

Dudley Farm Historic State Park

Advisory Group Draft Unit Management Plan

**STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

**Division of Recreation and Parks
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INTRODUCTION

Dudley Farm Historic State Park is located in Alachua County (see Vicinity Map). Access to the park is from State Road 26 (see Reference Map). The Vicinity Map also reflects significant land and water resources existing near the park.

Dudley Farm Historic State Park was initially acquired on June 9, 1983. Currently, the park comprises 327.44 acres. The Board of Trustees of the Internal Improvement Trust Fund (Trustees) hold fee simple title to the park and on October 31, 1984, the Trustees leased (Lease Number 3366) the property to DRP under a 50-year lease. The current lease will expire on October 20, 2034.

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

Purpose and Significance of the Park

The purpose of Dudley Farm Historic State Park is to preserve and interpret the Dudley Farm historic site for future generations and to provide unique public outdoor recreation opportunities while facilitating natural resource conservation efforts within the park.

Park Significance

- Dudley Farm Historic State Park is a living history site where visitors can experience a restored farmstead that was in use from the 1870 to 1940. The park is the site of an authentic working farm showcasing a century of Florida farming history.
- In the late 1800s, the Dudley Farm was a center of activity in western Alachua County and played an integral role in the community's history.
- Numerous karst features are present within the park including caves and solution depressions. These features provide several direct surface to groundwater connections in the park.
- Tours of the historic site provide an opportunity for school groups and organizations to visit and learn about the role farming and agriculture played in Florida's history.

Dudley Farm Historic State Park is classified as a Special Feature Site in the DRP's unit classification system. A special feature is a discrete and well-defined object or condition that attracts public interest and provides recreational enjoyment through visitation, observation and study. A state special feature site is an area which contains such a feature, and which is set aside for controlled public enjoyment.

Special feature sites for the most part are either historical or archaeological by type, but they may also have a geological, botanical, zoological, or other basis. State special feature sites must be of unusual or exceptional character, or have statewide or broad regional significance.

Management of special feature sites places primary emphasis on protection and maintenance of the special feature for long-term public enjoyment. Permitted uses are almost exclusively passive in nature and program emphasis is on interpretation of the special feature. Development at special feature sites is focused on protection and maintenance of the site, public access, safety and the convenience of the user.

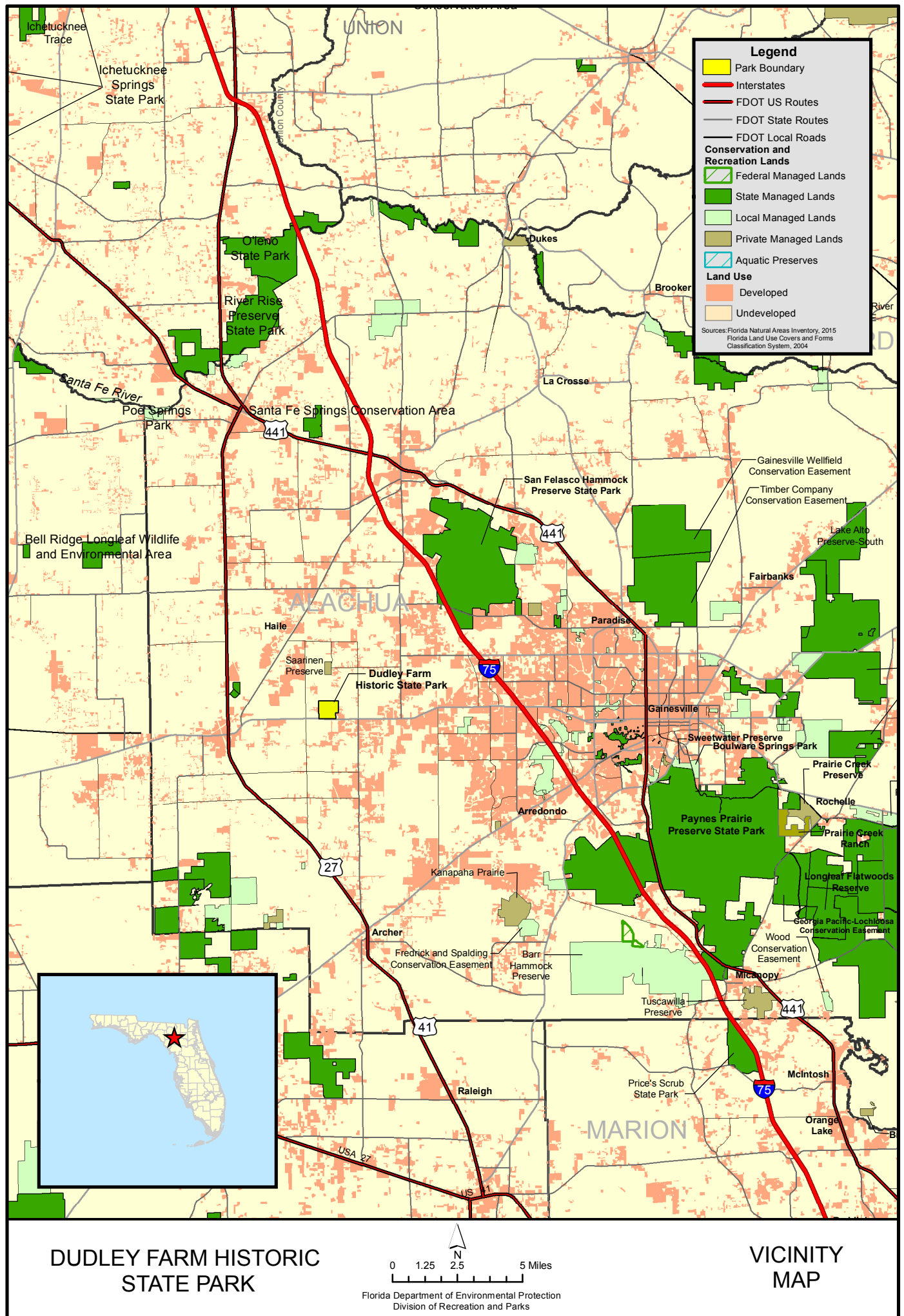
Purpose and Scope of the Plan

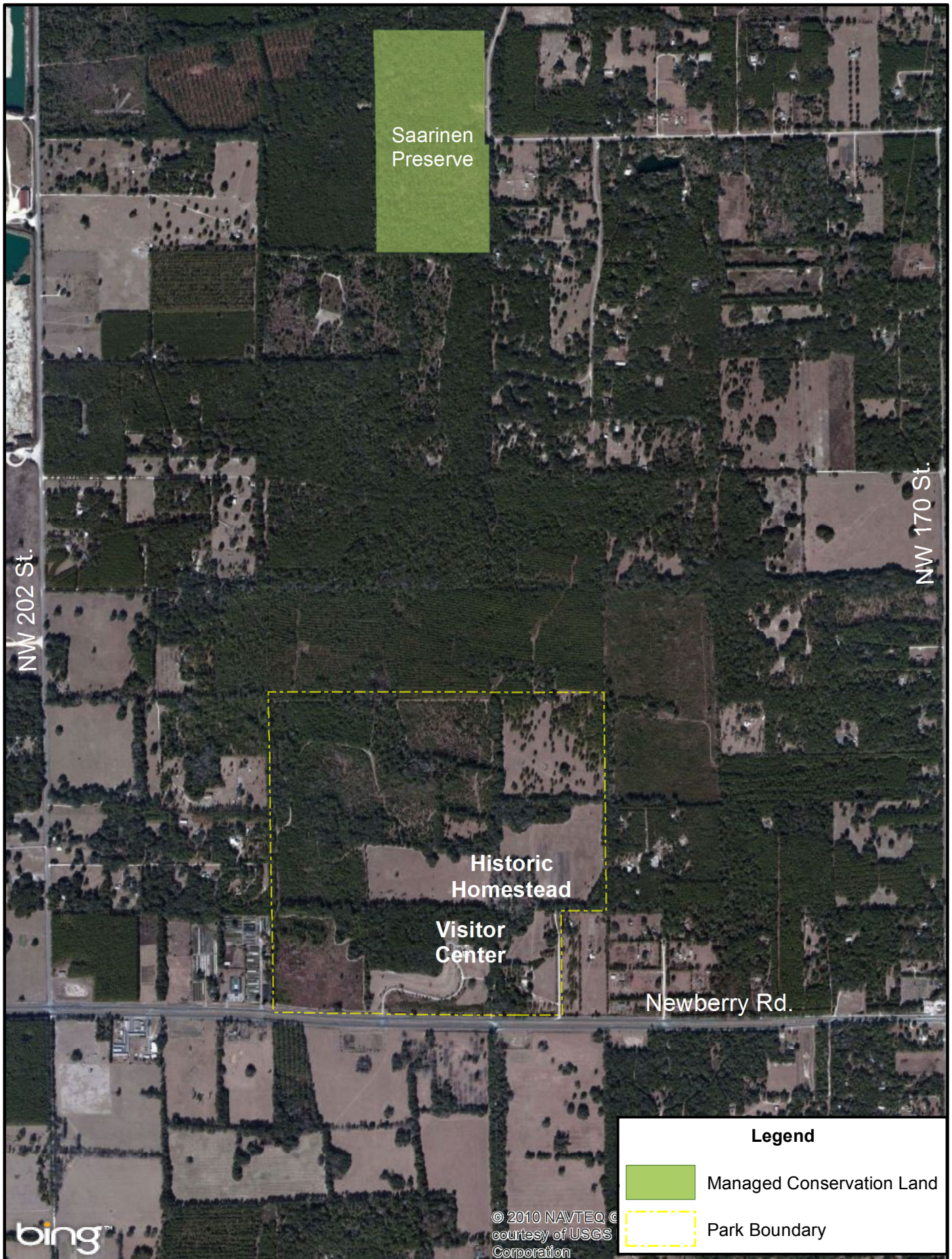
This plan serves as the basic statement of policy and direction for the management of Dudley Farm Historic State Park as a unit of Florida's state park system. It identifies the goals, objectives, actions and criteria or standards that guide each aspect of park administration, and sets forth the specific measures that will be implemented to meet management objectives and provide balanced public utilization. The plan is intended to meet the requirements of Sections 253.034 and 259.032, Florida Statutes, Chapter 18-2, Florida Administrative Code, and is intended to be consistent with the State Lands Management Plan. With approval, this management plan will replace the 2004 approved plan.

The plan consists of three interrelated components: the Resource Management Component, the Land Use Component and the Implementation Component. The Resource Management Component provides a detailed inventory and assessment of the natural and cultural resources of the park. Resource management needs and issues are identified, and measurable management objectives are established for each of the park's management goals and resource types. This component provides guidance on the application of such measures as prescribed burning, exotic species removal, imperiled species management, cultural resource management and restoration of natural conditions.

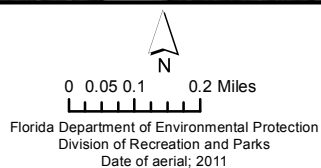
The Land Use Component is the recreational resource allocation plan for the park. Based on considerations such as access, population, adjacent land uses, the natural and cultural resources of the park, and current public uses and existing development, measurable objectives are set to achieve the desired allocation of the physical space of the park. These objectives identify use areas and propose the types of facilities and programs as well as the volume of public use to be provided.

The Implementation Component consolidates the measurable objectives and actions for each of the park's management goals. An implementation schedule and cost estimates are included for each objective and action.





DUDLEY FARM HISTORIC
STATE PARK



REFERENCE MAP

Included in this table are (1) measures that will be used to evaluate the DRP's implementation progress, (2) timeframes for completing actions and objectives and (3) estimated costs to complete each action and objective.

All development and resource alteration proposed 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.

In the development of this plan, the potential of the park to accommodate secondary management purposes was analyzed. These secondary purposes were considered within the context of the DRP's statutory responsibilities and 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.

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. 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.

DRP may provide the services and facilities outlined in this plan either with its own funds and staff or through an outsourcing contract. Private contractors may provide assistance with natural resource management and restoration activities or a concessionaire may provide services to park visitors in order to enhance the visitor experience. For example, a concessionaire could be authorized to sell merchandise and food and to rent recreational equipment for use in the park. A concessionaire may also be authorized to provide specialized services, such as interpretive tours, or overnight accommodations when the required capital investment exceeds that which DRP can elect to incur. Decisions regarding outsourcing, contracting with the private sector, the use of concessionaires, etc. are made on a case-by-case basis in accordance with the policies set forth in DRP's Operations Manual (OM).

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 (DRP) 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.

Many operating procedures are standardized system-wide and are set by internal direction. These procedures are outlined in the OM that covers such areas as personnel management, uniforms and personal appearance, training, signs, communications, fiscal procedures, interpretation, concessions, public use regulations, resource management, law enforcement, protection, safety and maintenance.

Park Management Goals

The following park goals express DRP's long-term intent in managing the state park:

- Provide administrative support for all park functions.
- Protect water quality and quantity in the park, restore hydrology to the extent feasible and maintain the restored condition.
- Restore and maintain the natural communities/habitats of the park.
- Maintain, improve or restore imperiled species populations and habitats in the park.
- Remove exotic and invasive plants and animals from the park and conduct needed maintenance-control.

- Protect, preserve and maintain the cultural resources of the park.
- Provide public access and recreational opportunities in the park.
- Develop and maintain the capital facilities and infrastructure necessary to meet the goals and objectives of this management plan.

Management Coordination

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

The Florida Department of Agriculture and Consumer Services (FDACS), Florida Forest Service (FFS), assists DRP staff in the development of wildfire emergency plans and provides the authorization required for prescribed burning. The Florida Fish and Wildlife Conservation Commission (FWC) assists staff in the enforcement of state laws pertaining to wildlife, freshwater fish and other aquatic life existing within the park. In addition, the FWC aids DRP with wildlife management programs, including imperiled species management. The Florida Department of State (FDOS), Division of Historical Resources (DHR) assists staff to ensure protection of archaeological and historical sites. The Florida Department of Environmental Protection (DEP), Florida Coastal Office (FCO) aids staff in aquatic preserves management programs. The DEP, Bureau of Beaches and Coastal Systems aids staff in planning and construction activities seaward of the Coastal Construction Control Line (CCCL). In addition, the Bureau of Beaches and Coastal Systems aid the staff in the development of erosion control projects.

Public Participation

DRP provided an opportunity for public input by conducting a public workshop and an Advisory Group meeting to present the draft management plan to the public. These meetings were held on [INSERT Dates], respectively. Meeting notices were published in the Florida Administrative Register, [INSERT publication date, VOL/ISSUE], included on the Department Internet Calendar, posted in clear view at the park, and promoted locally. The purpose of the Advisory Group meeting is to provide the Advisory Group members an opportunity to discuss the draft management plan (see Addendum 2).

Other Designations

Dudley Farm Historic State Park is not within an Area of Critical State Concern as defined in Section 380.05, Florida Statutes, and it is not presently under study for such designation.

Dudley Farm Historic State Park was designated through the Florida Greenways and Trails Designation Program on January 22, 2002.

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

RESOURCE MANAGEMENT COMPONENT

Introduction

The Florida Department of Environmental Protection (DEP), Division of Recreation and Parks (DRP) in accordance with Chapter 258, Florida Statutes, 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. Management measures expressed in this plan are consistent with the DRP's overall mission in natural systems management. Cited references are contained in Addendum 3.

The DRP's philosophy of resource management is natural systems management. Primary emphasis is placed on restoring and maintaining, to the degree possible, the natural processes that shaped the structure, function and species composition of Florida's diverse natural communities as they occurred in the original domain. Single species management for imperiled species is appropriate in state parks when the maintenance, recovery or restoration of a species or population is complicated due to constraints associated with long-term restoration efforts, unnaturally high mortality or insufficient habitat. Single species management should be compatible with the maintenance and restoration of natural processes and should not imperil other native species or seriously compromise the park values.

The DRP's management goal for cultural resources is to preserve sites and objects that represent Florida's cultural periods, significant historic events or persons. This goal often entails 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 can be affected by conditions and events that occur beyond park boundaries. Ecosystem management is implemented through a resource management evaluation program that assesses resource conditions, evaluates management activities and refines management actions, and reviews local comprehensive plans and development permit applications for park/ecosystem impacts.

The entire park is divided into management zones that delineate areas on the ground that are used to reference management activities (see Management Zones Map). The shape and size of each zone may be based on natural community type, burn zone, and the location of existing roads and natural fire breaks. It is important to note that all burn zones are management zones; however, not all management zones include fire-dependent natural communities. Table 1 reflects the management zones with the acres of each zone.

Table 1. Dudley Farm Historic State Park Management Zones			
Management Zone	Acreage	Managed with Prescribed Fire	Contains Known Cultural Resources
DF-1	20.54	N	N
DF-2A	32.08	Y	N
DF-2B	16.43	N	N
DF-2C	8.53	N	N
DF-2D	19.13	N	Y
DF-3	9.28	N	Y
DF-4A	36.32	Y	N
DF-4B	33.43	Y	Y
DF-5A	31.04	Y	N
DF-5B	7.46	N	Y
DF-5C	15.03	Y	N
DF-5D	8.35	Y	N
DF-6A	32.27	Y	N
DF-6B	19.80	Y	N
DF-6C	23.45	Y	Y
DF-6D	7.65	Y	Y
DF-6E	12.66	Y	N

Resource Description and Assessment

Natural Resources

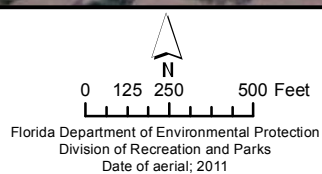
Topography

Dudley Farm Historic State Park is located within a lowland plains region of western Alachua County. This region is characterized by a generally flat landscape with some relief present in the form of gently rolling hills and numerous solution depressions that were shaped by changes in sea level during the Pleistocene. The dominant topographic features at Dudley Farm are the abundant solution cave openings that provide a direct surface to groundwater connection. Elevations within Dudley Farm range from about 72 feet above mean sea level (msl) within a sinkhole to 132 feet msl at a point southeast of Cherry Pits Cave (see Topographic Map).

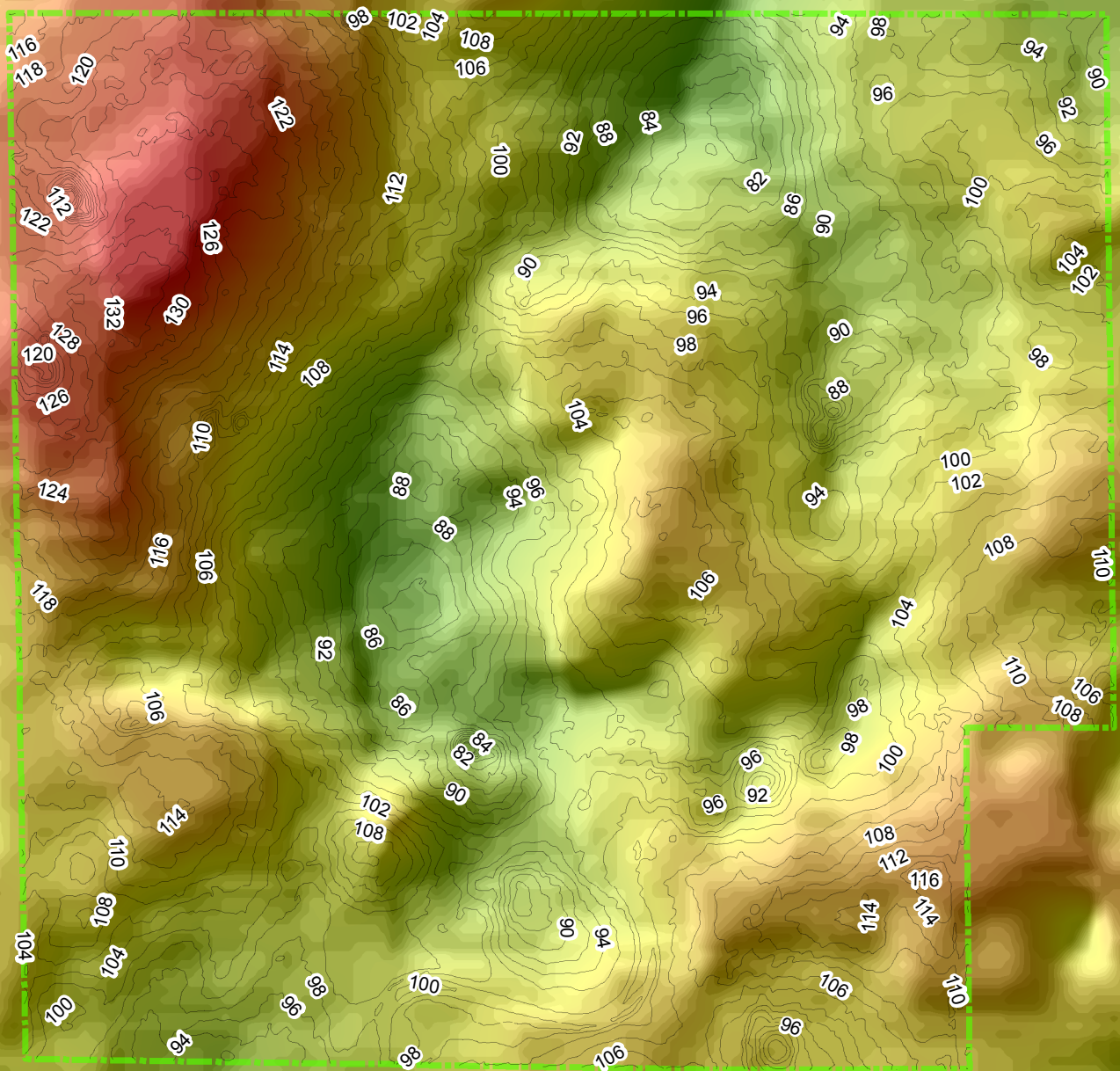
Most of the park's topography has been altered to some degree by past land use practices including intensive farming and road clearing, and more recently by firebreak maintenance. The majority of Dudley Farm's known cave openings are highly susceptible to the effects of erosion and sedimentation because of their proximity to these topographic disturbances. Fenceline Cave, for example, whose entrance has steeply sloping sides and is located very close to an unpaved service road, commonly has surface water runoff funnel directly into the cave system during significant storm events.




DUDLEY FARM
HISTORIC STATE PARK




MANAGEMENT ZONES
MAP


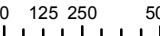


Legend

 Park_Boundary

 Topographic Line 2 Foot Interval

DUDLEY FARM
HISTORIC STATE PARK


0 125 250 500 Feet

Florida Department of Environmental Protection
Division of Recreation and Parks
Date of aerial; 2011

TOPOGRAPHIC MAP

There are two distinct topographic anomalies located at the south end of the park, a paved road from the park entrance to the main parking lot and a pair of landscaped berms that run parallel to State Road 26. The paved entrance road is partially elevated, bisects a large swath of park property, and has extensive storm water retention swales along its length to attenuate runoff. There are no culverts under the paved road. The two broad-based landscaped berms, which were constructed for noise abatement purposes, are aligned parallel to State Road 26 and rise four to five feet above the natural grade.

Geology

Dudley Farm lies within the Western Valley physiographic region of Florida, a large geographically elongated lowland plain enclosed within the Central Highlands of the Atlantic Coastal Plain (White 1970). This geomorphic zone is an area of subtle relief, underlain by a thin veneer of sand over limestone, which forms a mature karst plain characterized by rapid recharge and numerous sinkholes (Upchurch et al. 2011). Geologists refer to the Western Valley in western Alachua County as the Western or Newberry Limestone Plain (Pirkle 1956; Williams et al. 1977; Upchurch et al. 2011). This region is an extension of the Williston Limestone Plain located to the west in eastern Levy County (Vernon 1951). One unique feature of the Newberry Plain is that the region is devoid of streams or rivers; however surface waters can readily enter the Upper Floridan aquifer by percolating through sandy soils or falling directly into karst features called "solution pipes" (Clark et al. 1964; Pirkle 1956). These cylindrical karst conduits are often deep, steep-sided vertical caves through which surface water and soil sediments may pass (Copeland 2003). Solution pipes are common throughout the Newberry Plain region (Pirkle 1956).

Underlying Dudley Farm Historic State Park are marine and non-marine deposits of sand, clay, marl, gravel, limestone, dolomite, and dolomitic limestone. In descending order, these deposits include the Hawthorn Group, Ocala Limestone, Avon Park Limestone, Lake City and Oldsmar Formations. Described from youngest to oldest, these deposits represent the Pleistocene, Pliocene, Miocene, and Eocene Series. The Eocene Series consists largely of carbonate rocks and comprises the Oldsmar and Lake City Formations, Avon Park Limestone, and Ocala Limestone. The Miocene Series includes the Hawthorn Group, while the Plio-Pleistocene Series consists of unnamed coarse clastics, including beds of soil, sand, clay, and younger marine and estuarine terrace deposits. The Hawthorn Formation is not continuous in western Alachua County because of past erosional processes (Williams et al. 1977).

The principal geologic structure of the area is the Ocala uplift, an anticlinal arch whose crest traverses southwestern Alachua County. The folding and subsequent fracturing of the Ocala Limestone in this area has forced beds of Tertiary-age limestone to the surface. The uppermost Ocala Limestone is the Crystal River Formation, a late Eocene member (Williams et al. 1977). In the Newberry Plain region, this formation is extensively fractured because of the solution effects of groundwater and surface water, resulting in a linear arrangement of sinkholes and caves (Williams et al. 1977).

Many caves and solution depressions at Dudley Farm are described by geologists as being directionally aligned with underlying structural features such as joints and

fractures within the Ocala Limestone (Clark et al. 1964; Pirkle 1956). Similar types of surface solution pipes and underground fracture systems occur throughout Alachua County, including Lee Sink in San Felasco Hammock Preserve State Park. It is because of these directional fractures within the Ocala Limestone and Dudley Farm's location within a known springshed (i.e. the Rum Island/Gilchrist Blue Springshed) that geologists have determined that groundwater below the Dudley Farm caves flows northwest towards the Santa Fe River Basin (Clark et al. 1964; Williams et al. 1977; Upchurch et al. 2011).

Soils

According to the Soil Survey of Alachua County, Florida, soils at Dudley Farm are nearly level to sloping, well drained, and moderately well drained (Thomas et al. 1985). Some soils are sandy to a depth of 20 to 40 inches and are loamy below, while others are sandy to a depth of 40 to 80 inches and loamy below. These soils occur in the uplands. Complete descriptions of the seven soil types found at Dudley Farm are contained in Addendum 4 (see Soils Map).

The soil profile at Dudley Farm does not appear to have been extensively altered, despite its location in a region where phosphate mining was once a thriving industry and where limerock mining continues to this day. Dudley Farm has been managed as a small-scale agricultural homestead for at least the past century, but there is no physical evidence that the site was ever mined. The only soil disturbances to be expected would be in the upper soil horizons and would primarily be associated with farming activities. Bedding and plowing activities for crop production and conversion of uplands to improved pasture have occurred across the majority of the park's landscape. Periodic fertilization of these areas may have caused changes in soil chemistry, and plowing in the uplands has caused some soil loss via erosion.

Dudley Farm contains a historic arsenic contamination site from a former cattle dipping operation on the homestead. Constructed in the early 1920s near the Dudley farmhouse, an in-ground dipping vat was used to immerse cattle in a chemical bath as a preventative for infectious insect-borne diseases at a time when Texas tick fever was a major problem in the cattle industry (Hope 2005). Soil cores and groundwater well monitoring have verified that the Dudley dip vat site has been contaminated with arsenic and chlorinated hydrocarbons originating from these former cattle operations. Additional discussion of this issue appears in the Hydrology section below.

Minerals

Limestone deposits occur at Dudley Farm. In addition, phosphatic ore used in the production of fertilizer is found in the Hawthorn Formation underlying the site. The extent of these deposits and the feasibility of extracting them have not been assessed. In any event, mining at Dudley Farm would be inconsistent with its past, current, and anticipated land uses.

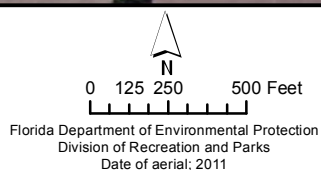


Legend

- 3 - Arredondo fine sand, 0 to 5 percent slopes
- 8 - Millhopper sand, 0 to 5 percent slopes
- 29 - Lochloosa fine sand, 2 to 5 percent slopes
- 30 - Kendrick sand, 2 to 5 percent slopes
- 33 - Norfolk loamy fine sand, 2 to 5 percent slopes
- 39 - Bonneau fine sand, 2 to 5 percent slopes
- 57 - Micanopy loamy fine sand, 2 to 5 percent slopes

Image courtesy of USGS Earthstar

DUDLEY FARM
HISTORIC STATE PARK



SOILS MAP

Hydrology

Permanent surface waters such as streams and lakes do not exist within the Newberry Plains region (or at Dudley Farm). The absence of these water bodies is directly linked to local geology in that karst features such as sinkholes and solution pipes, as well as the sandy soils of the area, play a defining role in encouraging an almost immediate passage of rainwater and runoff into the Floridan aquifer via cave openings, or alternatively a rapid percolation through the soil.

Three aquifer systems are present in Alachua County: the water table or surficial aquifer, the secondary artesian aquifer, and the Floridan aquifer (Clark et al. 1964; Thomas et al. 1985). The surficial aquifer occurs primarily near the surface and overlies the Hawthorn Group, which serves as a confining layer where it is present (Williams et al. 1977). The secondary artesian aquifer is within the Hawthorn and is recharged by downward flow from the surficial aquifer and upward flow from the Floridan aquifer, which in this area is under artesian pressure. The Floridan aquifer, which occurs within the upper several hundred feet of Ocala Limestone, underlies the entire region. The Floridan is the most productive of the aquifers due to its high transmissivity and storage capacity.

The elevation at the top of the Floridan aquifer is about 42 to 46 feet msl (Krause 1990). Therefore the Floridan may be visible in the deeper parts of some of the Dudley caves where the Hawthorn layer is perforated by the caves and the Floridan is in an unconfined state. Dudley Farm lies within the Rum Island/Gilchrist Blue Springshed and groundwater flow beneath the park is northwest toward the Santa Fe River (Upchurch et al. 2011).

There is an extensive well monitoring database for the region surrounding Dudley Farm (FDEP 2014). Numerous entities such as DEP, SJRWMD, environmental consulting firms and university researchers are all involved in the sampling of wells within the basin. The wells are used to monitor groundwater quality and background levels at various facilities including waste management, underground injection, groundwater contamination, and cattle dip vat sites, and also at private residential areas and public areas. There are nearly 250 wells scattered across the regional watershed that have undergone various levels of sampling. Data from dedicated, long-term monitoring wells, used by state agencies for tracking water quality changes within watersheds, are accessible through a storage and retrieval database managed by DEP (FDEP 2014).

There are nine water supply wells scattered around the park property, but currently only four are active, including one at each of the following: Dudley farmhouse, visitor center, shop complex and ranger residence. Of the nine wells, two were capped and abandoned (per recommendations from dip vat research - see below), two are uncased historic period wells at the old home place and behind the Dudley farmhouse that are only used for interpretation, and one is a pitcher pump well that is no longer used. The ranger residence well, which is the most recently constructed water supply structure in the park, was built during the severe drought of 1999-2002. During that same time period, the depth of the Dudley farmhouse well was extended because of significantly decreased groundwater levels in the region (Copeland et al. 2011; Williams et al. 2011).

