ARCHAEOLOGICAL AND HISTORICAL SURVEY
U. S. M. C. BASE CAMP LEJEUNE, M. C. AIR STATION (HELICOPTER), NEW RIVER, OAK GROVE OUTLYING LANDING FIELD

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CONDUCTED UNDER THE AUSPICES OF THE DEPARTMENT OF DEFENSE

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EXECUTIVE SUMMARY

An Archaeological and Historical Reconnaissance of U.S. Marine Corps Base, Camp Lejeune.

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Abstract

Under contract with the U.S. Department of the Navy, the University of North Carolina at Wilmington undertook an archaeological and historical reconnaissance of U.S. Marine Corps Base, Camp Lejeune New River Air Station (Helicopter), and Oak Grove Outlying Landing Field, North Carolina, from June 1980 to August 1981. The results for New River Air Station and Camp Lejeune are combined since the properties are contiguous, occupy essentially the same environment, and will, thus, have identical results. The results for Oak Grove Outlying Landing Field are presented as a chapter within the larger text. A portion of the work dealing with the historical record was subcontracted to Coastal Zone Resource Division of Ocean Data Systems, Inc.

The work consisted of a search of previous work in the area, an on-ground survey of areas selected on the basis of specific environmental zones present at the Base. Within these zones random areas were selected to ensure statistical significance to the findings. Surface collections were made at all sites located and analysis of this material completed. All sites were evaluated for potential eligibility on the basis of surface collection, were then tested by excavating a number of two-meter by two-meter squares at each potentially eligible site. Finally, the same procedure was employed at Oak Grove Auxiliary Landing Field in nearby Jones County.

Site locational data was collected from each site on the basis of several environmental and physiographic features. Analysis of these factors showed that sites were clustered within a short distance to water (usually 100 meters or less) and that sites of the Archaic, Early Woodland and Middle Woodland cultural periods tended to be located on higher elevations on freshwater streams. Sites of the later Middle Woodland and Late Woodland periods tended to be located at lower elevations adjacent to salt water.

The results of the analysis showed that the majority of sites located were probably ineligible for inclusion on the National Register of Historic Places because they were either so small, so deflated, or so damaged by military activity that their practical potential for producing research data was approaching nil.

The majority of sites considered eligible for the National Register of Historic Places were shell middens of the Late Woodland period, although a number of earlier sites were also found to be potentially eligible.

No sites considered to be eligible for inclusion on the National Register of Historic Places were encountered at New River Air Station (Helicopter) nor at Oak Grove Outlying Landing Field. A total of fifteen sites were encountered on Camp Lejeune which are considered potentially eligible for inclusion in the National Register of Historic Places. These are sites number On^{V}71, 113, 138, 230, 231, 240, 251, 259, 283, 284, 286, and Wallace Creek (Mumford) Mill Dam and the Cray Cemetery. Specific recommendations for these sites are made in the main body of the text.

VICINITY MAP

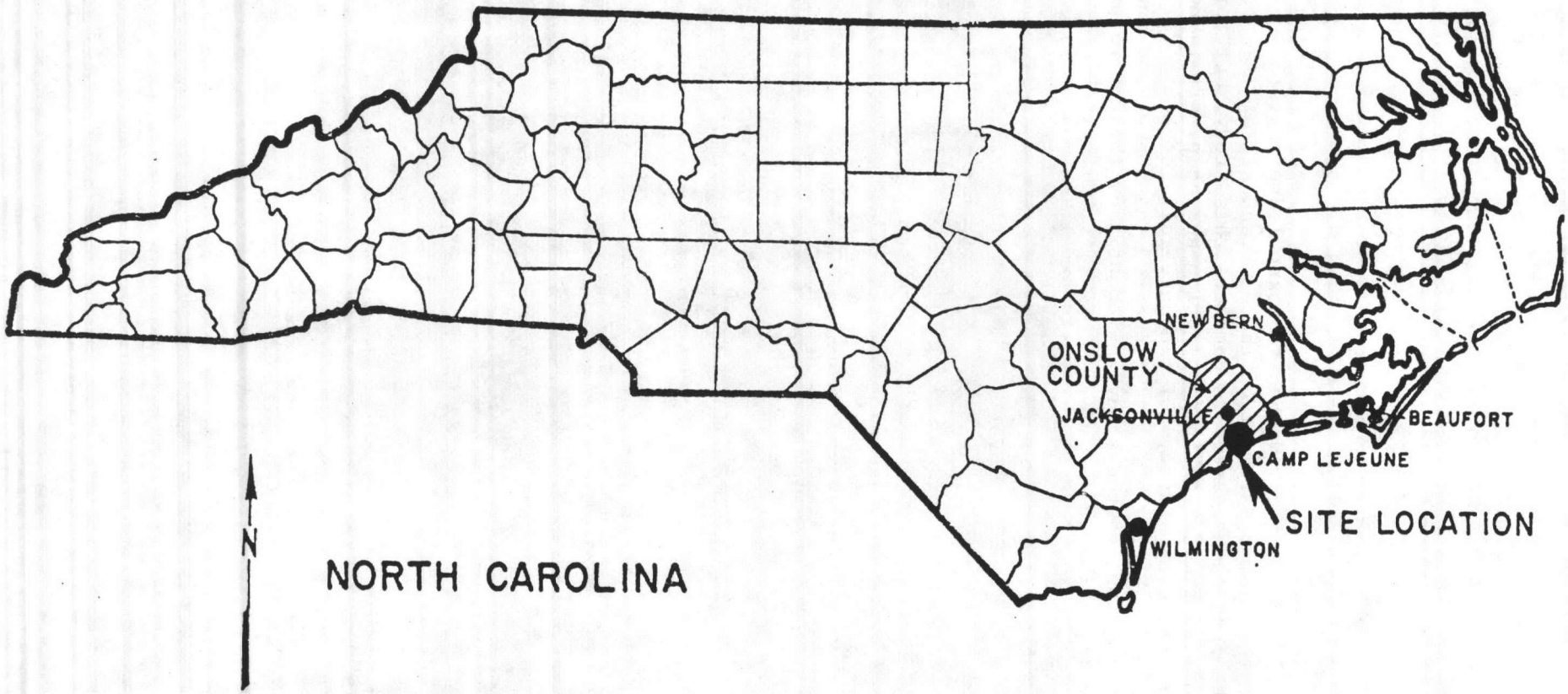

FIGURE 1

ACKNOWLEDGEMENTS

The principal investigator wishes to acknowledge grateful indebtedness to the U.S. Department of the Navy and all of its staff for not only the funding necessary to complete this study, but for all the man-hours of time given in cooperation and help. It is necessary to remember the many students of the University of North Carolina at Wilmington who fought the heat, the insects, the snakes and bears of Camp Lejeune to complete the study. Without them the entire project would have been impossible.

CHAPTER I Introduction

During May, June and July of 1980 the University of North Carolina at Wilmington contracted with the United States Department of the Navy to conduct an archaeological/historical reconnaissance of U.S. Marine Corps Base, Camp Lejeune, North Carolina. The purpose of the reconnaissance was to produce a "sensitivity" map of the Base, outlining with as much detail as possible areas on the Base which would have the highest probability of being the location of archaeological sites. The reconnaissance was not intended to be a total survey of the Base or to locate all archaeological sites. Instead, 20 to 25 percent of the Base was to be examined under controlled conditions so that a model could be formulated which would apply to all areas of the Base. Sites were to be located by pedestrian survey, collections made from the surface of each site, environmental factors present at each site recorded, and the above data subjected to a computerized analysis which would generate a model of the environmental and cultural factors which would determine the locations of archaeological sites.

The model produced by survey and computer would then be plotted on Base maps to produce a visual display of the "sensitive" areas of the Base. This map and the accompanying report would provide a tool for future planning at the Base.

Archaeological Background

The coast of North Carolina is probably the most poorly understood archaeological province in the state. While archaeological work began in this area at an early date in the 1930's, the vast majority of archaeological work in the state has been conducted in the piedmont and mountain regions. On the coast early survey work was conducted by the Research Laboratories of Anthropology at the University of North Carolina at Chapel Hill in the early 1930's. Subsequent to the early survey work, there was essentially nothing accomplished until the late 1950's, when William Haag conducted a very brief survey of the northern sector of the coast (Haag 1958). The central sector of the coast was next visited by personnel from the Research Laboratories of Anthropology again in the late 1960's and early 1970's. The present investigator began survey work in 1969 (Loftfield 1970) working near Harker's Island and North River, located approximately 40 miles north of Camp Lejeune. This led to extensive surveying and testing by personnel from the Research Laboratories of Anthropology culminating in the Ph.D. dissertation of this investigator in 1976. During the 1970's extensive work has been conducted in the northern sector of the coast by personnel

from East Carolina University, but most of this remains unpublished. Additional survey and testing has been recently undertaken in the far southern reaches of the North Carolina coast by personnel of the North Carolina Division of Archives and History (CETA 1978). Finally, excavation of a late woodland site some seven miles from Camp Lejeune has recently been reported (Loftfield 1979).

Because so little work has been accomplished to date in the coastal province of the state, much interpretation must be based upon work in the piedmont and mountains. Dating of projectile point types depends on analogy between the points found on the coast and comparable types from the piedmont, as does the dating of general cultural periods.

Human occupation and hence cultural behavior began on the coast of North Carolina by at least 10,000 to 11,000 B.C. Two projectile points of the "Clovis" type were recovered from the White Oak River area, less than ten miles north of Camp Lejeune (Perkinson 1971: 22,24). Dated by analogy of type with similar points in other parts of the country, it can be assumed that they fall into the general range of eastern Paleo-Indian habitation. No other recognized evidence of this period has been found in the immediate vicinity although other Paleo-Indian projectile points have been found from time to time on the coast (Perkinson 1971, 1973). The culture of the makers of these points remains unknown for the present coastal area, but again by analogy it can be assumed that they were hunters of large megafauna and led a very nomadic lifestyle. The finds on the coast today probably do not represent a littoral occupation by Paleo-Indian people, as it is surmised that at 10,000 B.C. the sea stood almost 90 feet lower than it does today (Oaks and Cock 1963: 979-983). Neuman shows that while the sea stood 90 feet lower than today, it rose rapidly until approximately 4,000 years ago, when the rate slowed and stabilized at just slightly lower than today. This would indicate that 10,000 years ago the coast lay somewhere bet ween 25 and 40 miles further east than it does today (Neuman 1972).

Beginning approximately 8000 to 9000 B.C., the Paleo-Indian life style faded with the passing of the large game and the onset of modern climatic conditions. The Archaic period, which succeeded the Paleo-Indian, saw the use of smaller projectile points, an emphasis on hunting smaller game, and a reduction in the territory of each group (Coe 1964). The Archaic continued until approximately 1500 to 2000 B.C. in the coastal area or until the arrival of fire clay pottery, which has traditionally been taken to imply the onset of the Woodland period. While this transition has

not been dated for the North Carolina coast, the presence of Thom's Creek and possibly Stallings Island fiber-tempered ceramics indicates an early arrival of the fired clay ceramic time marker (CETA 1978:52). It is doubtful that the introduction of these ceramics caused or even indicates any adjustment in basic adaptive strategy which is usually implied by the term Woodland. The Woodland period begins with the introduction of pottery, but it implies a change in subsistence to include cultigens. This seems unlikely on the North Carolina coast, but the transition period is poorly understood in the state in general and even more poorly on the coast.

After the apprearance of the early fiber-temptered wares and the Thom's Creek ware, there appears an early Woodland ceramic tradition marked by sand tempering. This is followed by a clay-tempered tradition, suspected of being middle Woodland in time, and subsequentiy by a shell-tempered ware known to be late Woodland (Loftfield 1976, CETA 1978).

Shell-tempered wares, which are most common in the central sector of the coast, are known to exist in Virginia, where they are associated with the coastal Algonquians (Harrington 1948: 251-252, Blaker 1952: 257-258, Evans 1955: 44-46, Brittingham 1947). These wares extend down through the northern sector of the coast, through the central sector where they are predominant, to finally fade out at the Cape Fear River. It has been suggested (Loftfield 1975, 1976) that these wares are probably associated with Algonquian speakers along the coast and their distribution marks the territory once occupied by Algonquian-speaking people.

The Indian presence on the coast has been described by a number of ethnohistoric observers. The first and most illuminating were those of certain members of the Roanoke Colony, especially Thomas Hariot and John White (Quinn 1955). Later, John Lawson described the Indians located along the Neuse and White Oak Rivers (Lawson 1965). In the former accounts, which deal more specifically with the northern sector of the coast, there is little doubt that the Roanoke colonists were in contact with Algonquian-speaking peoples, while Lawson deals with Tuscaroras in the central sector of the coast. However, Lawson states that the coastal Algonquians were a decimated group, indicating that they had fallen on hard times. The Roanoke Colony reports date from 1584 to 1586, whereas Lawson was writing in the first decade of the eighteenth century. Thus there is a considerable time gap between the two accounts. An analysis of the significance of these accounts and a synthesis of the cultural ecolog-

ical material contained in them have been addressed by this investigator earlier (Loftfield 1976).

The Indian presence in the vicinity of Camp Lejeune came to an end by 1715 with the close of the Tuscarora War and the removal of the Indians to other lands. By that time, land grants had been patented in the area and the historic era ushered in.

The work at Camp Lejeune was not conducted in a vacuum. Earlier works by the principal investigator and others were consulted to provide a very strong background for orienting the 1980 reconnaissance.

