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Memorandum

To: Regional Director, Southeast Region
From: Superintendent, Gulf Islands National Seashore
Subject: Annual Narrative Report

Enclosed is the 1981 Annual Narrative Report for Gulf Islands.

SIGNED

T. D. Pridemore

mm:3/25/82

Administration

Nineteen-eighty-one was the first full, normal year following Hurricane Frederic, which has become a historic reference point in the management of Gulf Islands National Seashore.

Budgetary adjustments and the absorption of pay increases forced us to cut back on the length of seasonals' employment by terminating them sooner than originally planned. Program expansion, as planned and approved in the early going, was dropped completely.

The personnel program continues to mature as a GS-9 Personnel Management Specialist position was established. Ellen Heilig was promoted into the post and her former GS-7 Personnel Assistant slot was abolished. Despite a reportedly high unemployment rate for this area, turnover in less-than-full-time permanent positions continues to be a problem. In 1981, the Accounting Technician lateraled to the Navy Hospital and the Chief Ranger's Secretary lateraled to Corry Field, both receiving full-time positions. As of this writing, both replacements have been offered and have accepted full-time jobs elsewhere, as well.

Equal Employment Opportunity continues to be a basic element in our personnel policy and practice at Gulf Islands. One black, mute male was converted to career and three other blacks, two males and one female, were promoted during the year. No blacks or Hispanics applied for the vacancies we had in 1981.

Park development continued apace. The Mississippi District Boat Facility and Maintenance Area were completed and the Fort Barrancas Visitor Contact Station and Parking lot also were completed. Construction finally began on the William M. Colmer Visitor Center at Davis Bayou after more than two years of negotiations. The administrative staff administered three contracts expending \$55,400 for road striping, boat engines and solid waste disposal.

Eight employees were recognized by virtue of the Incentive Awards Program, four receiving suggestion awards and four receiving performance awards.

YACC

Initial phase down of the YACC operation began with the termination of all but one staff member.

The YACC enrollees at Tuskegee, Alabama with supervision by Camp Director, Carpenter Leader from Gulf Islands, Florida District, and direction from Historical Architect Garner, SERO, completely refurbished the Mary Scott Cottage at Tuskegee Institute.

Resource Management and Visitor Protection

Attention to management of the park's wide variety of natural resources was greatly increased at the beginning of 1981 through the addition of Buck Thackeray to the staff as Resource Management Specialist. A significant amount of time was spent in developing a new Resource Management Plan, following new NPS requirements and aimed at replacing the park's outdated plan. As an adjunct to this plan, a Fire Management Plan was also drafted.

After more than two years work on a solution to the ORV problem, special regulations were finally published in August which established a permit system and other restrictions. Two beach routes, on Perdido Key and at Fort Pickens, were opened on August 24. The Fort Pickens route had to be closed later in the year, however, due to erosion which made the beach impassable at high tides. Nearly 800 ORV permits were sold during the remainder of the year at \$7.50 each. Compliance with operating restrictions and route designations was generally good, with only a few serious infractions.

Public use on Perdido Key was also affected earlier in the year when the two miles of paved road destroyed in 1979 by Hurricane Frederic was rebuilt by the Federal Highway Administration. This again allowed beach users access to the area east of the pavilion which had traditionally received heavy use.

At Fort Pickens, the permanent replacement for the hurricane-destroyed entrance station was completed at a location about a half mile inside the boundary. This relocation, coupled with good building design and road rerouting, produced a more effective and efficient entrance station operation.

The specially-equipped law enforcement vehicles on order for two years did not appear in 1981, but three ranger cars in Florida were replaced in September by full-size sedans which are better suited for the job than the compact cars. In Mississippi, the 20' Aquasport patrol boat, which had suffered a great deal of deterioration in only three years of use, was surveyed and replaced by a new 22' Boston Whaler.

A potentially serious fire broke out in the Naval Live Oaks area on July 13, but was controlled after burning only nine acres. The fire was located off the Andrew Jackson Trail, north of the location prepared for the new park maintenance area.

