

CH 1974-19
635/D-214

ARCHEOLOGICAL SURVEY OF PERDIDO KEY
GULF ISLANDS NATIONAL SEASHORE, FLORIDA
BY A. WAYNE PROKOPETZ

ABSTRACT

During August, 1974, an archeological survey of Perdido Key, near Pensacola, Florida, was conducted. This survey located an aboriginal Fort Walton period (1400-1750) site. Wind and water erosion limited the scope of this project. A strong possibility exists that other aboriginal sites may yet be revealed by the same processes which at present tend to obscure them. No historical sites were located. Fort McRee, which once stood on the east tip of the Key, no longer exists. All remains of this fort have been washed into the sea. The literature reviewed suggests that other than Fort McRee, no significant historical occupation of the Key has occurred.

TABLE OF CONTENTS

	Page
Abstract	ii
Acknowledgements	iv
List of Maps	v
Chapter I -- Introduction	1
Chapter II -- Description of Survey Area	4
Chapter III -- Outline of Prehistoric and Historic Culture	11
Chapter IV -- Survey Methodology	19
Chapter V -- Site Description	22
Chapter VI -- Conclusions	25
Chapter VII -- Recommendations	27
References Cited	
Photographs	

LIST OF MAPS

	Page
Map 1 -- General View of Perdido Key	6
Map 2 -- Map showing Shoreline Changes at Perdido Key	7

CHAPTER I

Introduction

An archeological survey of lands under the jurisdiction of the National Park Service on Perdido Key, near Pensacola, Florida was conducted from July 26 to August 30, 1974. The purpose of this survey was to locate all pre-historic and historic sites which might be situated within the Park boundaries. The section of Perdido Key surveyed is part of the lands which make up the Florida portion of Gulf Islands National Seashore.

Gulf Islands National Seashore is located along the Northwest Florida Gulf coast and extends to the Mississippi Gulf coast. This National Park System area is composed of several off-shore islands, and several parcels of mainland property. The Park plans eventually propose incorporation of a total of 18,250 acres within its management area.

Surveys of the Mississippi portion of the Park have been conducted on Ship Island and at Magnolia Park. This survey completes the archeological assessment of the lands currently administered by Gulf Islands National Seashore.

Prior to this surveys were done at: the Naval Live Oaks Reservation area, Fort Pickens, Santa Rosa Island management area No. I, and the Pensacola Forts (Tesar, 1974a, 1974b, 1974c).

Previous archeological surveys and excavations in the Pensacola area, as well as those done within the National Park boundaries, have revealed that men, both aboriginal and European, have occupied this area at least since 1000 B.C. The prehistory revealed shows the development of North American Indian culture from simple hunting and gathering societies to agricultural societies which built impressive earth mounds.

The Post contact history, after the arrival of the Europeans, is the story of the struggle to settle and control a continent. In the Pensacola area, three major European nations, Spain, France, and England, contested each other from 1698 to 1821 for control of the region. In 1821, with the signing of the Adams-Onis Treaty, the United States gained control of the area.

From 1821 to the present the history of the area has been one of the development of the United States. The first battle of the Civil War in Florida was fought here.

The importance of the Perdido Key area to the history of the Pensacola area is not very significant. This

survey, the first prehistoric assessment conducted, revealed only one aboriginal site. Fort McRee, of importance during the Battle of Santa Rosa Island, was located on the east end of the Key and protected the entrance to Pensacola Bay along with Fort Pickens, no longer exists. The east end of Perdido Key has since 1865 been eroded away, and with it have gone the ruins of Fort McRee. The only historic structure on the Park property are the remains of a World War I shore battery bunker. This site does, however, reveal the importance of Pensacola Bay from a military perspective.

The results of this survey, although limited, do add to a fuller understanding of the archeology and history of the Pensacola area. Perdido Key is no longer a gray zone, a blank space on our archeological and historical maps. As will be pointed out in the following chapters the survey of this area is not complete. The environmental conditions which exist, shifting sands and eroding beaches, may yet reveal further prehistoric and historic evidence of occupation on this Key.