One specific subset of well and soil testing data important to Dudley Farm is that associated with the abandoned cattle dipping site near the Dudley farmhouse. During the 1920s, the Dudley farmstead dipped its cattle in pesticides such as arsenic to control tick infestations. There is only one known cattle dip vat in the park, located in the southeast corner of zone DF-6C and currently isolated from humans and animals by fencing.

In 1995, the DRP initiated rigorous soil testing at the park's only cattle dip vat site (Woodward-Clyde Consultants 1995). During this initial assessment, the entire contaminant plume surrounding the dip vat was extensively delineated. Soils were found to be contaminated by both arsenic and chlordane, and high levels of arsenic were documented several feet below the soil surface.

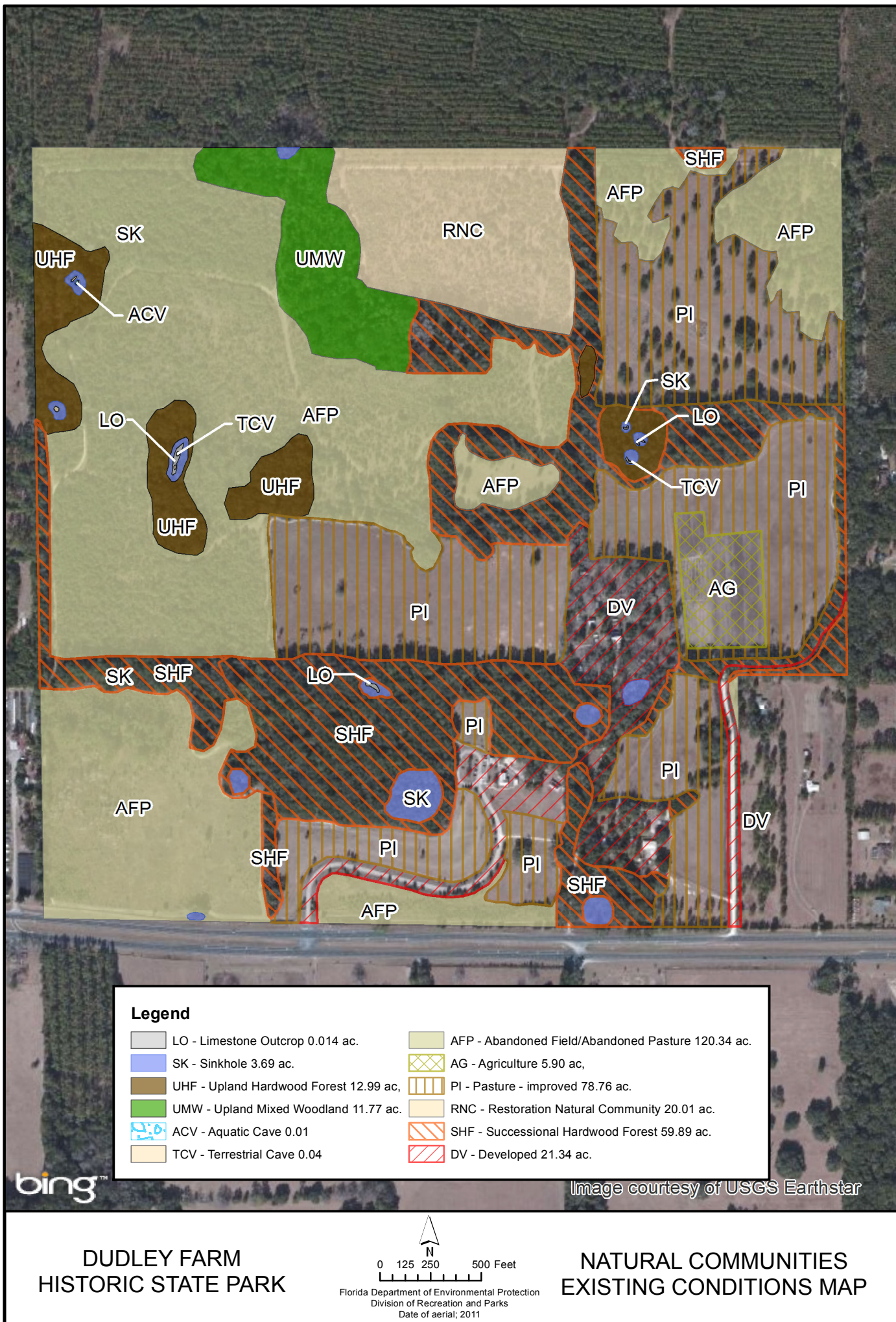
Several investigations and analyses have subsequently been conducted by soil contamination experts at the University of Florida (Thomas 1998; Rhue 1997; Reve, personal communication 2002). Surface concentrations of arsenic at the dip vat site are up to two orders of magnitude higher than the acceptable risk level established for residential settings (Woodward-Clyde 1995, Thomas 1998). A well located 150 feet east of the cattle dip vat undergoes annual arsenic testing. No contamination has been found to date. Overall research conclusions are that arsenic is slowly migrating laterally toward the west and away from the homestead, with lateral movement of contaminants exceeding vertical movement (Thomas 1998). However, vertical migration in excess of 10 feet at some locations is occurring as the contaminant plume slowly moves through the clay soils below the site (Rhue et al. 1996; Reve, personal communication 2004). Soil experts state that it may take as many as 100 years for contaminants to completely move through the clay layers of the Hawthorn Formation and reach groundwater.

Nevertheless, questions have been generated regarding risk levels associated with potential groundwater contamination (Reve, personal communication 2004). It is apparent from available monitoring reports that very little arsenic contamination has been detected downslope from the dip vat site or in the vicinity of a sinkhole to the south, with the exception of a few questionable surface samples (Thomas 1998). The dip vat's location on top of a natural bowl-shaped limestone formation near the ground surface allows this geologic feature to function like a dam and block the spread of arsenic eastward toward the farmhouse and southward toward the sinkhole (Reve, personal communication 2004).

Current recommendations from experts are to keep the site fenced and secure, prevent any soil disturbance, and allow vegetation to recolonize the site. Even though there does not appear to be an immediate threat of groundwater contamination, monitoring and assessment of this site should continue in order to further delineate the spread of the plume and define the actual extent of the problem. Remediation of this site would require deep excavation since the arsenic plume occurs in high concentration at a significant depth.

Natural Communities

This section of the management plan describes and assesses each of the natural communities found in the state park. It also describes of the desired future



condition (DFC) of each natural community and identifies the actions that will be required to bring the community to its desired future condition. Specific management objectives and actions for natural community management, exotic species management, and imperiled species management are discussed in the Resource Management Program section of this component.

The system of classifying natural communities employed in this plan was developed by the Florida Natural Areas Inventory (FNAI 2010). 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 that are similar with respect to those factors will tend to have natural communities with similar species compositions. Obvious differences in species composition can occur, however, 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--generally have quite different climatic environments, and these necessitate different management programs. Some physical influences, such as fire frequency, may vary from FNAI's descriptions for certain natural communities in this plan.

When a natural community within a park reaches the desired future condition, it is considered to be in a "maintenance condition." Required actions for sustaining a community's maintenance condition may include; maintaining optimal fire return intervals for fire dependent communities, ongoing control of non-native plant and animal species, maintaining natural hydrological functions (including historic water flows and water quality), preserving a community's biodiversity and vegetative structure, protecting viable populations of plant and animal species (including those that are imperiled or endemic), and preserving intact ecotones that link natural communities across the landscape.

The park contains six distinct natural communities as well as six altered landcover types (see Natural Communities Map). A list of known plants and animals occurring in the park is contained in Addendum 5.

Upland Hardwood Forest

Desired future condition: Mature, closed canopy hardwood forest typically occurring on slopes and rolling hills with generally mesic conditions. Overstory tree species may consist of southern magnolia (*Magnolia grandiflora*), sweetgum (*Liquidambar styraciflua*), live oak (*Quercus virginiana*), laurel oak (*Quercus laurifolia*), Florida maple (*Acer saccharum* subsp. *floridanum*), and swamp chestnut oak (*Quercus michauxii*). Understory species will include trees and shrubs such as American holly (*Ilex opaca*), flowering dogwood (*Cornus florida*), eastern redbud (*Cercis canadensis*), red bay (*Persea borbonia*), horse sugar (*Symplocos tinctoria*), and beautyberry (*Callicarpa americana*). Groundcover will consist of shade tolerant herbaceous species, sedges and vines.

Description and assessment: Prior to the advent of fire suppression and the spread of agriculture in the southeastern coastal plain, the upland hardwood forest natural community was less widespread than it is today. Historically, upland hardwood forest at Dudley Farm probably occurred only in narrow fringes around the major terrestrial caves. During the 20th century, the hardwood forest fringes likely expanded into adjacent disturbed habitats. Remnant pine stumps, quite possibly

longleaf pine, can be found near several of the cave openings in areas now dominated by the hardwood species characteristic of upland hardwood forest. Aerial photographs from 1937 clearly show that clumps of hardwoods were left as buffers around the major cave openings, although the majority of the other natural communities at the site had been completely cleared and converted to agriculture by that time.

This community type appears to be located in areas that were spared during previous episodes of land clearing on the farm, particularly near the cave openings. The older stands of upland hardwood forest are in relatively good condition, while the younger, more successional areas are in fair condition. Some of the latter areas may have once been upland mixed woodland. The upland hardwood forests have also been impacted by invasive exotic plants. Coral ardisia (*Ardisia crenata*) is particularly problematic.

General Management Measures: Management measures for upland hardwood forest include regular survey for and prompt removal of invasive exotic plants, particularly coral ardisia and Japanese climbing fern (*Lygodium japonicum*).

Upland Mixed Woodland

Desired future condition: Dominant tree species will include longleaf pine (*Pinus palustris*), southern red oak (*Quercus falcata*), sand post oak (*Quercus margaretta*), and mockernut hickory (*Carya alba*). Hardwood tree species are frequently dominant or co-dominant with pines (*Pinus* spp.). Flowering dogwoods (*Cornus florida*) may be present. Percent herbaceous cover will be comparable to sandhill and possibly contain yellow Indiangrass (*Sorghastrum nutans*), silver plumegrass (*Saccharum alopecuroides*), and big bluestem (*Andropogon gerardii*). In old growth conditions, oaks and hickories are commonly 150-200 years old. The Optimal Fire Return Interval for this community is 2-5 years, depending on adjacent natural communities.

Description and assessment: Much of the Dudley Farm property was probably cleared of native longleaf pines before the 1900s, although the Dudley family did retain a large stand of longleaf pines on the north side of their holdings until the 1960s. Then the area was clear cut and the land sold. A 1937 aerial photograph shows what appear to be scattered longleaf pines, presumably with a native upland pine type of groundcover, just north of the current park boundary. Soil characteristics and historical references to longleaf pines being harvested on the site also support the conclusion that most of the current park was once upland mixed woodland or possibly upland pine. Early survey records also indicate that a type of high pine forest existed on the site. Very few upland mixed woodland or upland pine species remain today, however. The conversion of natural areas to agricultural fields and the grazing of livestock in remnant wooded areas have dramatically altered the natural landscape, not only at Dudley Farm, but also across much of north Florida.

The only area still classified as upland mixed woodland lies in the north central portion of the park. It is a woodlot that does not appear to have been cleared by the Dudley family. With the exception of this remnant and the upland hardwood forest remnants near the cave openings, all of the other forested areas in the park

were cleared and converted to some form of agriculture. This upland mixed woodland is considered to be in poor condition due to lack of fire and invasion by offsite hardwood species.

General Management Measures: Restoration of the upland mixed woodland at Dudley Farm will require periodic prescribed fires and substantial plantings of groundcover species and canopy tree species. Given the isolated and limited area of upland mixed woodland in the park, restoration will not be a high priority except in the context of restoration of the cultural landscape of this historic site. The former pasture area, now classified as a restoration natural community, that lies to the east of the upland mixed woodland will be the primary focus of longleaf ecosystem restoration efforts. Both areas will be managed with the goal of restoring at least the structural components of this high pine community, if not the complete species diversity.

Sinkhole

Desired future condition: Sinkholes are characterized by cylindrical or conical depressions with limestone or sand walls. Sinkholes do not contain standing water for long periods of time as do sinkhole lakes. Depending upon the age of the sinkhole, the vegetation of sandy sinkholes may represent a well-developed forest including southern magnolia (*Magnolia grandiflora*), sweetgum (*Liquidambar styraciflua*), wax myrtle (*Myrica cerifera*), grape vines (*Vitis* spp.), Virginia creeper (*Parthenocissus quinquefolia*), water oak (*Quercus nigra*) and pignut hickory (*Carya glabra*). Sinkholes with vertical limestone walls may be covered by a variety of mosses, liverworts, ferns and small herbs. Sinkholes will generally have a very moist microclimate due to seepage and being buffered by the lower elevation and a tree canopy. Desired future conditions include limiting unnatural erosion and protecting the microclimate from disturbance.

Description and assessment: Several well-developed sinkholes occur within the park. Two notable sinkholes are located to the southeast and southwest of the main farmhouse on either side of the former access road (Old Jonesville Road). These sinks are broad depressions that formerly hosted heavy vegetative cover, including appreciable amounts of invasive exotic plant species such as air-potato (*Dioscorea bulbifera*), white yam (*Dioscorea alata*), mimosa (*Albizia julibrissin*), small-leaf spiderwort (*Tradescantia fluminensis*) and coral ardisia. Park staff and volunteers have made considerable progress in removing invasive plants from these sinkholes. Another sinkhole, this one located adjacent to State Road 26 just east of the former access road to the farm, once held water periodically although now it rarely retains water.

Most of the sinkholes in the park are relatively stable and sediment filled, although water usually percolates quickly through the accumulated soil layers. The sinkhole located southeast of the farmhouse appears to have developed a direct opening into the underlying limestone and now drains through a semi-vertical shaft several inches in diameter. Sinkholes also surround the openings of the various Dudley caves. These areas are described further in the section below dealing with terrestrial and aquatic caves. A portion of another large sinkhole, Dixie Sink, straddles the north boundary of the park. This sink is vegetated with mixed hardwoods. The sinkholes within the park are generally in good condition.

General Management Measures: Erosion is a natural process associated with sinkhole formation and expansion. Sinkholes within the park will be protected from any unnatural disturbances that might accelerate natural rates of erosion. Public access to the sinkholes will be restricted to prevent impacts from foot traffic and to insure public safety around the cave openings. Protection from erosion is of highest priority where terrestrial and aquatic cave openings are associated with sinkholes. The park will also continue to control exotic plants within the sinkholes.

Limestone Outcrop

Desired future condition: Limestone outcrops are associated with karst topography and are often found within other features such as sinkholes or as isolated features within mesic hammocks and upland hardwood forests. Various ferns, mosses and smaller herbs typically grow on the limestone surface or in crevices. Characteristic species include partridgeberry (*Mitchella repens*), brittle maidenhair fern (*Adiantum tenerum*), netted chain fern (*Woodwardia areolata*), southern shield fern (*Thelypteris kunthii*), and various species of panicgrass (*Panicum* spp.). Other rare fern species may also occur on limestone outcrops.

Description and assessment: The limestone outcrops at Dudley Farm are associated with the sinkholes and the terrestrial and aquatic cave openings. The most well-developed limestone outcrops are found above Myrtle's Cave, Cherry Pits Cave, Dudley's Cave, Dudley's Tunnel, and Watering Hole Cave. Most of these are in restricted or remote areas, so they are relatively undisturbed and are in good to excellent condition. At this time, no imperiled plant species have been documented on these outcroppings.

General Management Measures: As with sinkholes, protection from erosion and from direct impacts of foot traffic are the primary protective measures for limestone outcrops. Although exotic plants are not common on these outcrops, they do occur in the surrounding area. Care must be taken when removing exotic plants near limestone outcrops to avoid destabilization of soils on steep slopes. Herbicide use must be limited, and if required, should be applied very selectively.

Aquatic and Terrestrial Cave

Desired future condition: Aquatic and terrestrial caves are characterized as cavities below the ground surface in karst areas. A cave system may contain portions classified as terrestrial caves and portions classified as aquatic caves. The latter will vary from shallow pools highly susceptible to disturbance to more stable, totally submerged systems. Because all caves develop under aquatic conditions, terrestrial caves can be considered essentially dry aquatic caves. Near the cave entrance, the vegetation may be typical of the surrounding natural community. Within the cave, illumination levels and therefore vegetation densities will drop rapidly. Species of mosses, algae, liverworts, may be present. Plants may be absent or limited to a few inconspicuous species of fungi that grow on guano or other organic debris. Cave systems are extremely fragile. Desired future conditions include protecting against alterations that may affect light penetration, air circulation, microclimate, or increase pollution in aquatic systems.

Description and assessment: At Dudley Farm, these two natural community types often occur together. Terrestrial caves of varying dimensions connect the aquatic

caves with the surface. The terrestrial portions of the cave systems are the best known subterranean features in the park (Krause 1990), although some limited exploration of the aquatic caves has also occurred (Morris and Butt 1995).

Twelve caves have been described as part of the original Dudley Farm cave complex (Krause 1990). A thirteenth cave was discovered in 1998. Presently, 10 of the 13 caves are under state ownership. The three caves that are privately owned lie to the north and east of the current park boundaries and are known as Dudley #10 (Emmel #1), Dudley #11 (Emmel #2) and Dudley #12. A listing of all twelve caves described by Krause, including known alternative cave names, is provided in Table 2 below.

Table 2. Cave Inventory			
Within Park Boundary	Florida Speleological Society Designation	Historical Name(s)	Florida Cave Survey File #
Y	Dudley Cave #1*	Dudley's Tunnel	0025
Y	Dudley Cave #2*	Dudley's Cave or	0024
Y	Dudley Cave #3*	Myrtle's Cave,	0006
Y	Dudley Cave #4*	Garbage Pit	0137
Y	Dudley Cave #5*	Cherry Pits Cave	0138
Y	Dudley Cave #6*	Fenceline Cave	0140
Y	Dudley Cave #7*	Barry Cave #1	0141
Y	Dudley Cave #8*	Watering Hole Cave	0142
Y	Dudley Cave #9*	Fenceline Fissure	0143
N	Dudley Cave #10*	Emmel Cave #1,	0020, 0782
N	Dudley Cave #11*	Emmel Cave #2	
N	Dudley Cave #12*		0139
Y	Dudley Cave #13	Bedspring Cave	0901
* From Krause 1990, and Krause personal communication.			

The actual physical extent of the aquatic cave systems depends primarily on groundwater levels. Cave surveys by the Florida Speleological Society in 1989 documented groundwater levels at elevations between 42 to 46 feet, although evidence in the caves suggests that historical water levels were as much as six feet higher. Increased groundwater withdrawals and recent drought conditions are thought to have been responsible for the lowering of water levels (Krause 1990). In all likelihood, the aquatic caves at Dudley Farm are in good condition, although any increased erosion at the cave entrances could eventually have negative effects. Aquatic cave systems require detrital input from aboveground sources, but unnaturally high levels of erosion can be detrimental.

The terrestrial caves at Dudley Farm vary greatly in size and accessibility. Maps of five of the larger terrestrial caves have been published by Krause (1990). Several caves have been blocked or partially blocked by the erosion of sand and detritus into the cave openings. Watering Hole Cave is described as a large eroded fissure with sediments blocking the cave entrance. This cave was presumably used by the

Dudleys to water livestock. Dudley's Cave also contains a deep layer of sediment that may have historically blocked access to the deeper reaches of the cave. Erosion and sedimentation have affected most of the other caves to some degree.

The terrestrial caves appear to be in good to excellent condition. Although several have experienced accelerated erosion in the past, most of these areas appear to be stable at this time. Cherry Pits, Garbage Pit and Fenceline caves have been impacted in the past by erosion associated with adjacent service roads. Garbage Pit Cave was historically used as a refuse site by the Dudley family. Cave inspections were conducted in 2014 as part of a Florida Fish and Wildlife Conservation Commission (FWC) cave survey for tri-colored bats (*Perimyotis subflavus*). At that time, Cherry Pits, Myrtle's, Dudley's, Dudley's Tunnel, and Fenceline caves were accessed by DRP and FWC staff. The caves appeared to be in stable condition and not suffering from excessive erosion.

Populations of cave-dwelling animals, or troglobites, are found in many of the caves at Dudley Farm, particularly those that have direct connections to the Floridan aquifer. Troglobites recorded in the Dudley Farm caves include the Florida cave isopod (*Caecidotea hobbsi*), Hobbs' cave amphipod (*Crangonyx hobbsi*), and the light-fleeing cave crayfish (*Procambarus lucifugus*). In fact, Dudley Cave is the type locality for the Florida cave isopod. All three troglobite species listed above are designated by FNAI as globally and state imperiled or rare.

There are indications that Myrtle's Cave once served as a large roost site for bats (Krause 1990), but only a few individual southeastern bats (*Myotis austroriparius*) and tri-colored bats have been documented in recent years. According to research by the FWC, Myrtle's Cave is not considered a historical maternity cave for southeastern bats (Gore and Hovis 1994). Small numbers of tri-colored bats have also been documented in several other caves at Dudley Farm.

General Management Measures: Aquatic and terrestrial caves are relatively stable environments that can be easily disturbed or damaged by outside influences. All of the cave entrances at Dudley Farm are considered restricted areas and are not open for public access. This not only protects the caves from damage and erosion from foot traffic, but also protects the public from injury. Most of the cave entrances are either surrounded by steep slopes or are vertical shafts. Most require technical equipment for safe access. The caves are protected by virtue of their remote locations and wooded buffers, as well as existing fence lines that block easy access. The cave entrances are visually monitored for erosion and other potential impacts.

Altered Landcover Types

Abandoned Field/Abandoned Pasture

Aerial photographs reveal that in 1937 most of Dudley Farm was under some form of cultivation. Interpretation of subsequent series of aerial photographs shows that in later decades many of the open fields on the farm were left fallow. Once abandoned, these fields were quickly invaded by loblolly pines (*Pinus taeda*). Small areas were allowed to succeed to pines (probably loblollies) during the 1940s, and larger areas, particularly in the northwest part of the farm, were beginning to be

invaded by pines by the late 1940s. During the 1960s and 1970s, several areas in the northwest portion of the farm were clear cut and a second crop of loblolly pines allowed to regenerate. Other formerly cultivated areas, such as the west portion of the farm, were abandoned in the 1960s and eventually supported a stand of mature loblolly pines. Pines were also planted on approximately 30 acres in the southwest corner of the site around 1990 prior to state acquisition.

In 1995, loblolly pines in the northwest corner of Dudley Farm became infested during a severe outbreak of southern pine beetles in Alachua County. The pines were clear cut to control the infestation. Several other pine beetle infestations of smaller scale were also treated in the western half of the property. In 2001, another outbreak of southern pine beetles occurred at the park. Nearly all the pines at Dudley Farm were affected by this outbreak. Most areas dominated by pines were harvested in efforts to control the outbreak, although scattered live trees remained.

These clear cut areas are most similar to and are mapped as abandoned field/abandoned pasture. But they are rapidly becoming dominated by laurel oaks and loblolly pines and are likely to become successional hardwood forests in due time. Historically, the Dudley family allowed fields and pastures to succeed to loblolly pine forests, and after harvesting them, allowed loblolly pines to return. So allowing these areas to succeed to loblolly pines is not historically inaccurate.

Agriculture

Portions of the pasture area to the east of the historic farmstead are used for growing sugar cane and other crops. The area currently being used for agricultural crops is mapped as agriculture, but this altered landcover type may contract or expand according to the needs of the historic state park operations.

Developed

Developed areas of Dudley Farm Historic State Park include the majority of the historic farm structures, the ornamental plantings and garden plots, the ranger residence, and the entrance drive and visitor center areas on the former Barry property. A complete list of all the developed areas may be found in the Land Use Component. Developed areas within the park will be managed to minimize their effects on adjacent natural areas. Priority invasive exotic plant species (FLEPPC Category I and II species) will be removed from all developed areas. Other management measures will include proper storm water management and development guidelines that are compatible with prescribed fire management in adjacent natural areas.

Pasture – Improved

Although much of Dudley Farm was once in improved pasture, only those areas currently being mowed and maintained are mapped as improved pasture in this plan. These areas are concentrated near the historic farmstead and are used in part as pasture for the park's mules and cracker cow herd. The mowed pastures along the park entrance drive are maintained as part of the cultural landscape. The improved pastures are

dominated by bahiagrass and other pasture grasses and broadleaf weeds. These areas will continue to be maintained as improved pasture.

Restoration Natural Community

The old fields or pastures in the north-central part of the park (Zone DF-5A) were abandoned and loblolly pines were allowed to grow in the late 1970s and mid-1980s. These areas were clear cut during the 2001 southern pine beetle outbreak. Zone DF-5A lies to the north of the farmstead and is south of the longleaf pine stand that was cleared by the Dudleys in the 1960s and then sold. This zone has been planted with longleaf pines in an attempt to restore an example of the native longleaf ecosystem that has been all but lost in this part of Alachua County. While complete restoration may not be feasible, restoration of the longleaf pines and some native groundcover should be possible to provide enhancement of the cultural landscape. The desired future condition for this area is upland mixed woodland.

Successional Hardwood Forest

The successional hardwood forests at Dudley Farm occur along old fence lines and in areas that were cleared at some point in the past century. These forests are relatively young and less diverse than the upland hardwood forests that were not cleared. Where appropriate, these areas will be allowed to succeed towards upland hardwood forest.

Imperiled Species

Imperiled species are those that are (1) tracked by FNAI as critically imperiled (G1, S1) or imperiled (G2, S2); or (2) listed by the U.S. Fish and Wildlife Service (USFWS), Florida Fish and Wildlife Conservation Commission (FWC) or the Florida Department of Agriculture and Consumer Services (FDACS) as endangered, threatened or of special concern.

Most of the imperiled animal species at Dudley Farm are associated with the aquatic and terrestrial caves, and are described in the Natural Communities section above. Another imperiled animal species that still occurs on the site is the gopher tortoise. A record for eastern indigo snake exists in the FNAI database, likely associated with gopher tortoise burrows.

Onsite management measures used to protect the aquatic and terrestrial caves from human disturbance, erosion, and contaminated runoff will also help preserve imperiled cave fauna such as cave isopods, amphipods, and crayfish. Changes in the type and intensity of land use in western Alachua County may directly impact regional groundwater quality and quantity, and indirectly affect local populations of rare aquatic invertebrates. The park will increase its frequency of patrol at caves if any show signs of unauthorized visitation or vandalism. The park will continue to conduct agricultural activities in a manner that will avoid negative impacts on gopher tortoises, and will continue to burn the pasture areas.

Several imperiled plant species have been noted within the park. Incised agrimony (*Agrimonia incisa*) is typically found in upland pine or upland mixed woodland communities. It has recently been discovered in one of the pasture zones that is regularly burned. Little ladiestresses (*Spiranthes tuberosa*) and giant orchid

(*Pteroglossaspis ecristata*) have also been documented in some of the pasture areas. No disking, plowing, or other soil disturbance should occur in the vicinity of these imperiled plant species. On the other hand, mowing and burning of these areas should not negatively impact these particular species, and burning is likely to stimulate their growth and reproduction. Staff should learn to recognize these species so they can document any new populations and avoid disturbing the soil in their vicinity. Another imperiled plant, eastern sweetshrub (*Calycanthus floridus*), is cultivated within the Dudley garden area and is not native to the region. All these species were documented as part of an ongoing project to survey and voucher the plants of Dudley Farm in association with the University of Florida Herbarium.

Table 3 contains a list of all known imperiled species within the park and identifies their status as defined by various entities. It also identifies the types of management actions that are currently being taken by DRP staff or others, and identifies the current level of monitoring effort. The codes used under the column headings for management actions and monitoring level are defined following the table. Explanations for federal and state status as well as FNAI global and state rank are provided in Addendum 6.

Table 3. Imperiled Species Inventory						
Common and Scientific Name	Imperiled Species Status				Management Actions	Monitoring Level
	FWC	USFWS	FDACS	FNAI		
PLANTS						
Incised agrimony <i>Agrimonia incisa</i>			LE	G3,S2	1,6,7	Tier 1
Eastern sweetshrub <i>Calycanthus floridus</i> (cultivated)			LE	G5,S2		
Giant orchid <i>Pteroglossaspis ecristata</i>			LT	G2G3, S2	1,6	Tier 1
Little ladiestresses <i>Spiranthes tuberosa</i>			LT		1,6	Tier 1
ARTHROPODS						
Florida cave isopod <i>Caecidotea hobbsi</i>				G2G3,S2	4,9,10	Tier 2
Hobbs' cave amphipod <i>Crangonyx hobbsi</i>				G2G3,S2S3	4,9,10	Tier 2

Table 3. Imperiled Species Inventory						
Common and Scientific Name	Imperiled Species Status				Management Actions	Monitoring Level
	FWC	USFWS	FDACS	FNAI		
Light-fleeing cave crayfish <i>Procambarus lucifugus</i>				G2G3,S2S3	4,9,10	Tier 2
REPTILES						
Eastern indigo snake <i>Drymarchon couperi</i>	FT	LT		G3,S3	1,6,7	Tier 1
Gopher tortoise <i>Gopherus polyphemus</i>	ST	C		G3,S3	1,2,6,7,10,12	Tier 1
BIRDS						
Florida sandhill crane <i>Grus Americana pratensis</i>	ST			G5T2T3,S2S3		Tier 1

Management Actions:

1. Prescribed Fire
2. Exotic Plant Removal
3. Population Translocation/Augmentation/Restocking
4. Hydrological Maintenance/Restoration
5. Nest Boxes/Artificial Cavities
6. Hardwood Removal
7. Mechanical Treatment
8. Predator Control
9. Erosion Control
10. Protection from visitor impacts (establish buffers)/law enforcement
11. Decoys (shorebirds)
12. Vegetation planting
13. Outreach and Education
14. Other

Monitoring Level:

- Tier 1. Non-Targeted Observation/Documentation: includes documentation of species presence through casual/passive observation during routine park activities (i.e. not conducting species-specific searches). Documentation may be in the form of Wildlife Observation Forms, or other district specific methods used to communicate observations.
- Tier 2. Targeted Presence/Absence: includes monitoring methods/activities that are specifically intended to document presence/absence of a particular species or suite of species.
- Tier 3. Population Estimate/Index: an approximation of the true population size or population index based on a widely accepted method of sampling.
- Tier 4. Population Census: A complete count of an entire population with demographic analysis, including mortality, reproduction, emigration, and immigration.
- Tier 5. Other: may include habitat assessments for a particular species or suite of species or any other specific methods used as indicators to gather information about a particular species.

Detailed management goals, objectives and actions for imperiled species in this park are discussed in the Resource Management Program section of this component and the Implementation Component of this plan.

Exotic and Nuisance Species

Exotic species are plants or animals not native to Florida. Invasive exotic species are able to out-compete, displace or destroy native species and their habitats, often because they have been released from the natural controls of their native range, such as diseases, predatory insects, etc. If left unchecked, invasive exotic plants and animals alter the character, productivity and conservation values of the natural areas they invade.

Exotic animal species include non-native wildlife species, free ranging domesticated pets or livestock, and feral animals. Because of the negative impacts to natural systems attributed to exotic animals, the DRP actively removes exotic animals from state parks, with priority being given to those species causing the greatest ecological damage.