Archaeological survey at Camp Lejeune actually started in the mid 1960's when personnel of the Research Laboratories of Anthropology at the University of North Carolina at Chapel Hill toured the base recording some few sites. Subsequent surveys were undertaken by the principal investigator in 1973 as a part of research leading to a dissertation for a graduate degree also at the University of North Carolina at Chapel Hill. When that author began teaching at the University at Wilmington it was logical for the survey to continue from that center.

In 1977 a third survey was conducted at Camp Lejeune by then Capt. Lloyd Hekhuis who was stationed at New River Air Station and who was on leave to complete an undergraduate education at UNC-Wilmington. As part of his academic program he completed a reconnaissance of a significant portion of the Base under the direction of Loftfield. This survey provided much of the background for the current reconnaissance (Hekuis and Loftfield, 1978).

Finally, earlier works by the principal investigator (Loftfield, 1970, 1976, and 1979) provided substantial understanding of the aboriginal occupations of the area now known as Camp Lejeune.

Chapter 2

The Environmental Setting

To generate an effective model of aboriginal occupation it is necessary to first understand the environmental settings which occur in the study area. Primitive cultures are always more closely related to their environments than more technologically advanced cultures and thus an understanding of the environmental zones available to a population is essential to understanding their adaptive patterns.

Chapter 3

Research Methodology

Biotic communities constitute one of the most important aspects of the total physical environment for understanding resource adaptation. The species existing within an environment are not randomly distributed throughout the entire environment, but rather are congregated together into recognizable communities. Species may be present in more than one community depending on the physical substrates which support those communities (Stark and Voohies 1978:23). For example, many fish species can occupy a number of different ecological zones such as estuary, marsh, or swamp depending on their abilities to withstand differences in salinity. The same is often true of certain shellfish. Thus, it is not sufficient merely to list the species present in a total environment or even to list the preferred habitats of those actually encountered at an archaeological site. The sum total of species in an environment defines the resource potential of an area. A comparison of species present in the debris of a site with the resource potential of an area identifies those species selected for utilization by the past culture under study and thus defines scheduling preferences. This can reflect not only other cultural activities which may influence or be influenced by scheduling preferences, but may also reflect seasonality. Certain species in any environment are available on a seasonal basis only and a comparison of species utilized as compared to total species present may reflect a seasonal occupation.

Finally, species utilized may be a reflection of technology. Certain species are almost always more difficult to capture than others given the level of technology available to a particular culture.

Identification of species present in each biotic community identifies not only the species available for exploitation, but also identifies which communities may have been exploited. In order to fully understand resource scheduling it is as essential to know what resources were available that were not utilized as it is to know which resources were exploited.

The survey methodology employed on this project was based upon an identification of pertinent environmental zones on the Base. These zones can best be defined in terms of the presence or absence of water, and then on the kind of water present. To the aboriginal inhabitant of the area water was of prime concern.

While water for drinking was important, water for transportation movement and as a source of food was probably even more significant. The dense undergrowth typical of the coastal area often made overland travel difficult or impossible for the aboriginal and early historic populations so water transport grew to be one of the predominant factors in site location. In addition, many of the resources exploited by these populations were associated with the water in one way or another. Using the environmental zones defined in the above section it was possible to isolate five major environmental zones at the Base.

The first of these zones was the barrier island zone consisting of Brown's Island and Hurst Island. Much of this zone was unavailable for survey because of its use as a bombing range and impact zone. 250 acres surveyed

Second, and perhaps the most significant zone, is the estuarine area which consists of ground found on the mainland side of the Brown Sound, Sallier's Bay, Mile Hammock Bay, Howard's Bay, Trap's Bay, and New River as well as the intertidal zone of several creeks tributary to New River and the sounds. 23,000 acres

Thirdly was recognized the land adjacent to freshwater creeks. These were in most instances the upper reaches of creeks that were intertidal in their lower reaches. 8,000 acres

Fourth to be recognized was land adjacent to natural lakes and ponds. While not numerous on the Base there are a number of these natural lakes and ponds. 750 acres surveyed

Finally, the remainder of the Base can be classed into the pocosin, savannah, forest, and swamp category. This category which is very diverse is typified by a lack of open or moving water useful for transport. 8,000 acres surveyed

Survey Methodology

The methodology involved in the three previous surveys of Camp Lejeune Marine Corps base of the mid 1960's, 1973 and 1977, is similar to that of the present survey. Cultural evidence was searched for by walking over disturbed areas and examining the ground surface. Road systems including hard surfaced, improved light duty, and unimproved dirt tracks were used to provide access to survey areas. In addition to providing access to certain survey areas, the roads themselves served as "transect" lines to implement a random survey strategy. Due to the fact that the majority of the Base is heavily forested and

consequently unsuitable for surface collecting, the survey strategy employed was a combination of random and non-random methods. Recognizing that one always has a much better chance of finding archaeological materials in disturbed areas than in forested areas, all areas of open ground within designated search areas were examined. This approach provided the maximum return of ground searched per man/hour expended.

At the same time, it is always necessary in gathering data to be used in generating a predictive model to approach the survey area in a random fashion to insure that all types of terrain are examined equally and all types of sites have an equal chance of being discovered. To provide this randomness to the survey several strategies were employed. First, the Base was divided into definable search zones determined by the total environmental setting of each zone. These were described above. Equal attention was given to each of these zones. In addition, certain types of roadways were employed as survey transect lines. Because Camp Lejeune is primarily a training facility there exist numerous unimproved roadways used by tracked vehicles and other heavy traffic. These dirt roads are constantly churned and provide excellent conditions for survey and collection. Since most follow straight lines across the Base they can be successfully used as random survey transect lines crossing any and all environmental zones in their path. By following these roads the survey crew was able to examine selected areas with an equal chance of finding sites in several zones.

Several types of open ground were extensively employed as search areas. These include plowed wildlife feed plots which are randomly placed around the Base, helicopter landing zones (generally referred to as Tactical Landing Zones abbreviated TLZ) shoreline erosional areas, and tracked vehicle manuever areas.

It is felt that this combination of approaches insured at one time a statistically meaningful sample of all areas of the Base while ensuring that the maximum possible number of sites was located.

The nature of artifact collection at sites varied according to the number of visible articles. If only a few artifacts were available, then a 100% collection was made to insure the best possible site analysis. If cultural material was excessively abundant, then a partial or random collection was made. At some sites, it was logistically impossible or unnecessary to

make a 100% collection. In the instance of isolated finds, when only one artifact was found, it was regarded as a chance discovery of no great significance.

As of this writing approximately 30% of the total available acreage at Camp Lejeune has been surveyed. Of the total acreage approximately 4.5% has actually been open ground with a very high degree of surface visibility. The total ground examined is, then, considerably higher than would be the case if a strictly random survey had been undertaken with shovel tests employed as the only search methodology.

For each archaeological site found during surveying activities, a North Carolina prehistoric or historic archaeological site form from the Archaeology Branch of the North Carolina Department of Archives and History, was filled out. Abstracts of all located sites are provided in this report. These forms serve to give a thorough site description and to provide a means for transferring the subsequent data to computer storage. A site number was given to each site by the University of North Carolina at Wilmington's archaeology laboratory and these UNC-W members are used throughout this report. Permanent numbers will be assigned by the North Carolina Division of Archives and History at the end of the current project.

Analytical Methodology

After the site descriptions had been recorded on the field forms and the recovered materials returned to the laboratory an analysis of the materials was performed. This analysis was designed to determine the cultural affiliation of each site discovered. Affiliation of archaeological sites in many cases can be determined by the artifacts recovered from the surface. Specific time periods have recognizable cultural markers which, when adequately studied, and is present in sufficient quantity and quality can determine the temporal position of the site. Similarly certain cultures have recognizable features which if present can determine the culture of the group responsible for the site in question.

Once the cultural affiliation had been determined the information was entered on the field site forms. When thus completed the site form data was coded onto computer forms and the information subjected to a computer analysis designed to specify the physiographic parameters of site location by the various cultural affiliations found to be present on the Base.

After completing the data collection activities described above, an extensive set of data management and analysis procedures was executed. The following material summarizes the major components of these two stages of research.

Data Management

In order to prepare the data for computer analysis, the site survey information was keypunched on machine-readable computer cards using a fixed-field format. The resulting deck of data cards was used to create an SPSS (Statistical Package for the Social Sciences) system file. This entailed inputting, documenting, and file saving the raw data collected using the site survey form. Variable names and extended labels as well as value labels were generated to correspond to the format used on the site survey form.

A number of variable tranformations were also generated. All alphanumeric variables were recoded to numeric values for ease of use in statistical analysis. Appropriate value labels were created to document these conversions. In addition, a new variable was computed measuring the distance between each site and the nearest stream. Finally, the multiple responses to the series of the items describing the cultural affiliations of each site were combined into a single summary variable.

After several file editing runs, the completed SPSS system file (data and dictionary) was saved on direct access disc storage at TUCC (Triangle Universities Computing Center) for efficient input during the data analysis activities described below.

Data Analysis

Univariate Analysis. -- In order to provide a reference document for the entire file, as well as to study the basic characteristics of each variable, a codebook of one-way frequency tables and associated descriptive statistics was outputted. These univariate tables displayed the absolute frequency or raw score for each value of every variable as well as the relative and cumulative frequencies of each value expressed in percent. Descriptive statistics were also computed summarizing the central tendency, dispersion, and shape of each variable's distribution of cases. The codebook tables and statistics allowed a check of the reliability and validity of the SPSS data file to ensure there were no errors in coding, punching, and inputting the site survey data.

Bivariate Analysis. -- Further analysis of the site data was accomplished through the use of contingency tables and associated summary statistics. These two-way crosstabulations displayed the distribution of cases arrayed by their position on the values of two variables. The purpose of this joint-frequency analysis was to examine the strength and direction of relationships between three sets of variables: site location, site definition, and environmental setting characteristics.

Crosstabulations were generated to display two covariations between the nine categories of site cultural affiliation and seven measures of site location, definition, and environmental setting: (1) topographic situation, (2) site elevation, (3) type of nearest water, (4) distance to nearest permanent water, (5) elevation of nearest permanent water, and (7) difference in site and water elevations. Marginal and cell entries in each table allowed the analysis of constellations of site characteristics associated within each of the nine categories of site cultural affiliation as well as among all sites as a single group.

Chapter 4
Survey Results

Fifty-eight prehistoric sites, including those recorded before the present study, have been located on Camp Lejeune Marine Base. The distribution of these sites represents a discrete pattern in which only very specific areas contain sites, a pattern repeated throughout Carteret County and the remaining portions of Onslow County.

All sites located thus far are in close proximity to, and have easy access to, either estuarine and tidal water, or to the creeks which are tributaries of these larger bodies. Various types of sites are discernable and these bear a direct relationship to the topography. Those yielding the largest quantities of cultural material, and thereby indicating the most intense occupations, are invariably situated immediately adjacent to salt or estuarian water or on high knolls very near substantial sections of the tributary creeks. Sites near salt water are usually located on flat, dry land and may cover as much as 100 acres. These sites are generally covered with shell fragments to produce shell middens. Those sites located on the knolls adjacent to fresh water streams may be as high as 40 feet above sea level. All these sites lie within 100 meters of wide tributary creeks not far from the upper reaches of the estuaries. The densest concentrations of artifacts at these sites tend to be at the summits of the knolls, thinning out towards their bases. Pottery sherds predominate, associated with stone flakes.

A number of sites represent isolated finds of single artifacts--stone implements, stone flakes or pottery sherds. Again, these are situated on flat ground remote from water or where access to water is unfavorable. It is reasonable to assume that single finds of projectile points or stone implements were simply lost in hunting. There are two sites, however, at which single pottery sherds were recovered. In each of these cases the ground had been greatly disturbed--cleared, scraped, filled--which may have removed most artifact material.

Materials from the site surface collections and Phase II test excavations were assigned a cultural affiliation based on recognizable cultural characteristics. Of the possible cultural affiliations materials were recovered from the Middle Archaic, Archaic Undetermined subperiod, Early Woodland, Middle Woodland, Late Woodland, and Woodland Undetermined subperiod. In addition materials from the historic period were assignable to classifications of Colonial and Historic Period undetermined sub-period.

Each of the recognizable cultural affiliations was then compared with the recorded environmental/topographic/physiographic features recorded at the sites where these affiliations were noted. This analysis produced stastically meaningful models of the environmental/topographic/physiographic parameters within which sites of each affiliation were located.

Middle Archaic 6,000-4,000 BC

The oldest materials found on the Base were of the Middle Archaic period approximately 5,000 to 4,000 BC. The time/cultural markers present for this period were several Morrow Mountain projectile points described and dated by Coe (1964) for the Piedmont region of the state . By analogy the points from Camp Lejeune date to the same period. Three sites were found to have this Middle Archaic culture/time marker present. In all three cases the sites were small or the find isolated. This is not surprising for this area as Archaic period sites are few for the whole coast. It is surmised that this dearth of Archaic sites exists because the rising sea level has drowned the sites. Indeed, only one other archaic site was located by this survey, and its affiliation could not be determined to specific cultural period. This makes a total of four archaic sites located by this survey. Examining the parameters of these sites it can be seen that they were located primarily on first terraces, at 10 feet above present sea level, on freshwater streams, approximately 100 meters from the water which was at current sea level. The sites tended to be approximately 10 feet above the current water.

