scholars agree that during this time a singular authority arose among the Seminole peoples in Florida. There were several *miccos* operating during this time (each one associated with a specific clan), but they deferred to a paramount *micco*, who during the war was Micanopy (Covington 1993; MacCauley 1887; Mahon 1985; McReynolds 1957; Missall and Missall 2004; Porter 1996; Weisman 1999).

The Green Corn Ceremony gained back its importance during the course of the war as well, as it provided the Seminoles with a sense of group cohesion which meant a larger pool of warriors to draw from for the conflict. While there are no descriptions of the actual ceremonies that took place during the war years, it is known that “Billy

Bowlegs hosted at least one... in the Big Cypress” (Weisman 1999:63). Weisman further states that there were likely to have been many more held throughout the state. Directly after the war, however, there were additions to the ceremony. They added the use of medicine bundles. This was unique among the groups of the Southeast that practiced this ceremony (Hudson 1976; Weisman 1999). According to Weisman (1999), these medicine bundles were utilized in ceremony to give warriors supernatural powers in war. Also added to the ceremony was the medicine fire (MacCauley 2000; Weisman 1999). The ceremony was also shortened from the previous eight days to seven, yet still held the same essential rituals.

Resisting the Second Wave of Southern Expansion

The Second Seminole War, C.E. 1835 through 1842, was the longest and most expensive of the wars waged between the United States and Native Americans (Butler 2001; Knetsch 2003; Mahon 1985; Meltzer 1972; Missall and Missall 2004; Weisman 1999). This war, much like the First Seminole War, was fought over two issues: the removal of the Seminole peoples westward across the Mississippi and the issue of slavery. The United States desired the territory of Florida to be settled, and thus ‘civilized,’ by white Americans. Southern white Americans perceived the presence of free Africans and maroons living alongside the Seminoles as a threat to the institution of slavery, and thus wanted any Africans in Florida captured and returned to the plantations in Florida, Georgia, and South Carolina. Most of all, though, the American state wished to expand and appropriate the Florida peninsula for itself.

In 1835 the United States Army was comprised of 7,198 soldiers (Mahon 1985). Of this number 603 were officers, while the remaining 6,595 were enlisted men. The army at this time contained three branches: infantry, artillery, and dragoons. There were seven regiments of infantry, with a total of 3,829 men; four regiments of artillery, with a total of 2,180 men; and one regiment of dragoons, with a total of 749 men (Mahon 1985). There were also a total of 440 Army personnel that filled the positions of engineers and various staff positions (Mahon 1985).

The uniforms worn by the United States Army was of two forms dependent upon the season. For winter campaigns the fatigue uniform was constructed of a woolen fabric called kersey (Field 2009; Mahon 1985). Both the coats and trousers were of a sky-blue color. The coats had nine two-piece buttons as well as a single button for each cuff. The colors and designs of these buttons were customized for each branch of service; white metal with the pattern of an eagle with the letter 'I' were used for the infantry; yellow metal with the pattern of an eagle with the letters "A" and "D" were used for the artillery and the dragoons (Field 2009). The shoulder straps and trim on the collar also denoted the soldier's branch of service; white trim was used for infantry uniforms, yellow trim for both artillery and dragoons (Field 2009). There was a reinforced pocket under each breast on these coats. The trousers had no pockets and had a cord-tie in the rear for size adjustments. The summer campaign uniform was of the same design, but constructed of white cotton (Field 2009; Mahon 1985). The only difference besides color and material for the summer uniforms was the lack of shoulder straps and collar trim. Both uniform

types were completed with white leather cross-belts that marked an “X” in the center of the soldier’s chest.

Headgear was also of two types. The first type of headgear was the 1833-pattern leather forage caps, which were issued for each five year enlistment (Field 2009). These caps, also known as gig tops, were tall, collapsible and made from goatskin. They had a patent leather visor and chin strap as well as a flap in the rear that unfurled six inches to protect the neck. A metal insignia with the same designations as the coat buttons was embossed on the front of these caps. The second type of headgear was the 1825-pattern shako (Field 2009). These wheel caps were dark blue and constructed of wool. They had a wide, black leather brim. Similar to the winter campaign coats, these caps had a trim that denoted branch of service. Footwear consisted of the 1822-pattern leather boots, which were black in color and had high laces (Field 1009).

The United States Navy also saw action during this war. In 1835 the U.S. Navy consisted of 4,412 soldiers. A total of 785 of this number were officers, the remainder (3,627) were sailors (Buker 1997).⁷ These numbers were also enhanced by the United States Marine Corps. The U.S. Marines consisted of 58 officers and 1,177 soldiers (Buker 1997).⁸ The U.S. Navy uniform consisted of white frock coat and wide legged cotton trousers. The frock coat had blue and white trim on the collar, bib and cuffs (Field 2009). Straw hats comprised the headgear and high-cut leather shoes the footwear. U.S. Marine Corps uniforms consisted of gray coat and trousers. The trim and shoulder straps

⁷ Mahon (1985) claims 746 officers and 4,801 enlisted men.

⁸ Mahon (1985) claims 68 officers and 1,349 enlisted men.

of the coat were yellow in color. The buttons on the front and cuffs of the coat were of yellow metal and depicted an eagle on an anchor (Field 2009). Footwear consisted of black canvas gaiters and the headgear was a fatigue cap. The cap was dark blue and had a wide top.

The weapons and accoutrements carried by the United States Army, Navy and Marine corps were all standard issued (Brown 1983). The primary weapon was the shoulder arm (Mahon 1985), which were of four types: carbines, muskets, pistols, and rifles (Brown 1983). The majority of these arms were the M1816 contract muskets (Brown 1983; Field 2009; Mahon 1985). These were muzzleloading flintlocks with a smoothbore. They were standard .69 caliber that used paper cartridges. These cartridges contained either a single .69 Cal ball and 100 grains of powder or a combination of a .69 Cal ball and three buckshot measuring .34-inch with 100 grains of powder (Brown 1983). The single cartridge was referred to as ball cartridges and the combination cartridge was known as buck-and-ball cartridges. Eighteen inch socket bayonets were issued for these muskets (Brown 1983; Field 2009).

Although, rifling technology existed at this time, rifles were not in common use by the United States military. Mahon (1985) claims approximately one rifle for every 22 muskets was in use. The rifles that were most common were the Hall's M1819 .52 caliber rifle (Mahon 1985). This rifle featured rifled barrels, which increases the accuracy of the trajectory of a bullet by causing it to spiral as it travels. The cartridges for these rifles were combustible cartridges. These were made by "impregnating the

paper wrapper with a potassium-nitrate (saltpeter)-water solution” (Brown 1983:450).

Furthermore, these rifles were breech-loading percussion rifles, enabling the user to load and fire a round faster than the user of a muzzleloading flintlock.

Another shoulder arm was issued in small numbers, but never actually saw combat. This was the Colt Model 1839 Patterson Revolving Cylinder Percussion Carbine. This light-weight, short-barreled rifle, or carbine, featured a rifled barrel and a muzzleloading revolving cylinder as well as percussion cap firing. This was an early attempt at repeating rifles. The only shipment of these arms during the war was appropriated by the Seminoles during the Caloosahatchee massacre, who discarded them shortly thereafter (Brown 1983; Missall and Missall 2004). Brown (1983:453) provides a list of all the weapons used by the U.S. military during the Second Seminole War, including those less common: M1816 Musket, M1817 Musket, M1835 Musket, M1833 Hall-North Carbine, M1836 Hall Carbine, M1836 Hall-North Carbine, M1840 Hall Type I and II Carbines, M1817 Common Rifle, M1819 Hall Rifle, M1841 Hall Rifle, M1819 North Pistol, M1826 North/Evans Pistol, and M1836 Johnson/Waters Pistol.

Alongside the United States military were the state militias and volunteers. The militias of many states were involved in the war, including Alabama, Georgia, Louisiana, Missouri, South Carolina and Tennessee (Field 2009; Knetsch 2003; Mahon 1985; Missall and Missall 2004;). The uniforms of the militias varied from state to state and even between companies (Field 2009). For detailed descriptions of the various militia uniforms see Field (2009:41-43). The volunteers, as well as some of the militia soldiers,

generally wore civilian clothing. This clothing ranged from hunting shirts to laborer's clothing' (Field 2009). The weapons carried by the militia and volunteers were those supplied from stockpiled armaments in the United States arsenals. Field (2009:43) claims that the "majority of these stockpiled US arms were most likely of War of 1812 vintage or earlier, such as M1795, 1809 and 1812 contract muskets."

During the Second Seminole War, there were several campaigns conducted, each under the direction of a different general. Due to the heat of the Florida summer, along with the various illnesses and diseases associated with the plethora of stinging insects that thrive in this heat, the U.S. military divided the year into the healthy season and the sickly season (Missall and Missall 2004). It was during the healthy season, or winter, that campaigns were conducted. Almost every campaign season seemed to see the introduction of a new general and, thus, a new strategy for the offensive against the Seminole.

General Clinch's Campaign

The first campaign of the Second Seminole War was commanded by General Duncan L. Clinch. Clinch's grand strategy was to defeat the Seminole peoples in one decisive blow (Knetsch 2003, 2011; Mahon 1985; Missall and Missall 2004). This blow was to be made in concert with the territorial volunteers under General Richard K. Call at the Cove of the Withlacoochee, an area believed to be where the majority of the Seminoles were. General Clinch's forces amounted to less than five hundred Army regulars spread throughout the posts in the area, while General Call brought 560 mounted

Florida volunteers (Knetsch 2003, 2011; Mahon 1985; Missall and Missall 2004). Utilizing approximately two hundred fifty regulars and five hundred volunteers (the remainder were left at their posts), the force marched towards the Cove of the Withlacoochee. However, the first battles of the campaign had already been waged by the time this force marched to enact their strategy. Clinch's campaign culminated with the First Battle of the Withlacoochee. The defeat by the Seminoles in this conflict caused officials in Washington to place General Winfield Scott in charge of the Florida theatre of war (Knetsch 2003, 2011; Mahon 1985; Missall and Missall 2004). General Clinch resigned a few months afterwards. There were six major engagements that occurred during Clinch's command.

On December 18, 1835 the first combat scenario of the infamous Second Seminole War was waged at the Battle of Black Point (Covington 1993; Laumer 1998; Mahon 1985; Missall and Missall 2004). As a small contingent of Florida militia escorted a baggage train towards Wetumpka, a band of Seminole warriors laid in wait. As the baggage train passed next to the Seminole position they attacked, employing class two offensive behaviors along with tactical subtype A (ambush) in order to capture the much needed supplies from the baggage.

On December 20, 1835 the Americans responded to the action of the Battle of Black Point (Boyd 1951; Mahon 1985; Missall and Missall 2004). General Call sent scouts to follow the trail of the warriors that attacked the baggage train. The scouts led General Call's contingent to the Seminole position and drove them out of a hammock and

into a forested wetland. During the combat scenario the warriors employed class two defensive behaviors with tactical subtype F (rearguard action).

On December 28, 1835 a moderately large column of U.S. soldiers was marching towards Fort King to act as reinforcements when they were attacked by Seminole warriors (Boyd 1951; Butler 2001; Coe 1898; Covington 1993; Laumer 1968, 1995; Mahon 1985; McReynolds 1957; Missall and Missall 2004; Sprague 2000). This combat scenario, possibly the most famous of this war, is known as Dade's Massacre. The warriors, hidden in semi-circular position among the pine flatwoods to the west of a military road, employed class one offensive behaviors with tactical subtypes A (ambush), C (flanking maneuvers), I (use of horses), and J (scalping). The semi-circular positioning of the warriors effectively pinned the soldiers between the warriors and a pond. Furthermore, the initial volley of fire from the Seminoles targeted all of the officers in the contingent.

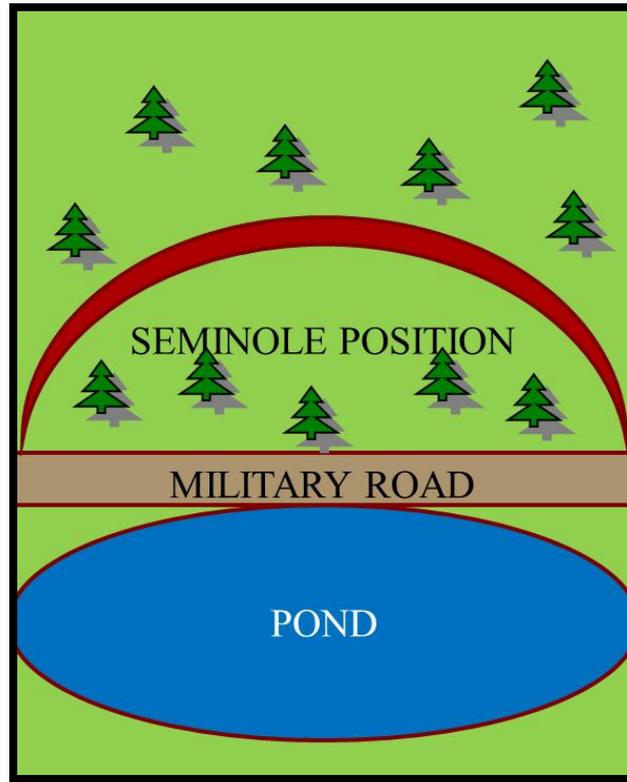


Figure 5. Diagram showing battle positions at the Dade Ambush.

A second combat scenario occurred nearly simultaneously with the Dade Massacre. In this scenario a band of Seminole warriors took position in a hammock adjacent to the road out of Fort King in order to assassinate Agent Wiley Thompson (Boyd 1951; Coe 1898; Knetsch 2003; Mahon 1985; Missall and Missall 2004; Laumer 1995; Sprague 2000). During this scenario the warriors simultaneously opened fire on Agent Thompson, who was walking with a Lieutenant, and the Sutler's cabin outside of Fort King. The warriors employed class two offensive behaviors with tactical subtypes A (ambush) and B (assault).

On December 31, 1835 General Clinch's force arrived at the Withlacoochee River to attempt to deliver the blow he intended. However, as his force of about seven hundred fifty soldiers attempted to cross the river, the First Battle of the Withlacoochee began (Bittle 1966; Boyd 1951; Butler 2001; Covington 1993; Knetsch 2003; Laumer 1968; Mahon 1985; McReynolds 1957; Missall and Missall 2004; Sprague 2000). The Seminole warriors had taken position on the far side of the river in a horseshoe shaped hammock that surrounded a small clearing. The soldiers relaxed in this clearing while waiting for the remainder of the force to cross the river in a small canoe that was found on the shore (Bittle 1966; Boyd 1951; Covington 1993; Knetsch 2003; Laumer 1968; Mahon 1985; McReynolds 1957; Missall and Missall 2004). This canoe was purposefully placed there as bait to get the soldiers to cross where the Seminoles wanted them to. While the force was split by the river the Seminoles attacked, employing class one offensive behaviors with tactical subtypes A (ambush) and G (use of bait).

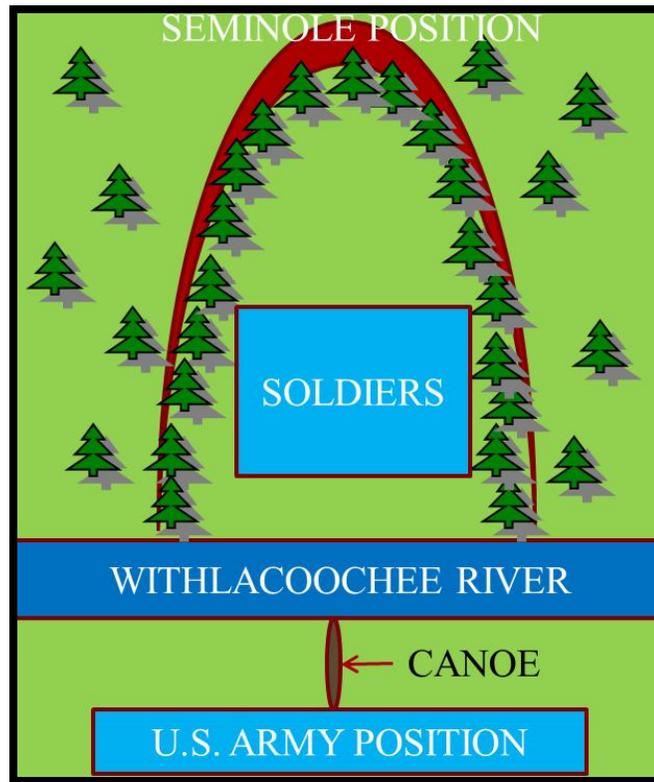


Figure 6. Diagram showing battle positions at the First Battle of the Withlacoochee.

On January 17, 1836 a small contingent of U.S. soldiers attempted to ambush a band of Seminole warriors at the Battle of Dunlawton (Butler 2001; Knetsch 2003; Mahon 1985; Missall and Missall 2004). Their initial attack, however, was foiled when a large contingent of Seminole warriors reinforced the initial warriors (Butler 2001; Knetsch 2003). The warriors turned the tide of battle by employing class two offensive behaviors with tactical subtypes B (assault), C (flanking maneuvers), D (defense of a natural fortification), and I (use of horses).

Table 13. Classification of combat behaviors employed during General Clinch's campaign.

Date	Name of Battle	Class	Mode	Subtype	Environment
12/18/1835	Battle of Black Point	2	O	A	HM
12/20/1835	Baggage Recovery	2	D	F	FW, HH/MTH/XH
12/28/1835	Dade's Massacre	1	O	A, C, I, J, K	PF, P, R
12/28/1835	Assassination of Wiley Thompson	2	O	A, B, J	C, HH/MTH/XH, R
12/31/1835	First Battle of the Withlacoochee	1	O	A, G	C, HH/MTH/XH
01/17/1836	Battle of Dunlawton	2	O	B, C, D, I	R, XH

General Scott's Campaign

The second campaign of the war was commanded by General Winfield Scott. General Scott's campaign strategy was much different than that of Clinch's. His grand strategy was drive the Seminoles to the northern part of the state where they would be more susceptible to the U.S. troops (Knetsch 2003, 2011; Mahon 1985; Missall and Missall 2004). In order to accomplish this task, Scott planned to utilize three separate wings, each under the command of a different senior officer. Each of these wings was to converge on the Cove of the Withlacoochee from different directions on March 25, 1836 (Knetsch 2003; Mahon 1985; Missall and Missall 2003). General Clinch, whom General Scott would be traveling with, was to command the right wing and take a southerly route from Fort Drane to the Cove. This wing consisted of 720 regulars and 1,248 volunteers from Georgia and Louisiana (Mahon 1985). General Abraham Eustis was to command the left wing and take southwesterly route from Volusia to Peliklakaha. This wing

consisted of 1,400 men: approximately three hundred regulars (six companies), “a regiment of mounted South Carolina volunteers... a South Carolina infantry regiment... [and a] company of Columbia volunteers” (Mahon 1985:156). Colonel William Lindsay was to command the center wing and take a northerly route from Fort Brooke to Chocachatti. This wing consisted of 750 Alabama volunteers, 260 Florida militiamen, and 240 regulars (Mahon 1985). Timing was to be the key of this strategy. If the center and left wings were in place on the 25th, the right wing could have driven the Seminoles out of the Cove and into the waiting forces of the center and left wings.

However, prior to this strategy being implemented General Edmund P. Gaines, who commanded the military in the western portion of Florida, arrived in Florida after hearing the news of the defeats of Dade and Clinch (Knetsch 2003, 2011; Mahon 1985; Missall and Misall 2004). Gaines and Scott were military rivals, and Gaines was in direct contradiction of his orders (which were to take command of the Texas front) by traveling to Florida. Gaines immediately mustered a force of 980 men to launch an assault on the Cove of the Withlacoochee (Knetsch 2003; Mahon 1985; Missall and Misall 2004). After his failed assault, known as the Battle of Camp IZard, Gaines left Florida. Scott then implemented his campaign. This campaign ended in failure, as once the Cove was reached, it was found to be empty; the Seminoles had fled to the south. After the failure of his campaign, Scott was ordered to Alabama for the Second Creek War. General Scott left the Florida theatre of war on May 21, 1836 (Mahon 1985). Nine major engagements took place during Scott’s command.

