DADE BATTLEFIELD HISTORIC STATE PARK

UNIT MANAGEMENT PLAN

APPROVED PLAN

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION Division of Recreation and Parks

January 14, 2004



Department of Environmental Protection

Jeb Bush Governor Marjorie Stoneman Douglas Building 3900 Commonwealth Boulevard, MS 140 Tallahassee, Florida 32399-3000 David B. Struhs Secretary

January 14, 2004

Ms. BryAnne White Government Operations Consultant II Office of Park Planning Division of Recreation and Parks

Re: Dade Battle Field Historic State Park

Lease Number: 3615

Dear Ms. White:

The Division of State Lands has completed the review of Dad Battlefield Historic State Park Land Management Plan and find that it fulfills all the requirements of Rule 18-2.021, F.A.C., and ss. 253.034 and 259.032, F.S. Therefore, on January 14, 2004, the Office of Environmental Services, acting as agent for the Board of Trustees of the Internal Improvement Trust Fund approves this plan. The plan's five-year update will be due in January 2014.

Approval of this land management plan does not waive the authority or jurisdiction of any governmental entity that may have an interest in this project. Implementation of any upland activities proposed by this management plan may require a permit or other authorization from federal and state agencies having regulatory jurisdiction over those particular activities.

Sincerely,

Delmas T. Barber

Delmas T. Barber, OMC Manager Office of Environmental Services Division of State Lands

"More Protection, Less Process"

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INTRODUCTION

Dade Battlefield Historic State Park is located in Sumter County (see Vicinity Map), one mile southwest of Bushnell, and is easily accessible from Interstate Highway 75, U.S. Highway 301, State Roads 476 and 48. The 80-acre park lies within the boundaries of the four million acres allocated to the Seminole Indians by the Treaty of Moultrie Creek in 1823. A small museum is the focal point for visitors arriving at the park. Inside, several displays, audiotapes and a video explain the battle and the causes that led to it. Paintings, a diorama and life-sized models of Native Americans and soldiers of that period enable visitors to visualize the dramatic event. A portion of the old military trail, known as the Fort King Road, lies in the eastern part of the park. This is where Major Dade's command was attacked. Concrete structures and signs along the trail aid the visitor in understanding the battle. The vicinity map also reflects significant land and water resources existing near the park.

Currently the park contains 80.65 acres. For this plan, park acreage has been calculated based on the composition of natural communities, in addition to ruderal and developed areas.

At Dade Battlefield Historic State Park, public outdoor recreation and conservation is the designated single use of the property. There are no legislative or executive directives that constrain the use of this property (see Addendum 1).

PURPOSE AND SCOPE OF THE PLAN

This plan serves as the basic statement of policy and direction for the management of Dade Battlefield Historic State Park as a unit of Florida's state park system. It identifies the objectives, criteria and standards that guide each aspect of park administration, and sets forth the specific measures that will be implemented to meet management objectives. The plan is intended to meet the requirements of Sections 253.034 and 259.032, Florida Statutes, Chapter 18-2, Florida Administrative Code, and intended to be consistent with the State Lands Management Plan. With approval, this management plan will supercede and replace the current approved plan of February 23, 1998. All development and resource alteration encompassed in this plan is subject to the granting of appropriate permits; easements, licenses, and other required legal instruments. Approval of the management plan does not constitute an exemption from complying with the appropriate local, state or federal agencies. This plan is also intended to meet the requirements for beach and shore preservation, as defined in Chapter 161, Florida Statutes and Chapters 62B-33, 62B-36 and 62R-49, Florida Administrative Code.

The plan consists of two interrelated components. Each component corresponds to a particular aspect of the administration of the park. The resource management component provides a detailed inventory and assessment of the natural and cultural resources of the park. Resource management problems and needs are identified, and specific management objectives are established for each resource type. This component provides guidance on the application of such measures as prescribed burning, exotic species removal, and restoration of natural conditions.

The land use component is the recreational resource allocation plan for the unit. Based on considerations such as access, population, and adjacent land uses, an optimum allocation of the physical space of the park is made, locating use areas and proposing types of facilities and volume of use to be provided.

In the development of this plan, the potential of the park to accommodate secondary management purposes ("multiple uses") was analyzed. These secondary purposes were considered within the context of the Division's statutory responsibilities and an analysis of the resource needs and values of the park. This analysis considered the park natural and cultural resources, management needs, aesthetic values, visitation, and visitor experiences. For this



park, it was determined that no secondary purposes could be accommodated in a manner that would not interfere with the primary purpose of resource-based outdoor recreation and conservation. Uses such as, water resource development projects, water supply projects, stormwater management projects, linear facilities and sustainable agriculture and forestry (other than those forest management activities specifically identified in this plan) are not consistent with this plan or the management purposes of the park and should be discouraged.

The potential for generating revenue to enhance management was also analyzed. Visitor fees and charges are the principal source of revenue generated by the park. It was determined that multiple-use management activities would not be appropriate as a means of generating revenues for land management. Instead, techniques such as entrance fees, concessions, and similar measures will be employed on a case-by-case basis as a means of supplementing park management funding.

The use of private land managers to facilitate restoration and management of this unit was also analyzed. Decisions regarding this type of management (such as outsourcing, contracting with the private sector, use of volunteers, etc.) will be made on a case-by-case basis as necessity dictates.

MANAGEMENT PROGRAM OVERVIEW

Management Authority and Responsibility

In accordance with Chapter 258, Florida Statutes, and Chapter 62D-2, Florida Administrative Code, the Division of Recreation and Parks (Division) is charged with the responsibility of developing and operating Florida's recreation and parks system. These are administered in accordance with the following policy:

It shall be the policy of the Division of Recreation and Parks to promote the state park system for the use, enjoyment, and benefit of the people of Florida and visitors; to acquire typical portions of the original domain of the state which will be accessible to all of the people, and of such character as to emblemize the state's natural values; conserve these natural values for all time; administer the development, use and maintenance of these lands and render such public service in so doing, in such a manner as to enable the people of Florida and visitors to enjoy these values without depleting them; to contribute materially to the development of a strong mental, moral, and physical fiber in the people; to provide for perpetual preservation of historic sites and memorials of statewide significance and interpretation of their history to the people; to contribute to the tourist appeal of Florida.

The Trustees have also granted management authority of certain sovereign submerged lands to the Division under Management Agreement MA 68-086 (as amended January 19, 1988). The management area includes a 400-foot zone from the edge of mean high water where a park boundary borders sovereign submerged lands fronting beaches, bays, estuarine areas, rivers or streams. Where emergent wetland vegetation exists, the zone extends waterward 400 feet beyond the vegetation. The agreement is intended to provide additional protection to resources of the park and nearshore areas and to provide authority to manage activities that could adversely impact public recreational uses.

Many operating procedures are standard system wide and are set by policy. These procedures are outlined in the **Division Operations Procedures Manual** (OPM) and cover such areas as personnel management, uniforms and personal appearance, training, signs, communications, fiscal procedures, interpretation, concessions, camping regulations, resource management, law enforcement, protection, safety and maintenance.

In the management of Dade Battlefield State Historic Park, balance is sought between the goals of maintaining and enhancing natural conditions and providing various recreational opportunities. Natural resource management activities are aimed at management of natural

systems. Development in the park is directed toward providing public access to and within the park, and to providing recreational facilities, in a reasonable balance, that are both convenient and safe. Program emphasis is on interpretation on the park's natural, aesthetic, and educational attributes.

Park Goals and Objectives

The following park goals and objectives express the Division long-term intent in managing the state park. At the beginning of the process to update this management plan, the Division reviewed the goals and objectives of the previous plan to determine if they remain meaningful and practical and should be included in the updated plan. This process ensures that the goals and objectives for the park remain relevant over time.

Estimates are developed for the funding and staff resources needed to implement the management plan based on these goals, objectives and priority management activities. Funding priorities for all state park management and development activities are reviewed each year as part of the Division legislative budget process. The Division prepares an annual legislative budget request based on the priorities established for the entire state park system. The Division also aggressively pursues a wide range of other funds and staffing resources, such as grants, volunteers and partnerships with agencies, local governments and the private sector, for supplementing normal legislative appropriations to address unmet needs. The ability of the Division to implement the specific goals, objectives and priority actions identified in this plan will be determined by the availability of funding resources for these purposes.

Natural and Cultural Resources

- 1. Manage resources in a way that will facilitate interpretation of the battle as accurately and realistically as possible.
 - A. Maintain the mesic flatwoods (site of the annual battle reenactment), as it would have appeared at the time of the battle. It was a pine forest of widely scattered trees with low growing saw palmettos and grasses as ground cover. Encroaching hardwoods should be eliminated except in a zone paralleling the boundary fence where they are needed to block the site of modern residences outside the park. A hardwood screen is also needed to block the shop area from the view of visitors standing on the berm to observe the reenactment.
 - **B.** Conduct regular prescribed burns in the mesic flatwoods.
 - C. Restore wiregrass to the mesic flatwoods.
 - **D.** Gradually phase out slash pines, replacing them with longleaf pines.
 - **E.** At some future date, evaluate the mesic flatwoods as a reintroduction site for gopher tortoises.
 - **F.** Keep all areas of the park free of exotic plants such as air potato and skunk vine, which grow just outside the park.
- 2. Retain and perhaps restore those aspects of the 1922 era Dade Memorial Park that are consistent with the primary goal.
 - A. Restore, and reconstruct if possible, stonework that characterized the 1922 memorial.
 - **B.** Seek funding to repair concrete and rock bridge on southwest park drive.
- **3.** Acquire additional land to park cars during the annual reenactment.
- 4. Remove non-resource based recreational facilities.
 - A. Remove shuffleboard courts.
 - **B.** Remove tennis courts.
- 5. Establish additional measures for cultural resources as needed.
 - A. Protect the park's memorial atmosphere from unnecessary visual or auditory intrusion.
 - **B.** Seek a more appropriate location for period camping during the annual reenactment

that does not infringe upon or affect the historic battlefield.

- **C.** Assess the cultural resources for repairs on a regular schedule as part of the resource management program.
- **D.** Determine feasibility of relocating visitor center away from the battlefield boundary.
- **E.** Collection objects either owned by or on loan to the park will come under management according to Division's established collections management procedures.
- **F.** Establish and maintain written guidelines for use and duration of use of cultural resources.
- **G.** Maintain patrol and inspection procedures, and routines of the park and the interpretive center, to ensure long-term preservation and survival of cultural resources.
- **H.** Resource management files will be established at the Park and District offices for each cultural resource, written standards and procedures for management of each resource will be established, and performance of management will be appraised according to the standards set forth in this outline. Condition of each element will be evaluated at five-year intervals and noted in Park and District files.
- I. Accession and catalog collection objects in park custody in accordance with Division's collections management procedures.
- J. Guidelines and operational procedures will be revised annually for each reenactment and special event activity. They will be enforced and their effectiveness evaluated based on need to preserve the cultural resources and cultural landscape of the park as the highest priority.
- **K.** Revise inspection procedures and routines of the park and the interpretive center to create a "condition" checklist for reporting preservation of cultural resources and collection objects.
- L. Implement a two-phase comprehensive archaeological and archival research project to learn more about the details of Dade's battle and to provide information needed to interpret the site.
- 6. Aesthetic improvements.
 - A. Add native flowering trees and shrubs at selected locations.
 - **B.** Add rock facing to cinderblock buildings to bring them into visual harmony with other stone structures.
 - **C.** A cultural resource green line based on lines of slight outward and auditory evidence inward will be established. Conservation easements as allowed under Chapter 704.06, F.S., will be sought and obtained wherever possible within the green line area to protect the park cultural resources.
 - **D.** The battlefield landscape and individual elements of the park's cultural resources will be documented photographically. Photographs will be updated every five years and copies will be placed in resource management files at park and District offices.

Recreational Goals

- 7. Continue to provide quality resource based outdoor recreational and interpretive programs and facilities at the state park.
 - A. Continue relationship with Sumter County School System for annual running competitions and interpretive field trips.
 - **B.** Continue current relationships and initiate new relationships with historical heritage tour groups
- 8. Seek funding to expand interpretive opportunities through the improvement of programs and exhibits as outlined in this management plan.
 - A. Develop an interpretive exhibit plan to update the visitor center and to provide interactive exhibits that meet universal guidelines.
 - **B.** Implement the interpretive exhibit plan by replacing current exhibits with those

described in the plan.

Park Administration/Operations

- 9. Make necessary repairs to paved roadways in the park.
- **10.** Seek funding for additional staffing for museum.
 - A. Secretary Specialist is needed to handle the increasing administrative requirements.
 - **B.** Museum guide is needed to provide programs, conduct research, assist visitor and research requests, maintain historical files, and plan and promote special events.

Management Coordination

The park is managed in accordance with all applicable Florida Statutes and administrative rules. Agencies having a major or direct role in the management of the park are discussed in this plan.

The Department of Agriculture and Consumer Services, Division of Forestry (DOF), assists Division staff in the development of wildfire emergency plans and provides the authorization required for prescribed burning. The Florida Fish and Wildlife Conservation Commission (FFWCC), assists staff in the enforcement of state laws pertaining to wildlife, freshwater fish and other aquatic life existing within park boundaries. In addition, the FFWCC aids the Division with wildlife management programs, including the development and management of Watchable Wildlife programs. The Department of State, Division of Historical Resources (DHR) assists staff to assure protection of archaeological and historical sites. The Department of Environmental Protection (DEP), Office of Coastal and Aquatic Managed Areas (CAMA) aids staff in aquatic preserves management programs. The DEP, Bureau of Beaches and Wetland Resources aids staff in planning and construction activities seaward of the Coastal Construction Line. In addition, the Bureau of Beaches and Wetland Resources aids staff in the development of erosion control projects. Emphasis is placed on protection of existing resources as well as the promotion of compatible outdoor recreational uses.

Other Designations

Dade Battlefield Historic State Park has not been designated an Area of Critical State Concern as defined in section 380.05, Florida Statutes. Currently it is not under study for such designation. In 1972, the site was listed in the National Register of Historic Places as "Dade Battlefield historic memorial". It was listed as a National Historic Landmark in 1994 by the National Park Service. The park is a component of the Florida Greenways and Trails System.

All waters within the unit have been designated as Outstanding Florida Waters, pursuant to Chapter 62-302 Florida Administrative Code. Surface waters in this unit are also classified as Class III waters by DEP. This unit is not designated as an aquatic preserve under provision of the Florida Aquatic Preserve Act of 1975 (section 258.35, Florida Statutes).

RESOURCE MANAGEMENT COMPONENT

INTRODUCTION

The Division of Recreation and Parks has implemented resource management programs for preserving for all time the representative examples of natural and cultural resources of statewide significance under its administration. This component of the unit plan describes the natural and cultural resources of the park and identifies the methods that will be used to manage them. The stated management measures in this plan are consistent with the Department's overall mission in ecosystem management. Cited references are contained in Addendum 2.

The Division's philosophy of resource management is natural systems management. Primary emphasis is on restoring and maintaining, to the degree practicable, the natural processes that shape the structure, function and species composition of Florida's diverse natural communities as they occurred in the original domain. Single species management may be implemented when the recovery or persistence of a species is problematic provided it is compatible with natural systems management.

The management goal of cultural resources is to preserve sites and objects that represent all of Florida's cultural periods as well as significant historic events or persons. This goal may entail active measures to stabilize, reconstruct or restore resources, or to rehabilitate them for appropriate public use.

Because park units are often components of larger ecosystems, their proper management is often affected by conditions and occurrences beyond park boundaries. Ecosystem management is implemented through a resource management evaluation program (to assess resource conditions, evaluate management activities, and refine management actions), review of local comprehensive plans, and review of permit applications for park/ecosystem impacts.

RESOURCE DESCRIPTION AND ASSESSMENT

Topography

Natural Resources

Dade Battlefield is mostly flat, with elevations ranging from 61 to 70 feet above mean sea level (msl). The lowest natural elevation is approximately 68 feet msl. The natural topography in the park has not been altered except at two small sites. A 0.6-acre wet depression on the northern boundary, probably a sinkhole originally, was dug for fill to construct fence lines, roads, and other facilities, and remains the lowest elevation on the property. This pit was then used as a dump for many years. It is no longer used to burn vegetative debris and has willow and marshmallow growing in it. A smaller pit on the southwest border was also excavated for fill, but today it is visible only as a slight depression in the ground.

The park lies within the Central physiographic zone of Florida, in the Central Highlands Province and Sumter Upland.