Early Woodland 1500 BC - 500 BC

The Early Woodland period is marked by the introduction of fired clay ceramics. For the coastal region as a whole the earliest pottery is fiber tempered, but none of this type was encountered by this survey. Indeed, fiber-tempered ceramics are rare in North Carolina as a whole being found usually to the south. Following the fiber-tempered ceramics there is found a somewhat more common type known as Thoms Creek which has been described as early as 1500 BC in South Carolina. This type of ceramic was represented in the current survey collection, but in very limited numbers. More common for the Early Woodland period is a ceramic type known as New River and described in detail by the author in earlier works (Loftfield 1976, 1979). The New River ceramics are generally sand tempered with cord marked surface as the predominant type. Ten sites were identified as Early Woodland on the

basis of having produced either Thoms Creek ceramics or New River ceramics. These sites can be typified as being between 10 and 20 feet above current sea level, between 20 and 50 meters from water which was a freshwater stream. The water was typically at sea level today or up to 10 feet above sea level. Sites were typically less than ten feet above the water on a first terrace situation.

The Woodland period is often thought to be marked by the introduction of horticulture. While domesticated plants may have been tended in the Early Woodland period on the coast there does not seem to be much evidence for it in the site location parameters. A comparison of the Early Woodland site locations shows no appreciable difference from those of the Archaic period. Thus while horticulture may have been introduced in this period it is not probable that it made an appreciable change in the general adaptive strategy or lifestyle of the inhabitants of the middle North Carolina coast.

Middle Woodland

The Middle Woodland period is marked by the production of two new ceramic types. These are the clay tempered ceramics known as Carteret by Loftfield (1976, 1979) and as Hanover Sherd Tempered by South (1960), and the coarse sand/grit tempered sherds known as Adam's Creek by Loftfield (1976) and as Mount Pleasant by Phelps (personal communication 1980). The exact temporal relationship between the Carteret and Onslow series is currently unclear. At any rate twenty sites were located on Camp Lejeune with one of these ceramic types represented. These sites tended to be on first terraces with a smaller percentage on flood plains and an even smaller percentage on second terraces. Sites tended to be at the ten foot elevation or lower although five sites were at twenty feet. The majority are still adjacent to fresh water although six sites were adjacent to salt water. The distance to the water is very diverse with no single distance being predominant. The majority of sites were located on water that was at sea level, but nine sites, or 45% were located on water at an elevation of ten feet.

The majority of sites continued to be located ten feet or less above the water. Middle Woodland cultural materials are the oldest so far found in association with shell middens.

Comparing these statistics with those for the Archaic and Early Woodland above it can be seen that some differences in site location preference have emerged. These differences may reflect

a growing involvement with cultivated plants for the appearance of sites on flood plains is often taken to mean a concern with easily tilled fertile soils. At the same time sites are found which are at higher elevations above water than earlier, and on second terraces. This may indicate a growing specialization in site functions, with some sites located on productive agricultural soils and other sites located in areas more conducive to hunting or specialized collecting. While these inferences are intriguing the current survey was hardly productive enough, or geographically extensive enough to produce sufficient data to even formulate a hypothesis strong enough to warrant testing, let along prove anything.

Late Woodland 500 AD - Historic Contact

The Late Woodland period is marked by the production of shell tempered pottery called White Oak by Loftfield (1976, 1979) and Collington by Phelps (personal communication 1980) and by a gravel tempered series called Onslow by Loftfield (1976) and Cashie by Phelps (personal communication 1980). South discusses a shell tempered series which he called Oak Island (1960) which is similar to the White Oak and Collington, but may be significantly different in detail.

The majority of Late Woodland sites were located on first terrace situations with a smaller percentage on flood plains and other situations. This placement reflects the inability to call the rises adjacent to the salt water sounds and estuaries anything other than first terrace, although they are clearly not first terrace in the classic sense of the Piedmont. Thus this statistic is somewhat misleading. This definition fits this circumstances adequately for the required analysis, but does, obviously, skew the results somewhat. The majority of sites were located at ten feet or less above current sea level, and were evenly divided between salt water and fresh water. The distance to this water is widely diverse. The vast majority of the water, however, was at current sea level. Almost all sites were ten feet or less above water.

The majority of Late Woodland sites were either shell middens per se or had large amounts of shell present in the site debris. The largest and most significant sites on the Base were shell middens located adjacent to the salt water sounds and estuaries. Earlier work by this investigator (Loftfield 1976, 1979) has suggested that these sites were seasonal villages where the primary activity was shell fish collecting during late spring and early

summer. Excavations at several sites on Camp Lejeune (see pp. 78-96) has tended to verify this evaluation in that few subsurface features were located, little dietary bone was encountered. and the sites seem to be composed of small episodic depositions of shell rather than as a continuous occupational deposition.

The shift in site locations visible in the Middle Woodland period seems to be continued in the Late Woodland, but locations adjacent to salt water become more important. Once again there is insufficient evidence in hand to make any conclusive statements and the change may be merely a reflection of differential preservation with some of the lower elevation sites of even the Early Woodland period lost to sea level encroachment.

Other time periods

Other time periods were either not represented in the survey collection or were handled in a different manner. Not represented in this survey were materials from the PaleoIndian, Early Archaic or Late Archaic periods. The PaleoIndian and Early Archaic periods are rarely represented on the outer coastal plain due to sea level rise. The late Archaic is occassionally represented on the coast, but is still rare. Other time periods of the historic era (after European contact and settlement) were represented in the collection. The environmental data collected is of less use in evaluating these periods since historic documents are available for study. The abstracts of site locations of the historic period are better handled from a documentary approach and are accordingly detailed in Part 2.

Survey Summary

The current survey results show that there is a definite pattern to archaeological site location at Camp Lejeune. Water seems to be one of the most important site locational criteria which is not surprising since for the aboriginals and the early colonial period settlers it provided not only a ready food supply, but the primary avenues of transportation as well. Thus all prehistoric sites were located within a short distance of water of some type. This water was always flowing or connected to flowing water. Thus the lakes and ponds on the Base showed no evidence of utilization by the aboriginal population. This indicates that access to fresh water for drinking was not a primary concern in site location.

Site locational parameters change only slightly from the Archaic through the Early Woodland. With the Middle Woodland a new pattern seems to emerge with a greater number of sites located on flood plains or on flat lands adjacent to salt water. There is an accompanying increase in apparent shellfish utilization. Whether these changes are real or only an apparent change due more to differential preservation of sites cannot be answered with the data in hand. Such a determination would result only after extensive surveys of other coastal regions followed by significant excavations at numerous sites, all of which is clearly beyond the scope of the present endeavor.

Sensitivity Map

The computer analysis of data collected in the field and itemized on the site forms was designed to present a composite picture of prominent environmental, topographic, and physiographic features which defined site locations. This analysis was conducted for each recognized cultural affiliation, then for all prehistoric sites, then for all historic sites, then for all sites combined.

For the purposes of generating the map of sensitive areas the statistics for all sites were used. These were collapsed to provide a "best line" determination of the parameters of site location. Briefly described it can be stated that of all sites located in the survey 75.9% were on first terrace situations. This is not comparable to topographic situations from the piedmont or mountains of North Carolina because on the coast the real first terraces are in many instances drowned. In these circumstances the first terrace may in reality be the second or even third terrace as it would be defined in non-drowned topographic areas. For the purposes of this map, however, the first terrace definition is very workable. Of all sites located 39.7% were at an absolute elevation above sea level of 10 feet and another 19% were at 20 feet elevation. Combining all site elevations below twenty feet indicates that 74.4% of all sites are located at or below twenty feet above sea level. In terms of occurrence on salt water or fresh water we find an almost even distribution with 56.9% on freshwater streams and 43.1% on salt water. In terms of absolute numbers this is correct, but it must be remembered that those sites on salt water were generally larger, more productive and had a higher incidence of eligibility to the National Register of Historic Places. Thus the largest number of all sites was on freshwater streams but the largest number of significant sites was on salt water.

Of all sites located 72% were within 100 meters of the nearest water regardless of its salinity. Of these waters 63.8% were at zero elevation today indicating the preference for waters of sea level. Of all sites located a total of 73% were on water of 10 feet elevation or less.

Finally, of all sites located 62.3% were 10 feet or less above the nearest water. This indicates the general tendency for sites to be located near the water without requiring the inhabitants to hike up hills or bluffs to get from the water to the site. This fact is witnessed by the known site locations which are generally on land to which access is easy from the water. High bluffs overlooking New River or other sources of water tended to be uninhabited.

The above parameters define a statistically meaningful percentage of all sites located and were used to generate the map of sensitive areas for Camp Lejeune. The "line" drawn between sensitive and nonsensitive areas was thus based on a number of factors, some of which were held to have more significance than others. In general the line was determined by following on the Base Training Map, contour lines which delineated areas that were first within 100 meters of water, then at elevations ten feet or less above the water elevation, then defining first terraces. In certain area where the "best line" parameters were obviously erroneous accomodation was made for the special circumstances that caused the error. The only area in which this occurred was along the lower reaches of New River and the adjacent sounds where the land is almost entirely low and sites often spaced considerably more than 100 meters from the water.

The "sensitive" areas shown on the map thus represent the geographical regions which are most likely to contain archaeological sites on Camp Lejeune. This area does not necessarily contain archaeological sites. In the final analysis sites are where they are found and many of the sites located within the sensitive area will be of no archaeological significance, while some sites of great significance may be located outside the "sensitive" zone. Notwithstanding these potential discrepancies it is felt that the Sensitivity Map does make a statistically meaningful statement about archaeological site locations. The area shown as "sensitive" is indeed the area of greatest potential for site location while the "non-sensitive" area is indeed highly unlikely to contain significant archaeological sites. The map can thus be used as a planning tool delineating those areas in which future construction, training or other land disturbing activities will have the highest probability of encountering archaeological resources. Con-

versely, the "non-sensitive" areas can be postulated as the areas least likely to contain archaeological resources likely to be damaged by future activities. This should not be taken to mean that no future activities should be planned for sensitive areas. Rather, it should be taken into consideration in the planning stage that there is a greater likelihood of encouraging archaeological remains in the "sensitive" area, and hence a greater possibility that some form of archaeological mitigation will be required should the proposed project actually impact an archaeological site.

Chapter 5
SITES LOCATED

This chapter contains specific descriptions of the sites located during the 1980 field season at Camp Lejeune and incorporates information on sites located previously as well. Site descriptions include locations of sites, conditions at the sites in terms of preservation, erosion, cultural affiliation, and evaluations of the sites' potentials for future research. These data are then used to make a recommendation for management of the cultural resources at the specific sites.

Recommendations for management are based upon a number of factors. These include:

1. Preservation at the site.
   Sites which were well preserved were considered more important than sites which were badly damaged or totally destroyed.

2. Relative age of the cultural materials at the site.
   Twentieth century materials were considered of no value, nineteenth century materials of greater value and colonial period materials of greatest value for the historic period. All prehistoric materials were considered of value but again the older materials were considered of more value because of their relative scarcity and also because they are the least studied for this geographical region.

3. Density of materials at the site.
   Thin surface scatters of materials were considered of no value. With greater concentration of artifacts on the surface per unit of area came a greater significance. Sites which had intact subsurface features or showed great promise of containing those features were ranked as most important.

4. Potential to answer unanswered questions concerning coastal population.

Late Woodland coastal sites with a massive covering of shell mantle have been the most studied on this part of the coast. Therefore they ranked as slightly less important than sites exhibiting other constellations of cultural components. This and other research questions for the coastal area are dealt with in several earlier chapters of this report.

Based upon an evaluation of each site according to the criteria described above a recommendation for management of each was formulated. These recommendations fall into four categories. Most sites were considered as ineligible for inclusion on the National Register of Historic Places primarily because the material was so dispersed or the site so damaged that potential for generating data from research at the site was non-existent or very insignificant. For these sites the recommendation reads as "not eligible for inclusion on the National Register."

Another group of sites were considered to have some potential for future research but not enough to justify inclusion on the National Register of Historic Places. For these few sites the recommendation reads "not eligible for inclusion on the National Register of Historic Places, but warrants protection." The implication of this recommendation is that if the Base land management program can accomodate it, the sites should be preserved. If they can not be preserved the loss would be real, but not extensive.

A third category of sites fell into the recommendation of "eligible for inclusion on the National Register of Historic Places." These sites definitely warrant a protective land management policy. Under this category sites were recommended as warranting protection, or in a very few cases as warranting immediate steps to salvage the preserved data because either erosion or military activities threatened to destroy the sites in a short period of time. It should be noted as a parenthesis to the report that bombing and shelling do not seem to inflict as serious damage to sites as use of the areas for intensive training involving excavations (such as "fox-holes" or the use of tracked vehicles).

The final category of recommendations includes a few sites which were located very late in the field season. A number of these sites seemed as if they would potentially be eligible to the National Register of Historic Places but were located so late in the season that test excavations to determine that eligibility could not be completed. These sites are noted as "potentially eligible to the National Register but needing testing to verify that recommendation.

Chapter 6
SITES TESTED

The second phase of work at Camp Lejeune consisted of opening a number of test excavations at selected sites to determine the potential for eligibility to the National Register of Historic Places of those sites. While not all sites considered potentially eligible for inclusion on this register were tested, those selected were the sites with the greatest probability of containing intact materials of potential research interest. Sites were selected on the basis of gross size, quantity and quality of materials recovered from surface collections, and visible conditions at each site. Large sites were selected on the basis of material concentration. Sites which produced either a large quantity of materials from the surface, or very old materials, or materials that were in other ways interesting were also selected. Finally sites that had specific research interests were examined as were several that had visible subsurface features in immediate danger of loss due to erosion or military activities. Sites were selected against if they had totally eroded into the water or had been excessively damaged by military or construction activity.