The first of the nine combat scenarios occurred from February 27 through March 5, 1836 and is known as the Battle of Camp IZard (Butler 2001; Knetsch 2003; Laumer 1998; Porter 1996; Sprague 2000). This combat scenario began much as the First Battle of the Withlacoochee had, with General Gaines' force of just less than one thousand soldiers attempting to cross the Withlacoochee River where Clinch's crossing was attempted. However, rather than waiting for the U.S. force to split across the river, the Seminoles fired from a hammock on the far bank as soon as they stepped into the water, which drove the U.S. force back. The following day another crossing was attempted a few miles downstream and the same thing happened, but rather than retreating the soldiers constructed a fortification called Camp IZard in a pine flatwoods surrounded by hammocks. The Seminoles laid siege to this camp until March 5, 1836. This combat scenario displays multiple combat behaviors that are reflective of Seminole combat adaptability. Throughout the course of the siege the warriors employed class one and three offensive behaviors along with tactical subtypes A (ambush), B (assault), C (flanking maneuvers), and H (use of fire).

On March 22, 1836 the first combat scenario under General Scott's leadership took place at the Battle of the St. Johns (Bemrose 2001; Mahon 1985; Missall and Missall 2004). As the left wing of General Scott's army crossed the St. Johns River a band of Seminole warriors laid in ambush within the littoral vegetation of the river, waiting for the U.S. force to be split by the river. As a portion of the soldiers relaxed on the far bank of the river awaiting their comrades' crossing, the Seminoles attacked, employing class two offensive mode behaviors with a combination tactical subtype A/B (ambush/assault).

On March 27, 1836 a band of Seminoles attacked Fort Alabama (Bemrose 2001; Butler 2001; Cohen 1964; Missall and Missall 2004). The attack on the fort began when the Seminole force killed and scalped a sentry and then surrounded the fort. Once the fort was surrounded the warriors began firing on the fort without much success. Upon noticing the ineffectiveness their weapons were having upon the fort walls, the warriors began to ascend into trees that overlooked the fort and began firing over the walls (Bemrose 2001; Cohen 1964). During this scenario the warriors employed class three offensive behaviors with tactical subtype C (flanking maneuvers).

On March 30, 1836 the left wing experienced its second engagement with the Seminoles at the Battle of Okihumpy (Cohen 1964; Mahon 1985; Porter 1996). As the U.S. force passed through a field adjacent to the Seminole position within a hammock, the warriors fired upon the soldiers. The soldiers retaliated by “repeatedly charg[ing] them” (Porter 1995:55). Cohen (1964:173) claimed that when the soldiers approached the hammock during their charge they found “the trees cut at a height.” These charges effectively dislodged the warriors from their position in the hammock. During this combat scenario the warriors employed class two offensive and defensive behaviors along with tactical subtypes A (ambush), F (rearguard action), and L (modification of the environment).

On March 31, 1836 the right wing of General Scott’s army found their first action at the Battle of Oloklikaha (Laumer 1998; Mahon 1985; Missall and Missall 2005; Percy 2006a, 2006b; Porter 1996). The right column of the U.S. force observed the

Seminoles, who were watching the soldiers and holding white flags, from a hammock on the opposite side of what the soldiers thought to be a prairie. This ‘prairie’ was, in fact, a waist deep marsh system, which considerably hampered the soldiers’ progress in crossing the landscape. As the soldiers were mired in the muck and water of the marsh, the Seminoles opened fire on their hapless targets. Once the soldiers finally reached the hammock, a bayonet charge was ordered. This charge effectively dislodged the warriors from their position in the hammock; the soldiers pursued the warriors through more than a mile of hammock and cypress swamp until reaching the banks of the Withlacoochee River. During this scenario the warriors employed class one designated behaviors in a combination offensive and defensive combat mode. Tactical subtypes employed included D (defense of natural fortification), F (rearguard action), and G (use of bait).

From April 5 through April 17, 1836 the Seminoles put Camp Cooper to the siege (Butler 2001; Coe 1898; Cohen 1964; Mahon 1985; Percy 2006a, 2006b). The siege began during construction of the defensive work when the force of Seminole warriors attempted to storm the picket work (Cohen 1964). This attempted storming occurred for thirteen consecutive days (Butler 2001; Cohen 1964). To counteract these attacks:

a sortie was made on [the Seminoles] from the fort, on this, as on nearly every other day of attack, and a party of our men advanced within thirty steps of them, through an almost continued fire, pursuing their way from tree to tree, and firing as they advanced (Cohen 1964:196)

During the siege the warriors employed class three offensive mode behaviors with tactical subtype B (assault).

Around the same time, from April 9 through May 23, 1836 another band of Seminole warriors had a blockhouse under siege (Bemrose 2001; Butler 2001; Cohen 1964; Knotts 1971). The siege began just before dawn on the 9th of April when warriors surrounded and fired on three sides of the blockhouse. April 15 marked a second assault, with warriors surrounding the entirety of the fortified structure. A third assault occurred on April 24. During this engagement warriors fired flaming arrows at the structure, effectively destroying the roof, while several hundred others fired their guns at the structure. During the time between and after these assaults the blockhouse was virtually surrounded at all times, and every few days the warriors “shot from 50 to 100 guns” at the structure (Knotts 1971:248). During the siege the warriors employed class three offensive behaviors along with tactical subtypes B (assault), C (flanking maneuvers), and H (use of fire).

On April 14, 1836 a force of Seminole warriors attacked Fort Drane (Bemrose 2001; Butler 2001). The attack began when the Seminole force began firing on the palisade. They had positioned themselves “about 20 yards to the right of the horse pen” (Bemrose 2001:86). The U.S. soldiers returned fire for about thirty minutes. Casualties from both sides went unrecorded, but Bemrose (2001:86-87) claimed they repulsed the Seminoles “with some loss” and that “great quantities of blood” were discovered upon inspection of the Seminole position on the following morning. During this scenario the warriors employed class three offensive behaviors with tactical subtype B (assault).

On April 27, 1836 a force of U.S. soldiers traveling to Fort Brooke happened upon the corpse of a missing soldier. While investigating the body a band of Seminole warriors attacked from their position within two hammocks, beginning the Battle of Thonotosassa (Butler 2001; Laumer 1998; Mahon 1985; Missall and Missall 2004; Porter 1996). The warriors fired simultaneously from hammocks on the right and left flanks of the soldiers. Line charges were ordered into both the small hammock on the left flank and the large hammock, which the creek ran through, to the front and right flank. The Seminole warriors were concealed on the far side of a ten yard wide creek (Thonotosassa Creek). The charge, while slowed by the creek, effectively dislodged the warriors from their position. During this combat scenario the warriors employed class one designated behaviors with a combination of offensive and defensive combat modes. Tactical subtypes employed included D (defense of a natural fortification) and modifier G (use of bait).

Table 14. Classification of combat behaviors employed during General Scott's campaign.

Date	Name of Battle	Class	Mode	Subtype	Environment
2/27- 3/5/1836	Battle of Camp Izard	1, 3	O	A, B, C, H	HH/MH/XH, PF, R
3/22/1836	Battle of St. Johns	2	O	A/B	R
3/27/1836	Attack on Fort Alabama	3	O	C, J	R
3/30/1836	Battle of Okihumpky	2	OD	A, F, L	MTH/XH
3/31/1836	Battle of Oloklikaha	1	OD	D, F, G	CS, HM, HH/MTH/XH
4/5- 17/1836	Siege of Camp Cooper	3	O	A	L
4/9- 5/23/1836	Siege of the Forgotten Blockhouse	3	O	B, C, H	R
4/14/1836	Attack on Fort Drane	3	O	B	FW
4/27/1836	Battle of Thonotosassa	1	OD	D, G	HH/MTH/XH, P, R

General Call's Campaign

General Richard K. Call assumed command on June 21, 1836 (Mahon 1985). Call's strategy was again different from that employed by his predecessors. His strategy was to strike at the Seminoles during the summer in order to destroy their crops in order to force them to surrender (Mahon 1985). This was to be done by establishing four strategic supply points that were accessible by steamboat: one in Tampa, one in Volusia, one on the Withlacoochee, and one at Suwannee Old Town (Covington 1993; Mahon 1985). From these supply points a major offensive on the Cove of the Withlacoochee would be launched.

Unfortunately for Call, the summer of 1836 was to delay his plans, with the majority of the forces in Florida, including Call himself, rendered useless due to illness

(Knetsch 2003; Mahon 1985; Missall and Misall 2004). Call had at his disposal approximately one thousand regulars, 230 Florida militiamen, and 1,200 Tennessee volunteers (whom did not arrive until September 18th) (Mahon 1985). This force was further augmented by 750 Creek warriors in October (Mahon 1985; Missall and Missall 2004). The campaign was deemed largely unsuccessful and General Call relinquished command to General Thomas S. Jesup on December 9, 1836 (Mahon 1985). There were eight major engagements that occurred during Call's command.

On the June 9, 1836 the garrison of Fort Defiance was drawn out of the fort and into the Battle of Micanopy due to rifle fire in the vicinity (Mahon 1985; Percy 2006a, 2006b; Sprague 2000). The Seminole warriors had taken position in a hammock. The U.S. forces split, with a company of artillery flanking to the right of the hammock and a mounted company of dragoons flanking to the left while a second company of artillery followed the dragoons. The dragoons charged from the left flank, drawing the Seminole's fire, while the other two companies fired on the Seminole position. The Seminole warriors retaliated to these tactics by attempting to split their force and take the left or rear flank of the centrally positioned artillery. During this scenario the warriors employed class one designated behaviors with a combination of offensive and defensive combat modes. They tactics employed included subtypes D (defense of a natural fortification) and C (flanking maneuvers).

On July 19, 1836 a force of U.S. soldiers was escorting a baggage train towards Fort Defiance when a band of Seminole warriors fired on the soldiers from their position

within a hammock, thus beginning the Battle of Welika Pond (Mahon 1985; Missall and Missall 2004; Percy 2006a, 2006b). The soldiers retaliated by returning fire with both shoulder pieces and artillery. Reinforcements arrived from Fort Defiance to aid the outnumbered soldiers. With reinforcements on hand, the Seminole position was effectively charged and the warriors scattered. During this scenario the warriors employed class two designated behaviors along with a combination of offensive and defensive combat modes and tactical subtypes A (ambush) and D (defense of a natural fortification).

On August 21, 1836 a force of U.S. soldiers attacked a band of Seminoles that had occupied the abandoned Fort Drane (Butler 2001; Coe 1898; Knetsch 2003; Mahon 1985; Percy 2006b; Sprague 2000). The Battle of Fort Drane began when the U.S. force, marching in three columns, surprised the Seminole warriors at dawn. Being caught in the open, the warriors executed a fighting retreat for about three-quarters of a mile to the swamp-like hammock, which was impenetrable to the U.S. soldiers. The warriors employed class one defensive behaviors with subtypes F (rearguard action) and D (defense of a natural fortification).

On September 18, 1836 a force under the command of Colonel Warren was attacked by a band of Seminole warriors during the Battle of San Felasco Hammock (Drake 1976; Mahon 1985). This battle occurred as Colonel Warren's force was out on reconnaissance in the vicinity of Fort Gilleland. Once the U.S. force was within range of the Seminole firearms, the warriors attacked from their position of concealment. The

U.S. troops retaliated with charges and artillery fire. The warriors then attempted to take the right flank, and subsequently the left, of the U.S. force. These flanking attempts were repelled by repeated charges and artillery fire. Further, the warriors attempted to charge the artillery on two occasions during the course of the battle. The warriors finally retreated and were pursued for over a mile. During this scenario the warriors employed class one offensive behaviors along with tactical subtypes A (ambush), B (assault), and C (flanking maneuvers).

On October 13, 1836 a large contingent of U.S. soldiers were engaged by a band of Seminole warriors (Mahon 1985; Porter 1996). The Second Battle of the Withlacoochee began when the U.S. force approached the river and were fired upon by the Seminole warriors, who had taken position behind and within trees on the opposite bank of the river. The U.S. force retaliated in kind. The U.S. troops repeatedly tried to cross, but heavy fire continually repelled their crossing. During this scenario the warriors employed class one offensive behaviors with tactical subtypes A (ambush) and D (defense of a natural fortification).

On November 17, 1836 a force of mounted Tennessee volunteers engaged a force of Seminole warriors from their encampment (Knetsch 2003; Mahon 1985; Missall and Missall 2005; Porter 1996; Sprague 2000). This battle occurred when the right wing of Call's army discovered a Seminole encampment. Upon this discovery the Tennessee volunteers, under General Armstrong, "rode rapidly ahead of the column, dismounted and made a gallant charge" (Mahon 1985:183). The Seminoles retreated from the charge,

fighting all the way through a swamp. The warriors employed class one defensive behaviors with tactical subtype F (rearguard action) during this combat scenario.

On November 18, 1836 a force of U.S. soldiers engaged a large group of Seminole warriors during General Call's search for the main body of Seminoles (Knetsch 2003; Mahon 1985; Missall and Missall 2004, 2005; Porter 1996; Sprague 2000). The First Battle of Wahoo Swamp began when the U.S. soldiers caught sight of the Seminole force on the edge of the hammock "facing a cleared area... apparently inviting attack" (Mahon 1985:184). The U.S. force split into three contingents for a charge: one taking the left flank, another taking the right, with a third charging the middle. The charge scattered the warriors, who dispersed further into the hammock. The combat behaviors employed during this scenario consisted of class one offensive/defensive behaviors with tactical subtype D (defense of a natural fortification).

On November 21, 1836 General Call's force engaged a large contingent of warriors during their continued search (Butler 2001, Knetsch 2003; Mahon 1985; Meltzer 1972; Missall and Missall 2004; Porter 1996). The Second Battle of Wahoo Swamp began when the U.S. force, marching in four horizontal lines stretching nearly a mile across a prairie, engaged the Seminole warriors approximately fifty yards from the hammock, in which the warriors had taken position. The U.S. troops charged the Seminoles while firing and reloading. The warriors gave ground to the charge, firing as they retreated for a mile and a half into the swamp to their rear. The warriors made their stand on the far side of a ten yard wide slough. Due to the exceedingly dark water of

sloughs, the U.S. soldiers thought this to be too deep for a crossing. The soldiers were not able to dislodge the warriors from their position on the far side of the slough and eventually retreated. During this scenario the Seminoles employed class one defensive behaviors along with tactical subtypes D (defense of a natural fortification) and F (rearguard action).

Table 15. Classification of combat behaviors employed during General Call's campaign.

Date	Name of Battle	Class	Mode	Subtype	Environment
6/9/1836	Battle of Micanopy	1	OD	C, D	L, HH/MTH/XH
7/19/1836	Battle of Welika Pond	2	OD	A, D	HH/MTH/XH
8/12/1836	Battle of Fort Drane	1	D	D, F	CA, FW
9/18/1836	Battle of San Felasco Hammock	1	O	A, B, C	MTH
10/13/1836	Second Battle of the Withlacoochee	1	O	A, D	R, FF
11/17/1836	Tennesseans' Battle	1	D	F	FW
11/18/1836	First Battle of Wahoo Swamp	1	OD	D	CA, HH/MTH/XH
11/21/1836	Second Battle of Wahoo Swamp	1	D	D, F	P, HH/MTH/XH, S

General Jesup's Campaign

General Thomas Sydney Jesup assumed command of the war on the 9th of December, 1836 (Knetsch 2003; Mahon 1985). His campaign can be divided into two segments. During the first segment of his campaign Florida was divided into zones of operations: the northern zone and the southern zone (Mahon 1985). General Jesup believed that the majority of the Seminoles had traveled to the southern portion of the

state, so his plan was to garrison all the forts in the northern zone with the Florida militia and Navy sailors. This would free the Army regulars to pursue the Seminoles to the south. His southward pursuit was an attempt to prevent the northern bands from linking with those in the south. His force during this segment of his campaign amounted to approximately 1,100 troops, comprised of “350 Alabama volunteers... 250 marines... 450 regulars; and the Creek regiment” of 750 warriors (Mahon 1985:196). Due to the unsuccessful nature of this plan of attack, however, General Jesup arranged for an armistice in February of 1837 (Knetsch 2011; Mahon 1985; Missall and Missall 2004). About seven hundred Seminoles set up camp in the vicinity of Fort Brooke (modern Tampa Bay) to await emigration to the west. However, in early June the camps were deserted, enraging General Jesup to the point of developing a new campaign plan (Mahon 1985).

The second segment of General Jesup’s campaign involved a multi-pronged attack that would drive the Seminoles south into the Everglades (Knetsch 2003, 2011; Mahon 1985; Missall and Missall 2004). As with the previous segment of his campaign, the general divided the state into two zones: north and south. Each zone saw a multipronged attack. The northern zone had several columns, beginning at various forts throughout the northern portion of the state and converging on Fort Mellon, in order to drive the Seminoles southward. The southern zone had a four pronged attack that was aimed at driving the Seminoles into the Everglades. It was this zone that saw the action during General Jesup’s campaign. The general had an upwards of 9,000 soldiers at his disposal for this segment of his campaign (Missall and Missall 2004). These were

divided amongst the various columns. Overall, this campaign was more successful than the previous ones, but it did not bring an end to the war. It did, however, result in the removal of over two thousand Seminoles and Black Seminoles west of the Mississippi (Knetsch 2003). General Jesup was relieved in May of 1838 (Knetsch 2003; Mahon 1985; Missall and Missall 2004). There were eight major engagements throughout the course of General Jesup's campaign.

On January 27, 1837 a detachment of U.S. Marine Corps and Creek warriors engaged a force of Seminole warriors as they followed a cattle trail in order to find the owners (Butler 2001; Knetsch 2003; Mahon 1985; Missall and Missall 2004; Porter 1996; Sprague 2000). The Battle of Hacheelustee began when the U.S. force charged a Seminole camp, capturing many ponies and several noncombatants. The warriors retreated across Hacheelustee Creek, taking a defensive position on the far side of the creek in a swamp. When the U.S. force came within firing range of the warriors, rifles were fired. The U.S. force retaliated by splitting their force in two, with one group staying opposite the warriors while another crossed the stream a little ways down to provide a cross fire. The warriors began retreating further into the swamp, crossed through a pine flatwoods, and took another defensive position in the swamp. The U.S. force followed and the battle resumed until the warriors retreated. The combat behaviors employed during this scenario consisted of class two defensive behaviors with tactical subtype F (rearguard action).

On February 8, 1837 a large band of Seminole warriors attacked Camp Mellon on Lake Monroe (Butler 2001; Mahon 1985; Missall and Missall; Porter 1996; Sprague 2000). The Battle of Lake Monroe began two hours before dawn, when the Seminole warriors formed a crescent line surrounding the fortification on three sides and began firing from the surrounding hammock. Both ends of their line touched the shore of Lake Monroe. The warriors kept a continual harassing fire upon the fortification, which at this time was a simple breastwork, for three hours. The soldiers retaliated by returning fire. In addition to the soldiers' fire, a steamboat equipped with artillery came to the soldiers' aid, firing both grapeshot and canister shot at the warriors. The battle ended when the warriors retreated into a nearby dense swamp. The warriors employed class three offensive behaviors with tactical subtype C (flanking maneuvers) during this scenario.

On February 9, 1837 a force of U.S. soldiers, with the aid of a detachment of Navy sailors, engaged a band of warriors upon stumbling on a Seminole encampment (Mahon 1985; Missall and Missall 2005; Porter 1996). The Battle of Crystal River began when the U.S. force discovered and immediately charged the Seminole encampment. The Seminoles fought as they retreated for over a mile and a half through a hammock. The naval detachment was close enough to hear the gunfire and rowed their boat to the scene of the engagement to assist. The warriors employed class two defensive behaviors with tactical subtype F (rearguard action) during this scenario.