CHAPTER II

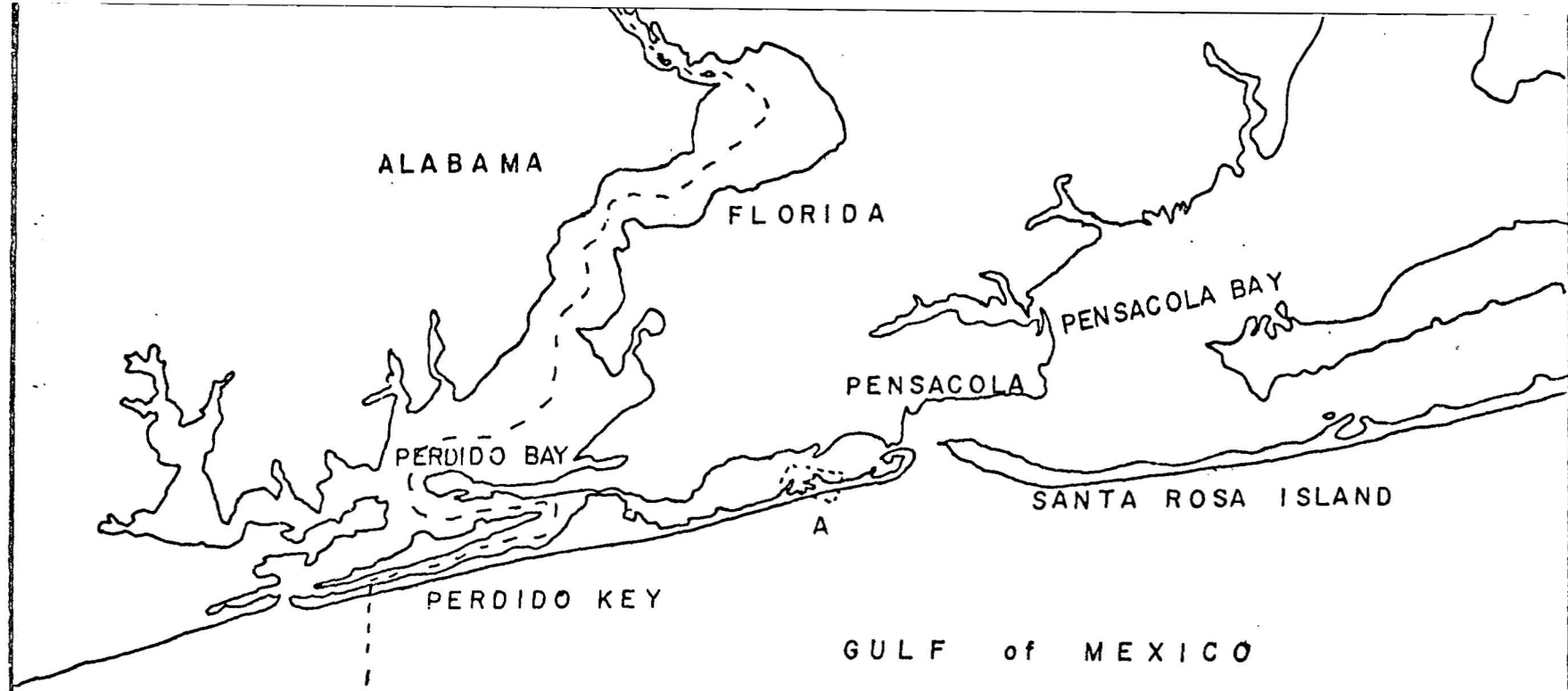
Description of the Survey Area

Perdido Key is a low sand island extending from $87^{\circ} 18' 45''$ to $87^{\circ} 33' 15''$ longitude. It lies from 350 to 2200 feet off the mainland and is bisected by the Florida-Alabama State Line. The area of the Key surveyed is east of the National Park Service's west boundary at Johnson Beach. This area is 6.1 miles in length. The width of the Key in this section is from 350 to 2500 feet, north to south. The total area surveyed was approximately 850 acres (see Map 1).