Test excavations were conducted at a total of eight sites, each selected for different reasons. This should not be taken to mean that only these eight sites have potential for inclusion on the National Register of Historic Places, or that these are the only sites on the Base which warrant further work. They are, however, the most promising of the sites so far located. Sites selected for testing include ON^{V}138 which is located immediately adjacent to the runway at TLZ Bluebird. The site was noticed because a very large shell-filled pit was eroding from a cut created in building the runway. The pit was thus exposed to almost immediate destruction. Upon excavation it became apparent that this was a historic site dating from the middle of the 18th century and was thus of extreme importance historically to the area.

ON^{V}105 is located just west of the road leading to Mile Hammock Bay at the water's edge. It had been severly impacted by construction of the landing and loading facilities at Mile Hammock Bay, but due to its proximity to ON^{V}234 and the extensive shell midden at the site tests were conducted. This was a prehistoric site.

ON^{V}234, a prehistoric site, was chosen for testing due to its enormous size. This site covers at least one hundred acres

and consists of a thin covering of shell midden with a very high concentration of potsherds and other artifacts. This site was selected because it is by far the largest site on the Base, and, indeed, would qualify as one of the largest sites on the central coast of North Carolina.

$ON^{V}240$ was tested for two reasons. First, it is the only large site immediately adjacent to the salt water that did not have a high concentration of shell. This lack of shell caused the belief that the site may have had a function different from the vast majority of sites located along the salt water that are more typically covered with a large shell midden. The ceramic counts from this site were identical to those from the more common shell midden sites as well. The second reason it was chosen was the large number of exposed subsurface features in immediate danger of destruction from military activity that occurs on this part of the Base, namely tracked vehicle maneuvering.

The final site tested with positive results was $ON^{V}251$. Located at the confluence of French's Creek and New River this was the only site located so far inland on New River that showed any degree of preservation. Other sites located on prominent confluences along New River were apparently totally eroded into the water as sherds could be collected at the water's edge, but not on the dry ground adjacent. At $ON^{V}251$ there were sherds on the high and dry ground, and close investigation revealed a number of exposed subsurface features which made the testing more fruitful.

All test excavations were conducted in two-meter-by-two-meter squares. The soil matrix was removed by flat shovel with all fill sifted through 1/2 inch hardware cloth. Excavation levels generally consited of 5 centimeter depths except where visible stratigraphic zones were present. The floors of all excavation levels were trowled and photographed in both black and white and color. Black and white photographs were taken with a 4" by 5" Crown 28mm lense. Scale drawings were made of all excavation floors which had visible cultural disturbances present at a scale of 1:20. Any cultural features noted were excavated separately generally by bisection with flotation samples collected and field flotated. After excavation these features were refilled with sifted soil and the excavation of the test square continued until a level of clearly pre-cultural sterility was encountered. After excavation all squares were refilled.

Because of the extremely preliminary nature of the testing no effort was made to tie the test squares to any established grid nor was an effort made to tie them to a set datum or bench mark for vertical control.

Chapter 8
Oak Grove

Oak Grove Marine Corps Base, located near Pollocksville in Jones County, North Carolina serves as an auxillary landing base for Marine Corps Base Camp Lejeune. As such it was included in the general suvey of Camp Lejeune, although it is geographically discontiguous with the main base. Its location is still within the greater physiographic coastal plain, but enjoys a slightly more inland situation. As such there is no direct access to estuarine or marine resources, although the Base does afront the Trent River. It is this river which provides the predominant physiographic feature of the base, the river valley. As is typical of most areas along the coast and indeed further inland as well, the majority of archaeological sites were discovered adjacent to the river which would have served as a primary route of transportation, a source of foods, and of fresh water. The portions of the Base not adjacent to the river have all been seriously damaged by Base activities and construction. As a consequence it is the areas along the river which are archaeologically most sensitive.

The survey methodology at this Base was identical to that employed at Camp Lejeune. Analytical procedures paralleled those employed at Camp Lejeune except that no computer analysis of the results was employed due to the small number of sites and the small total acreage involved. It was simply more cost-effective to handle the data by hand.

The archaeological survey of the Oak Grove outlying landing field revealed eight sites, predictably close to the Trent River. The survey was hampered by the lack of an adequate Base map. Those maps provided were incomplete and outdated so that some locational data is imprecise.

The small percentage of open ground at the Base necessitated shovel testing in many areas with an attendant drop in ground area surveyed. Thus several areas that appeared topographically to be desirable for habitation showed no signs of occupation.

The most productive area of the Base lies along the southern perimeter, within 100 meters of the Trent River. This fact was predictable, given the importance of the rivers on the southeast as means of transportation and as a source of food. Along this stretch of the river the most common topographic situation is one in which knolls rise moderately from an initial steep river bank, leveling off, and then gradually sloping towards the North, or the interior of the base. Usually the knolls achieve their highest

elevation within 50 meters of the river bank, however, there are notable exceptions. At JN^V10 the ground rises gradually from the river, not leveling off until 150 meters inland. JN^V13 and JN^V17 the river bank rises over 10 feet and immediately leveling within 5 meters of the river's edge. There are areas where the initially steep rise is not noted. The river edge at JN^V12 is a cyprus swamp where the ground fails to rise substantially until approximately 20 meters from the river.

No sites were discovered any farther inland than 150 meters from the river though routine tests were conducted in these areas. The survey concentrated primarily on the boundary areas of the base since the interior has been completely disturbed with base facilities.

Chapter 7
Recommendations for Further Work

Recommendations for further work fall into several categories based upon the scope of the projected work, implications of existing legal requirements, and the current state of the science in archaeology. The recommendations can be most easily divided into three categories, namely, 1. Plans for Continued Discovery and Recording of Sites, 2. Plans for Protection of Sites Eligible for Inclusion on the National Register of Historic Places, and 3. Plans for Sites Not Eligible for Inclusion on the National Register of Historic Places. As such these recommendations include both prehistoric and historic sites.

Plans for Continued Discovery and Recording of Sites

It must be recognized that the 1980 survey and its antecedent surveys have in no way whatever discovered all the archaeological or historical sites located on Marine Corps Base Camp Lejeune. These surveys were intended to examine certain portions of the Base for purposes of generating a model of site location parameters and were never intended to be thorough and exhaustive. As a consequence there remains a requirement to have an established procedure for recording any archaeological or prehistoric sites that may in the future be located on the Base by Base personnel or their guests or employees or contractors in the course of any activity carried out at the Base. The easiest and most effective method for meeting this obligation would be to follow currently employed procedures. These procedures have been implemented on an informal basis and have included the funnelling of site location data originating on the Base through the Environmental Resources office to personnel at the University of North Carolina at Wilmington. The University personnel have then taken it upon themselves to record these data on appropriate forms and maps, and have forwarded the information to the North Carolina Division of Archives and History or the Research Laboratories of Anthropology at the University of North Carolina at Chapel Hill, both of which are recognized state repositories of site location information. Given the low frequency of site discovery on the Base it would probably not be cost effective to include any archaeological personnel within the Base Environmental Resources Office, although it may be appropriate for one or more of the currently employed personnel to be given some training in recognizing archaeological materials and the laws governing the obligations of the Base towards protecting those materials. This would ensure more adequate protection of archaeological and historical resources on the Base

and would ensure adequate compliance with existing and future laws and executive orders that would affect these resources.

While the current staff and archaeological personnel at the University of North Carolina at Wilmington remain strongly devoted to recording sites at Camp Lejeune and recognize the central North Carolina coast as a major area of research interest, there is no way to guarantee that this relationship will survive for an extended period of time. For that reason, while the existing channel can continue to be utilized as long as it exists, it would benefit the Base to be in stronger position to handle the data and legal requirements connected with historic preservation at the Base by itself.

Plans for Protection of Sites Eligible for Inclusion on the National Register

The strongest obligation of the Marine Corps in regards to historical properties concerns plans for protecting archaeological and historic sites that are considered eligible for inclusion on the National Register of Historic Places. Eligibility for inclusion can be based upon a number of factors which include but are not limited to the research potential of the site, the historical significance of the site, or the architectural or artisic significance of the sight.

Sites located in this survey have been analyzed according to their research potential, historic significance, and architectural and artistic significance. The recommendations contained in this report are only recommendations and do not constitute an actual determination of eligibility for inclusion on the National Register of Historic Places. It is the responsibility of the Base to prepare forms or contract to have the forms prepared requesting a detmination of eligibility. These forms must be forwarded through proper channels and the determination made by the Advisory Council on Historic Preservation. If a review channel has not been formalized by the Department of the Navy, a model for this review procedure has been formulated by the Department of the Army and is contained in Technical Manual TM5-801-1.

Once a determination of eligibility has been made then legal requirements protecting and enhancing the resources at eligible sites come into play. Anticipating determinations of eligibility the following recommendations are made for further work at Camp Lejeune.

Three sites, $ON^{V}286$, $ON^{V}290$ and $ON^{V}294$ were discovered

too late in the 1980 survey to be tested. Each of these sites showed sufficient promise of subsurface features and produced sufficient numbers of artifacts to suggest their eligibility for inclusion on the National Register of Historic Places. A definite statement on potential eligibility, however, would be possible only with some testing at the sites. Test excavations at the site could easily be accomplished in a short summer field season, and it is recommended that funds be made available for the necessary testing to be accomplished. Total cost for this testing would range from $12,000 to $24,000 depending on contractor.

Wallace Creek Mill Dam (Mumford Mill Dam)

Only two sites at Camp Lejeune had above-ground construction left intact. One of these was the dam at the Mill on Wallace Creek. Originally constructed in the late eighteenth century this dam and mill was in constant use until the nineteen-thirties. The dam is in an excellent state of preservation today but is being degraded by Marine Corps training activities which have included excavation of "fox holes" and small fortifications and gun emplacements. It is recommended that all such training activities in the area surrounding the dam cease and that measures be taken to repair the existing damage and stabilize the dam to prevent further degradation or erosion. This work will not require professional personnel beyond an on-site advisory tour to indicate the areas of damage and recommend steps for mitigating the adverse impacts. Actual ground work can be performed adequately by Base personnel.

The Cray Cemetery

The other site with extant above-ground construction was the Cray Cemetery. Personnel from the Base Environmental Protection Office showed the survey personnel this interesting colonial site. The cemetery was surrounded by a brick wall which had been partially robbed by Base personnel in an earlier period. The cemetery has historical significance at the local and state levels and as an existing evidence of a particular style of architecture. It has been recommended as eligible for the National Register of Historic Places and warrants immediate protection from further degradation. It is recommended that the location of this cemetery be made known and that steps be taken to preclude military activity in the immediate vicinity. This should include provisions that will ensure that no further robbing of bricks occurs.

ON^V240 Jarretts Point

The site at Jarretts Point numbered ON^V240 is one of the most important sites on the Base in terms of immediate research interests by the archaeological community. It is also the site suffering the most severe on-going damage from use by the Marine Corps for training activities. These activities include a helicopter landing and lifting zone and a tracked vehicle maneuvering area. The site is currently badly damaged with further damage occuring regularly. It is recommended that immediate steps be taken to mitigate the adverse impact to the site by recovering the remaining archaeological data from the ground. When data recovery is complete, the site can be eliminated from those sites eligible for the National Register of Historic Places and future activities by the Marine Corps will not constitute damage to the site.

Mitigation by salvage can be conducted in several ways. It would be possible to excavate the site rather quickly by contracting with a qualified archaeological group to conduct immediate salvage work at the site, the extent and intensity of which would need to be negotiated by the Department of the Navy, the Department of Interior, and the contractor. It is recommended by this investigator that the entire area of concern be uncovered by use of heavy machinery (such as road graders) to expose surviving subsurface features, plot the features and excavate them.

Considering the several areas of concern at ON^V240 it is suggested that approximately six months of field work by a six-person crew would adequately recover the existing data. This would then be followed by at least six months of laboratory analysis. Total cost for a project of this scope would fall within a range of $65,000 to $120,000 depending on the contractor.

Another possibility for mitigation of this site would be to cease military activity at the site for several summers and allow the excavation to be conducted by personnel from one or more universities that might be interested in the data that would be recovered. While this program would take longer than the program outlines above it would probably have a much lower dollar cost. It is estimated that approaching the site in this fashion would require two summer field seasons and cost approximately $30,000 to $60,000 again depending on the contractor.

The third possibility for mitigation at this site would be to eliminate military activity altogether.

Evaluating the above recommendations would lead one to several

conclusions. Only Base personnel can determine the advisability of ceasing military activity at the site altogether, for several years, or for only a short period of time. From an archaeological perspective the option of ceasing military activity altogether is the most desired option. If that is not feasible then the prolonged excavation procedure is preferred as it provides time for reflection and interim analysis of data. The quick salvage is least preferred as it necessitates rapid work with no time for interim analysis or reflection on results.

ON^{V}138

This colonial period historic site showed some evidence of intact subsurface features, but the extent of the site could not be determined in the 1980 survey. The site is actively being damaged through erosion caused by maintainence of the landing strip at TLZ Bluebird. It is suggested that serious steps be taken to stabilize the area. Salvage excavation may be in order if this area is to continue to see heavy military activity. The three approaches discussed for ON^{V}240, above, may be applied here as well.