On December 25, 1837 a large force of U.S. soldiers under Colonel Zachary Taylor engaged several bands of Seminole warriors at the Battle of Okeechobee (Butler

2001; Mahon 1985, 1991; Missall and Missall 2004, 2005; Porter 1996; Sprague 2000; Tucker 1991; White 1950). The battle began as the U.S. force, marching in two horizontal lines, crossed the sawgrass marsh. The marsh contained about “three feet of mud and water” (Mahon 1985:227), and sawgrass that was an upwards of five feet in height. The sawgrass within twenty yards of the Seminole position in the hammock had been cut short to create an open field of fire and notched the trees in the hammock for use as rifle rests (Mahon 1985; Sprague 2000; Turner 1991; White 1950). When the U.S. force entered this area the warriors, who were positioned in and among the trees in the hammock, opened fire. Several attempts at charging through the saw grass marsh eventually saw some of the U.S. force inside the boundaries of the hammock. Inside the hammock the battle turned to melee combat; Seminole warriors fighting with knives and hatchets, U.S. soldiers with pistols and the butts of their shoulder arms. Eventually the majority of the U.S. force gained the hammock position. The Seminoles scattered and retreated in canoes onto Lake Okeechobee. The combat behaviors employed during this scenario consisted of class one defensive behaviors along with tactical subtype D (defense of a natural fortification) and modifier L (modification of environment).

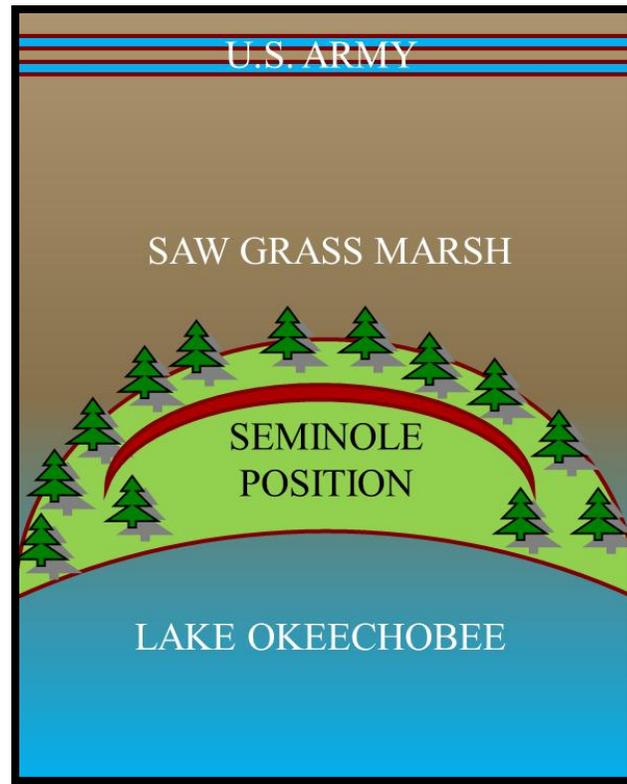


Figure 7. Diagram showing battle positions at the Battle of Okeechobee.

On January 15, 1838 a force of 80 U.S. soldiers, comprised of 55 sailors and 25 Army regulars, engaged a force of between forty six and eighty Seminole warriors (Mahon 1985; Missall and Missall 2004, 2005; Porter 1996; Procyk 2008). The Battle of Jupiter Inlet ensued when the U.S. force, under the command of Lieutenant Powell, was led by a captured Seminole woman to the head of a trail leading into a cypress swamp. Upon reaching this point the warriors opened fire. The U.S. force, which was marching in three columns, immediately charged the swamp. The warriors then retreated farther into the swamp and stood their ground. The U.S. force broke rank and retreated to their boats. The warriors employed class one offensive/defensive behaviors along with tactical subtypes A (ambush) and D (defense of a natural fortification).

On January 24, 1838 a large force of U.S. soldiers were engaged by a band of Seminole warriors in the Battle of Loxahatchee (Butler 2001; Knetsch 2003; Mahon 1985; Meltzer 1972; Missall and Missall 2004, 2005; Motte 1963; Porter 1996; Procyk 2008; Sprague 2000). This battle occurred as General Jesup's force scoured the southern portion of the state for bands of Seminoles, one of which they found positioned in a hammock opposite a large cypress swamp. The battle began when the advance guard of the U.S. force was fired upon by the Seminoles from their position in the hammock. The entire U.S. force charged through the cypress swamp in order to reach the Seminole position. The cypress slough, however, acted as a natural moat and picket defense. Jacob Motte, an army surgeon present during this battle, described it as "an almost impassable cypress slough, nearly half a mile wide; in passing through which we were up to our saddle girths in mud and water, our horses constantly stumbling over the cypress knees" (Motte 1963:194). With the horses mired in mud, the U.S. force had to dismount in order to continue the charge. Once they reached the hammock the Seminoles retreated across the expanse of the Loxahatchee River, positioning themselves behind and in the trees on the far bank of the river. As with the Battle of Okeechobee, trees were notched for rifle rests and the areas around them cleared to create a field of fire. The U.S. force crossed the Loxahatchee, a small contingent taking the Seminole flank. The warriors began to retreat at this point. The combat behaviors employed during this scenario consisted of class one offensive/defensive combination behaviors along with tactical subtypes A (ambush) and D (defense of natural fortification) as well as modifier L (modification of environment).

On March 22, 1838 a force of U.S. soldiers and sailors engaged a band of Seminole warriors in the Battle of Pine Island (Buker 1963;Knetsch 2003; Mahon 1985; Motte 1963). This engagement occurred as the U.S. force was searching the Everglades region for Abiaka and his band of Seminole warriors (Buker 1963; Knetsch 2003; Sprague 2000). The battle began as the U.S. troops waded through the Everglades towards the Pine Island Ridge Hammock, where the Seminole warriors had positioned themselves. The U.S. force divided into three contingents: two companies on foot in the center, four companies on foot to the left flank, and a company in rowboats to the right flank. The warriors opened fire on the soldiers before they reached the hammock. The soldiers retaliated in kind, firing from all three sides. The Seminoles retreated into the Everglades. The Seminoles employed class two defensive behaviors with tactical subtype D (defense of natural fortification) during this scenario.

On April 24, 1838 a contingent of U.S. soldiers engaged a band of Seminole warriors while Lieutenant Harney's force continued the search for Abiaka's band (Mahon 1985; Motte 1963). This engagement occurred as Lieutenant Harney's force continued the search for Abiaka and his band of warriors. The battle began when the U.S. force spied a Seminole campfire and attempted to conduct a surprise raid. The U.S. force was divided into three contingents in order to hold the front and flank to the right and the left simultaneously. Upon reaching a pine flatwoods, the soldiers mimicked the Seminole tactic of using the trees as cover to fire from. Fire was exchanged on both sides. As the warriors began to retreat they put up a running fight. The U.S. force pursued them for two and a half hours before giving up. The warriors employed class one defensive

behaviors along with tactical subtypes D (defense of natural fortification) and F (rearguard action).

Table 16. Classification of combat behaviors employed during General Jesup's campaign.

Date	Name of Battle	Class	Mode	Subtype	Environment
1/27/1837	Battle of Hatcheelustee	2	D	F	PF, R, FW
2/8/1837	Battle of Lake Monroe	3	O	C	L, MTH, FW
2/9/1837	Battle of Crystal River	2	D	F	MTH, R
12/25/1837	Battle of Okeechobee	1	D	D, L	HH
1/15/1838	Battle of Jupiter Inlet	1	OD	A, D	CS
1/24/1838	Battle of Loxahatchee	1	OD	A, D, L	CS, HH, R
3/22/1838	Battle of Pine Island	2	D	D	HH/THH, WP
4/24/1838	Lieutenant Harney's Battle	2	D	D, F	PF, WP

General Taylor's Campaign

General Zachary Taylor assumed command of the war in May of 1838 (Knetsch 2003; Mahon 1985). When he assumed command he had control of roughly two thousand three hundred soldiers (Knetsch 2003). Taylor's strategy was much different from his predecessors, taking an approach that was less aggressive and oriented more towards organization and control. This strategy consisted of dividing the peninsula into square segments that measured twenty miles by twenty miles each with a fortification in the center of each segment parcel (Knetsch 2003; Mahon 1985). Further, each of the fortifications would be garrisoned by twenty soldiers so that a contingent of ten soldiers may be on patrol and ten soldiers may garrison the fortification at all times. The idea was

that these fortifications were close enough to each that they could reinforce and resupply each other within a day. Further, they would allow the soldiers to explore and map the entirety of the state, thus minimizing the advantage the Seminoles had due to their superior knowledge of the terrain. Knetsch (2003) claims that this strategy did little for improving American efforts for victory in the war, but greatly improved their knowledge of the terrain through the mapping expeditions. Furthermore, during General Taylor's campaign, there was little action due to a peace parlay that had been offered by General Macomb. General Taylor was relieved on May 5, 1840. There were only two significant combat scenarios that occurred during his tenure as commander of the war.

On July 23, 1839 a band of warriors attacked a small contingent of U.S. soldiers and several citizens (Adams 1970; Butler 2001; Knetsch 2003; Mahon 1985; Missall and Missall 2004; Porter 1996; Sprague 2000). This engagement occurred during the armistice of 1839 while a trading post was being established on the north shore of the Caloosahatchee River. The massacre began at 4:00 A.M., before the light of the sun had touched the horizon, when the warriors simultaneously attacked the soldiers' camp and the trading post, 400 yards away. Many of the soldiers were killed while still in their beds, the rest fled and dove into the river, which was lined on both the northern and southern shores by warriors firing at the floating targets. The soldiers failed to put up any resistance. Some were lured into coming back to the warriors, only to be captured and then subsequently killed. During this scenario the warriors employed class two offensive behaviors along with tactical subtypes A (ambush) and B (assault) as well as modifier J (scalping).

On March 28, 1840 a contingent of U.S. soldiers under Captain Rains were attacked by a band of Seminole warriors while scouting the vicinity of Fort King (Mahon 1985). The battle began when the scouting party was fired upon “from ambush” by the Seminole warriors (Mahon 1985:275). The soldiers retaliated by making use of the Seminole tactic of using trees for cover and returned fire. The warriors began to flank them on both the right and the left, however. The U.S. soldiers executed a charge towards Fort King to make their escape. In this engagement the warriors employed class two offensive behaviors with tactical subtypes A (ambush) and C (flanking maneuvers).

Table 17. Classification of combat behaviors employed during General Taylor's campaign.

Date	Name of Battle	Class	Mode	Subtype	Environment
7/23/1839	Caloosahatchee Massacre	2	O	A, B, J	R
3/28/1840	Captain Rains' Battle	2	O	A, C	N/A (MTH)

General Armistead's Campaign

General Walker K. Armistead assumed command of the war on May 5, 1840 (Knetsch 2003; Mahon 1985). As soon as he assumed command he nixed General Taylor's strategy and implemented his own. His strategy was to divide the command of Florida in two, using the Suwannee River as the dividing line (Knetsch 2003). The Secretary of War placed General Leigh Read in command of the northern zone along with an additional one thousand militia in order to protect American settlements in the Alachua region (Knetsch 2003; Mahon 1985). General Armistead's campaign did little

to finish the war so he was relieved on May 31, 1841. There were five significant combat scenarios during his command in Florida.

On May 19, 1840 two small contingents of U.S. soldiers were attacked by a force of Seminole warriors at the Battle of Bridgewater (Covington 1993; Mahon 1985; Missall and Missall 2004; Sprague 2000). The battle began when Lieutenant Martin and three soldiers from Fort Wakahoota were traveling to Micanopy. Several miles from Micanopy they were fired upon by the force of warriors. Lieutenant Martin escaped to Micanopy and a detachment of seventeen soldiers, under Lieutenant Sanderson, went in search of the warriors. This detachment was soon surrounded and fired upon by the warriors, who were positioned within a hammock (Sprague 2000). The detachment charged the hammock, successfully scattering the warriors. During this scenario the Seminoles employed class two offensive behaviors with tactical subtypes A (ambush) and C (flanking maneuvers).

On August 7, 1840 a band of Seminole warriors, under the command of Chakaika who led the infamous Caloosahatchee Massacre, attacked the settlement of Indian Key (Coe 1898; Knetsch 2003; Mahon 1985; Missall and Missall 2004; Sprague 2000; Walker 1926). This settlement did not have any military personnel, but about seventy inhabitants. The attack began around 2:00 A.M. when the warriors, in seventeen canoes, landed on the shores of Indian Key. They split into two groups and targeted the two largest houses in the settlement. Many of the residents fled, taking to boats, during the attack upon the two houses. A small detachment of navy sailors, stationed on a

neighboring island, attempted to come to the rescue, firing artillery from a boat. The warriors, however, had gotten hold of the artillery of one of the residents and fired the cannon at the boat, repelling the detachment of sailors. The warriors held the island for about twelve hours (Coe 1898). This band of warriors employed class two offensive behaviors with tactical subtypes A (ambush) and B (assault).

On December 28, 1840 a small contingent of U.S. soldiers was engaged by a small band of Seminole warriors in the Battle of Martin's Point (Mahon 1985; Missall and Missall 2004; Sprague 2000). This battle occurred as the U.S. force was escorting the wife of an officer to Fort Wacahoota (Sprague 2000). It began when the escort passed within twenty yards of the hammock. The warriors opened fire. The soldiers retaliated in kind, but the warriors began advancing. The battle soon turned to melee combat. Soon after, the majority of the U.S. force, including the woman they were escorting, lay dead. The combat behaviors employed during this combat scenario consisted of class two offensive behaviors with tactical subtype A (ambush)

On March 2, 1841 a small contingent of U.S. soldiers, under the command of Lieutenant Alburdis, was attacked by a small band of Seminole warriors (Mahon 1985; Porter 1996; Sprague 2000). The battle began when the warriors, using the corpse of a soldier as bait, made war-whoops over the corpse to alert the garrison of Fort Brooks and subsequently positioned themselves within the hammock alongside the road. Lieutenant Alburdis led nineteen soldiers to investigate. However, rather than falling into the trap set by the warriors, the U.S. force circled to the rear of the Seminole position and opened fire

on the warriors. The warriors retreated into a pine flatwoods, fighting as they went. The soldiers pursued until the warriors disappeared into a hammock. The warriors employed class two offensive/defensive combination behaviors along with tactical subtypes A (ambush) and F (rearguard ambush) as well as modifier G (use of bait).

A second engagement took place on March 2 as well. A small contingent of U.S. soldiers was attacked by a small band of Seminole warriors (Sprague 2000). This battle occurred as Lieutenant Albutris led a detachment to escort an expected baggage train from Fort Russell to Fort Brooks (Sprague 2000). The Battle of Orange Creek began as the U.S. force was crossing the bridge over Orange Creek. The warriors had positioned themselves within a dense hammock on both sides of the military road and fired on the soldiers as they crossed the bridge. The soldiers fought their way to the pine flatwoods area and spread to a skirmish line, each soldier taking cover behind a pine tree. The soldiers began to advance from tree to tree towards the warriors' position. The warriors subsequently retreated. The warriors employed class two offensive behaviors along with tactical subtype A (ambush) during this scenario.

Table 18. Classification of combat behaviors employed during Gen. Armistead's campaign.

Date	Name of Battle	Class	Mode	Subtype	Environment
5/19/1840	Battle of Bridgewater	2	O	A, C	MTH
8/7/1840	Indian Key Massacre	2	O	A, B	B, Settlement
12/28/1840	Battle of Martin's Point	2	O	A	MTH
3/2/1841	Lieutenant Albutris' Battle	2	OD	A, F, G	MTH, PF

Colonel Worth's Campaign

Colonel William J. Worth assumed command of the war on May 31, 1841 (Knetsch 2003; Mahon 1985). His campaign was the final one of the war. Colonel Worth was by far the most aggressive commander of the war. His strategy was simple and effective: to have large columns of soldiers attacking Seminole strongholds from multiple directions during the summer planting season, thus destroying Seminole food supplies and forcing surrender (Knetsch 2003; Mahon 1985). And this is exactly what happened. Three large columns of soldiers marched to drive the Seminoles out of the Cove of the Withlacoochee and Wahoo Swamp areas southward and inland while destroying camps and fields of crops along the way (Knetsch 2003; Mahon 1985). By the end of Colonel Worth's campaign there were a mere three hundred or so Seminoles remaining in Florida (Knetsch 2003). He was successful. The greatest part of his success was that only three major combat scenarios occurred during his campaign.

On December 20, 1841 the advance guard, under the command of Major Belknap, of a large force of U.S. soldiers was engaged by a band of Seminole warriors during the search for the bands of Abiaka and Otulke Thlocco (Mahon 1985; Sprague 2000). The battle occurred when the advance guard reached an area in between two ephemeral ponds. They were marching around and between the knees and stumps of cypress trees when the band of warriors rose up from concealment in a cypress swamp and fired a single volley at the advance guard. The warriors immediately retreated. A pursuit was

mounted by the U.S. force but the warriors trail was not to be found due to the inundated environment. The warriors employed class two offensive behaviors with tactical subtype A (ambush) during this scenario.

On January 25, 1842 a force of U.S. soldiers attacked a band of Seminole warriors at the Battle of Dunn's Lake (Butler 2001; Mahon 1985; Sprague 2000). This battle occurred as the force under Major Plympton searched for Halleck Tustenuggee's band for retribution for the massacre of the Mandarin settlement on the 20th of December, 1841 (Mahon 1985; Sprague 2000). It began when the U.S. force spread out to form a skirmish line, at six foot intervals, and charged the Seminole position within a hammock at the head of Dunn's Lake (Mahon 1985). The Seminoles, however, had moved their position to the rear of the U.S. force, indicating that they had expected the U.S. force's arrival and entry point. A firefight ensued and the U.S. force eventually mustered a charge towards the Seminole position. The engagement lasted about an hour and fifteen minutes before the Seminole warriors retreated across the water into a swamp. During this combat scenario the warriors employed class two defensive behaviors along with tactical subtypes A (ambush) and D (defense of a natural fortification). The movement of the warriors' position to the rear of the U.S. force in anticipation of their point of entry into the hammock is here considered an ambush due to the fact that this placement allowed for the warriors to strike at the U.S. force with the element of surprise.

On April 19, 1842 the final action that can be considered an organized battle of the Second Seminole War occurred during the Battle of Peliklakaha (Butler 2001; Coe

1898; Covington 1993; Knetsch 2003; Mahon 1985; Meltzer 1972; Missall and Missall 2004; Porter 1996; Sprague 2000). This battle occurred as the U.S. military was continuing to search for Halleck Tustenuggee’s band. The battle ensued when the U.S. force, marching in two extended skirmish lines fired upon the Seminole position (Mahon 1985; Sprague 2000). The warriors responded in kind. After the initial volleys of fire, the main component of the U.S. force charged the Seminole position while a detachment of dragoons circled to the rear of the hammock. The portion of the force that charged the front of the hammock had to wade through the wet prairie only to discover that the Seminoles had fortified the hammock with a breastwork of fallen logs and rotting vegetation packed along the borders of the hammock. The stench that wafted from the rotten vegetation as it was cut and hacked made many of the soldiers vomit. They had further fortified their position by clearing a field of fire at the edge of the hammock. Nonetheless, the U.S. force completely encircled the warriors, who then scattered into small groups and retreated. The combat behaviors employed during this combat scenario included class one defensive behaviors with tactical subtypes D (defense of natural fortification) and E (fortification).

Table 19. Classification of combat behaviors employed during General Worth's campaign.