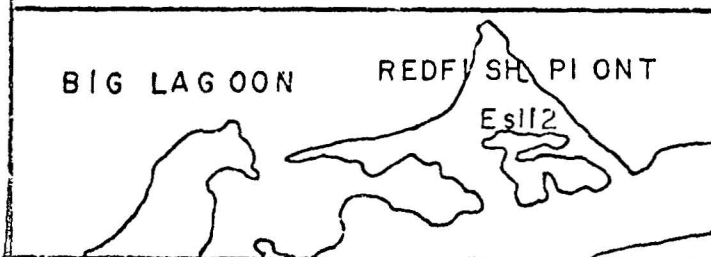
Perdido Key is the western island which forms the entrance to Pensacola Bay. It lies 2400 feet to the west of the western end of Santa Rosa Island. A shallow lagoon, Big Lagoon, separates Perdido Key from the mainland. This lagoon ranges from 1 to 19 feet in depth. On the Gulf side the water drops off within 600 feet of the beach to a depth of 20 feet.

Perdido Key, a barrier beach, is little more than a sand dune protecting the mainland from Gulf wave action erosion. Naval maps recording shoreline changes since 1859 (see Map 2), make it very clear that in the last 100 years alone, there has been considerable relocation of the sands comprising the Key. For the most part, the island has been moving northward, toward the mainland. The three points of land extending into Big Lagoon on the north side of the Key were separate islands as recently as 1895. The Naval map also shows that at one time the eastern end of the Key was connected by a narrow neck of land to the Mainland. Most of the eastern end of the Key has been built by dredge fill. Map 1 shows a hook of land extending west from the east end; this hook is completely made of dredge fill.

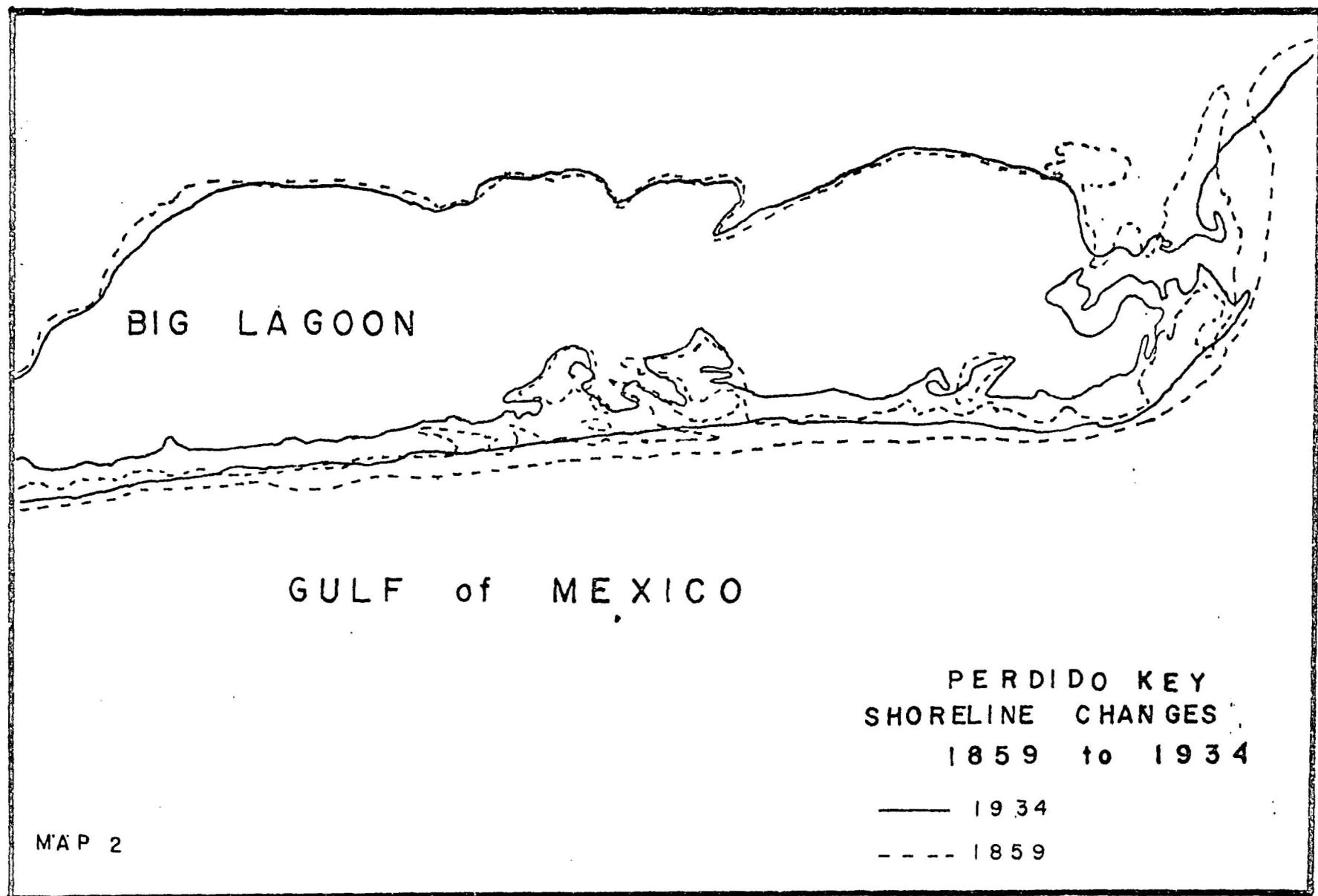
The water currents effecting the Key tend to shift the sands to the west, while winds tend to move the sand dunes north. The combination of the two has created a situation which makes surveying very difficult. As the Naval map shows, much of the present Key has only been above water for 60 years or so. Wave action would have eroded any sites on the Gulf side of the Key. The northward moving sand would have laid many feet of sand on sites to the lee of the Key.