Geology

The substrate in Sumter County is composed of a limestone core overlain by clayey sediments and Pleistocene sands. Dissolution of limestone has been limited by the clayey sediments, resulting in a relatively high elevation. Surface and near surface sediments consist of quartz sand, clay, peat, limestone, and dolomite. These sediments range in age from the Middle Eocene, 40-45 million years ago, to Holocene, 10,000 years ago to present.

No outstanding geologic formations are seen at Dade Battlefield Historic State Park. Years ago, the Florida Crushed Stone Company drilled for limestone approximately 1,500 feet from the park's south side and determined that the rock was not of a high enough quality to be used

commercially. Crushed limestone is the major mineral commodity produced in Sumter County.

<u>Soils</u>

Two types of soils are found at almost all of Dade Battlefield Historic State Park, Kanapaha fine sand and Sparr fine sand. Both types of soil are very similar, typically occurring on nearly level to gently sloping, poorly drained areas. Subsoils can be sandy throughout, or sandy to a depth of 20 inches with loam or clay below. Except in the two places excavated for fill mentioned above, the soils in the unit have not been disturbed. Two additional soil types -- Eau Gallie fine sand and Placid fine sand -- have been identified at the extreme southwest corner of the park (see Soils Map). Addendum 3 contains detailed soils descriptions for the park.

Minerals

Dade Battlefield Historic State Park has no known minerals of commercial value. In addition, as stated previously, the underlying limestone is not of commercial quality.

<u>Hydrology</u>

Regional hydrology. The unit lies within the Jumper Creek Canal Watershed. Water is drawn from two aquifer systems, the Floridan aquifer, serving as the main source of regional water, and from the shallow aquifer. The Floridan aquifer is composed of limestones and dolomites from the Tertiary Period. General movement of water is from east to west. The shallow aquifer can be found where sands overlie the limestones and dolomites of the Floridan aquifer. Recharge of the shallow aquifer is almost entirely from local rainfall.

Park hydrology. Dade Battlefield Historic State Park receives its drinking water from the city of Bushnell to the northeast. The water is drawn from wells tapping the Floridan aquifer.

Surface drainage today is through a series of drainage ditches that convey water from the north and east, through the park to exit on the south boundary. A ditch carries water south from Bushnell into Center Pond, then to Webb's Pond adjacent to the park. From the latter pond, two ditches transport water through the park. One ditch, more like a small canal, is elaborately constructed, lined with stone and has become a scenic amenity. It is crossed by four bridges. The other smaller ditch enters at the southeast corner and parallels the south boundary for a short distance before rejoining the other ditch at the point where it leaves the park. From there drainage proceeds southwesterly through a series of ponds, ditches, and swampy areas to Gum Slough, and finally to the Withlacoochee River. The park drains quite well. Water rarely stands and has never persisted long enough to cause problems.

The canal through the park serves as a source of intermittent water. It was originally a natural drainage way or slough. Webb's pond outside the east boundary of the park, sometimes known as "Death Pond" in reference to the battle, had, it is reported, fed the canal by means of a permanent spring, providing it with flowing water year round. It had a healthy fish population until the mid-1950s when explosions from the mining of limestone nearby reportedly stopped the spring and thereby stopped the constant flow of water through the park. The canal presently holds water, and sometimes fish, only during periods of heavy rain, when surface runoff fills the canal and/or water backs up from Gum Slough. The intermittent flow in the canal serves as the only surface water in the park. In 1994, the spring reportedly started up again, perhaps due to unusually abundant rainfall, and the canal was still flowing in 1995. In 1998, water spilled over the banks of the canal during the abundant winter rains. In recent years, due to drought conditions, water was only briefly in the canal in 2001 and 2002 when Tropical Storm Gabrielle passed through. It is doubtful that the above-mentioned spring is actively flowing.

At present, no adjacent land uses have any impact on the park. The land to the east,



supporting the pond, is currently in the service of agriculture, being used to graze cattle. Acquisition of 40 acres surrounding the pond would provide an aesthetic buffer against development on the park's east side, and it would provide much-needed parking space for the large number of visitors who attend the Dade Battlefield reenactment each year. The pond would add an entirely new habitat type to the park, and thereby increase the number of plant and animal species found within its boundaries.

Natural Communities

The system of classifying natural communities employed in this plan was developed by the Florida Natural Areas Inventory (FNAI) **FNAI Descriptions**. The premise of this system is that physical factors, such as climate, geology, soil, hydrology and fire frequency generally determine the species composition of an area, and that areas which are similar with respect to these factors will tend to have natural communities with similar species compositions. Obvious differences in species composition can occur, despite similar physical conditions. In other instances, physical factors are substantially different, yet the species compositions are quite similar. For example, coastal strand and scrub--two communities with similar species compositions different physical strand and scrub--two communities with similar species compositions.

The park contains one distinct natural community (see Natural Communities Map) in addition to developed areas. Park specific assessments of the existing natural communities are provided in the narrative below. A list of plants and animals occurring in the unit is contained in Addendum 4.

Mesic flatwoods. The longleaf pine mesic flatwoods is the only significant and intact natural community located in the western portion of the park. This community is small, yet representative of the type of terrain in which Dade's historic battle was fought. A 3,499-foot circular, nature trail meanders through the flatwoods.

The flatwoods were once the site of logging and turpentining activities. Approximately 170 pines exhibiting "catface" turpentine scars still stand. These trees represent some of the older pines in the park. Since the last plan revision, lightning strikes, beetle infestation and high winds have destroyed about five trees. Three fire-damaged, catfaced pines killed by drought and insect infestation in 1980 had estimated ages of 65, 70, and 90 years. Catfaced pines are weakened trees that become particularly susceptible to engraver beetle (Ips spp.) infestations during drought conditions.

Pine trees may have been cut for timber at the turn of the century. Milled logs for a courthouse addition were found to contain musket balls. The most recent logging occurred around 1927, with stump removal occurring during World War II. The pines standing today are second growth trees.

In the 1970s, the mesic flatwoods were succeeding towards a hammock, and showed a great deal of oak encroachment. In that decade, a prescribed burning program was initiated and today, burning is conducted each year. The flatwoods suffer slight aesthetic degradation from numerous hardwood stumps left standing 2-4 feet above the ground. During a period of park personnel shortage, park management utilized community workers in a hardwood removal program. Unfortunately, the quality of the laborers' work was marginal, and these unsightly stumps tarnish the desired look.

Of the 50 acres of mesic flatwoods remaining at Dade Battlefield Historic State Park today, approximately five acres have been altered and planted with slash pines. The slash pines are next to the picnic area, toward the northeast corner of the unit. Slash pine was not the original species here, and over time, the trees can be removed and replaced by longleaf pines. The



frequency of prescribed burns was reduced in 2000 and 2001 due to the beetle infestations and fear that the already drought stressed trees would not survive yet one more assault.

Developed. Developed areas at Dade Battlefield Historic State Park include a tennis court, picnic shelters, two shuffleboard courts and several buildings. Each year during the month of December, a reenactment of the battle is staged. The event has become very popular, with growing numbers of people attending. As it became increasingly difficult for visitors to view the battle, an earthen berm, five feet high and 150 feet long, was raised in 1987 so that visitors could sit on the slope and have a better view of the reenactment. The berm was raised on the outfield of the baseball field, making the field dysfunctional.

The battle site and a portion of the Fort King Military Road are situated near the eastern boundary of the park in what was once mesic flatwoods. The vegetation consists of large live oak trees, low, mixed understory vegetation and about 40 mature pines and the same number of 20-30 foot saplings, planted prior to 1998. Lawn grass has been planted in selected locations. This part of the park is used mostly for interpretation.

Designated Species

Designated species are those that are listed by the Florida Natural Areas Inventory (FNAI), U.S. Fish and Wildlife Service (USFWS), Florida Fish and Wildlife Conservation Commission (FFWCC), and the Florida Department of Agriculture and Consumer Services (FDA) as endangered, threatened or of special concern. Addendum 5 contains a list of the designated species and their designated status for this park. Management measures will be addressed later in this plan.

There are a few gopher tortoises in the park. It is the only recorded designated species to be considered for management.

The single rare plant species reported (but not presently found) at the park is Florida anise or yellow star anise (*Illicium parviflorum*), which inhabits pine flatwoods. There are no designated species that are unique to the unit.

Special Natural Features

No unique natural features occur within this unit.

Cultural Resources

Evaluating the condition of cultural resources is accomplished using a three part evaluative scale, expressed as good, fair, and poor. These terms describe the present state of affairs, rather than comparing what exists against the ideal, a newly constructed component. Good describes a condition of structural stability and physical wholeness, where no obvious deterioration other than normal occurs. Fair describes a condition in which there is a discernible decline in condition between inspections, and the wholeness or physical integrity is and continues to be threatened by factors other than normal wear. A fair judgment is cause for concern. Poor describe an unstable condition where there is palpable, accelerating decline, and physical integrity is being compromised quickly. A resource in poor condition suffers obvious declines in physical integrity from year to year. A poor condition suggests immediate action to reestablish physical stability.

Cultural resources in Dade Battlefield Historic State Park are of great interest in the history of this state. Some of these resources are related to the so-called "Dade Massacre", an event widely seen by Floridians of the late 1830s as ranking among the great cataclysms of their time. The field of battle on which Brevet Major Francis Dade and all but three men of his command were killed is encompassed only in part by the park boundaries. The spot is well known, if somewhat notorious, since the battle. The portion of the battlefield located within the park has been in public ownership since 1921. A portion of the Fort King Military Road,

on which Dade's command was traveling when the Seminoles attacked, is also (by inference) on the Historic State Park grounds. The Battlefield was listed in the National Register of Historic Places in 1972 as "Dade Battlefield Historic Memorial," and it is listed in the Florida Master Site File as Sm 12. It has also been designated a National Historic Landmark.

The remaining cultural resources of the Historic Site are from the first quarter of the twentieth century and may be diagnostic for what they reveal about publicly sponsored battle memorials, development of which seems to have been an important public undertaking in small southern towns during the 1920s. These features may also be important for what they reveal about planning and execution of public parks in a provincial setting. Beginning in 1970, restoration and interpretation came to the fore in park service thinking, emphasizing, in the case of cultural resources, restoring the site to the appearance it might have presented at its most significant cultural period. Under this system of thought, the resources representing the battle memorial were not held in high esteem.

A reconnaissance survey by professional staff of the Division of Recreation and Parks identified 12 related objects or structures which comprise all or elements of nine distinct cultural microcomponents (small components: all may be considered one large component). These elements are at least sixty years old, and while most have been altered to some extent, only Dade 2, the Memorial Breastworks, has been fundamentally changed in character or appearance. The cement Breastworks was disposed of and is replaced periodically with pine trees. For the sake of convenience, they have been numbered below Dade 1 through Dade 9.

Dade 1:	Bench "Allapata-Yama"	Dade 5b:	Captain Fraser Monument
	painted on back support	Dade 5c:	Major Dade monument
Dade 2:	Memorial Breastworks	Dade 6:	Abandoned gateposts
Dade 3:	Footbridge	Dade 7:	Vehicular bridge
Dade 4:	Small Service Bridge	Dade 8:	Stand pipe
Dade 5a:	Lt. Mudge monument	Dade 9:	Band stand

Most of these components are in good-to-excellent condition, though the component numbered Dade 6 is in fair-to-good condition and, as mentioned above, the component numbered Dade 2 has been disposed of. Together with the photographs of the missing components and oral history interviews of people in the community, these components would make up the only coordinated body of knowledge we have about early activities in the public service sector.

RESOURCE MANAGEMENT PROGRAM

Special Management Considerations

Timber Management Analysis

Chapters 253 and 259, Florida Statutes, require an assessment of the feasibility of managing timber in land management plans for parcels greater than 1,000 acres if the lead agency determines that timber management is not in conflict with the primary management objectives of the land. The feasibility of harvesting timber at this park during the period covered by this plan was considered in context of the Division's statutory responsibilities, and an analysis of the park's resource needs and values. The long-term management goal for forest communities in the state park system is to maintain or re-establish old-growth characteristics to the degree practicable, with the exception of early successional communities such as sand pine scrub and coastal strand.

During the development of this plan, an analysis was made regarding the feasibility of timber management activities for this park. It was then determined that the primary management objectives of the unit could be met without conducting timber management activities for this

management plan cycle. Timber management will be reevaluated during the next revision of this management plan.

Management Needs and Problems

The primary goal of resource management at this park is to manage resources in a way that will let them interpret the historic event -- the battle -- as accurately and realistically as possible. A secondary goal is to retain and perhaps to restore those aspects of the 1922 era Dade Memorial Park that are not inconsistent with the primary goal.

The battle is interpreted in two ways. First, by fixed interpretive facilities which include a museum, signs and monuments along a trail, and a replica of a triangular breastwork made of the trunks of pine trees. The other mode of interpretation is through an annual reenactment carried out on two consecutive days during a weekend in December. The portion of the park that remains as a mesic flatwoods community forms a backdrop for the reenacted battle. It should be managed to create a facsimile of the scene, as it would have appeared in the 1830s.

For many years, the mesic flatwoods community was not managed at all except to exclude fire, which drastically changed its character by allowing the growth of hardwood trees. Shading by hardwoods has nearly eliminated wiregrass, once an abundant plant, and perhaps other species as well.

It is apparently uncertain whether, or where, the army officers who fell in battle are buried. An archaeological and archival investigation might answer this question.

In 1992, phase I of a museum assessment program was carried out by the American Association of Museums. Grant funding should be sought for a phase II assessment that would be aimed at evaluating the museum collections.

The Florida Park Service historic preservationist, John Scafidi, in a report in 1987, pointed out that the social forces prompting the creation of this site, and the monuments and other structures installed at the time of its dedication, represent a historical event in themselves worthy of preservation.

The remaining cultural resources of the Historic Site are a component of the first quarter of the twentieth century and may be diagnostic for what they reveal about publicly sponsored battle memorials, development of which seems to have been a virtual pastime in small southern towns in 1922 and for what they reveal about planning and execution of public parks in a decidedly provincial setting. The complex should also be considered diagnostic for public park development prior to large scale federal involvement which came to characterize such activities during and after the 1930s. These resources have suffered neglect in the last thirty years, in part because they have had no recognizable utilitarian function, and probably in part because they are so provincial in design and execution.

A plan should be developed to identify those components of Dade Memorial Park for which it would be suitable to retain, modify or reconstruct, in order to convey a sense of the community intent, in establishing the original park. As an example, it might be possible to reconstruct the original gateway, or to face the cinderblock construction of later buildings with stonework, architecturally consistent with the original bridges and other stone structures, as was done when the bandstand was built on the grounds.

The park maintains a limited collection of museum and interpretive objects housed in the interpretive center. Acquisition of collection objects is controlled by the park's scope of collections statement.

The previous establishment of recreational facilities: a ball field, tennis courts and shuffleboard courts, also needs discussion. Since 1970, the concept of "Resource-based"

Outdoor Recreation" has been a strong underpining of the Florida Park Service's management philosophy. The idea is to support recreational activities that are dependent on a natural resource high in aesthetic attributes, but not to include activities and facilities that can easily be provided in an urban or other setting. The recreational facilities at Dade Battlefield were built when the park was the only public land available to enhance the recreational base of the local community. That is no longer the case since Sumter County has built a 15-acre recreational complex one mile away. The ball field backstop has been removed. The shuffleboard and tennis courts are no longer used and should be removed.

Management Objectives

The resources administered by the Division are divided into two principal categories: natural resources and cultural resources. The Division primary objective in natural resource management is to maintain and restore, to the extent possible, to the conditions that existed before the ecological disruptions caused by man. The objective for managing cultural resources is to protect these resources from human-related and natural threats. This will arrest deterioration and help preserve the cultural resources for future generations to enjoy.

The management objective for the mesic flatwoods is, first, to eliminate the remaining hardwood trees that have encroached. Much progress has been made in this direction during the past ten years. Most large oak trees have been felled and most of the smaller trees have been cleared away. However, the large oak stumps should be cut off at ground level, and the remaining dense growth of smaller oaks should be eliminated. Final clearance of these smaller trees will be time-consuming job if the work falls to the park staff. If a mechanical tree cutter is used, then the work could be finished in a few days.

To preserve the scenic integrity of the mesic flatwoods as a realistic setting for the reenactment, a 50-foot-wide buffer of hardwood trees must be left in place along the north, west and south boundaries of the park. Homes, recently built, line the fence along the north boundary. They are nearly invisible from the reenactment viewing area because of hardwood trees slated for elimination but not removed. On the south boundary, only one home has been built in recent years, but others will almost certainly come into the pasture that borders the south and western sides of the park. To allow these interior buffers to develop, a soft fire line should be cut with a mechanical tree cutter, parallel to the outer edge of the mesic flatwoods to keep fire out of the buffer. An additional 50-foot vegetative buffer should be permitted to grow up and screen the shop area.