Other Eligible Sites

No other sites considered eligible for inclusion on the National Register of Historic Places that were visited in 1980 showed evidence of active degradation by military activities. Indeed, most sites showed that activities were conducted at the sites which tended to stabilize and preserve them. The activities included bulkheading at sites that were actively eroding such as ON^{V}251, reforestation such as at ON^{V}234, or use as wild-life feed plots. While the use as feed plots does entail some plowing, it is not thought that the plowing activity is actively degrading the sites. The reservation of these feed plot areas from other military activity is a benefit in that site damaging activities are thus precluded.

It is recommended that as long as these enhancement activities are continued at these eligible sites, no additional precautions need be taken in their behalf.

Plans for Sites Not Considered Eligible for Inclusion on the National Register

The Marine Corps is not legally required to protect sites

that are not considered eligible for the National Register of Historic Places. However, if any of these sites can be protected without expenditures of any funds or without compromising any existing programs at the Base, such protection should be extended. This is considered especially important in the case of those eight sites which were considered to be ineligible for the National Register but which seemed to have some potential for future research. These sites are $ON^{V}105$, $ON^{V}259$, $ON^{V}271$, $ON^{V}275$, $ON^{V}279$, $ON^{V}284$ and $ON^{V}291$.

An Archaeological and Historical Reconnaissance of

U.S. Marine Corps Base, Camp Lejeune.

Part 2 The Historic Record

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Conducted Under the Auspices of the Department of the Navy

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Abstract

Research into the civilian history of the Camp Lejeune study area, conducted by Coastal Zone Resources during 1980, has resulted in the accumulation of a large body of data relating to the area and heretofore unknown. The rate of data yield so far exceeded expectations that the time budgeted for composition of the report proved greatly inadequate to cover the entire span of the civilian history of the study area in an exhaustive manner.

Because the most significant new data pertained to the Colonial period, treatment of that period has received the most detailed attention in this report. Of particular interest is the new information relating to the early settlement of the area, the early courthouses, the Colonial wars, and Colonial leaders.

Since virtually all standing structures in the study area were destroyed in 1941, the evaluations made in this report address themselves to the archaeological components which hopefully have survived and are associated with some of the study area's most important historical figures. Eighteen specific sites and two classes of sites (naval stores industrial sites and representative dwelling sites of the poorer classes) are evaluated in this report as potentially eligible for nomination to the National Register of Historic Places. Five recommendations for additional research include (1) further investigation of the potentially eligible sites, (2) further historical research concentrating on problem areas, (3) a survey of underwater archaeological resources, (4) an oral history project to interview former residents of the study area, and (5) an historical architectural study based on the photographs now in the custody of the Public Works Office at Camp Lejeune.

The historical research phase has made a significant contribution to an increased knowledge of Onslow County history. In addition, a historic sites map for Camp Lejeune has been prepared as an integral part of the report.

I. INTRODUCTION

From June through December, 1980, Coastal Zone Resources Division (CZR) of Ocean Data Systems, Inc., under subcontract agreement (Purchase Order #209663) with the University of North Carolina at Wilmington (UNC-W), performed the detailed historical research resulting in this report, a research document required in connection with a cultural resource study being carried out by UNC-W at Camp Lejeune, North Carolina, and New River Air Station (Helicopter), North Carolina, under Department of the Navy Engineering Contract N62470-79-C-4273. The location of the project area is shown in Figures 1 and 2. (Figure 2 is enclosed in a pocket inside the back cover.)

The purposes of this historical research and the resulting report were (1) to gather detailed historical data on the historic role of the Camp Lejeune area from earliest settlement to the time of military acquisition in 1941, (2) to identify the more important historic sites (see Figure 2) within the Camp Lejeune Military Reservation, (3) to produce an overview placing the study area within its historical context, (4) to generate a detailed history of the study area to serve as a scholarly reference for future professional studies, and (5) to formulate recommendations for cultural resource management and any required further historical studies/ investigations.

Under the scope of work, the historical research was to concern itself with the history of the area contained within the present boundary of the Camp Lejeune Military Reservation, having a total land area of approximately 85,406 acres, and excluding a water acreage of 15,765 acres. In terms of the period to be researched, the study was to confine itself to the years from earliest exploration and settlement to the conclusion of the area's civilian history in 1941.

In the process of the research, the study utilized published, manuscript, photographic, cartographic, and oral sources of data. The more specific types of sources included court minutes, deeds, wills, plats, tax records, inventories, minutes of the board of county commissioners, land grants and entries, estate records, guardians' accounts, legislative papers, military records, correspondence, agency reports, governors' papers, petitions, miscellaneous loose records, depositions, maps, charts, microfilm publications, records of Revolutionary War prize cases, post office records, vessel registrations, census schedules, customs records, private collections, published books, magazines and

journals, newspapers, scholarly reports, theses and dissertations, and personal interviews.

Local, state, and national repositories of pertinent records were visited for the purpose of pursuing the in-depth research. The most important repositories (archives and collections) visited include the Onslow County Court House, Jacksonville, NC; the North Carolina Division of Archives and History, Raleigh, NC; the Land Grant Office, Raleigh, NC; the National Archives, Washington, DC; the Library of Congress, Washington, DC; the East Carolina Manuscript Collection, East Carolina University, Greenville, NC; the Southern Historical Collection and the North Carolina Collection, the University of North Carolina, Chapel Hill, NC; the Duke University Manuscript Collection, Durham, NC; the Hayes Collection, a private collection normally at Edenton, NC, but at the time on loan to the Southern Historical Collection for indexing and microfilming; the State Museum of Natural History, Raleigh, NC; the State Library, Raleigh, NC; the Carteret County Court House, Beaufort, NC; the Mariners Museum, Newport News, VA; the UNC-W Library, Wilmington, NC; the personal library of Mr. Tucker R. Littleton, Swansboro, NC; land records and survey maps in the Public Works Office, Marine Corps Base, Camp Lejeune, NC; and personal interviews conducted at Jacksonville and Swansboro, NC. In addition, the principal investigator freely contributed to this project information from his personal research files consisting of over 20,000 notecards on local history compiled by himself over the past 20 years and with the assistance of Mr. Roger E. Kammerer, Jr., in recent years.

The research performed by CZR encountered several very real problems, some of which were anticipated. Believing that the intent of the survey was to conduct a reasonably exhaustive research and produce a definitive history, CZR had originally proposed a considerably larger number of man-hours for the research than was ultimately accepted under the terms of contract. From the outset, it became apparent that the vast holdings of the major repositories confronted the researcher with a volume of available sources which overwhelmed the effort in view of the constraints on time and budget. Consequently, the investigation had to become much more selective of research sources and documents than was desirable in light of the broader research goals.

Still another problem encountered and, to some extent, anticipated was the lack of surviving landmarks as reference points. The removal of above-ground structures following military acquisition of the land virtually negated all efforts to pinpoint precisely the locations of former historic structures and sites. The problem of locating potential historical archaeological

resources was further compounded by problems inherent in the source documents themselves, problems involving vague location descriptions of land and improvements associated therewith, the use of obsolete place names no longer identified on existing maps or known to living former residents of the area, and occasionally conflicting information. In addition, the duplication of some place names--particularly streams and creeks--left many locations only tentatively identified.

The result is that many of the sites identified in Figure 2 are mere approximations. Other sites are yet unmapped because the vagueness of the presently available information renders any venture to pinpoint the locations too risky. It has been deemed better to leave such sites off Figure 2 than to contribute to the growing volume of historical misinformation already plaguing the researcher into Onslow County history. To insure greater accuracy in cartographically locating the area's historic sites, the principal investigator spent time touring the area under the guidance of former resident of the study area and local historian, Mr. K. B. Hurst, of Jacksonville, NC.

The focus of the research effort has been to discover and to describe the characters, the circumstances, and the events determining the social, cultural, and economic history of the project area. In so doing, considerable attention has been paid to the role of the various ethnic and national groups included in the area's historic population. Research into the area's historic utilization of its natural resources has sought to identify the major economic activities, the diversity of occupations, the comparative value of the utilized resources, and the influence of the economic factors on the overall social and cultural aspects of the area's history. Additional attention has been paid to historic settlement patterns in the area, as well as to patterns of immigration and emigration.

A major effort was made to identify a variety of historic sites and to include among the identified sites the former residences of the area's principal historical figures. Further effort was aimed at identifying the major currents in the history of the study area, its most significant events, activities, and personalities. After assessing the nature and importance of the local history, the investigation has endeavored to determine the role of the project area in the history of the state and the nation, noting both the study area's similarities and differences in comparison with the dominant character and trends of the larger historic setting.

Considering the allowed time and budget, the results of the research have been very gratifying. Answers to some long-unsolved questions have been found, including clarification concerning the county's first court house. Not the least important is the fact that this report has produced the first detailed mapping of the area's identified historic sites. Perhaps most important, this investigation has undertaken the most extensive original research into the area's history ever attempted, and the result has been the preparation of a professional historical work comprising a major contribution to local history relating to the Camp Lejeune area and, for that matter, Onslow County.

In the conduct of the research, Wesley K. Hall and Mary Ann Stephenson each devoted a total of better than two weeks to the examination of pertinent records. Almost six months' time was devoted to the research phase by Tucker R. Littleton, principal investigator/research historian for the project. Thomas Clemmons prepared the graphics under the guidance of Mr. Littleton, who is the sole author of this report.

II. EVALUATION OF PREVIOUS HISTORICAL RESEARCH

Except for minor, scattered articles relating either totally or partially to the study area, only two previous historians of any consequence have delved into the civilian history of the Camp Lejeune Military Reservation or written upon that subject. Like the county at large, the present study area has been quite neglected by historians at the regional and state levels. Serious efforts to rescue from oblivion or permanently record the notable events and persons of Onslow County's history have occurred only during the present century.

Though Dr. Cyrus Thompson was appointed the county's first official historian, he left no permanent or noteworthy record of his knowledge of local history or of any research conducted by him. The first meaningful, original historical research and writing on the subject of Onslow County history was undertaken by the late Fitzhugh Lee Morris, former official genealogist for the Sons of the American Revolution in North Carolina. Though Morris concentrated on information contained in the official records of the county and state and devoted his major research to genealogical questions, he is due great credit for also researching some of the major themes and events of Onslow history and for laying a solid foundation upon which subsequent local historians have built. In his purely historical research, Morris put major emphasis on the Colonial history of Onslow County and the lives of the county's most prominent leaders and founding families. His writings relating to the study area were incidental to his interest in the history of the county as a whole and his special interest in such families as the Sneads, Dudleys, and Wards. Morris authored numerous articles which were contributed to several newspapers in North Carolina, especially a series on county history written for the Onslow Record in the late 1920's. His manuscript history of the Dudley family, with considerable material on such allied families as the Sneads, is in the possession of the Genealogy Section of the State Library. Morris acquired a reputation for detailed original research, meticulous analysis of his data, and an extreme degree of accuracy (Brown 1960:368). Perhaps the most important results of his historical research have been preserved in J. Parsons Brown's The Commonwealth of Onslow: A History, in which some of Morris's material has been included virtually verbatim.

Because he was a pioneer in Onslow County history, Morris did not succeed in writing on the broader subject range of county history, nor did he collect and publish all his historical writings under one cover. He did, however, set the example for later research, and he appears to have been the first to make extensive

use of the county court minutes as a valuable source for county history of the period 1732-1868. Unfortunately, Morris's exceedingly valuable notebooks on historical and genealogical research disappeared shortly after the death of the last of his four brothers and sisters who survived him. Though never officially honored with the title, Morris was nevertheless in fact Onslow's first county historian.

The second person to research and write upon the history of Onslow County, and thus the history of the present study area, was the late Joseph Parsons Brown, whose published work has been referred to above. Because Brown could build upon and expand on the earlier work of Morris, he was able to treat the county's history more broadly and somewhat more comprehensively. However, the fact that Brown was forced to conduct his additional research in his spare time and at his own expense slowed his progress and kept him from being able to write a truly adequate or definitive history of Onslow County. Considering their limitations and circumstances, both Morris and Brown performed a very creditable work and have left future researchers greatly in their debt. Until the present research and writing of this report, Brown's history remained the single most important published account of the civilian history of the Camp Lejeune area. Brown's major contributions to the history of the study area lie in his chapters on the formation of the county, the Colonial period, the Revolutionary War, the Civil War leadership, and churches of the area.

In comparison with Morris, Brown does not enjoy quite the same reputation for accuracy. Though in a few instances misled by the primary sources themselves, Brown is primarily guilty of inaccuracies which have crept into his history through his uncritical acceptance of oral tradition and of those portions of his book contributed by other writers. A major fault of the work is its lack of logical or chronological organization. The documentation and indexing are woefully inadequate. Nevertheless, 20 years after its publication, Brown's book is the best treatment of Onslow County history presently available. Because many important sources of information were not researched, Brown lacks a lot of detailed history on a number of subjects, and some aspects of local history are either untreated or only slightly addressed. Needless to say, the status of earlier historical research has made the present research project far more necessary and its findings a more valuable contribution to the on-going quest for a comprehensive and authoritative history of the study area and of Onslow County.