MAP INSERT A



MAP I
GENERAL LOCATION OF PERDIDO
KEY AND SITE Es112



On the Gulf side of the Key, in about three feet of water, an old peat stratum is eroding out of the bottom. This stratum is under approximately five to twenty feet of beach sand. The peat layer represents a period when the sea level was considerably lower. At that time Perdido Key was a low marsh area extending into the Gulf of Mexico. The date of this stratum is unknown. The westward movement of sand along the Gulf coast, coupled with an already existing marsh island, probably produced the present barrier beach.

Perdido Key can be divided into three topographic zones. The beach makes up the first of these, extending 50 to 100 feet back from the Gulf. The second, center zone, is comprised of the shifting sand dunes. In many sections this zone extends nearly from the beach to the lagoon. These dunes vary from 5 to 15 feet in height. The dunes are broken by wind created blowouts and long "valleys" on a north-south orientation, caused by the erosion of water when storms drive seas across the Key. The third and final zone is a low marsh area which lies along the lagoon side of the Key. Three points of land on this side of the Key are the major part of this zone. The marsh zone is marked with low sand islands throughout.

Only one fresh water pond is presently located on

the Key, on the east end of the island. At one time there may have been similar ponds elsewhere, but at present none can be located. Potable water can be obtained by digging two to three feet into the sand. This type of "well", however, does not last very long.

The beach zone is devoid of vegetation. Sea oats (Uniola paniculata) are the major species located in the dunes. Scattered Palmettos (Serenoa repens) and Scrub Oaks only appear individually. Vegetation of the low marsh area includes various medium height grasses and small stands of Sand Pines (Pinus clausa), numbering from 10 to 30 trees. The latter are located on the higher, sandy portions of the marsh area. Also located in this zone are dense groves of Palmetto and Scrub Oak (Quercus chapmairi, Q. minimum, Q. incana). At Redfish point, and in the area along the west boundary of Johnson Beach, the Scrub Oak groves are the densest, and largest in the area.

Species of animals found on Perdido Key are limited. Only two Genera of mammals are present, the armidillo (Dasypus novemcinctus), and several species of mice. There are several species of small lizards, and the Water Moccasin (Ancistrodon piscirorus), and the Diamond Back Rattlesnake (Crotalus sp.) are the most common reptiles.