In some cases, native wildlife may also pose management problems or nuisances within state parks. A nuisance animal is an individual native animal whose presence or activities create special management problems. Examples of animal species from which nuisance cases may arise include venomous snakes or raccoons and alligators that are in public areas. Nuisance animals are dealt with on a case-by-case basis in accordance with the DRP's Nuisance and Exotic Animal Removal Standard.

Detailed management goals, objectives and actions for management of invasive exotic plants and exotic and nuisance animals are discussed in the Resource Management Program section of this component.

All of Dudley Farm was farmed during the tenure of the Dudley family. This disturbance has created a site vulnerable to invasion by exotic plants. Some of the traditional ornamental species planted at the farm are now known to be invasive species. A private nursery that currently bounds the western edge of the park provides an on-going source of additional invasive exotic plants. Fortunately, most of the invasive exotic plants in the park occur in the southern portion around the farmhouse and other buildings.

The most prevalent invasive exotic plants in the park are coral ardisia, mimosa, camphor-tree, air-potato, and winged yam (or white yam). In 2013, an air-potato biological control beetle, *Lilioceris cheni*, was released in the park. After that release it became apparent that white yam, which is not eaten by the beetle, is actually more common in the park than air-potato. The park will need to treat the white yam using conventional methods.

The park staff regularly treats the invasive exotic plants at Dudley Farm and maintains treatment and survey information in the DRP's statewide database. Since approval of the previous management plan in 2004, the Florida Park Service has treated 126 acres of invasive exotic plants in-house. Park and District 2 staffs should focus on keeping the northern part of the park as free of invasive exotic plants as possible.

The primary exotic animal that may cause problems in the natural areas at Dudley Farm is the nine-banded armadillo (*Dasypus novemcinctus*). The exotic Norway rat (*Rattus norvegicus*) and house mouse (*Mus musculus*) are potential problems at the historic farmstead.

In 2002 the red bay ambrosia beetle, *Xyleborus glabratus*, was first detected in the United States in Georgia. The beetle carries a fungal pathogen (*Raffaelea lauricola*) that causes laurel wilt disease and results in the death of red bays (*Persea borbonia*) and other species in the Lauraceae family. The beetle and its associated pathogen spread rapidly and by 2005 it was detected in Duval County, Florida (Mayfield and Thomas 2009). The beetle and laurel wilt have now spread throughout most of Florida and many of the surrounding states. While most of the adult red bays have been top killed, the trees continue to resprout from their roots. It may be that members of the Lauraceae will continue to survive as in a shrub form as the remnant tree root systems continue to resprout. At this point, much remains unknown about the long term impacts of this disease on red bays and other Lauraceae.

Table 3 contains a list of the Florida Exotic Pest Plant Council (FLEPPC) Category I and II invasive, exotic plant species found within the park (FLEPPC 2013). The table also identifies relative distribution for each species and the management zones in which they are known to occur. An explanation of the codes is provided following the table. For an inventory of all exotic species found within the park, see Addendum 5.

Table 4. Inventory of FLEPPC Category I and II Exotic Plant Species			
Common and Scientific Name	FLEPPC Category	Distribution	Management Zone (s)
PLANTS			
Mimosa <i>Albizia julibrissin</i>	I	1	DF-6B
		2	DF-5D, DF-6E, DF-6C, DF-5B, DF-5A, DF-4B, DF-4A, DF-2D, DF-2A, DF-1, DF-6D
Coral ardisia <i>Ardisia crenata</i>	I	2	DF-2A, DF-3, DF-5C
		3	DF-1, DF-2D
Camphor-tree <i>Cinnamomum camphora</i>	I	1	DF-2D
		2	DF-2A, DF-6B, DF-1, DF-6C, DF-5C, DF-5B, DF-5A, DF-4B, DF-4A, DF-3, DF-2C
White yam <i>Dioscorea alata</i>	I	6	DF-1, DF-3
Air-potato <i>Dioscorea bulbifera</i>	I	3	DF-1
Glossy privet <i>Ligustrum lucidum</i>	I	2	DF-1
Cogongrass <i>Imperata cylindrica</i>	I	3	DF-2C, 6A
Chinese privet <i>Ligustrum sinense</i>	I	2	DF-1
Japanese climbing fern <i>Lygodium japonicum</i>	I	2	DF-1, DF-5C
Skunkvine <i>Paederia foetida</i>	I	1	DF-3
Chinese brake fern <i>Pteris vittata</i>	II	1	DF-6B
Kudzu <i>Pueraria montana</i>	I	2	DF-4B
Small-leaf spiderwort <i>Tradescantia fluminensis</i>	I	2	DF-3
Chinese wisteria <i>Wisteria sinensis</i>	II	3	DF-2D
			DF-1

Distribution Categories:

- 0 No current infestation: All known sites have been treated and no plants are currently evident.
- 1 Single plant or clump: One individual plant or one small clump of a single species.
- 2 Scattered plants or clumps: Multiple individual plants or small clumps of a single species scattered within the gross area infested.
- 3 Scattered dense patches: Dense patches of a single species scattered within the gross area infested.
- 4 Dominant cover: Multiple plants or clumps of a single species that occupy a majority of the gross area infested.
- 5 Dense monoculture: Generally, a dense stand of a single dominant species that not only occupies more than a majority of the gross area infested, but also covers/excludes other plants.
- 6 Linearly scattered: Plants or clumps of a single species generally scattered along a linear feature, such as a road, trail, property line, ditch, ridge, slough, etc. within the gross area infested.

Special Natural Features

The aquatic and terrestrial cave systems described in the Natural Communities section are the park's only special natural features.

Cultural Resources

This section addresses the cultural resources present in the park that may include archaeological sites, historic buildings and structures, cultural landscapes and collections. The Florida Department of State (FDOS) maintains the master inventory of such resources through the Florida Master Site File (FMSF). State law requires that all state agencies locate, inventory and evaluate cultural resources that appear to be eligible for listing in the National Register of Historic Places. Addendum 7 contains the FDOS, Division of Historical Resources (DHR) management procedures for archaeological and historical sites and properties on state-owned or controlled properties; the criteria used for evaluating eligibility for listing in the National Register of Historic Places, and the Secretary of Interior's definitions for the various preservation treatments (restoration, rehabilitation, stabilization and preservation). For the purposes of this plan, significant archaeological site, significant structure and significant landscape means those cultural resources listed or eligible for listing in the National Register of Historic Places. The terms archaeological site, historic structure or historic landscape refer to all resources that will become 50 years old during the term of this plan.

Condition Assessment

Evaluating the condition of cultural resources is accomplished using a three-part evaluation scale, expressed as good, fair and poor. These terms describe the present condition, rather than comparing what exists to the ideal condition. 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 assessment is usually a cause for concern. Poor describes 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 is needed to reestablish physical stability.

Level of Significance

Applying the criteria for listing in the National Register of Historic Places involves the use of contexts as well as an evaluation of integrity of the site. A cultural resource's significance derives from its historical, architectural, ethnographic or archaeological context. Evaluation of cultural resources will result in a designation of NRL (National Register or National Landmark Listed or located in an NR district), NR (National Register eligible), NE (not evaluated) or NS (not significant) as indicated in the table at the end of this section.

There are no criteria for determining the significance of collections or archival material. Usually, significance of a collection is based on what or whom it may represent. For instance, a collection of furniture from a single family and a particular era in connection with a significant historic site would be considered highly significant. In the same way, a high quality collection of artifacts from a significant archaeological site would be of important significance. A large herbarium collected from a specific park over many decades could be valuable to resource management efforts. Archival records are most significant as a research source. Any records depicting critical events in the park's history, including construction and resource management efforts, would all be significant.

The following is a summary of the FMSF inventory. In addition, this inventory contains the evaluation of significance.

Prehistoric and Historic Archaeological Sites

Desired future condition: All significant archaeological sites within the park that represent Florida's cultural periods or significant historic events or persons are preserved in good condition in perpetuity, protected from physical threats and interpreted to the public.

Description: Dudley Farm Historic State Park has four archaeological sites. All of the sites contain prehistoric components and two of the sites also contain historic components. A predictive model has been completed for Dudley Farm (Collins et al. 2012). Forty-one percent of the park is considered to be of high or medium sensitivity for cultural resources.

Dudley Homestead (AL4828), referred to as the "old home place", is the 19th-century site of the original Dudley farmstead. No structure remains standing. The archaeological site also has prehistoric components. It is located about a tenth of a mile from the historic farmstead (Dudley Farm Main House AL2328A), which was constructed circa 1882 and is still standing. A well that is probably associated with the "old home place" site needs to be recorded with the FMSF, possibly as an update to AL4828.

Dudley Farm State Historic Site, 8AL2328, which encompasses the area of the Dudley Farm Main House and surroundings, is an archaeological site which is both historic (19th and 20th centuries) and prehistoric.

The two sites that are solely prehistoric, AL02612 and AL05685, are both lithic sites. Site AL02612, which covers about 11,000 sq. ft., contains lithic scatter from the Archaic Period and the Deptford culture. Material from AL05685 is of unknown age. The recorder of site AL02612 indicated it is probably eligible for the National Register. Very little is known about AL05685.

There are at least two additional archaeological sites yet to be recorded in the park. The first site consists of limestone foundation remnants in a wooded area north of the farmstead buildings and near the "old home place". The remnants were described by Myrtle Dudley as belonging to slave cabins, but the buildings may actually have been tenant farmer dwellings. The second site is the area in and near Garbage Pit Cave. A previous geological survey (Krause 1990) indicated this area may have important information regarding prehistoric settlement.

Condition Assessment: All of the archaeological sites are in good condition and there are no perceived threats to them at this time.

General Management Measures: Since all sites are currently in good condition, no specific management actions are needed. However, all archaeological sites should receive regularly scheduled visits to check site condition, and any changes in condition should be noted.

The old home place (AL4828) needs botanical study. The current absence of identified remains pertaining to farm tenants at Dudley Farm may merely be indicative of a lack of research. The stone foundations of possible tenant houses need to be recorded with the FMSF as an update to this site.

Historic Structures

Desired future condition: All significant historic structures and landscapes that represent Florida's cultural periods or significant historic events or persons are preserved in good condition in perpetuity, protected from physical threats and interpreted to the public.

Description: Dudley Farm Historic State Park has 18 historic structures, one resource group and one historic district comprising the historic structures and the farm landscape listed with the FMSF.

The core feature of the park is the Dudley Farm Main House (AL2328A) with its many associated farm structures. The house was built in the latter half of the 19th century but is constructed in the Georgian style that came into favor in the American colonies during the 1700s. The style of the house is practical and functional, and with its central hall and windows provides cross ventilation. The house and associated farm buildings were built with heart pine from longleaf pines that grew on the Dudley property. The structures are set on limestone bases built from stone that was found on site.

In 2002, Dudley Farm was designated a National Register Historic District (AL4856). Most of the historic period resources were included in the nomination to

the National Register of Historic Places, however some historic structures or resources associated with the historic farm still need to be recorded with the FMSF. These include a variety of structures and are listed in the Cultural Resource Management section of the plan under Objective B.

Other historic structures which are not contributing features to the National Register Historic District also need to be recorded. These structures, which are either of a later date or were moved to their present location, include the Norman Dudley House and Garage, Hodges Jones Barn, Hodges Jones Windmill, and the 1950's kitchen which currently serves as a shop. The Hodges Jones House, Windmill and Barn are located on the Barry property, which was acquired in 1997. Together they comprise a visitor center/interpretive area for orienting visitors before they enter the Dudley Farm Historic Homestead proper.

Although the main interpretive focus at Dudley Farm Historic State Park is the period from 1870 to 1940, the farm is recognized as a representative site whose primary purpose is to provide a view into a period of Florida's agrarian past that began shortly after statehood (1845) and ended over 100 years later. The Dudleys, like many others, emigrated from South Carolina to Florida during the early settlement period. The subsequent 100 years witnessed massive social change influenced by urbanization, immigration, and industrialization. Not all factors were equally influential among population groups. For example, farming provided a stable and dependable way of life for thousands of Floridians throughout most of the period. The full extent of the century of change became apparent only toward the end of the period. By the close of World War II (1945), farms and the countryside had been transformed forever. Mechanization, the pervasiveness of a money economy, changes in patterns of ownership and tenancy, urbanization and the decline of rural populations, agricultural dislocations and crises, changes in scale of economic viability, and the aging of rural populations were clear trends by the late 1940s. The people of Florida are fortunate to have acquired a family farm whose story not only parallels the history of the state throughout the long tenure of the Dudley family but also provides important contrasts.

Philip Benjamin Harvey Dudley (1814-1881) established the place now known as Dudley Farm in 1858, at a time when the agricultural future of Alachua County seemed assured. By 1860, P.B.H. Dudley had established himself as a solid, middle class agrarian capitalist. He owned thirty slaves and 960 acres of land in Alachua County, which in 1860 was a much larger county than it is now. His granddaughter, Myrtle, described him as an "overseer" of about 200 slaves (Yunker interviews, 1983-1984). He may have been both an owner and overseer, but it was ownership of thirty slaves that made Dudley a man of substance. The material culture of the farm is largely the product of the efforts of his son, also named Philip Benjamin Harvey Dudley and called "Ben" (1852-1918), and his grandsons and granddaughters. Grandson Ralph Dudley was chiefly identified as the "farmer" of Dudley Farm (Davis 1970). Myrtle Dudley, who donated the core of the park to the state, was the youngest of Ralph Dudley's siblings.

Little remains of the elder P.B.H. Dudley's physical presence on the property,

although the archaeological site known as the old home place or Dudley Homestead (AL4828) is located only about one tenth of a mile from the existing main house. The old home place is distinct from the Dudley main house, also known as the home place (AL2328A), which is the core part of the area donated to the state by Myrtle Dudley. An abandoned well slightly south of the old home place is probably associated with archaeological site AL4828.

There was some confusion in associating material things with their originators, and at least one early local history described the present farmhouse as the Dudley plantation house. The farmhouse or main house (AL2328A), however, was not built until at least the Reconstruction period of 1865-1876 (Davis 1970). A research team has cited a reasonable date for construction of the farmhouse as circa 1882 (Historic American Buildings Survey, 1992). The "old home place" archaeological site is the more likely location of any "plantation house." In addition, the original Florida landholdings of the Dudley family were in Archer, Florida, dating from the 1830s, and were not at the current location of Dudley Farm (Pers. Comm., Park Manager Morgan Tyrone).

The material presence, or built environment, of the farm (the farm's inventory of buildings, other structures, roadways, fence lines, etc.) grew throughout the life of Ben Dudley. Many of the farm's extant structures or their immediate predecessors were probably built during this time, approximately 1880 - 1915. Other elements of the farm's built environment were constructed later, in the 1930s during Ralph's time. By the outbreak of World War II (1941), the built environment of Dudley Farm was complete. Some structures were subsequently repaired, altered, demolished, or moved, but the stock of buildings had achieved equilibrium. It is remarkable that this building stock experienced no major destructive fires. Perhaps like most farmers, the Dudleys were careful, but they were also fortunate.

Some built elements of the farm have changed, though to what degree is sometimes difficult to understand. A road attributed to the elder P.B.H. Dudley passed directly in front (south) of the Dudley farmhouse dooryard. Portions of the road still remain (AL05635 Old Gainesville Road). The family constructed a store (AL23280 Dudley Farm Pack/Store House) beside the road. During the second Cleveland Administration, the store also served as a post office (October 1892 - April 1894), a clue to probable family prominence in the local Democratic Party (Bradbury and Hallock 1962). Travelers sometimes stayed with the Dudleys, and drovers often passed the night near the house with their herds. A front bedroom in the house is known as "the company room." P.B.H. Dudley's road was later replaced by State Road 26, about a quarter of a mile south. A portion of the older road continued to function as part of the network of farm lanes. The store building was moved north into the barnyard and used as a packinghouse and storage building. A shed addition to the south side postdates the move. It was built slightly before 1920 to garage the family's first automobile.

The approach to the front door of the farmhouse changed through the years. Early photographs show a simple, barely adorned front yard, apparently a swept open space. Interviews and photographs describe and illustrate how, as more organized

plantings became popular throughout the nation, that popularity was mirrored in the dooryard. The family gardeners, women of Myrtle Dudley's generation, planted ornamentals like roses, amaryllis, and camellias. Miss Dudley has described how neighbors drove out to see the beautiful garden (Yunker interviews).

The family established a stand of pecan trees for home use and to generate supplementary income. Small pecan groves are common features of southern farms. They illustrate the ingenuity and tenacity with which families experimented with new strategies to provide additional cash in hard times. Like many of their neighbors, the Dudleys also established grape arbors, four of which remain (Scafidi interview). The pecan trees and grape arbors are important cultural features of the farm. They also provide evidence of planning for production and subsistence and should be documented sufficiently to allow restoration.

Other components of a self-sustaining farm of the era include the Corn Crib (AL2328G), the Smokehouse (AL2328E), the Dudley Farm Stable (D) for mules (AL2328I), and the Dudley Farm Stable (AL2338J).

Tung oil production became economically important in Alachua County in the first half of the 20th century. Unlike many neighbors, the Dudleys evidently did not participate in the rage for tung oil trees that swept western Alachua County at that time. Nearby San Felasco Hammock Preserve State Park, however, was once the scene of extensive tung oil tree cultivation. A few tung oil trees currently grow at Dudley Farm, but it is not known whether they are the volunteer remains of a grove or were seeded by some other means (Opdyke 1974; Scafidi interview).

Dudley was a family farm, but it was by no means a subsistence operation of the more common "forty acres and a mule" variety. The family always owned considerable acreage and grew the important cash crops of the times. It appears that they had assistance from tenants, day laborers, or both. The elder and younger P.B.H. Dudleys grew cotton for market. Both had agreements with laborers or tenant farmers. The laborers and tenants were paid with a "furnish" partly consisting of pork and sugar cane produced at the farm (Yunker interviews, Reddy 1990). Cane syrup was produced at the Dudley Farm Sugar Furnace (AL2328N). Later laborers or tenants may have worked on a cash basis, but it is noted that there were no more tenants after the beginning of World War II (Reddy 1990). The ethnicity of the tenant farmers is not known and has not been studied. However, a history of the area mentions Jonesville as a place where most of the land was owned by African Americans (Opdyke 1974).

Although the Dudley store is usually described as a neighborhood institution used by local people and passers-by, it may have also served as a commissary for tenants of the Dudley family and their neighbors. George McLarty, Miss Dudley's nephew, referred to the structure as a commissary (Yunker interviews).

Cotton was a traditional cash crop of the area. Although "King Cotton" came to Alachua County late in the antebellum period, it took hold and remained important long after the War Between the States ended. Cotton was a labor-intensive product.

It required a lot of human effort to plant, keep healthy, and harvest. There is anecdotal evidence that cotton production declined in the late 19th century when a "worm" invaded the crop. The successful response to the crisis, also anecdotal, seems to have been to move the crop off established fields into newly cleared pinelands. Ultimately, cotton lost its appeal in the period around World War I (Parenchia 1978).

The boll weevil invaded the cotton belt in Texas at the turn of the 20th century and steadily moved eastward, so that by the teens and twenties it was a living fact for Florida growers. Measures such as varying times of the planting and spreading poisonous dusts could be taken to avoid great damage from the pests. Some of these measures were inconvenient, others noxious or dangerous, and still others worked well only when the scale of operation was larger than a small farm could support.

By the 1930s, local farmers had changed their crop preferences and many were producing flue-cured tobacco. This modern product could be industrialized on the small scale of a family farm, but it occasionally required large inputs of labor. A noticeable trend of the 1920s and 1930s was an ongoing decline in rural population. There was a parallel decline, then stabilization, in flue-cured tobacco production. At the Dudley farm, tobacco production declined during the 1930s, coincident with family illnesses and the growth of the chicken and egg business. Also at this time, boys were moving away from the farm for more modern careers and the girls of the family who were educated to be teachers remained on the farm (Pers. Comm. Carlton Dudley).

The most important physical resource relating to this activity is the tobacco barn (AL2328F), which was completed about 1935 according to Myrtle Dudley (this date may be a few years late). The barn and its accouterments, including the gas burners, are largely intact.

One farm activity that bridged the period between the decline in cotton and the end of the tobacco and chicken and egg businesses was the production of beef cattle for market. This activity apparently began around World War I with the introduction of purebred stock. The Dudleys had previously kept milk cows and free-ranging scrub cows, both for family consumption, but entry into the modern cattle business was an ambitious step. The physical remnants of cattle production are a 1920's era cattle dip vat (AL2328K) and a "squeeze chute". This complex is located just outside the southwest corner of the home place. The vat serves as a reminder of the serious nature of farmers' wars with pests, especially Texas fever ticks, which threatened to destroy investments in bred stock. The squeeze chute facilitated the handling and loading of stock onto trucks. Structures within this complex have been modified over the years. For example, the squeeze chute is an obvious replacement of earlier mechanisms and tools. This serves as an excellent reminder of the farmer's continual need to replace what is necessary for making a living.

On a family farm, everyone pitched in to help make ends meet. During the 1930s, as the switch from cotton to flue-cured tobacco occurred, Myrtle Dudley and at least

one sister, Winnie, developed a chicken and egg business that served the area. Myrtle Dudley and her nephew, Gordon Garland, described an enterprise involving many customers, some of whom apparently were egg wholesalers (Yunker interviews). That business declined on the eve of the Second World War and (apparently) did not resume afterward. The reasons for the decline are unclear. The aging of Dudley family members and their consequent frailties and illnesses were a constant of the later 1930s. The corresponding need to spend more time caring for mother and siblings, as well as the effects of the Depression and World War II, may have led to the decline.

The sisters' business resulted in an expansion or improvement of elements of the farm's built environment. Eight structures, four of which survive, were constructed for the business. There is a large chicken house (Dudley Farm Chicken Coop AL2328R) and yard on the northwest side of the barnyard. A brooder house (AL2328Q) sits slightly north and east of the farmhouse. The small chicken coop (Coop #3) is located north of the tobacco barn and adjacent to the garden fence, and the northeast chicken coop (Coop #1) is located northeast of the farmhouse. In the 2004 unit management plan, these two chicken houses were called chicken coop #1 and #3 because that is their designation in the Historic American Buildings Survey (HABS) report (Historic American Buildings Survey, 1992). These are unrecorded structures. They should be recorded with the Florida Master Site File using both of their names. This will clearly correlate their designation and description in the HABS report and the names currently in use by park staff.

Family illnesses of the 1930s stimulated a major change in the farmhouse. For about 50 years, the house was served by a traditional separate kitchen (Dudley farm kitchen, AL2328C), located several yards north. During the thirties, the kitchen was moved south to meet the back porch of the house. This allowed the elderly Fannie Dudley to move more easily from one building to the other. In the early 1950s, the kitchen structure was moved to the northwest corner of the barnyard, and an addition containing a modern kitchen and bathroom, both with running water, was built in its place. The back porch may have been incorporated in the addition to become an east-west hallway. This alteration seems to have been the final major change in the configuration of the Dudley home place (Yunker interviews). After the property was acquired by the State of Florida, the 1950's kitchen and bathroom were removed to restore the farmhouse to its previous design, and the original kitchen (AL2328C) was returned to its former place.

An orderly listing of the cultural resources of Dudley Farm may be divided into two parts: the Dudley homestead and the remainder of the farm. The Dudley homestead is located within the 23.8-acre parcel that Myrtle Dudley donated to the state. It includes all standing structures, the pecan trees, most of the grape arbors, fencing, and the old roads. Included in the remaining 232 acres of Dudley Farm are the following: farm fields; wood lots; the old home place site and associated well; the cattle dip vat, squeeze chute, and pens; archaeological sites, including possible native American sites and tenant dwellings; and certain sinkholes and cave entrances which may contain archaeologically interesting materials such as farm debris and household trash.

The Dudley Farm homestead is recorded as a historic district in the Florida Site Master File (FMSF) as 8AL4856. Most structures are recorded under this file, but some important resources are not. The cultural components of the Dudley farm or home place as the family called it, including Park Building numbers, are as follow:

Table 5. Dudley Farm Structures Inventory		
Park #	FMSF	Name(s)
BL189002	2328A	Dudley house
BL189018	2328B	Stone house, flower pit (plant shed)
BL189006	2328C	Kitchen
BL189020	2328D	Outhouse
BL189017	2328E	Smokehouse
BL189005	2328F	Tobacco barn
BL189021	2328G	Corn crib
BL189004	2328H	Hay barn
BL189021	2328I	Mule barn (HABS stable #2)
BL189021	2328J	Stable
NA	2328K	Dip vat & drain pad
BL189019	2328L?	(HABS milking room)
BL189022	2328M	Pump house, pump engine house
BL189014	2328N	Cane syrup complex
BL189007	2328O	Store & shed (packhouse)
NA		Cistern
NA		Dairy shed/canning house/laundry house
BL189016		Northeast chicken coop, Coop #1 (used for turkeys)
BL189013		Small chicken coop, Coop #3 (in the garden)
BL189003	2328R	Long chicken house (chicken coop #2)
BL189015	2328Q	Brooder house
BL189028	2328P	Sweet potato cellar
NA		Water tower base, etc.
NA		Kitchen foundation piers
NA		Well

The well, round corral, and pens, while fairly close to the Dudley farmhouse (AL2328A), are apparently cultural components of the old home place (AL4828). They will warrant more research when they are recorded with the FMSF.

The built environment at Dudley Farm represents a rich sample of vernacular design and construction. All structures, except the dip vat, cattle squeeze, sweet potato cellar, and stone house, are wood frame construction, usually built from locally obtained pine. Framing is typically timber or post-and-beam. The foundations, ranging from assembled rubble to piers, are mostly masonry and make use of locally obtained limestone. Siding is generally wood, either board and batten, horizontal or vertical board without battens, or weatherboard (wood lap siding). The original wood exterior fabric of the north and south elevations of the Dudley house had once been covered with cement asbestos shingles. The shingles were removed during restoration of the house by the Florida Park Service, and vertical board and

batten fabric were restored to those elevations. Except for window frames and the shingled north and south elevations of the house, little exterior paint is evident. Paint analysis has not yet been undertaken, however.

All roofing, except for the dairy house, is tin or galvanized tin, either standing seam or corrugated. Metal was the roof material of choice in the mid-1920s, replacing earlier wood shingles. Although danger of fire is often cited as a reason for replacing worn out shingle roofs with metal, the latter also had the virtue of being inexpensive. Installing a metal roof required less labor than did shingling the same area, since wood shingles usually were split by hand on site. Many structures have undergone roof work within the last five years (2009-2014) as part of an ongoing effort to stabilize them.

The stone house (AL2328B) and sweet potato cellar (AL2328P), roughly constructed of limestone masonry, are exceptions to the general use of wood fabric. The stone house, which is located in the dooryard garden on the south side of the farm house, is constructed of informally assembled mortar and rubble masonry. Its earthen floor is approximately two feet below grade. The stone house's rear wall rises about three feet above grade, while its front (south) wall rises about five feet. The structure has served for storage or as a potting shed. Its southern exposure allows the starting of tender plants in pots or flats before actual planting time.

The sweet potato cellar is a dugout whose walls are limestone masonry. The liner walls rise about one foot above grade. When the Florida Park Service assumed management of the property, the cellar structure was largely complete, except for the roofed portion that would have sat on the raised foundation. Myrtle Dudley referred to the roof as an "A-frame" (Yunker interviews; Scafidi interview). Extrapolating from nearby structures, however, it was probably a conventional gabled roof with the gable ends pointing east and west. This portion could be visualized as a set of abbreviated frame walls and a roof. Once the state acquired the property, the roof and gabled ends were replaced to conform to this description. Entry to the existing structure is through a well-defined opening in the east wall.

Concrete is seldom visible as a primary structural material on the farm. However, the dip vat (AL2328K) and drip pad were constructed of concrete around World War I. This was part of a statewide effort to control insect pests and to eradicate the Texas fever tick from Florida cattle. The vat is a walk-through treatment tank, located below grade. It stands as a reminder of local farmers' participation in the purebred cattle industry and their cooperation in combating a common threat to their economic wellbeing. The cistern, located at the northeast corner of the house, is partially constructed of concrete.

The floors of several barnyard structures consist of roughly poured concrete. These floors appear to have been added some time after initial construction. This is evident in the chicken houses, the eastern portion of the hay barn (AL2328H), the porch area of the dairy house, and one grain storage area adjacent to the milking room (AL2328L). As their needs changed, many farmers moved structures from one location to another. The hay barn, which was moved from another farm and then

altered, is a major example, but other structures, specifically the store and kitchen, are known to have been moved also. Once these structures were floored with concrete, however, the likelihood of their being moved diminished greatly. Evidence of such activity at Dudley Farm, in the form of abandoned concrete floors, has not been discovered.

Ralph Dudley was regarded as a leading farmer in the Newberry area. Among the many post-World War I publications found on the property, there are many pamphlets advising about new developments in farming. The poured floors of the 1930s-era chicken houses may reflect the desire of the Dudleys to operate their business wisely, possibly in accordance with the most up-to-date agricultural practices of the time.

The structures at Dudley Farm are vernacular in that they were constructed and repaired using local materials. Vernacular structures, especially on farms, were rebuilt, repaired, and patched as needed, on an ongoing basis. Thus, although most structures at the farm are patched and occasionally show signs of having been entirely rebuilt or upgraded, all exhibit great historical integrity. This is among the most important aspects of the farm: the structures remain much the way their builders intended them to be. If structures were moved, it was for a specific purpose by the builders or their descendants. This should be kept in mind during subsequent planning: the movement of structures into idealized "authentic" locations, though well intentioned, may be a serious error. This concept applies to the store, whose location may be viewed as "new" and intrusive, but which actually has considerable historical legitimacy, especially with reference to established historic preservation practices.

The list of cultural resources described thus far is an inventory of standing structures that existed at Dudley Farm during the period from approximately 1880 to 1940. Other, less obvious resources carry equal importance. The most prominent of these are the historic Gainesville road, which represented a southern boundary for the barnyard; the current and abandoned fence lines and lanes; the pecan grove and grape arbors; the layout of the main house front flower garden; the old home place and well; and possible remains of other (tenant) dwellings.

The pecan trees have undergone preliminary study and documentation of the ages of the trees and the varieties of pecans produced, as well as mapping of the possible pattern of planting. The grape arbors have been the subject of similar studies.

Volunteers and staff have documented the plantings and landscape elements of the front dooryard garden. Currently (2014), a collection of the flora of Dudley Farm is being vouchered at the University of Florida Herbarium (Riley et al. Univ. of Florida Herbarium Collections Catalogue). The collection includes all of the garden plants, which will allow a more accurate documentation of the plantings.

Another category of cultural resources at the park consists of the site's absent resources, namely those structures, roads, fence lines, and other cultural resources

that have been lost over time, either to demolition and removal or to alterations of terrain. Examples may include outbuildings of the "old home place", gravesites, or cemeteries. These resources will be identified through survey activity and the study of extant resources. They should be mapped as they are discovered and identified. Professional archaeologists have recently studied the "old home place" area and the original location of the detached kitchen, as well as part of the historic Gainesville road (Dickinson and Wayne 2001, 2002).