III. METHODOLOGY

Several facts had great bearing on the development of the methodological approach to this research project. First of all, very little attention--either at the state or local level--has ever been paid to Onslow County history. With the exception of the two county historians discussed in Chapter II, virtually no one else has published anything about the history of the Camp Lejeune area--at least nothing more than brief articles dealing either very superficially with the county's history or else very specifically with a single, narrow subject. The lack of good published sources meant that the present research would have to rely extraordinarily on primary sources--official documents and manuscript collections.

In addition, no local newspaper for Onslow County appeared before the last decade of the nineteenth century, and there are no extant copies of the several earliest newspapers in the county. For that reason, the important newspaper sources of local historical data would have to come primarily from newspapers published in Wilmington, New Bern, and Raleigh. The remoteness of those publications often resulted in many newsworthy events going unreported and certainly inadequately or inaccurately covered at times. It was realized that the lack of a good local newspaper for almost the first two centuries of the county's existence would certainly create many information gaps in the search for the types of information not normally derived from official records. As a compensation for the absence of a local newspaper, greater attention had to be paid to publications in nearby counties, to business directories, and various types of reports.

Furthermore, much misinformation about the county's history has been published in the available printed sources, and even the official county records contain not a few errors which have crept in through the recopying of old and dilapidated grant records and deed books. The existence of such inaccuracies required constant vigilance and critical evaluation of the collected data. It was evident that the research would at times necessitate great detail and re-evaluation of the enlarged body of information. Therefore, areas of known or suspected erroneous information were targeted for special research effort.

In formulating the research strategy, the principal investigator determined to base the initial research on the broadest possible diversity of sources, consistent with the goals of the project and the established constraints of budget and time. Examination of a broad range of sources, it was reasoned, would

accommodate the following: (1) maximum immediate identification of potential sources, research materials, and repositories; (2) assessment of the relative importance of the identified data sources; (3) determination of which sources should receive major subsequent investigation; (4) determination of the number and nature of these unused or minimally used sources which should be examined in any second or continuing phase of this project; and (5) a more reliable basis for estimating time and funding requirements in the event follow-up research should be recommended. A reasonably complete list of the diversified types of sources sampled has been given in Chapter I.

After sampling the variety of research sources, the principal investigator endeavored to formulate a basis for selecting those sources which should receive major utilization. Preparatory to this selection, an effort was made to determine to some extent those specific subjects or historical periods needing the greatest research attention to remedy deficiency in earlier treatment. In addition, an effort was made to identify those important sources most inadequately used in earlier research efforts. Thus the formula for selecting major sources took into consideration the following factors: (1) value or importance of the kind of information contained therein, (2) amount of previously unused but pertinent data contained therein, (3) rate of data return for time required to research the source, (4) reliability of the source, (5) immediate applicability of the data to the study area, and (6) accessibility of the source or repository.

At this point in the development of the research design, it was decided that, consistent with the research tasks and objectives specified in the scope-of-work for the Camp Lejeune project, the most extensively researched sources should be the official records--primarily the court minutes, deeds, and wills recorded for Onslow County. Secondary research emphasis appeared to be merited by two types of published records--the printed volumes of The Colonial and State Records of North Carolina and eastern North Carolina newspapers of the eighteenth and nineteenth centuries.

With respect to the subjects or historical periods which should receive the primary research focus, it was decided that the period from 1713 to 1815 should claim the greatest attention. There were several considerations which led to this conclusion: (1) the Colonial period (from colonization to 1776) is foundational to any study of the county's history, (2) the later history of the study area can be adequately understood and appreciated only in the light of a proper awareness of earlier historical developments and cultural phenomena, (3) the period

from 1713 (when the area was opened up for settlement following the end of the Tuscarora War) to 1815 (when the War of 1812 ended) was undeniably the most historically significant period in the entire history of the study area, (4) the eighteenth century coincided with the period when Onslow and the study area played the most important role in the history of the state and nation, (5) the eighteenth century appeared to be marked by the greatest industrial diversity and economic importance of any single segment of the area's history, (6) the years 1713-1815 appear to be the most inadequately researched and poorly understood period in the study area's history, and (7) most of the published misinformation on Onslow County history relates to the eighteenth century.

Specific subjects which appear to have received too little previous research attention include historical treatment of early settlement and settlement patterns, industrial activities, social history, the role of ethnic groups, local government administration and the rise of a ruling class, patterns of migration, agricultural history, maritime history, the growing interest in internal improvements, development of educational institutions, events leading up to the Revolution, and the wars of the late Colonial period such as the War of Jenkins's Ear, the French and Indian War, and the War of the Regulators. Even in nineteenth-century history, inadequate attention has been paid to the War of 1812, the primacy of the planter class, the growth of small communities and post offices, epidemics, natural calamities, deepening social problems, the character of local politics, the decline and ultimate demise of the naval stores industry, the lumber boom, the Secession Movement, the Civil War, the effects of the Civil War and Reconstruction on the quality of life, and the area's entrance into the twentieth century.

Quite admittedly, the present study has had neither adequate time nor funding to explore the above topics to the full extent desirable. Nevertheless, the need for research in those areas was recognized near the outset, and the major research effort was designed to contribute as much new information on those subjects as possible within the set limits of this contract.

Since the present historical research project had contract limitations on budgeted time and funding, the project's possible accomplishments were limited by the same factors. The result, nevertheless, has been to increase greatly the amount of available historical information relating to the study area, to fill in many gaps, to expose previously published historical errors, and to present the area's history in the light of its contextual evolvement. Any deficiencies remaining in the product of this

research project can be remedied only by the provision of ample future time and funding to bring the research to a satisfactory conclusion--the exhausting of all available sources that ought reasonably to be examined and utilized.

In the conduct of the research, all essential, pertinent information was abstracted from the utilized sources and transferred to 4" x 6" note cards. The note cards were given subject headings and dated either with the date of occurrence, if known, or the date when the information first appeared in writing, if the former date was not known. Each note card included its proper documentation. For the reader's convenience in verifying historical information, it was decided in cases of multiple sources of the same data to reference the most accessible source. As a general rule, published sources were usually cited instead of the less accessible manuscript sources except in cases where the manuscript or primary source contained important data not included in the published source. For the foregoing reason of greater accessibility, most information derived from the Onslow County deeds and wills is documented by the appropriate reference to Zae Hargett Gwynn's Abstracts of the Records of Onslow County, North Carolina, which by now can be found in virtually all the good public libraries in the state.

Upon completion of the note-taking portion of the research, the principal investigator organized the resulting file of cards alphabetically by subject and chronologically by period. Once all the data had been grouped by related subjects and delineated by historical periods, the assembled facts were reviewed, analyzed, and synthesized in final form to permit composition of the report to begin.

As a part of the research and the report preparation, time was devoted to the production of a historic sites map for Camp Lejeune. Some of the problems encountered in the effort to determine precise site locations are discussed in Chapter I. If the findings relating to any one historic site were inconclusive as to approximate location, that site was intentionally not indicated on the map (Figure 2). The principal investigator believes that when reasonable doubt exists the historian or writer should not make positive assertions or insinuate the reliability of assumptions since it is much easier subsequently to add new information after it has been confirmed than to recall hastily disseminated historical inaccuracies. For that reason, several sites for which an "educated guess" could have been made have been left out of Figure 2, awaiting future clarification and more conclusive evidence. In addition, to aid in the location of geographical place names appearing in the historical text, the author of this report attempted to add to Figure 2 the names of several creeks or branches, points, and landings not identified on the six topographic quadrangle maps which served as the base map for Figure 2.

V. EVALUATIONS AND RECOMMENDATIONS

A. Evaluations

The virtual eradication of all standing structures in the study area immediately following military acquisition of the land makes it certain that the only surviving evidences of historic utilization in the area are archaeological in nature. Therefore, this evaluation section addresses the archaeological components associated with the more significant historic sites in the study area. The significance and potential eligibility of such archaeological components for inclusion in the National Register of Historic Places will be discussed individually in the following paragraphs. Difficulties associated with pinpointing locations of the historic sites have been discussed in Chapter I. The following evaluations, therefore, are contingent upon a successful effort to locate physically the archaeological components and are based upon the assumption that those components have not been impacted to the point of destroying the scientific data accumulated in the ground.

1. Sites Associated with Important Leaders

a. Edward Marshburn

If Marshburn's homesite can be pinpointed, there should be archaeological materials dating from as early as 1730-1740. Because of Marshburn's distinction as the second known teacher in the history of North Carolina, his role as deputy clerk of the North Carolina Court under Chief Justice Christopher Gale, and his prominence in the early affairs of Onslow County, his plantation building sites should be eligible for inclusion in the National Register at the state and local levels of significance. In addition, any recovered data would greatly improve the present knowledge of the material possessions and living standards of a man of his social status in the first years of the county's existence. Specifically, archaeological investigation of Marshburn's dwelling site could potentially shed much light on the circumstances of a prominent, cultured gentleman in a Colonial pioneer setting.

b. Col. Edward Ward, Sr.

If the site of Col. Ward's plantation home can be identified, there should be cultural materials present from the period 1735-1765. Because of the large and prominent family descended from Col. Ward, the long dynasty of county and state

political leaders founded by him, and his considerable wealth and prominence in the naval stores industry, the archaeological component associated with Col. Ward's plantation should be potentially eligible for inclusion in the National Register at the local level of significance. Archaeological investigation could potentially yield valuable information about the quality of life among Onslow planters in the late Colonial period.

c. Col. William Cray, Sr.

As a merchant, brickmaker, naval stores manufacturer, and long-term military and public official, Col. Cray should have left important archaeological clues shedding much light on many aspects of local history between 1749 and 1778. Because of his prominence in Colonial and state government, his leadership role in the War of the Regulators and the Revolutionary War, and his position as president of the Council of State, Col. Cray's homesite should be potentially eligible for inclusion in the National Register at the state and local levels of significance. Archaeological investigation of Cray's homeplace should reveal valuable information on Colonial and early Revolutionary life and the lifestyle of a public official of the times.

d. Col. Henry Rhodes

As a prosperous planter, keeper of an ordinary, grist mill owner, and a state and county leader, Col. Rhodes also should have left valuable archaeological data associated with his residence and mill site. Like Marshburn, Col. Rhodes appears to have been buried on his plantation in a private graveyard that became "lost" and was therefore not moved when the land was acquired by the government. If it can be located, the archaeological component dating to Col. Rhodes's time should produce very useful data relating to the late Colonial and Revolutionary periods. Because of his prominence in the Revolution and in early state government, Col. Rhodes's homesite should be potentially eligible for inclusion in the National Register at the local level of significance.

e. Col. George Mitchell

As a military and political leader and a planter and mill owner, Col. Mitchell probably possessed the material culture typical of his social class in Onslow County at the time. Because he lived until 1791, Col. Mitchell may have left archaeological evidence that would enlighten the study of Revolutionary and early Federal period history. Because the several leaders

discussed in this chapter lived overlapping life spans, yet gradually moved closer to the present, a comparison of their recovered material culture could conceivably offer a continuum of data reflecting the various changes in the social and economic history of the study area over time. In view of Col. Mitchell's military and political prominence, any archaeological component associated with him would be potentially eligible for inclusion in the National Register at the local level of significance.

f. Robert Whitehurst Snead

Snead's role as a wealthy and cultured planter, a fairly large slaveowner, a merchant, a naval stores manufacturer, a political leader, and the owner of the first cotton gin in the county's history combine to give significance to any archaeological component associated with him. Such a site should be potentially eligible for inclusion in the National Register at the local level of significance.

g. Gen. Edward Ward

Typical of Onslow's antebellum aristocracy, Gen. Ward was a large planter and slaveholder, an influential politician, a mill owner, and a prominent military official. Unlike most of the other leaders, Gen. Ward left some archaeological sites identified with him and having their locations pinpointed. The ruins of the brick walls to his cemetery, though in a plundered state, are still evident; and his residence is reported to have been located between the cemetery and the riverbank--perhaps nearer the river than the cemetery. Because of his connection with early defense plans for the War of 1812 in North Carolina, his long political career, and his generalcy in the North Carolina Militia, any sites associated with Gen. Ward should be potentially eligible for inclusion in the National Register at the local level of significance.

h. Dr. Edward W. Ward

As a large cotton planter, an advocate of Southern Rights and Secession, a local cultural leader, a prominent physician, organizer of a Civil War company from Onslow, and a promoter of public school education, Dr. Ward's life spans the antebellum period, the Civil War, Reconstruction, and the closing years of the 19th century. Archaeological investigation of his plantation should yield considerable information regarding life in Onslow for most of the 1800's. His pre-eminence in the cultural life of the study area should make any sites identified with him potentially eligible for inclusion in the National Register at the local level of significance.

2. Sites Associated with Wealthy Planters

a. Joseph French, Sr.

French died during the late Colonial period, having been a successful planter and naval stores manufacturer. He also operated an early ordinary. His house site, which was evidently the site of his ordinary, should contain valuable archaeological data and should be potentially eligible for inclusion in the National Register at the local level of significance.

b. Robert Snead, Sr.

Snead lived through most of the 18th century, dying in 1802. He operated the best known ferry and ordinary in the study area. In addition, he was one of nine people in the colony authorized to forward the mail when the first post road was established. He appears to have been buried in a family cemetery that has been "lost" and therefore was not moved when the military purchased the land. Because of Snead's varied and important activities, any site associated with him should be potentially eligible for inclusion in the National Register at the local level of significance. His ordinary site, if located and excavated, could reveal much about Colonial ordinaries in North Carolina.

c. William Starkey Hill

Because of his large cotton plantation, grist mill, and cotton gin on Holmes's Point, Hill's house site and industrial sites could produce considerable information about the early antebellum period. His descent from some of the wealthiest and most highly educated families in the White Oak River area suggests that archaeological materials on sites associated with Hill could provide an excellent commentary on the lifestyle and material possessions characteristic of the county's most successful planters. Archaeological sites identified with Hill should be potentially eligible for inclusion in the National Register at the local level of significance.

d. David Ward Simmons, Sr.