The predominant biotic community located near the Key is aquatic. There are many species of fish and snails found along the shoreline. A detailed list is too long to present here.

The two major environmental features are, the movement of sand by water and wind, and the aquatic biotic community. The former affects the probability of finding sites located on the Key and the type of settlement that could be established. The potential of the aquatic community is very great and would have been a strong attraction to prehistoric peoples dependent on marine resources. The position of the Key in relationship to Santa Rosa Island and the mouth of Pensacola Bay is also of importance. The defense of the Bay has been of major concern since the first arrival of the Spanish; a fortification on the east end of the Key would certainly affect access to Pensacola Bay.

CHAPTER III

Outline of Prehistoric and Historic Cultures

The prehistory and history of the Pensacola area has been the topic of many writers. Presented here is a brief outline summarizing what has already been said in many thousands of pages written about this region. The best general work dealing with the prehistoric cultures occupying the area is by Gordon Willey (1949). His Northwest Florida Gulf Coast survey establishes the chronology of the region. Although there have been some changes in this outline since its publication, the work is still the best available for general understanding of the prehistory of the area. The historic period, since Spanish exploration, has been researched by many. Their works should be consulted for in-depth discussions of the history of the area. The historic outline presented here is taken from Bearss (1957) and McGovern (1972).

The data collected during this survey and the historical research done show that there have been only two sites on Perdido Key, one of which, Fort McRee, no

longer exists. The other, Fort Walton (A.D. 1400-1750), has been interpreted as belonging to the prehistoric/historic aboriginal period. Fort McRee, built in 1831, and since destroyed, is important in the Civil War history of the area. The entire outline will be presented here for two reasons: 1) all history is continuous, and no period is really separate from adjacent ones, and 2) the conditions existing at Perdido Key make it possible that other sites may be eventually encountered.

Although man has been in the New World since at least 10,000 B.C., there is no concrete evidence of his occupation in the Pensacola area until 1000 B.C. This lack of evidence does not mean that he wasn't here earlier. Chances are that rising sea levels and alluvial deposits have hidden his earliest remains.

The earliest culture period in the New World, and in Florida, is the Paleo-Indian. This period has been defined by the presence of well-made lanceolot points. These people were dependent to a large degree on mega fauna, mammoth, mastadon, etc., for their subsistence. They were basically roving bands of hunters, but they probably utilized other food resources too. Although no remains have been found in coastal Florida, it seems

improbable that they ignored major marine resources. Work along the Louisiana coast has shown that in that area Paleo-Indian peoples utilized the coast (Gagiliano, 1964). The Paleo-Indian period is dated from 10,000 to 6,000 B.C.

The following Archaic Period (6,000 to 2,000 B.C.), was a period of shifting from big game hunting to a more generalized subsistence. Hunting was still important, but plant foods and aquatic resources increased in importance. Many sites of this period located along the coast and on rivers are marked by large piles of shell. These shell middens are the remains of many aboriginal meals.

From 2,000 to A.D. 1, the known cultures of the general area do not radically change in their subsistence patterns. The addition of ceramics to their material culture after 2,000 B.C. does, however, mark a new period. The earliest forms of ceramics, Fiber Tempered wares, are not present in the area. The first ceramic bearing culture is Deptford.

Deptford Period sites are located along the coast and rivers of the area. They are usually marked by shell middens. Ceramics are sand tempered wares. Deptford Simple Stamped and Check Stamped are the major markers. Subsistence was based on the utilization of almost all possible food resources: plants, terrestrial and marine

animals (Milanich, 1974). Sites have been reported from the mainland and Santa Rosa Island. The possibility exists that the Perdido Key area may eventually show that Deptford peoples were present. Deptford is dated from 1,000 B.C. to A.D. 1.

The Santa Rosa-Swift Creek period follows the Deptford. Santa Rosa-Swift Creek (A.D. 1-600), sites are similar to Deptford. Possibly limited agriculture was being added to the subsistence base at this time period. Complicated Stamped wares are a time marker. Also at this time burial mounds occur. These mounds are usually associated with a village. Again there is no reason why sites of this period could not be on Perdido Key.