Date	Name of Battle	Class	Mode	Subtype	Environment
12/20/1841	Major Belknap’s Ambush	2	O	A	CS, EP
1/25/1842	Battle of Dunn’s Lake	2	D	A, D	MTH
4/19/1842	Battle of Peliklakaha	1	D	D, E	MTH, WP

CHAPTER SEVEN: RESULTS OF ANALYSIS

The dataset for this research was analyzed in three ways. The first consisted of statistical analyses of the combat scenarios for each of the individual campaigns and *entradas*; the second consisted of statistical analyses for each temporal period; the third consisted of statistical analyses for the entire dataset. In analyzing the individual campaigns and *entradas*, as well as the two temporal periods and the entire dataset, frequency distributions, crosstabulation analysis, and bivariate correlation analyses were employed. Frequency distributions create categories of data and report the number of observations within each attribute of the dataset, allowing for visual representation of the data in the form of graphs (Madrigal 1998). Crosstabulation analysis provides the number of observations in which attributes co-occur within the dataset, allowing correlations to be made. Bivariate correlation analysis mathematically equates the amount of co-variance between two variables, or attributes, to determine if there is a statistically significant correlation between the two variables (Madrigal 1998). The form of bivariate correlation analysis used in this research is known as the Pearson correlation. This bivariate correlation technique “quantifies the relation between two variables, and tests the null hypothesis that such relation is not statistically significant... the null hypothesis is that the *parametric* correlation between the two variables is 0” (Madrigal 1998:179). The Pearson correlation coefficient formula is:

$$r = \frac{SP_{Y_1Y_2}}{\sqrt{(SS_{Y_1})(SS_{Y_2})}}$$

Further, all bivariate correlation analyses run as part of this research employ the two-tail test for significance.

Protohistoric Period Results

The Narvaez Dataset

The dataset for the Narvaez *entrada* consists of twenty-two combat scenarios (Table 19). Of the twenty-two scenarios the Apalachee there were three occurrences of class one, twelve occurrences of class two, and three occurrences of class three designations (Table 20). All of these designations were employed in an offensive combat mode. Class two designations comprise the largest portion of the dataset for the Narvaez *entrada*. This demonstrates that the Apalachee had a preference for waging war in smaller numbers. Furthermore, during all of the class two designations tactical subtype A was employed. This further demonstrates that the Apalachee preferred to utilize the offensive ambush in combat scenarios involving fewer combatants.

Table 20. Classification of combat behaviors (Class:Mode:Subtype) employed against the Narvaez *entrada*.

		Frequency	Percent	Cumulative Percent
Combat Behavior	1:O:A	1	4.5	4.5
	1:O:A, C	1	4.5	9.1
	1:O:B	1	4.5	13.6
	2:O:A	12	54.5	68.2
	3:O:A	1	4.5	72.7
	3:O:A, H	2	9.1	81.8
	N/A	4	18.2	100.0
	Total	22	100.0	

Table 21. Class designations of combat behaviors employed against the Narvaez *entrada*.

		Frequency	Percent	Cumulative Percent
Class	N/A	4	18.2	18.2
Designation	1.00	3	13.6	31.8
	2.00	12	54.5	86.4
	3.00	3	13.6	100.0
	Total	22	100.0	

Class one designations comprise 13.6% of the dataset. Of the three class one designations one employed tactical subtype A, one employed a combination of tactical subtypes A and C, and one employed tactical subtype B. This class demonstrates the greatest variation in the employment of tactical subtypes. This may be due to the ability to conduct a wider variety of military maneuvers with a larger number of combatants. Class three designations also comprise 13.6% of the dataset. In all three of the scenarios of class three designations, the Apalachee warriors employed tactical subtype A. The use of this tactic, however, differs from the traditional notions of an ambush. Rather than lying in wait they combined the tactic of an assault with the element of surprise to attack the *entrada* that occupied their village. In two of the class three scenarios the warriors employed a subtype modifier H to attempt to raze the village with the *entrada* inside. Furthermore, there were four scenarios that were unclassifiable due to lack of details in the historical record.

The primary tactical subtype employed by the Apalachee was the ambush (subtype A). As a singular tactic, the ambush comprises 63.6% of the dataset for the Narvaez *entrada* (Table 21). There are three observances of this tactic being used in

conjunction with other tactics to maximize the combat effectiveness of the warriors. Flanking maneuvers (tactical subtype C) comprised one of these combined observances, while the use of fire (modifier H) comprises the other combined observances. With these three observances added to the total sum of this tactical subtype, the ambush comprises a full 77.2% of the dataset. There is a single observance of assault tactics (tactical subtype B), comprising a mere 4.5% of the dataset. Furthermore, there are four observances of unclassifiable tactical subtypes due to a lack of historical details.

Table 22. Tactical subtypes employed by the Apalachee against the Narvaez *entrada*.

		Frequency	Percent	Cumulative Percent
Tactical Subtype	A	14	63.6	63.6
	A, C	1	4.5	68.2
	A, H	2	9.1	77.3
	B	1	4.5	81.8
	N/A	4	18.2	100.0
	Total	22	100.0	

The primary ecosystem utilized by the Apalachee during combat scenarios against the Narvaez *entrada* was the forested wetland, which comprised 59.1% of the dataset (Table 22, Table 23). All three observances of class one designations and 83.3% of class two designations were employed within the context of forested wetlands. The specific form of forested wetland is not known, however, as the historical documents pertaining to the scenarios do not distinguish between wetland environmental types. There are three observances during which the Apalachee attacked the *entrada* during its stay in an Apalachee village, so the environment of the battlefield consisted of the settlement itself.

Furthermore, there are six observances of an unspecified ecosystem being utilized during a combat scenario.

Table 23. Ecosystems utilized during combat scenarios with the Narvaez *entrada*.

		Frequency	Percent	Cumulative Percent
Ecosystem	FW	13	59.1	59.1
	N/A	6	27.3	86.4
	Settlement	3	13.6	100.0
	Total	22	100.0	

Table 24. Crosstab. of Combat Behavior (Class:Mode:Subtype) and Environment attributes for the Narvaez *entrada*.

		Environment			Total
		FW	N/A	Settlement	
Combat Behavior	1:O:A	1	0	0	1
	1:O:A, C	1	0	0	1
	1:O:B	1	0	0	1
	2:O:A	10	2	0	12
	3:O:A	0	0	1	1
	3:O:A, H	0	0	2	2
	N/A	0	4	0	4
Total		13	6	3	22

Bivariate correlation analysis demonstrates the presence of statistically significant correlations in the dataset (Table 24). The hypothesis that the environment is positively correlated with the employment of specific tactical subtypes was proven true. The strength of the correlation is moderately strong at 0.596 with a p -value of 0.003. The analysis also demonstrates the presence of a positive correlation between class designated behavior and the environment as well. This correlation is much stronger than that

between tactical subtype and environment, with a level of 0.774 and a p -value of less than 0.001. Further, the analysis also shows a significant and strong positive correlation between class designated behavior and combat mode. This correlation is logical since the number of combatants, a primary quantitative attribute for class designation, should determine whether the combatants take on an offensive or defensive mode in combat. It is interesting to note, however, that no significant correlations, either positive or negative, were demonstrated between class and tactical subtype or combat mode and tactical subtype.

Table 25. Bivariate correlation analysis of attributes of the Narvaez dataset.

		Class	Combat Mode	Tactical Subtype	Ecosystem
Class	Pearson Correlation	1	.828**	.404	.774**
	Sig. (2-tailed)		.000	.063	.000
Combat Mode	Pearson Correlation	.828**	1	.314	.652**
	Sig. (2-tailed)	.000		.154	.001
Tactical Subtype	Pearson Correlation	.404	.314	1	.596**
	Sig. (2-tailed)	.063	.154		.003
Ecosystem	Pearson Correlation	.774**	.652**	.596**	1
	Sig. (2-tailed)	.000	.001	.003	

** . Correlation is significant at the 0.01 level (2-tailed).

The de Soto Dataset

The dataset for the de Soto *entrada* consists of thirteen combat scenarios (Table 25). Within this dataset are four class one designated behaviors, five class two designated behaviors, two class three designated behaviors, and two class four designated behaviors (Table 26). There are nine observances of an offensive combat mode and four

observances of a combination of offensive and defensive modes (Table 27). As with the Narvaez dataset, class two designation behaviors comprise the largest category at 38.5% of the de Soto dataset. Further, 80.0% of the class two behaviors were offensive in nature, with the remainder being a combination of offensive and defensive modes. The primary tactical subtype utilized in class two behavior scenarios is the ambush (tactical subtype A), comprising 80.0% of the class two behaviors. There are two observances of subtype A tactics being used in conjunction with other subtypes. In one of the observances subtype A is used in conjunction with both flanking maneuvers (tactical subtype C) and a rearguard action (tactical subtype F). In the other observance tactical subtype A is used in conjunction with fortification (tactical subtype E). There is one observance of class two designated behaviors being employed in both offensive and defensive combat modes. This is also the only observance of assault tactics (tactical subtype B) being employed as a class two designated behavior. Furthermore, this observance also employed fortification (tactical subtype E) alongside subtype B.

Table 26. Classification of combat behaviors (Class:Mode:Subtype) employed against the de Soto *entrada*.

		Frequency	Percent	Cumulative Percent	
Combat	1:O:B	1	7.7	7.7	
Behavior	1:OD:A, B, E, H	1	7.7	15.4	
	1:OD:B, E	1	7.7	23.1	
	1:OD:B, F	1	7.7	30.8	
	2:O:A	2	15.4	46.2	
	2:O:A, C, F	1	7.7	53.8	
	2:O:A, E	1	7.7	61.5	
	2:OD:B, E	1	7.7	69.2	
	3:O:A	2	15.4	84.6	
	4:O:N/A	2	15.4	100.0	
	Total		13	100.0	

The second largest category in the dataset was composed of class one designated behaviors, comprising 30.8% of the dataset. Three of the four observances (75.0%) of this behavior designation were employed in both offensive and defensive modes. Each of these observances employed assault tactics (tactical subtype B) in conjunction with other subtypes and modifiers. There is one observance of tactical subtypes A (ambush), B (assault), and E (fortification), as well as an H modifier (use of fire); there is one observance of tactical subtypes B (assault) and E (fortification); and there is one observance of tactical subtypes B (assault) and F (rearguard action). Furthermore, there is a single observance of class one designated behaviors being employed with an offensive combat mode. In this observance the only tactical subtype employed was B (assault). There are two observances each of class three and class four designated behaviors. All four of the observances of these behaviors were employed in an offensive

combat mode. During the class three observance tactical subtypes A (assault) and E (fortification) were employed. The tactical subtype(s) employed during the class four observance is unclassifiable due to lack of details in the historical record.

Table 27. Class designations of combat behaviors employed against the de Soto *entrada*.

		Frequency	Percent	Cumulative Percent
Class	1.00	4	30.8	30.8
	2.00	5	38.5	69.2
	3.00	2	15.4	84.6
	4.00	2	15.4	100.0
	Total	13	100.0	

Table 28. Combat modes employed against the de Soto *entrada*.

		Frequency	Percent	Cumulative Percent
Combat Mode	O	9	69.2	69.2
	O/D	4	30.8	100.0
	Total	13	100.0	

The primary tactical subtype employed by the Apalachee against the de Soto *entrada* was the ambush (subtype A). As a singular tactic this subtype comprises 53.9% of the de Soto dataset (Table 28). However, in 71.4% of the observances of this subtype additional subtypes and modifiers were employed in conjunction with subtype A. There is one observance of tactical subtypes A (ambush), B (assault), E (fortification), as well as modifier H (use of fire); there is one observance of tactical subtypes A (ambush), C (flanking maneuvers), and F (rearguard action); and there is one observance of tactical subtypes A (ambush) and E (fortification). Furthermore, there are two observances,

comprising 28.6% of subtype A observances, of tactical subtype A (ambush) being used as a solitary tactic.

The second largest category of tactical subtypes employed by the Apalachee is the assault (tactical subtype B). There are four observances of this subtype, comprising 30.8% of the de Soto dataset. Three of the four observances of this subtype employed multiple subtypes in conjunction with one another. There are two observances of tactical subtypes B (assault) and E (fortification), and there is one observance of tactical subtypes B (assault) and F (rearguard action) being employed as a combination. There is a single observance of subtype B being employed as a solitary tactic. Furthermore, there are two observances, comprising 15.4% of the de Soto dataset, in which the tactical subtypes are unclassifiable due to lack of details in the historical record.

Table 29. Tactical subtypes employed by the Apalachee against the de Soto *entrada*.

	Frequency	Percent	Cumulative Percent
Tactical Subtype A	2	15.4	15.4
A, B, E, H	1	7.7	23.1
A, C, F	1	7.7	30.8
A, E	3	23.1	53.8
B	1	7.7	61.5
B, E	2	15.4	76.9
B, F	1	7.7	84.6
N/A	2	15.4	100.0
Total	13	100.0	

The primary ecosystem utilized by the Apalachee in their resistance to the de Soto *entrada* was the forested wetland, which comprises 38.5% of the de Soto dataset (Table

29). As with the ecosystems in the Narvaez dataset, these are an unspecified type of forested wetland. In three observances, however, they utilized a river along with the surrounding forested wetland as a natural fortification against the *entrada*. The rivers were utilized along with class one behaviors (large-scale) during 66.7% of the observances of rivers being utilized, while the remaining 33.3% of observances involved class two (small-scale) behaviors (Table 30). The rivers were utilized as a natural moat to both hinder the progress of the *entrada* as well as a way to divide the force of the *entrada* at distances beyond crossbow or arquebus shot, effectively reducing the military power of the *entrada*. Half of the observances of forested wetlands being used solitarily involved class one behaviors (large-scale) while the other half involved class two behaviors (small-scale).

Settlements comprise 23.1% of the environments utilized in the de Soto dataset, 7.7% of which were fortified. The observances of the unfortified settlement (Anhaica) occurred during class three behaviors (attack on a fortification) employed by the Apalachee. The observance of the fortified settlement (Mabila) occurred during class one behaviors (large-scale) employed by the Tascalusa. Furthermore, this is the only combat scenario involving the Tascalusa. There are also five observances of unclassifiable environments in the dataset.

Table 30. Ecosystems utilized during combat scenarios with the de Soto *entrada* dataset.

		Frequency	Percent	Cumulative Percent
Ecosystem	Fortified Settlement	1	7.7	7.7
	FW	2	15.4	23.1
	FW, R	3	23.1	46.2
	N/A	5	38.5	84.6
	Settlement	2	15.4	100.0
	Total	13	100.0	

Table 31. Crosstab. of Combat Behavior (Class:Mode:Subtype) and Environment attributes from the de Soto *entrada* dataset.

		Environment					
		Fortified				Settlement	Total
		Settlement	FW	FW, R	N/A	Settlement	Total
Combat Behavior	1:O:B	0	1	0	0	0	1
	1:OD:A, B, E, H	1	0	0	0	0	1
	1:OD:B, E	0	0	1	0	0	1
	1:OD:B, F	0	0	1	0	0	1
	2:O:A	0	0	0	2	0	2
	2:O:A, C, F	0	1	0	0	0	1
	2:O:A, E	0	0	1	0	0	1
	2:OD:B, E	0	0	0	1	0	1
	3:O:A, E	0	0	0	0	2	2
	4:O:N/A	0	0	0	2	0	2
Total		1	2	3	5	2	13

Bivariate correlation analysis of the de Soto dataset shows results completely different from that of the Narvaez dataset. The analysis shows no significant correlations, either positive or negative, between class designation and environment, combat mode and environment, or tactical subtype and environment. It does, however,

demonstrate some interesting significant correlations between combat behaviors. The analysis shows a moderately strong negative correlation between class and combat mode, with a level of -0.587 and a *p*-value of 0.035 (Table 31). This result is the opposite of what the bivariate correlation analysis of the Narvaez dataset demonstrated. It also shows a strong negative correlation between class and tactical subtype, with a level of -0.746 and a *p*-value of 0.003. The negative correlations between these attribute of combat behavior may be due to the large amount of variation in the tactics employed against the de Soto *entrada*. It does, however, demonstrate a moderately strong positive correlation between combat mode and tactical subtype, with a level of 0.673 and a *p*-value of 0.012.

Table 32. Bivariate correlation analysis of attributes of the de Soto dataset.

		Class	Combat Mode	Tactical Subtype	Environment
Class	Pearson Correlation	1	-.587*	-.746**	-.151
	Sig. (2-tailed)		.035	.003	.622
Combat Mode	Pearson Correlation	-.587*	1	.673*	.133
	Sig. (2-tailed)	.035		.012	.665
Tactical Subtype	Pearson Correlation	-.746**	.673*	1	.043
	Sig. (2-tailed)	.003	.012		.889
Environment	Pearson Correlation	-.151	.133	.043	1
	Sig. (2-tailed)	.622	.665	.889	

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

The Protohistoric Dataset

The dataset for the entire Protohistoric period consists of thirty six combat scenarios (Table 32). Within this dataset are eight observances of class one designated behaviors, seventeen observances of class two designated behaviors, five observances of

class three designated behaviors, two observances of class four designated behaviors, and four observances of unclassifiable class level behaviors (Table 33). There are twenty eight observances of an offensive combat mode, four observances of combined offensive and defensive combat modes, and four observances of an unclassifiable combat mode (Table 34).

Class two behaviors comprise the largest portion of the Protohistoric dataset at 47.2% of the total dataset. Of the seventeen observances of class two designated behaviors, 94.1% were employed with an offensive combat mode. Every observance of class two offensive mode behaviors includes the use of the ambush (tactical subtype A), with 87.5% of the class two offensive mode behaviors employing tactical subtype A as the only subtype. There are two observances in this dataset in which multiple tactical subtypes were used during class two offensive mode behaviors. There is one observance of tactical subtypes A (ambush), C (flanking maneuvers), and F (rearguard action) being used in conjunction with each other; there is one observance of tactical subtypes A (ambush) and E (fortification) being used in combination. There is also one observance, comprising 5.9% of class two designated behaviors, of a combined offensive and defensive combat mode. The tactical subtypes employed during this observance were subtype B (assault) and E (fortification).

Table 33. Combat behaviors (Class:Mode:Subtype) employed during the Protohistoric period.

		Frequency	Percent	Cumulative Percent	
Combat	1:O:A	1	2.8	2.8	
Behavior	1:O:A, C	1	2.8	5.6	
	1:O:B	2	5.6	11.1	
	1:O:B, C	1	2.8	13.9	
	1:OD:A, B, E, H	1	2.8	16.7	
	1:OD:B, E	1	2.8	19.4	
	1:OD:B, F	1	2.8	22.2	
	2:O:A	14	38.9	61.1	
	2:O:A, C, F	1	2.8	63.9	
	2:O:A, E	1	2.8	66.7	
	2:OD:B, E	1	2.8	69.4	
	3:O:A	3	8.3	77.8	
	3:O:A, H	2	5.6	83.3	
	4:O:N/A	2	5.6	88.9	
	N/A	4	11.1	100.0	
	Total		36	100.0	

Class one designated behaviors comprise the second largest category in the Protohistoric dataset at 22.2%. There are five observances of an offensive combat mode (62.5%) and three observances of a combination of offensive and defensive combat modes (37.5%). Within the observances of class one offensive mode behaviors the primary tactical subtype is the assault (subtype B), comprising 60.0% of class one offensive mode behaviors. There are two observances of this behavior being employed as the only subtype and there is one observance of this behavior being used in conjunction with tactical subtype C (flanking maneuvers). All the three observances of class one offensive/defensive mode behaviors employ multiple tactical subtypes. There

is one observance of subtypes A (ambush), B (assault), E (fortification), and H (use of fire); there is one observance of tactical subtypes B (assault) and E (fortification) and one observance of subtypes B (assault) and F (rearguard action).

Table 34. Class designations of combat behaviors employed during the Protohistoric period.

		Frequency	Percent	Cumulative Percent
Class	N/A	4	11.1	11.1
Designation	1	8	22.2	33.3
	2	17	47.2	80.6
	3	5	13.9	94.4
	4	2	5.6	100.0
	Total	36	100.0	

Table 35. Combat modes employed during the Protohistoric period.

		Frequency	Percent	Cumulative Percent
Combat	N/A	4	11.1	11.1
Mode	O	28	77.8	88.9
	O/D	4	11.1	100.0
	Total	36	100.0	

Class three designated behaviors comprise the third largest category in the Protohistoric dataset at 13.9%. All class three designated behaviors in this dataset were employed in an offensive combat mode and all employed the ambush (subtype A) as the primary tactical subtype. There are two observances of this subtype behavior being used in combination with an H modifier (use of fire). Class four designated behaviors comprise the smallest category at 5.6% of the dataset. Both observances of class four

designated behaviors were employed in an offensive combat mode with an unclassifiable tactical subtype.