The historic road may be studied as a cultural resource. Past research at the Old Bellamy Road within River Rise Preserve State Park has contributed considerable information about road building and the local environment. Likewise at Dudley Farm, fence lines and lanes present pictures of intentions and solutions to problems on a farm. Recording both current and abandoned fence lines and lanes will aid in planning development and activities throughout the park. A more comprehensive understanding of the historic structures at Dudley Farm will be achieved if the Florida Park Service completes a Historic American Landscape Survey in which the farm structures are documented within the context of other details in the historic landscape.

Condition Assessment: Most of Dudley Farm's historic structures are in good condition because the staff is vigilant and there is a well-managed preventative maintenance program in place at the park. Of the standing structures at Dudley Farm, the following are considered to be in good condition: the main house (AL2328A), the kitchen (AL2328C), the corn crib (AL2328F), the flower pit (AL2328B), the cistern and well, the pump house (AL2328M), the pack/store house (AL2328O), the sweet potato cellar (AL2328P), the stable (D) known as the mule stable (AL2328I), the stable (AL2328J), the outhouse (AL2328D), the smokehouse (AL2328E), the cane syrup complex (AL2328N), the hay barn (AL2328H), the milk room (AL2328L), the dip vat (AL2328K) area (including the squeeze chute), the brooder house (AL2328Q), and the small and northeast chicken coops (Coops #3 & #1 respectively). These are optimistic assessments, based on the structures' abilities to withstand daily use and on their conditions compared to the other structures discussed below.

The buildings in fair condition are the dairy shed / canning house / laundry house, the "long chicken house" (Dudley Farm Chicken Coop AL2328R), and the tobacco barn (AL2328F). The dairy shed / canning house / laundry house needs structural work because the support posts are twisting in their concrete foundation, which is no longer level. The roof and siding are in good condition however. The walls of the "long chicken house" are shifting and leaning and the foundation is unstable. There have been several previous attempts to stabilize this building. The tobacco barn has some battens which are being worn away by rainwater.

Additional unrecorded structures at Dudley Farm include the grape arbors and fences, which are in fair to good condition. Much work has been accomplished in restoring historic split rail fencing throughout the farm.

While not structural, the planted landscape of the farm is an integral part of the historic landscape. Many of the trees of the home place are considered to be in poor condition despite regular pruning and care. These include pecans and cedars that are becoming senescent. They are either dying or they are shedding large pieces of themselves.

General Management Measures: The main challenge in managing the Dudley structures is to retain their structural integrity without sacrificing their historical integrity: in other words, keep the structures from tumbling down without engaging in other work which might inadvertently affect the resources adversely. In this regard, the running of electrical and telephone wires underground has made management of the structures simpler and less open to inadvertent destruction. Furthermore, the removal of visible utility lines to the Dudley home place has been an integral part of the restoration process.

A major difference between the Florida Park Service's preservation of historic structures for posterity and the Dudley family's repairing of the same structures for ongoing farm use lies in the degree of planning and preparation needed for repairs to be started and the standards to which the repair work must be held. The Florida Park Service applies all of the Secretary of the Interior's Standards for the Treatment of Historic Properties to its historic preservation activities. Adherence to these widely accepted standards is intended to enable work to be performed without sacrificing historical integrity, while also providing methods to allow adaptations of structures for purposes beyond those envisioned by their original builders.

All buildings receive preventative maintenance which includes: removal of vegetation from the foundation rocks, periodic leveling of the building foundations, application of a mix of turpentine and linseed oil on the first three feet of wood above the ground every 2-5 years, a monthly cleaning and damage check of all buildings, and a termite check for wood integrity and insect frass. A termite control company also inspects the structures four times per year and treatments are done as needed. In addition, some of the buildings behind the farmstead have their foundations raised, as well as leveled, every 5-10 years. Foundation raising is accomplished by the addition of limerock fill and local limestone to maintain the nature of the original stone foundations.

All of the structures that have stone or concrete foundations experience deterioration at the point where the stone or concrete comes into contact with pinewood siding or framing. An acid-base exchange, encouraged by rain or dew, is apparently taking place at that point, and the fluid is wicked upward by the cell structure of the vertical siding members. Since all such structures are vulnerable no matter what their present state, appropriate design measures and technical solutions should be implemented when work is performed on them in the future. If buildings do need repair, the park uses old wood in good condition for the repairs and also uses aged tin for roof repairs.

A plan is needed for maintenance and replanting of the historic landscape. The plan should include guidelines for rejuvenation of the pecan orchard, historic trees and grape arbors.

Collections

Desired future condition: All historic, natural history and archaeological objects within the park that represent Florida's cultural periods, significant historic events or persons, or natural history specimens are preserved in good condition in perpetuity, protected from physical threats and interpreted to the public.

Description: There is a considerable body of collection objects from the farm, most of which were obtained through donation by Myrtle Dudley and her nephews, George McLarty and Gordon Garland. Additional collection objects were acquired from Miss Dudley by purchase. To date, the collection numbers over six thousand objects. The majority of these are either personal accessories or part of a substantial accumulation of ephemeral items that several generations of a family can leave on a farm. There is also a considerable body of furnishings, of which furniture is the major constituent, though there are a few lamps and other accessories as well. All collection items are located at the park.

Because of the nature and size of the collection, a state-of-the-art collections building, the first of its type in the Florida Park Service, was constructed at Dudley Farm Historic State Park in 2008. It consists of a collection storage room, a cold room, a work room and an office. The building has double baffle doors to control humidity and protect against fire, a sprinkler system, fireproof cabinets for film and audio documents, quilt racks, powder coated shelves for collection items, map and document storage and a security alarm system. The collection storage room is kept at 68 degrees F. The cold room is used for fabric storage and is kept at 40 degrees F.

The Dudley furniture illustrates the family's adaptation to the changing ways of life on Florida farms. Some pieces are the result of skilled craftsmanship or custom manufacture. The family bed was clearly one of these. This is the bedstead Myrtle Dudley believed her grandparents had brought from South Carolina in the 1840s, although it has been modified in a few small ways. Professional conservators have identified a few other craftsman-produced pieces during their work. Most of the remaining furniture was mass-produced. Preliminary research indicates it was acquired, by and large, between 1890 and 1930. Most are utilitarian pieces such as bedsteads. Other mass-produced pieces are of a slightly later period, possibly 1920-1950. These include an assortment of tables and chairs, possibly replacements of older pieces.

Other furniture was made, repaired extensively, or modified at home or locally. There are several, locally handmade, hide-seated, ladder-back pine chairs. These are unadorned, although conservators have established that most of the chairs were painted long ago and the paint later removed. The chairs were apparently used throughout the house. The family table, located in the kitchen addition, was a homemade expansion of a factory-made piece. The factory-made dining chairs were of a type which could be acquired new from about 1890 through 1950. Almost all

have been extensively modified or repaired. Among the tentative interpretations of this mass of materials is that, like many farm families, the Dudleys had little superfluous furniture.

The largest group of Dudley family possessions seems to have been acquired between 1880 and 1912. This period of apparent material expansion, from Mary Catherine's childhood through Myrtle's early adolescence, coincides with Fanny Dudley's childbearing years. These objects bear witness to the material demands of raising a family around the turn of the 20th century. This was also a period of some apparent prosperity for the family. Although the Dudleys were abandoning cotton for tobacco, and although the transition to raising purebred cattle had resulted in outflows of resources for construction materials and chemicals, the Dudleys were still able to purchase their first automobile during this period. Subscription magazines in the collection indicate the family stayed abreast of the popular culture of the time. Judging from the body of collection objects, most acquisitions after that time (or after the 1920s) were limited to personal items, sewing materials, and utilitarian objects, such as oil lamps and kitchenware--all serviceable, sturdy goods.

The Dudley collection also contains a large number of family photographs dating back to about the 1870s, documents dating to the 1830s covering the family's time in South Carolina as well as Florida, assorted letters, and personal, legal and farm financial documents from about 1870 through 1940. There are also audio interviews with Miss Myrtle Dudley in reel-to-reel and other formats.

Condition Assessment: The park's collection is housed in four different areas: the Dudley Homestead, the collections building, the visitor center and around the commissary building. Dudley family items are located in the Dudley Homestead and the collections building. The homestead is not air-conditioned, but the visitor center and collections building are both climate controlled.

In general, the collection items are in good condition. However staff will need professional assistance when restoring several types of items and providing long term care. In particular, the park will require professional guidance during restoration of documents and fabric items such as quilts and linens, or while continuing their maintenance in good condition.

General Management Measures: To maintain a collection of this size, a number of management measures are needed. Specific actions are listed in the Cultural Resource Management section under Objective B.

Currently, management of the collection as outlined above falls to the Friends of Dudley Farm Citizen Support Organization (CSO). Although the CSO members are very dedicated, the level of professional work and detail needed for the collection management is beyond their capabilities as volunteers. Professional collection management support is urgently needed.

Current in-house management of the collection includes regular cleaning and inspection of the furniture. Donated linens are used in the house so that the Dudley

family linens can be kept preserved in the collections building. The visitor center displays are rotated every six months.

It would benefit the park to have modern models of the Dudley family quilts to display so that the originals could be kept in the climate-controlled collections building. Additional protection is needed for the collection in the farmstead. Sturdier room barriers such as those made of Plexiglas would keep visitors from entering the rooms and touching collection items.

Detailed management goals, objectives and actions for the management of cultural resources in this park are discussed in the Cultural Resource Management Program section of this component. Table 6 contains the name, reference number, culture or period, and brief description of all the cultural sites within the park that are listed in the Florida Master Site File. The table also summarizes each site's level of significance, existing condition and recommended management treatment. An explanation of the codes is provided following the table.

Table 6. Cultural Sites Listed in the Florida Master Site File					
Site Name and FMSF #	Culture/Period	Description	Significance	Condition	Treatment
AL2328 Dudley Farm State Historic Site	19 th & 20 th century American, Archaic	Archaeological Site	NRL	G	P
AL2328A Dudley Farm Main House	Post-Civil War Reconstruction, ca. 1880	Historic Structure	NRL	G	P
AL 2328B Dudley Farm Stone House or Flower Pit	Ca. 1920	Historic Structure	NRL	G	P
AL2328C Dudley Farm Kitchen	Ca. 1882	Historic Structure	NRL	G	P
AL 2328D Dudley Farm Outhouse	Ca. 1900	Historic Structure	NRL	G	P
AL2328E Dudley Farm – Smokehouse	Historic ca. 1882	Historic Structure	NE	G	P

Table 6. Cultural Sites Listed in the Florida Master Site File					
Site Name and FMSF #	Culture/Period	Description	Significance	Condition	Treatment
AL2328F Dudley Farm – Tobacco Barn	Historic ca. 1930	Historic Structure	NE	F	P
AL2328G Dudley Farm – Corn Crib	Historic ca. 1905	Historic Structure	NE	G	P
AL2328H Dudley Farm – Hay Barn	Historic ca. 1924	Historic Structure	NE	G	P
AL2328I Dudley Farm – Stable (D)	Historic ca. 1905	Historic Structure	NE	G	P
AL2328J Dudley Farm – Stable	Historic ca. 1925	Historic Structure	NE	G	P
AL2328K Dudley Farm – Cattle Dip	Historic ca. 1900	Historic Structure	NE	G	P
AL2328L Dudley Farm – Milk Room	Historic ca. 1930	Historic Structure	NE	G	P
AL2328M Dudley Farm – Pump House	Historic ca. 1908	Historic Structure	NE	G	P
AL2328N Dudley Farm – Sugar Furnace	Historic ca. 1882	Historic Structure	NE	G	P

Table 6. Cultural Sites Listed in the Florida Master Site File					
Site Name and FMSF #	Culture/Period	Description	Significance	Condition	Treatment
AL2328O Dudley Farm – Pack/Store House	Historic ca. 1890s	Historic Structure	NE	G	P
AL2328P Dudley Farm Sweet Potato Cellar	Historic 1890s	Historic Structure	NE	G	P
AL2328Q Dudley Farm Brooder House	Historic 1930	Historic Structure	NE	G	P
AL2328R Dudley Farm Chicken Coop	Historic ca. 1930	Historic Structure	NE	F	P
AL02612 Dudley Farm Prehistoric Site	Archaic and Deptford	Archaeological Site	NR	G	P
AL04828 Dudley Homestead	Historic early-late 1800s and 1900s; prehistoric	Archaeological Site	NRL	G	P
AL04856 Dudley Farm	1859-1952	Historic District	NRL	G	P

Table 6. Cultural Sites Listed in the Florida Master Site File					
Site Name and FMSF #	Culture/Period	Description	Significance	Condition	Treatment
AL05635 Old Gainesville Road	Historic 1870s	Resource Group	NE	G	P
AL05685 Dudley Farm Prehistoric Site 2	Prehistoric	Archaeological Site	NE	G	P

Significance:

NRL National Register listed
 NR National Register eligible
 NE not evaluated
 NS not significant

Condition

G Good
 F Fair
 P Poor
 NA Not accessible
 NE Not evaluated

Recommended Treatment:

RS Restoration
 RH Rehabilitation
 ST Stabilization
 P Preservation
 R Removal
 N/A Not applicable

Resource Management Program

Management Goals, Objectives and Actions

Measurable objectives and actions have been identified for each of the DRP's management goals for Dudley Farm Historic State Park. Please refer to the Implementation Schedule and Cost Estimates in the Implementation Component of this plan for a consolidated spreadsheet of the recommended actions, measures of progress, target year for completion and estimated costs to fulfill the management goals and objectives of this park.

While, the DRP utilizes the ten-year management plan to serve as the basic statement of policy and future direction for each park, a number of annual work plans provide more specific guidance for DRP staff to accomplish many of the resource management goals and objectives of the park. Where such detailed planning is appropriate to the character and scale of the park's natural resources, annual work plans are developed for prescribed fire management, exotic plant management and imperiled species management. Annual or longer- term work plans are developed for natural community restoration and hydrological restoration. The work plans provide the DRP with crucial flexibility in its efforts to generate and implement adaptive resource management practices in the state park system.

The work plans are reviewed and updated annually. Through this process, the DRP's resource management strategies are systematically evaluated to determine their effectiveness. The process and the information collected is used to refine techniques, methodologies and strategies, and ensures that each park's prescribed management actions are monitored and reported as required by Sections 253.034 and 259.037, Florida Statutes.

The goals, objectives and actions identified in this management plan will serve as the basis for developing annual work plans for the park. The ten-year management plan is based on conditions that exist at the time the plan is developed. The annual work plans provide the flexibility needed to adapt to future conditions as they change during the ten-year management planning cycle. As the park's annual work plans are implemented through the ten-year cycle, it may become necessary to adjust the management plan's priority schedules and cost estimates to reflect these changing conditions.

Natural Resource Management

Hydrological Management

Goal : Protect water quality and quantity in the park, restore hydrology to the extent feasible and maintain the restored condition.

The natural hydrology of most state parks has been impaired prior to acquisition to one degree or another. Florida's native habitats are precisely adapted to natural drainage patterns and seasonal water level fluctuations, and variations in these

factors frequently determine the types of natural communities that occur on a particular site. Even minor changes to natural hydrology can result in the loss of plant and animal species from a landscape. Restoring state park lands to original natural conditions often depends on returning natural hydrological processes and conditions to the park. This is done primarily by filling or plugging ditches, removing obstructions to surface water "sheet flow," installing culverts or low-water crossings on roads, and installing water control structures to manage water levels.

Objective A: Conduct/obtain an assessment of the park's hydrological restoration needs.

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| Action 1 | Continue to cooperate with other agencies and independent researchers regarding hydrological research and monitoring programs at Dudley Farm. |
| Action 2 | Continue to monitor surface water and groundwater quality at the park. |
| Action 3 | Seek professional expertise in determining the sources and direction of groundwater flow in the park's aquatic caves. |
| Action 4 | Continue to monitor land use or zoning changes on properties bordering the park. |

The most significant hydrological feature at Dudley Farm is the extensive aquatic cave system that underlies the park. This system is located toward the southern end of the Rum Island-Gilchrist Blue Springshed of the Santa Fe River Basin. The Dudley caves are well known within the local professional speleological community as important sites for numerous species of sensitive, cave dwelling fauna. Research and monitoring efforts by cave experts have produced an abundance of information documenting the Dudley cave systems (see details in the Hydrology and Imperiled Species sections above). The following are hydrological assessment actions recommended for the park.

The DRP will continue its tradition of close cooperation with state and federal agencies and independent researchers engaged in hydrological, geological, and soils research and monitoring in the park, and it will encourage and facilitate additional research in those areas. The DRP will rely upon agencies such as the SRWMD, USGS, and FDEP to keep it apprised of any declines in groundwater levels or any suspected contamination of groundwater in the region. District 2 staff will continue to monitor Environmental Resource Permit and Water Use Permit requests for the region and provide timely and constructive comments as needed in order to promote protection of the park's aquatic cave resources. Additional cooperative efforts may include facilitating the review and approval of research permits and providing researchers with assistance in the field, including orientation to park resources. Recommendations derived from these monitoring and research activities will be essential to the decision making process during management planning. One activity worthy of DRP support is continued cooperation with appropriate agencies or researchers in the further delineation of boundaries of the Rum Island-Gilchrist Blue Springshed.

Staff will continue to monitor land use or zoning changes within lands bordering the park. Major ground disturbances on neighboring properties or inadequate treatment of runoff into local sinkholes could ultimately cause significant degradation of groundwater resources in the park. When appropriate, DRP District 2 staff will provide comments to other agencies regarding proposed changes in land use or zoning that may affect the park. In addition, District 2 staff will closely monitor mining operations and other activities in the Rum Island-Gilchrist Blue Springshed, watching out for significant changes that might require the issuance of large consumptive use permits that could adversely affect park resources.

Objective B: Monitor impacts of erosion and sedimentation on the aquatic cave systems.

- Action 1 Monitor erosion at entrances to the aquatic caves and evaluate and mitigate impacts as needed.

Because many of Dudley Farm's aquatic caves are naturally open ecosystems, they are continuously under threat from erosion and sedimentation. To reduce the threat, District 2 and park staffs will continue to monitor Dudley Farm's network of aquatic cave entrances for disturbance issues and will coordinate with cave experts in obtaining detailed interior cave assessments. Certain cave entrances that are more susceptible to erosion, such as Cherry Pits, Garbage Pit and Fenceline Cave, will be monitored regularly. Erosion in these areas appears to be due to the proximity of a service road. If this continues to be an issue at this location, options such as moving the road further away from the cave entrance will be pursued.

The DRP will continue to investigate best management options for mitigation of erosion and sedimentation at all known cave access points. Wherever necessary, the park will implement corrective measures that reduce the impacts of soil erosion on aquatic cave resources.

Objective C: Monitor and evaluate the impacts of historic cattle dipping operations at Dudley Farm.

- Action 1 Continue to cooperate with appropriate agencies and experts regarding soil, surface water, and groundwater monitoring and assessment associated with the historic cattle dip vat contamination in the park.

In 1995, the DRP identified a single significant area of concern within Dudley Farm where previous landowners had conducted intensive cattle dipping operations. Rigorous groundwater and soil sampling in vicinity of the dip vat revealed that soils in the area were severely contaminated. According to soils experts, however, those soils are not an immediate threat to contaminate local groundwater because they are contained within a natural bowl-shaped limestone formation. This subsurface geologic feature acts like a dam and is blocking contaminants from substantial downward spreading. Recommendations from University of Florida soil contamination experts were to continue the periodic monitoring and assessment of the dip vat area in order to document the extent of the contamination and track any additional spread. The DRP has been advised that any remediation of this site

would require a deep excavation since the arsenic plume occurs at high concentration and extends to a significant depth.

The DRP will continue to cooperate with FDEP, other agencies and experts from the University of Florida concerning the long-term monitoring of water quality and soils in the area where cattle dipping operations had occurred. The DRP will mitigate impacts as needed, using the best available means of remediation.

Natural Communities Management

Goal: Restore and maintain the natural communities/habitats of the park.

The DRP practices natural systems management. In most cases, this entails returning fire to its natural role in fire-dependent natural communities. Other methods to implement this goal include large-scale restoration projects as well as smaller scale natural communities' improvements. Following are the natural community management objectives and actions recommended for the state park.

Prescribed Fire Management: Prescribed fire is used to mimic natural lightning-set fires, which are one of the primary natural forces that shaped Florida's ecosystem. Prescribed burning increases the abundance and health of many wildlife species. A large number of Florida's imperiled species of plants and animals are dependent on periodic fire for their continued existence. Fire-dependent natural communities gradually accumulate flammable vegetation; therefore, prescribed fire reduces wildfire hazards by reducing these wild land fuels.

All prescribed burns in the Florida state park system are conducted with authorization from the FDACS, Florida Forest Service (FFS). Wildfire suppression activities in the park are coordinated with the FFS.

Objective A: Within 10 years, have 175 acres of the park maintained within the optimum fire return interval.

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| Action 1 | Develop/update an annual burn plan. |
| Action 2 | Manage fire dependent communities by burning between 20 - 230 acres annually. |

Table 7 contains a list of all fire-dependent natural communities found within the park, their associated acreage and optimal fire return interval, and the annual average target for acres to be burned.

Table 7. Prescribed Fire Management		
Natural Community	Acres	Optimal Fire Return Interval (Years)
Upland Mixed Woodland	12	2-5
Abandoned Field/Abandoned Pasture	120	1-5
Pasture – Improved	79	1-20
Restoration Natural Community	20	1-3
Agriculture	5	1-20
Annual Target Acreage	35 – 230	

Prescribed fire is planned for each burn zone on the appropriate interval. The park's burn plan is updated annually because fire management is a dynamic process. To provide adaptive responses to changing conditions, fire management requires careful planning based on annual and very specific burn objectives. Each annual burn plan is developed to support and implement the broader objectives and actions outlined in this ten-year management plan.

The majority of the prescribed burns at Dudley Farm have been conducted to maintain the improved pastures and abandoned pasture areas. The areas that were clear cut to control southern pine beetles are now dominated by a mix of young loblolly pines and hardwood saplings. Prescribed fires may be used in these areas if necessary to reduce fuel loads. The area designated for interpretation of the historic longleaf pine ecosystem is currently being restored, and fire will be used to manage the longleaf pines and associated vegetation. Likewise, the planted longleaf in Zone DF-2A in the southwest corner of the park will be managed with prescribed fire. Due to concerns over cultural resources and park facilities, prescribed fires are not conducted in certain zones, including DF-1, DF-2D, DF-3 and DF-5B. These areas are typically maintained by mowing.

During development of park firebreaks, staff will align the breaks in such a way as to minimize erosion in vicinity of the various caves and sinkholes. Maintenance of the improved pastures and abandoned pastures will benefit certain wildlife species, including gopher tortoises, that prefer open herbaceous habitats.

In order to track fire management activities, the DRP maintains a statewide burn database. The database allows staff to track various aspects of each park's fire management program including individual burn zone histories and fire return intervals, staff training and experience, backlog, etc. The database is also used for annual burn planning which allows the DRP to document fire management goals and objectives on an annual basis. Each quarter the database is updated and reports are produced that track progress towards meeting annual burn objectives.

Natural Community Restoration: In some cases, the reintroduction and maintenance of natural processes is not enough to reach the desired future

conditions for natural communities in the park, and active restoration programs are required. Restoration of altered natural communities to healthy, fully functioning natural landscapes often requires substantial efforts that may include mechanical treatment of vegetation or soils and reintroduction or augmentation of native plants and animals. For the purposes of this management plan, restoration is defined as the process of assisting the recovery and natural functioning of degraded natural communities to desired future condition, including the re-establishment of biodiversity, ecological processes, vegetation structure and physical characters.

Examples that would qualify as natural community restoration, requiring annual restoration plans, include large mitigation projects, large-scale hardwood removal and timbering activities, roller-chopping and other large-scale vegetative modifications. The key concept is that restoration projects will go beyond management activities routinely done as standard operating procedures such as routine mowing, the reintroduction of fire as a natural process, spot treatments of exotic plants, and small-scale vegetation management.

Following are the natural community/habitat restoration and maintenance actions recommended to create the desired future conditions in the upland mixed woodland community (see Desired Future Conditions Map).

Objective B: Conduct habitat/natural community restoration activities on 16 acres of upland mixed woodland natural community.

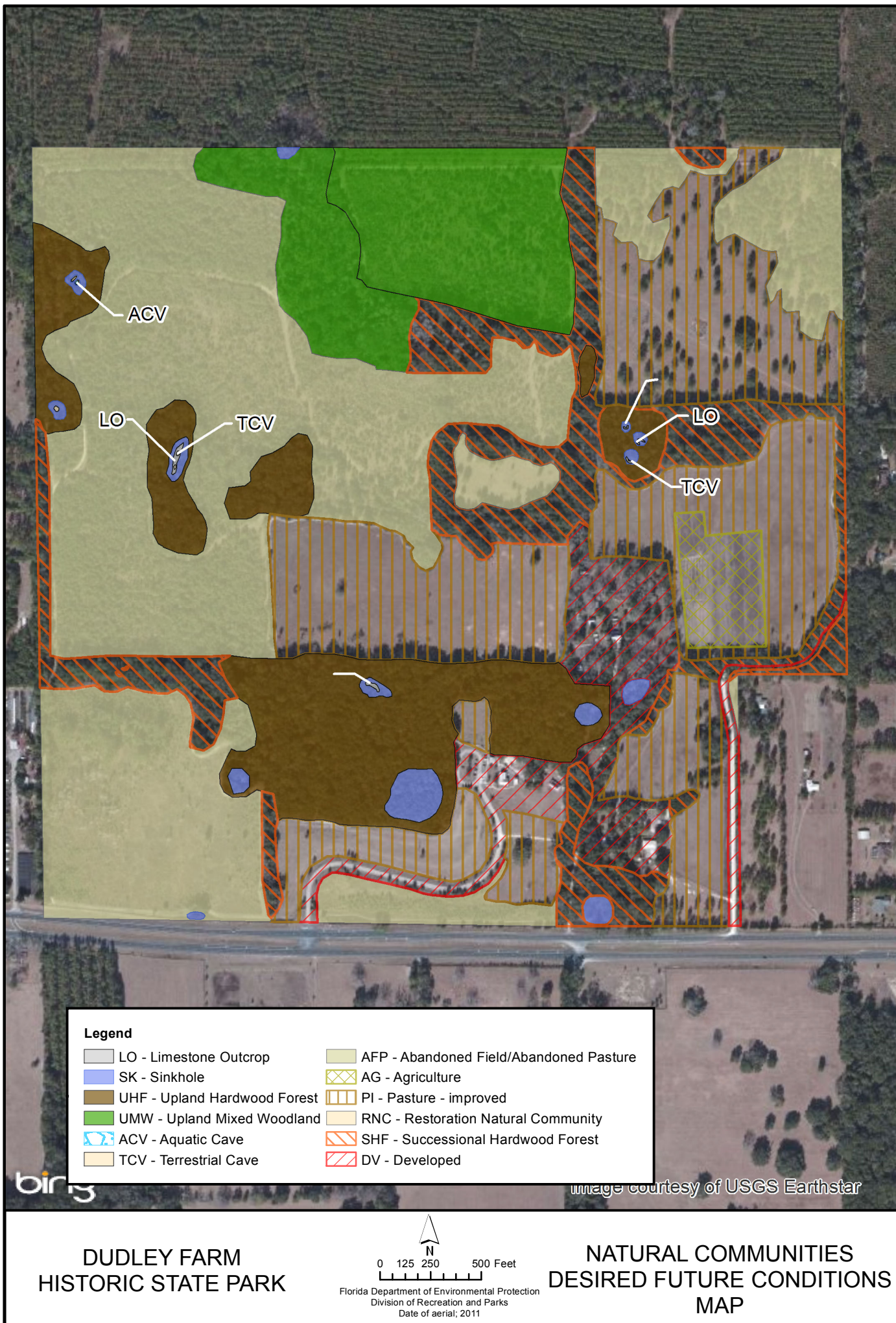
- | | |
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| Action 1 | Develop/update a site specific restoration plan. |
| Action 2 | Implement the restoration plan. |

The northern half of zone DF-5A has been designated a longleaf pine restoration area. This former pasture/field is adjacent to a poor quality remnant of upland mixed woodland. The restoration of a longleaf pine and native hardwood stand in this area will help restore the cultural landscape of Dudley Farm and will provide a higher quality natural area for wildlife. The focus will be on restoring the structure and dominant plant species of an upland mixed woodland rather than the complete range of groundcover species. Periodic prescribed fires and selective hardwood and loblolly pine removal will be important components of the restoration process.

Natural Community Improvement: Improvements are similar to restoration but on a smaller, less intense scale. This typically includes small-scale vegetative management activities or minor habitat manipulation. Following are the natural community/habitat improvement actions recommended at the park.

Objective C: Conduct natural community/habitat improvement activities on 24 acres of upland hardwood forest natural community.

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| Action 1 | Implement habitat improvement in successional hardwood forest. |
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The successional hardwood forest that lies between the historic farmstead and the visitor center/entrance facilities (zone DF-2D), along with the large block that lies west of this area (zone DF-2B), will be allowed to succeed to upland hardwood forest. Although cleared in the distant past, these areas are large enough and retain enough older hardwoods to allow development of an upland hardwood forest. Management measures required will include removal of invasive exotic plants, particularly coral ardisia.

Imperiled Species Management

Goal: Maintain, improve or restore imperiled species populations and habitats in the park.

The DRP strives to maintain and restore viable populations of imperiled plant and animal species primarily by implementing effective management of natural systems. Single species management is appropriate in state parks when the maintenance, recovery or restoration of a species or population is complicated due to constraints associated with long-term restoration efforts, unnaturally high mortality or insufficient habitat. Single species management should be compatible with the maintenance and restoration of natural processes, and should not imperil other native species or seriously compromise park values.

In the preparation of this management plan, DRP staff consulted with staff of the FWC's Imperiled Species Management or that agency's Regional Biologist and other appropriate federal, state and local agencies for assistance in developing imperiled animal species management objectives and actions. Likewise, for imperiled plant species, DRP staff consulted with FDACS. Data collected by the USFWS, FWC, FDACS and FNAI as part of their ongoing research and monitoring programs will be reviewed by park staff periodically to inform management of decisions that may have an impact on imperiled species at the park.

Ongoing inventory and monitoring of imperiled species in the state park system is necessary to meet the DRP's mission. Long-term monitoring is also essential to ensure the effectiveness of resource management programs. Monitoring efforts must be prioritized so that the data collected provides information that can be used to improve or confirm the effectiveness of management actions on conservation priorities. Monitoring intensity must at least be at a level that provides the minimum data needed to make informed decisions to meet conservation goals. Not all imperiled species require intensive monitoring efforts on a regular interval. Priority must be given to those species that can provide valuable data to guide adaptive management practices. Those species selected for specific management action and those that will provide management guidance through regular monitoring are addressed in the objectives below.

Objective A: Update baseline imperiled species occurrence inventory lists for plants and animals.

Action 1 Continue to inventory the park to update imperiled species lists.

Objective B: Monitor and document 3 selected imperiled animal species in the park.

- Action 1 Develop monitoring protocols for 3 selected imperiled animal species including the Florida cave isopod, Hobbs' cave amphipod, and the light-fleeing cave crayfish.
- Action 2 Implement monitoring protocols for the 3 imperiled animal species listed in Action 1 above.

The troglobitic invertebrates in the aquatic caves at Dudley Farm have been monitored sporadically over the years. District 2 staff will work on developing a protocol for periodic monitoring of these species in partnership with FWC and other agencies or institutions.