The Weeden Island period sites (A.D. 600 to 1400) are also present in the area. Incised and punctated wares were very common at this time. Burial mounds and Temple mounds were built. There seemed to be a tendency to move away from the coast to upland areas. This may reflect a growing dependency on agriculture. Coastal sites are marked by shell middens.

The final aboriginal period represented in this area is the Fort Walton period (A.D. 1400-1750). There are many sites of this period in the area. The single site

found on Perdido Key is a Fort Walton site. The ceramics found are Pensacola Plain sherds. This type of pottery is a western variant of the Fort Walton ceramic series.

Coastal Fort Walton sites are marked by shell middens. Temple mounds were built at this time. There is definite evidence for a strong dependency on agriculture at this time. Early Spanish observers describe fishing stations along the coast, at which fish were caught and dried for later use. The type site for this period is located 60 miles to the east.

The first European visit to the area was by Spanish explorers, in 1516, when Don Diego Miruelo sailed into Pensacola Bay. Again in 1519, 1528 and 1540, Spanish explorers visited the Bay. The four visits all concurred the excellence of the Bay for a harbor. None of these visits was lengthy; their purpose was to trade with the Indians or to replenish ship stores.

The first permanent attempt at settlement in the Pensacola Bay area was in 1559. Don Tristan de Luna y Arellano, with 1,500 soldiers and settlers, tried to establish a colony here. Problems with the Indians, the climate and hurricanes forced abandonment of the colony after two years.

Stimulated by French activity at Mobile, less than

60 miles from Pensacola, the Spanish made two more trips to the area, in 1686 and 1693. The need to stop French aggression in Spanish Florida prompted the Spanish to send Andres de Arriola and 350 men to establish a fort and settlement at Pensacola Bay. In 1720 the Spanish lost the settlement to the French.

In 1722 Spain again reclaimed the Pensacola Bay area. A town was built on Santa Rosa Island, located within the boundaries of the present National Park. In 1750 a small fort was built on the mainland. In 1752 a hurricane destroyed the town on Santa Rosa Island forcing the Spanish to move to the mainland near the 1750 fort.

From 1763 to 1781, the British were in control of the Pensacola area. During the American Revolution Spain sent an Army to recapture Pensacola. From 1781 to 1821, the United States and Spain argued over who had the right to Spanish Florida. During this period, Armies of the United States, in 1814 and 1818, captured the city of Pensacola. Finally, in 1821, Spain realized it could not maintain control and signed the Adams-Onis treaty giving Spanish Florida to the United States.

In 1825 the United States built a Navy Yard at Pensacola and built four forts to protect the harbor entrance. Fort Pickens on Santa Rosa Island was started

in 1829. Fort McRee on Perdido Key (then known as Foster's Island) was started in 1831. Fort Barrancas and its redoubt on the mainland opposite the channel entrance were built in 1839 and 1844 respectively.

As has been mentioned, there are no structural remains of Fort McRee, a kidney shaped fortification. In 1861 it was armed with 125 seacoast and garrison cannons. For extra fire power a water battery was established just south of the Fort on Perdido Key, this area has since been destroyed by erosion. On January 12, 1861, the Federal forces stationed in Pensacola in anticipation of the war to come as the result of southern secession, abandoned Fort McRee, and all other military properties in the area except Fort Pickens.

On November 22, 1861, the Confederate Forces of the area and Federal Forces at Fort Pickens began the Battle of Santa Rosa Island. During this battle Fort McRee was heavily damaged. Fort Pickens, assisted by two Federal Men of War, the Niagara and the Richmond, fired over 5,000 shells at Fort McRee. Three times the fort was on fire. When the battle was over the situation remained the same. The Federal Forces still held Fort Pickens, and the Confederates the rest of the area. In April 1862, Fort McRee

was reinforced with siege guns. These guns were never used. On May 9, during the withdrawal of Confederate Forces from Pensacola, Fort McRee, along with all other military structures and equipment in the Pensacola area were burned. On May 10, 1863, the United States flag was raised over the ruins of Fort McRee.