Finally, years of shading by hardwoods has virtually eliminated wiregrass from the mesic flatwoods. As methods are developed for replanting this species it should be returned as a dominant ground cover plant.

In the five acres of mesic flatwoods that have been replanted with slash pines, four trees are selectively removed each year to be made into a log breastwork during the reenactment. A few longleaf pine seedlings should be planted periodically so that replacement trees--of the species originally there--can begin to grow. Ideally, the seedlings should be produced locally from cones collected in the park.

Management Measures for Natural Resources

Hydrology

Hydrological measures are not essential here either for ecological or operational reasons, but the scenic appeal of the park might be enhanced by installing several small water control structures in the canal to raise water levels and produce several cascades or rills at sites where they might be seen by visitors crossing bridges.

Prescribed Burning

The objectives of prescribed burning are to create those conditions that are most natural for a particular community, and to maintain ecological diversity within the unit's natural communities. To meet these objectives, the park is partitioned into burn zones, and burn prescriptions are implemented for each zone. The park burn plan is updated annually to meet current conditions. All prescribed burns are conducted with authorization from the Department of Agriculture and Consumer Services, Division of Forestry (DOF). Wildfire suppression activities will be coordinated between the Division and the DOF.

There are three burn zones at Dade Battlefield Historic State Park (see Burn Zones Map). Zone D1 and D2 are longleaf pine flatwoods. Zone D3 is a slash pine flatwoods. Prescribed burning should be conducted in these zones as often as the fuel will permit, annually if possible.

All burns will be prescribed during the growing season. Catfaced pines will be preserved, not being allowed to burn if they ignite.

Additional fire fighting equipment in the form of a water tank is needed to allow the park manager more latitude in choosing burn days. Permission to burn is sometimes denied by DOF when conditions are less than perfect because water is not available at the burn site. The water tank could be a truck-mounted slide-in unit or a mobile tank.

Designated Species Protection

The welfare of designated species is an important concern of the Division. In many cases, these species will benefit most from proper management of their natural communities. At times, however, additional management measures are needed because of the poor condition of some communities, or because of unusual circumstances that aggravate the particular problems of a species. The Division will consult and coordinate with appropriate federal, state and local agencies for management of designated species.

The only designated animal species known to be resident in the park is the gopher tortoise, currently listed as a Species of Special Concern by the Florida Game and Fresh Water Fish Commission. A survey by a district biologist following prescribed burns in the summer of 1994, revealed 13 burrows, two of which appeared to be inactive. The park was encompassed by a hog wire fence in 1988 so presumably no migration of tortoises can occur across the park boundary. Conservation biologists have proposed that a gopher tortoise population of 40-50 individuals, living in a favorable environment, has a 90 percent probability of surviving for 200 years. Going by this prediction it does not appear that the small number of resident gopher tortoises can persist into the future.

However, the remaining natural habitat in the park might be adequate in size to sustain a viable population if other factors -- such as forage and substrate quality -- are supportive. At some future date, experts from the Florida Game and Fresh Water Fish Commission will be consulted to evaluate the park as a reintroduction site, but certainly, this cannot be considered until all hardwoods are removed from mesic flatwoods habitat. If wiregrass can be ultimately reestablished, it might favor the return of gopher tortoises.

Eastern indigo snakes are seen quite often though residency in the park has not been studied.

Florida anise has been reported from this park, but the park manager has never seen it.

Exotic Species Control

Exotic species are those plants or animals that are not native to Florida, but were introduced because of human-related activities. Exotics have fewer natural enemies and may have a higher survival rate than do native species, as well. They may also harbor diseases or parasites



that significantly affect non-resistant native species. Consequently, it is the strategy of the Division to remove exotic species from native natural communities.

Bamboo, lantana and camphor trees appear from time to time. They are quickly and easily removed when found. The most serious threat is from air potato and skunk vine. Both species, however, have nearly been eliminated from the park and are controlled by hand when they periodically enter from adjacent property. East of the old dumpsite on the north boundary is an area of skunk vine that needs to be eliminated.

Exotic species in this park are for the most part, under control. On-going efforts are made to prevent them from being a problem.

Problem Species

Problem species are defined as native species whose habits create specific management problems or concerns. Occasionally, problem species are also a designated species, such as alligators. The Division will consult and coordinate with appropriate federal, state and local agencies for management of designated species that are considered a threat or problem.

There are no problem species at this park.

Management Measures for Cultural Resources

The management of cultural resources is often complicated because these resources are irreplaceable and extremely vulnerable to disturbances. The advice of historical and archaeological experts is required in this effort. Approval from Department of State, Division of Historical Resources (DHR) must be obtained before taking any actions, such as development or site improvements that could affect or disturb the cultural resources on state lands (see <u>DHR Cultural Management Statement</u>).

Actions that require permits or approval from DHR include development, site excavations or surveys, disturbances of sites or structures, disturbances of the substrate, and any other actions that may affect the integrity of the cultural resources. These actions could damage evidence that would someday be useful to researchers attempting to interpret the past. Management of the actual battlefield, which includes a portion of the Fort King Military Road, is complicated by the invisibility of the resources. The battlefield represents a footprint in the soil of the park and the surrounding area, and the Fort King Road represents a line drawn through the footprint. Both are invisible to the naked eve. The character of small unit battles of the second quarter of the nineteenth century makes it improbable that much subsurface evidence remains. In fact, the battle was an occurrence of such brief duration that finding any physical evidence from the event is virtually inconceivable. However, archaeologists believe enough evidence exists to delineate the exact boundaries of the battlefield and determine the positions of Seminole warriors and soldiers. There may also be evidence of the encampment of General Gaines and his troops. The greatest and most persistent threat to the integrity of the battlefield, the historic road, and the memorials that identify them, is development.

Short-term development is typified by the series of often-undocumented physical changes and compromises which facilitate the yearly reenactment. Such actions include allowing vehicular traffic, including a Park Service vehicle, and parking on non-stabilized areas, occasional excavation of illegal fire and trash pits by reenactors, and other small violations of the battlefield skin or surface that are only discovered after their perpetrations.

Long-term development is represented by construction activities to enable the park to function adequately as a park and as a reenactment stage, as well as a memorial. While procedures exist to allow and facilitate these activities, such development must be constrained and regulated. The expanded recreational and public picnicking opportunities that have become

available outside the park during the past decade will be helpful to this objective.

Other developments, carried out since the 1970s for "authenticity", threaten the structures of the 1920s, which have attained standing as representations of American culture in the immediate post World War I period. An example of such development was destruction of the concrete memorial breastworks because it was not "correctly" oriented, an assessment which ignored the memorial nature of the construction.

The lack of guaranteed parking space for visitors attending the reenactment poses a grave threat to this activity in the future. A privately owned pasture is presently used to accommodate the cars that cannot find space in the park, but it may not always be available. An alternative site should be found. The ideal land for this purpose is the Webb property just beyond the east boundary. It would bring a large pond into the park that figured importantly in the battle. This property is included in the optimum boundary for the park.

Another special management consideration involves the addition of certain native trees and shrubs at selected locations to enhance the aesthetic qualities of the developed area. The numerous large live oaks around the museum and other buildings make a visit to this park an enjoyable experience even aside from the points of historical interest. This pleasing scene could be further enhanced by the planting of flowering native trees and shrubs at carefully chosen spots. Seasonal color and a variety of foliage could be added, both to decorate empty spaces and to screen the straight lines of man-made structures, without the viewer being aware that any landscaping design was intended. Ideal plants for this purpose would be flowering dogwood and redbud trees distributed at intervals of 30 to 50 feet. Native azaleas that bloom profusely in the spring could be placed at strategic locations. In addition, there might be other plant species suited for this informal arrangement.

Research Needs

Natural Resources

Any research or other activity that involves the collection of plant or animal species on park property requires a collecting permit from the Department of Environmental Protection. Additional permits from the Florida Fish and Wildlife Conservation Commission, the Department of Agriculture and Consumer Services, or the U.S. Fish and Wildlife Service may also be required.

The status of Florida anise or yellow star anise (*Illicium parviflorum*) needs to be assessed and management needs, if any proposed.

Cultural Resources

Dade's battle, or the Dade Massacre, has been studied extensively by scholars and laypersons for many years. The historical data are quite thorough. By contrast, research which will facilitate management of the parks cultural resources are few. Composition of the standing cultural resources should be studied in order to assure their preservation. If resources have been moved, efforts should be made to replace them as originally sited, without compromising the primary goal of interpreting the historic event.

Students or scholars of the history of public works or public outdoor recreation should be encouraged to study, document the 1920s park, and analyze its development and decline. The type of laboratory in public planning represented by Dade Battlefield Historic State Park is a rarity in the Southeast and may be unique in Florida.

There are numerous unresolved questions about the logistics of Dade's battle and associated burials that followed. The location of the officer's graves, whether Seminole graves occur, the field of fire for the Seminole and soldier, and the exact boundaries of the battlefield are questions to be examined.

In 1964, a research excavation of the area inside the replica breastworks was conducted. This research revealed two gravesites of enlisted men and artifacts recovered included uniform buttons, rifle balls, and teeth.

In 2001, an archaeology roundtable meeting was held at the park attended by notable archaeologists and scholars to discuss research needs at the site. In January 2001, students from the University of South Florida developed a Phase I Research Plan that could be used to seek research funding. Initial research work would be non-intrusive.

An archaeological and archival investigation might answer the question; however, archaeological and archival investigations of the park should be approached with cautious conservatism. Should a project be suggested it would be sufficient to utilize non-intrusive technology like ground penetrating radar in preference to excavation in locating features or anomalies. In any event, any such investigations require a permit from the Division of Historical Resources and should never be undertaken without such permit.

Resource Management Schedule

A priority schedule for conducting all management activities that is based on the purposes for which these lands were acquired, and to enhance the resource values, is contained in Addendum 6. Cost estimates for conducting priority management activities are based on the most cost effective methods and recommendations currently available (see Addendum 6).

Land Management Review

Section 259.036, Florida Statutes, established land management review teams to determine whether conservation, preservation, and recreation lands titled in the name of the Board of Trustees of the Internal Improvement Trust Fund (board) are being managed for the purposes for which they were acquired and in accordance with a land management plan adopted pursuant to s. 259.032, the board of trustees, acting through the Department of Environmental Protection (department). The managing agency shall consider the findings and recommendations of the land management review team in finalizing the required update of its management plan.

A land management review of this park has not been conducted.

LAND USE COMPONENT

INTRODUCTION

Land use planning and park development decisions for the state park system are based on the dual responsibilities of the Division of Recreation and Parks. These responsibilities are to preserve representative examples of original natural Florida and its cultural resources, and to provide outdoor recreation opportunities for Florida's citizens and visitors.

The general planning and design process begins with an analysis of the natural and cultural resources of the unit, and then proceeds through the creation of a conceptual land use plan that culminates in the actual design and construction of park facilities. Input to the plan is provided by experts in environmental sciences, cultural resources, park operation and management, through public workshops, and environmental groups. With this approach, the Division objective is to provide quality development for resource-based recreation throughout the state with a high level of sensitivity to the natural and cultural resources at each park.

This component of the unit plan includes a brief inventory of the external conditions and the recreational potential of the unit. Existing uses, facilities, special conditions on use, and specific areas within the park that will be given special protection, are identified. The land use component then summarizes the current conceptual land use plan for the park, identifying the existing or proposed activities suited to the resource base of the park. Any new facilities needed to support the proposed activities are described and located in general terms.

EXTERNAL CONDITIONS

An assessment of the conditions that exist beyond the boundaries of the unit can identify any special development problems or opportunities that exist because of the unit's unique setting or environment. This also provides an opportunity to deal systematically with various planning issues such as location, adjacent land uses and the park interaction with other facilities.

Existing Use of Adjacent Lands

The surrounding land uses are primarily agricultural and residential. Recently, the rate of residential development has increased with numerous new homes being constructed near the park.

Planned Use of Adjacent Lands

It is anticipated that residential development around the park will continue. Potential negative impacts to the park could include increased noise, stormwater runoff, traffic, and visual intrusions.

PROPERTY ANALYSIS

Effective planning requires a thorough understanding of the unit's natural and cultural resources. This section describes the resource characteristics and existing uses of the property. The unit's recreation resource elements are examined to identify the opportunities and constraints they present for recreational development. Past and present uses are assessed for their effects on the property, compatibility with the site, and relation to the unit's classification.

Recreation Resource Elements

This section assesses the unit's recreation resource elements those physical qualities that, either singly or in certain combinations, supports the various resource-based recreation activities. Breaking down the property into such elements provides a means for measuring the property's capability to support individual recreation activities. This process also

analyzes the existing spatial factors that either favor or limit the provision of each activity.

Dade Battlefield Historic State Park is the location of a historic battle between Seminole Indians and the U.S. Army in 1835, at the beginning of the Second Seminole War. Every year a reenactment of the battle is held in the park, drawing visitors from around the country. A grass-covered earthen berm was constructed near the center of the property to enhance public viewing of the annual battle reenactment.

About a third of the 80-acre park has been developed to accommodate picnicking and other recreational uses. The eastern boundary of the park contains the historic battlefield with a historic trail following the route of the old Fort King Military Road and the visitor center. These areas are characterized by large live oaks and mowed lawn areas, providing a popular picnic area. Recreational facilities such as a ball field, a tennis court, and a shuffleboard court were developed to serve local residents. The ball field has been removed and use of the tennis court has been discontinued since the construction of a nearby recreational park by Sumter County

A drainage canal transports surface runoff from the town of Bushnell through the southeast side of the park. The canal is lined with stone and is crossed by vehicle and pedestrian bridges. One of the bridges, on the southwest side of the park drive, is not structurally sound for vehicles that exceed 3 tons, such as motor homes and large trucks.

Native stone has been used extensively throughout the park for construction. The entryway, the bandstand, and numerous columns are faced with stone, adding to the rustic charm of the park.

The western half of the property supports a healthy longleaf pine mesic flatwoods community, the only intact natural community in the park. The mesic flatwoods are regularly managed with prescribed burning, providing a representative example of the historic conditions present during the time of the battle. A short nature trail loops through the mesic flatwoods, providing access to the park's only natural area.

Archaeological and Historical Features

The park itself is considered a historic feature, being the site of a historic battle between Seminole Indians and the U.S. Army in 1835. A portion of the Fort King Military Road is located near the eastern boundary of the park. Three concrete monuments located on the historic battlefield are dedicated to the officers killed during the battle. The numerous monuments and park improvements developed during the first quarter of the twentieth century are considered cultural resources.

Assessment of Use

All legal boundaries, significant natural features, structures, facilities, roads, trails and easements existing in the unit are delineated on the base map (see Base Map). Specific uses made of the unit are briefly described in the following sections.

Past Uses

Prior to management by the division, the site was designated as "Dade Memorial Park," and was managed as a community park to memorialize the fallen soldiers. Over the years, the park has been a popular location for local gatherings and picnics.

Recreational Uses

The major forms of recreation include picnicking, hiking, nature study, and historic interpretation. A shuffleboard court is available for park visitors, but does not receive much use. A modern recreation complex has been developed nearby, decreasing the demand for it. The Florida Volksport Association has established a ten-kilometer walking trail on existing fencerows and fire breaks.



Other Uses

A historic battle reenactment is held at the park annually near the actual date of the historic battle. The annual World War II Commemorative event, held the first Saturday in August, reflects upon the site's history associated with the war.

Protected Zones

A protected zone is an area of high sensitivity or outstanding character from which most types of development are excluded as a protective measure. Generally, facilities requiring extensive land alteration or resulting in intensive resource use, such as parking lots, camping areas, shops or maintenance areas, are not permitted in protected zones. Facilities with minimal resource impacts, such as trails, interpretive signs and boardwalks are generally allowed. All decisions involving the use of protected zones are made on a case-by-case basis after careful site planning and analysis.

At Dade Battlefield Historic State Park, the battlefield, the monuments to the fallen officers and the portion of the Fort King Military Road in the park have been designated as protected zones.

Existing Facilities

Recreation facilities. All of the public facilities are located on the eastern side of the park. The picnic area contains six picnic shelters, a barbecue shelter, a restroom building, and numerous cooking grills. This area has paved parking for about 132 vehicles and unpaved parking for approximately 40 vehicles.

A centrally located meeting hall facility includes a full kitchen and restrooms. This facility is available for a number of uses including meetings, family reunions, and wedding receptions. A small bandstand/gazebo structure is located adjacent to the meeting hall. The visitor center is the focal point for interpretive information on the historic battle. The visitor center's small museum includes paintings, artifacts, a diorama, and life-sized models in period dress. The visitor center also includes public restrooms, a video viewing room featuring a 12-minute documentary about Dade's battle, and a small display area for the sale of books relating to natural and cultural resources. Paved parking at the visitor center will accommodate about 12 vehicles.