Objective C: Monitor and document 2 selected imperiled plant species in the park.

- Action 1 Develop a monitoring protocol for 1 selected imperiled plant species, incised agrimony.
- Action 2 Implement monitoring protocols for 2 imperiled plant species, incised agrimony and little ladiestresses.

DRP staff will develop a monitoring protocol for incised agrimony and will implement monitoring protocols for it and little ladiestresses. Those actions should help protect these imperiled plants from soil disturbance such as disking in areas of improved and abandoned pasture where the plants have recently been documented.

Exotic Species Management

Goal: Remove exotic and invasive plants and animals from the park and conduct needed maintenance control.

The DRP actively removes invasive exotic species from state parks, with priority being given to those causing the ecological damage. Removal techniques may include mechanical treatment, herbicides or biocontrol agents.

Objective A: Annually treat 3 acres of exotic plant species in the park.

- Action 1 Annually develop/update an exotic plant management work plan.
- Action 2 Implement the annual work plan by treating 3 acres in the park annually and by continuing maintenance and follow-up treatments as needed.

Staff should first focus on treating invasive exotic plants in the northern zones of the park with the goal of keeping those areas relatively free of exotics. Species with the greatest potential to invade should receive the highest priority for treatment. These include cogongrass, skunkvine and ardisia. Staff should continue to survey the park for new infestations on a regular basis.

Objective B: Develop and implement measures to prevent the accidental introduction or further spread of invasive exotic plants in the parks.

- Action 1 Develop preventative measures, including a protocol for equipment inspection and decontamination, designed to limit the accidental introduction and spread of invasive exotic plants.
- Action 2 Implement preventative measures, including the protocol listed in Action 1 above.

Exotic plants often invade an area accidentally through preventable methods of entry. To limit accidental introduction and movement of exotic species, park staff will develop and practice preventative measures, including a protocol for equipment inspection and decontamination. Activities such as mowing, logging, fire line preparation and road building can introduce or redistribute exotics via contaminated equipment. Fill dirt, lime rock, potted horticultural plants and mulch are all potentially contaminated by exotics even if they are not readily visible at the time of entry into the park. Some new infestations of exotics may be preventable by ensuring that contractors clean their equipment before entering the park. The further spread of exotics already established in the park may be avoided by making sure that staff and contractors do not move equipment from a contaminated area to an exotics-free area within the park without first cleaning their equipment.

Objective C: Implement control measures on 1 exotic animal species in the park.

- Action 1 Remove exotic animals as they appear in the park.

At this time, Dudley Farm does not have significant issues with exotic animals. If that should change in the future, the park will arrange to remove them as appropriate.

Cultural Resource Management

Cultural resources are individually unique, and collectively, very challenging for the public land manager whose goal is to preserve and protect them in perpetuity. The DRP will implement the following goals, objectives and actions, as funding becomes available, to preserve the cultural resources found in Dudley Farm Historic State Park.

Goal: Protect, preserve and maintain the cultural resources of the park.

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. All activities related to land clearing, ground disturbing activities, major repairs or additions to historic structures listed or eligible for listing in the National Register of Historic Places must be submitted to the FDOS, Division of Historical Resources (DHR) for review and comment prior to undertaking the proposed project. Recommendations may include, but are not limited to concurrence with the project as submitted, pre-testing of the project site by a certified archaeological monitor, cultural resource

assessment survey by a qualified professional archaeologist, modifications to the proposed project to avoid or mitigate potential adverse effect. In addition, any demolition or substantial alteration to any historic structure or resource must be submitted to the DHR for consultation and the DRP must demonstrate that there is no feasible alternative to removal and must provide a strategy for documentation or salvage of the resource. Florida law further requires that DRP consider the reuse of historic buildings in the park in lieu of new construction and must undertake a cost comparison of new development versus rehabilitation of a building before electing to construct a new or replacement building. This comparison must be accomplished with the assistance of the DHR.

Objective A: Assess and evaluate 4 of 24 recorded cultural resources in the park.

- | | |
|----------|---|
| Action 1 | Complete 4 assessments/evaluations of archaeological sites. |
| Action 2 | Complete a Historic American Landscape Survey for the park's historic buildings and cultural landscape. |

All the archaeological sites at Dudley Farm Historic State Park are currently in good condition, but in order to keep them that way park staff will need to visit them regularly and document any changes observed.

While the National Register of Historic Places registration form for the Dudley Farmstead includes a sketched map of the farm fields as well as the historic structures, other details of the farm and of the property's functioning components could be better documented to preserve this information for the future. Since the farm passed directly from the Dudley family to the Florida Park Service, the layout and function of the property is relatively unchanged. The DRP should obtain a Historic American Landscape Survey to document the structures within the context of the other details of the historic landscape. This survey should document such things as the site's absent resources (namely those structures, roads, fence lines, and other cultural resources that have been lost over time, either to demolition and removal or to alterations of terrain), current and abandoned fence lines and lanes, locations of historic farm fields, animal pens, the house flower garden, varieties of pecan and other crop trees, the Dudley Homestead AL4828 and its associated well and tenant house foundations, caves which may contain interesting farm trash, archaeological sites, and all other known but as yet undocumented features.

No additional Historic Structures Reports are needed at this time.

Objective B: Compile reliable documentation for all recorded historic and archaeological resources.

- | | |
|----------|---|
| Action 1 | Ensure all known sites are recorded or updated in the Florida Master Site File. |
| Action 2 | Conduct Level 1 archaeological survey for 3 high priority areas identified by the predictive model. |
| Action 3 | Update and adopt a Scope of Collections Statement. |

- Action 4 Within the context of the social history of the era and as a representative example, compile the history of the Dudley family in South Carolina, the move to Florida, and the early years in Florida before establishment of Dudley Farm.
- Action 5 Complete the cataloguing of the collection.
- Action 6 Finish entering the collection into the statewide Past Perfect database.
- Action 7 Determine which items to deaccession from the collection, including some items that are not connected to the Dudley family.
- Action 8 Develop and implement a secure process to allow physical viewing of the collection by approved researchers.
- Action 9 Develop restoration plans for fragile collection items such as film, documents or fabrics.
- Action 10 Photograph, scan and digitize the collection so researchers can view the collection remotely.
- Action 11 Develop a protocol regarding long term care of the collection.
- Action 12 Enlist the services of a professional collections' manager to guide management and conservation of the collection.

Several historic structures or other resources at the farm still need to be recorded with the FMSF. These include but are not limited to: the grape arbors, dairy shed/ canning house/ laundry house, two chicken coops (the northeast chicken coop (Coop #1) and the small chicken coop (Coop #3)), the main house well, the cistern, the water tower pilings, the remnants of the Newnansville to Jonesville and Half Moon Lake Road that passes to the west of the Dudley Main House (AL2328A), the round corral, the cattle squeeze chute, the cotton and wash house foundation, and the stone foundations and well at the "old home place" (Dudley Homestead (AL4828)).

The Dudley Farmstead National Register of Historic Places registration form includes a sketched map of the farm fields as well as the historic structures. However, details of the farm/property's functioning components could be better documented to preserve this information for the future. Since the farm passed directly from the Dudley family to the Florida Park Service, the layout and function of the property is relatively unchanged. This warrants documenting it in greater detail. The location of the historic farm fields, fence lines, animal pens, house flower garden, the Dudley Homestead (AL4828) and its associated well, caves that may contain interesting farm trash, archaeological sites and all other features should be documented via a Historic American Landscape Survey.

The predictive model that was completed for Dudley Farm indicates three high priority areas that have not yet had any archaeological work done. These three areas should be the focus of any Level 1 survey.

The Dudley family migrations may in many ways be representative of the large-scale movement of people from the Carolinas to Florida prior to statehood. While

the park has a great deal of information about the Dudley family from about 1860 to 1950, much less is known about their time in South Carolina and their early years in Florida before they founded Dudley Farm. Acquiring additional information about this period of family history should help us better understand the social history of that era.

Management of a collection the size of the Dudley collection is time consuming and needs professional guidance. Actions 5-12 are items that need to be addressed to enable successful management and protection of the collection.

Objective C: Bring 3 of 24 recorded cultural resources into good condition.

- Action 1 Design and implement a program for regular monitoring of all cultural sites.
- Action 2 Create and implement a cyclical maintenance program for each cultural resource.
- Action 3 Bring the dairy shed / canning house / laundry house structure, the Dudley Farm Chicken Coop (AL2328R), and the tobacco barn (AL2328F) into good condition.

Regular preventative maintenance is critical for the historic structures at Dudley Farm. Maintenance of the structures should be performed in accordance with a strictly established routine that describes time periods, tasks, and techniques. A maintenance schedule of this type is hereinafter in this plan called cyclical maintenance. A review of maintenance procedures by a professional conservator of buildings would determine if additional or newer methods are available. This would benefit the future preservation of the structures.

The following discussion lists actions taken since adoption of the previous management plan to maintain the historic structures, as well as actions that are needed to bring structures to good condition. Preventative maintenance shall be used for all structures as delineated above, as well as any specific actions mentioned. The three structures in fair condition are discussed first.

The foundation of the long chicken house (Dudley Farm Chicken Coop AL2328R) is cracking and the walls are moving sideways. The roof has been replaced several times. In 2012, under guidance from Historic Preservationist Phil Werndli of BNCR, attempts were made to center the building walls using pulleys. This structure will need continuous repair because of its faulty structural design. A long-term comprehensive plan is needed to guide its repairs. It will require a professional evaluation to develop the plan.

The dairy shed / canning house / laundry house needs to be recorded with the FMSF. Its support posts, which are twisting in their concrete foundation, need to be straightened and stabilized, and the foundation needs to be leveled.

The tobacco barn (AL2328F) which is in fair condition, was treated for termites in 2007. Any affected siding and battens were replaced. The roof was redone in 2005. In the future, some battens will need repairing because they get worn down by

rain. A few siding boards may need to be replaced in the next five years. These are difficult to find because very long boards (about 30-40 ft.) are required to match the original boards.

The following discussion refers to structures that are all in good condition: The Dudley Farm Main House (AL2328A) was tented for termites in 2010, the roof was redone using old tin, and all the old electric lines in the house were rewired. The wire's old cloth covering was replaced with modern material, thereby reducing the fire hazard. The voltage was kept low to maintain it as it would have been in the early 20th century. In 2011, sills on the front and side windows were repaired on the right side of the building.

The roof of the Dudley Farm stone house (AL2328B), or the flower pit, was replaced in 2004. No other significant repairs are currently needed. In 2010, the kitchen (AL2338C) was reroofed, the foundation was raised to counteract erosion, and the back porch was added to match photographs from the early 1900s. The outhouse (AL2328D) foundation was raised in 2010. Its tin roof will need to be replaced with old tin that is still in good condition in about five years. In 2010, the smokehouse (AL2328E) foundation was elevated, siding was repaired, rafters were replaced, and the roof was redone.

The corn crib (AL2328G) foundation was raised and stabilized in 2010. It may need raising again in about five years. Corn is no longer stored in the corn crib, and this has helped to control rodent damage to the structure. The hay barn's (AL2328H) tin roof was replaced in 1997. Minor mortar cracks have been repaired. Only preventative maintenance is needed at this time.

The mule stable or stable D (AL2328I) and the stable (AL2328J) had their foundations raised in 2010 and foundation cracks were repaired. The roofs and some rafters were replaced. Individual pieces of damaged siding were also replaced. The ground around the mule stable was reworked to direct water away from the buildings and reduce future erosion.

Repairs were made to the cattle dip (AL2328K) in 2012. Boards were replaced, dead trees were removed, and vegetation was kept low to restrict root growth from damaging the structure.

Foundation cracks in the milk room (AL2328L) were repaired in 2008 and the foundation was raised in 2010. In the pump house (AL2328M), floor boards and siding that were termite damaged were repaired and the tin roof was replaced.

The sugar furnace (AL2328N), also known as the cane syrup complex, was used until 2011 for the sugar cane boils during "Cane Days" events at Dudley Farm. The number and frequency of boils was damaging the original furnace so a reproduction furnace was built near the visitor center for use during Cane Days. The original furnace is no longer used. It has been repaired with appropriate mortar and limestone. The building foundation was raised in 2010, siding was repaired, one of the cracked kettles was replaced with the same size kettle, and metal work was

protected. The metal components will need protective treatment approximately every two years, and the foundation needs to be evaluated periodically.

The pack/store house (AL2328O) roof was repaired in 2010 and some foundation rocks were replaced. Runoff water was rerouted to prevent erosion, and minor rodent damage was repaired. Low voltage lighting was added inside the building for visitor safety.

In 2010, the roof and wood-gabled ends of the sweet potato cellar (AL2328P) were rebuilt, and the tin roof was replaced with cedar shake shingles to match the original roof structure. The shingles were made on site. The shake shingles will need regular checking for damage and leaks.

The brooder house (AL2328Q) and the small chicken coop (Coop #3) and the northeast chicken coop (Coop #1) had foundation repairs, roof repairs and minor siding repairs in 2005-2006. The latter two buildings still need to be recorded with the FMSF.

The cistern cover was replaced in 2008 and had minor repair work done in 2010. The well was covered with a wooden cap to protect the mortar and limestone from the weather. The cistern needs to be recorded with the FMSF.

Although the Hodge-Jones house, barn and windmill are not "historic" relative to the Dudley homestead, maintenance procedures for them should be similar to those used on the historic structures of the farm itself. The house has been adapted for use as a visitor and education center, as well as a park office. The barn serves as an interpretive station, and is passed by virtually every visitor who is going to the Dudley farmstead.

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 DRP'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 those communities specifically managed as early successional.

A timber management analysis was not conducted for this park since its total acreage is below the 1,000-acre threshold established by statute. Timber management will be re-evaluated during the next revision of this management plan.

Arthropod Control Plan

All DRP lands are designated as “environmentally sensitive and biologically highly productive” in accordance with Ch. 388 and Ch. 388.4111 Florida Statutes. If a local mosquito control district proposes a treatment plan, the DRP works with the local mosquito control district to achieve consensus. By policy of DEP since 1987, aerial adulticiding is not allowed, but larviciding and ground adulticiding (truck spraying in public use areas) is typically allowed. The DRP does not authorize new physical alterations of marshes through ditching or water control structures. Mosquito control plans temporarily may be set aside under declared threats to public or animal health, or during a Governor’s Emergency Proclamation. Dudley Farm Historic State Park does not have an adopted mosquito control plan at this time.

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 located in the Implementation Component of this management plan.

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 are being managed for the purposes for which they were acquired and in accordance with their approved land management plans. The considered recommendations of the land management review team and updated this plan accordingly.

Dudley Farm Historic State Park has not been subject to a land management review.

LAND USE COMPONENT

Introduction

Land use planning and park development decisions for the state park system are based on the dual responsibilities of the Florida Department of Environmental Protection (DEP), Division of Recreation and Parks (DRP). 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. Additional input is received through public workshops, and through environmental and recreational-user groups. With this approach, the DRP 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 expressed 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, regional demographics, adjacent land uses and park interaction with other facilities

Dudley Farm Historic State Park is located within Alachua County about 13 miles west of Gainesville and 5 miles east of Newberry in the north central part of the state. Approximately 365,000 people live within 30 miles of the park (U.S. Census 2010).

The population of Alachua County is relatively diverse. According to the U.S. Census data (2013), approximately one-fifth of residents in Alachua County identify as black, Hispanic or Latino or another minority group. Half of residents can be described as youth or seniors (U.S. Census 2010). In 2013, Alachua

County's per capita personal income was \$38,225 (below the statewide average of \$41,497) (U.S. Bureau of Economic Analysis 2013).

A significant amount of resource-based recreation opportunities exist within 15 miles of Dudley Farm Historic State Park. River Rise Preserve, O'Leno, Paynes Prairie Preserve, and San Felasco Hammock Preserve State Parks offer bicycling, fishing, hiking, paddling, camping, and wildlife viewing. Devil's Millhopper Geological State Park and Nature Coast State Trail have hiking, nature trails, and birding opportunities.

Nearby, the Florida Forest Service (FFS) manages Newnans Lake and Geoth State Forests. Both properties provide hiking, horseback riding, and wildlife viewing. The Florida Fish and Wildlife Conservation Commission (FWC) offers biking, and hiking trails at Bell Ridge Longleaf and Watermelon Pond Wildlife and Environmental Areas. Alachua County manages Poe Springs Park where visitors can swim, snorkel, paddle, and hike.

The park is located in the North Central Vacation Region, which includes Alachua, Bradford, Columbia, Dixie, Gadsden, Gilchrist, Hamilton, Jefferson, Lafayette, Leon, Levy, Madison, Suwanee, Taylor, Union, and Wakulla counties (Visit Florida 2013). According to the 2013 Florida Visitor Survey, approximately 2% of domestic visitors to Florida visited this region. Roughly 95% visitors to the region traveled to the North Central Region for leisure purposes. The top activities for domestic visitors were visiting friends or relatives and shopping. Summer was the most popular travel season, but visitation was generally spread throughout the year. Most visitors traveled by non-air (85%), reporting an average of 3 nights and spending an average of \$79 per person per day (Visit Florida 2013).

Florida's Statewide Comprehensive Outdoor Recreation Plan (SCORP) indicates that participation rates in this region for freshwater beach activities, saltwater boat fishing, saltwater and freshwater boat ramp use, freshwater fishing, canoeing/kayaking, visiting archaeological and historic sites, wildlife viewing, picnicking, hiking, camping, off-highway vehicle riding, horseback riding, and hunting are higher than the state average with demand for additional facilities increasing through 2020 (FDEP 2013).

Existing Use of Adjacent Lands

Dudley Farm Historic State Park falls within Alachua County and City of Newberry jurisdictions. Newberry is a designated Main Street Community by the Florida Main Street Program maintaining the integrity of the historic downtown business district.

The area surrounding the park is currently in rural/agricultural land uses. Rural residences are located immediately east and southeast from the core homestead area of the historic site. Adjacent lands north and northwest are

undeveloped, cleared pasture or pine plantations at this time. Immediately to the west are residences and to the southwest there is a plant nursery. Access to the historic site is on the southern boundary from State Road 26. Tioga Town Center, a mixed use development that is a vibrant entertainment destination in Alachua, lies 4 miles to the east of the park.

Planned Use of Adjacent Lands

Alachua County is within the North Central Florida Planning District. Gainesville is the regional base for retail and government services due to the presence of the University of Florida. The region's population was approximately 500,000 in 2010 (Census 2010). The city and Alachua County account for half of the region's total population. Tourism is a major economic driver in the region as a result of the abundant natural resources the area has to offer. Interstate 75 running through the counties also serves as a large economic growth contributor. There are no major improvements planned for Interstate 75. Another key component in Alachua's future growth is the Envision Alachua Sector Plan written by Plum Creek. If approved, the sector plan seeks to develop 10,500 residential units and 15.5 million square feet of commercial space that is expected to provide more than 30,000 jobs (Plum Creek 2013). Medium estimates project that Alachua County's population will exceed 300,000 residents in 2040.

There are planned transportation projects nearby that could affect Dudley Farm Historic State Park. The intersection of Newberry Road and C.R. 241 (NW 170th St) is 3 miles east of the park. There are plans to widen Newberry Road from 4 to 6 lanes for 1.5 miles east of the intersection. The road is also slated for a dedicated transit lane in the median. The expansion will reduce congestion that results from trips to Tioga Town Center and Publix Shopping Center on Newberry Road. The Alachua County Comprehensive Plan specifies that the intersection of Newberry Road and C.R. 241 should serve as a "low intensity employment oriented focal point" with mixed uses (Alachua 2010). These land use improvements are intended to bring more people to the Jonesville area adjacent to Dudley Farm.

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.

Recreational Resource Elements

This section assesses the park's recreational resource elements, those physical qualities that, either singly or in certain combinations, can support various resource-based recreation activities. Breaking down the property into such elements provides a means for measuring the property's capability to support potential recreational activities. This process also analyzes the existing spatial factors that either favor or limit the provision of each activity.

Land Area

Upland mixed forest covers a portion of the site, especially around the sinkholes and cave entrances. The mixed forest community along with historic fencerows and farm lanes provide good hiking opportunities. The open pastures allow picnicking opportunities and nature trails can wind through natural communities offering interpretation for park visitors.

Significant Habitat

The aquatic and terrestrial caves provide habitat for cave fauna such as cave isopods, amphipods, and crayfish. The FNAI designated species list includes these arthropods. The gopher tortoise is found in some of the upland areas and care is taken to leave the burrows undisturbed.

Archeological and Historic Features

The Dudley Farm site provides visitors with the unique experience of observing the changes in Florida farming over 150 years and three generations of the Dudley Family. Visitors experience live on the farm as staff and volunteers dress in period clothing and complete traditional chores associated with life on the farm such as tending to livestock and sugarcane farming.

Assessment of Use

All legal boundaries, significant natural features, structures, facilities, roads and trails 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

Spanning one hundred and fifty years, three generations of the Dudley family lived and worked this piece of land. It became a significant crossroads community by the 1880s.

Future Land Use and Zoning

The DRP works with local governments to establish designations that provide both consistency between comprehensive plans and zoning codes and permit

typical state park uses and facilities necessary for the provision of resource-based recreation.

The current future land use designation of Dudley Farm Historic State Park is agricultural which maintains the existing rural character. The current zoning is also agricultural. Farming is still performed on park grounds featuring livestock and plants. Thus, there are no expected conflicts between the future land use or zoning designations and typical state park land uses.

Current Recreational Use and Visitor Programs

Dudley Farms has a number of interpretive opportunities throughout the property. The major focus is the farm, called Dudley Farmstead, and the surrounding fields and pastures. The historic character of the land and structures located within the farmstead exemplify and preserve the qualities of a late-19th century family farm. Secondary interpretive resources include the altered natural communities, the geological features on the property, and the ongoing historic preservation on site. The National Park Service has officially listed Dudley Farm on the National Register of Historic Places. The site is a popular destination for school groups and the public. Hiking and picnicking are also available.

Dudley Farm Historic State Park recorded 27,418 visitors in FY 2014/2015. By DRP estimates, the FY 2014/2015 visitors contributed \$2,521,317 in direct economic impact, the equivalent of adding 40 jobs to the local economy (FDEP 2015).

Other Uses

A road along the eastern boundary of the property is a public right of way for adjacent landowners.

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 Dudley Farm Historic State Park, the sinkholes, cave entrances and their drainage areas have been designated as natural resource protection zones; and the farmstead, as selected for the National Register of Historic Places, is designated as a cultural resource protection zone.

Existing Facilities

Dudley Farmstead encompasses two different interpretive areas. The Old Home Place is the site of the original log house constructed on the property by P.B.H. Dudley, Sr. An abandoned well is associated with it. Although little remains of the structure itself, this area is an important component in the history of the farm. The Dudley home and farm structures, fences, gardens, and orchards are the focus of visitation and interpretive activities. Farm animals have been re-introduced to Dudley Farm. Cracker cows and a cracker horse, turkey, chicken, mules and sheep are all part of the daily life at Dudley. School groups and individual visitors can take an active part in the everyday workings of the farm.

Visitors approach the historic site from the Visitor Center traveling by foot along the historic dirt roads. An historic home, moved to a site southwest of the farmstead, has been renovated to serve as the Visitor Center. Historical displays including some of the collections from the Dudley Farm introduce people to the period. The Hodge Barn, also relocated from off site, is presently used for storage but will house the farm implement collection (see Base Map).

Recreation Facilities

Visitor Center
Picnic Area
Trail (0.5 miles)
Hodge Barn
Historic Farm Site
Front Yard Garden
Field Crops

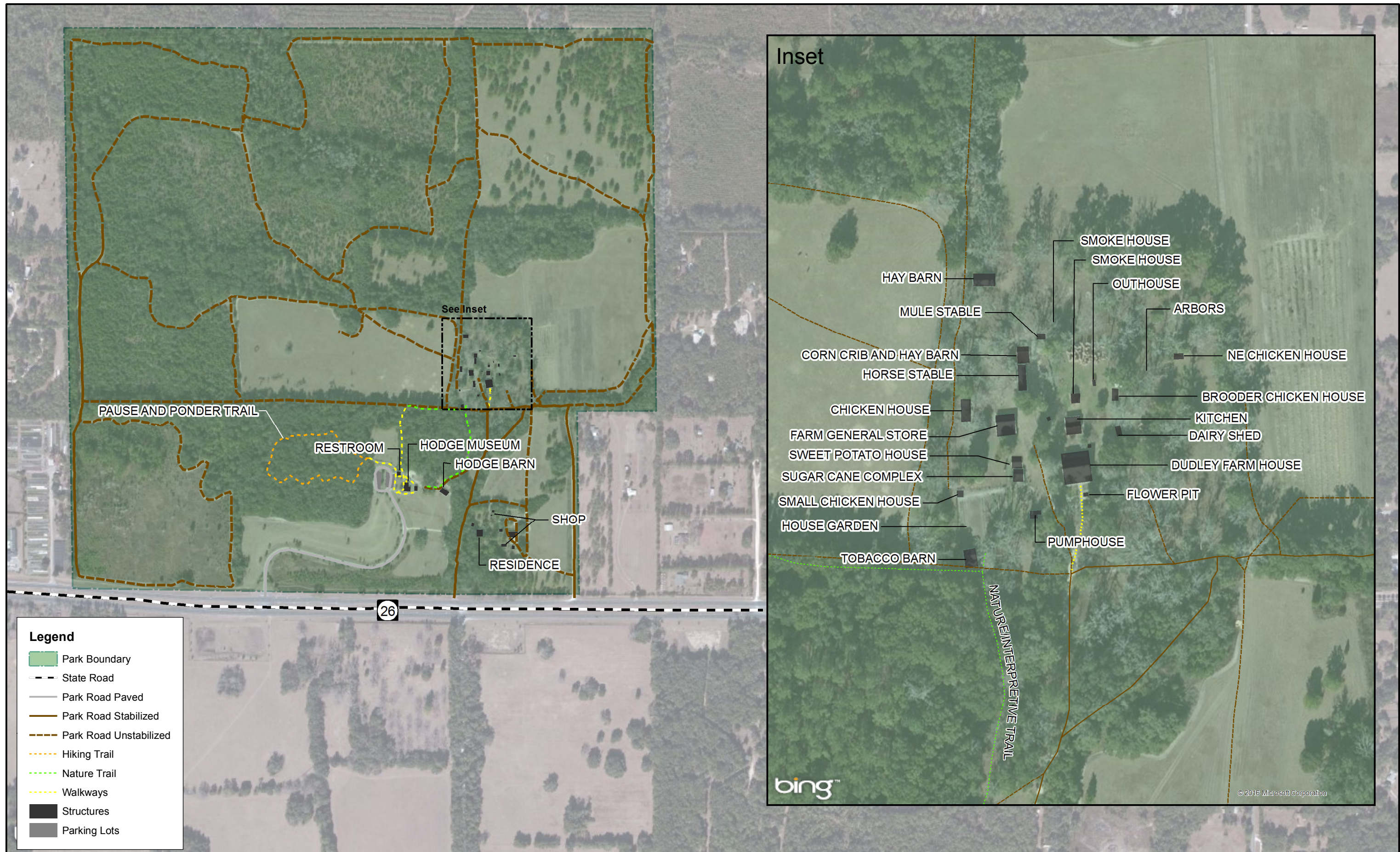
Support Facilities

Restroom
Parking (32 spaces)
Overflow Parking
Tram
Ranger Residence
Storage Shed (2)
1950s Kitchen

Conceptual Land Use Plan

The following narrative represents the current conceptual land use proposal for this park. The conceptual land use plan is the long-term, optimal development plan for the park, based on current conditions and knowledge of the park's resources, landscape and social setting (see Conceptual Land Use Plan). The conceptual land use plan is modified or amended, as new information becomes available regarding the park's natural and cultural resources or trends in recreational uses, in order to adapt to changing conditions. Additionally, the acquisition of new parkland may provide opportunities for alternative or expanded land uses. The DRP develops a detailed development plan for the park and a site plan for specific facilities based on this conceptual land use plan, as funding becomes available.

During the development of the conceptual land use plan, the DRP assessed the potential impact of proposed uses or development on the park resources and applied that analysis to determine the future physical plan of the park as well as the scale and character of proposed development. Potential resource impacts are also identified and assessed as part of the site planning process once funding is available for facility development.



At that stage, design elements (such as existing topography and vegetation, sewage disposal and stormwater management) and design constraints (such as imperiled species or cultural site locations) are investigated in greater detail. Municipal sewer connections, advanced wastewater treatment or best available technology systems are applied for on-site sewage disposal. Creation of impervious surfaces is minimized to the greatest extent feasible in order to limit the need for stormwater management systems, and all facilities are designed and constructed using best management practices to limit and avoid resource impacts. Federal, state and local permit and regulatory requirements are addressed during facility development. 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, park staff monitors conditions to ensure that impacts remain within acceptable levels.

Potential Uses

Public Access and Recreational Opportunities

Goal: Provide public access and recreational opportunities in the park.

The existing recreational activities and programs of this state park are appropriate to the natural and cultural resources contained in the park and should be continued. [New and/or improved] activities and programs are also recommended and discussed below.

Objective: Maintain the park's current recreational carrying capacity of 230 users per day.

The park demonstrates Florida farming from the 1850s to the mid-1940s. Historic demonstrations such as cane grindings and corn shucking are popular with park visitors. The historic site is supported by a visitor center and interpretation.

Objective: Expand the park's recreational carrying capacity by 400 users per day.

Developing an extensive nature trail and indoor education center will expand carrying capacity, allowing increased access to park facilities.

Objective: Continue to provide the current repertoire of 8 interpretive, educational and recreational programs on a regular basis.

Dudley Farm Historic State Park currently provides eight interpretive and educational programs for park visitors. These events include Dudley Kid's Day, National Public Lands Day, Reconstruction Era events, and farm cane day and farm quilt day. Living history reenactment occurs throughout the park regularly.

Objective: Develop 2 new interpretive, educational and recreational programs.

An interpretive kiosk should feature a map of the park at the park entrance to direct visitors to the homestead. Once constructed, the indoor education center detailed below will host classes and interpretive programs. This will accommodate special events, like weddings, demonstrations, and public events.

Proposed Facilities

Capital Facilities and Infrastructure

Goal: Develop and maintain the capital facilities and infrastructure necessary to implement the recommendations of the management plan.

The existing facilities of this state park are appropriate to the natural and cultural resources contained in the park and should be maintained. New construction, as discussed further below, is recommended to improve the quality and safety of the recreational opportunities, to improve the protection of park resources, and to streamline the efficiency of park operations. The following is a summary of improved and/or new facilities needed to implement the conceptual land use plan for Dudley Farm Historic State Park:

Objective: Maintain all public and support facilities in the park.