After the Civil War Fort McRee was abandoned. It was left to be destroyed by the sea. On Perdido Key today, some 2000 feet from where Fort McRee once stood, is a coastal defense battery built during World War I.

Except for Fort McRee, there is no historical documentation of any Spanish, French, English or American activity on Perdido Key. It is possible that the area was explored by the Spanish, or later arrivals, but no evidence is known. There is record of two land grants being given by the English to colonists in the years 1763 to 1769. Samuel Bennworth was given the east half of the Key and Charles Blanchard was given the west portion. There is no record of their ever using the land granted them.

The prehistory and history have been presented here because of the possibility that with almost 3,000 years of occupation in the Pensacola area other sites besides the one found and the one lost may be located.

CHAPTER IV

Survey Methodology

For the survey of Perdido Key a model for settlement was established. The data presented in Chapters II and III was utilized. Archeological models are predictive and important for organizing a survey such as this. The model not only was designed to predict site location but it also gave a ranking of importance to which areas should be surveyed. The entire area was covered on foot, providing a necessary check as to the validity of the model.

A model is really nothing more than what types of site location would have been chosen by occupants of the area. Along with this, the model then describes how the site should look at present. As has been stated, the Key as a whole probably looks very different today than it looked 100 years ago. Three thousand years ago it might not have even existed.

Many different assumptions and concepts went into the model used. The following is an outline of the model. It is felt that this model will be of value to other surveys where similar conditions exist.

- 1) Fresh water is a basic necessity for life; all fresh water sources were examined.
- 2) Any site on the Key would have been subjected to periods of high winds and seas. Sites would have been located on the lagoon side of the dunes.
- 3) Sites would have been located on the highest possible protective ground. The low sand mounds in the marsh area would be favorable locations.
- 4) On the Florida Gulf Coast sites are often marked by cedar trees, or stands of oak. Cedars grow well in calcium carbonate provided by deteriorating shells. Acorns were a food source. When they were brought to a site they would eventually be dropped. Thus introduced into the already existing. The scrub oak stands, since they were not very numerous, were prime areas to be inspected.
- 5) The old beachline was eroding, thus exposing strata which otherwise were covered by many feet of sand. The shoreline was walked twice.
- 6) Blowouts and where the waves had crossed the Key were checked. The bottom of these were once the old marsh. These areas, like the beach had many feet of sand removed.

7) The model had historical facts alter its basic format. Aboriginal groups would have been more effected by the environment than the historic occupants, for when the need for defense would and did outweigh the problem of fresh water. Fresh water was either carried to the fort, or collected in cisterns.

The model did predict the location of the Fort Walton period site. Although the rest of the Key was intensively walked over, no other sites could be found. As has been repeatedly stated the conditions imposed by wind and water have acted to conceal any other sites if they do exist.

CHAPTER V

Site Description

Redfish Point Site (8Es 112)

This site is located on Redfish Point, between longitude 87 20' to 87 20' 5" and latitude 30 19' N to 30 19' 3" N. The site covers about four acres. It was marked by six surface scatters of sherds. A total of 42 sherds of the Pensacola Plain ceramic type were found. Also found was a sandstone abrader. The six surface scatters had no apparent arrangement. The site has no depth below surface.

The site was located in an area primarily covered by scrub oak. The surface scatters were in blow outs between sand dunes, which were being held in place by the growth of scrub oak on them. Redfish Point (see Map 1) is located on the lagoon side of the Key.

The sherds and sandstone abrader were the only materials indicating a site was present. At this location there was no indication of any shell refuse or midden accumulation.

This site belongs to the Fort Walton Period. From the available data it seems that this site is one of the most western sites for this period. It is probably the remains of a temporary fishing camp on Perdido Key. It is impossible to estimate the duration of the occupation. It is also impossible to infer the time of year that the site was used.

The lack of integrity at the site, because of no apparent depth, makes this site not very important. Any excavation would probably result in very little interpretive data.