Simmons is identified with the Federal, antebellum, and Civil War periods in Onslow. His large plantation on Paradise Point was the source of his considerable wealth. Because he was representative of the large slaveholding planters in Onslow and prominent in local affairs, Simmons's plantation could possibly produce sites potentially eligible for inclusion in the National Register at the local level of significance.

e. Col. William Montfort

Member of one of Onslow's most prominent families, Col. Montfort was active in the Civil War and was likely the owner of a salt works during the Civil War. His plantation on Montfort's Point was owned by William Cray, Jr., in the late 1700's. Montfort's prominence and prosperity should have left rich archaeological resources on his homesite. If so and if found, the site may be potentially eligible for inclusion in the National Register at the local level of significance.

f. Thomas A. McIntyre

"Onslow Hall," the 27-room mansion built near Town Point by McIntyre in 1892, was described as one of the South's oustanding showplaces. His farm was described as a "model farm" where all kinds of livestock and many varieties of vegetable crops were raised. As a New York financier and builder of the railroad between Wilmington and Jacksonville, McIntyre had a tremendous impact on the economic development of Onslow in the late 1800's and early 1900's. His farm contained a cotton gin, stables, living quarters for the better than 100 people who worked on the farm, elaborate recreational facilities, and other signs of opulence. At first a part owner, McIntyre later became sole owner of the Onslow Lumber Company. Driveways lined with magnolia trees and archaeological evidence of structures may still be seen on McIntyre's former 2600-acre estate. From 1919 to 1941 the Town Creek Farm was owned by C. C. Coddington. Because the estate was unique in the area and because of McIntyre's economic impact on Onslow County, the archaeological component of McIntyre's Town Creek estate should be eligible for inclusion in the National Register at the local level, and possibly the state level, of significance.

3. Sites Associated with Industrial Activities

a. The Ratliff Grist Mill

Built by Charles Ratliff in the 1730's, this mill was later owned by Christian Heidelberg and others. Its location on what later came to be called Rhodes's Mill Creek suggests that it eventually was owned by Col. Henry Rhodes. Because the mill was one of the earliest in the county, an archaeological investigation of the site could potentially reveal very interesting details about the design and operation of early mills in the area. If found and identified, the mill site should be potentially eligible for inclusion in the National Register at the local level of significance.

b. The Mitchell-Ward-Montford Grist Mill

Built by Col. George Mitchell in the late 1700's, the mill was subsequently owned by Gen. Edward Ward and Dr. William J. Montfort, Sr., and operated into the 20th century. Archaeological remains of the mill can still be seen in Wallace's Creek. Because of its long operation and association with prominent citizens, the mill site should be examined archaeologically. It has potential eligibility for inclusion in the National Register at the local level of significance.

c. French's Mill

This grist mill on French's Creek was erected by Dr. William French and was the source of the name for French's Mill Post Office when it was established in 1823. The site retains archaeological evidence of the mill and deserves further investigation. This mill, too, had a long operation and should be potentially eligible for inclusion in the National Register at the local level of significance.

d. Tar Kiln Beds

Because of its extensive naval stores industry, the study area should have abounded with tar kiln beds. However, they are especially susceptible to destruction by subsequent farming, land-clearing operations, and--at Camp Lejeune--by military training exercises. Due to the vital importance of naval stores to England and to Onslow's Colonial economy and North Carolina's pre-eminence in that industry, representative tar kiln beds should be considered potentially eligible for inclusion in the National Register at the local level of significance. In addition, a well-preserved and properly interpreted tar kiln bed would make an interesting educational display for the military and their dependents.

4. Sites Associated with the Poorer Class

As occasion may permit, it would be desirable to examine archaeologically some homesites representative of the poorer class among the early settlers, antebellum and Reconstruction period residents, and especially some slave cabin sites. For the most part, the lifestyle, social history, and material culture of the poorer class and average citizen are mostly poorly understood. The written records shed little light on the subject, and archaeology holds the greatest promise of eventually filling in the gaps in the present knowledge of the circumstances of Onslow's

poor. Such sites when found and investigated should, when taken as representative examples, hold potential eligibility for inclusion in the National Register at the local level of significance.

5. Onslow's First Courthouse and County Seat Town

a. First Onslow Courthouse

Located on Jarrott's Point and Courthouse Bay, the first Onslow courthouse was a building owned by John Williams and lent to the county. If the site could be found intact and investigated, it should reveal interesting information about the people attending the early court sessions. Such a site should be potentially eligible for inclusion in the National Register at the local level of significance.

b. The County Seat Town of Johnston

Incorporated in 1741, Johnston was the first incorporated town in Onslow and one of the earliest in the province. It was the first county seat town for Onslow also. In 1752 the town was destroyed by a hurricane. Because of its narrow focus on the period from 1741 to 1752, the town site should yield very specifically dated information. Since the town was abandoned after its total destruction by the hurricane, any potential archaeological materials should have good temporal separation. If the precise location of the town is ever to be known, it must now be determined archaeologically. Such investigation should produce data regarding the configuration and dimensions of the town, location of key structures, and types of activities which occurred there. The town site should be eligible for inclusion in the National Register at the local level of significance.

B. Recommendations

1. Further Investigation of Potentially Eligible Sites

In view of the number of historic sites in the study area which are potentially eligible for inclusion in the National register, it is recommended that a follow-up phase to the present reconnaissance be initiated with the following goals and purposes:

a. By proper archaeological investigative techniques to seek to locate and pinpoint the archaeological components discussed under "Evaluations" earlier in this chapter.

b. By careful assessment of the archaeological research potential and historic significance of the potentially

eligible sites, to seek to determine whether they have been destructively impacted or whether there is justification for pursuing nomination to the National Register.

c. By compiling adequate supporting data, both scientific (i.e., archaeological) and historical, to provide documentation for nomination to the National Register for all study area sites determined to warrant nomination.

d. To prepare and submit nomination forms for those sites for which adequate documentation has been compiled.

2. Further Historical Research on the Study Area

Areas of deficiency have been pointed out in the detailed historical research portion of this present report--deficiencies which are the consequence of inadequate budgeted time and funds. Several of the areas needing further historical research include the following:

a. In-depth research on specific historic archaeological sites found by the field reconnaissance and at present still not identified with the historic persons who created those sites. This phase should also include further in-depth research on the property (chain of title, land-use practices, biographical details on the various owners, etc.) containing those sites discussed under "Evaluations" earlier in this chapter. Such research would be an essential part of the documentation required to substantiate nominations to the National Register.

b. Additional research on the initial settlement of the study area. As pointed out in the text of this report, the state of the early Onslow records contributes more to confusion than to an understanding of the initial settlement of the Camp Lejeune area. It was also noted earlier that budgeted time did not permit adequate research in the early records of Craven, Carteret, and New Hanover counties, as well as the Land Grant Office in Raleigh. This type of research is slow and tedious, but research into the aforementioned records is going to be necessary if the questions still remaining about the earliest settlement of the study area are ever to be answered. Early settlement is an aspect of local history very inadequately researched for Onslow County as a whole.

c. Additional research on the 18th century. Despite the productivity of the present research, many potential sources of

data which are likely to yield valuable information remain unexamined. The time and funds allowed for the present research did not permit many of the private collections in the Southern Historical Collection and the State Archives to be examined. In addition, there are many groups of official records in the State Archives and the National Archives which will require painstaking research. Much more work is needed in the records at the Onslow County Courthouse in Jacksonville. Admittedly, the records already researched offered the best rate of data return and subsequent phases are likely to have a noticeably slower rate of useful discovery, but the end results would certainly justify the time spent.

d. Additional research on the 19th and early 20th centuries. The main sources needing to be researched for these periods are the Onslow deed records and the newspapers in eastern North Carolina.

e. This additional research phase should also address itself to the possible discovery of "lost" graveyards still remaining on government property. Tightening legislation dealing with the disposition of human burials could conceivably cause problems in the future. Some of these "lost" graveyards are mentioned in the old deeds and by the combined techniques of archaeology and historical research could conceivably be located and legally moved before accidental intrusion occurs with some of the associated delays and inconveniences which could result from the application of present and proposed legislation.

3. Survey of Underwater Archaeological Resources

Appendix G lists known shipwrecks in the study area's waters, and Appendix M lists the known historic landings for the area. However, it can be safely assumed that there are far more shipwrecks and landings in the study area than reflected in Appendices G and M. Virtually every plantation with waterfrontage had its own landing, and through the years the old landing was sometimes discontinued and use of a new landing begun. For that reason, many large waterfront farms or plantations will have more than one landing associated with them. Such landings often have associated underwater archaeological sites containing well-preserved artifacts that reveal what kinds of household items were imported and what local products were exported. The archaeological value of shipwrecks is obvious. Both the vessel and any preserved evidence of its cargo constitute valuable sources of information about such subjects as ship design and construction, local commerce, and the material culture associated with the various periods of local history. These extremely valuable sources of information should be

surveyed and an effort made to correlate the underwater archaeological sites with their related terrestrial sites and the pertinent historical data.

4. Oral History Project with Former Residents

The few personal interviews conducted in the course of the research for this report have proved beyond question that much valuable historical information obtainable from no other source could be gathered by an oral history project conducted with the participation of former residents of the study area. These former residents can identify precise locations, fill in details which illuminate the sketchy historical record, and relate events, customs, and personal recollections that put the historical data in a new perspective. But the knowledge contained only in the memories of those who witnessed history is a very perishable knowledge. Already it has been 40 years since the former residents vacated the study area, and those then in their 20's are now in their 60's. Many of these knowledgeable people have already passed on, and an irreplaceable source of information has been lost. In view of the brevity of human life, this proposed project should be given immediate, serious consideration. If this opportunity is lost, it will never return and the knowledge that might have been gained will be lost forever. Great urgency, therefore, attaches itself to this recommendation.

5. Study of the Area's Historical Architectural Heritage

Inasmuch as the government obliterated the study area's standing structures, the proper source for a historical architectural study has been lost. However, the Public Works Office at Camp Lejeune has in its custody photographs of the old houses, barns, outbuildings, fences, and other structures and landscape scenes which were taken when the land was acquired and which constitute the only remaining clues to the study area's architectural heritage. Before more of these photographs gradually disappear, as some regrettably have, the Marine Corps should contract a professional architectural historian to examine the photographs and compile a professional report setting forth whatever architectural information can be salvaged from the remaining photographs. In addition, as an extra security measure, it is strongly recommended that the military authorities permit the North Carolina Division of Archives and History to copy the photographs for preservation purposes. Some of the documents filed with these photographs are already beginning to be damaged by a type of fungus or similar growth and should be treated to prevent further harm. The North Carolina Archives can recommend remedial measures for the documents and would be willing

to copy the photographs at no expense to the military. Such documentary photographs constitute a cultural resource worthy of preservation. It is, therefore, urged that prompt consideration be given to this recommendation.

VI. SUMMARY AND HISTORICAL OVERVIEW

Located along the middle shore of Onslow Bay, the Camp Lejeune study area is basically bordered by N. C. 24, the lower half of Bear Creek, the Atlantic Ocean, lower New River, Everett's Creek, N. C. 210, and U. S. 17. The military complex encompasses some of Onslow County's earliest settled areas and some of its most historic sites.

Much confusion exists about the earliest settlement in the area, but those claims to settlement occurring prior to 1710 have been shown to be groundless. It is generally accepted that the New River area began to be settled about 1713, and there is also good evidence that the portion of the study area bordering Bear Creek was settled as early as 1713. Those moving into the area in the early 18th century were primarily English and Scotch in descent and secondarily Negro, followed by Welsh, and French. Most of the earliest settlers came from New England, Maryland, Virginia, and northeastern North Carolina.

Increasing numbers of settlers began moving into the area in the 1720's, and in 1730-1731 a sizeable colony of families from Bertie Precinct relocated on New River. Gov. George Burrington issued an order creating the new precinct named Onslow on 23 November 1731 (Old Style), but the precinct for political reasons was not confirmed until 19 February 1734 (Old Style; 2 March 1735, New Style).

By the late 1720's New River was showing the first signs of a developing commerce, the lower ferry over New River was established, and agriculture and the naval stores industry were becoming the basis of the county's economy. By the beginning of 1732, the county was holding court in a building owned by John Williams on Jarrott's Point and Courthouse Bay. Williams's building became in essence the county's first courthouse and gave Courthouse Bay its name.

As the early years of the county's history passed, a few more roads were laid out, other ferries begun, and increasing numbers of homes were built along the major streams. In 1741 the town of Johnston was incorporated as Onslow's first county seat town and was located on Mittam's Point (now Town Point). When the town was destroyed by a hurricane in 1752, most of the town lots were still unimproved (not occupied), and construction of the new courthouse had never been completed.

Large farms (plantations) and the extensive naval stores industry made slavery very economically profitable for the planter class, and the institution of slavery existed as an important social and economic influence for over a century in the study area's history.

In the 18th century, corn seems to have been the most economically important crop, along with the raising of livestock. Naval stores manufacture probably represented the greatest single source of income for the area, but grist milling became one of the most significant economic activities also. A good diversity of occupational skills and trades existed in the study area in Colonial times.