A short nature trail of about three quarters of a mile loops through mesic flatwoods, the park's only natural community and a representative example of the historic battleground conditions.

The Florida Volksport Association has designated a ten-kilometer walking trail within the park. This trail is primarily located on existing fencerows and firebreaks and it extends into the neighboring community.

Support facilities. The support facilities are located along the southern boundary, west of the visitor center. Support facilities include a shop building, a pole barn, a storage shed, and a ranger residence. The visitor center contains administrative office space. An honor box pay station is located along the entry road for collection of admission fees.

CONCEPTUAL LAND USE PLAN

The following narrative represents the current conceptual land use proposal for this park. As new information is provided regarding the environment of the park, cultural resources, recreational use, and as new land is acquired, the conceptual land use plan may be amended to address the new conditions. A detailed development plan for the park and a site plan for specific facilities will be developed based on this conceptual land use plan, as funding becomes available. During the development of the unit management plan, the Division assesses potential impacts of proposed uses on the resources of the property. Uses that could result in unacceptable impacts are not included in the conceptual land use plan. Potential impacts are more thoroughly identified and assessed through the site planning process once funding is available for the development project. At that stage, design elements, such as sewage disposal and stormwater management, and design constraints, such as designated species or cultural site locations, are more thoroughly investigated. Advanced wastewater treatment or best available technology systems are applied for on-site sewage disposal. Stormwater management systems are designed to minimize impervious surfaces to the greatest extent feasible, and all facilities are designed and constructed using best management practices to avoid impacts and to mitigate those that cannot be avoided. Federal, state and local permit and regulatory requirements are met by the final design of the projects. This includes the design of all new park facilities consistent with the universal access requirements of the Americans with Disabilities Act (ADA). After new facilities are constructed, the park staff monitors conditions to ensure that impacts remain within acceptable levels.

Potential Uses and Proposed Facilities

No additional recreational facilities are recommended at this unit. Redesign and fabrication of exhibits for the visitor center is needed to update the information and revitalize this important function of the state park.

One of the bridges on the southwestern side of the park drive is not structurally sound for vehicles that exceed 3 tons, such as motor homes and large trucks. The section of park drive from the visitor center parking lot to the southern picnic area parking lot is currently opened to vehicular traffic only during the three annual special events, and at those times is marked with signage indicating load restrictions. The bridge is also monitored for any further deterioration. This section of road is still available to pedestrians and bicyclists. No additional support facilities are needed at this time.

Facilities Development

Preliminary cost estimates for proposed facilities are provided in Addendum 6. These cost estimates are based on the most cost-effective construction standards available at this time. The preliminary estimates are provided to assist the Division in budgeting future park improvements, and may be revised as more information is collected through the planning and design processes.

Existing Use and Optimum Carrying Capacity

Carrying capacity is an estimate of the number of users a recreation resource or facility can accommodate and still provide a high quality recreational experience and preserve the natural values of the site. The carrying capacity of a unit is determined by identifying the land and water requirements for each recreation activity at the unit, and then applying these requirements to the unit's land and water base. Next, guidelines are applied which estimate the physical capacity of the unit's natural communities to withstand recreational uses without significant degradation. This analysis identifies a range within which the carrying capacity most appropriate to the specific activity, the activity site and the unit's classification is selected (see Table 1).

The optimum carrying capacity for this park is a preliminary estimate of the number of users the unit could accommodate after the current conceptual development program has been implemented.

	Existing Propo Capacity Additio		oosed tional	Estimated Optimum		
Activity/Facility	One Time	Daily	One Time	Daily	One Time	Daily
Trails						
Hiking	40	160			40	160
Nature	40	160			40	160
Visitor Center	90	360			90	360
Picnicking	150	300			150	300
TOTAL	320	980	0	0	320	980

Table 1--Existing Use And Optimum Carrying Capacity

Optimum Boundary

As additional needs are identified through park use, development, research, and as adjacent land uses change on private properties, modification of the unit's optimum boundary may occur for the enhancement of natural and cultural resources, recreational values and management efficiency.

Identification of lands on the optimum boundary map is solely for planning purposes and not for regulatory purposes. A property's identification on the optimum boundary map is not for use by any party or other government body to reduce or restrict the lawful right of private landowners. Identification on the map does not empower or require any government entity to impose additional or more restrictive environmental land use or zoning regulations. Identification is not to be used as the basis for permit denial or the imposition of permit conditions.

The optimum boundary map reflects lands identified for direct management by the Division as part of the park. These parcels may include public as well as privately owned lands that improve the continuity of existing park lands, provide additional natural and cultural resource protection, and/or allow for future expansion of recreational activities.

One parcel of land, approximately 20 acres in size, is recommended for acquisition to complete the optimum boundary of the state park. The parcel is located directly east of the existing park boundary. An important part of the historic battlefield is contained by this parcel, including the pond that sheltered the American survivors, where a cannon thrown by the Seminoles after the battle was later found. This acquisition is needed to preserve a more complete component of the historic battle site than is currently in public ownership. At this time, no lands are considered surplus to the needs of the park.



Addendum 1—Acquisition History

Purpose and Sequence of Acquisition

The State of Florida acquired the park to develop, operate, and maintain the property for the outdoor recreation, park, conservation, historic, and related purposes. The property was acquired on September 29, 1921, for the express purpose of establishing a historical park as a memorial to the casualties at Dade Battlefield. the park now serves that purpose, as well as providing varied recreational opportunities for visitors.

On January 23, 1968, the Trustees leased the Site to the Division of Recreation and Parks) under Lease Number 2324 for a period of 99 years. The Trustees subsequently assigned Lease Number 3615 to the unit .

According to the Trustees lease, the Division manages Dade Battlefield Historic State Park only for the development, conservation and protection of natural and cultural resources and for resource-based public outdoor recreation, which is compatible with the conservation and protection of the property.

Title Interest

The Trustees hold fee simple title to Dade Battlefield Historic State Park.

Special Conditions On Use

The park is designated single-use to provide resource-based public outdoor recreation and other park related uses. Uses such as water resource development projects, water supply projects, storm-water management projects, and linear facilities and sustainable agriculture and forestry (other than those forest management activities specifically identified in the park's unit management plan) are not consistent with this plan or the management purposes of the park.

Outstanding Reservations

There are no outstanding rights, uses or reservations that apply to the park.

Addendum 2—References Cited

- DeBary, E. October 26, 1997, "Collections of Stories" Second Seminole War, Special to Ocala Star Banner.
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- Layman, Creo, 1998, Dade Massacre of 1835, Black Powder Annual, Ms. on file.
- Yamataki, Howard, A.O. Jones, D.Leach, 1984. Soil Survey of Sumter County, Florida. Soil Conservation Service, U.S.Department of Agriculture.204 pp. + maps.
Addendum 3—Soil Descriptions

(21) EauGallie fine sand, bouldery subsurface. –This soil is nearly level and is poorly drained. It is on the broad flatwoods The mapped areas are irregular in shape and range from 20 to 300 acres. Surface and subsurface boulders are approximately 60 to 250 feet individually. Although most boulders have been removed from cropland and improved pasture, the remaining subsurface boulders can damage equipment that penetrates the soil. The slopes are smooth and range from 0 to 2 percent.

Typically, the surfaced layer is dark gray fine sand about 8 inches thick. The subsurface layer, to a depth of about 25 inches, is light gray fine sand. The upper part of the subsoil, to a depth of about 36 inches, is very dark brown fine sand. The lower part, to a depth of about 57 inches, is brown fine sand. The substratum to a depth of 80 inches or more is gray sandy clay loam that has mottles in shades of yellow and red.

Included with this soil in mapping are small areas of Mabel, Myakka, Paisley, and Vero soils. The included soils make up about 20 percent of this map unit.

In most years, this soil has a high water table within 10 to 40 inches of the surface for more than 6 months and at a depth of less than 10 inches for 1 month to 4 months. The available water capacity is moderate. Permeability is rapid in the surface and subsurface layers. It is moderately slow in the lower part. Natural fertility is low.

Native vegetation is slash pine, longleaf pine, live oak, and water oak. The understory includes saw palmetto, gallberry, running oak, and pineland threeawn.

This EauGallie soil has very severe limitation for cultivated crops because of wetness. Boulders at or near the surface are a continuing nuisance during tillage operations. Most tillage operations are not impractical if the boulders are removed. The adapted crops are limited unless very intensive conservation practices and water control measures should be used if this soil is cultivated. With adequate drainage, this soil is well suited to many vegetable crops. A water control system is needed to remove excess surface water in wet periods and to provide water for subsurface irrigation in dry periods. Row crops should be planted on the contour. Soil improving cover crops should be included in the rotation system three-fourths of the time. Conservation tillage helps to conserve moisture and controls plant damage from blowing soil. Seedbed preparation should include bedding of the rows. Fertilizer and lime should be applied according to the need of the crops.

This soil is well suited to pasture and hay crops. Pangolagrass, bahiagrass, and clover are well adapted to this soil and grow well if they are properly managed. A drainage system is needed to remove excess surface water during heavy rains. These grasses and legumes also require regular applications of fertilizer and lime. Grazing should be carefully controlled to maintain healthy plants for maximum yields. Boulders should be removed to help equipment damage.

The potential is moderately high for the production of pine trees. Equipment use limitations, seedling mortality, and plant competition are concerns in management. Slash pine is the preferred tree to plant for commercial wood production.

Typically, this soil is characterized by the South Florida Flatwoods range site. This site can be identified by the scattered pine trees and an understory of saw palmetto and grasses. If grazing is controlled, the site has the potential to produce significant amounts of creeping bluestem, lopsided indiangrass, chalky bluestem, and various panicums. As range deterioration occurs because of overgrazing, the site is dominated by saw palmetto and pineland threeawn (wiregrass). Some areas of this soil support dense stands of oak trees. This soil provides good shade and resting areas for cattle but provides insufficient grazing.

Wetness is a severe limitation for urban and recreational uses. This wetness limitation can be reduced or overcome by installing a drainage system to lower the high water table during wet periods. Mounding may be needed in places for septic tank absorption fields. Seepage should be controlled before using this soil for sanitary facilities because of the possibility of pollution of water supplies. Random large boulders or groups of boulders may require use of a modified installation design or an alternate site in the map unit for many urban uses. The sandy texture is a severe limitation for recreational use and causes poor trafficability in unpaved areas. A suitable topsoil fill material should be used or some type of surface stabilization is needed to overcome this limitation.

This EauGallie soil is in capability subclass IVw and in woodland suitability group 10W.

(25) Kanapaha sand bouldery subsurface. This soil is nearly level and is poorly drained. It is low, broad flats and low knolls. The mapped areas are irregular in shape and range from 10 to 100 acres. Surface and subsurface boulders are approximately 60 to 250 feet apart. They occur randomly in small groups or individually. Although most boulders have been remove from the cropland and improved pasture, the remaining subsurface boulders can damage equipment that penetrates the soil. The slopes are smooth and range from 0 to 2 percent.

Typically the surface layer is very dark gray sand about 6 inches thick. The upper part of the subsurface layer, to a depth of 33 inches, is grayish brown sand. The lower part, to a depth of about 45 inches, is light gray fine sand. The upper part of the subsoil, to a depth of 55 inches, is light gray sandy loam. The middle part, to a depth of 70 inches, is light brownish gray sandy clay loam. The lower part to a depth of about 80 inches is light brownish gray sandy loam.

Included with this soil in mapping are small areas of EauGallie, Pompano, and Sparr soils. The included soils make up about 15 percent of this map unit.

This soil has a high water table within 10 to 40 inches of the surface for 3 to 4 months and at a depth of less than 10 inches for 1 month to 3 months during most years. In drier periods, the water table recedes to a depth of more than 40 inches. The available water capacity is low. Permeability is rapid in the surface and subsurface layers and is moderately slow or slow in the subsoil. Natural fertility is low.

Native vegetation is sweetgum, live and water oaks, maple, magnolia, hickory, slash pine, longleaf pine, and loblolly pine. The understory includes hairy panicum, several varieties of bluestems and threeawns, and numerous forbs.

This Kanapaha soil has severe limitations for cultivated crops because of wetness and the thick, sandy texture. Boulders at or near the surface are a continuing nuisance during tillage operations. Most tillage operations are not impractical if the boulders are removed. Many vegetable crops can be grown on this soil if very intensive conservation practices and water control measures are used. A water control system is needed to remove excess surface water in wet periods and to provide water for subsurface irrigation in dry periods. Row crops should be rotated with close growing, soil-improving cover crops. Soil-improving cover crops should be included in the rotation system three-fourths of the time. Conservation tillage helps to conserve moisture and controls erosion. Seedbed preparation should include bedding of the rows. Fertilizer and lime should be applied according to the need of the crops.

The soil is well suited to pasture. Pangolagrass, improved bahiagrass, and white clover grow well if they are properly managed. A water control system is needed to remove excess surface water after heavy rains. Regular applications of fertilizer and lime should be applied according to the need of the crops. Grazing should be controlled to maintain plant vigor. Boulders should be removed to help prevent equipment damage.

This soil has moderately high potential for the production of pine trees. The main concerns in management are the use of equipment when the soil is wet and undesirable plant competition. Seedling mortality is high. Slash, loblolly, and longleaf pines are the most suitable trees to plant for commercial wood production.

A 3 - 2

Typically, this soil is characterized by the Oak Hammock range site. This community is readily identified by the dense canopy cover of dominantly live oak trees. Cattle use these area primarily for shade and resting areas because of the dense canopy and relatively open understory. Desirable forage includes longleaf uniola, low panicum, low paspalum, switchgrass, and lopsided indiangrass.

Wetness is a severe limitation for urban and recreational uses. This wetness limitation can be reduced or overcome by installing a drainage system to lower the high water table during wet periods. Mounding may be needed in places for septic tank absorption fields because of wetness and slow permeability. Random large boulders or groups of boulders may require use of a modified installation design or an alternate site in the map unit for many urban uses. The sandy texture is a severe limitation for recreational use and causes poor trafficability in unpaved areas. A suitable topsoil fill material should be used or some type of surface stabilization is needed to overcome this limitation.

This Kanapaha soil is in capability subclass IIw and in woodland suitability group 10W.

(30) Placid fine sand, depressional. This soil is nearly level and is very poorly drained. It is in depressional areas and in poorly defined drainageways that pond. The mapped areas are irregular in shape and range form 20 to 100 acres. The slopes are concave and range form 0 to 2 percent.

Typically, the surface layer is black fine sand about 10 inches thick underlain by very dark gray fine sand to a depth of about 16 inches. The underlying material, to a depth of about 28 inches, is grayish brown fine sand and to a depth of 80 inches or more is white fine sand.

Included with this soil in mapping are small areas of Basinger, Myakka, Ona, and Pompano soils. Also included are some areas of soils that have loamy layers at a depth of more than 60 inches. The included soils make up about 20 percent of this map unit.

This soil has water above the surface for 6 to 8 months. The available water capacity is moderate. Permeability is rapid throughout. Natural fertility is moderate.

Native vegetation is pickerelweed, maidencane, and various aquatic plants.

In its natural state, this Placid soil is not suited to cultivated crops because of ponding. With adequate drainage, Placid soil is well suited to many high-value crops. A water control system is needed to remove excess water rapidly during heavy rains. If the soil is cultivated, conservation practices, such as good seedbed preparation, proper arrangement of rows, crop rotation, and regular applications of fertilizer, should be used. Cover crops should be included in the rotation system two-thirds of the time. Cover crops and the residue of other crops should be used to help maintain tilth and to control erosion.

In its natural state, this soil is not suited to pasture because of ponding. With adequate drainage, it is well suited to such plants and pangolagrass, bahiagrass, and clover. A drainage system is needed to remove excess surface water. These grasses and legumes grow well if they are properly fertilized and limed. Grazing should be controlled to maintain plant vigor and to obtain maximum yields.

This soil is not suited to pine trees because of ponding.

Typically, this soil is characterized by the Freshwater Marshes and Ponds range site. This site can be identified by an open expanse of grasses, sedges, rushes, and other herbaceous plants. If grazing is controlled, this range site has the potential to produce more forage than any of the other range sites. Chalky bluestem and blue maidencane dominate the drier parts of the range site, and maidencane is the dominant plant in the wetter parts. Other desirable forage includes cutgrass, bluejoint panicum, sloughgrass, and low panicum. Periodic high water levels provide natural deferment from cattle grazing. Carpetgrass, an introduced plant, tends to dominate the drier parts of the range site if the soil is overgrazed. Some areas that support dense stands of hardwood or cypress trees are poorly suited to rangeland.