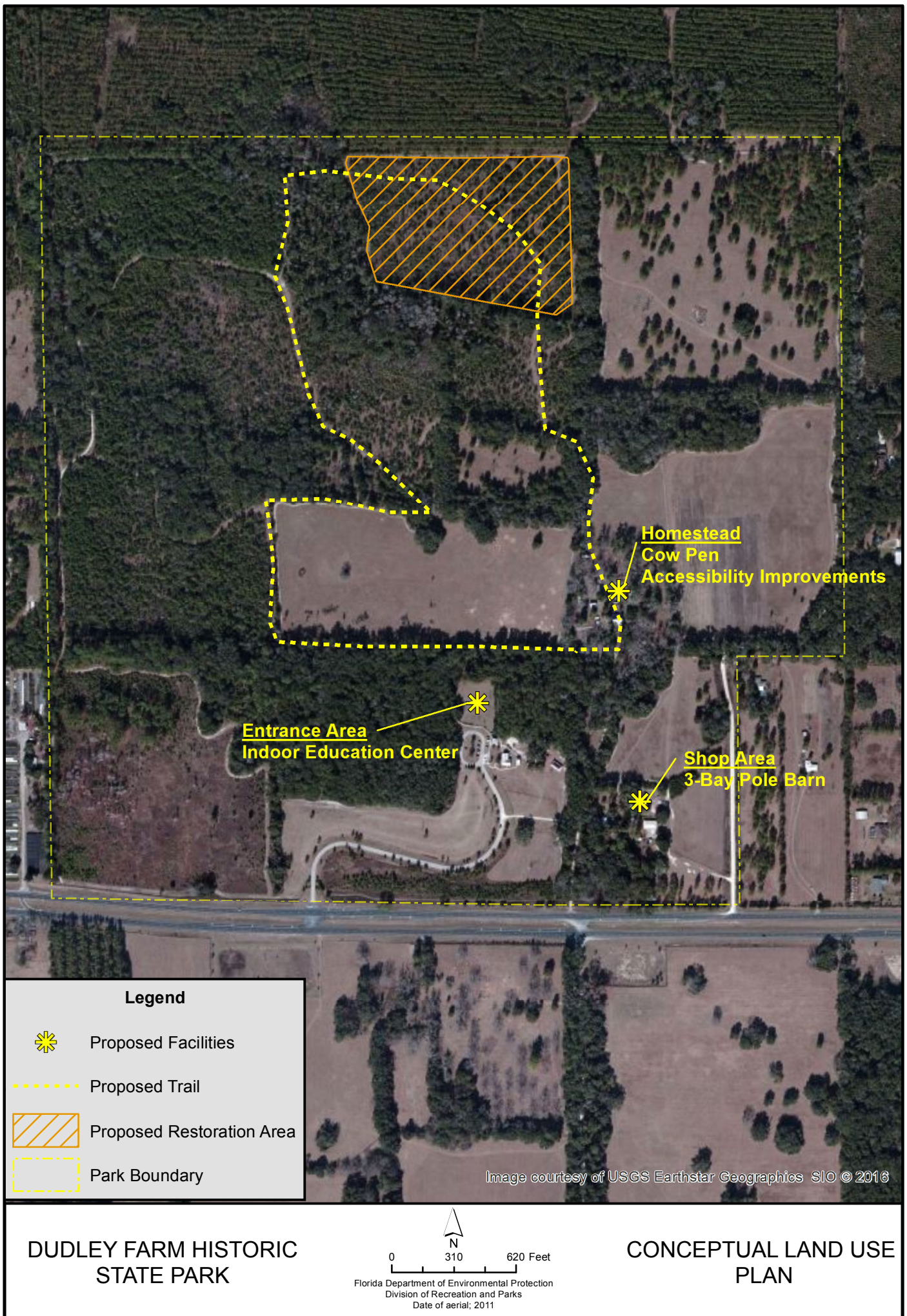
All capital facilities, trails and roads within the park will be kept in proper condition through the daily or regular work of park staff and/or contracted help.

Objective: Improve/repair 4 existing facilities.

Major repair projects for park facilities may be accomplished within the ten-year term of this management plan, if funding is made available. These include the modification of existing park facilities to bring them into compliance with the Americans with Disabilities Act (a top priority for all facilities maintained by DRP). The following discussion of other recommended improvements and repairs are organized by use area within the park.

Visitor Center/Entrance Area

An indoor education center should be constructed to the north of the parking lot in the cleared lawn. This multi-purpose facility should be air-conditioned and accommodate school groups, weddings, and demonstrations. The exterior should be designed sensitive to the adjacent buildings to blend in with the historical context being interpreted.



Homestead

The farmhouse should be studied for accessibility improvements. The elevator is difficult to maintain and may be replaced with a ramp if there is adequate space. A new cow pen should be built at the northern edge of the homestead (by the horses) to connect pastures.

Shop Area

A 3-bay pole barn should be constructed at the shop area to formalize the space across from the volunteer sites.

Parkwide

A restoration area along the park's northern boundary (identified on the approved plan CLUP) will allow regrowth of longleaf and wiregrass. The restoration area will constitute just over 16 acres. Eventually, this area can be incorporated into the nature trail route for hiking.

Objective: Construct 2 miles of trail.

A nature trail should be constructed that allows interpretation of natural communities. The trail will be developed from the historic farmstead to the east and loop to the abandoned pasture at the park's western boundary. The nature trail will give visitors a dedicated route to traverse the successional hardwood forest and pasture natural communities.

Facilities Development

Preliminary cost estimates for these recommended facilities and improvements are provided in the Ten-Year Implementation Schedule and Cost Estimates (Table 7) located in the Implementation Component of this plan. These cost estimates are based on the most cost-effective construction standards available at this time. The preliminary estimates are provided to assist DRP in budgeting future park improvements, and may be revised as more information is collected through the planning and design processes. New facilities and improvements to existing facilities recommended by the plan include:

Recreation Facilities

Indoor education center
Nature trail (2.1 miles)
Restoration area (16.74 acres)
Accessibility improvements
Cow pen
Interpretive kiosk

Support Facilities

3-bay pole barn

Recreational 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 8).

The recreational 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. When developed, the proposed new facilities would approximately increase the unit's carrying capacity as shown in Table 8.

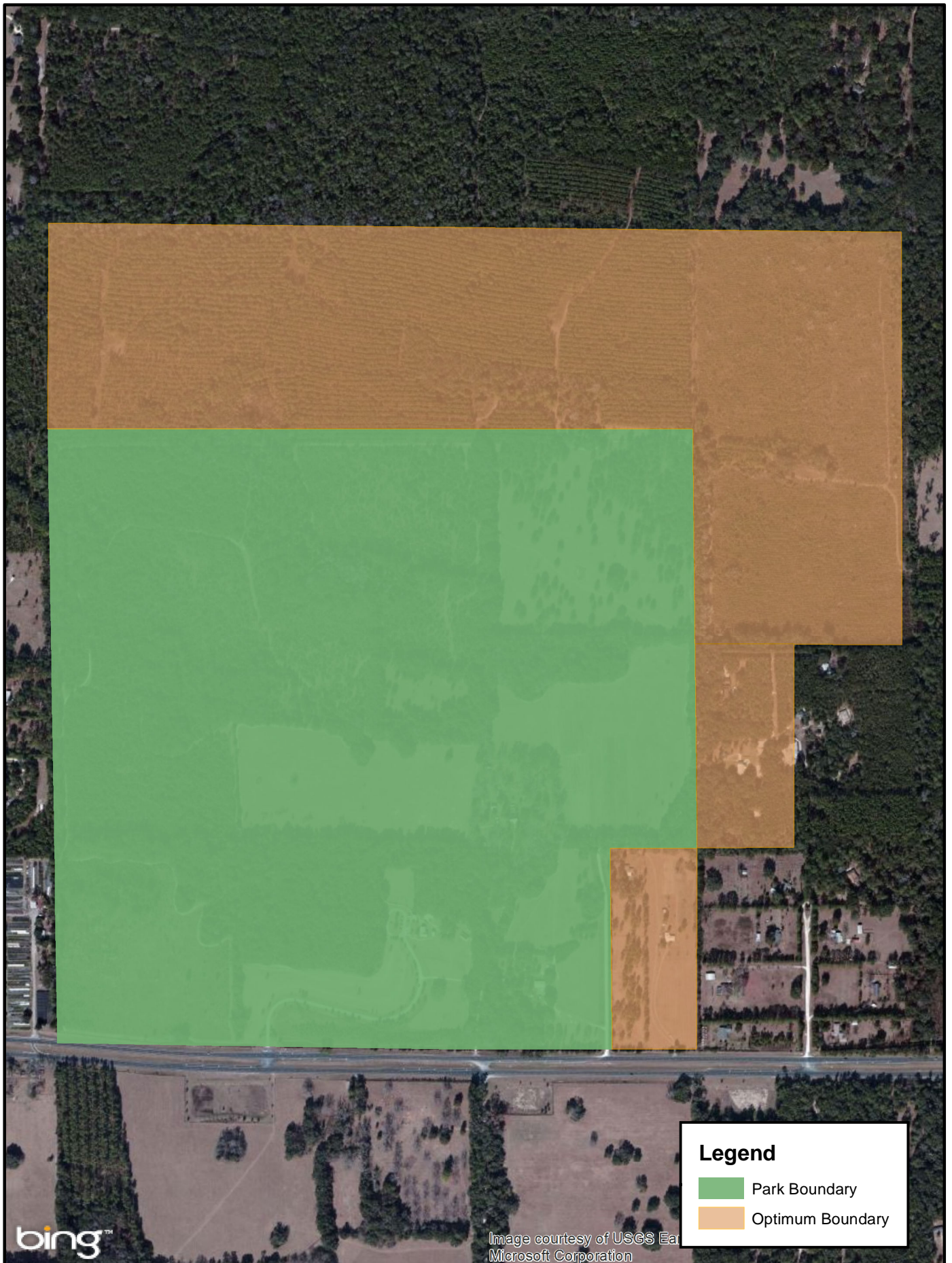
Table 8. Recreational Carrying Capacity

Activity/Facility	Existing Capacity*		Proposed Additional Capacity		Estimated Recreational Capacity	
	One Time	Daily	One Time	Daily	One Time	Daily
Nature Trail	5	20	21	84	26	104
Visitor Center	57	230			57	230
Indoor Education Center			100	400	100	400
TOTAL	57	230	100	400	157	630

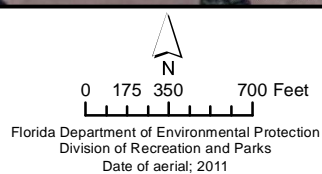
*Existing capacity revised from approved plan according to DRP guidelines.

Optimum Boundary

The optimum boundary map reflects lands considered desirable for direct management by the DRP as part of the state park. These parcels may include public or privately owned land that would improve the continuity of existing parklands, provide the most efficient boundary configuration, improve access to the park, provide additional natural and cultural resource protection or allow for future expansion of recreational activities. Parklands that are potentially surplus to the management needs of DRP are also identified. As additional needs are identified through park use, development, and research, and as land use changes on adjacent property, modification of the park's optimum boundary may be necessary.



DUDLEY FARM
HISTORIC STATE PARK



OPTIMUM BOUNDARY
MAP

Identification of parcels on the optimum boundary map is intended solely for planning purposes. It is not to be used in connection with any regulatory purposes. Any party or governmental entity should not use a property's identification on the optimum boundary map to reduce or restrict the lawful rights of private landowners. Identification on the map does not empower or suggest that any government entity should impose additional or more restrictive environmental land use or zoning regulations. Identification should not be used as the basis for permit denial or the imposition of permit conditions.

The optimum boundary for the historic site encompasses 222 acres, including two parcels of land located south and east and three parcels to the north and east of the current boundaries. The southeastern parcels are recommended to provide buffer land and an alternative area for park support facilities. Acquisition of the parcels north and east would bring additional natural and cultural resources related to the historic farm, a prehistoric site, and caves into public ownership. They would also serve to buffer the historic site from future changes in adjacent land uses.

IMPLEMENTATION COMPONENT

The resource management and land use components of this management plan provide a thorough inventory of the park's natural, cultural and recreational resources. They outline the park's management needs and problems, and recommend both short and long-term objectives and actions to meet those needs. The implementation component addresses the administrative goal for the park and reports on the Division of Recreation and Parks (DRP) progress toward achieving resource management, operational and capital improvement goals and objectives since approval of the previous management plan for this park. This component also compiles the management goals, objectives and actions expressed in the separate parts of this management plan for easy review. Estimated costs for the ten-year period of this plan are provided for each action and objective, and the costs are summarized under standard categories of land management activities.

MANAGEMENT PROGRESS

Since the approval of the last management plan for Dudley Farm Historic State Park in 2004, significant work has been accomplished and progress made towards meeting the DRP's management objectives for the park. These accomplishments fall within three of the five general categories that encompass the mission of the park and the DRP.

Park Administration and Operations

The Friends of Dudley Farm provides volunteer hours as well as funding for equipment, livestock costs and items needed by staff for re-enacting. Some of the more notable accomplishments of the CSO include:

- Partially funding one part-time OPS to assist with maintenance of the ornamental garden.
- Assisting in the establishment and management of the collections building, which currently houses over 1,100 items.
- Providing funding for the Commissary building to be moved onsite and the establishment of a small gift shop in this building.
- Conversion of an existing building into a maintenance shop.
- Construction of a sugar cane complex, with a mill and an 80 gallon kettle, in order to produce cane syrup. This building was established in order to take the strain off the historic structure to allow for better preservation.
- Installation of lighting for the parking area.
- Installation of an irrigation systems for the heritage roses grown at the park.
- Purchase of an event tent.
- Construction of a plant nursery in order to propagate heritage plants as stock for the historic ornamental garden.
- Volunteer Hours have increased by approximately 45% over the past five fiscal years. Since 2010, more than 53,000 volunteer hours have been logged at the park.

Resource Management

Natural Resources

- The park staff regularly treats the invasive exotic plants at Dudley Farm and maintains treatment and survey information in the DRP's statewide database. Since approval of the previous management plan in 2004, the Florida Park Service has treated 126 acres of invasive exotic plants in-house.

Cultural Resources

- Long Chicken House: The roof has been replaced several times. In 2012, attempts were made to center the building walls using pulleys.
- The tobacco barn (AL2328F), was treated for termites in 2007. Any affected siding and battens were replaced. The roof was redone in 2005.
- The Dudley Farm Main House (AL2328A) was tented for termites in 2010, the roof was redone using old tin, and all the old electric lines in the house were rewired. The wire's old cloth covering was replaced with modern material, thereby reducing the fire hazard. The voltage was kept low to maintain it as it would have been in the early 20th century. In 2011, sills on the front and side windows were repaired on the right side of the building.
- The roof of the Dudley Farm stone house (AL2328B), or the flower pit, was replaced in 2004.
- In 2010, the kitchen (AL2338C) was reroofed, the foundation was raised to counteract erosion, and the back porch was added to match photographs from the early 1900s.
- The outhouse (AL2328D) foundation was raised in 2010.
- In 2010, the smokehouse (AL2328E) foundation was elevated, siding was repaired, rafters were replaced, and the roof was redone.
- The corn crib (AL2328G) foundation was raised and stabilized in 2010.
- The mule stable or stable D (AL2328I) and the stable (AL2328J) had their foundations raised in 2010 and foundation cracks were repaired. The roofs and some rafters were replaced. Individual pieces of damaged siding were also replaced. The ground around the mule stable was reworked to direct water away from the buildings and reduce future erosion.
- Repairs were made to the cattle dip (AL2328K) in 2012. Boards were replaced, dead trees were removed, and vegetation was kept low to restrict root growth from damaging the structure.
- Foundation cracks in the milk room (AL2328L) were repaired in 2008 and the foundation was raised in 2010.
- In the pump house (AL2328M), floor boards and siding that were termite damaged were repaired and the tin roof was replaced.

- The sugar furnace (AL2328N), also known as the cane syrup complex, has been repaired with appropriate mortar and limestone. The building foundation was raised in 2010, siding was repaired, one of the cracked kettles was replaced with the same size kettle, and metal work was protected.
- The pack/store house (AL2328O) roof was repaired in 2010 and some foundation rocks were replaced. Runoff water was rerouted to prevent erosion, and minor rodent damage was repaired. Low voltage lighting was added inside the building for visitor safety.
- In 2010, the roof and wood-gabled ends of the sweet potato cellar (AL2328P) were rebuilt, and the tin roof was replaced with cedar shake shingles to match the original roof structure. The shingles were made on site. The shake shingles will need regular checking for damage and leaks.
- The brooder house (AL2328Q) and the small chicken coop (Coop #3) and the northeast chicken coop (Coop #1) had foundation repairs, roof repairs and minor siding repairs in 2005-2006.
- The cistern cover was replaced in 2008 and had minor repair work done in 2010.

Recreation and Visitor Services

- The main interpretive program given by the park is the "Dudley Farm Historic Tour" and is scheduled with required reservation. In addition, several programs are offered by park staff and other groups to educate the public of the history of the park. The "Dudley Kids" program has gained popularity in the last couple of years. It is a monthly program that presents different topics about life on the farm. The programs are hands on, involving several activities surrounding a central theme.
- The park's largest annual event is the Cane Day Festival. Held in December each year, this event draws a couple of thousand visitors each year. Additional annual events include "Plowing up the Past," "Quilt Day," "Reconstruction"
- The park maintains partnerships with local schools to educate students, providing a large number of interpretive programs each year. The park was a part of the Friends of Florida State Park's Felburn Grant Program, which provided funding to schools for transportation to the park. Additionally the park provides two school day events, including "Plowing Up the Past" and "Reconstruction," which each host 300 – 500 students.
- In 2013/2014 the park has established a procedure for weddings and private events and begin to market specifically for weddings. Although the current number of weddings held at the park is nominal (around 6-10 per year), the park seen a continual increase and believes that further marketing will allowed for continued growth.
- The park has established a relationship with the Girl Scouts Gateway Council to provide training to the scouts on interpreting the history of the park. The trained scouts then present "Partake of the Past," a two day re-enactment open to the public.

- The park works with Visit Gainesville to provide a self-guided cell phone tour of the park.
- The park established a Geocaching program.
- The park is on the National Register of Historic Places.

Park Facilities

- The Hodges Jones House, Windmill and Barn were moved on site and comprise a visitor center/interpretive area for orienting visitors before they enter the Dudley Farm Historic Homestead proper. The house has been adapted for use as a visitor and education center as well as a park office. The barn serves as an interpretive station.
- A restroom, picnic area, parking area, overflow parking lot, sidewalks, a tram, and a hiking trail (Paws and Ponder) have all been established. The park currently has one ranger residence.

MANAGEMENT PLAN IMPLEMENTATION

This management plan is written for a timeframe of ten years, as required by Section 253.034 Florida Statutes. The Ten-Year Implementation Schedule and Cost Estimates (Table 9) summarizes the management goals, objectives and actions that are recommended for implementation over this period, and beyond. Measures are identified for assessing progress toward completing each objective and action. A time frame for completing each objective and action is provided. Preliminary cost estimates for each action are provided and the estimated total costs to complete each objective are computed. Finally, all costs are consolidated under the following five standard land management categories: Resource Management, Administration and Support, Capital Improvements, Recreation Visitor Services and Law Enforcement.

Many of the actions identified in the plan can be implemented using existing staff and funding. However, a number of continuing activities and new activities with measurable quantity targets and projected completion dates are identified that cannot be completed during the life of this plan unless additional resources for these purposes are provided. The plan's recommended actions, time frames and cost estimates will guide the DRP's planning and budgeting activities over the period of this plan. It must be noted that these recommendations are based on the information that exists at the time the plan was prepared. A high degree of adaptability and flexibility must be built into this process to ensure that the DRP can adjust to changes in the availability of funds, improved understanding of the park's natural and cultural resources, and changes in statewide land management issues, priorities and policies.

Statewide priorities for all aspects of land management are evaluated each year as part of the process for developing the DRP's annual legislative budget requests. When preparing these annual requests, the DRP considers the needs and priorities of the entire state park system and the projected availability of funding from all sources during the upcoming fiscal year. In addition to annual legislative appropriations, the DRP pursues supplemental sources of funds and staff resources

wherever possible, including grants, volunteers and partnerships with other entities. The DRP's ability to accomplish the specific actions identified in the plan will be determined largely by the availability of funds and staff for these purposes, which may vary from year to year. Consequently, the target schedules and estimated costs identified in Table 9 may need to be adjusted during the ten-year management planning cycle.

Table 9
Park Name Ten-Year Implementation Schedule and Cost Estimates
Sheet 1 of 4

NOTE: THE DIVISION'S ABILITY TO COMPLETE THE OBJECTIVES OUTLINED BY THE MANAGEMENT PLAN IS CONTINGENT ON THE AVAILABILITY OF FUNDING AND OTHER RESOURCES FOR THESE PURPOSES.				
Goal I: Provide administrative support for all park functions.		Measure	Planning Period	Estimated Manpower and Expense Cost* (10-years)
Objective A	Continue day-to-day administrative support at current levels.	Administrative support ongoing	C	\$30,766
Objective B	Expand administrative support as new lands are acquired, new facilities are developed, or as other needs arise.	Administrative support expanded	UFN	\$53,506
Goal II: Protect water quality and quantity in the park, restore hydrology to the extent feasible, and maintain the restored condition.		Measure	Planning Period	Estimated Manpower and Expense Cost* (10-years)
Objective A	Conduct/obtain an assessment of the park's hydrological needs.	Assessment conducted	UFN	\$9,850
Action 1	Continue to cooperate with other agencies and independent researchers regarding hydrological research and monitoring programs at Dudley Farm.	Monitoring programs implemented	C	\$3,500
Action 2	Continue to monitor surface water and groundwater quality at the park.	Monitoring conducted	C	\$3,000
Action 3	Seek professional expertise in determining the sources and direction of groundwater flow in the park's aquatic caves.	Consultations conducted	C	\$2,000
Action 4		LU changes monitored	C	\$1,350
Objective B	Monitor impacts of erosion and sedimentation on the aquatic cave systems.	Monitoring conducted	C	\$4,000
Action 1	Monitor erosion at entrances to the aquatic caves and evaluate and mitigate impacts as needed.	Monitoring conducted	C	\$4,000
Objective C	Monitor and evaluate the impacts of historic cattle dipping operations at Dudley Farm.	Monitoring conducted	C	\$8,000
Action 1	Continue to cooperate with appropriate agencies and experts regarding soil, surface water, and groundwater monitoring and assessment associated with the historic cattle dip vat contamination in the park.	Monitoring/assessments conducted	C	\$8,000
Goal III: Restore and maintain the natural communities/habitats of the park.		Measure	Planning Period	Estimated Manpower and Expense Cost* (10-years)
Objective A	Within 10 years have 175 acres of the park maintained within optimal fire return interval.	# Acres within fire return interval target	LT	\$125,000
Action 1	Develop/update annual burn plan.	Plan updated	C	\$10,000
Action 2	Manage fire dependent communities for ecosystem function, structure and processes by burning between 20 - 230 acres annually, as identified by the annual burn plan.	Average # acres burned annually	C	\$115,000
Objective B	Conduct habitat/natural community restoration activities on 16 acres of upland mixed woodland natural community.	# Acres restored or with restoration underway	UFN	\$11,152
Action 1	Develop/update site specific restoration plan	Plan developed/updated	ST	\$1,000
Action 2	Implement restoration plan	# Acres with restoration underway	UFN	\$10,152
Objective C	Conduct natural community/habitat improvement activities on 24 acres of upland hardwood forest natural community.	# Acres improved or with improvements underway	UFN	\$5,000
Action 1	Implement habitat improvement in successional hardwood forest.	# Acres improved or with improvements underway	UFN	\$5,000

* 2017 Dollars
ST = actions within 2 years
LT = actions within 10 years
C = long term or short term actions that are continuous or cyclical
UFN = currently unfunded need

Table 9
Park Name Ten-Year Implementation Schedule and Cost Estimates
Sheet 2 of 4

NOTE: THE DIVISION'S ABILITY TO COMPLETE THE OBJECTIVES OUTLINED BY THE MANAGEMENT PLAN IS CONTINGENT ON THE AVAILABILITY OF FUNDING AND OTHER RESOURCES FOR THESE PURPOSES.				
Goal IV: Maintain, improve or restore imperiled species populations and habitats in the park.		Measure	Planning Period	Estimated Manpower and Expense Cost* (10-years)
Objective A	Update baseline imperiled species occurrence inventory lists for plants and animals, as needed.	List updated	C	\$2,000
Objective B	Monitor and document 3 selected imperiled animal species in the park.	# Species monitored	C	\$2,000
Action 1	Develop monitoring protocols for 3 selected imperiled animal species including the Florida cave isopod, Hobbs' cave amphipod, and the light-fleeing cave crayfish.	# Protocols developed	ST	\$700
Action 2	Implement monitoring protocols for the 3 imperiled animal species listed in Action 1 above.	# Species monitored	C	\$1,300
Objective C	Monitor and document 2 selected imperiled plant species in the park.	# Species monitored	C	\$700
Action 1	Develop a monitoring protocol for 1 selected imperiled plant species, incised agrimony.	# Protocols developed	ST	\$250
Action 2	Implement monitoring protocols for 2 imperiled plant species, incised agrimony and little ladiestresses.	# Species monitored	C	\$450
Goal V: Remove exotic and invasive plants and animals from the park and conduct needed maintenance-control.		Measure	Planning Period	Estimated Manpower and Expense Cost* (10-years)
Objective A	Annually treat 3 acres of exotic plant species in the park.	# Acres treated	C	\$13,240
Action 1	Annually develop/update exotic plant management work plan.	Plan developed/updated	C	\$3,840
Action 2	Implement annual work plan by treating 3 acres in park, annually, and continuing maintenance and follow-up treatments, as needed.	Plan implemented	C	\$9,400
Objective B	Develop and implement measures to prevent the accidental introduction or further spread of invasive exotic plants in the parks.	# Species for which control measures implemented	C	\$2,000
Action 1	Develop preventative measures, including a protocol for equipment inspection and decontamination, designed to limit the accidental introduction and spread of invasive exotic plants.		ST	\$1,000
Action 2	Implement preventative measures, including the protocol listed in Action 1 above.		C	\$1,000
Objective C	Implement control measures on 1 exotic animal species in the park.	Measures implemented	C	\$1,000
Action 1	Remove exotic animals as they appear in the park.	Animals removed	C	\$1,000
Goal VI: Protect, preserve and maintain the cultural resources of the park.		Measure	Planning Period	Estimated Manpower and Expense Cost* (10-years)
Objective A	Assess and evaluate 4 of 24 recorded cultural resources in the park.	Documentation complete	LT	\$28,000
Action 1	Complete 4 assessments/evaluations of archaeological sites. Prioritize preservation and stabilization projects.	Assessments complete	LT	\$3,000
Action 2	Complete a Historic American Landscape Survey for the park's historic buildings and cultural landscape.	Reports and priority lists completed	UFN	\$25,000
Objective B	Compile reliable documentation for all recorded historic and archaeological sites.	Documentation complete	LT	\$466,000
Action 1	Ensure all known sites are recorded or updated in the Florida Master Site File.	# Sites recorded or updated	ST	\$5,000

* 2017 Dollars
ST = actions within 2 years
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UFN = currently unfunded need

Table 9
Park Name Ten-Year Implementation Schedule and Cost Estimates
Sheet 3 of 4

NOTE: THE DIVISION'S ABILITY TO COMPLETE THE OBJECTIVES OUTLINED BY THE MANAGEMENT PLAN IS CONTINGENT ON THE AVAILABILITY OF FUNDING AND OTHER RESOURCES FOR THESE PURPOSES.				
Action 2	Conduct Level 1 archaeological survey for 3 priority areas identified by the predictive model.	Survey completed	UFN	\$20,000
Action 3	Update and adopt a Scope of Collections Statement.	Document completed	ST	\$1,000
Action 4	Within the context of the social history of the era and as a representative example, compile the history of the Dudley family in South Carolina, the move to Florida, and the early years in Florida before establishment of Dudley Farm.	Interviews complete	LT	\$15,000
Action 5	Develop a protocol for long term management of the collection, complete the cataloguing and scanning of the collection into Past Perfect database via dedicated staff and establish an internet connection access at the collections facility to allow integration into the Division database.	Long term management protocol established, internet connection created and collection entered	LT	\$370,000
Action 6	Adopt and implement the Division Access Policy to allow a secure process to permit physical viewing of the collection by approved researchers.	Process developed/implemented	UFN	\$5,000
Action 7	Develop and implement a conservation needs and restoration plan for fragile collection items such as photographs, documents or fabrics.	Plan developed	UFN	\$50,000
Objective C	Bring 3 of 24 recorded cultural resources into good condition.	# Sites in good condition	LT	\$177,000
Action 1	Design and implement a program for regular monitoring of all cultural sites.	# Sites monitored	C	\$7,000
Action 2	Create and implement a cyclical maintenance program for each cultural resource.	Programs implemented	C	\$90,000
Action 3	Bring the dairy shed / canning house / laundry house structure, the Dudley Farm Chicken Coop (AL2328R), and the tobacco barn (AL2328F) into good condition.	Projects completed	UFN	\$80,000
Goal VII: Provide public access and recreational opportunities in the park.		Measure	Planning Period	Estimated Manpower and Expense Cost* (10-years)
Objective A	Maintain the park's current recreational carrying capacity of 230 users per day.	# Recreation/visitor	C	\$584,558
Objective B	Expand the park's recreational carrying capacity by 400 users per day.	# Recreation/visitor	ST or LT	\$1,016,622
Objective C	Continue to provide the current repertoire of 8 interpretive, educational and recreational programs on a regular basis.	# Interpretive/education programs	C	\$40,000
Objective D	Develop 2 new interpretive, educational and recreational programs.	# Interpretive/education programs	ST or LT	\$14,000
Goal VIII: Develop and maintain the capital facilities and infrastructure necessary to meet the goals and objectives of this management plan.		Measure	Planning Period	Estimated Manpower and Expense Cost* (10-years)
Objective A	Maintain all public and support facilities in the park.	Facilities maintained	C	\$661,473
Objective B	Continue to implement the park's transition plan to ensure facilities are accessible in accordance with the American with Disabilities Act of 1990.	Plan implemented	ST or LT	\$10,000
Objective C	Improve and/or repair 4 existing facilities as identified in the Land Use Component.	# Facilities/Miles of Trail/Miles of Road	LT	\$598,643

* 2017 Dollars
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UFN = currently unfunded need

Table 9
Park Name Ten-Year Implementation Schedule and Cost Estimates
Sheet 4 of 4

NOTE: THE DIVISION'S ABILITY TO COMPLETE THE OBJECTIVES OUTLINED BY THE MANAGEMENT PLAN IS CONTINGENT ON THE AVAILABILITY OF FUNDING AND OTHER RESOURCES FOR THESE PURPOSES.				
Objective D	Construct 2 miles of trail as identified in the Land Use Component.	# Facilities/Miles of Trail/Miles of Road	LT	\$155,232
Objective E	Expand maintenance activities as existing facilities are improved and new facilities are developed.	Facilities maintained	C	\$1,150,388
Summary of Estimated Costs				
Management Categories			Total Estimated Manpower and Expense Cost* (10-years)	
Resource Management			\$854,942	
Administration and Support			\$84,273	
Capital Improvements			\$763,875	
Recreation Visitor Services			\$3,467,042	
Law Enforcement Activities		Note: Law enforcement activities in Florida State Parks are conducted by the FWC Division of Law Enforcement and by local law enforcement agencies.		