One of the most numerous and prominent study area families that came to power during the early to mid-1700's was the Ward family, founded in Onslow by Col. Edward Ward (1694-1766). The Wards, Crays, Rhodeses, and Sneads were probably the study area's most prosperous and influential Colonial families and continued so till the end of the 18th century, except for the Ward family, whose local influence did not significantly wane till the late 19th century.

Three Colonial wars affected the study area residents to varying degrees. The War of Jenkins's Ear (1739-1744) and King George's War (1744-1748) in Europe merged into one war so far as North Carolina was concerned. The study area was affected only by Spanish privateers preying on coastal shipping and by the penetration of Bear Inlet in 1747 by a mongrel band of armed men from the Spanish stronghold at St. Augustine, Florida. As a result of the Spanish activity, the Colonial Assembly in 1748 decreed the building of a small fort at Bear Inlet, which was probably soon abandoned when the enemy failed to return.

The French and Indian War (1754-1763) had slightly more impact on the study area inasmuch as local forces were raised and readied for combat. The organization of the Onslow militia owes its origin to the French and Indian War, though little else resulted.

The last Colonial war affecting the study area was the War of the Regulators. Unlike the earlier wars, the War of the Regulators drew troops from Onslow who took a very active part in the Battle of Alamance. Col. William Cray, Sr., of New River, was one of the principal military officers on whom Gov. Tryon heavily relied in this last war of the Colonial period. No Onslow men, however, were lost in the 1771 campaign against the Regulators.

The two dominant social aspects of the study area's Colonial history were the spreading dependence on slave labor and the rise of a landed aristocracy dominating the political and cultural life of the county as a whole. The first slavery-related problems emerged in the study area during the very late Colonial period.

Education in the Colonial period was relegated to the apprentice system and the "old field schools." Only the wealthy planter class could provide their children with education beyond "reading, writing, and ciphering." Consequently, the planter class became the source of county and state leadership and the producer of the area's professional men.

One important figure of the Colonial period in the study area was Edward Marshburn (d. circa 1740), who was identified as a school teacher as early as 1712 near Sarum on the North Carolina-Virginia line. Marshburn, who moved to New River about 1730-1731, is the second person identified as a teacher in the history of North Carolina.

Another dominant influence in the social history of the study area was religion. Because so many of those included in the colony from northeastern North Carolina who moved to New River were dissenters, the established Anglican church had little support in Onslow. Sometime in the 1750's the Baptists began to experience their own "Great Awakening" in the New River area, resulting in the phenomenal growth of the Baptists until they virtually monopolized the local religious scene. Elder Ezekiel Hunter and Elder Robert Nixon were the foremost Colonial leaders among New River Baptists. The Baptist support of the Revolution throughout the original colonies probably had much to do with the prominent involvement of New River residents in the fight for liberty in North Carolina. The only Methodist influence during the period 1776-1815 seems to have been a few brief visits by the circuit rider bishop, Francis Asbury, at the home of George Shepard, Sr., on Stone's Bay, where Asbury preached twice during visits made en route from Wilmington to Richlands.

In the closing days of the Colonial period, New River men dominated the county's delgates to the provincial congresses, the county's choices for the Colonial Assembly, and the membership on the Onslow Committee of Safety.

With the Declaration of Independence in 1776, the study area entered fully into the Revolution. Col. Cray, as colonel of the Onslow militia, and his son, William Cray, Jr., as Onslow's recruiting officer, spearheaded the effort to raise and train the county's troops. Onslow had very few Tories and equally few deserters. Though military action came close, no Revolutionary engagement occurred in the study area. The elder Cray retained a prominent leadership role in the original state legislature and upon the death of Cornelius Harnett succeeded to the presidency of the Council of State.

The military control of Onslow's Revolutionary activities and the militia remained in the hands of study area residents throughout the Revolution. Col. William Cray, Sr., of Duck Creek, was the ranking officer until his death in late 1778. Cray was followed by Col. Henry Rhodes, of the Stone's Bay area, who was in command from late 1778 until his death near the end of December, 1780. Rhodes was then succeeded by Col. George Mitchell of the Paradise Point area, who retained command of the Onslow militia until his resignation in 1787.

The end of the 1790's saw Robert Whitehurst Snead introduce the county's first cotton gin into the study area. The cotton gin did much in the South to increase the spread of slavery, and in the study area it must have been greatly responsible for the increased ratio of the number of slaves to the total population after 1800. Cotton as a crop gradually gained importance in Onslow after 1800, but it never became king as in the South generally.

As slavery increased in Onslow, the early 19th century saw a concomitant increase in problems with runaway slaves, small slave uprisings, and rumored threats of insurrections. It was an especially difficult time for the area's few free Negroes.

In 1791 President George Washington on his Southern Tour passed through the study area on the old Wilmington Road. Sections of that road still exist on the edge of Camp Lejeune near U. S. 17 and N. C. 210; and at the home of Capt. James Foy, near Verona, President Washington stopped to dine.

The granting of out-of-state land warrants to Revolutionary War veterans or their heirs in the close of the 1700's as payment for military service initiated an increased emigration which gradually reached its peak in the years 1830 to 1840. In the migration, Onslow and the study area lost some of the wealthiest, most industrious, and most intelligent families in the county.

Nevertheless, the members of the planter class who stayed in Onslow remained influential despite their small number. Agriculture and naval stores remained the economic backbone of the study area for the entire 19th century.

The War of 1812 witnessed the raising of troops from Onslow, the provision of arms for the defense of the county's coastline, and the emergence of Gen. Edward Ward as one of the study area's foremost military and political leaders of the Federal and early antebellum periods.

The antebellum period from 1816 to 1860 saw little, if any, change in the area's social and economic history. Naval stores

continued to dominate the local economy, and reliance on slave labor steadily increased. The growing problem with slave uprisings reached a peak in 1821 and again in 1831.

The apprentice system and the "old field schools" remained the area's educational program, except for a few short-lived academies, until the common schools were created as a result of legislation in 1839. The drive for a public school system did not begin to affect the Onslow scene, however, until about 1841 and remained very slow in getting established.

The New River Baptists organized another congregation (Ward's Will Church) in the study area during the antebellum period, and all Baptist churches in the county during this period were of the Primitive Baptist order.

During the antebellum period the study area experienced a large exodus of citizens joining the southward and westward migration. The decade from 1830 to 1840 witnessed the heaviest antebellum emigration from Onslow County and the study area.

Southern Rights sentiment began to be evidenced near the end of the antebellum period, and by 1860 the county was overwhelmingly expressing secessionist tendencies. The study area produced the county's delegate to the Secession Convention of 1861-1862, Dr. E. W. Ward. In addition, the year 1860 saw several military companies organized in Onslow County in anticipation of the Civil War.

The antebellum period also witnessed the establishment of the study area's first three post offices--French's Mills in 1823, Foy's Store in 1830, and Stone Bay in 1844. Numerous attempts at internal improvements ended in failure, and the study area slowly began to decline in influence.

The area's decline in importance was most noticeable with respect to political leadership. Only the Ward family and a few intermarried families continued to wield political influence in the study area, and the county's leadership gradually began to be supplied by other sections of the county.

The devastating Civil War (1861-1865) virtually ended the study area's importance in the county. Most Civil War activity in the study area centered around lower New River and Bear Inlet. Raids aimed at maiming the blockade runners and destroying the salt works in the area occurred throughout the years 1862 through 1864. The most famous and substantial raid was that of Lt. William B. Cushing in November, 1862, when his vessel, the Ellis, was destroyed near the mouth of New River.

The study area supplied many of the county's Confederate troops and felt the severe drain on manpower and resources. Extreme shortage of such essentials as food and clothing subjected study area residents to great poverty and occasioned pitiful local attempts at public relief. The war left the study area ruined socially, culturally, and economically. The old plantation system with its ruling planter class was terminated by the war, and a new citizen class was created by an emancipation which theoretically freed the former slaves but gave them no preparation for maintaining that freedom or achieving the real essence of freedom. Thus increased racial tensions resulted from the Civil War and introduced the dark days of Reconstruction.

While political reconstruction of the state was confined to the period 1868-1877, the economic and social aspects of reconstruction lasted much longer and spilled over into the 20th century. Reconstruction years initiated changes in state and local government, replaced the old plantation system with that of share-cropping, and saw tremendous political, social, and economic struggles. The post-Civil War decades were a time of extreme poverty for Onslow County, and the study area's lost political and cultural leadership in the county was never regained.

Farming and naval stores continued to dominate the local economy during the period 1866-1900. Two of the study area's most important citizens of the period were Dr. E. W. Ward and Thomas A. McIntyre. Ward, owner of the Cedar Point Plantation, was deeply involved in the civic and cultural life of the study area. McIntyre, owner of the 27-room mansion, "Onslow Hall," and the 2600-acre Glenoe Stock Farm at Town Point, was a wealthy New Yorker who invested heavily in the study area's lumber industry and built the railroad from Wilmington to Jacksonville.

Considerable effort was made during the latter years of this period to develop New River oysters as a major export, but the hurricane of 1899 sanded up the oyster grounds and ruined the industry's prospects. The East Carolina Piscatorial Association became involved in both oyster production and truck farming. But virtually all the outward signs of economic recovery resulted from the investments of outside concerns, wealthy Northerners or businessmen from other sections of the state. Consequently, the new businesses yielded minimal economic benefits for the study area residents themselves other than the creation of a slightly larger job market and increasing sales for the local timber and seafood products.

The effort to secure rail service for the study area during the late 1800's received a measure of success, but except for the briefly operated railroad spur to Bayview the railroad service came no closer than the edge of the study area at Verona and Jacksonville. Several efforts at improvements to navigation proved ineffective. About 1885 the community named Marines (for the family by that surname) was established, and between 1874 and 1895 the U. S. Post Office Department established five new post offices in the study area. Another late 19th-century town was Bay View on Stone's Bay and New River, but it did not become one of the study area's more important communities.

In the end of the 1800's, following political reconstruction, the public school system made slow and feeble progress at re-establishment. In matters of religion, the period 1866-1900 saw the establishment of the area's first all-black congregations and the study area's first Missionary Baptist churches. In addition, the Primitive Baptists added a new congregation of their denomination at Stone's Bay in 1867.

The gradual, very slight economic recovery made in the late 1800's was doomed to be short-lived, however. In the early decades of the twentieth century, the demise of the naval stores industry in Onslow County had fully come to pass, leaving agriculture and lumbering as the only main supports of the local, reduced economy. In addition, the Great Depression added to the already depressed state of the study area's economy, and World War I brought its own distresses. On the brighter side, the introduction of tobacco farming in the area gradually resulted in a new important commodity to offset, in part, the economic impact created by the closing of the local naval stores industry.

The early 20th century was also marked by several resort and residential developments in the study area--developments such as Hurst Beach, Henderson Beach, Onslow Beach, "The Col. Montfort Place," the Paradise Point Development, Marine Heights, and other residential developments. The Montfort Point Recreation Center and the country club and golf course at Paradise Point became well known and widely patronized recreational facilities. In addition, the recreational facilities of the Town Creek Farm (Glenoe Stock Farm of McIntyre's time) because famous for their lavish accommodations and recrational opportunities especially provided for the better than 100 employees, plus the frequent numerous guests.

The period 1900-1941 saw the introduction of the automobile, the first paved roads, and the coming of electricity to the study area. Great progress was made in the area of public school education.

The disparity in quality of education between the various sections of the county was gradually reduced. Several additional black congregations were organized in the study area.

Not only was the study area in a period of economic decline during the early 20th century, but it also continued to lose political and cultural influence. The only leader of real consequence to come upon the scene in the study area during the period 1900-1941 was Col. George William Gillette, who served in both World Wars I and II and is generally credited with drawing the attention of the military to the need for a defense installation in the study area.

In 1941 the government began the acquisition of the land for Camp Lejeune, and approximately 720 families had to be relocated. With the mass exodus, the civilian history of the study area came to a close.

In the section on "Evaluations," the following sites (archaeological components) are deemed to be potentially eligible for nomination to the National Register of Historic Places, provided those archaeological components can be pinpointed and identified:

Home of Edward Marshburn
Home of Col. Edward War, Sr.
Home of Col. William Cray, Sr.
Home and mill site of Col. Henry Rhodes
Home and mill site of Col. George Mitchell
Home and industrial sites associated with Robert Whitehurst Snead
Home and cemetery of Gen. Edward Ward
Home of Dr. Edward W. Ward
Home (ordinary) of Joseph French, Sr.
Home (ordinary) and ferry site of Robert Snead, Sr.
Plantation complex (home, mill, cotton gin) associated with William Starkey Hill
Home of David Ward Simmons, Sr.
Home of Col. William Montfort
"Onslow Hall," mansion and plantation complex associated with Thomas A. McIntyre
The Ratliff Grist Mill
The Mitchell-Ward-Montfort Grist Mill
French's Mill
Tar Kiln Beds (selected)
Selected Dwelling Sites Associated with Poorer Classes
Onslow's First Courthouse (Jarrott's Point)
Site of Town of Johnston

Recommendations for further study include the following:

Further Investigation of the Potentially Eligible Sites
Further Historical Research on the Study Area (targeted problems in present knowledge of the area's past)
Survey of Underwater Archaeological Resources
An Oral History Project (interviewing former residents)
Historical Architectural Study (utilizing old photographs in the custody of the Public Works Office)