Ponding is a severe limitation for urban and recreational uses. This limitation can be overcome by installing a drainage system to lower the high water table during wet periods and by using a suitable fill material in the depressions. Seepage should be controlled before using this soil for sanitary facilities because of the possibility of pollution of water supplies. The sandy texture is a severe limitation for recreational use and causes poor trafficability in unpaved areas. A suitable topsoil fill material should be used of some other type of surface stabilization is needed to overcome this limitation.

This Placid soil is in capability subclass VIIw and in woodland suitability group 6W.

(33) Sparr fine sand, 0 to 5 percent slopes. This soil is nearly level to gently sloping and somewhat poorly drained. It is in seasonally wet areas on the upland ridges, at the base of some sloping areas, and near some poorly drained areas. The slopes are smooth and slightly concave.

Typically, the surface layer is grayish brown fine sand 8 inches thick. The subsurface layer, to a depth of 50 inches, is brown, pale brown, and very pale brown fine sand. The upper part of the subsoil, to a depth of 59 inches, is light yellowish brown fine sandy loam. The middle part, to a depth of 70 inches, is light yellowish brown sandy clay loam. The lower part to a depth of 80 inches is light brownish gray sandy clay loam. Mottles of brown, red, yellow, and gray occur from a depth of about 20 to 80 inches.

The water table is at a depth of 2.5 to 3.5 feet for periods of 1 month to 4 months. Permeability is rapid in the sandy surface and subsurface layers and slow in the subsoil. Runoff is slow. The available water capacity is low to moderate. Natural fertility is low.

Typically, this Sparr soil is in the upland hardwood hammock range site. This site is readily identified by the dense canopy of oaks, magnolias, and hickories.

The natural wetness is a severe limitation to use of this soil as septic tank absorption fields and to use for sanitary landfills or sewage lagoons. If the soil is used for sanitary landfills or sewage lagoons, the facilities should be sealed to help prevent seepage. Wetness is a moderate limitation to use for building site development, dwellings without basements, and commercial buildings. Cutbanks may cave.

Addendum 4—Plant And Animal List

Dade Battlefield Historic State Park Plants

Primary Habitat Codes (for designated species)

FERNS

Scientific Name

Royal fern Resurrection fern

Common Name

Bracken fern

Southern red cedar Slash pine Longleaf pine Loblolly pine Pondcypress Baldcypress Coontie

Broomsedge Sedge Cabbage palm Duck-potato Saw palmetto Laurel-leaf greenbrier Spanish moss Common cattail

Red maple Groundsel tree Spanish needles American beautyberry Trumpet-creeper Florida paintbrush Hairy chaffhead Redbud Partridge pea Stinging nettle; Tread-softly Eastern flowering dogwood Rattlebox Summer-farewell Beggar's ticks; Tick-trefoil Carolina elephant's foot Daisy fleabane Dogfennel Yellow jessamine Narrow-leaved sunflower Innocence; Round-leaf bluet Pennywort St. Andrew's-cross Gallberry Yaupon

Osmunda regalis var. spectabilis Pleopeltis polypodioides var. michauxiana Pteridium aquilinum

GYMNOSPERMS AND CYCADS

Juniperus virginiana Pinus elliottii Pinus palustris Pinus taeda Taxodium ascendens Taxodium distichum Zamia pumila

MONOCOTS

Andropogon virginicus Cyperus sp. Sabal palmetto Sagittaria latifolia Serenoa repens Smilax laurifolia Tillandsia usneoides Typha latifolia

DICOTS

Acer rubrum Baccharis halimifolia Bidens alba var. radiata Callicarpa americana *Campsis radicans* Carphephorus corymbosus *Carphephorus paniculatus* Cercis canadensis Chamaecrista fasciculata Cnidoscolus stimulosus Cornus florida Crotolaria sp. Dalea pinnata Desmodium sp. Elephantopus carolinianus *Erigeron* sp. Eupatorium capillifolium Gelsemium sempervirens *Helianthus angustifolius* Houstonia procumbens *Hydrocotyle* sp. Hypericum hypericoides Ilex glabra Ilex vomitoria

8

8

Dade Battlefield Historic State Park Plants

Common Name	Scientific Name	Primary Habitat Codes (for designated species)
Blazing star	Liatris tenuifolia	
Sweetoum	Liquidamber styraciflua	
Southern magnolia	Magnolia grandiflora	
Creening cucumber	Magnona granagiora Melothria pendula	
Partridge berry	Mitchella renens	
Red mulberry	Morus rubra	
Wax mulberry	Morus ruoru Mvrica cerifera	
Southern prickly pear	Opuntia humifusa	
Virginia creeper	Parthenocissus avinavefolia	
Purple passion flower: Maypop	Passiflora incarnata	
Phoebanthus	Phoebanthus grandiflorus	
Cherry laurel	Prunus caroliniana	
Rabbit tobacco	Pterocaulon pvcnostachvum	
Laurel oak: Diamond oak	<i>Ouercus laurifolia</i>	
Myrtle oak	<i>Ouercus mvrtifolia</i>	
Water oak	Quercus nigra	
Live oak	\tilde{Q} uercus virginiana	
Winged sumac	\widetilde{R} hus copallinum	
Blackberry	Rubus sp.	
Elderberry	Sambucus nigra subsp. canaden	sis
Sawleaf greenbrier	Smilax bona-nox	
Laurel-leaf greenbrier	Smilax laurifolia	
Wand goldenrod	Solidago stricta	
Poison ivy	Toxicodendron radicans	
White clover	Trifolium repens	
Shiny blueberry	Vaccinium myrsinites	
Ironweed	Vernonia sp.	
Southern foxgrape; Muscadine	Vitis rotundifolia	

Dade Battlefield Historic State Park Animals

Common Name	Scientific Name	Primary Habitat Codes (for all species)
	AMPHIBIANS	
Southern toad	Bufo terrestris	8.81
Green treefrog	Hyla cinerea	8,81
U	REPTILES	,
Striped mud turtle	Kinosternon bauri	81
Gopher tortoise	Gopherus polyphemus	8,81
Cooter	Pseudemys spp.	8
Florida softshell	Trionyx ferox	8
Green anole	Anolis carolinensis	8,81
Southern fence lizard	Sceloporus undulatus undulatus	8
Ground skink	Scincella lateralis	8
Southern black racer	Coluber constrictor priapus	8,81,82
Southern ringneck snake	Diadophis punctatus punctatus	8,81
Eastern indigo snake	Drymarchon corais couperi	8
Yellow rat snake	Elaphe obsoleta quadrivittata	8,81
Eastern mud snake	Farancia abacura abacura	81
Southern hognose snake	Heterodon simus	8
Florida kingsnake	Lampropeltis getulus floridana	8
Rough green snake	Opheodrys aestivus	8
Eastern garter snake	Thamnophis sirtalis sirtalis	8
Penninsular ribbon snake	Thamnophis sauritis sackenii	8,81,82
Eastern coral snake	Micrurus fulvius fulvius	8
Florida cottonmouth	Agkistrodon piscivorus conanti	81
Dusky pygmy rattlesnake	Sistrurus miliarius barbouri	8
Eastern diamondback rattlesnake	Crotalus adamanteus	8
	BIRDS	
Anhinga	Anhinga anhinga	OF
Great blue heron	Ardea herodias	81
Little blue heron	Egretta caerulea	81
Cattle egret	Bubulcus ibis	8
White ibis	Eudocimus albus	8
Wood stork	Mycteria americana	OF
Wood duck	Aix sponsa	8
Mallard	Anas platyrhynchos	81
Black vulture	Coragyps atratus	OF
Turkey vulture	Cathartes aura	OF
Osprey	Pandion haliaetus	OF
Southern bald eagle	Haliaeetus leucocephalus	OF
Cooper's hawk	Accipiter cooperii	OF
Red-shouldered hawk	Buteo lineatus	8
Red-tailed hawk	Buteo jamaicensis	8
American kestrel	Falco sparverius	81
Northern bobwhite	Colinus virginianus	8
Wild turkey	Meleagris gallopavo	8
American coot	Fulica americana	81
Limpkin	Aramus guarauna	81
Florida sandhill crane	Grus canadensis pratensis	81
Kılldeer	Charadrius vociferus	81

Dade Battlefield Historic State Park Animals

Common Name	Scientific Name	Primary Habitat Codes (for all species)	
Common snipe	Canalla gallinago	OF	
Mourning dove	Zanaida macroura	81	
Common ground-dove	Columbina passarina	81	
Vellow billed cuckoo	Coccurate amaricanus	8	
Fastern screech owl	Otus asio	8	
Great horned owl	Bubo virginigus	8	
Barred owl	Striv varia	8	
Common nighthawk	Chordeiles mino	OF	
Chuck-wills-widow	Caprimulaus carolinansis	8	
Chimney swift	Chaetura pelagica	OF	
Ruby-throated humminghird	Archilochus colubris	82	
Ruby-throated hummingond Belted kingfisher	Caryla aleyon	OF	
Red-headed woodnecker	Melanernes erythrocenhalus	8	
Red-bellied woodpecker	Melanerpes carolinus	8	
Vellow-bellied sansucker	Snhvranicus varius	8	
Downy woodpecker	Picoides nubescens	8	
Southern bairy woodnecker	Picoides villosus	8	
Northern flicker	Colantes auratus	8	
Pileated woodpecker	Dryoconus nileatus	8	
Great crested flycatcher	Myjocopus priedius Myjorchus crinitus	8	
Fastern kinghird	Tyrannus tyrannus	8 81	
Purple martin	Progne subis	OF 82	
Blue jay	Cyanocitta cristata	8 81	
American crow	Corvus brachvrhvnchos	8	
Fish crow	Corvus ossifragus	8	
Carolina chickadee	Parus carolinensis	81	
Tufted titmouse	Parus bicolor	8	
Carolina wren	Thrvothorus ludovicianus	8	
Blue-gray gnatcatcher	Polioptila caerulea	8,81	
Eastern bluebird	Sialia sialis	8,81	
Wood thrush	Hylocichla mustelina	8	
American robin	Turdus migratorius	8,81	
Gray Catbird	Dumetella carolinensis	8,81	
Northern mockingbird	Mimus polyglottos	8,81	
Brown thrasher	Toxostoma rufum	8	
Cedar waxwing	Bombycilla cedrorum	8,81	
Loggerhead shrike	Lanius ludovicianus	81	
European starling	Sturnus vulgaris*	81	
White-eyed vireo	Vireo griseus	8	
Northern parula	Parula americana	8	
Pine warbler	Dendroica pinus	8	
Summer tanager	Piranga rubra	8	
Northern cardinal	Cardinalis cardinalis	8,81	
Eastern towhee	Pipilo erythrophthalmus	8,81	
Red-winged blackbird	Agelaius phoeniceus	81	
Eastern meadowlark	Sturnella magna	81	
Common grackle	Quiscalus quiscula	8,81	
	MAMMALS		
Virginia oppossum	Didelphis virginiana	8,81	
Eastern cottontail	Sylvilagus floridanus	8,81	

Dade Battlefield Historic State Park Animals

fic Name	Primary Habitat Codes (for all species)	
	0.01.00	
carolinensis	8,81,82	
niger	8,81	
mys volans	8,81	
s pinetis	81	
scus gossypinus	8	
dontomys humulis	81	
on hispidus	8	
vulpes*	8,81	
n cinereoargenteus	8,81	
n lotor	8,81,82	
anadensis	81	
fus	8,81	
leus virginianus	8,81	
	<i>ic Name</i> carolinensis niger mys volans pinetis scus gossypinus dontomys humulis on hispidus vulpes* n cinereoargenteus n lotor anadensis fus leus virginianus	

TERRESTRIAL

- 1. Beach Dune
- 2. Bluff
- 3. Coastal Berm
- 4. Coastal Rock Barren
- 5. Coastal Strand
- **6.** Dry Prairie
- 7. Maritime Hammock
- 8. Mesic Flatwoods
- 9. Coastal Grasslands
- **10.** Pine Rockland
- **11.** Prairie Hammock
- **12.** Rockland Hammock
- **13.** Sandhill
- 14. Scrub
- **15.** Scrubby Flatwoods
- 16. Shell Mound
- **17.** Sinkhole
- **18.** Slope Forest
- **19.** Upland Glade
- **20.** Upland Hardwood Forest
- 21. Upland Mixed Forest
- **22.** Upland Pine Forest
- **23.** Xeric Hammock

PALUSTRINE

- 24. Basin Marsh
- 25. Basin Swamp
- 26. Baygall
- **27.** Bog
- 28. Bottomland Forest
- 29. Depression Marsh
- **30.** Dome
- **31.** Floodplain Forest
- **32.** Floodplain Marsh
- **33.** Floodplain Swamp
- **34.** Freshwater Tidal Swamp
- **35.** Hydric Hammock
- 36. Marl Prairie
- **37.** Seepage Slope
- 38. Slough
- 39. Strand Swamp
- **40.** Swale
- **41.** Wet Flatwoods
- **42.** Wet Prairie

LACUSTRINE

- 43. Clastic Upland Lake
- 44. Coastal Dune Lake
- 45. Coastal Rockland Lake
- **46.** Flatwood/Prairie Lake
- 47. Marsh Lake

LACUSTRINE—Continued

- **48.** River Floodplain Lake
- 49. Sandhill Upland Lake
- 50. Sinkhole Lake
- 51. Swamp Lake

RIVERINE

- **52.** Alluvial Stream
- 53. Blackwater Stream
- **54.** Seepage Stream
- 55. Spring-Run Stream

ESTUARINE

- **56.** Estuarine Composite Substrate
- **57.** Estuarine Consolidated Substrate
- 58. Estuarine Coral Reef
- **59.** Estuarine Grass Bed
- 60. Estuarine Mollusk Reef
- **61.** Estuarine Octocoral Bed
- **62.** Estuarine Sponge Bed
- **63.** Estuarine Tidal Marsh
- 64. Estuarine Tidal Swamp
- **65.** Estuarine Unconsolidated Substrate
- **66.** Estuarine Worm Reef

MARINE

- **67.** Marine Algal Bed
- 68. Marine Composite Substrate
- **69.** Marine Consolidated Substrate
- 70. Marine Coral Reef
- 71. Marine Grass Bed
- 72. Marine Mollusk Reef
- 73. Marine Octocoral Bed
- 74. Marine Sponge Bed
- 75. Marine Tidal Marsh
- **76.** Marine Tidal Swamp
- 77. Marine Unconsolidated Substrate
- **78.** Marine Worm Reef

SUBTERRANEAN

- **79.** Aquatic Cave
- 80. Terrestral Cave

MISCELLANEOUS

- 81. Ruderal
- 82. Developed
- MTC Many Types Of Communities
- **OF** Overflying

Addendum 5—Designated Species List

Rank Explanations For FNAI Global Rank, FNAI State Rank, Federal Status And State Status

The Nature Conservancy and the Natural Heritage Program Network (of which FNAI is a part) define an <u>element</u> as any exemplary or rare component of the natural environment, such as a species, natural community, bird rookery, spring, sinkhole, cave, or other ecological feature. An <u>element occurrence</u> (EO) is a single extant habitat that sustains or otherwise contributes to the survival of a population or a distinct, self-sustaining example of a particular element.

Using a ranking system developed by The Nature Conservancy and the Natural Heritage Program Network, the Florida Natural Areas Inventory assigns two ranks to each element. The global rank is based on an element's worldwide status; the state rank is based on the status of the element in Florida. Element ranks are based on many factors, the most important ones being estimated number of Element occurrences, estimated abundance (number of individuals for species; area for natural communities), range, estimated adequately protected EOs, relative threat of destruction, and ecological fragility.

Federal and State status information is from the U.S. Fish and Wildlife Service; and the Florida Game and Freshwater Fish Commission (animals), and the Florida Department of Agriculture and Consumer Services (plants), respectively.