The year's most serious law enforcement incident was a kidnapping, at knife point, of a 16 year old boy at Davis Bayou on March 28. The boy was driven out of the park and homosexually assaulted by the kidnapper, then released near his Ocean Springs home. A suspect was later identified and arrested. A young woman attempted suicide by gunshot at Johnson Beach on December 17. The attempt was unsuccessful and recovery is expected. The YACC shop building in the Fort Pickens area was burglarized on two consecutive nights in October. Several thousand dollars worth of power tools and other items were taken in the two incidents. No arrests resulted from the investigation.

Two water-related deaths occurred in the Mississippi District during the year. On Easter Sunday, April 19, an inexperienced woman died while attempting to SCUBA dive at Ship Island. Park Divers recovered her body the next day. At Horn Island on August 16, a man attempting to recover a drifting boat by swimming after it disappeared and was presumed drowned. The only Florida fatality occurred in a one-car accident in the curves at the Santa Rosa area on September 27. The car's driver and only occupant was thrown out when the car left the road at high speed and rolled over.

One additional warning measure was placed on the approaches to the road curves at Santa Rosa early in the year. Flashing Amber warning lights were suspended above the road both east and west of the curves to warn drivers of the lower speed required.

Personnel changes were widespread in both districts. Florida District Ranger Henry Hilliard retired and was replaced through promotion of Art Johnson. Three rangers left Florida via transfer or resignation, and in Mississippi all four rangers assigned to the islands transferred to other parks during the year.

MAINTENANCE

The Federal Highway Department completed permanent repairs to the Perdido Key Road in May 1981. Total cost of the project was approximately \$400,000. This project completed the reconstruction of roads damaged by Hurricane Frederic.

A contract for exterior painting of 8 historic buildings in the Fort Pickens Area was completed in March 1981. Total cost of the project was approximately \$30,000. This project was funded with FY 80 cyclic funds.

Contracts for shoulder work in the Santa Rosa Area (\$127,000) and road striping throughout the Florida District (\$13,000) were completed in October 1981. These projects were funded with FY 81 cyclic funds.

The park received \$35,000 of cyclic funds in FY 82. The funds are for overlaying roads at the Ranger Station (\$20,000) and replacing radios parkwide (\$15,000).

Overhead flashing caution lights were installed at each end of the rerouted road in the Santa Rosa area. Total cost of the project was approximately \$5,000.

An oyster shell parking lot on the north side of the road at the Santa Rosa Day Use Facility was paved. Total cost of the project was \$3,000.

Boardwalk material in the amount of \$24,000 for replacement of deteriorated boardwalks parkwide was purchased utilizing FY 81 cyclic funds.

INTERPRETATION

Interpretive Division - Florida

Historical

Two major living history presentations opened and closed the 1981 year for historical interpreters. "Savages, Corsets and Demon Rum - an 1823 Pensacola Interlude" on January 3 and "Christmas by Candlelight" on December 29. The members of Pensacola Historical Society received special notices for both these presentations.

On May 3 all historical interpreters participated in Barrancas Day, a part of the city-wide Galvez Celebration. During this day Ft. Barrancas and its new visitor contact station were officially dedicated. A slide program on Galvez was presented throughout the day.

Several of the historical interpreters co-authored the publication "Barrancas Bugle" printed for the Galvez Celebration.

New programs during the summer included a candlemaking demonstration and tours of the WWII Observation Tower. A full schedule of cultural history school programs were given at Fort Barrancas and Fort Pickens in the spring. Because of limited staff, a limited number of programs were given in the fall.

However, an audio-visual cultural history program for 7th graders was developed and copies were distributed through the county school system.

Because of limited staffing, Redoubt was opened 2 hours on 4 days/week in the summer or by reservation the remainder of the year.

Melissa McGinnis demonstrated how to make candles at the Gulf Coast Arts Festival in November.

Natural History

The schedule of summer interpretive activities was begun two weeks earlier (May 31) than in previous years. This was possible due to seasonals being brought on duty in early April for the spring environmental education program and receiving their orientation and training at that time. It also allowed us to serve a greater number of early summer visitors that otherwise might not have had the opportunity to attend an interpretive program. The schedule was cut one week short at the end of the summer (August 15) due to budget cuts forcing the termination of all seasonal employees.