World War I Gun Site (8Es 113)

This site is located on the eastern tip of the Key. It is only listed because it might at some time be useful in showing the military history of the area. Also, it provides a marker for the location of Fort McRee. Although this site is west of the location of the old fort, its location in relation to the channel to Pensacola is about the same. No excavation is recommended.

Several dredge spoil piles are located to the west of the World War I Gun Site. Several pieces of glass and

ceramic sherds dating to the mid 1800's were found in these piles. This material may have come from the submerged site of Fort McRee. There is no archeological value per se to such material. However, it might be of value in locating the submerged fort. This material also may have come from the submerged remains of several out structures associated with the fort, which once stood approximately in the area where the present chanal between Big lagoon and the Pensacola Bay Channel now is located. This is mentioned only to record that this condition does exist.

CHAPTER VI

Conclusions

The survey of Perdido Key revealed the existence of one Fort Walton Period aboriginal site. It also reconfirmed that no remains of Fort McRee exist.

The Fort Walton Period site is important as far as information concerning aboriginal activity and distribution in the area. The potential of this site yielding any further interpretive data is probably not worth the effort to excavate it.

There have been some reports by local divers of finding the remain of Fort McRee in the Pensacola Bay channel. None of these reports have been substantiated. Several dredge piles examined during the course of the survey did show remains dating to the mid 1800's; however, the nature of their disposition makes them valueless, from an archeological view.

The conditions existing on the Key make it impossible to suggest that this survey is final. A major storm could reveal any number of sites. It is impossible at present to

predict the type of sites possible. Only constant surveillance can eventually locate any sites yet to be found.

CHAPTER VII

Recommendations

No excavation is recommended in the case of the two sites listed in this report. It is recommended, however, that when work is done on Perdido Key which may involve the movement of sand, such as road building, a survey be conducted of the immediate area. Observations of the existing site suggest that a survey would probably be able to gather any interpretive data that the site (sites) may yield.

The existence of historic materials dating to the mid 1800's in the dredge piles on the eastern end of Perdido Key suggest that at some time in the future an underwater survey might be conducted to see if any remains of Fort McRee do exist below the water. This type of survey would be of value. Little information is available concerning the effect of erosion of this magnitude on a site. Current conditions in the area of Fort McRee are very strong

and before any survey work is conducted careful consideration would have to be given as to the actual feasibility of such a survey.

REFERENCES CITED

- Bearss, E.C.
1957 "Civil War Operations In and Around Pensacola".
Florida Historical Quarterly. Vol. 36,
Nos. 1 and 2.
- Gagiliano, S.M.,
1964 An Archaeological Survey of Avery Island...
Baton Rouge, Louisiana. Avery Island Inc.
- Milanich, J.T.
1973 "The Southeastern Deptford Culture: A
Preliminary Definition". Bureau of Historic
Sites and Properties, Bulletin No. 3. Florida
Department of State.
- McGovern, J.R.
1972 "Chronology of Colonial Pensacola (1559-1821)".
Colonial Pensacola, J.R. McGovern ed. Vol. 1.
Pensacola, Florida.
- Tesar, L.D.
1974a Archeological Survey and Testing of Gulf
Islands National Seashore, Part I: Florida.
On file Southeastern Archeological Center,
National Park Service, Tallahassee, Florida.
- 1974b Archeological Survey of Certain Naval Air
Station Lands: Pensacola, Florida. On file
Southeastern Archeological Center, National
Park Service, Tallahassee, Florida.
- 1974c Archeological Survey and Testing of Gulf
Islands National Seashore, Part II: Mississippi.
On file Southeastern Archeological Center,
National Park Service, Tallahassee, Florida.
- Willey, G.R.
1949 "Archeology of the Florida Gulf Coast".
Smithsonian Miscellaneous Collection, Vol. 113.
Washington, D.C.

Explanation of Plates

Plate

1. Looking north from the Redfish Point site (Es112).
Shows typical stand of Pines.
2. Redfish Point site (Es112). This is one of the low
sand hills located in the marsh zone.
3. Redfish Point site (Es112). Low shrubs in background
are scrub oaks.
4. View of the central dune zone.



Plate 1



Plate 2



Plate 3



Plate 4