* 2017 Dollars
ST = actions within 2 years
LT = actions within 10 years
C = long term or short term actions that are continuous or cyclical
UFN = currently unfunded need

Addendum 1—Acquisition History

Dudley Farm Historic State Park Acquisition History

LAND ACQUISITION HISTORY REPORT					
Park Name	Dudley Farm Historic State Park				
Date Updated	5/31/2016				
County	Alachua County, Florida				
Trustees Lease Number	Lease No. 3366				
Current Park Size	327.44 acres				
Purpose of Acquisition	The State of Florida acquired Dudley Farm Historic Sttate Park to use the property soley as the site of agricultural exhibition park and historic Site.				
Acquisition History					
Parcel Name	Date Acquired	Initial Seller	Initial Purchaser	Size in acres	Instrument Type
MDID 4135	6/24/1986	Myrtle E. Dudley	The Board of Trustees of the Internal Improvement Trust Fund of the State of Florida (Trustees)	159.942	Warranty Deed
MDID 14616	12/18/1997	Barry Land and Development Company, Inc.	Trustees	77.547	Warranty Deed
MDID 4136	9/22/1986	Myrtle E. Dudley	Trustees	75.781	Warranty Deed
MDID 4134	06/08/183	Myrtle E. Dudley	Trustees	13.658	Special Warranty Deed
Management Lease					
Lease Number	Date Leased	Initial Lessor	Initial Lessee	Current Term	Expiration Date
Lease No. 3366	10/31/1984	The Board of Trustees of the Internal Improvement Trust Fund of the State of Florida	The State of Florida Departmnetnt of Natural Resources for the use and benefit of the Division of Recreation and Parks	50 years	10/30/2034
Outstanding Issue	Type of Instrument	Brief Description of the Outstanding Issue		Term of the Outstanding Issue	
Reverter	Special Warranty Deed	Subject property will be used only as a site for agriclultural exhibition park and historic site for ever. If the property is not used for the stated purposes, it shall revert back to the grantor.		Perpetuity	

Addendum 2—Advisory Group Members and Report

**Dudley Farm Historic State Park
Advisory Group Members and Report**

{List}

**Dudley Farm Historic State Park
Advisory Group Members and Report**

{ Report }

Addendum 3—References Cited

Dudley Farm Historic State Park References Cited

- Alachua County. 2010. Alachua County Comprehensive Plan 2011-2013. Alachua County, Florida.
- Bradbury, Alford, and E. S. Hallock. 1962. Chronology of Florida Post Offices. Florida Federation of Stamp Clubs.
- Clark, W. E., R. H. Musgrove, C.G. Menke, and J. W. Cagle Jr. 1964. Water resources of Alachua, Bradford, Clay, and Union Counties, Florida. Florida Geological Survey, Report of Investigations No. 35. 170pp.
- Collins, L. D., S. Fernandez, J. P. Du Vernay, K.A. Driscoll, and T. Doering. 2012. Archaeological Resource Sensitivity Modeling in Florida State Parks District 2: the Northeast Florida Region. Alliance for Integrated Spatial Technologies, University of South Florida. Pp. 1063 pp.
- Copeland, R. 2003. Florida Spring classification system and spring glossary. Florida Geological Survey, Special Publication Number 52. Florida Geological Survey, Tallahassee, Florida. 18pp.
- Copeland, R. N. Duran, A. White, and S. Upchurch 2011. Regional and statewide trends in Florida spring and well groundwater quality (1991-2003). Bulletin number 69 (revised). Florida Geological Survey, Florida Department of Environmental Protection, Tallahassee, Florida. 417pp.
- Davis, Jess. 1970. History of Alachua County, 1824-1969. n.p.
- Dickinson, M. F. and L. B. Wayne. 2001. Dudley Farm State Historic Site Kitchen/Porch Relocation Archeological Study, Alachua County, Florida. A report prepared for FL DEP, O'Leno State Park by Southarc, Inc. Report number 211-01-01. 43pp + Appendices.
- Dickinson, M. F. and L. B. Wayne. 2002. Buggy Barns to Smokehouses: Archaeology at Dudley Farm State Historic Site, Alachua County, Florida. A report prepared for FL DEP, O'Leno State Park by Southarc, Inc. Report number 211-01-02. 187pp. + Appendices.
- FDEP. 2013. *Outdoor Recreation in Florida 2013*. Tallahassee, Florida.
- FDEP 2014. Florida Department Environmental Protection Map direct: Geographic Information Systems. Accessed November 2014 at URL <http://www.dep.state.fl.us/gis/>
- FDEP. 2015. *Florida State Park System Economic Impact Assessment for Fiscal Year 2014/2015*. Tallahassee, FL.
- FLEPPC 2013. Florida Exotic Pest Plant Council's 2013 List of Invasive Plant Species. Internet: <http://www.fleppc.org/list/list.htm>

Dudley Farm Historic State Park References Cited

- Florida Natural Areas Inventory. 2010. Guide to the Natural Communities of Florida 2010 Edition. Tallahassee, FL. 276 pp.
- Gore, J. A., and J. A. Hovis. 1994. Southeastern myotis maternity cave survey. Florida Game and Fresh Water Fish Comm. Nongame Wildl. Program Final Perf. Rep. 33 pp.
- Historic American Buildings Survey, "Dudley Farm, Farmhouse & Outbuildings," 1992. Prints & Photographs Division, Library of Congress, HABS FL-565, <http://www.loc.gov/pictures/collection/hh/item/fl0707/>.
- Hope, H. 2005. Dip that tick: Texas tick fever eradication in Arkansas, 1907-1943. Arkansas historic Preservation Program, Department of Arkansas Heritage, Little Rock, Arkansas. 18pp.
- Krause, A. A. 1990. The Dudley Farm caves. The Florida Speleologist. Volume 27(1), 4-10pp.
- Mayfield, A.E. and M.C. Thomas 2009. Pest Alert: the redbay ambrosia beetle, *Xyleborus glabratus* Eichhoff (Scolytinae: Curculionidae). Florida Department of Agriculture and Consumer Services, Division of Plant Industry. DACS-P-01651. 4pp.
- Morris, T., and P. L. Butt. 1995. Status and distribution of the Florida cave shrimp (*Palaemonetes cummingi*) and other species in Cherry Pits Cave, Alachua County, FL.; Initial survey, August 1995. Prepared for the Florida Game and Fresh Water Fish Comm., Tallahassee, Florida. 14pp.
- Opdyke, John B., ed. 1974. Alachua County, a Sesquicentennial Tribute. Gainesville, Florida: Alachua County Historical Commission.
- Parencia, C. R., Jr. 1978. 120 Years of Research on Cotton Insects in the United States. U.S.D.A. Handbook #515, March 1978. Washington, D.C.: Government Printing Office.
- Pirkle E. 1956. Notes on physiographic features of Alachua County, Florida. Quarterly Journal of the Florida Academy of Sciences Vol. 19 No. 2-3. Gainesville, Florida. June-September 1956. 168-182pp.
- Plum Creek. 2013. *What is Envision Alachua*. Gainesville, Florida.
- Reddy, David. February 1, 1990. Material and Cultural Investigation of the Sugar Cane Grinding Complex: The Dudley Farm, Jonesville, Florida. Report submitted to District III Administration, Division of Recreation and Parks.
- Reve, W. 2002. Personal communication to District 2 Florida Park Service on 5 March 2002. University of Florida, Soil and Water Science Department, Gainesville, Florida.

Dudley Farm Historic State Park References Cited

- Reve, W. 2004. Personal communication to District 2 Florida Park Service on 4 August 2004. University of Florida, Soil and Water Science Department, Gainesville, Florida.
- Rhue, R. D., W. Reve, and J. Thomas 1996. Interim Report to the Florida Park Service for a permit to collect soil and water samples of the cattle dip vat from Dudley Farm State Historic Site. Report from University of Florida, Soil and Water Science Department, Gainesville, Florida.
- Rhue, R. D., 1997. Interim Report and renewal request for abandoned cattle dip vats at Dudley Farm and Paynes Prairie State Preserve. Report from University of Florida, Soil and Water Science Department, Gainesville, Florida. 2pp.
- Riley, I., B. Davis, K. D. Perkins, K. M. Davis and A. W. Barkdoll., Floristic inventory of Dudley Farm Historic State Park collections in: University of Florida Herbarium Collections Catalog, Florida Museum of Natural History, Gainesville, FL. Published on the internet at <http://www.flmnh.ufl.edu/herbarium/cat/> Accessed on October 2014.
- Scafidi, John. 8/25/96. Telephone Interview of Ranger Sally Morrison.
- Thomas, B. P., E. Cummings, and W. H. Wittstruck 1985. Soil survey of Alachua County, Florida. United States Department of Agriculture, Soil Conservation Service. 257pp + maps.
- Thomas, J.E. 1998. Distribution, Movement and Extraction of Arsenic in Selected Florida Soils. PhD Dissertation, University of Florida.
- University of Florida, Bureau of Economic and Business Research (UFL BEBR). 2014. *Florida Statistical Abstract 2013*.
- U.S. Department of Commerce, Bureau of Economic Analysis. 2014. 2013 *Personal Income Summary/Per Capital Personal Income*. <http://www.bea.gov/itable/>.
- U.S. Census Bureau. 2013. *State and County Quickfacts*. <http://quickfacts.census.gov/qfd/index.html>, 2014.
- Upchurch, S., J. Chen, and C. Cain 2011. Springsheds of the Santa Fe River. SDII Global Corporation. 3rd edition. Final Report to Alachua County Department of Environmental Protection. 93pp.
- Vernon, R. O. 1951. Geology of Citrus and Levy Counties, Florida. Florida Geologic Survey Bulletin 33, 255 pp.
- Visit Florida! 2013. *2013 Florida Visitor Survey*. Tallahassee, Florida.

Dudley Farm Historic State Park References Cited

- White, W. 1970. The geomorphology of the Florida peninsula. Geological Bulletin No. 51. State of Florida Department of Natural Resources, Bureau of Geology, Division of Resource Management, Florida Department of Natural Resources, Tallahassee. 172pp.
- Williams, K., D. Nicola, and A. Randazzo 1977. The geology of the western part of Alachua County, Florida. Report of Investigations No. 85, Florida Bureau of Geology, Tallahassee, Florida. 98pp.
- Williams, L.J., A.D. Dausman, and J.C. Bellino 2011. Relation of aquifer confinement and long-term groundwater level decline in the Floridan aquifer system. Proceedings of the 2011 Georgia Water Resources Conference held April 11–13, 2011, at the University of Georgia, Athens, Georgia. 2pp. abstract + map.
- Woodward-Clyde Consultants 1995. Cattle dip vat assessment program: A summary report. Prepared for Florida Department of Environmental Protection. Woodward-Clyde Consultants, 3676 Hartsfield Road Tallahassee FL 32303.
- Yunker, Donald K., conducted by. 1983-84. Tape Recorded Interviews of Myrtle Dudley, Gordon Garland, George McLarty.

Addendum 4—Soil Descriptions

Dudley Farm Historic State Park Soil Descriptions

3 – Arredondo fine sand, 0 to 5 percent slopes – This is a nearly level to gently sloping, well drained soil that occurs in the uplands. Slopes are smooth and convex in shape. This soil may contain small depressions, limestone boulders, fragments of limestone, and sinkholes. Most of these boulders are siliceous. The water table in this soil is at a depth of more than 72 inches. Surface runoff is slow due to rapid infiltration. Permeability is rapid in the surface and subsurface layers and moderately slow to moderate in the loamy subsoil.

The surface layer is dark grayish fine sand about 8 inches thick. The subsurface layer is yellowish brown fine sand to a depth of 49 inches. The subsoil extends to a depth of 86 inches or more and consists of yellowish brown sandy clay loam. Organic matter content is low.

8 – Millhopper sand, 0 to 5 percent slopes – This is a nearly level to gently sloping, moderately well drained soil that occurs in the uplands and on rolling knolls in the flatwoods. Slopes are mostly smooth and convex. The water table in this soil occurs at a depth of 40 to 60 inches for 1 to 4 months and at a depth of 60 to 72 inches for 2 to 4 months annually. Permeability is rapid in the surface and subsurface layers, moderately rapid in the upper 6 inches of the subsoil, and slow to moderately slow below this depth.

Typically, the surface layer is dark grayish brown sand about 9 inches thick. The subsurface layer is yellowish brown fine sand about 49 inches thick. The subsoil extends to a depth of 89 inches and consists of yellowish to grayish brown loamy sand and light gray mottled sandy clay loam. Organic matter content is low to moderately low.

29 – Lochloosa fine sand, 2 to 5 percent slopes – This is a somewhat poorly drained soil found on rolling uplands. Slopes are slightly convex. The water table is about 30 to 40 inches below the surface for 1 to 4 months during most years. The water table may rise to a depth of 20 to 30 inches for 1 to 3 weeks. Surface runoff is slow. Permeability is rapid in the surface and subsurface layers, moderate in the upper part of the subsoil, and slow in the lower part.

The surface layer is dark gray fine sand about 7 inches thick. The subsurface layer is yellowish brown loamy sand or sand to a depth of 31 inches. It has light gray and yellowish brown mottles below a depth of 21 inches. The subsoil extends to a depth of 76 inches and consists of gray or greenish sandy clay loam. Organic matter content is low to moderately low in the surface layer.

30 – Kendrick sand, 2 to 5 percent slopes – This is a gently sloping, well drained soil found on gently rolling uplands. The water table is more than 72 inches below the surface. Surface runoff is moderately slow. Permeability is rapid in the surface and subsurface layers and moderately slow in the subsoil.

Generally, the surface layer of this soil is dark grayish brown sand about 9 inches thick. The subsurface layer is yellowish brown loamy sand to a depth of

Dudley Farm Historic State Park Soil Descriptions

26 inches. The subsoil extends to a depth of 90 inches or more and consists of yellowish brown fine sandy loam and mottled yellowish brown sandy clay loam. Organic matter content is low to moderately low in the surface layer.

33 – Norfolk loamy fine sand, 2 to 5 percent slopes – This is a gently sloping, well drained soil occurring on rolling uplands. The slopes are slightly convex. The water table is at a depth of 48 to 72 inches for 1 to 3 months during most years. Surface runoff is medium. Permeability is rapid in the surface layer, moderately slow to moderate in the upper part of the subsoil, and very slow to slow in the lower part.

The surface layer is dark grayish brown loamy fine sand about 9 inches thick. The subsoil extends to a depth of 62 inches and consists of yellowish brown fine sandy clay loam. The underlying material between 62 and 80 inches deep is light gray mottled clay. Organic matter content is low to moderately low.

39 – Bonneau fine sand, 2 to 5 percent slopes – This is a gently sloping, moderately well drained soil found in the uplands. Slopes are generally slightly convex. The water table is at a depth of 40 to 60 inches for 1 to 3 months and at a depth of 60 to 72 inches for 2 to 3 months during most years. Surface runoff is slow. Permeability is moderately rapid to rapid in the sandy surface and subsurface layers and moderately slow to very slow in the subsoil.

The surface layer is dark gray fine sand about 9 inches thick. The subsurface layer is brownish yellow fine sand to a depth of 29 inches. The subsoil extends to a depth of 84 inches or more and consists of yellowish brown fine sandy loam and gray mottled sandy clay loam. Organic matter content is low to moderately low in the surface layer.

57 – Micanopy loamy fine sand, 2 to 5 percent slopes – This is a gently sloping, somewhat poorly drained soil occurring on rolling uplands. Slopes are slightly convex. This soil has a perched water table about 20 to 30 inches below the surface for cumulative periods of 1 to 3 months during most years. During dry periods the water table is at a depth of more than 60 inches. Surface runoff is medium. Permeability is rapid in the surface layer, moderate in the upper 6 inches of the subsoil, and slow to very slow below this depth.

Typically, the surface layer is dark grayish brown loamy fine sand about 6 inches thick. The subsoil extends to a depth of 77 inches and consists of yellowish brown sandy clay loam and gray mottled sandy clay loam. The underlying material between a depth of 77 to 85 inches is intermixed gray and greenish gray sandy clay loam. Organic matter content in the surface layer is moderately low to high.

Addendum 5—Plant and Animal List

Dudley Farm Historic State Park Plants

Common Name	Scientific Name	Primary Habitat Codes (for imperiled species)
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LICHENS

Reindeer lichen	<i>Cladina subtenuis</i>
Lichen	<i>Cladonia sp.</i>

PTERIDOPHYTES

Ebony spleenwort.....	<i>Asplenium platyneuron</i>
Japanese climbing fern	<i>Lygodium japonicum</i> *
Resurrection fern	<i>Pleopeltis polypodioides</i> var. <i>michauxiana</i>
Tailed bracken	<i>Pteridium aquilinum</i> var. <i>pseudocaudatum</i>
Chinese ladder brake	<i>Pteris vittata</i> *
Meadow spike-moss	<i>Selaginella apoda</i>
Widespread maiden fern	<i>Thelypteris kunthii</i>

GYMNOSPERMS

Sago palm.....	<i>Cycas revoluta</i> * ^
Red cedar	<i>Juniperus virginiana</i>
Slash pine	<i>Pinus elliotii</i>
Longleaf pine.....	<i>Pinus palustris</i>
Loblolly pine	<i>Pinus taeda</i>
Yew plum pine	<i>Podocarpus macrophyllus</i> * ^
Bald-cypress	<i>Taxodium distichum</i>
Coontie.....	<i>Zamia pumila</i>

ANGIOSPERMS

MONOCOTS

Garlic	<i>Allium sp.</i> ^
Onion	<i>Allium cepa</i> * ^
Meadow garlic	<i>Allium canadense</i> var. <i>canadense</i>
Bluestem	<i>Andropogon sp.</i>
Bushy bluestem	<i>Andropogon glomeratus</i> var. <i>pumilus</i>
Broomsedge bluestem	<i>Andropogon virginicus</i>
Wiregrass.....	<i>Aristida stricta</i> var. <i>beyrichiana</i>
Sprenger's asparagus-fern	<i>Asparagus aethiopicus</i> * ^
Common asparagus-fern.....	<i>Asparagus setaceus</i> * ^
Common oats	<i>Avena fatua</i> var. <i>sativa</i> * ^
Watergrass.....	<i>Bulbostylis barbata</i> *
Canna.....	<i>Canna sp.</i> * ^
Hammock sedge	<i>Carex fissa</i> var. <i>aristata</i>
Long's sedge	<i>Carex longii</i>

Dudley Farm Historic State Park Plants

Common Name	Scientific Name	Primary Habitat Codes (for imperiled species)
Whitemouth dayflower	<i>Commelina erecta</i>	
Spiral ginger.....	<i>Costus scaber</i> * ^	
Milk and wine crinum.....	<i>Crinum</i> sp. * ^	
White crinum.....	<i>Crinum</i> sp. * ^	
Poisonbulb	<i>Crinum asiaticum</i> *	
Striped spider lily	<i>Crinum augustum</i> * ^	
June bride lily	<i>Crinum jagus</i> * ^	
Montbretia	<i>Crocasmia x crocosmiiflora</i> * ^	
Hidden ginger	<i>Curcuma petiolata</i> * ^	
Bermudagrass	<i>Cynodon dactylon</i> *	
Poorland flatsedge	<i>Cyperus compressus</i>	
Baldwin's flatsedge.....	<i>Cyperus croceus</i>	
Umbrella plant	<i>Cyperus involucratus</i> * ^	
Nutgrass	<i>Cyperus rotundus</i> *	
Tapered witchgrass	<i>Dichantherium acuminatum</i> var. <i>acuminatum</i>	
Variable witchgrass	<i>Dichantherium commutatum</i>	
Openflower witchgrass.....	<i>Dichantherium laxiflorum</i>	
Southern crabgrass	<i>Digitaria ciliaris</i>	
Slender crabgrass	<i>Digitaria filiformis</i> var. <i>filiformis</i>	
Winged yam	<i>Dioscorea alata</i> *	
Air potato.....	<i>Dioscorea bulbifera</i> *	
Elliott's lovegrass	<i>Eragrostis elliottii</i>	
Purple lovegrass	<i>Eragrostis spectabilis</i>	
Centipedegrass	<i>Eremochloa ophiuroides</i> *	
Pinewoods fingergrass	<i>Eustachys petrea</i>	
Gladiolus.....	<i>Gladiolus</i> sp. * ^	
Flamelily	<i>Gloriosa superba</i> * ^	
White gingerlily.....	<i>Hedychium coronarium</i> * ^	
Daylily	<i>Hemerocallis</i> sp. * ^	
Amaryllis.....	<i>Hippeastrum</i> sp. * ^	
Cogongrass	<i>Imperata cylindrica</i> *	
Shrimpplant	<i>Justicia brandegeana</i> * ^	
Shortleaf spikesedge	<i>Kyllinga brevifolia</i> *	
Snowflake	<i>Leucojum</i> sp. * ^	
Lily.....	<i>Lilium</i> sp. * ^	
Easter lily.....	<i>Lilium longiflorum</i> * ^	
Golden spider lily	<i>Lycoris aurea</i> * ^	
Common banana.....	<i>Musa x paradisiaca</i> * ^	
Daffodil.....	<i>Narcissus</i> sp. * ^	
Jonquil.....	<i>Narcissus jonquilla</i> * ^	
Cream narcissus	<i>Narcissus tazetta</i> * ^	
Burmans's basketgrass.....	<i>Oplismenus burmannii</i> *	
Woodsgrass.....	<i>Oplismenus hirtellus</i>	
Panic grass.....	<i>Panicum</i> spp.	
Beaked panicum	<i>Panicum anceps</i>	
Bahigrass	<i>Paspalum notatum</i> var. <i>saurae</i> *	

Dudley Farm Historic State Park Plants

Common Name	Scientific Name	Primary Habitat Codes (for imperiled species)
Thin paspalum	<i>Paspalum setaceum</i>	
Black bamboo.....	<i>Phyllostachys nigra</i> *	
Annual bluegrass	<i>Poa annua</i> *	
Giant orchid	<i>Pteroglossaspis ecristata</i>	RNC
Starrush whitetop	<i>Rhynchospora</i> sp.	
Cabbage palm	<i>Sabal palmetto</i>	
Sugarcane.....	<i>Saccharum</i> sp. ^	
Snake plant.....	<i>Sansevieria trifasciata</i> * ^	
Fringed nutrush	<i>Scleria ciliata</i>	
Saw palmetto	<i>Serenoa repens</i>	
Yellow bristlegrass	<i>Setaria parviflora</i>	
Narrowleaf blue-eyed grass	<i>Sisyrinchium angustifolium</i>	
Annual blueeyed grass.....	<i>Sisyrinchium rosulatum</i> *	
Earleaf greenbrier	<i>Smilax</i> cf. <i>auriculata</i>	
Saw greenbrier	<i>Smilax bona-nox</i>	
Cat greenbrier	<i>Smilax glauca</i>	
Laurel greenbrier	<i>Smilax laurifolia</i>	
Lanceleaf greenbrier.....	<i>Smilax</i> cf. <i>smallii</i>	
Bristly greenbrier	<i>Smilax tamnoides</i>	
Grain sorghum.....	<i>Sorghum bicolor</i> * ^	
Prairie wedgescale	<i>Sphenopholis obtusata</i>	
Little ladiestresses	<i>Spiranthes</i> cf. <i>tuberosa</i>	AFP
Spring ladiestresses	<i>Spiranthes vernalis</i>	
Ballmoss	<i>Tillandsia recurvata</i>	
Spanish moss	<i>Tillandsia usneoides</i>	
Small-leaf spiderwort	<i>Tradescantia fluminensis</i> *	
Bluejacket; Ohio spiderwort	<i>Tradescantia ohiensis</i>	
Tall redtop	<i>Tridens flavus</i> var. <i>flavus</i>	
Arrowleaf elephant's ear	<i>Xanthosoma sagittifolium</i> * ^	
Spanish bayonet	<i>Yucca aloifolia</i>	
Corn.....	<i>Zea mays</i> ssp. <i>mays</i> * ^	
Rainlily	<i>Zephyranthes</i> sp. * ^	
Autumn zephyrlily	<i>Zephyranthes candida</i> * ^	
Bitter ginger	<i>Zingiber zerumbet</i> * ^	

DICOTS

Okra.....	<i>Abelmoschus esculentus</i> ^	
Slender threeseed mercury	<i>Acalypha gracilens</i>	
Look up	<i>Acer negundo</i>	
Red maple.....	<i>Acer rubrum</i>	
Hot water plant.....	<i>Achimenes</i> cf. <i>longiflora</i> * ^	
Red buckeye.....	<i>Aesculus pavia</i> ^	
Beach false foxglove.....	<i>Agalinis fasciculata</i>	
Incised agrimony	<i>Agrimonia incisa</i>	AFP
Mimosa.....	<i>Albizia julibrissin</i> *	
Common ragweed	<i>Ambrosia artemisiifolia</i>	

Dudley Farm Historic State Park Plants

Common Name	Scientific Name	Primary Habitat Codes (for imperiled species)
Devil's walkingstick	<i>Aralia spinosa</i>	
Coral ardisia	<i>Ardisia crenata</i> *	
Butterflyweed	<i>Asclepias tuberosa</i>	
Whorled milkweed.....	<i>Asclepias verticillata</i>	
Showy milkwort	<i>Asemeia violacea</i>	
Slimleaf pawpaw	<i>Asimina angustifolia</i>	
Dwarf pawpaw	<i>Asimina pygmea</i>	
Groundsel tree; Sea-myrtle.....	<i>Baccharis halimifolia</i>	
Coastalplain honeycombhead....	<i>Balduina angustifolia</i>	
Crested Philippine violet.....	<i>Barleria cristata</i> * ^	
Beet	<i>Beta vulgaris</i> var. <i>esculenta</i> * ^	
Beggarticks	<i>Bidens alba</i>	
Spanish needles.....	<i>Bidens bipinnata</i>	
False nettle; Bog hemp.....	<i>Boehmeria cylindrica</i>	
India mustard; leaf mustard....	<i>Brassica juncea</i> * ^	
Rape; turnip	<i>Brassica rapa</i> * ^	
Angel's trumpet	<i>Brugmansia</i> sp. * ^	
American bluehearts.....	<i>Buchnera americana</i>	
Butterfly bush.....	<i>Buddleja</i> cf. <i>davidii</i> * ^	
American beautyberry	<i>Callicarpa americana</i>	
Eastern sweetshrub.....	<i>Calycanthus floridus</i> var. <i>floridus</i> ^	DV
Camellia	<i>Camellia japonica</i> * ^	
Trumpet creeper	<i>Campsis radicans</i>	
Trumpet vine.....	<i>Campsis</i> x <i>tagliabuana</i> ^	
Shepherd's purse	<i>Capsella bursa-pastoris</i> *	
Pepper.....	<i>Capsicum annuum</i> ^	
Pignut hickory	<i>Carya glabra</i>	
Pecan	<i>Carya illinoensis</i> * ^	
Southern catalpa.....	<i>Catalpa bignonioides</i>	
Sugarberry; Hackberry	<i>Celtis laevigata</i>	
Common buttonbush	<i>Cephalanthus occidentalis</i>	
Mouse-ear chickweed	<i>Cerastium glomeratum</i> *	
Redbud.....	<i>Cercis canadensis</i>	
Hairyfruit chervil.....	<i>Chaerophyllum tainturieri</i>	
Partridge pea.....	<i>Chamaecrista fasciculata</i>	
Sensitive pea.....	<i>Chamaecrista nictitans</i> var. <i>nictitans</i>	
Pillpod sandmat	<i>Chamaesyce hirta</i>	
White fringetree.....	<i>Chionanthus virginicus</i> ^	
Camphor-tree	<i>Cinnamomum camphora</i> *	
Purple thistle	<i>Cirsium horridulum</i>	
Nuttall's thistle	<i>Cirsium nuttallii</i>	
Watermelon	<i>Citrullus lanatus</i> * ^	
Netleaf leather-flower	<i>Clematis reticulata</i>	
Turk's turban.....	<i>Clerodendrum indicum</i> * ^	
Tread-softly.....	<i>Cnidioscolus stimulosus</i>	
Blue mistflower	<i>Conoclinium coelestinum</i> ^	

Dudley Farm Historic State Park Plants

Common Name	Scientific Name	Primary Habitat Codes (for imperiled species)
Doubtful knight's-spur	<i>Consolida ajacis</i> * ^	
Canadian horseweed	<i>Conyza canadensis</i> var. <i>pusilla</i>	
Goldenmane tickseed	<i>Coreopsis basalis</i> * ^	
Lanceleaf tickseed.....	<i>Coreopsis lanceolata</i> ^	
Roughleaf dogwood	<i>Cornus asperifolia</i>	
Flowering dogwood	<i>Cornus florida</i>	
Swamp dogwood.....	<i>Cornus foemina</i>	
Smallflower fumewort.....	<i>Corydalis micrantha</i> ssp. <i>australis</i>	
Pinebarren frostweed.....	<i>Crocanthemum corymbosum</i>	
Slender scratchdaisy	<i>Croptilon divaricatum</i>	
Lanceleaf rattlebox.....	<i>Crotalaria lanceolata</i> *	
Rabbitbells	<i>Crotalaria rotundifolia</i>	
Showy rattlebox.....	<i>Crotalaria spectabilis</i> *	
Silver croton.....	<i>Croton argyranthemus</i>	
Vente conmigo.....	<i>Croton glandulosus</i> var. <i>septentrionalis</i>	
Rushfoil	<i>Croton michauxii</i>	
Garden cucumber.....	<i>Cucumis sativus</i> * ^	
Seminole pumpkin	<i>Cucurbita moschata</i> * ^	
Squash	<i>Cucurbita pepo</i> * ^	
Dahlia.....	<i>Dahlia x hortensis</i> * ^	
Florida ticktrefoil	<i>Desmodium floridanum</i>	
Dillenius' ticktrefoil.....	<i>Desmodium glabellum</i>	
Zarabacoa comun	<i>Desmodium incanum</i> *	
Sand ticktrefoil	<i>Desmodium</i> cf. <i>lineatum</i>	
Dixie ticktrefoil	<i>Desmodium tortuosum</i> *	
Threeflower ticktrefoil.....	<i>Desmodium triflorum</i> *	
Poor Joe.....	<i>Diodia teres</i>	
Common persimmon	<i>Diospyros virginiana</i>	
Drymary	<i>Drymaria cordata</i>	
Tall elephantsfoot	<i>Elephantopus elatus</i>	
Lilac tasselflower.....	<i>Emilia sonchifolia</i> *	
American burnweed	<i>Erechtites hieraciifolius</i>	
Oakleaf fleabane	<i>Erigeron quercifolius</i>	
Prairie fleabane.....	<i>Erigeron strigosus</i>	
Loquat	<i>Eriobotrya japonica</i> *	
Baldwin's eryngo.....	<i>Eryngium baldwinii</i>	
Coralbean; Cherokee bean	<i>Erythrina herbacea</i>	
Thoroughwort.....	<i>Eupatorium</i> sp.	
Dogfennel	<i>Eupatorium capillifolium</i>	
Yankeeweed	<i>Eupatorium compositifolium</i>	
Slender flattop goldenrod.....	<i>Euthamia caroliniana</i>	
Annual trampweed	<i>Facelis retusa</i> *	
Hairy crabweed.....	<i>Fatoua villosa</i> *	
Common fig	<i>Ficus carica</i> * ^	
Strawberry	<i>Fragaria</i> sp. * ^	
Downy milkpea	<i>Galactia regularis</i>	