During the eleven week season 5,457 visitors attended the 22 programs offered weekly in the Fort Pickens Area. In addition over 42,000 visitors made use of the Sandbox Marine Museum during 1981. As in the past the more popular programs were those that involved the visitor directly with the resource, ie. "Seeing Sealife", "Snorkeling" and "Beach Campfire".

Summer programs at Perdido Key were limited to weekends for the general public and to one day weekly for Camp Happy Sands. A new experimental effort this year was the introduction of the "New Games" concept into interpretive programs. This effort was met with limited success. As in the past, involving the kind of visitor and the type of visitor use in scheduled interpretive programs, remains a challenge.

Summer interpretive programs were offered four days a week on a regular basis at Santa Rosa during 1981. Volunteers also presented programs three additional days a week for a portion of the summer. Visitation in the Santa Rosa Area is increasing slowly with the completion of the picnic shelters and expanded parking facilities. "Snorkeling", "Surfing", "Seeing Sealife" and "Junior Ranger" programs were popular. Photo and Sand Sculpture contests were continued for the second year. The Sand Sculpture contest drew 49 contestants with many artistic final products and numerous spectators. The Sand Sculptures contest looks like a winner.

The Sandbox Marine Museum was manned and open daily throughout the year with daily programs offered. Special interpretive programs were scheduled during Easter and Christmas Weeks and the Thanksgiving weekend.

Environmental Education - over 5800 students from 37 Escambia and Santa Rosa County schools benefited from our quality, curriculum coordinated programs in 1981. Environmental Education Specialist, Paula Valentine, worked closely with curriculum coordinators and teachers in providing programs that enhanced on-going classroom studies relating to the Seashore's resources. This arrangement promoted both teacher cooperation and student participation and will benefit park management in the future when these students hopefully become well informed, concerned, responsible park users.

The core of our Environmental Education program is the Meet-a-Ranger and Day-at-the-Seashore activities for fourth graders. Almost 1500 students participated in 1981. Meet-a-Ranger, an off-site program using puppets, music, slides and live rangers, introduces the students to the National Park System, the work of the National Park Service and "how to" and "how not to" use and enjoy a National Park.

The Meet-a-Ranger program and use of a newly developed student workbook prepares the students for their on-site, Day-at-the-Seashore experience. Here they actually come into contact with the resource, learn of its importance and develop a caring attitude towards it.

Future plans call for addition of a learning station to better serve pre-school groups and upgrading of middle school and high school programs.

Our natural history environmental education programs continue to be in demand, and based on the successful accomplishment of stated objectives, will continue to be a major element in the overall interpretive program at Gulf Islands.

Interpretive Facilities

Fort Pickens Area

A new natural history museum exhibit/quiz board on animals and plants is nearing completion. Interpretive Technician, Paula Valentine, planned and designed the exhibit and is supervising the local fabrication. Three new exhibits were added or changed in the Sandbox during the year. A portfolio on the identification of common wildflowers is also under way.

Nancy Cox Beck produced an archeological exhibit for the museum and Suzanne Lewis designed a photo exhibit for the Quartermaster Store.

The acquisition of an inflatable raft and motor enabled interpretive SCUBA divers to make more frequent collections for the Sandbox aquaria. This resulted in much higher quality exhibits available for visitor use and understanding.

All the boardwalks and interpretive signs damaged by Hurricane Frederic on the Blackbird Marsh Nature Trail have been replaced. New anodized aluminum interpretive signs and posts were installed on the Dune Nature Trail. Interpretive Technician, Wayne Valentine, revised the text, rerouted the trail, ordered the signs and posts and supervised the installation.

The William Bartram Marker, donated by the Ivy Garden Club was approved and will be installed at Fort Pickens Area in 1982.

Perdido Key

YACC enrollees completed the rebuilding of the wildlife viewing platform and the building of additional boardwalks on the Nature trail. All interpretive signs were replaced on the trail.

Santa Rosa

Major improvements were made to the exhibit room at Santa Rosa. Technician, Mike Magley, planned, designed, acquired materials and supervised construction of an aquaria wall exhibit. This will allow visitors to view representative local marine life, thereby increasing their understanding and appreciation of the local marine resources. The information desk was relocated and the Barrier Island exhibit was upgraded. Hanging interpretive banners were planned and designed in cooperation with Harpers Ferry Center. An orientation wayside is being readied for installation in the spring of 1982.