FNAI GLOBAL RANK DEFINITIONS

G1	=	Critically imperiled globally because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made
		factor.
G2	=	Imperiled globally because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
G3	=	Either very rare and local throughout its range (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction of other factors.
G4	=	apparently secure globally (may be rare in parts of range)
G5	=	demonstrably secure globally
GH	=	of historical occurrence throughout its range, may be rediscovered (e.g., ivory-billed
GX	=	believed to be extinct throughout range
GXC	=	extirpated from the wild but still known from captivity or cultivation
G#?	=	tentative rank (e.g.,G2?)
G#G#	=	range of rank: insufficient data to assign specific global rank (e.g.,G2G3)
G#T#	=	rank of a taxonomic subgroup such as a subspecies or variety; the G portion of the rank refers
		to the entire species and the T portion refers to the specific subgroup; numbers have same
		definition as above (e.g.,G3T1)
G#Q	=	rank of questionable species - ranked as species but questionable whether it is species or
-		subspecies; numbers have same definition as above (e.g.,G2Q)
G#T#Q	=	same as above, but validity as subspecies or variety is questioned.
GU	=	due to lack of information, no rank or range can be assigned (e.g., GUT2).
G?	=	not yet ranked (temporary)
S1	=	Critically imperiled in Florida because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man- made factor.
S2	=	Imperiled in Florida because of rarity (6 to 20 occurrences or less than 3000 individuals) or
		because of vulnerability to extinction due to some natural or man-made factor.
S3	=	Either very rare and local throughout its range (21-100 occurrences or less than 10,000
		individuals) or found locally in a restricted range or vulnerable to extinction of other factors.
S4	=	apparently secure in Florida (may be rare in parts of range)
S5	=	demonstrably secure in Florida
SH	=	of historical occurrence throughout its range, may be rediscovered (e.g., ivory-billed
		woodpecker)
SX	=	believed to be extinct throughout range
SA	=	accidental in Florida, i.e., not part of the established biota
SE	=	an exotic species established in Florida may be native elsewhere in North America
SN	=	regularly occurring, but widely and unreliably distributed; sites for conservation hard to determine
SU	=	due to lack of information, no rank or range can be assigned (e.g., SUT2).
S?	=	not yet ranked (temporary)

LEGAL STATUS

N FEDERAL	= (Li	Not currently listed,nor currently being considered for listing,by state or federal agencies. sted by the U. S. Fish and Wildlife Service - USFWS)
LE	=	Listed as Endangered Species in the List of Endangered and Threatened Wildlife and Plants under the provisions of the Endangered Species Act. Defined as any species that is in danger of extinction throughout all or a significant portion of its range.
PE	=	Proposed for addition to the List of Endangered and Threatened Wildlife and Plants as Endangered Species.
LT	=	Listed as Threatened Species. Defined as any species that is likely to become an endangered species within the near future throughout all or a significant portion of its range.
PT	=	Proposed for listing as Threatened Species.
С	=	Candidate Species for addition to the list of Endangered and Threatened Wildlife and Plants. Defined as those species for which the USFWS currently has on file sufficient information on biological vulnerability and threats to support proposing to list the species as endangered or threatened.
E(S/A)	=	Endangered due to similarity of appearance.
T(S/A)	=	Threatened due to similarity of appearance.
STATE		
<u>Animals</u>		(Listed by the Florida Fish and Wildlife Conservation Commission - FFWCC)
LE	=	Listed as Endangered Species by the FFWCC. Defined as a species, subspecies, or isolated population which is so rare or depleted in number or so restricted in range of habitat due to any man-made or natural factors that it is in immediate danger of extinction or extirpation from the state or which may attain such a status within the immediate future
LT	=	Listed as Threatened Species by the FFWCC. Defined as a species, subspecies, or isolated population which is acutely vulnerable to environmental alteration, declining in number at a rapid rate, or whose range or habitat is decreasing in area at a rapid rate and as a consequence is dectined or very likely to become an endangered species within the foreseeable future.
LS	=	Listed as Species of Special Concern by the FFWCC. Defined as a population which warrants special protection, recognition, or consideration because it has an inherent significant vulnerability to habitat modification, environmental alteration, human disturbance, or substantial human exploitation which, in the foreseeable future, may result in its becoming a threatened species.
<u>Plants</u>		(Listed by the Florida Department of Agriculture and Consumer Services - FDACS)
LE	=	Listed as Endangered Plants in the Preservation of Native Flora of Florida Act. Defined as species of plants native to the state that are in imminent danger of extinction within the state, the survival of which is unlikely if the causes of a decline in the number of plants continue, and includes all species determined to be endangered or threatened pursuant to the Federal Endangered Species Act of 1973, as amended.
LT	=	Listed as Threatened Plants in the Preservation of Native Flora of Florida Act. Defined as species native to the state that are in rapid decline in the number of plants within the state,but which have not so decreased in such number as to cause them to be endangered.

Dade Battlefield Historic State Park

Designated Species

Plants

Common Name/	Designated Species Status			
Scientific Name	FDA	USFWS	FNAI	
Royal fern Osmunda regalis var. spectabilis Coontie Zamia pumila	CE CE			

Dade Battlefield Historic State Park

Designated Species

Animals

Common Name/ Designated Species Stat			<u>Status</u>
Scientific Name	FFWCC	USFWS	FNAI
Gopher tortoise			
Gopherus polyphemus	LS		G3/S3
Eastern indigo snake			
Drymarchon corais couperi	LT	LT	G4T3/S3
Southern hognose snake			
Heterodon simus			G2/S2
Little blue heron			
Egretta caerulea	LS		G5/S4
Wood stork			
Mycteria americana	LE	LE	G4/S2
White ibis			
Eudocimus albus	LS		G5/S4
Cooper's hawk			
Accipiter cooperii			G4/S3?
Southern bald eagle			G 1/60
Haliaeetus leucocephalus	LT	LT	G4/S3
Osprey			
Pandion haliaetus			G5/S3S4
Limpkin	τC		05/82
Aramus guarauna	LS		G3/83
Florida sandnili crane	IТ		CETTT2/2222
Grus canadensis pratensis	LI		651213/8283
Biasidas willosus			C5 529
Ficolities villosus Sharman's fax aquirral			03,53?
Suchan S IOX Squitter	IS		G5T2/S2
sciurus niger	LO		0312/82

Addendum 6—Priority Schedule And Cost Estimates

Estimates are developed for the funding and staff resources needed to implement the management plan based on goals, objectives and priority management activities. Funding priorities for all state park management and development activities are reviewed each year as part of the Division's legislative budget process. The Division prepares an annual legislative budget request based on the priorities established for the entire state park system. The Division also aggressively pursues a wide range of other funds and staffing resources, such as grants, volunteers, and partnerships with agencies, local governments and the private sector for supplementing normal legislative appropriations to address unmet needs. The ability of the Division to implement the specific goals, objectives and priority actions identified in this plan will be determined by the availability of funding resources for these purposes. Phase II Museum Assessment. 0-10 years. \$ 2,000 Exhibit plan for new visitor center interpretive exhibits 0-2 years \$6,000 New exhibits for visitor center (following exhibit plan) 0-10 years. \$111,000 Exhibit plan for visitor center interpretive exhibits 0-2 years \$6,000 Historic concrete and rock bridge repairs. 0-10 years. \$25,000 Archeological Research Project: 0-10 years. \$75,000 Monitor and repair deteriorating historical structures. 0-10 years. \$50,000 Feasibility study to relocate visitor center away from cultural resource area: 0-10 years. \$450,000 Paving Repairs. 0-10 years \$30,000 Remove Tennis Court & Shuffleboard Courts. 0-10 years. \$3000 Acquisition of 22 acres for parking area. 0-10 years. \$100,000 FTE Secretary Specialist. 0-10 years. \$21,000 FTE Museum Guide 0-10 years. \$25,000

This summary presents the hierarchical classification and brief descriptions of 82 Natural Communities developed by Florida Natural Areas Inventory and identified as collectively constituting the original, natural biological associations of Florida.

A Natural Community is defined as a distinct and recurring assemblage of populations of plants, animals, fungi and microorganisms naturally associated with each other and their physical environment. For more complete descriptions, see Guide to the Natural Communities of Florida, available from Florida Department of Natural Resources.

The levels of the hierarchy are:

Natural Community Category - defined by hydrology and vegetation.

Natural Community Groups - defined by landform, substrate, and vegetation.

Natural Community Type - defined by landform and substrate; soil moisture condition; climate; fire; and characteristic vegetation.

TERRESTRIAL COMMUNITIES LACUSTRINE COMMUNITIES XERIC UPLANDS **RIVERINE COMMUNITIES** COASTAL UPLANDS MESIC UPLANDS SUBTERRANEAN COMMUNITIES ROCKLANDS MESIC FLATLANDS MARINE/ESTUARINE COMMUNITIES PALUSTRINE COMMUNITIES WET FLATLANDS Definitions of Terms Used in Natural SEEPAGE WETLANDS **Community Descriptions** FLOODPLAIN WETLANDS **BASIN WETLANDS**

TERRESTRIAL - Upland habitats dominated by plants which are not adapted to anaerobic soil conditions imposed by saturation or inundation for more than 10% of the growing season.

XERIC UPLANDS - very dry, deep, well-drained hills of sand with xeric-adapted vegetation.

Sandhill - upland with deep sand substrate; xeric; temperate; frequent fire (2-5 years); longleaf pine and/or turkey oak with wiregrass understory.

Scrub - old dune with deep fine sand substrate; xeric; temperate or subtropical; occasional or rare fire (20 - 80 years); sand pine and/or scrub oaks and/or rosemary and lichens.

Xeric Hammock - upland with deep sand substrate; xeric-mesic; temperate or subtropical; rare or no fire; live oak and/or sand live oak and/or laurel oak and/or other oaks, sparkleberry, saw palmetto.

COASTAL UPLANDS - substrate and vegetation influenced primarily by such coastal (maritime) processes as erosion, deposition, salt spray, and storms.

Beach Dune - active coastal dune with sand substrate; xeric; temperate or subtropical; occasional or rare fire; sea oats and/or mixed salt-spray tolerant grasses and herbs.

Coastal Berm - old bar or storm debris with sand/shell substrate; xeric-mesic; subtropical or temperate; rare or no fire; buttonwood, mangroves, and/or mixed halophytic herbs and/or shrubs and trees.

Coastal Grassland - coastal flatland with sand substrate; xeric-mesic; subtropical or temperate; occasional fire; grasses, herbs, and shrubs with or without slash pine and/or cabbage palm.

Coastal Rock Barren - flatland with exposed limestone substrate; xeric; subtropical; no fire; algae, mixed halophytic herbs and grasses, and/or cacti and stunted shrubs and trees.

Coastal Strand - stabilized coastal dune with sand substrate; xeric; subtropical or temperate; occasional or rare fire; dense saw palmetto and/or seagrape and/or mixed stunted shrubs, yucca, and cacti.

Maritime Hammock - stabilized coastal dune with sand substrate; xeric-mesic; subtropical or temperate; rare or no fire; mixed hardwoods and/or live oak.

Shell Mound - Indian midden with shell substrate; xeric-mesic; subtropical or temperate; rare or no fire; mixed hardwoods.

MESIC UPLANDS - dry to moist hills of sand with varying amounts of clay, silt or organic material; diverse mixture of broadleaved and needleleaved temperate woody species.

Bluff - steep slope with rock, sand, and/or clay substrate; hydric-xeric; temperate; sparse grasses, herbs and shrubs.

Slope Forest - steep slope on bluff or in sheltered ravine; sand/clay substrate; mesichydric; temperate; rare or no fire; magnolia, beech, spruce pine, Shumard oak, Florida maple, mixed hardwoods.

Upland Glade - upland with calcareous rock and/or clay substrate; hydric-xeric; temperate; sparse mixed grasses and herbs with occasional stunted trees and shrubs, e.g., eastern red cedar.

Upland Hardwood Forest - upland with sand/clay and/or calcareous substrate; mesic; temperate; rare or no fire; spruce pine, magnolia, beech, pignut hickory, white oak, and mixed hardwoods.

Upland Mixed Forest - upland with sand/clay substrate; mesic; temperate; rare or no fire; loblolly pine and/or shortleaf pine and/or laurel oak and/or magnolia and spruce pine and/or mixed hardwoods.

Upland Pine Forest - upland with sand/clay substrate; mesic-xeric; temperate; frequent or occasional fire; longleaf pine and/or loblolly pine and/or shortleaf pine, southern red oak, wiregrass.

ROCKLANDS - low, generally flat limestone outcrops with tropical vegetation; or limestone exposed through karst activities with tropical or temperate vegetation.

Pine Rockland - flatland with exposed limestone substrate; mesic-xeric; subtropical; frequent fire; south Florida slash pine, palms and/or hardwoods, and mixed grasses and herbs.

Rockland Hammock - flatland with limestone substrate; mesic; subtropical; rare or no

fire; mixed tropical hardwoods, often with live oak.

Sinkhole - karst feature with steep limestone walls; mesic-hydric; subtropical or temperate; no fire; ferns, herbs, shrubs, and hardwoods.

MESIC FLATLANDS - flat, moderately well-drained sandy substrates with admixture of organic material, often with a hard pan.

Dry Prairie - flatland with sand substrate; mesic-xeric; subtropical or temperate; annual or frequent fire; wiregrass, saw palmetto, and mixed grasses and herbs.

Mesic Flatwoods - flatland with sand substrate; mesic; subtropical or temperate; frequent fire; slash pine and/or longleaf pine with saw palmetto, gallberry and/or wiregrass or cutthroat grass understory.

Prairie Hammock - flatland with sand/organic soil over marl or limestone substrate; mesic; subtropical; occasional or rare fire; live oak and/or cabbage palm.

Scrubby Flatwoods - flatland with sand substrate; xeric-mesic; subtropical or temperate; occasional fire; longleaf pine or slash pine with scrub oaks and wiregrass understory.

PALUSTRINE - Wetlands dominated by plants adapted to anaerobic substrate conditions imposed by substrate saturation or inundation during 10% or more of the growing season. Includes non-tidal wetlands; tidal wetlands with ocean derived salinities less than 0.5 ppt and dominance by salt-intolerant species; small (less than 8 ha), shallow (less than 2 m deep at low water) water bodies without wave-formed or bedrock shoreline; and inland brackish or saline wetlands.

WET FLATLANDS - flat, poorly drained sand, marl or limestone substrates.

Hydric Hammock - lowland with sand/clay/organic soil, often over limestone; mesichydric; subtropical or temperate; rare or no fire; water oak, cabbage palm, red cedar, red maple, bays, hackberry, hornbeam, blackgum, needle palm, and mixed hardwoods.

Marl Prairie - flatland with marl over limestone substrate; seasonally inundated; tropical; frequent to no fire; sawgrass, spikerush, and/or mixed grasses, sometimes with dwarf cypress.

Wet Flatwoods - flatland with sand substrate; seasonally inundated; subtropical or temperate; frequent fire; vegetation characterized by slash pine or pond pine and/or cabbage palm with mixed grasses and herbs.

Wet Prairie - flatland with sand substrate; seasonally inundated; subtropical or temperate; annual or frequent fire; maidencane, beakrush, spikerush, wiregrass, pitcher plants, St. John's wort, mixed herbs.

SEEPAGE WETLANDS - sloped or flat sands or peat with high moisture levels maintained by downslope seepage; wetland and mesic woody and/or herbaceous vegetation.

Baygall - wetland with peat substrate at base of slope; maintained by downslope seepage, usually saturated and occasionally inundated; subtropical or temperate; rare or no fire; bays and/or dahoon holly and/or red maple and/or mixed hardwoods.

Seepage Slope - wetland on or at base of slope with organic/sand substrate; maintained

by downslope seepage, usually saturated but rarely inundated; subtropical or temperate; frequent or occasional fire; sphagnum moss, mixed grasses and herbs or mixed hydrophytic shrubs.

FLOODPLAIN WETLANDS - flat, alluvial sand or peat substrates associated with flowing water courses and subjected to flooding but not permanent inundation; wetland or mesic woody and herbaceous vegetation.

Bottomland Forest - flatland with sand/clay/organic substrate; occasionally inundated; temperate; rare or no fire; water oak, red maple, beech, magnolia, tuliptree, sweetgum, bays, cabbage palm, and mixed hardwoods.

Floodplain Forest - floodplain with alluvial substrate of sand, silt, clay or organic soil; seasonally inundated; temperate; rare or no fire; diamondleaf oak, overcup oak, water oak, swamp chestnut oak, blue palmetto, cane, and mixed hardwoods.

Floodplain Marsh - floodplain with organic/sand/alluvial substrate; seasonally inundated; subtropical; frequent or occasional fire; maidencane, pickerelweed, sagittaria spp., buttonbush, and mixed emergents.

Floodplain Swamp - floodplain with organic/alluvial substrate; usually inundated; subtropical or temperate; rare or no fire; vegetation characterized by cypress, tupelo, black gum, and/or pop ash.

Freshwater Tidal Swamp - river mouth wetland, organic soil with extensive root mat; inundated with freshwater in response to tidal cycles; rare or no fire; cypress, bays, cabbage palm, gums and/or cedars.

Slough - broad, shallow channel with peat over mineral substrate; seasonally inundated, flowing water; subtropical; occasional or rare fire; pop ash and/or pond apple or water lily.