The primary tactical subtype employed during the Protohistoric period was the ambush (subtype A), comprising 66.7% of the dataset (Table 35). Of the observances of this tactical subtype, 75.0% employed this subtype as a solitary tactic while the remaining 25.0% of these observances included multiple tactical subtypes and modifiers. There are: two observances of subtypes A (ambush) and H (use of fire); one observance of subtypes A (ambush), B (assault), E (fortification), and H (use of fire); one observance of subtypes A (ambush) and C (flanking maneuvers); one observance of subtypes A (ambush), C (flanking maneuvers), and F (rearguard action); and one observance of subtypes A (ambush) and H (use of fire).

Assault tactics (tactical subtype B) comprised the second largest category of tactics employed during the Protohistoric period at 33.3% of the dataset. Only two observances demonstrate the use of the assault as a solitary tactic. All other observances demonstrate that this tactic was used in conjunction with one or more other subtypes or modifiers. There are: two observances of subtypes B (assault) and E (fortification); one observance of subtypes B (assault) and C (flanking maneuvers); and one observance of subtypes B (assault) and F (rearguard action). Furthermore, there are six observances of unclassifiable tactical subtypes in the Protohistoric dataset.

Table 36. Tactical subtypes employed during the Protohistoric period.

		Frequency	Percent	Cumulative Percent
Tactical	A	18	50.0	50.0
Subtype	A, B, E, H	1	2.8	52.8
	A, C	1	2.8	55.6
	A, C, F	1	2.8	58.3
	A, E	1	2.8	61.1
	A, H	2	5.6	66.7
	B	2	5.6	72.2
	B, C	1	2.8	75.0
	B, E	2	5.6	80.6
	B, F	1	2.8	83.3
	N/A	6	16.7	100.0
	Total		36	100.0

The primary ecosystem utilized during combat in the Protohistoric period was the unspecified form of forested wetland, which comprises 50.0% of the dataset (Table 36, Table 37). Three of the observances involving forested wetlands also involved the use of a river during combat. Two of these three observances are associated with class one designated behaviors while the remaining observance is associated with class two designated behaviors. Settlements comprise 16.7% of the environments utilized during Protohistoric period combat. Furthermore, 16.7% of the observances of settlements being utilized in combat involve fortified settlements. The observance involving the fortified settlement is the only observance of class one designated behaviors utilized a settlement in combat, all others involved class three designated behaviors. Additionally, there are five observances of unclassifiable environmental types in this dataset.

Table 37. Ecosystems utilized during combat scenarios in the Protohistoric period.

		Frequency	Percent	Cumulative Percent
Ecosystem	Fortified Settlement	1	2.8	2.8
	FW	15	41.7	44.4
	FW, R	3	8.3	52.8
	N/A	12	33.3	86.1
	Settlement	5	13.9	100.0
	Total	36	100.0	

Table 38. Crosstab. of Combat Behavior (Class:Mode:Subtype) and Environment attributes of the Protohistoric dataset.

		Environment					
		Fortified				Settlement	Total
		Settlement	FW	FW, R	N/A		
Combat Behavior	1:O:A	0	1	0	0	0	1
	1:O:A, C	0	1	0	0	0	1
	1:O:B	0	2	0	0	0	2
	1:O:B, C	0	0	0	1	0	1
	1:OD:A, B, E, H	1	0	0	0	0	1
	1:OD:B, E	0	0	1	0	0	1
	1:OD:B, F	0	0	1	0	0	1
	2:O:A	0	10	0	4	0	14
	2:O:A, C, F	0	1	0	0	0	1
	2:O:A, E	0	0	1	0	0	1
	2:OD:B, E	0	0	0	1	0	1
	3:O:A	0	0	0	0	3	3
	3:O:A, H	0	0	0	0	2	2
	4:O:N/A	0	0	0	2	0	2
	N/A	0	0	0	4	0	4
Total		1	15	3	12	5	36

Bivariate correlation analysis demonstrates two significant statistical correlations between attributes in the dataset (Table 38). The first is between combat mode and tactical subtype. The analysis suggests a moderately strong positive correlation at 0.591 with a *p*-value of less than 0.001. The second significant correlation is between combat mode and environment. The analysis also shows this as a moderately strong positive correlation at 0.429 with a *p*-value of 0.009. Correlations between other attributes are suggested as well. These correlations included some positive and some negative; all are considered to be weak correlations, though. However, their *p*-values suggest a large amount of error in the analysis thus negating the validity of those correlations.

Table 39. Bivariate correlation analysis of attributes of the Protohistoric dataset.

		Class	Combat Mode	Tactical Subtype	Ecosystem
Class	Pearson Correlation	1	.296	-.128	.274
	Sig. (2-tailed)		.080	.457	.106
Combat Mode	Pearson Correlation	.296	1	.591**	.429**
	Sig. (2-tailed)	.080		.000	.009
Tactical Subtype	Pearson Correlation	-.128	.591**	1	.241
	Sig. (2-tailed)	.457	.000		.157
Ecosystem	Pearson Correlation	.274	.429**	.241	1
	Sig. (2-tailed)	.106	.009	.157	

** . Correlation is significant at the 0.01 level (2-tailed).

American Period Results

The First Creek War Dataset

The dataset for the First Creek War consists of twelve combat scenarios (Table 39). Within this dataset are eight observances of class one designated behaviors, one

observance of class two designated behaviors, two observances of class three designated behaviors, and one observance of a combination of class one and class three designated behaviors (Table 40). There are seven observances of an offensive combat mode, three observances of a defensive combat mode, and two observances of a combination of offensive and defensive combat modes (Table 41).

Table 40. Classification of combat behaviors (Class:Mode:Subtype) employed during the First Creek War.

		Frequency	Percent	Cumulative Percent
Combat	1:D:A, E	1	8.3	8.3
Behavior	1:D:E, F	2	16.7	25.0
	1:O:A, B, C	1	8.3	33.3
	1:O:A, B, C, E	1	8.3	41.7
	1:O:B	1	8.3	50.0
	1:OD:B	1	8.3	58.3
	1:OD:B, D	1	8.3	66.7
	1/3:O:B	1	8.3	75.0
	2:O:A	1	8.3	83.3
	3:O:B, C, G, J	1	8.3	91.7
	3:O:C, H, J	1	8.3	100.0
	Total	12	100.0	

Class one designated behaviors comprise the largest category of class designated behaviors in this dataset at 66.7%. Of the eight observances of class one designated behaviors, 37.5% were employed in an offensive combat mode. Every observance of class one offensive mode behaviors involved the employment of tactical subtype B (assault). The majority, however, employed multiple subtypes. There is one observance of subtype B (assault) being the only subtype employed; there is one observance of

subtypes A (ambush), B (assault), and C (flanking maneuvers); and there is one observance of subtypes A (ambush), B (assault), C (flanking maneuvers), and E (fortification). There are also three observances (37.5% of class one behaviors) of class one defensive mode behaviors. All three observances involved the employment of multiple tactical subtypes. There is one observance of subtypes A (ambush) and E (fortification); there are two observances of subtypes E (fortification) and F (rearguard action). There are also two observances (25% of class one behaviors) of a combination of offensive and defensive combat modes being employed during class one behaviors. Both observances involve the employment of tactical subtype B (assault). There is one observance of subtype B (assault) being the only subtype employed and there is one observance of subtypes B (assault) and D (defense of a natural fortification) being employed in conjunction with each other.

Table 41. Class designations of combat behaviors employed during the First Creek War.

		Frequency	Percent	Cumulative Percent
Class	1.00	8	66.7	66.7
Designation	2.00	1	8.3	75.0
	3.00	2	16.7	91.7
	5.00	1	8.3	100.0
	Total	12	100.0	

Class three behaviors comprise the second largest category of class designated behaviors in the First Creek War dataset at 16.7%. The two observances of class three designated behaviors were employed in an offensive mode as well as multiple tactical subtypes and modifiers. There is one observance of tactical subtypes B (assault), C

(flanking maneuvers) with modifiers G (use of bait) and J (scalping); there is one observance of subtype C (flanking maneuvers) with modifiers H (use of fire) and J (scalping).

Class two designated behaviors and the combination of class one and three behaviors comprise the smallest categories of class designated behaviors in the dataset, with a single observance of each and each comprising 8.3% of the dataset. Both behaviors were employed with an offensive combat mode and involved the employment of a single tactical subtype. The class two offensive behavior was employed with tactical subtype A (ambush) while the class one/three behavior was employed with tactical subtype B (assault).

Table 42. Combat modes employed during the First Creek War.

	Frequency	Percent	Cumulative Percent
Combat Mode D	3	25.0	25.0
O	7	58.3	83.3
OD	2	16.7	100.0
Total	12	100.0	

The dataset shows a large amount of variation in tactical subtypes employed during the First Creek War (Table 42). The primary tactical subtype employed was the assault, comprising 58.2% of the dataset. There are three observances of this subtype being employed as a solitary tactical subtype. There is one observance of this subtype being employed alongside subtypes A (ambush) and C (flanking maneuvers); there is one observance of this subtype being employed alongside subtypes A (ambush), C (flanking

maneuvers), and E (fortification); there is one observance of this subtype being employed alongside subtype C and modifiers G (use of bait) and J (scalping); there is also one observance of this subtype being employed alongside subtype D (defense of a natural fortification).

Tactical subtype A (ambush) comprises the second largest category of tactical subtypes in this dataset, comprising 33.2% of the dataset. The majority of the observances of this tactical subtype involve multiple subtypes being employed together. There is one observance of subtype A (ambush) being employed as a solitary tactical subtype; there is one observance of this subtype being employed alongside B (assault) and C (flanking maneuvers); there is one observance of this subtype being employed alongside B (assault), C (flanking maneuvers), and E (fortification); there is also one observance of this subtype being employed alongside subtype E (fortification).

Table 43. Tactical subtypes employed during the First Creek War.

		Frequency	Percent	Cumulative Percent
Tactical	A	1	8.3	8.3
Subtype	A, B, C	1	8.3	16.7
	A, B, C, E	1	8.3	25.0
	A, E	1	8.3	33.3
	B	3	25.0	58.3
	B, C, G, J	1	8.3	66.7
	B, D	1	8.3	75.0
	C, H, J	1	8.3	83.3
	E, F	2	16.7	100.0
	Total		12	100.0

The primary environmental type utilized during the First Creek War was the settlement, comprising 41.7% of the dataset (Table 43, Table 44). When combined with fortifications, culturally modified battlefields comprise 58.4% of the battlefields utilized during this war. Rivers and forested wetlands (unspecified type) comprise the second largest battlefield environment at 25.0% of the dataset. There is a single observance of pine flatwoods and unspecified open forests being utilized and there is a single observance of an unclassifiable environmental type.

Table 44. Ecosystems utilized during the First Creek War.

		Frequency	Percent	Cumulative Percent
Ecosystem	Fort	2	16.7	16.7
	FW, R	2	16.7	33.3
	N/A	1	8.3	41.7
	PF, FW	1	8.3	50.0
	R, Unspecified (Open Forest)	1	8.3	58.3
	Settlement	5	41.7	100.0
	Total	12	100.0	

Table 45. Crosstab. of Combat Behavior (Class:Mode:Subtype) and Environment attributes of First Creek War dataset.

		Environment						
		Fort	FW, R	N/A	PF, FW	R, Unspec.	Settlement	Total
Combat	1:D:A, E	0	0	0	0	0	1	1
Behavior	1:D:E, F	0	0	0	0	0	2	2
	1:O:A, B, C	0	1	0	0	0	0	1
	1:O:A, B, C, E	0	1	0	0	0	0	1
	1:O:B	0	0	0	0	1	0	1
	1:OD:B	0	0	0	0	0	1	1
	1:OD:B, D	0	0	0	1	0	0	1
	1/3:O:B	0	0	0	0	0	1	1
	2:O:A	0	0	1	0	0	0	1
	3:O:B, C, G, J	1	0	0	0	0	0	1
	3:O:C, H, J	1	0	0	0	0	0	1
Total		2	2	1	1	1	5	12

Bivariate correlation analysis of the dataset for the First Creek War does not show any significant correlations in the dataset (Table 45). The analysis suggests weak negative correlations between class and combat mode as well as class and environment, but the *p*-value suggests too much error in the analysis to prove this correlation. The same is true of the suggested weak positive correlations between class and tactical subtype, combat mode and tactical subtype, combat mode and environment as well as tactical subtype and environment.

Table 46. Bivariate correlation analysis of attributes of the First Creek War dataset.

		Class	Combat Mode	Tactical Subtype	Environment
Class	Pearson Correlation	1	-.467	.027	-.080
	Sig. (2-tailed)		.126	.933	.806
Combat Mode	Pearson Correlation	-.467	1	.381	.237
	Sig. (2-tailed)	.126		.221	.459
Tactical Subtype	Pearson Correlation	.027	.381	1	.328
	Sig. (2-tailed)	.933	.221		.299
Environment	Pearson Correlation	-.080	.237	.328	1
	Sig. (2-tailed)	.806	.459	.299	

The First Seminole War Dataset

The dataset for the First Seminole War consists of eight combat scenarios (Table 46). Within this dataset are seven observances of class one designated behaviors and one observance of class two designated behaviors (Table 47). There is a single observance of an offensive combat mode, five observances of a defensive combat mode, and two observances of an unclassifiable combat mode (Table 48). Class one designated behaviors comprise the largest category in the dataset, comprising 87.5%. The majority (71.4%) of class one designated behaviors were employed in a defensive combat mode. Further, 80.0% of the observances of class one defensive mode behaviors were employed with tactical subtype F (rearguard action); one of these observances included subtype D (defense of a natural fortification) being employed alongside subtype F (rearguard action). There is also a single occurrence of class one defensive mode behaviors employing tactical subtype D (defense of a natural fortification) as a solitary tactic. There is also a single occurrence of class one behaviors being employed in an offensive combat mode alongside tactical subtype A (ambush) and modifier J (scalping).

There is also a single observance of class one behaviors being employed with both an unclassifiable combat mode and tactical subtype. Furthermore, the only observance of class two designated behaviors employed an unclassifiable combat mode and tactical subtype. The unclassifiable nature of both the combat modes and the tactical subtypes is due to the dearth of details contained within the historical records of the First Seminole War.

Table 47. Combat behaviors (Class:Mode:Subtype) employed during the First Seminole War.

		Frequency	Percent	Cumulative Percent
Combat	1:D:D	1	12.5	12.5
Behavior	1:D:D, F	1	12.5	25.0
	1:D:F	3	37.5	62.5
	1:N/A:N/A	1	12.5	75.0
	1:O:A, J	1	12.5	87.5
	2:N/A:N/A	1	12.5	100.0
Total		8	100.0	

Table 48. Class designations of behaviors employed during the First Seminole War.

		Frequency	Percent	Cumulative Percent
Class	1.00	7	87.5	87.5
Designation	2.00	1	12.5	100.0
Total		8	100.0	

Table 49. Combat modes employed during the First Seminole War.

	Frequency	Percent	Cumulative Percent
Combat Mode D	5	62.5	62.5
N/A	2	25.0	87.5
O	1	12.5	100.0
Total	8	100.0	

The primary tactical subtype employed during the First Seminole War was the rearguard action (subtype F). A full 50.0% of the dataset for this war involved tactical subtype F (Table 49). There is one observance of this subtype being employed in combination with tactical subtype D (defense of a natural fortification), which comprises the second most common subtype employed during this war at 25.0% of the dataset involving this subtype. There is also a single observance (12.5% of the dataset) of tactical subtype A (ambush) being employed with modifier J (scalping). Furthermore there are two observances of unclassifiable tactics being employed (25.0% of the dataset).

Table 50. Tactical subtypes employed during the First Seminole War.

	Frequency	Percent	Cumulative Percent
Tactical Subtype A, J	1	12.5	12.5
D	1	12.5	25.0
D, F	1	12.5	37.5
F	3	37.5	75.0
N/A	2	25.0	100.0
Total	8	100.0	

The primary ecosystem utilized during the First Seminole War was the forested wetland (unspecified type). This ecosystem comprises 62.5% of the dataset (Table 50,

Table 51). Rivers comprise the second largest category in the dataset (12.5% as a single ecosystem, 25.0% as a combined ecosystem). Further, there are two observances of an unclassifiable type of ecosystem in the dataset.

Table 51. Ecosystems utilized during the First Seminole War.

		Frequency	Percent	Cumulative Percent
Ecosystem	FW	4	50.0	50.0
	FW, R	1	12.5	62.5
	N/A	2	25.0	87.5
	R	1	12.5	100.0
	Total	8	100.0	

Table 52. Crosstab. of Combat Behavior (Class:Mode:Subtype) and Environment attributes of First Seminole War dataset.

		Environment				Total
		FW	FW, R	N/A	R	
Combat	1:D:D	1	0	0	0	1
Behavior	1:D:D, F	1	0	0	0	1
	1:D:F	2	0	0	1	3
	1:N/A:N/A	0	0	1	0	1
	1:O:A, J	0	1	0	0	1
	2:N/A:N/A	0	0	1	0	1
Total		4	1	2	1	8

Bivariate correlation analysis demonstrates a single significant correlation in the dataset for the First Seminole War (Table 52). This correlation, between combat mode and tactical subtype, is a very strong positive correlation at 0.945 with a *p*-value of less than 0.001. Moderately strong positive correlations are suggested between combat mode and environment as well as tactical subtype and environment. However, the *p*-values for

these correlations suggest too much error to verify their validity. Moderately strong negative correlations are also suggested. These are between class and combat mode, class and tactical subtype. As with the above positive correlations, the *p*-values are too high to verify validity. There is also a weak negative correlation suggested between class and environment. Again, the *p*-value is also too high for validation.

Table 53. Bivariate correlation analysis of attributes of the First Seminole War dataset.

		Class	Combat Mode	Tactical Subtype	Environment
Class	Pearson Correlation	1	-.655	-.577	-.078
	Sig. (2-tailed)		.078	.134	.855
Combat Mode	Pearson Correlation	-.655	1	.945**	.510
	Sig. (2-tailed)	.078		.000	.197
Tactical Subtype	Pearson Correlation	-.577	.945**	1	.607
	Sig. (2-tailed)	.134	.000		.111
Environment	Pearson Correlation	-.078	.510	.607	1
	Sig. (2-tailed)	.855	.197	.111	

** . Correlation is significant at the 0.01 level (2-tailed).

The Second Seminole War Dataset

The dataset for the Second Seminole War consists of forty two combat scenarios (Table 53). Within this dataset are fifteen observances of class one designated behaviors, twenty observances of class two designated behaviors, six class three designated behaviors, and one observance of a combination of class one and class three designated

Table 54. Classification of combat behaviors (Class:Mode:Subtype) employed during the Second Seminole War.

Combat Behavior	Frequency	Percent	Cumulative Percent	Combat Behavior	Frequency	Percent	Cumulative Percent
1:D:D, E	1	2.4	2.4	2:D:D, F	1	2.4	45.2
1:D:D, F	2	4.8	7.1	2:D:F	3	7.1	52.4
1:D:D, L	1	2.4	9.5	2:O:A	4	9.5	61.9
1:D:F	1	2.4	11.9	2:O:A, B	1	2.4	64.3
1:O:A, B, C	1	2.4	14.3	2:O:A, B, J	2	4.8	69.0
1:O:A, C, I, J, K	1	2.4	16.7	2:O:A, C	2	4.8	73.8
1:O:A, D	1	2.4	19.0	2:O:A/B	1	2.4	76.2
1:O:A, G	1	2.4	21.4	2:O:B, D, I	1	2.4	78.6
1:OD:A, D	1	2.4	23.8	2:OD:A, D	1	2.4	81.0
1:OD:A, D, L	1	2.4	26.2	2:OD:A, F, G	1	2.4	83.3
1:OD:C, D	1	2.4	28.6	2:OD:A, F, L	1	2.4	85.7
1:OD:D	1	2.4	31.0	3:O:A	1	2.4	88.1
1:OD:D, F, G	1	2.4	33.3	3:O:B	1	2.4	90.5
1:OD:D, G	1	2.4	35.7	3:O:C	1	2.4	92.9
1/3:O:A, B, C, H	1	2.4	38.1	3:O:C, H	1	2.4	95.2
2:D:A, D	1	2.4	40.5	3:O:C, J	1	2.4	97.6
2:D:D	1	2.4	42.9	3:O:N/A	1	2.4	100.0
				Total	42	100.0	

behaviors (Table 54). There are twenty two observances of an offensive combat mode, eleven observances of a defensive combat mode, and nine observances of a combination of offensive and defensive combat modes (Table 55).