Pensacola Forts

The flagpole at Fort Barrancas was installed in 1981. Jeff Parsons assisted the Regional Historic Architect in this installation.

The visitor contact station at Fort Barrancas opened to visitors in June, 1981. Two temporary exhibits and two audio visual programs on the rear screen projectors are available for visitors to view.

A nature trail and picnic area at Fort Barrancas were established in 1981.

Cultural Resource Management

Buildings 7 and 8 at Fort Pickens Area received additional painting and rehabilitation before seasonal housing opened and after it closed in 1981.

Suzanne Lewis did historical research through mail inquiry and by making a trip to the National Archives. She obtained microfilmed material, photos, and maps on the historic fortifications.

Contracted archeologists from Florida State University continued their research projects on erosion and vandalism effects on archeological sites at Naval Live Oaks.

Four of the cannon at Fort Barrancas were moved. The Navy borrowed 3 cannon and moved the fourth cannon to the island in the parking area of Fort Barrancas.

Continued progress was made on the museum collection. However there has been a break in continuity with a personnel change and position lapse.

Personnel

Anne Dudley, District Historian, transferred to Sagamore Hill National Historical Site in May and Nancy Cox Beck resigned her park technician position in November. Suzanne Lewis and Melissa McGinnis received temporary promotions in the interim.

Seven Volunteers in the Parks and four Young Adult Conservation Corps enrollees assisted the interpretive division in providing visitor services and information in 1981.

Cooperating Association Activities

The combined sales of the two outlets at Fort Pickens and Fort Barrancas showed a 61% increase over 1980. This increase was due in part to the expanded sales area at the new Fort Barrancas Visitor Contact Station.

Due to lack of sales and personnel, the Santa Rosa outlet was closed in 1980.

ENPMA donated \$3550 in requests in 1981.

Interpretive Division - Mississippi

Interpretive Activities

Interpretive contacts increased by 10.07% over 1981 in spite of a decrease in summer seasonal activities. One seasonal conducted the programs in Davis Bayou on Fridays, Saturdays, and Sundays only. The other two days were spent at the information desk replacing the Park Aid on his lieu days. Davis Bayou activities included marsh tours, a crabbing demonstration along with a cast net demonstration. Special marsh tours were given other evenings, by reservation to organized groups only. On the average two conducted tours were presented on each of the scheduled evenings. The seasonal employee was a Zoology major who greatly enhanced the program with his knowledge of various marine fauna and their life cycles.

The overvall program worked well in Davis Bayou and only a very few visitors were unable to be accommodated on the marsh tours. The cast net throwing demonstration involved direct visitor participation and added humor to the program.

Ship Island's program was greatly reduced since summer seasonal employee hiring was cut by 50%. Tours were scheduled just prior to boat departure times to alleviate the crowding of tours upon the boat's arrival at Ship Island. Snorkeling and beach walks supplemented the program giving visitors respite from the intense heat of the day while snorkeling.

The visitor contact station added three displays to its salt water aquarium containing estuarine fishes. Two tanks contained snakes, one a ribbon snake and the other a rat snake (a constrictor). During the course of the summer it was noted that the rat snake only ate white mice. A brown mouse lived in harmony with the rat snake for 6 weeks, when it was exchanged for a white mouse of short duration.

The other display contains local carnivorous plants, which presents a slight feeding problem when the insect population decreases with the onset of cold weather.

A solar display is on exhibit, which was constructed with the assistance of the maintenance division.

Historic Preservation

The 15" Rodman gun on Fort Massachusetts was reassembled after being returned from Keesler Air Force Base where it was refurbished, painted and the tube placed back onto a sound carriage.

The carriage was painted oriental red to conform to armament regulations of that period. The tube remains painted black.

Final disposition has not been made on the best way to stabilize the beach around the fort.

Personnel

Ron L. Webb was hired as a Park Technician (Naturalist) on a 32 hour appointment in October to fill the newly created position in the division vacant since fiscal year 1980.