Strand Swamp - broad, shallow channel with peat over mineral substrate; seasonally inundated, flowing water; subtropical; occasional or rare fire; cypress and/or willow.

Swale - broad, shallow channel with sand/peat substrate; seasonally inundated, flowing water; subtropical or temperate; frequent or occasional fire; sawgrass, maidencane, pickerelweed, and/or mixed emergents.

BASIN WETLANDS - shallow, closed basin with outlet usually only in time of high water; peat or sand substrate, usually inundated; wetland woody and/or herbaceous vegetation.

Basin Marsh - large basin with peat substrate; seasonally inundated; temperate or subtropical; frequent fire; sawgrass and/or cattail and/or buttonbush and/or mixed emergents.

Basin Swamp - large basin with peat substrate; seasonally inundated, still water; subtropical or temperate; occasional or rare fire; vegetation characterized by cypress, blackgum, bays and/or mixed hardwoods.

Bog - wetland on deep peat substrate; moisture held by sphagnum mosses, soil usually saturated, occasionally inundated; subtropical or temperate; rare fire; sphagnum moss and titi and/or bays and/or dahoon holly, and/or mixed hydrophytic shrubs.

Coastal Interdunal Swale - long narrow depression wetlands in sand/peat-sand substrate; seasonally inundated, fresh to brackish, still water; temperate; rare fire;

graminoids and mixed wetland forbs.

Depression Marsh - small rounded depression in sand substrate with peat accumulating toward center; seasonally inundated, still water; subtropical or temperate; frequent or occasional fire; maidencane, fire flag, pickerelweed, and mixed emergents, may be in concentric bands.

Dome Swamp - rounded depression in sand/limestone substrate with peat accumulating toward center; seasonally inundated, still water; subtropical or temperate; occasional or rare fire; cypress, blackgum, or bays, often tallest in center.

LACUSTRINE - Non-flowing wetlands of natural depressions lacking persistent emergent vegetation except around the perimeter.

Clastic Upland Lake - generally irregular basin in clay uplands; predominantly with inflows, frequently without surface outflow; clay or organic substrate; colored, acidic, soft water with low mineral content (sodium, chloride, sulfate); oligo-mesotrophic to eutrophic.

Coastal Dune Lake - basin or lagoon influenced by recent coastal processes; predominantly sand substrate with some organic matter; salinity variable among and within lakes, and subject to saltwater intrusion and storm surges; slightly acidic, hard water with high mineral content (sodium, chloride).

Coastal Rockland Lake - shallow basin influence by recent coastal processes; predominantly barren oolitic or Miami limestone substrate; salinity variable among and within lakes, and subject to saltwater intrusion, storm surges and evaporation (because of shallowness); slightly alkaline, hard water with high mineral content (sodium, chloride).

Flatwoods/Prairie Lake - generally shallow basin in flatlands with high water table; frequently with a broad littoral zone; still water or flow-through; sand or peat substrate; variable water chemistry, but characteristically colored to clear, acidic to slightly alkaline, soft to moderately hard water with moderate mineral content (sodium, chloride, sulfate); oligo-mesotrophic to eutrophic.

Marsh lake - generally shallow, open water area within wide expanses of freshwater marsh; still water or flow-through; peat, sand or clay substrate; occurs in most physiographic regions; variable water chemistry, but characteristically highly colored, acidic, soft water with moderate mineral content (sodium, chloride, sulfate); oligo-mesotrophic to eutrophic.

River Floodplain Lake - meander scar, backwater, or larger flow-through body within major river floodplains; sand, alluvial or organic substrate; colored, alkaline or slightly acidic, hard or moderately hard water with high mineral content (sulfate, sodium, chloride, calcium, magnesium); mesotrophic to eutrophic.

Sandhill Upland Lake - generally rounded solution depression in deep sandy uplands or sandy uplands shallowly underlain by limestone; predominantly without surface inflows/outflows; typically sand substrate with organic accumulations toward middle; clear, acidic moderately soft water with varying mineral content; ultra-oligotrophic to mesotrophic.

Sinkhole Lake - typically deep, funnel-shaped depression in limestone base; occurs in most physiographic regions; predominantly without surface inflows/outflows, but frequently with connection to the aquifer; clear, alkaline, hard water with high mineral content (calcium, bicarbonate, magnesium).

Swamp Lake - generally shallow, open water area within basin swamps; still water or flowthrough; peat, sand or clay substrate; occurs in most physiographic regions; variable water chemistry, but characteristically highly colored, acidic, soft water with moderate mineral content (sodium, chloride, sulfate); oligo-mesotrophic to eutrophic.

RIVERINE - Natural, flowing waters from their source to the downstream limits of tidal influence and bounded by channel banks.

Alluvial Stream - lower perennial or intermittent/seasonal watercourse characterized by turbid water with suspended silt, clay, sand and small gravel; generally with a distinct, sediment-derived (alluvial) floodplain and a sandy, elevated natural levee just inland from the bank.

Blackwater Stream - perennial or intermittent/seasonal watercourse characterized by teacolored water with a high content of particulate and dissolved organic matter derived from drainage through swamps and marshes; generally lacking an alluvial floodplain.

Seepage Stream - upper perennial or intermittent/seasonal watercourse characterized by clear to lightly colored water derived from shallow groundwater seepage.

Spring-run Stream - perennial watercourse with deep aquifer headwaters and characterized by clear water, circumneutral pH and, frequently, a solid limestone bottom.

SUBTERRANEAN - Twilight, middle and deep zones of natural chambers overlain by the earth's crust and characterized by climatic stability and assemblages of trogloxenic, troglophilic, and troglobitic organisms.

Aquatic Cave - cavernicolous area permanently or periodically submerged; often characterized by troglobitic crustaceans and salamanders; includes high energy systems which receive large quantities of organic detritus and low energy systems.

Terrestrial Cave - cavernicolous area lacking standing water; often characterized by bats, such as Myotis spp., and other terrestrial vertebrates and invertebrates; includes interstitial areas above standing water such as fissures in the ceiling of caves.

MARINE/ESTUARINE (The distinction between the Marine and Estuarine Natural Communities is often subtle, and the natural communities types found under these two community categories have the same descriptions. For these reasons they have been grouped together.) - Subtidal, intertidal and supratidal zones of the sea, landward to the point at which seawater becomes significantly diluted with freshwater inflow from the land.

Consolidated Substrate - expansive subtidal, intertidal and supratidal area composed primarily of nonliving compacted or coherent and relatively hard, naturally formed mass of mineral matter (e.g., coquina limerock and relic reefs); octocorals, sponges, stony corals, nondrift macrophytic algae, blue-green mat-forming algae and seagrasses sparse, if present.

Unconsolidated Substrate - expansive subtidal, intertidal and supratidal area composed primarily of loose mineral matter (e.g., coralgal, gravel, marl, mud, sand and shell); octocorals, sponges, stony corals, nondrift macrophytic algae, blue-green mat-forming algae and seagrasses sparse, if present.

Octocoral Bed - expansive subtidal area occupied primarily by living sessile organisms of the Class Anthozoa, Subclass Octocorallia (e.g., soft corals, horny corals, sea fans, sea whips, and sea pens); sponges, stony corals, nondrift macrophytic algae and seagrasses spares, if present.

Sponge Bed - expansive subtidal area occupied primarily by living sessile organisms of the Phylum Porifera (e.g., sheepswool sponge, Florida loggerhead sponge and branching candle sponge); octocorals, stony corals, nondrift macrophytic algae and seagrasses sparse, if present.

Coral Reef - expansive subtidal area with elevational gradient or relief and occupied primarily by living sessile organisms of the Class Hydrozoa (e.g., fire corals and hydrocorals) and Class Anthozoa, Subclass Zoantharia (e.g., stony corals and black corals); includes deepwater bank reefs, fringing barrier reefs, outer bank reefs and patch reefs, some of which may contain distinct zones of assorted macrophytes, octocorals, & sponges.

Mollusk Reef - substantial subtidal or intertidal area with relief from concentrations of sessile organisms of the Phylum Mollusca, Class Bivalvia (e.g., molluscs, oysters, & worm shells); octocorals, sponges, stony corals, macrophytic algae and seagrasses sparse, if present.

Worm Reef - substantial subtidal or intertidal area with relief from concentrations of sessile, tubicolous organisms of the Phylum Annelida, Class Polychaeta (e.g., chaetopterids and sabellarids); octocorals, sponges, stony corals, macrophytic algae and seagrasses sparse, if present.

Algal Bed - expansive subtidal, intertidal or supratidal area, occupied primarily by attached thallophytic or mat-forming prokaryotic algae (e.g, halimeda, blue-green algae); octocorals, sponges, stony corals and seagrasses sparse, if present.

Grass Bed - expansive subtidal or intertidal area, occupied primarily by rooted vascular macrophytes, (e.g., shoal grass, halophila, widgeon grass, manatee grass and turtle grass); may include various epiphytes and epifauna; octocorals, sponges, stony corals, and attached macrophytic algae sparse, if present.

Composite Substrate - expansive subtidal, intertidal, or supratidal area, occupied primarily by Natural Community elements from more than one Natural Community category (e.g., Grass Bed and Algal Bed species; Octocoral and Algal Bed species); includes both patchy and evenly distributed occurrences.

Tidal Marsh - expansive intertidal or supratidal area occupied primarily by rooted, emergent vascular macrophytes (e.g., cord grass, needlerush, saw grass, saltwort, saltgrass and glasswort); may include various epiphytes and epifauna.

Tidal Swamp - expansive intertidal and supratidal area occupied primarily by woody vascular macrophytes (e.g., black mangrove, buttonwood, red mangrove, and white mangrove); may include various epiphytes and epifauna.

DEFINITIONS OF TERMS Terrestrial and Palustrine Natural Communities

Physiography

Upland - high area in region with significant topographic relief; generally undulating **Lowland** - low area in region with or without significant topographic relief; generally flat to gently sloping

Flatland - generally level area in region without significant topographic relief; flat to gently sloping

Basin - large, relatively level lowland with slopes confined to the perimeter or isolated interior locations

Depression - small depression with sloping sides, deepest in center and progressively shallower towards the perimeter

Floodplain - lowland adjacent to a stream; topography influenced by recent fluvial processes

Bottomland - lowland not on active floodplain; sand/clay/organic substrate

Hydrology

occasionally inundated - surface water present only after heavy rains and/or during flood stages

seasonally inundated - surface water present during wet season and flood periods **usually inundated** - surface water present except during droughts

Climatic Affinity of the Flora

tropical - community generally occurs in practically frost-free areas

subtropical - community generally occurs in areas that experience occasional frost, but where freezing temperatures are not frequent enough to cause true winter dormancy **temperate** - community generally occurs in areas that freeze often enough that vegetation goes into winter dormancy

Fire

annual fire - burns about every 1-2 years
frequent fire - burns about every 3-7 years
occasional fire - burns about every 8-25 years
rare fire - burns about every 26-100 years
no fire - community develops only when site goes more than 100 years without burning

LATIN NAMES OF PLANTS MENTIONED IN NATURAL COMMUNITY DESCRIPTIONS

bays: swamp bay -Persea palustris gordonia -Gordonia lasianthus sweetbay -Magnolia virgiana beakrush - *Rhynchospora* spp. beech - Fagus grandifolia blackgum - Nyssa biflora blue palmetto - Sabal minor bluestem - Andropogon spp. buttonbush - Cephalanthus occidentalis cabbage palm - Sabal palmetto cacti - Opuntia and Harrisia spp., predominantly stricta and pentagonus cane - Arundinaria gigantea or A. tecta cattail - Typha spp. cedars: red cedar - Juniperus silicicola white cedar - Chamaecyparis thyoides or C. henryi cladonia - Cladonia spp. cypress - *Taxodium distichum* dahoon holly - Ilex cassine diamondleaf oak - Quercus laurifolia fire flag - Thalia geniculata Florida maple - Acer barbatum gallberry - Ilex glabra gums: tupelo - Nyssa aquatica blackgum - Nyssa biflora Ogeechee gum - Nyssa ogeche hackberry - Celtis laevigata hornbeam - Carpinus caroliniana laurel oak - Quercus hemisphaerica live oak - Quercus virginiana loblolly pine - Pinus taeda longleaf pine - Pinus palustris magnolia - Magnolia grandiflora maidencane - Panicum hemitomon needle palm - Rhapidophyllum hystrix

anise - Illicium floridanum

overcup oak - Quercus lyrata pickerel weed - Pontederia cordata or P. lanceolata pignut hickory - Carya glabra pop ash - Fraxinus caroliniana pond apple - Annona glabra pond pine - Pinus serotina pyramid magnolia - Magnolia pyramidata railroad vine - Ipomoea pes-caprae red cedar - Juniperus silicicola red maple - Acer rubrum red oak - Quercus falcata rosemary - Ceratiola ericoides sagittaria - Sagittaria lancifolia sand pine - Pinus clausa saw palmetto - Serenoa repens sawgrass - Cladium jamaicensis scrub oaks - Quercus geminata, Q. chapmanii, Q. myrtifolia,Q. inopina sea oats - Uniola paniculata seagrape - Coccoloba uvifera shortleaf pine - Pinus echinata Shumard oak - Quercus shumardii slash pine - Pinus elliottii sphagnum moss - *Sphagnum* spp. spikerush - *Eleocharis* spp. spruce pine - Pinus glabra St. John's wort - Hypericum spp. swamp chestnut oak - Quercus prinus sweetgum - Liquidambar styraciflua titi - Cyrilla racemiflora, and Cliftonia monophylla tuliptree - Liriodendron tulipfera tupelo - Nyssa aquatica turkey oak - Quercus laevis water oak - Quercus nigra waterlily - Nymphaea odorata white cedar - Chamaecyparis thyoides white oak - Quercus alba willow - Salix caroliniana yucca - Yucca aloifolia

A. <u>GENERAL DISCUSSION</u>

Archaeological and historic sites are defined collectively in 267.021(3), F.S., as "historic properties" or "historic resources." They have several essential characteristics that must be recognized in a management program.

First of all, they are a finite and non-renewable resource. Once destroyed, presently existing resources, including buildings, other structures, shipwreck remains, archaeological sites and other objects of antiquity, cannot be renewed or revived. Today, sites in the State of Florida are being destroyed by all kinds of land development, inappropriate land management practices, erosion, looting, and to a minor extent even by well-intentioned professional scientific research (e.g., archaeological excavation). Measures must be taken to ensure that some of these resources will be preserved for future study and appreciation.

Secondly, sites are unique because individually they represent the tangible remains of events that occurred at a specific time and place.

Thirdly, while sites uniquely reflect localized events, these events and the origin of particular sites are related to conditions and events in other times and places. Sites can be understood properly only in relation to their natural surroundings and the activities of inhabitants of other sites. Managers must be aware of this "systemic" character of historic and archaeological sites. Also, it should be recognized that archaeological sites are time capsules for more than cultural history; they preserve traces of past biotic communities, climate, and other elements of the environment that may be of interest to other scientific disciplines.

Finally, the significance of sites, particularly archaeological ones, derives not only from the individual artifacts within them, but equally from the spatial arrangement of those artifacts in both horizontal and vertical planes. When archaeologists excavate, they recover, not merely objects, but also a record of the positions of these objects in relation to one another and their containing matrix (e.g., soil strata). Much information is sacrificed if the so-called "context" of archaeological objects is destroyed or not recovered, and this is what archaeologists are most concerned about when a site is threatened with destruction or damage. The artifacts themselves can be recovered even after a site is heavily disturbed, but the context -- the vertical and horizontal relationships -- cannot. Historic structures also contain a wealth of cultural (socio-economic) data that can be lost if historically sensitive maintenance, restoration or rehabilitation procedures are not implemented, or if they are demolished or extensively altered without appropriate documentation. Lastly, it should not be forgotten that historic structures often have associated potentially significant historic archaeological features that must be considered in land management decisions.

B. STATUTORY AUTHORITY

Chapter 253, <u>Florida Statutes</u> ("State Lands") directs the preparation of "single-use" or "multiple-use" land management plans for all state-owned lands and state-owned sovereignty submerged lands. In this document, 253.034(4), F.S., specifically requires that "all management plans, whether for single-use or multiple-use properties, shall specifically describe how the managing agency plans to identify, locate, protect and preserve, or

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otherwise use fragile non-renewable resources, such as archaeological and historic sites, as well as other fragile resources..."

Chapter 267, <u>Florida Statutes</u> is the primary historic preservation authority of the state. The importance of protecting and interpreting archaeological and historic sites is recognized in 267.061(1)(a), F.S.:The rich and unique heritage of historic properties in this state, representing more than 10,000 years of human presence, is an important legacy to be valued and conserved for present and future generations. The destruction of these nonrenewable historic resources will engender a significant loss to the state's quality of life, economy, and cultural environment. It is therefore declared to be state policy to:

- 1. Provide leadership in the preservation of the state's historic resources; [and]
- 2. Administer state-owned or state-controlled historic resources in a spirit of stewardship and trusteeship;...