Table 55. Class designations of behaviors employed during the Second Seminole War.

		Frequency	Percent	Cumulative Percent
Class	1.00	15	35.7	35.7
Designation	2.00	20	47.6	83.3
	3.00	6	14.3	97.6
	5.00	1	2.4	100.0
Total		42	100.0	

Table 56. Combat modes employed during the Second Seminole War.

		Frequency	Percent	Cumulative Percent
Combat Mode	D	11	26.2	26.2
	O	22	52.4	78.6
	OD	9	21.4	100.0
Total		42	100.0	

The dataset for the Second Seminole War shows a large amount of variation in the combinations of tactical subtypes employed during the war (Table 56). The primary tactical subtype employed during the Second Seminole War was the ambush (subtype A). This tactical subtype, as a solitary tactic and in combination with other subtypes and modifiers, comprises 50.0% of the dataset for this war. There are five observances of this subtype being employed as a solitary tactic, comprising 11.9% of the dataset. There is a wide variety of this tactic being combined with other subtypes and modifiers. See Table

Table 57. Tactical subtypes employed during the Second Seminole War.

Tactical Subtype	Frequency	Percent	Cumulative Percent
A	5	11.9	11.9
A, B	1	2.4	14.3
A, B, C	1	2.4	16.7
A, B, C, H	1	2.4	19.0
A, B, J	2	4.8	23.8
A, C	2	4.8	28.6
A, C, I, J, K	1	2.4	31.0
A, D	4	9.5	40.5
A, D, L	1	2.4	42.9
A, F, G	1	2.4	45.2
A, F, L	1	2.4	47.6
A, G	1	2.4	50.0
A/B	1	2.4	52.4
B	1	2.4	54.8
B, D, I	1	2.4	57.1
C	1	2.4	59.5
C, D	1	2.4	61.9
C, H	1	2.4	64.3
C, J	1	2.4	66.7
D	2	4.8	71.4
D, E	1	2.4	73.8
D, F	3	7.1	81.0
D, F, G	1	2.4	83.3
D, G	1	2.4	85.7
D, L	1	2.4	88.1
F	4	9.5	97.6
N/A	1	2.4	100.0
Total	42	100.0	

38 for the full range of this variation. There is also one observance of a combination subtype A/B, which comprises 2.4% of the dataset.

Tactical subtype D (defense of a natural fortification) comprises the second largest category, at 38.2%, of tactical subtypes observed in this dataset. There are only two observances of this subtype being employed as a solitary tactic, comprising 4.8% of the dataset. The majority of the observances involving this subtype employed either subtypes A (ambush) and D (defense of natural fortification) or D (defense of natural fortification) and F (rearguard action) together. Each of these combinations comprises 25.0% of the total observances of tactical subtype D. Refer to Table 38 for other combinations involving tactical subtype D.

Tactical subtype F (rearguard action) comprises the third largest category at 23.8% of the dataset. The majority (63.6%) of the observances of this subtype involve combining this subtype with others. Refer to Table 38 for the full range of these combinations. Tactical subtype C (flanking maneuvers) comprises the fourth largest category at 21.6% of the dataset. The majority of the observances of this subtype, however, are in combination with other subtypes and modifiers. Refer to Table 38 for the full range of variation in these combinations as well as for combinations of lesser used tactical subtypes.

The primary ecosystem utilized during the Second Seminole War was the hammock (Table 57). The type of hammock used, however, is most often indistinguishable in the historical record and was largely dependent on the area in which

Table 58. Ecosystems utilized during the Second Seminole War.

Ecosystem	Frequency	Percent	Cumulative Percent	Ecosystem	Frequency	Percent	Cumulative Percent
B, Settlement	1	2.4	2.4	L, HH/MTH/XH	1	2.4	47.6
C, HH/MTH/XH	1	2.4	4.8	L, MTH, FW	1	2.4	50.0
C, HH/MTH/XH, R	1	2.4	7.1	MTH	4	9.5	59.5
C, FW	1	2.4	9.5	MTH, PF	1	2.4	61.9
C, HH/MTH/XH	1	2.4	11.9	MTH, PF, R	1	2.4	64.3
CS	1	2.4	14.3	MTH, R	1	2.4	66.7
CS, EP	1	2.4	16.7	MTH, WP	1	2.4	69.0
CS, HH, R	1	2.4	19.0	MTH/XH	1	2.4	71.4
CS, HM, HH/MTH/XH	1	2.4	21.4	N/A	1	2.4	73.8
FW	2	4.8	26.2	N/A (MTH)	1	2.4	76.2
FW, HH/MTH/XH	1	2.4	28.6	P, HH/MTH/XH, S	1	2.4	78.6
HH	1	2.4	31.0	PF, P, R	1	2.4	81.0
HH/MTH/XH	1	2.4	33.3	PF, R, FW	1	2.4	83.3
HH/MTH/XH, P, R	1	2.4	35.7	PF, WP	1	2.4	85.7
HH/MTH/XH, PF, R	1	2.4	38.1	R	4	9.5	95.2
HH/THH, WP	1	2.4	40.5	R, FF	1	2.4	97.6
HM	1	2.4	42.9	R, XH	1	2.4	100.0
L	1	2.4	45.2				
				Total	42	100.0	

a battle occurred. Oftentimes, hammocks with associated rivers were utilized. There are seven observances of this, comprising 29.2% of observances of hammocks utilized in the dataset. Rivers comprise the second largest category of utilized ecosystems in this dataset at 33.3% (fourteen observances). Half of the observances of rivers involve the utilization of a hammock ecosystem as well. Forested wetlands and cypress swamps comprise the third largest category of ecosystem utilized at 23.8% (10 observances). A large portion of observances (40.0%) of forested wetlands and cypress swamps involve the utilization of a hammock ecosystem as well. All other ecosystems observed in this dataset were utilized in much smaller frequencies.

Bivariate correlation analysis demonstrates several significant statistical correlations in the dataset for the Second Seminole War (Table 58). The analysis shows a moderately strong positive correlation between combat mode and tactical subtype with a level of 0.746 and a p -value of less than 0.001. It also shows a weak negative correlation between class and combat mode with a level of -0.391 and a p -value of 0.011. It further shows a weak negative correlation between class and tactical subtype with a level -0.307 and a p -value of 0.048. Weak positive correlations are suggested between class and environment as well as between tactical subtype and environment. However, the p -values for these correlations suggest too much error to validate the correlations. There is also a very weak negative correlation between combat mode and environment. As with the above weak correlations, the p -value for this correlation shows too much error in the analysis.

Table 59. Bivariate correlation analysis of attributes of the Second Seminole War dataset.

		Class	Combat Mode	Tactical Subtype	Environment
Class	Pearson Correlation	1	-.391*	-.307*	.150
	Sig. (2-tailed)		.011	.048	.344
Combat Mode	Pearson Correlation	-.391*	1	.746**	-.072
	Sig. (2-tailed)	.011		.000	.652
Tactical Subtype	Pearson Correlation	-.307*	.746**	1	.117
	Sig. (2-tailed)	.048	.000		.461
Environment	Pearson Correlation	.150	-.072	.117	1
	Sig. (2-tailed)	.344	.652	.461	

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

CHAPTER EIGHT: CONCLUSIONS

The results of the statistical analyses, when placed within the historical and cultural contexts of the wars and their combat scenarios, provide several insights into the patterns of warfare employed by some of the Muskogean speaking cultural groups as well as the evolution of Seminole combat behaviors. These insights add much to the anthropological and historical databases, as the specific behaviors associated with combat have typically gone unnoticed by scholars of both disciplines. More importantly, these insights bring Native American warfare out of its relegation as simplistic guerrilla warfare into new light as a complex set of behaviors.

Protohistoric Period Warfare

The information gleaned from this research concerning Protohistoric warfare involved three separate and distinct cultural groups: the Apalachee, the Coosa, and the Tascalusa. The majority of the information pertains specifically to the Apalachee, who are associated with thirty four of the thirty six combat scenarios that comprise the Protohistoric dataset. There is one combat scenario associated with the Coosa and one combat scenario associated with the Tascalusa. Being that there is only one example for each the Coosa and Tascalusa there are few inferences that can be made regarding their combat behaviors. There is, however, a significant amount of data regarding the Apalachee. This allows for several inferences to be drawn from this research concerning Apalachee combat behaviors.

The Apalachee

The analysis of the dataset from the Protohistoric period demonstrates several aspects of Apalachee combat behaviors. The first significant finding is that the Apalachee were highly bellicose. The evidence from this research demonstrates that the Apalachee were never completely on the defensive against the *entradas*. They were always on the offensive except when they were routed. The second significant finding regarding Apalachee warfare is that they preferred to wage war in smaller numbers. This is logical since they were facing a new enemy that was not well understood and used strange technologies and creatures unknown to the Apalachee of this temporal period. When faced with the Narvaez and de Soto *entradas* the Apalachee typically waited for smaller groups to break away from the main force before attacking.

The third significant aspect of Apalachee combat behaviors is that the primary tactical subtype they employed was the ambush. They employed both the offensive and defense ambush. When employing the defensive ambush they would utilize fortifications for an ambush, such as during the Second Battle of Burnt Mill Creek when the Apalachee warriors ambushed the contingent of horsemen from behind breastwork fortifications on the bank of a river as well as throughout the forested region beyond the river.

The Coosa and Tascalusa

Not much can be said regarding the combat behaviors of the Coosa or the Tascalusa. There is only one combat scenario recorded for each of these two cultural groups. The Coosa attempted to form a long-term politico-military alliance with the

Europeans. When de Soto marched through Coosa territory there were no instances of actual combat. There was a brief moment when the Coosa warriors brandished arms towards the de Soto *entrada* but they were talked down by their *micco*. The Coosas housed and fed the *entrada* for many days before the *entrada* left. This paid off in the long run for when the contingent of the de Luna *entrada* arrived in Coosa they were recruited by the chief and his warriors to aid putting down the Napochie rebellion. The behaviors displayed by the warriors when marching on the Napochies shows that they utilized a complex and disciplined set of behaviors in combat. They marched in multiple contingents that formed a cross that pointed to the four cardinal directions with their war chief in the center. They did not actually get the chance to engage in combat because the Napochies surrendered after the first *harquebus* shot from the *entrada* contingent. Prior to this, however, they did get the chance to attempt to raze the Napochie settlement. Further, within the Napochie settlement there was a scalping pole in the center of the town. Being that the Napochies were a part of the Coosa chiefdom it is likely that the Coosas followed the practice of scalping as well.

The Tascalusa also seemed more apt to create an alliance with the *entrada* at first as well. Due to de Soto's behavior in taking the *micco* hostage this changed. Tascalusa himself lead the *entrada* to the largest battle they encountered in North America: the Battle of Mabila. During this combat scenario the Tascalusa employed an extremely large ambush within the walls of the settlement of Mabila. They used the sealed palisade to separate the *entrada* from its military leader before beginning the attack. Historical documentation states the fortification of the settlement was impressive and included large

field of fire cleared around the entire settlement (Garcilaso 1993; Hudson 1997). During the combat scenario they employed a mixture of ambush and assault tactics along with fire. Overall, it should be noted that the Coosa and Tascalusa both employed a complex set of combat behaviors that are comparable to some of the behaviors exhibited by the complex societies of Mesoamerica, such as the Aztec (see Hassig 1988).

American Period Warfare

The information gleaned from this research concerning warfare in the American period involved two separate yet connected cultural groups: the Creeks and the Seminoles. The majority of the information pertains specifically to the Seminoles, who are associated with fifty of the sixty two combat scenarios that comprise the American period dataset. There are twelve other combat scenarios associated with the Creeks. Due to the small amount of data concerning Creek combat behaviors there are few inferences that can be drawn from the data. There is, however, a significant amount of data regarding Seminole combat behaviors. This allows for several inferences to be drawn from this research concerning Seminole combat behaviors and the evolution of said behaviors, which are discussed later in this chapter.

The Creeks

The analysis of the dataset concerning the First Creek War provides some insight into Creek combat behaviors, but these insights are few due to the small nature of the dataset associated with the Creeks. The Creeks primarily engaged in class one designated behaviors in an offensive mode. In other words they preferred large scale battles in

which they were on the offensive. Along with preferring to engage in large scale offensive battles they preferred to employ assault tactics (tactical subtype B). While this was the primary tactical maneuver they employed they did employ this tactic alongside multiple other tactics. This demonstrates that they had a larger tactical repertoire than just employing simple assaults. They were able to coordinate multiple tactics into a single and effective battlefield strategy. Further, they employed a dynamic array of tactics that were adaptable to multiple situations during a combat scenario. This is further demonstrated by the fact they actively changed class designated behaviors as well as combat modes when the situation necessitated it.

Muskhogeian Patterns of Combat Behavior

The results of the analysis of the entire dataset for this research provide the basis for several anthropological extrapolations concerning the combat behaviors of Muskhogeian cultural groups. There is a roughly equal distribution between class one and class two designated behaviors, 37.8% and 40.8% respectively. This demonstrates that, as a generalized notion, Muskhogeian cultural groups did not focus their combat behaviors in way that lean towards large scale or small scale battles. The analysis does show, however, that there is a general bellicosity among these cultural groups and when incited to war, they were on the offensive the majority of the time. The combat behaviors of these groups were also adaptive. In 15.3% of the combat scenarios analyzed as part of this research, a combination of offensive and defensive modes was employed. In other words, when their adversaries took the advantage in a battle, Muskhogeian warriors quickly adapted their tactics from being offensive to being defensive thus effectively and

efficiently allowing them to defend themselves and retreat from the battlefield in a manner that minimized casualties.

The primary tactic employed by Muskhogean warriors was the ambush (tactical subtype A). More than half of the combat scenarios in this dataset involved the employment of this tactic. Half of these instances of ambushes involved multiple other tactics while the other half only involved the ambush itself. This is a highly effective tactical maneuver that is still used in warfare today. The element of surprise in this tactic allows the ambushers to effectively take the initial advantage due to the ambushees not being in a defensible position. This maximizes the lethality of the maneuver. Furthermore, there are many combinations of tactics that were employed by the Muskhogean groups. Within this dataset alone there are thirty-nine combinations of tactical maneuvers. This demonstrates a highly diverse tactical repertoire among Muskhogean warriors as well as a thorough comprehension of warfare.

The analysis of this dataset also demonstrates several significant statistical correlations that have relevance far beyond this research and into the realm of military studies. The first of these correlations demonstrates that the environment has a significant impact on the tactical maneuvers employed by combatants. While the correlation is statistically considered to be weak, it is a correlation that is well known. The environment is a limiting factor in warfare. For example, there are only so many things a military force can do in a densely wooded region, while the options for varying maneuvers open widely in an open-aired environment such as grasslands. The second of

these correlations demonstrates that the combat mode impacts the tactical maneuvers employed by combatants. This is actually a given. The same tactics used in an offensive mode will not be employed during defense.

The Evolution of Seminole Combat Behaviors

The analysis of the combat behaviors contained within the dataset for this research details the evolution of a complex set of combat behaviors for the Seminole peoples. During the Protohistoric period, prior to the ethnogenesis of the Seminole cultural identity, the combat behaviors of Muskogean speaking groups had multiple foci that seem to be dependent upon the cultural group involved in warfare. The cultural groups to northern portion of the study area (i.e. – the Coosa and Tascalusa) were more interested in creating politico-military alliances with the Europeans to further their own agendas. This is logical due to the fact these groups were politically structured as complex paramount chiefdoms. Paramount chiefdoms are comprised of multiple chiefdoms brought together under the rule of a singular political authority. The establishment and maintenance of this political authority need not always rely on military strength. Political alliances may have been created and maintained through other social mechanisms such as intergroup marriages, systems of intergroup trade networks, or military alliance against a common foe. Due to the political nature of the complex paramount chiefdom these groups likely had previous experience with the establishment and maintenance of such alliances. Thus, the creation of such an alliance with the Europeans is not so farfetched. When de Soto breached the etiquette of the Tascalusa and took Chief Tascalusa hostage he breached the unspoken contract of any alliance the

Tascalusa might have sought and thus inadvertently initiated a war with the Tascalusa that culminated in the Battle of Mabila.

The Apalachee of northern Florida were also politically structured in the same manner. However, they exhibited a tendency towards bellicosity, not attempting any sort of alliance with the Europeans. If they were politically structured in the same manner why did they respond in such a different manner? The answer may lie in the location of the Apalachee. They were southeasternmost Muskogean speaking cultural group. Their nearest neighbors were the Timucuan speaking groups of northern Florida. The accounts from both the Narvaez and de Soto *entradas* state that several of the cultural groups they made contact with during their march through Florida made statements about the Apalachee being their enemies. If the Apalachee were constantly surrounded by adversaries they would have been accustomed to defending their territory without question. The coming of the Europeans into their territory would have brought about the same reaction as the trespassing of an existing rival group.

While this research demonstrates the presence of variation, the tactics employed during the Protohistoric period tended to focus on small scale offensive ambushes. This is particularly evident among the Apalachee, who waited for small groups to become separated from the larger military force before attacking. This tactic is highly efficient for maximizing casualties in the enemy force while minimizing the casualties in one's own force. The ambush during this time typically utilized a forested wetland environment. These ecosystems are typically densely wooded (especially along the

borders of the ecosystem) and inundated, providing a medium to fire from cover while also providing a medium for both slowing an enemy force from gaining the ability to employ melee combat as well as providing an easy escape route from the battlefield. This fact demonstrates a strong understanding of military strategy.

Fortification was also emphasized during this temporal period. The Coosa, Tascalusa, and Apalachee all employed fortifications on their settlements. Some of these fortifications utilized the surrounding environment in their design, such as those in the Coosa territory that were located on islands and peninsulas that utilized rivers as natural moats. The Apalachee also fortified other areas in the outskirts of their territory to eliminate potential trespassers from gaining easy access to their territory. They fortified the banks of river fords as well as well traveled paths through forested areas. These fortifications consisted of logs and briars latched to trees to create barriers as well as breastworks for the protection of archers.

The combat behaviors of the Seminole were different from those of the Protohistoric period. The changes did not occur immediately, however. To analyze these changes we need to first look at those behaviors employed by the Creeks during the early part of the American period. During the First Creek War the Creek peoples employed combat behaviors that were typically large scale and offensive in nature. They also tended to rely on assault tactics rather than ambushes. Unlike the Apalachee of the Protohistoric period, the Creeks (who had adopted many Apalachee into their clans after the 1704 mission raids) did not wait for smaller groups of adversaries to become

separated to attack. They had a tendency to attack enemies in full force. While this differs from the Apalachee, it is difficult to say that this differs from the Coosa or Tascalusa as there are only two combat scenarios in the historical record that are associated with these cultural groups. However, in these two combat scenarios the Coosas and Tascalusas did not wait for smaller groups to detach from a larger force. Rather, the Tascalusas purposefully separated a small group in order to dispatch the leader of the opposing force prior to attacking the entire force. The Coosas attempted to attack the Napochie force, who immediately surrendered after the first *harquebus* shot.

The first examples of Seminole combat behaviors demonstrate that they were not as bellicose as the Apalachee or Creek. Rather, throughout the short duration of the First Seminole War they were primarily on the defensive. The primary tactic utilized in Seminole defensive behaviors was the rearguard action. They also utilized the environment as a natural system of defense on several occasions. There is only one observance of combat behaviors being employed in an offensive combat mode. Furthermore, there is no mention in the historical record of the Seminoles utilizing fortifications during this war.