Dudley Farm Historic State Park Plants

Common Name	Scientific Name	Primary Habitat Codes (for imperiled species)
Goosegrass	<i>Galium aparine</i>	
Coastal bedstraw	<i>Galium hispidulum</i>	
Stiff marsh bedstraw	<i>Galium tinctorium</i>	
White-cloaked cudweed	<i>Gamochaeta chionesthes</i>	
American everlasting	<i>Gamochaeta coarctata</i> *	
Pennsylvania everlasting	<i>Gamochaeta pensylvanica</i>	
Southern beeblossom	<i>Gaura angustifolia</i>	
Yellow jessamine	<i>Gelsemium sempervirens</i>	
Carolina cranesbill	<i>Geranium carolinianum</i>	
Upland cotton	<i>Gossypium hirsutum</i> ^	
English ivy	<i>Hedera</i> cf. <i>helix</i> * ^	
Jerusalem artichoke	<i>Helianthus tuberosus</i> * ^	
Clasping heliotrope	<i>Heliotropium amplexicaule</i> *	
Roselle	<i>Hibiscus sabdariffa</i> * ^	
Innocence	<i>Houstonia procumbens</i>	
Hydrangea	<i>Hydrangea macrophylla</i> * ^	
Lacecap hydrangea	<i>Hydrangea macrophylla</i> var. <i>normalis</i> * ^	
Oakleaf hydrangea	<i>Hydrangea quercifolia</i> ^	
St. John's wort	<i>Hypericum</i> sp.	
Pineweeds	<i>Hypericum gentianoides</i>	
St. Andrew's-cross	<i>Hypericum hypericoides</i>	
South American catsear	<i>Hypochaeris</i> cf. <i>chillensis</i> *	
Tropical bushmint	<i>Hyptis mutabilis</i> *	
American holly	<i>Ilex opaca</i>	
Yaupon	<i>Ilex vomitoria</i>	
Hairy indigo	<i>Indigofera hirsuta</i> *	
Sweetpotato	<i>Ipomoea batatas</i> * ^	
Tievine	<i>Ipomoea cordatotriloba</i>	
Ivyleaf morning-glory	<i>Ipomoea hederacea</i> *	
Cypressvine	<i>Ipomoea quamoclit</i> *	
Juba's bush	<i>Iresine</i> cf. <i>diffusa</i>	
Black walnut	<i>Juglans nigra</i> ^	
Grassleaf lettuce	<i>Lactuca graminifolia</i>	
Bottle gourd	<i>Lagenaria siceraria</i> * ^	
Crapemyrtle	<i>Lagerstroemia indica</i> * ^	
Henbit deadnettle	<i>Lamium amplexicaule</i> *	
Lantana; Shrubverbena	<i>Lantana camara</i> * ^	
Lion's-ear	<i>Leonotis nepetifolia</i> *	
Virginia pepperweed	<i>Lepidium virginicum</i>	
Japanese privet	<i>Ligustrum japonicum</i> * ^	
Glossy privet	<i>Ligustrum lucidum</i> *	
Chinese privet	<i>Ligustrum sinense</i> *	
Canadian toadflax	<i>Linaria canadensis</i>	
Sweetgum	<i>Liquidambar styraciflua</i>	
Tuliptree	<i>Liriodendron tulipifera</i> ^	
Japanese honeysuckle	<i>Lonicera japonica</i> * ^	

Dudley Farm Historic State Park Plants

Common Name	Scientific Name	Primary Habitat Codes (for imperiled species)
Southern magnolia	<i>Magnolia grandiflora</i>	
Black medick	<i>Medicago lupulina</i> *	
Snow squarstem	<i>Melanthera nivea</i>	
Creeping cucumber	<i>Melothria pendula</i>	
Noyau vine.....	<i>Merremia dissecta</i>	
Four-o'-clock	<i>Mirabilis jalapa</i> * ^	
Partridgeberry	<i>Mitchella repens</i>	
Tropical girdlepod	<i>Mitracarpus hirtus</i> *	
Red mulberry	<i>Morus rubra</i>	
Wax myrtle	<i>Myrica cerifera</i>	
Cultivated tobacco	<i>Nicotiana tabacum</i> * ^	
Firespike	<i>Odontonema cuspidatum</i> * ^	
Cutleaf eveningprimrose	<i>Oenothera laciniata</i>	
Flattop mille grains	<i>Oldenlandia corymbosa</i> *	
Pricklypear	<i>Opuntia humifusa</i>	
Oregano	<i>Origanum vulgare</i> * ^	
Tea olive.....	<i>Osmanthus fragrans</i> * ^	
Common yellow woodsorrel.....	<i>Oxalis corniculata</i>	
Pink woodsorrel	<i>Oxalis debilis</i> var. <i>corymbosa</i> *	
Broadleaf woodsorrel.....	<i>Oxalis intermedia</i> *	
Skunkvine	<i>Paederia foetida</i> *	
Virginia creeper	<i>Parthenocissus quinquefolia</i>	
Purple passionflower.....	<i>Passiflora incarnata</i>	
Spreading cinchweed.....	<i>Pectis prostrata</i>	
Red bay	<i>Persea borbonia</i>	
Lima bean	<i>Phaseolus lunatus</i> * ^	
Kidney bean	<i>Phaseolus vulgaris</i> * ^	
Garden phlox.....	<i>Phlox paniculata</i> * ^	
Oak mistletoe	<i>Phoradendron leucarpum</i>	
Turkey tangle fogfruit	<i>Phyla nodiflora</i>	
Mascarene Island leafflower	<i>Phyllanthus tenellus</i> *	
Chamber bitter	<i>Phyllanthus urinaria</i> *	
Groundcherry	<i>Physalis</i> sp.	
Obedient plant	<i>Physostegia virginiana</i> * ^	
American pokeweed	<i>Phytolacca americana</i>	
Artillery plant	<i>Pilea microphylla</i>	
Pitted stripe seed	<i>Piriqueta cistoides</i> ssp. <i>caroliniana</i>	
Garden pea	<i>Pisum sativum</i> * ^	
Virginia plantain.....	<i>Plantago virginica</i>	
American sycamore.....	<i>Platanus occidentalis</i> ^	
Paintedleaf	<i>Poinsettia cyathophora</i>	
Fiddler's spurge	<i>Poinsettia heterophylla</i>	
Dotted smartweed.....	<i>Polygonum punctatum</i>	
Rustweed.....	<i>Polypremum procumbens</i>	
Paraguayan purslane	<i>Portulaca amilis</i> *	
Chickasaw plum.....	<i>Prunus angustifolia</i>	

Dudley Farm Historic State Park Plants

Common Name	Scientific Name	Primary Habitat Codes (for imperiled species)
Carolina laurelcherry	<i>Prunus caroliniana</i>	
Peach	<i>Prunus persica</i> * ^	
Black cherry	<i>Prunus serotina</i>	
Flatwoods plum; Hog plum	<i>Prunus umbellata</i>	
Sweet everlasting	<i>Pseudognaphalium obtusifolium</i>	
Blackroot	<i>Pterocaulon pycnostachyum</i>	
Kudzu	<i>Pueraria montana</i> var. <i>lobata</i> *	
Carolina desertchicory	<i>Pyrrhopappus carolinianus</i>	
Common pear	<i>Pyrus communis</i> * ^	
Bastard white oak	<i>Quercus austrina</i>	
Sand live oak	<i>Quercus geminata</i>	
Laurel oak; Diamond oak	<i>Quercus laurifolia</i>	
Swamp chestnut oak	<i>Quercus michauxii</i>	
Water oak	<i>Quercus nigra</i>	
Live oak	<i>Quercus virginiana</i>	
Carolina buckthorn	<i>Rhamnus caroliniana</i>	
Azalea	<i>Rhododendron simsii</i> * ^	
Winged sumac	<i>Rhus copallinum</i>	
Tropical Mexican clover	<i>Richardia brasiliensis</i> *	
Rose	<i>Rosa</i> sp. * ^	
Green rose	<i>Rosa chinensis</i> f. <i>viridiflora</i> * ^	
Sand blackberry	<i>Rubus cuneifolius</i>	
Southern dewberry	<i>Rubus trivialis</i>	
Carolina wild petunia	<i>Ruellia caroliniensis</i>	
Heartwing dock	<i>Rumex hastatulus</i>	
Lyreleaf sage	<i>Salvia lyrata</i>	
American elder; Elderberry	<i>Sambucus nigra</i> subsp. <i>canadensis</i>	
Canadian blacksnakeroot	<i>Sanicula canadensis</i>	
Soapberry	<i>Sapindus saponaria</i>	
Chinese tallowtree	<i>Sapium sebiferum</i> *	
Common wireweed	<i>Sida ulmifolia</i>	
Indian hemp; Cuban jute	<i>Sida rhombifolia</i>	
Bully	<i>Sideroxylon</i> sp.	
Silver buckthorn	<i>Sideroxylon alachuense</i>	
Gum bully	<i>Sideroxylon lanuginosum</i>	
Sleepy catchfly	<i>Silene antirrhina</i>	
American black nightshade	<i>Solanum americanum</i>	
Garden tomato	<i>Solanum lycopersicum</i> * ^	
Irish potato	<i>Solanum tuberosum</i> * ^	
Goldenrod	<i>Solidago</i> sp.	
Canada goldenrod	<i>Solidago canadensis</i> var. <i>scabra</i>	
Twistedleaf goldenrod	<i>Solidago tortifolia</i>	
Spiny sowthistle	<i>Sonchus asper</i> *	
Roughfruit scaleseed	<i>Spermolepis divaricata</i>	
Bridal wreath	<i>Spiraea cantoniensis</i> * ^	
Florida hedgenettle	<i>Stachys floridana</i>	

Dudley Farm Historic State Park Plants

Common Name	Scientific Name	Primary Habitat Codes (for imperiled species)
Common chickweed.....	<i>Stellaria media</i> *	
Queensdelight	<i>Stillingia sylvatica</i>	
Rice button aster	<i>Symphyotrichum dumosum</i>	
Whitelady.....	<i>Thunbergia fragrans</i> * ^	
Carolina basswood	<i>Tilia americana</i> var. <i>caroliniana</i>	
Bluewings	<i>Torenia fournieri</i> * ^	
Eastern poison ivy.....	<i>Toxicodendron radicans</i>	
Forked bluecurls	<i>Trichostema dichotomum</i>	
White clover	<i>Trifolium repens</i> *	
Clasping Venus' looking-glass ...	<i>Triodanis perfoliata</i>	
Caesarweed	<i>Urena lobata</i> *	
Sparkleberry	<i>Vaccinium arboreum</i>	
Deerberry	<i>Vaccinium stamineum</i>	
Purpletop vervain.....	<i>Verbena incompta</i> *	
Texas vervain.....	<i>Verbena officinalis</i> ssp. <i>halei</i>	
Tuberous vervain	<i>Verbena rigida</i> *	
Corn speedwell	<i>Veronica arvensis</i> *	
Walter's viburnum.....	<i>Viburnum obovatum</i>	
Florida vetch	<i>Vicia floridana</i>	
Blackeyed pea; cowpea	<i>Vigna unguiculata</i> * ^	
Common blue violet	<i>Viola sororia</i>	
Summer grape	<i>Vitis aestivalis</i>	
Muscadine.....	<i>Vitis rotundifolia</i>	
Southern rockbell.....	<i>Wahlenbergia marginata</i> *	
Chinese wisteria.....	<i>Wisteria sinensis</i> * ^	
Oriental false hawksbeard	<i>Youngia japonica</i> *	
Hercules-club	<i>Zanthoxylum clava-herculis</i>	

INVERTEBRATES

Mollusks

Rosy Wolfsnail	<i>Euglandina rosea</i>	TCV
Toothed Globe	<i>Mesodon zaletus</i>	TCV

Crayfish

Florida Cave Isopod.....	<i>Caecidotea hobbsi</i>	ACV
Hobbs' Cave Amphipod	<i>Crangonyx hobbsi</i>	ACV
Alach. Light-fleeing Cave Cray. .	<i>Procambarus lucifugus</i>	ACV

Beetles

Punctured Tiger Beetle.....	<i>Cicindela punctulata</i>	MTC
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Spiders

James Cave Spider	<i>Azilia affinis</i>	TCV
Tropical Wolf Spider	<i>Ctenus captiosus</i>	TCV

Dudley Farm Historic State Park Animals

Common Name	Scientific Name	Primary Habitat Codes (for all species)
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Cave Cobweb Spider *Gaucelmus augustinus*TCV

Grasshoppers (GH)

Southern Greenstriped GH *Chortophaga australior*.....MTC

Dragonflies

Ebony Jewelwing *Calopteryx maculata*MTC

Regal Darner *Coryphaeschna ingens*MTC

Eastern Pondhawk..... *Erythemis simplicicollis*.....MTC

Needham's Skimmer *Libellula needhami*.....MTC

Blue Dasher *Pachydiplax longipennis*.....MTC

Carolina Saddlebags *Tamea carolina*MTC

Butterflies and Moths

Gulf Fritillary *Agraulis vanillae*MTC

Hackberry Emperor *Asterocampa celtis*.....MTC

Tawny Emperor *Asterocampa clyton*MTC

Horace's Duskywing *Erynnis horatius*MTC

Zebra Swallowtail..... *Eurytides marcellus*MTC

Zebra Heliconian *Heliconius charitonius*MTC

Hummingbird Moth..... *Hemaris thysbe*MTC

Carolina Satyr *Hermeuptychia sosybius*.....MTC

Fiery Skipper *Hylephila phyleus*MTC

Common Buckeye *Junonia coenia*MTC

Eastern Tiger Swallowtail *Papilio glaucus*MTC

Phaon Crescent..... *Phyciodes phaon*MTC

Pearl Crescent *Phyciodes tharos*MTC

Whirlabout *Polites vibex*MTC

Tropical Checkered Skipper *Pyrgus oileus*MTC

Little Yellow Sulphur..... *Pyrisitia lisa*MTC

Gray Hairstreak *Strymon melinus*MTC

American Lady..... *Vanessa virginiensis*.....MTC

AMPHIBIANS

Frogs and Toads

Southern Toad..... *Anaxyrus terrestris* UHF, SHF

Greenhouse Frog *Eleutherodactylus planirostris* * UHF, SHF

REPTILES

Turtles

Gopher Tortoise *Gopherus polyphemus*.....AFP, PI

Florida Box Turtle..... *Terrapene carolina bauri*..... UHF, SHF

Dudley Farm Historic State Park Animals

Common Name	Scientific Name	Primary Habitat Codes (for all species)
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Lizards

Green Anole *Anolis carolinensis* SHF, DV

Snakes

Southern Black Racer *Coluber constrictor priapus* AFP, SHF
 Eastern Indigo Snake *Drymarchon couperi* AFP, SHF
 Eastern Hognose Snake *Heterodon platyrhinos* AFP, SHF
 Southern Hognose Snake *Heterodon simus* AFP
 Eastern Coral Snake *Micrurus fulvius* UHF, SHF
 Eastern Ratsnake *Pantherophis alleghaniensis* SHF, UHF, DV
 Eastern Corn Snake *Pantherophis guttatus* SHF, DV

BIRDS

New World Quails

Northern Bobwhite *Colinus virginianus* RNC, AFP, PI

Herons, Egrets, and Bitterns

Cattle Egret *Bubulcus ibis* PI, OF

New World Vultures

Black Vulture *Coragyps atratus* MTC, OF
 Turkey Vulture *Cathartes aura* MTC, OF

Hawks, Eagles, and Kites

Swallow-tailed Kite *Elanoides forficatus* OF
 Mississippi Kite *Ictinia mississippiensis* SHF, OF
 Cooper's Hawk *Accipiter cooperii* SHF
 Red-shouldered Hawk *Buteo lineatus* SHF, OF
 Red-tailed Hawk *Buteo jamaicensis* RNC, OF

Cranes

Sandhill Crane *Grus canadensis* OF

Plovers

Killdeer *Charadrius vociferus* PI, OF

Pigeons and Doves

Mourning Dove *Zenaida macroura* MTC
 Common Ground-Dove *Columbina passerina* AFP, AG, DV

Cuckoos

Yellow-billed Cuckoo *Coccyzus americanus* UHF, SHF

Dudley Farm Historic State Park Animals

Common Name	Scientific Name	Primary Habitat Codes (for all species)
Owls		
Eastern Screech-Owl	<i>Megascops asio</i>	SHF, DV
Great Horned Owl	<i>Bubo virginianus</i>	SHF
Barred Owl	<i>Strix varia</i>	SK, UHF, SHF
Nightjars		
Common Nighthawk	<i>Chordelles minor</i>	OF
Chuck-will's-widow	<i>Antrostomus carolinensis</i>	SHF
Swifts		
Chimney Swift	<i>Chaetura pelagica</i>	DV, OF
Hummingbirds		
Ruby-throated Hummingbird	<i>Archilochus colubris</i>	SHF, DV
Woodpeckers		
Red-headed Woodpecker	<i>Melanerpes erythrocephalus</i>	AFP, RNC, DV
Red-bellied Woodpecker.....	<i>Melanerpes carolinus</i>	MTC
Downy Woodpecker	<i>Picoides pubescens</i>	MTC
Hairy Woodpecker	<i>Picoides villosus</i>	SHF, DV
Northern Flicker	<i>Colaptes auratus</i>	AFP, PI, DV
Pileated Woodpecker	<i>Dryocopus pileatus</i>	MTC
Falcons		
American Kestrel.....	<i>Falco sparverius</i>	PI, DV, OF
Tyrant Flycatchers		
Eastern Phoebe.....	<i>Sayornis phoebe</i>	MTC
Great Crested Flycatcher.....	<i>Myiarchus crinitus</i>	SHF, AFP, DV
Shrikes		
Loggerhead Shrike	<i>Lanius ludovicianus</i>	AFP, PI
Vireos		
Red-eyed Vireo	<i>Vireo olivaceus</i>	UHF, SHF
Crows and Jays		
Blue Jay	<i>Cyanocitta cristata</i>	MTC
American Crow	<i>Corvus brachyrhynchos</i>	MTC, OF
Swallows		
Purple Martin	<i>Progne subis</i>	DV, OF
Tits and Allies		
Carolina Chickadee.....	<i>Poecile carolinensis</i>	MTC
Tufted Titmouse.....	<i>Baeolophus bicolor</i>	MTC

Dudley Farm Historic State Park Animals

Common Name	Scientific Name	Primary Habitat Codes (for all species)
Wrens		
House Wren	<i>Troglodytes aedon</i>	AFP, DV
Carolina Wren.....	<i>Thryothorus ludovicianus</i>	MTC
Thrushes		
Eastern Bluebird	<i>Sialia sialis</i>	AFP, PI, DV
American Robin	<i>Turdus migratorius</i>	MTC
Mockingbirds and Thrashers		
Gray Catbird.....	<i>Dumetella carolinensis</i>	SHF, AFP, DV
Northern Mockingbird	<i>Mimus polyglottos</i>	SHF, AFP, DV
Brown Thrasher	<i>Toxostoma rufum</i>	SHF, AFP, DV
Starlings		
European Starling	<i>Sturnus vulgaris</i> *	DV
New World Warblers		
Cape May Warbler.....	<i>Setophaga tigrina</i>	MTC
Northern Parula	<i>Setophaga americana</i>	MTC
Yellow-rumped Warbler.....	<i>Setophaga coronata</i>	MTC
Black-throated Green Warbler ..	<i>Setophaga virens</i>	MTC
Yellow-breasted Chat.....	<i>Icteria virens</i>	AFP
Tanagers		
Summer Tanager	<i>Piranga rubra</i>	AFP, RNC, DV
Sparrows and Allies		
Eastern Towhee	<i>Pipilo erythrophthalmus</i>	AFP, RNC
Chipping Sparrow.....	<i>Spizella passerina</i>	AFP, PI, DV
Vesper Sparrow	<i>Pooecetes gramineus</i>	AFP, PI
Cardinals, Grosbeaks and Buntings		
Northern Cardinal	<i>Cardinalis cardinalis</i>	MTC
Blue Grosbeak	<i>Guiraca caerulea</i>	AFP
Indigo Bunting	<i>Passerina cyanea</i>	AFP
Blackbirds and Allies		
Red-winged Blackbird	<i>Agelaius phoeniceus</i>	MTC
Finches and Allies		
American Goldfinch	<i>Carduelis tristis</i>	SHF, AFP, OF

MAMMALS

Dudley Farm Historic State Park Animals

Common Name	Scientific Name	Primary Habitat Codes (for all species)
Didelphids		
Virginia Opossum	<i>Didelphis virginiana</i>	MTC
Bats		
Southeastern Bat	<i>Myotis austroriparus</i>	TCV, OF
Tri-colored Bat	<i>Perimyotis subflavus</i>	TCV, OF
Edentates		
Nine-banded Armadillo	<i>Dasypus novemcinctus</i> *	MTC
Lagomorphs		
Eastern Cottontail	<i>Sylvilagus floridanus</i>	MTC
Rodents		
Southern Flying Squirrel	<i>Glaucomys volans</i>	UHF, SHF
Eastern Gray Squirrel	<i>Sciurus carolinensis</i>	MTC
Sherman's Fox Squirrel	<i>Sciurus niger shermani</i>	AFP, RNC, PI
Carnivores		
Dog	<i>Canis familiaris</i> *	MTC
Coyote	<i>Canis latrans</i> *	MTC
Cat	<i>Felis domesticus</i> *	MTC
Raccoon	<i>Procyon lotor</i>	MTC

Primary Habitat Codes

TERRESTRIAL

Beach Dune.....	BD
Coastal Berm.....	CB
Coastal Grassland	CG
Coastal Strand.....	CS
Dry Prairie	DP
Keys Cactus Barren	KCB
Limestone Outcrop	LO
Maritime Hammock	MAH
Mesic Flatwoods.....	MF
Mesic Hammock.....	MEH
Pine Rockland	PR
Rockland Hammock.....	RH
Sandhill	SH
Scrub	SC
Scrubby Flatwoods	SCF
Shell Mound	SHM
Sinkhole	SK
Slope Forest	SPF
Upland Glade.....	UG
Upland Hardwood Forest	UHF
Upland Mixed Woodland	UMW
Upland Pine.....	UP
Wet Flatwoods	WF
Xeric Hammock	XH

PALUSTRINE

Alluvial Forest.....	AF
Basin Marsh	BM
Basin Swamp.....	BS
Baygall	BG
Bottomland Forest.....	BF
Coastal Interdunal Swale	CIS
Depression Marsh	DM
Dome Swamp.....	DS
Floodplain Marsh.....	FM
Floodplain Swamp.....	FS
Glades Marsh.....	GM
Hydric Hammock.....	HH
Keys Tidal Rock Barren	KTRB
Mangrove Swamp	MS
Marl Prairie.....	MP
Salt Marsh.....	SAM
Seepage Slope.....	SSL
Shrub Bog.....	SHB
Slough.....	SLO
Slough Marsh	SLM
Strand Swamp.....	STS

Primary Habitat Codes

Wet Prairie WP

LACUSTRINE

Clastic Upland Lake CULK

Coastal Dune Lake CDLK

Coastal Rockland Lake CRLK

Flatwoods/Prairie FPLK

Marsh Lake MLK

River Floodplain Lake..... RFLK

Sandhill Upland Lake SULK

Sinkhole Lake SKLK

Swamp Lake..... SWLK

RIVERINE

Alluvial Stream AST

Blackwater Stream..... BST

Seepage Stream SST

Spring-run Stream SRST

SUBTERRANEAN

Aquatic Cave ACV

Terrestrial Cave TCV

ESTUARINE

Algal Bed EAB

Composite Substrate ECPS

Consolidated Substrate ECNS

Coral Reef ECR

Mollusk Reef EMR

Octocoral Bed EOB

Seagrass Bed ESGB

Sponge Bed..... ESPB

Unconsolidated Substrate..... EUS

Worm Reef..... EWR

Primary Habitat Codes

MARINE

Algal Bed	MAB
Composite Substrate	MCPS
Consolidated Substrate	MCNS
Coral Reef	MCR
Mollusk Reef	MMR
Octocoral Bed	MOB
Seagrass Bed	MSGB
Sponge Bed	MSPB
Unconsolidated Substrate	MUS
Worm Reef	MWR

ALTERED LANDCOVER TYPES

Abandoned field/Abandoned pasture	AFP
Agriculture	AG
Artificial Pond	AP
Borrow Area	BA
Canal/ditch	CD
Clearcut pine plantation	CPP
Clearing/Regeneration	CL
Developed	DV
Impoundment	IM
Invasive exotic monoculture	IEM
Pasture - improved	PI
Pasture - semi-improved	PSI
Pine plantation	PP
Restoration Natural Community	RNC
Road	RD
Spoil area	SA
Successional hardwood forest	SHF
Utility corridor	UC

MISCELLANEOUS

Many Types of Communities	MTC
Overflying	OF

Addendum 6—Imperiled Species Ranking Definitions

Imperiled Species Ranking Definitions

The Nature Conservancy and the Natural Heritage Program Network (of which FNAI is a part) define an element 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 element occurrence (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 Fish and Wildlife Conservation 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 fabricated 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 or 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 woodpecker)
- 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)

Imperiled Species Ranking Definitions

- 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.
- GUdue 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 or 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
- SHof 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
- SNregularly occurring but widely and unreliably distributed; sites for conservation hard to determine
- SUdue to lack of information, no rank or range can be assigned (e.g., SUT2).
- S?.....Not yet ranked (temporary)
- NNot currently listed, nor currently being considered for listing, by state or federal agencies.

Imperiled Species Ranking Definitions

LEGAL STATUS

FEDERAL

(Listed 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.
- C 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.
- EXPE, XE..... Experimental essential population. A species listed as experimental and essential.
- EXPN, XN Experimental non-essential population. A species listed as experimental and non-essential. Experimental, nonessential populations of endangered species are treated as threatened species on public land, for consultation purposes.

STATE

ANIMALS .. (Listed by the Florida Fish and Wildlife Conservation Commission - FWC)

- FE Federally-designated Endangered
- FT Federally-designated Threatened
- FXN..... Federally-designated Threatened Nonessential Experimental Population
- FT(S/A) Federally-designated Threatened species due to similarity of appearance

Imperiled Species Ranking Definitions

ST..... Listed as Threatened Species by the FWC. 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 therefore is destined or very likely to become an endangered species within the near future.

SSC..... Listed as Species of Special Concern by the FWC. 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 that, in the near future, may result in its becoming a threatened species.

PLANTS (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.

Addendum 7—Cultural Information

These procedures apply to state agencies, local governments, and non-profits that manage state-owned properties.

A. General Discussion

Historic resources are both archaeological sites and historic structures. Per Chapter 267, Florida Statutes, *'Historic property' or 'historic resource' means any prehistoric district, site, building, object, or other real or personal property of historical, architectural, or archaeological value, and folklife resources. These properties or resources may include, but are not limited to, monuments, memorials, Indian habitations, ceremonial sites, abandoned settlements, sunken or abandoned ships, engineering works, treasure trove, artifacts, or other objects with intrinsic historical or archaeological value, or any part thereof, relating to the history, government, and culture of the state.'*

B. Agency Responsibilities

Per State Policy relative to historic properties, state agencies of the executive branch must allow the Division of Historical Resources (Division) the opportunity to comment on any undertakings, whether these undertakings directly involve the state agency, i.e., land management responsibilities, or the state agency has indirect jurisdiction, i.e. permitting authority, grants, etc. No state funds should be expended on the undertaking until the Division has the opportunity to review and comment on the project, permit, grant, etc.

State agencies shall preserve the historic resources which are owned or controlled by the agency.

Regarding proposed demolition or substantial alterations of historic properties, consultation with the Division must occur, and alternatives to demolition must be considered.

State agencies must consult with Division to establish a program to location, inventory and evaluate all historic properties under ownership or controlled by the agency.

C. Statutory Authority

Statutory Authority and more in depth information can be found at:
<http://www.flheritage.com/preservation/compliance/guidelines.cfm>

D. Management Implementation

Even though the Division sits on the Acquisition and Restoration Council and approves land management plans, these plans are conceptual. Specific information regarding individual projects must be submitted to the Division for review and recommendations.

Management Procedures for Archaeological and Historical Sites and Properties on State-Owned or Controlled Properties (revised March 2013)

Managers of state lands must coordinate any land clearing or ground disturbing activities with the Division to allow for review and comment on the proposed project. Recommendations may include, but are not limited to: approval of the project as submitted, cultural resource assessment survey by a qualified professional archaeologist, modifications to the proposed project to avoid or mitigate potential adverse effects.

Projects such as additions, exterior alteration, or related new construction regarding historic structures must also be submitted to the Division of Historical Resources for review and comment by the Division's architects. Projects involving structures fifty years of age or older, must be submitted to this agency for a significance determination. In rare cases, structures under fifty years of age may be deemed historically significant. These must be evaluated on a case by case basis.

Adverse impacts to significant sites, either archaeological sites or historic buildings, must be avoided. Furthermore, managers of state property should make preparations for locating and evaluating historic resources, both archaeological sites and historic structures.

E. Minimum Review Documentation Requirements

In order to have a proposed project reviewed by the Division, certain information must be submitted for comments and recommendations. The minimum review documentation requirements can be found at:

http://www.flheritage.com/preservation/compliance/docs/minimum_review_documentation_requirements.pdf .

* * *

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

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

Phone: (850) 245-6425

Toll Free: (800) 847-7278

Fax: (850) 245-6435

Eligibility Criteria for National Register of Historic Places

The criteria to be used for evaluating eligibility for listing in the National Register of Historic Places are as follows:

- 1) Districts, sites, buildings, structures, and objects may be considered to have significance in American history, architecture, archaeology, engineering, and/or culture if they possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:
 - a) are associated with events that have made a significant contribution to the broad patterns of our history; and/or
 - b) are associated with the lives of persons significant in our past; and/or
 - c) embody the distinctive characteristics of type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; and/or
 - d) have yielded, or may be likely to yield, information important in prehistory or history.
- 2) Ordinarily cemeteries, birthplaces, or graves of historical figures; properties owned by religious institutions or used for religious purposes; structures that have been moved from their original locations; reconstructed historic buildings; properties primarily commemorative in nature; and properties that have achieved significance within the past 50 years shall not be considered eligible for the *National Register*. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within the following categories:
 - a) a religious property deriving its primary significance from architectural or artistic distinction or historical importance; or
 - b) a building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or
 - c) a birthplace or grave of an historical figure of outstanding importance if there is no appropriate site or building directly associated with his productive life; or
 - d) a cemetery which derives its primary significance from graves of persons of transcendent importance, from age, distinctive design features, or association with historic events; or
 - e) a reconstructed building, when it is accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and no other building or structure with the same association has survived; or a property primarily commemorative in intent, if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or
 - f) a property achieving significance within the past 50 years, if it is of exceptional importance.

Preservation Treatments as Defined by Secretary of Interior's Standards and Guidelines

Restoration is defined as the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period. The limited and sensitive upgrading of mechanical, electrical and plumbing systems and other code-required work to make properties functional is appropriate within a restoration project.

Rehabilitation is defined as the act or process of making possible a compatible use for a property through repair, alterations and additions while preserving those portions or features that convey its historical, cultural or architectural values.

Stabilization is defined as the act or process of applying measures designed to reestablish a weather resistant enclosure and the structural stability of an unsafe or deteriorated property while maintaining the essential form as it exists at present.

Preservation is defined as the act or process of applying measures necessary to sustain the existing form, integrity and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment; however, the limited and sensitive upgrading of mechanical, electrical and plumbing systems and other code-required work to make properties functional is appropriate within a preservation project.