Responsibilities of the Division of Historical Resources in the Department of State pursuant to 267.061(3), F.S., include the following:

- 1. Cooperate with federal and state agencies, local Governments, and private organizations and individuals to direct and conduct a comprehensive statewide survey of historic resources and to maintain an inventory of such responses.
- 2. Develop a comprehensive statewide historic preservation plan.
- **3.** Identify and nominate eligible properties to the <u>National Register of Historic Places</u> and otherwise administer applications for listing properties in the <u>National Register of Historic Places</u>.
- 4. Cooperate with federal and state agencies, local governments, and organizations and individuals to ensure that historic resources are taken into consideration at all levels of planning and development.
- 5. Advise and assist, as appropriate, federal and state agencies and local governments in carrying out their historic preservation responsibilities and programs.
- 6. Carry out on behalf of the state the programs of the National Historic Preservation Act of 1966, as amended, and to establish, maintain, and administer a state historic preservation program meeting the requirements of an approved program and fulfilling the responsibilities of state historic preservation programs as provided in subsection 101(b) of that act.
- 7. Take such other actions necessary or appropriate to locate, acquire, protect, preserve, operate, interpret, and promote the location, acquisition, protection, preservation, operation, and interpretation of historic resources to foster an appreciation of Florida history and culture. Prior to the acquisition, preservation, interpretation, or operation of a historic property by a state agency, the Division shall be provided a reasonable opportunity to review and comment on the proposed undertaking and shall determine that there exists historic authenticity and a feasible means of providing for the preservation, interpretation and operation of such property.
- 8. Establish professional standards for the preservation, exclusive of acquisition, of historic resources in state ownership or control.
- 9. Establish guidelines for state agency responsibilities under subsection (2).

Responsibilities of other state agencies of the executive branch, pursuant to 267.061(2), F.S., include:

- 1. Each state agency of the executive branch having direct or indirect jurisdiction over a proposed state or state-assisted undertaking shall, in accordance with state policy and prior to the approval of expenditure of any state funds on the undertaking, consider the effect of the undertaking on any historic property that is included in, or eligible for inclusion in, the <u>National Register of Historic Places</u>. Each such agency shall afford the division a reasonable opportunity to comment with regard to such an undertaking.
- 2. Each state agency of the executive branch shall initiate measures in consultation with the division to assure that where, as a result of state action or assistance carried out by such agency, a historic property is to be demolished or substantially altered in a way that adversely affects the character, form, integrity, or other qualities that contribute to [the] historical, architectural, or archaeological value of the property, timely steps are taken to determine that no feasible and prudent alternative to the proposed demolition or alteration exists, and, where no such alternative is determined to exist, to assure that timely steps are taken either to avoid or mitigate the adverse effects, or to undertake an appropriate archaeological salvage excavation or other recovery action to document the property as it existed prior to demolition or alteration.
- **3.** In consultation with the division [of Historical Resources], each state agency of the executive branch shall establish a program to locate, inventory, and evaluate all historic properties under the agency's ownership or control that appear to qualify for the National Register. Each such agency shall exercise caution to assure that any such historic property is not inadvertently transferred, sold, demolished, substantially altered, or allowed to deteriorate significantly.
- 4. Each state agency of the executive branch shall assume responsibility for the preservation of historic resources that are owned or controlled by such agency. Prior to acquiring, constructing, or leasing buildings for the purpose of carrying out agency responsibilities, the agency shall use, to the maximum extent feasible, historic properties available to the agency. Each agency shall undertake, consistent with preservation of such properties, the mission of the agency, and the professional standards established pursuant to paragraph (3)(k), any preservation actions necessary to carry out the intent of this paragraph.
- 5. Each state agency of the executive branch, in seeking to acquire additional space through new construction or lease, shall give preference to the acquisition or use of historic properties when such acquisition or use is determined to be feasible and prudent compared with available alternatives. The acquisition or use of historic properties is considered feasible and prudent if the cost of purchase or lease, the cost of rehabilitation, remodeling, or altering the building to meet compliance standards and the agency's needs, and the projected costs of maintaining the building and providing utilities and other services is less than or equal to the same costs for available alternatives. The agency shall request the division to assist in determining if the acquisition or use of a historic property is feasible and prudent. Within 60 days after making a determination that additional space is needed, the agency shall request the division to assist in identifying buildings within the appropriate geographic area that are historic properties suitable for acquisition or lease by the agency, whether or

not such properties are in need of repair, alteration, or addition.

6. Consistent with the agency's mission and authority, all state agencies of the executive branch shall carry out agency programs and projects, including those under which any state assistance is provided, in a manner which is generally sensitive to the preservation of historic properties and shall give consideration to programs and projects which will further the purposes of this section.

Section 267.12 authorizes the Division to establish procedures for the granting of research permits for archaeological and historic site survey or excavation on state-owned or controlled lands, while Section 267.13 establishes penalties for the conduct of such work without first obtaining written permission from the Division of Historical Resources. The Rules of the Department of State, Division of Historical Resources, for research permits for archaeological sites of significance are contained in Chapter 1A-32, F.A.C.

Another Florida Statute affecting land management decisions is Chapter 872, F.S. Section 872.02, F.S., pertains to marked grave sites, regardless of age. Many state-owned properties contain old family and other cemeteries with tombstones, crypts, etc. Section 872.05, F.S., pertains to unmarked human burial sites, including prehistoric and historic Indian burial sites. Unauthorized disturbance of both marked and unmarked human burial site is a felony.

C. MANAGEMENT POLICY

The choice of a management policy for archaeological and historic sites within stateowned or controlled land obviously depends upon a detailed evaluation of the characteristics and conditions of the individual sites and groups of sites within those tracts. This includes an interpretation of the significance (or potential significance) of these sites, in terms of social and political factors, as well as environmental factors. Furthermore, for historic structures architectural significance must be considered, as well as any associated historic landscapes.

Sites on privately owned lands are especially vulnerable to destruction, since often times the economic incentives for preservation are low compared to other uses of the land areas involved. Hence, sites in public ownership have a magnified importance, since they are the ones with the best chance of survival over the long run. This is particularly true of sites that are state-owned or controlled, where the basis of management is to provide for land uses that are minimally destructive of resource values.

It should be noted that while many archaeological and historical sites are already recorded within state--owned or controlled--lands, the majority of the uplands areas and nearly all of the inundated areas have not been surveyed to locate and assess the significance of such resources. The known sites are, thus, only an incomplete sample of the actual resources - i.e., the number, density, distribution, age, character and condition of archaeological and historic sites - on these tracts. Unfortunately, the lack of specific knowledge of the actual resources prevents formulation of any sort of detailed management or use plan involving decisions about the relative historic value of individual sites. For this reason, a generalized policy of conservation is recommended until the resources have been better addressed.

The generalized management policy recommended by the Division of Historical Resources includes the following:

- State land managers shall coordinate all planned activities involving known 1. archaeological or historic sites or potential site areas closely with the Division of Historical Resources in order to prevent any kind of disturbance to significant archaeological or historic sites that may exist on the tract. Under 267.061(1)(b), F.S., the Division of Historical Resources is vested with title to archaeological and historic resources abandoned on state lands and is responsible for administration and protection of such resources. The Division will cooperate with the land manager in the management of these resources. Furthermore, provisions of 267.061(2) and 267.13, F.S., combined with those in 267.061(3) and 253.034(4), F.S., require that other managing (or permitting) agencies coordinate their plans with the Division of Historical Resources at a sufficiently early stage to preclude inadvertent damage or destruction to known or potentially occurring, presently unknown archaeological and historic sites. The provisions pertaining to human burial sites must also be followed by state land managers when such remains are known or suspected to be present (see 872.02 and 872.05, F.S., and 1A-44, F.A.C.)
- Since the actual resources are so poorly known, the potential impact of the managing 2. agency's activities on historic archaeological sites may not be immediately apparent. Special field survey for such sites may be required to identify the potential endangerment as a result of particular management or permitting activities. The Division may perform surveys, as its resources permit, to aid the planning of other state agencies in their management activities, but outside archaeological consultants may have to be retained by the managing agency. This would be especially necessary in the cases of activities contemplating ground disturbance over large areas and unexpected occurrences. It should be noted, however, that in most instances Division staff's knowledge of known and expected site distribution is such that actual field surveys may not be necessary, and the project may be reviewed by submitting a project location map (preferably a 7.5 minute U.S.G.S. Quadrangle map or portion thereof) and project descriptive data, including detailed construction plans. To avoid delays, Division staff should be contacted to discuss specific project documentation review needs.
- **3.** In the case of known significant sites, which may be affected by proposed project activities, the managing agency will generally be expected to alter proposed management or development plans, as necessary, or else make special provisions to minimize or mitigate damage to such sites.
- 4. If in the course of management activities, or as a result of development or the permitting of dredge activities (see 403.918(2)(6)a, F.S.), it is determined that valuable historic or archaeological sites will be damaged or destroyed, the Division reserves the right, pursuant to 267.061(1)(b), F.S., to require salvage measures to mitigate the destructive impact of such activities to such sites. Such salvage measures would be accomplished before the Division would grant permission for destruction of the affected site areas. The funding needed to implement salvage measures would be the responsibility of the managing agency planning the site destructive activity. Mitigation of historic structures at a minimum involves the preparation of measured

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drawings and documentary photographs. Mitigation of archaeological resources involves the excavation, analysis and reporting of the project findings and must be planned to occur sufficiently in advance to avoid project construction delays. If these services are to be contracted by the state agency, the selected consultant will need to obtain an Archaeological Research Permit from the Division of Historical Resources, Bureau of Archaeological Research (see 267.12, F.S. and Rules 1A-32 and 1A-46 F.A.C.).

- 5. For the near future, excavation of non-endangered (i.e., sites not being lost to erosion or development) archaeological site is discouraged. There are many endangered sites in Florida (on both private and public lands) in need of excavation because of the threat of development or other factors. Those within state-owned or controlled lands should be left undisturbed for the present with particular attention devoted to preventing site looting by "treasure hunters". On the other hand, the archaeological and historic survey of these tracts is encouraged in order to build an inventory of the resources present, and to assess their scientific research potential and historic or architectural significance.
- 6. The cooperation of land managers in reporting sites to the Division that their field personnel may discover is encouraged. The Division will help inform field personnel from other resource managing agencies about the characteristics and appearance of sites. The Division has initiated a cultural resource management training program to help accomplish this. Upon request the Division will also provide to other agencies archaeological and historical summaries of the known and potentially occurring resources so that information may be incorporated into management plans and public awareness programs (See Management Implementation).
- 7. Any discovery of instances of looting or unauthorized destruction of sites must be reported to the agent for the Board of Trustees of the Internal Improvement Trust Fund and the Division so that appropriate action may be initiated. When human burial sites are involved, the provisions of 872.02 and 872.05, F. S. and Rule 1A-44, F.A.C., as applicable, must also be followed. Any state agent with law enforcement authority observing individuals or groups clearly and incontrovertibly vandalizing, looting or destroying archaeological or historic sites within state-owned or controlled lands without demonstrable permission from the Division will make arrests and detain those individuals or groups under the provisions of 267.13, 901.15, and 901.21, F.S., and related statutory authority pertaining to such illegal activities on state-owned or controlled lands. County Sheriffs' officers are urged to assist in efforts to stop and/or prevent site looting and destruction.

In addition to the above management policy for archaeological and historic sites on stateowned land, special attention shall be given to those properties listed in the <u>National</u> <u>Register of Historic Places</u> and other significant buildings. The Division recommends that the <u>Secretary of the Interior's Standards for Rehabilitation and Guidelines for</u> <u>Rehabilitating Historic Buildings</u> (Revised 1990) be followed for such sites.

The following general standards apply to all treatments undertaken on historically significant properties.

1. A property shall be used for its historic purpose or be placed in a new use that requires

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minimal change to the defining characteristics of the building and its site and environment.

- 2. The historic character of a property shall be retained and preserved. The removal of historic materials or alterations of features and spaces that characterize a property shall be avoided.
- **3.** Each property shall be recognized as a physical record of its time, place and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.
- 4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.
- 5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.
- 6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.
- 7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.
- **8.** Significant archaeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.
- 9. New additions, exterior alterations, or related new construction shall not destroy materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
- 10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired. (see <u>Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings</u> [Revised 1990]).

Divisions of Historical Resources staff are available for technical assistance for any of the above listed topics. It is encouraged that such assistance be sought as early as possible in the project planning.

D. MANAGEMENT IMPLEMENTATION

As noted earlier, 253.034(4), F.S., states that "all management plans, whether for singleuse or multiple-use properties, shall specifically describe how the managing agency plans to identify, locate, protect and preserve, or otherwise use fragile non-renewable resources, such as archaeological and historic sites..." The following guidelines should help to fulfill that requirement.

1. All land managing agencies should contact the Division and send U.S.G.S. 7.5 minute quadrangle maps outlining the boundaries of their various properties.

- 2. The Division will in turn identify site locations on those maps and provide descriptions for known archaeological and historical sites to the managing agency.
- **3.** Further, the Division may also identify on the maps areas of high archaeological and historic site location probability within the subject tract. These are only probability zones, and sites may be found outside of these areas. Therefore, actual ground inspections of project areas may still be necessary.
- 4. The Division will send archaeological field recording forms and historic structure field recording forms to representatives of the agency to facilitate the recording of information on such resources.
- 5. Land managers will update information on recorded sites and properties.
- 6. Land managers will supply the Division with new information as it becomes available on previously unrecorded sites that their staff locate. The following details the kind of information the Division wishes to obtain for any new sites or structures that the land managers may report:

A. Historic Sites

- (1) Type of structure (dwelling, church, factory, etc.).
- (2) Known or estimated age or construction date for each structure and addition.
- (3) Location of building (identify location on a map of the property, and building placement, i.e., detached, row, etc.).
- (4) General Characteristics: (include photographs if possible) overall shape of plan (rectangle, "L" "T" "H" "U", etc.); number of stories; number of vertical divisions of bays; construction materials (brick, frame, stone, etc.); wall finish (kind of bond, coursing, shingle, etc.); roof shape.
- (5) Specific features including location, number and appearance of:
 - (a) Important decorative elements;
 - (b) Interior features contributing to the character of the building;
 - (c) Number, type, and location of outbuildings, as well as date(s) of construction;
 - (d) Notation if property has been moved;
 - (e) Notation of known alterations to building.

B. Archaeological Sites

- (1) Site location (written narrative and mapped location).
- (2) Cultural affiliation and period.
- (3) Site type (midden, burial mound, artifact scatter, building rubble, etc.).
- (4) Threats to site (deterioration, vandalism, etc.).
- (5) Site size (acreage, square meters, etc.).
- (6) Artifacts observed on ground surface (pottery, bone, glass, etc.).
- (7) Description of surrounding environment.
- 7. No land disturbing activities should be undertaken in areas of known archaeological or historic sites or areas of high site probability without prior review by the Division early in the project planning.
- **8.** Ground disturbing activities may proceed elsewhere but land managers should stop disturbance in the immediate vicinity of artifact finds and notifies the Division if previously unknown archaeological or historic remains are uncovered. The provisions
of Chapter 872, F.S., must be followed when human remains are encountered.

- **9.** Excavation and collection of archaeological and historic sites on state lands without a permit from the Division are a violation of state law and shall be reported to a law enforcement officer. The use of metal detectors to search for historic artifacts shall be prohibited on state lands except when authorized in a 1A-32, F.A.C., research permit from the Division.
- **10.** Interpretation and visitation which will increase public understanding and enjoyment of archaeological and historic sites without site destruction or vandalism is strongly encouraged.
- **11.** Development of interpretive programs including trails, signage, kiosks, and exhibits is encouraged and should be coordinated with the Division.
- 12. Artifacts found or collected on state lands are by law the property of the Division. Land managers shall contact the Division whenever such material is found so that arrangements may be made for recording and conservation. This material, if taken to Tallahassee, can be returned for public display on a long term loan.

E. ADMINISTERING AGENCY

Questions relating to the treatment of archaeological and historic resources on state lands may be directed to:

Compliance Review Section Bureau of Historic Preservation Division of Historical Resources R.A. Gray Building 500 South Bronough Street Tallahassee, Florida 32399-0250

Contact Person:

Susan M. Harp Historic Preservation Planner Telephone (850) 245-6333 Suncom 205-6333 FAX (850) 245-6437