The combat behaviors employed by the Seminoles during the Second Seminole War also differed from those employed during the First Seminole War. During the Second Seminole War, there was a much larger number of combat scenarios over a much longer temporal span (1817-1818 C.E. versus 1835-1842 C.E.), demonstrating an increase in Seminole tenacity and willingness to resist American expansionism. The

Seminoles also diverged from their tactic of staying on the defensive and focused on staying on the offensive, which further demonstrates Seminole tenacity during this temporal period. The battlefield tactics (tactical subtypes) employed by the Seminole during this war also demonstrates a high amount of diversity. The majority (64.3%) of the combat scenarios associated with this war involve multiple tactical subtypes being employed together. Further, there are very few observances of the same combinations of subtypes being used multiple times, demonstrating a willingness to experiment with tactical combinations in order to maximize combat effectiveness in defeating a foe as unrelenting as the American military. The Seminoles also did not utilize fortifications during this war. Rather, there are two observances of them using natural fortifications against the American force.

Furthermore, the combat behaviors employed during the Second Seminole War changed through time, demonstrating that Seminole combat behaviors were dynamic and adaptive. Prior to the Battle of Okeechobee (December 25, 1837), Seminole combat behaviors were more diverse and had more of a focus on class one designated behaviors, or large scale battles. While class two designated behaviors, or small scale battles, were present there was a larger proportion of class one designated behaviors. The two primary tactical subtypes employed prior to this landmark battle were the ambush (subtype A) and the defense of a natural fortification (subtype D). Subsequent to the Battle of Okeechobee, Seminole combat behaviors were less diverse and had a strong focus on class two designated behaviors. There are only three observances of class one designated behaviors being employed after this landmark battle. Ambush tactics (tactical subtype A)

comprise the largest proportion (73.3%) of the tactical subtypes employed during the latter portion of the war. Further, the proportion of observances of tactical subtype D (defense of natural fortification) rises approximately three percent for this temporal span (1838-1842 C.E.). While the proportion of tactical subtype D rises in this short period, the number of observances of flanking dwindles considerably, falling from 25.9% prior to the Battle of Okeechobee to only 13.3% after the battle. It should also be noted that the majority of the behaviors prior to and subsequent to the Battle of Okeechobee were employed in an offensive combat mode, demonstrating a continued aggressiveness in Seminole resistance to the expansion of the American state.

Possible Causes of Change

By placing the changes observed in combat behaviors through within the larger cultural, historical, and environmental contexts it is possible to isolate the probable causes of these changes. The first of these changes to be addressed is the change in Seminole behaviors from the First to the Second Seminole War. As I discussed previously, the Seminoles were primarily on the defensive during the First Seminole War and primarily on the offensive during the Second Seminole War. It is likely that their defensive stance during the former was due to two primary reasons. The first is that the Seminoles did not wish war with the United States. They were still recovering from the effects of the Patriot War of 1812 and wanted to be left to live their lives in peace. The second reason is due to the size of the American force they faced. General Jackson led a combined force of approximately three thousand three hundred U.S. soldiers, militia, and

allied Creek warriors. With a force of this magnitude descending upon them, it is no wonder the Seminoles chose to retreat rather than take the offensive.

The second change that warrants discussion is the lack of fortification among the Seminoles. As previously discussed, they did not utilize any typical forms of fortification during either the First or the Second Seminole War. This differs from the predecessors of the Seminoles. The Coosas and Tascalugas, along with their descendant cultural group the Creeks, fortified many of their settlements in Georgia and Alabama. As did the Apalachee of northern Florida, some of whom were later adopted into the Creek Nation. Many of the fortifications in Georgia and Alabama were quite extensive and included palisades, bastions, and moats to prevent invaders from gaining entry into a settlement. So why did the Seminoles do away with such measures when they migrated to Florida in the eighteenth century? The answer lies in the environment. Florida's environment provides everything a group of people would need to fortify themselves in a position against invaders. As Butler (2001) stated, the hammocks of Florida provide a discreet border that is oftentimes near impenetrable. The discreet border of the hammocks took the place of the palisade around a fortified settlement. While the vegetation was dense and near impenetrable, Seminole warriors were able to place themselves near enough to the edge to be able to fire between branches. This took the place of the loopholes that were often present in a palisade wall. The hammocks of Florida are also typically located adjacent to wetland environments, such as wet prairies or various forms of forested wetlands like cypress swamps. These wetland ecosystems provided two strategic defensive advantages. The first is that the inundated nature of these ecosystems provided

a natural waterway that typically circumnavigated the hammocks, or at least a large portion of the hammocks. This replaced the need to excavate a moat around the palisade, or in this case the border of the hammock. A force of adversaries would become mired in the water and mucky soils within these ecosystems, greatly impeding their ability to gain the Seminole position within the hammock and providing the Seminole warriors with virtual sitting ducks as targets. The second advantage provided by wetland ecosystems is an effective escape route. The inundated nature of these ecosystems would have effectively hidden the trail of a retreating force of warriors. They likely would have reconnoitered the soundest path through the wetlands, thus they would not have become mired during their escape. Thus Butler (2001) proposed the perfect name for hammocks: Seminole Woodland Fortress.

It may be asked whether this strategy of utilizing natural fortifications was strictly tactical in nature or if it was the result of events within the broader historical context. In other words, did the Seminoles specifically choose to defend a natural fortification because it provided a means of enhanced defense, or did they do so because they were constantly on the run from a larger and seemingly never ending force of enemies? The answer to this question can go several ways. The first is that they chose these defensible locations due to both their tactical advantage as well as the ability to minimize energy output into creating a defensible structural fortification. The second is they chose them due to the constant movement of people and resources throughout peninsular Florida. The third is they specifically chose these locations due to the possibility of luring the U.S. military away from permanent settlements containing non-combatants. I propose that the

Seminoles chose to utilize natural fortifications in lieu of culturally constructed ones for a combination of reasons; specifically, due to the tactical advantage they imbued, the minimization of energy and resource output, and the possibility of leading their enemies away from concentrations of non-combatants. I believe it unlikely that the reason lies within the constant movement throughout the peninsula due to the fact that there is no evidence of the presence of fortifications at Seminole village sites prior to the Seminole Wars. It is because of this that I propose the environment is the primary cause of this combat behavior.

A third significant change occurred during the Second Seminole War. As previously discussed during the beginning of the war there was a focus on class one designated behaviors, but after the Battle of Okeechobee there was a shift to focus on class two designated behaviors. Watson (2011) attributes this to a changing strategy that utilized a decentralized network to outrun and outgun the American military. While this is logical it is not the whole truth. After the Battle of Okeechobee the Seminoles and the American military parlayed and had numerous meetings to bring about peace between them. As a result, a large portion of Seminoles and their Black Seminole allies were transported west of the Mississippi. It is this loss of fighting power that is the primary cause of the change. The Seminoles did, however, use this to their advantage and scattered into several fighting units across the state, making it increasingly difficult for the Americans to corner them. Watson (2011) was partially correct in stating that the decentralization of Seminole military power was part of their overall strategy in resisting

American expansionism. However, the strategy was not for strategy's sake, it was the direct result in the loss of a large portion of fighting power.

A fourth aspect of change that warrants discussion is not necessarily a combat behavior, but it is intrinsically tied to warfare. This is settlement patterns. Prior to the Second Seminole War the Seminoles resided in structures that resembled wooden plank-hewn cabins, much like their Creek counterparts to the north. However, during the Second Seminole War these structures disappeared and were replaced by the famous Seminole chickee, an open aired structure that is basically four cypress posts with palmetto-thatched roofing. The appearance of the chickee goes hand in hand with warfare due to the fact that they are quickly and easily constructed as well as easily hidden within the hammock environs of Florida. This type of structure is one of the feats of ingenuity and tenacity that allowed the Seminoles to stay on the move and ahead of the American military, thus prolonging the war for so long. These structures also tie in to the idea of the Seminole Woodland Fortress. The hammock environs offered them enough protection from invaders that they no longer needed fortifications around settlements or walls for additional protection.

There is one further aspect of combat behaviors that warrants discussion. This is technology utilized in combat. There are no changes in the behaviors employed in this dataset that are associated with the introduction of the technology of the firearm. This is likely due to the similarities of use between the firearm and the bow and arrow. There was, however, a change in the strategies utilized. Rather than relying on the environment

to create munitions for combat, the Creeks and the Seminoles sought out supplies of firearms and munitions. It is not known why this reliance on firearms came about. Bow and arrow technology is more efficient to use as the manufacture of these items requires a lower energy output. Further, the bow and arrow was more accurate than the firearms of the time and had the same rate of lethality as a firearm.

Strategy

Despite the facts, historians have a long history of relegating Native American warfare to a place in history as something simplistic. One of the primary purposes of this research is to reverse this notion and bring to light the fact that Native American warfare was a complex, dynamic, and adaptive set of behaviors. Within this research there are several instances during which very complex behaviors were displayed, behaviors that definitely don't fit a definition of following simplistic patterns of warfare. For example, the de Luna accounts describe the Coosa warriors as marching in four separate contingents, each one aligned with a cardinal direction. Their war chief marched in the center of the four contingents, directing the warriors with his voice and standard. This practice of marching in multiple contingents shows a highly sophisticated military discipline that allows for a dynamic battlefield strategy that allows for flanking multiple sides of the enemy force as well as rearguard protection. Not only does this formation provide tactical military advantages, it also helps to integrate warfare within the purview of the Coosas' belief system. Archaeological sites located within the geographic boundaries of the Coosa chiefdom have yielded numerous artifacts associated with the Southeastern Ceremonial Complex. As previously stated, one of the three cults within

this complex venerates warfare and warriors. One of the primary motifs associated with the chiefly warfare cult is the cross in circle motif, which is similar in style to a compass rose pointing to the four cardinal directions (Knight 1986). Being that this tactical formation reflects the importance of the cardinal directions, and thus the importance of the Coosa religious system, it can be inferred that warfare played a pivotal role in Coosa culture, as was suggested by Wickman (1999) concerning all of the Muskogean speaking cultural groups.

The sheer amount of variation in the tactical subtypes employed during the wars analyzed in this research demonstrates that the combat behaviors employed by Muskogean groups, such as the Apalachee, Coosas, Creeks, Seminoles, and Tascalusas, were dynamic and adaptive rather than simplistic guerrilla warfare. During combat scenarios they actively adapted their tactics to fit the need of the situation at hand. A sophisticated military understanding is also demonstrated through the fortifications constructed by the Apalachee, Creek, and Tascalusa. While the Protohistoric accounts don't mention the fortification of settlements in Apalachee territory, the warriors did fortify river crossings and paths through forested areas. These fortifications included braided thorny vines and saplings tied lengthwise across paths as well as breastworks along river fords and paths through the woods. The Tascalusa fortified their settlements with palisades and bastions as well as by clearing fields of fire for several hundred yards surrounding their settlements. Many of the settlements in the Coosa chiefdom were also fortified. They were located on islands in large rivers, which provided a large natural moat that circumnavigated the settlements to supplement palisades and bastions. Some

were also located on peninsulas and had one side of the settlement directly adjacent to the river, a palisade surrounding three sides of the settlement, and an additional moat excavated on the outside of the palisade.

Creek fortifications were considered brilliant by American military leaders, especially that found at Horseshoe Bend. This fortification was a breastwork that was constructed in a manner that actually deflected artillery fire. Creek understanding of fortification also extends to offensive maneuvers against fortified positions. In the attack on Fort Mims the Creek warriors not only surrounded the entirety of the fortification, they took control of every loophole from the outside. This effectively reduced the defensive abilities of the Americans while providing the Creek warriors with an excellent position that allows the maximization of both offense and defense.

The Seminole took fortification a completely different direction that was partly dictated by the environment. They utilized the natural fortifications of central and south Florida. These natural fortifications are the hammock ecosystems of Florida. Butler (2001) claims that the hammocks, or Seminole Woodland Fortresses, provide dense, discrete borders that act as a natural palisade. These natural palisades provided the protection necessary to reduce the number of Seminole casualties while providing efficient cover to remain hidden from the view of the U.S. soldiers. Furthermore, many of these Woodland Fortresses have surrounding wetland ecosystems, such as wet prairies and forested wetlands that acted as a natural moat around their fortification. When the U.S. military would attack the Seminoles in their Woodland Fortresses they would

become mired in the water and soils that surround the hammocks. This effectively allowed the Seminole warriors to pick them off piecemeal. The Battle of Okeechobee provides a perfect example of the use of both natural palisade and natural moat. The hammock utilized in this battle was surrounded by dense sawgrass marsh. The Seminoles modified both ecosystems to maximize their effectiveness in combat. Trees within the hammock were notched for a steady gun placement and the sawgrass marsh was cleared of vegetation for several yards to provide a clear field of fire directly in front of their position in the hammock. As the soldiers approached they became mired and were fired upon.

The Seminoles and Creeks waged war with specific military objectives that looked to the long run, which contradicts Owsley's (1981) statement that they had no understanding of military strategy. Both the Seminoles and Creeks attempted to effectively 'cut the head off the snake' by targeting officers in combat. They understood that by doing so they would effectively reduce the strength of the American military to hold together and wage disciplined combat. The Dade Ambush provides a perfect example of this strategy among the Seminoles. The first volley of gunfire from the Seminoles effectively extinguished the flame of life in the majority of the officers. After this initial volley the rest of the U.S. contingent was targeted. The Battle of Calabee Creek provides an excellent example of Creek warriors attempting this stratagem. This battle also demonstrates additional understanding of military strategy in that a small contingent of warriors broke away from the main body of the attack to sneak around the side and take control of the American artillery. If they had succeeded the Americans in

Camp Defiance would have been slaughtered wholesale. An additional strategy utilized by the Seminoles was to cut off baggage trains, thus effectively eliminating the U.S. military from resupplying itself around the state. For example, the initial engagement, the Battle of Black Point, of the Second Seminole War involved the capture of a baggage train.

Concluding Remarks and Future Research

This research has successfully answered all of the research questions set forth in Chapter 2. It has detailed the basic evolution of Seminole combat behaviors and has detailed the differences in the combat behaviors of the Seminoles, Creeks, Apalachees, Coosas, and Tascalusas. It has also detailed the role that the environment played in shaping the combat behaviors of the Seminoles. This research has further added to the anthropological and historical knowledge bases by providing insight into the combat behaviors of the Apalachee, Coosas, Creeks, Seminoles, and Tascalusas. Furthermore, it has outlined statistical data that has implications to fields outside of Anthropology and History, such as military science, military studies, and military history. Though most of all it has proposed, and proven successful, a new model for the analysis of combat behaviors. This model is fluid, allowing for future researchers to adapt it accordingly to their own work.

However, as with all academic studies, future research will provide further insights and answers to the questions posed by this research. For instance, further analysis of other wars involving the Creeks, such as the mission raids of 1704 and the

Yamasee War (both of which are Colonial period), will provide the information necessary to extrapolate further details about Creek combat behaviors as well as attribute further plausible causes for change in these behaviors through time. Furthermore, cross-cultural comparison with other cultural groups throughout North America will provide us with a much more comprehensive understanding of the fascinating behaviors associated with warfare, behaviors that have often been overlooked by academics worldwide.

REFERENCES

Abler, Thomas S.

1992 Beavers and Muskets: Iroquois Military Fortunes in the Face of European Colonization. *In War in the Tribal Zone: Expanding States and Indigenous Warfare*. R. Brian Ferguson and Neil L. Whitehead, eds. Pp. 151-174. Santa Fe: School of American Research Press.

Abrahamson, Warren G. and David C. Hartnett

1990 Pine Flatwoods and Dry Prairies. *In Ecosystems of Florida*. Ronald L. Myers and John J. Ewel, eds. Pp. 103-149. Orlando: University of Central Florida Press.

Adams, George R.

1970 The Caloosahatchee Massacre: Its Significance in the Second Seminole War. *Florida Historical Quarterly* 48(4):368-380.

Akers Jr., Frank H.

1975 The Unexpected Challenge: The Creek War of 1813-1814. Ph.D. Dissertation, Department of History, Duke University.

Aptheker, Herbert

1963 American Negro Slave Revolts. New York: International Publishers.

Bemrose, John

2001[1966] Reminiscences of the Second Seminole War. Tampa: University of Tampa Press.

Bense, Judith A.

1994 Archaeology of the Southeastern United States: Paleoindian to World War I. New York: Academic Press.

Bittle, George C.

1966 The Florida Militia's Role in the Battle of Withlacoochee. *Florida Historical Quarterly* 44(4):303-311.

Blitz, John H. and Karl G. Lorenz

2006 *Chattahoochee Chiefdoms*. Tuscaloosa: The University of Alabama Press.

Bly, Antonio T.

1998 *Crossing the Lake of Fire: Slave Resistance during the Middle Passage, 1720-1842*. *The Journal of Negro History* 83(3):178-186.

Bolen, Eric G.

1998 *Ecology of North America*. New York: John Wiley & Sons, Inc.

Bonhage-Freund, Mary T.

2007 *Botanical Remains*. *In Archaeology of the Lower Muskogee Creek Indians, 1715-1836*. H. Thomas Foster II, author. Pp. 136-193. Tuscaloosa: University of Alabama Press.

Boyd, Mark F.

1951 *The Seminole War: It's Background and Onset*. *Florida Historical Quarterly* 30(1):3-115.

Braun, E. Lucy

1967 *Deciduous Forests of Eastern North America*. New York: Hafner Publishing Company.

Brown, James A.

1997 *The Archaeology of Ancient Religion in the Eastern Woodlands*. *Annual Review of Anthropology* 26:465-485.

Brown, M. L.

1983 *Notes on U.S. Arsenal, Depots, and Martial Firearms of the Second Seminole War*. *Florida Historical Quarterly* 61(4):445-458.

Buchanan, John

2005 *Jackson's Way: Andrew Jackson and the Peoples of the Western Waters*. Edison: Castle Books.

Buker, George E.

1963 Lieutenant Levin M. Powell, U.S.N., Pioneer of Riverine Warfare. *Florida Historical Quarterly* 47(3):253-275.

1997 *Swamp Sailors in the Second Seminole War*. Gainesville: University Press of Florida.

Bunn, Mike and Clay Williams

2008 *Battle for the Southern Frontier: The Creek War and the War of 1812*. Charleston: The History Press.

Butler, David S.B.

2001 *An Archaeological Model of Seminole Combat Behavior*. M.A. thesis, Department of Applied Anthropology, University of South Florida.

Carneiro, Robert L.

1981 *The Chiefdom: Precursor to the State*. In *The Transition to Statehood in the New World*. Grant D. Jones and Robert R. Kantz, eds. Pp. 37-79. New York: Cambridge University Press.

Chaudhuri, Jean and Joyotpaul Chaudhuri

2009 *A Sacred Path: The Way of the Muscogee Creeks*. Los Angeles: UCLA American Indian Studies Center.

Coe, Charles H.

1898 *Red Patriots: The Story of the Seminoles*. Cincinnati: The Editor Publishing Company.

Cohen, Myer M.

1964[1836] *Notices of Florida and the Campaigns*. Gainesville: University of Florida Press.

Corkran, David H.

1967 *The Creek Frontier, 1540-1783*. Norman: University of Oklahoma Press.

Covington, James W.

1993 *The Seminoles of Florida*. Gainesville: University Press of Florida.

De Biedma, Luys Hernandez

- 1993 Relation of the Island of Florida. John E. Worth, trans. and ed. *In The De Soto Chronicles: The Expedition of Hernando de Soto to North America in 1539-1543, Volume I.* Lawrence A. Clayton, Vernon J. Knight Jr., and Edward C. Moore, eds. Pp. 221-246. Tuscaloosa: University of Alabama Press.

De Vaca, Cabeza

- 2003 The Narrative of Cabeza de Vaca. Rolena Adorno and Patrick C. Pautz, trans. and eds. Lincoln: University of Nebraska Press.

Debo, Angie

- 1941 The Road to Disappearance. Norman: University of Oklahoma Press.

Drake, Samuel G.

- 1976[1841] The Book of the Indians: or Biography and History of the Indians of North America. New York: AMS Press.

Ellisor, John T.