Tom Robbins, Park Historian, had his 32 hour appointment changed to full time in August.

Cooperative Association Activities

Donation from ENPMA were not expended because of the late hiring and implementation of the summer activity program at Davis Bayou. Budget uncertainties also caused the delay.

The self guiding fort tour leaflet required more extensive revising than at first anticipated. Locating and drawing the illustrations required additional research and manpower not previously recognized.

Harpers Ferry Center Activities - Park-wide

Planning continued on the William M. Colmer Visitor Center exhibits, Fort Barrancas exhibits, the banners for Santa Rosa contact station, and the park-wide wayside plan and history film script.

The new natural history film was received in December. It emphasizes the ecology of the coastal environment.

Santa Rosa portable teaching aids were received.

COASTAL FIELD RESEARCH LABORATORY

The Coastal Field Research Laboratory's Barrier Island Dynamics Program is a study of the coastal processes, geomorphology, and nearshore sediment dynamics of Petit Bois, Horn, and Ship Islands. There are two phases to this study. The first is the determination of the actual rates of erosion and accretion on the eastern and western tips of the islands, with standard surveying techniques. This work is in its fourth year and fifteen surveys have been performed to date. In addition, rates of erosion and accretion of the central island shorelines, not included in the island tip surveys, are being determined with aerial photogrammetric techniques for a 24-year time span. The second phase of this study deals with understanding the factors responsible for the maintenance of the islands in both time and space. This involves a knowledge of the meteorological and hydrographic characteristics of the area. The Coastal Field Research Laboratory is cooperating with the Mobile District of the U. S. Army Corps of Engineers on this phase. Recently, we obtained two meteorological towers, one on West Ship Island and one on Horn Island, from the Corps of Engineers.

In February 1981 a research program was initiated to monitor the artificial beach placed around Fort Massachusetts. This research will provide a mathematical model by which, given a variety of meteorologic and hydrographic conditions, park management will be able to predict the amount of time remaining before the foundation of the Fort would again be exposed, and the quantities of sand required to nourish the beach. It will provide ample lead time for management to arrange for renourishment. To date, four surveys have been carried out and meteorologic data acquired. It is felt that by 1983 sufficient meteorologic, hydrographic, and shoreline data will have been collected for the preliminary model.

The Lab is also working on a study to identify potential beach sites for the disposal of dredged material on park lands in the Pensacola area. This study is directed toward identifying both the quality of material and the quantity of material that might be placed in particular sites.

Our physical and geographical studies of Gulf Islands National Seashore include an evaluation of island drift based on aerial photography, compilation of remote sensing and cartographic products available for the seashore area, and a monitoring program for off-road vehicle and pedestrian impacts on Perdido Key. Four contract studies are being conducted for the Coastal Field Research Laboratory. The first is a phytosociological study of Perdido Key. This study had initially been set up to assess and monitor the effects of off-road vehicles on Perdido Key. However, the scope of the study was changed after Hurricane Frederic impacted the Key and most traces of off-road vehicle impact were removed. The study is presently in its third

year and is now focusing on revegetation and dune dynamics following hurricane perturbation. The second contract study, now in its second year, initiated by the Coastal Field Research Laboratory following Hurricane Frederic, deals with beach and off-shore studies of the geomorphology and nearshore sediment dynamics of Perdido Key. These two studies will not only provide information concerning the recovery of Perdido Key but will also provide a baseline and monitoring program for the evaluation of pedestrian and off-road vehicle impacts on the Key. In collaboration with the U. S. Army Corps of Engineers, Coastal Engineering Research Center in Fort Belvoir, Virginia, we are investigating the possibilities of using pre- and post-hurricane aerial photography of Perdido Key to ascertain topographic changes of the Key. Ground truth data is being provided by the Coastal Field Research Laboratory. The aerial photographic technique is under development by the Corps of Engineers. The third contract supported by the Coastal Field Research Laboratory deals with the status of endangered and threatened species on Ship, Horn, and Petit Bois Islands. This study has been completed and the final report is in preparation. The fourth contract provides assistance to the Coastal Field Research Laboratory in the performance of the Barrier Island Dynamics Program.