- 1996 The Second Creek War: The Unexplored Conflict. Ph.D. Dissertation, Department of History, University of Tennessee, Knoxville.
- 2010 The Second Creek War: Interethnic Conflict and Collusion on a Collapsing Frontier. Lincoln: University of Nebraska Press.

Elvas, Gentleman from

- 1993 The Account by a Gentleman from Elvas. James A. Robertson, trans. and ed. *In The De Soto Chronicles: The Expedition of Hernando de Soto to North America in 1539-1543, Volume I.* Lawrence A. Clayton, Vernon J. Knight Jr., and Edward C. Moore, eds. Pp. 19-219. Tuscaloosa: University of Alabama Press.

Ethridge, Robbie

- 2003 Creek Country: The Creek Indians and Their World. Chapel Hill: University of North Carolina Press.

Ewel, Katherine C.

- 1990 Swamps. *In Ecosystems of Florida.* Ronald L. Myers and John J. Ewel, eds. Pp. 281-323. Orlando: University of Central Florida Press.

Fagan, Brian

2005 *Ancient North America: The Archaeology of a Continent*. Fourth Edition. New York: Thames & Hudson, Ltd.

Fairbanks, Charles H.

1987 *Creek and Pre-Creek*. In *A Creek Sourcebook*. William C. Sturtevant, ed. Pp. 285-309. New York: Garland Publishing, Inc.

Fenneman, Nevin M.

1928 *Physiographic Divisions of the United States*. *Annals of the Association of American Geographers* 18(4): 261-353.

Field, Ron

2009 *The Seminole Wars 1818-1858. Men-at-Arms*. New York: Osprey Publishing.

Ferguson, R. Brian and Neil L. Whitehead

1992 *The Violent Edge of Empire*. In *War in the Tribal Zone: Expanding States and Indigenous Warfare*. R. Brian Ferguson and Neil L Whitehead, eds. Pp. 1-30. Sante Fe: School of American Research Press.

Foster, H. Thomas II

2007 *Archaeology of the Lower Muskogee Creek Indians, 1715-1836*. Tuscaloosa: University of Alabama Press.

Frank, Andrew K.

2005 *Creeks and Southerners: Biculturalism on the Early American Frontier*. Lincoln: University of Nebraska Press.

Garcilaso de la Vega, the Inca

1993 *La Florida*. Charmion Shelby, trans., and David Bost, ed. In *The De Soto Chronicles: The Expedition of Hernando de Soto to North America in 1539-1543, Volume II*. Lawrence A. Clayton, Vernon J. Knight Jr., and Edward C. Moore, eds. Pp. 25-559. Tuscaloosa: University of Alabama Press.

Greller, Andrew M.

1980 Correlation of Some Climate Statistics with Distribution of Broadleaved Forest Zones in Florida, U.S.A. *Bulletin of the Torrey Botanical Club* 107(2):189-219.

2000 Vegetation in the Floristic Regions of North and Central America. *In* *Imperfect Balance: Landscape Transformations in the Precolumbian Americas*. David L. Lentz, ed. *The Historical Ecology Series*. New York: Columbia University Press.

2003 A Review of the Temperate Broad-Leaved Evergreen Forest Zone of Southeastern North America: Floristic Affinities and Arborescent Vegetation Types. *Botanical Review* 69(3):269-299.

Hahn, Steven C.

2004 *The Invention of the Creek Nation, 1670-1763. Indians of the Southeast*. Lincoln: University of Nebraska Press.

Halbert, Henry S. and Timothy H. Ball

1995 *The Creek War of 1813 and 1814*. Frank L. Owsley, Jr., ed. Tuscaloosa: University of Alabama Press.

Hally, David J.

1994 *The Chiefdom of Coosa. In The Forgotten Centuries: Indians and Europeans in the American South, 1521 – 1704*. Charles Hudson and Carmen C. Tesser, editors. Pp. 227-253. Athens: The University of Georgia Press.

Hassig, Ross

1974 *Internal Conflict in the Creek War of 1813-1814*. *Ethnohistory* 21(3):251-271.

1988 *Aztec Warfare: Imperial Expansion and Political Control. The Civilization of the American Indian Series, Volume 188*. Norman: University of Oklahoma Press.

Heidler, David S., and Jeanne T. Heidler

2003 *Old Hickory's War: Andrew Jackson and the Quest for Empire*. Baton Rouge: Louisiana State University Press.

Hudson, Charles

1976 *The Southeastern Indians*. Knoxville: The University of Tennessee Press.

1994 The Hernando de Soto Expedition, 1539-1543. *In* *The Forgotten Centuries: Indians and Europeans in the American South, 1521-1704*. Charles Hudson and Carmen C. Tesser, editors. Pp. 74-103. Athens: The University of Georgia Press.

1997 *Knights of Spain, Warriors of the Sun: Hernando de Soto and the South's Ancient Chiefdoms*. Athens: The University of Georgia Press.

2005[1990] *The Juan Pardo Expeditions: Exploration of the Carolinas and Tennessee, 1566-1568*. Rev. edition. Tuscaloosa: The University of Alabama Press.

Jones, David E.

2007 *Poison Arrows: North American Indian Hunting and Warfare*. Austin: University of Texas Press.

Keener, Craig S.

1998 *An Ethnohistoric Perspective on Iroquois Warfare During the Second Half of the Seventeenth Century (A.D. 1649-1701)*. Ph.D. dissertation, Department of Anthropology, The Ohio State University.

Knetsch, Joe

2003 *Seminole Wars, 1817-1858*. Charleston: Arcadia Publishing.

2011 *Strategy, Operations, and Tactics in the Second Seminole War, 1835-1842*. *In* *America's Hundred Years' War: U.S. Expansion to the Gulf Coast and the Fate of the Seminole, 1763-1858*. Pp. 128-154. William S. Belko, ed. Gainesville: University Press of Florida.

Knight, Vernon J., Jr.

1986 *The Institutional Organization of Mississippian Religion*. *American Antiquity* 51(4):675-687.

1994 *The Formation of the Creeks*. *In* *The Forgotten Centuries: Indians and Europeans in the American South, 1521 – 1704*. Charles Hudson and Carmen C. Tesser, editors. Pp. 373-392. Athens: The University of Georgia Press.

Knotts, Tom

1971 *History of the Blockhouse on the Withlacoochee*. *Florida Historical Quarterly* 49(3):245-254.

Kushlan, James A.

1990 Freshwater Marshes. *In* *Ecosystems of Florida*. Ronald L. Myers and John J. Ewel, eds. Pp. 324-363. Orlando: University of Central Florida Press.

Lambert, Patricia M.

2002 The Archaeology of War: A North American Perspective. *Journal of Archaeological Research* 10(3):207-241.

Langford, James, B., Jr. and Marvin T. Smith

1990 Recent Investigations in the Core of the Coosa Province. *In* *Lamar Archaeology: Mississippian Chiefdoms in the Deep South*. Mark Williams and Gary Shapiro, editors. Pp. 104-116. Tuscaloosa: The University of Alabama Press.

Laumer, Frank

1968 *Massacre: An account of the massacre of Major Francis L. Dade and his men by the Seminole Indians in Florida, December 28, 1835*. Gainesville: University of Florida Press.

1995 *Dade's Last Command*. Gainesville: University Press of Florida.

1998 *Amidst a Storm of Bullets: The Diary of Lt. Henry Prince in Florida, 1836-1842*. Seminole Wars Historic Foundation Contribution No. 1. Tampa: University of Tampa Press.

Lawres, Nathan R.

2008 *Native and African Cultures and their Resistance to Oppression in Florida Prior to 1850*. Honors thesis, Department of Anthropology, University of Central Florida.

2009 *Indigenous Combat Behavior: An Analysis of Battlefield Tactics Employed Against the Conquest of Florida*. Paper presented at 66th Southeastern Archaeological Conference, Mobile, November 4-7.

MacCauley, Clay

2000[1887] *The Seminole Indians of Florida*. Gainesville: University Press of Florida.

Madrigal, Lorena

1998 *Statistics for Anthropology*. Cambridge: Cambridge University Press.

Mahon, John K.

1972 *The War of 1812*. Lexington: De Capo Press.

1985[1967] *History of the Second Seminole War, 1835-1842*. Rev. edition. Gainesville: University Press of Florida.

1991 *Missouri Volunteers at the Battle of Okeechobee: Christmas Day 1837*. *Florida Historical Quarterly* 70(2):166-176.

1998 *The First Seminole War, November 21 1817-May 24,1818*. *Florida Historical Quarterly* 77(1):62-67.

Malone, Patrick M.

1991 *The Skulking Way of War: Technology and Tactics among the New England Indians*. Lanham: Madison Books.

Martin, Joel W.

1991 *Sacred Revolt: The Muskogees' Struggle for a New World*. Boston: Beacon Press.

1994 *Southeastern Indians and the English Trade in Skins and Slaves*. *In The Forgotten Centuries: Indians and Europeans in the American South, 1521 – 1704*. Charles Hudson and Carmen C. Tesser, editors. Pp. 304-324. Athens: The University of Georgia Press.

Mason, Carol I.

2005 *The Archaeology of Ocmulgee Old Fields, Macon, Georgia*. *Classics in Southeastern Archaeology*. Tuscaloosa: The University of Alabama Press.

McCauley, Clark

1990 *Conference Overview*. *In The Anthropology of War*. Jonathan Haas, ed. Pp. 1-25. Cambridge: Cambridge University Press.

McReynolds, Edwin C.

1957 *The Seminoles*. Norman: University of Oklahoma Press.

Meltzer, Milton

2004 *Hunted Like a Wolf: The Story of the Seminole War*. Sarasota: Pineapple Press.

Micco, Melinda B.

1995 *Freedmen and Seminoles: Forging a Seminole Nation*. Ph.D. dissertation. Department of Ethnic Studies. University of California, Berkeley.

Milanich, Jerald T.

1995 *Florida Indians and the Invasion from Europe*. Gainesville: University Press of Florida.

1998 *Florida's Indians from Ancient Times to Present*. Gainesville: University Press of Florida.

Milanich, Jerald T. and Charles H. Fairbanks

1980 *Florida Archaeology*. New York: Academic Press.

Miller, Susan A.

Coacoochee's Bones: A Seminole Saga. Lawrence: University of Kansas Press.

Missall, John and Mary Lou Missall

2004 *The Seminole Wars: America's Longest Indian Conflict*. Gainesville: University Press of Florida.

2005 *The Miserable Pride of a Soldier: The Letters and Journals of Col. William S. Foster in the Second Seminole War*. John Missall and Mary Lou Missall, eds. Tampa: University of Tampa Press.

Moore, Alexander, ed.

1988 *Nairne's Muskhogean Journals: The 1708 Expedition to the Mississippi River*. Jackson: University Press of Mississippi

Motte, Jacob R.

1963 *Journey Into Wilderness: An Army Surgeon's Account of Life in Camp and Field during the Creek and Seminole Wars 1836-1838*. James F. Sunderman, editor. Gainesville: University of Florida Press.

Nance, C. Roger

1990 A Study of Lamar Ecology on the Western Edge of the Southern Piedmont. *In* Lamar Archaeology: Mississippian Chiefdoms in the Deep South. Mark Williams and Gary Shapiro, editors. Pp. 139-146. Tuscaloosa: The University of Alabama Press.

Nielsen, Axel E., and William H. Walker

2009 Introduction: The Archaeology of War in Practice. *In* Warfare in Cultural Context: Practice, Agency, and the Archaeology of Violence. Tucson: University of Arizona Press.

O'Steen, Lisa

2007 Animal Remains. *In* Archaeology of the Lower Muskogee Creek Indians, 1715-1836. H. Thomas Foster II, author. Pp. 194-255. Tuscaloosa: University of Alabama Press.

Otterbein, Keith F.

1999 A History of Research on Warfare in Anthropology. *American Anthropologist* 101(4):794-805.

2004 *How War Began*. College Station: Texas A&M University Press.

2007 *The Anthropology of War*. Long Grove:Waveland Press.

Owsley Jr., Frank L.

1981 *Struggle for the Gulf Borderlands: The Creek War and the Battle of New Orleans 1812-1815*. Tuscaloosa: University of Alabama Press

Pearcy, Matthew T.

2006a Documents: Andrew Atkinson Humphreys' Seminole War Field Journal. *Florida Historical Quarterly* 85(2):197-230.

2006b "The Ruthless Hand of War": Andrew A. Humphreys in the Second Seminole War. *Florida Historical Quarterly* 85(2):123-153.

Platt, William J. and Mark W. Schwartz

1990 Temperate Hardwood Forests. *In* Ecosystems of Florida. Ronald L. Myers and John J. Ewel, eds. Pp. 194-229. Orlando: University of Central Florida Press.

Polhemus, Richard R.

1990 Dallas Phase Architecture and Sociopolitical Structure. *In* Lamar Archaeology: Mississippian Chiefdoms in the Deep South. Mark Williams and Gary Shapiro, editors. Pp. 125-138. Tuscaloosa: The University of Alabama Press.

Porter, Kenneth W.

1996 The Black Seminoles: History of a Freedom-Seeking People. Alcione M. Amos and Thomas P. Senter, eds. Gainesville: University Press of Florida.

Priestly, Herbert I.

2010 The Luna Papers, 1559-1561: Volumes 1 & 2. Tuscaloosa: University of Alabama Press.

Procyk, Richard J.

2008 Guns Across the Loxahatchee: An Archaeological Investigation of Seminole War Sites in Florida, with a special focus on the Battle of Loxahatchee, January 24, 1838. 3rd Edition. Cocoa: Florida Historical Society Press.

Rangel, Rodrigo

1993 Account of the Northern Conquest and Discovery of Hernando de Soto. John E. Worth, trans. and ed. *In* The De Soto Chronicles: The Expedition of Hernando de Soto to North America in 1539-1543, Volume I. Lawrence A. Clayton, Vernon J. Knight Jr., and Edward C. Moore, eds. Pp. 247-306. Tuscaloosa: University of Alabama Press.

Rivers, Larry E.

2000 Slavery in Florida. Gainesville: University Press of Florida.

Saunt, Claudio

1999 A New Order of Things: Property, Power, and the Transformation of the Creek Indians, 1733-1816. Cambridge: Cambridge University Press.

Scarry, John F.

1994 The Late Prehistoric Southeast. *In* The Forgotten Centuries: Indians and Europeans in the American South, 1521-1704. Charles Hudson and Carmen C. Tesser, editors. Pp. 17-35. Athens: The University of Georgia Press.

Sears, William H.

1955 Creek and Cherokee Culture in the 18th Century. *American Antiquity* 21(2): 143-149.

Seymour, Susan

2006 Resistance. *Anthropological Theory* 6(3):303-321.

Shapiro, Gary

1990 Bottomlands and Rapids: A Mississippian Adaptive Niche in the Georgia Piedmont. *In Lamar Archaeology: Mississippian Chiefdoms in the Deep South*. Mark Williams and Gary Shapiro, editors. Pp. 147-162. Tuscaloosa: The University of Alabama Press.

Simons, Anna

1999 WAR: Back to the Future. *Annual Review of Anthropology* 28:73-108.

Smith, Marvin T.

1987 Archaeology of Aboriginal Culture Change in the Interior Southeast: Depopulation During the Early Historic Period. *The Ripley P. Bullen Series*. Gainesville: University Press of Florida.

1994 Aboriginal Depopulation in the Postcontact Southeast. *In The Forgotten Centuries: Indians and Europeans in the American South, 1521 – 1704*. Charles Hudson and Carmen C. Tesser, editors. Pp. 257-275. Athens: The University of Georgia Press.

2000 Coosa: The Rise and Fall of a Southeastern Mississippian Chiefdom. *The Ripley P. Bullen Series*. Gainesville: University Press of Florida.

Spira, Timothy P.

2011 Wildflowers & Plant Communities of the Southern Appalachian Mountains & Piedmont. Chapel Hill: The University of North Carolina Press.

Spoehr, Alexander

1941 Camp, Clan, and Kin among the Cow Creek Seminole of Florida. *Field Museum of Natural History Anthropological Series* 22(1):1-27.

Sprague, John T.

2000 *The Origin, Progress, and Conclusion of the Florida War*. Tampa: University of Tampa Press.

Swanton, John R.

1922 *Early History of the Creek Indians and Their Neighbors*. Bulletin (Smithsonian Institution. Bureau of American Ethnology), 73. Washington: Government Printing Office.

1946 *Indians of the Southeast*. Washington D.C.: Bureau of American Ethnology Bulletin 137.

Thorpe, I.J.N.

2003 *Anthropology, Archaeology, and the Origin of Warfare*. *World Archaeology* 35(1): 145-165.

Tucker, Phillip T.

1991 *A Forgotten Sacrifice: Richard Gentry, Missouri Volunteers, and the Battle of Okeechobee*. *Florida Historical Quarterly* 70(2):150-165.

Vince, Susan W., Stephen R. Humphrey, and Robert W. Simons

1989 *The Ecology of Hydric Hammocks: A Community Profile*. Biological Report 85(7.26) prepared for U.S. Department of Interior, Fish and Wildlife Service.

Walker, Hester Perrine

1926 *Massacre at Indian Key, August 7, 1840 and the Death of Doctor Henry Perrine*. *Florida Historical Quarterly* 5(1):18-42.

Waselkov, Gregory A.

2006 *A Conquering Spirit: Fort Mims and the Redstick War of 1813-1814*. Tuscaloosa: University of Alabama Press.

Waselkov, Gregory A. and Kathryn E.H. Braund, eds.

1995 *William Bartram on the Southeastern Indians*. Lincoln: University of Nebraska Press.

Watson, Samuel

- 2011 Seminole Strategy, 1812-1858: A Prospectus for Further Research. *In* America's Hundred Years' War: U.S. Expansion to the Gulf Coast and the Fate of the Seminole, 1763-1858. Pp. 155-180. William S. Belko, ed. Gainesville: University Press of Florida.

Weisman, Brent R.

- 1989 Like Beads on a String: A Culture History of the Seminole Indians in North Peninsular Florida. Tuscaloosa: The University of Alabama Press.
- 1999 Unconquered Peoples: Florida's Seminole and Miccosukee Indians. Gainesville: University Press of Florida.
- 2000a Archaeological Perspectives on Florida Seminole Ethnogenesis. *In* Indians of the Greater Southeast: Historical Archaeology and Ethnohistory. B. McEwan, ed. Pp. 299-317. Gainesville: University Press of Florida.
- 2000b The Plantation System of the Florida Seminole Indians and Black Seminoles during the Colonial Era. *In* Colonial Plantations and Economy in Florida. Jane Landers, ed. Pp. 136-149. Gainesville: University Press of Florida.
- 2007 Nativism, Resistance, and Ethnogenesis of the Florida Seminole Indian Identity. *Historical Archaeology* 41(4):198-212.

White Jr., Frank F

- 1950 A Journal of Lt. Robert C. Buchanan During the Seminole War. *Florida Historical Quarterly* 29(2):133-151.

White, Max E.

- 2002 The Archaeology and History of the Native Georgia Tribes. *Native Peoples, Cultures, and Places of the Southeastern United States*. Gainesville: Florida.

Whitney, Ellie, D. Bruce Means, and Anne Rudloe

- 2004 Priceless Florida: Natural Ecosystems and Native Species. Sarasota: Pineapple Press.

Wickman, Patricia R.

- 1999 The Tree That Bends: Discourse, Power, and the Survival of the Maskoki People. Tuscaloosa: University of Alabama Press.

Widmer, Randolph J.

1994 The Structure of Southeastern Chiefdoms. *In* *The Forgotten Centuries: Indians and Europeans in the American South, 1521 – 1704*. Charles Hudson and Carmen C. Tesser, editors. Pp. 125-155. Athens: The University of Georgia Press.

Williams, Mark and Gary Shapiro

1990 Paired Towns. *In* *Lamar Archaeology: Mississippian Chiefdoms in the Deep South*. Mark Williams and Gary Shapiro, editors. Pp. 163-174. Tuscaloosa: The University of Alabama Press.

Wright Jr., J. Leitch

1986 *Creeks and Seminoles: The Destruction and Regeneration of the Muscogulge People*. Lincoln: University of Nebraska Press.