## **ITEM 6:**

Vote on whether the Adams Ranch II 2021 Cycle 2 Florida Forever proposal will proceed through the project evaluation process for potential addition to the 2022 Florida Forever Priority List.

## **DSL STAFF REMARKS:**

The DSL received the Adams Ranch II Florida Forever proposal for consideration for the 2021 cycle 2. Only those proposals receiving at least five affirmative Council votes will be further evaluated for possible addition to the 2022 Florida Forever Priority List.

PROPOSAL	COUNTY	CATEGORY	ACRES
Adams Ranch II	Osceola, St. Lucie	Less-Than-Fee	28,334

## STAFF RECOMMENDATION:

Vote on the proposal.

## ARC RECOMMENDATION:

Project	DHR	FFS	Lynetta Griner	FWC	Bill Palmer	Elva Peppers	DEP	Selected
Adams Ranch II								

# OF THE May 2021 FLORIDA FOREVER PROPOSALS

Prepared by Florida Natural Areas Inventory

1018 Thomasville Road Suite 200-C Tallahassee, FL 32303



The Florida Natural Areas Inventory (FNAI) is dedicated to gathering, interpreting, and disseminating information critical to the conservation of Florida's biological resources. The Inventory was founded in 1981 as a member of The Nature Conservancy's international network of natural heritage programs, and it is now part of Florida State University's Institute of Science and Public Affairs. Funding for FNAI is provided through contracts, which currently include work for the Florida Department of Environmental Protection (DEP), the U. S. Fish and Wildlife Service, Florida Forest Service, Florida Fish and Wildlife Conservation Commission, and Florida's Water Management Districts.

FNAI staff builds and maintains a comprehensive statewide database that now includes more than 35,000 occurrences of rare plant and animal species and high-quality natural communities. The database also contains information on more than 2,000 lands managed wholly or in part for conservation. This database includes national forests, parks and wildlife refuges; state parks, forests, aquatic preserves, and wildlife management areas; water management district lands; county and municipal parks; private preserves; and military installations with substantial natural areas. Boundaries of state land acquisition projects are also represented.

As part of an agreement with DEP, FNAI provides data and expertise to assist with the multi-step process of evaluating lands proposed for acquisition through the Florida Forever Program. This document presents our preliminary review of proposals submitted for the cycle beginning May 2021. This includes one proposal: Adams Ranch II (Osceola and St. Lucie counties). This review includes the following for the proposals: Biological Conservation Priority; Natural Resource Description; Rare Species on the site; and maps of the proposed site. Recreational and archeological values are not considered in this evaluation. A tabular evaluation based on the Florida Forever Conservation Needs Assessment (FFCNA) GIS data layers is also included.

**Biological Conservation Priority:** We summarize our overall preliminary assessment of the proposals as a "Biological Conservation Priority" for each site. This rank represents our initial assessment of a proposal's contribution to the protection of significant ecological resources from a **statewide perspective**. These ranks reflect the FNAI scientific staff's best judgment based on information available at the time of the evaluation. Further assessment may be needed for some proposals in order to appreciate their biological importance. Factors weighed in the assignment of the priority ranks include rarity, condition, and diversity of ecological resources; perceived degree of threat to the site; and relative degree of protection of the resources (i.e., number and quality of resources already adequately protected elsewhere). The importance of a proposal to the natural resource management of contiguous or nearby conservation lands is also considered. Finally, we acknowledge that sites with low ranks, though of lesser statewide significance, may nonetheless be locally valuable for education, recreation, and protection of locally rare resources.

The Biological Conservation Priority is based on a proposal's boundary as submitted. These ranks may change if alterations are made to the boundary or if new biological information about a site becomes available.

**Natural Resource Description:** The description of the natural resources presented for each proposal is developed from information provided in the proposal application, the FNAI database, FNAI staff comments, and aerial photographs. The natural communities listed in this evaluation and the percentage of the total area that each comprises were derived principally from aerial photographs as interpreted by FNAI staff and by landcover information from the Water Management Districts. These data were supplemented by FNAI natural community occurrence data where available. These sources were also used to determine the extent of disturbed lands that no longer support natural communities (agriculture areas, developed areas, mines, etc.). Acreages of communities and disturbances are approximate, but provide a reasonable estimate for this stage of the evaluation process. More precise landcover information is gathered during the project assessment phase for those proposals selected for further evaluation.

Acreages of natural communities, particularly mesic and wet flatwoods, may differ from acreages given in the Florida Forever Measures Evaluation (FFME) evaluation table (described below). The FFME relies on statewide remotely sensed data where on the ground information is lacking. Using current high resolution aerial photography, FNAI scientists sometimes identify different acreage of certain landcover types, for example, pine plantation or flatwoods, than is identified through remotely sensed data.

Rare species on the proposed areas are listed in each evaluation. Species recorded in the FNAI database and those reported in the application are listed separately in the table. Potential rare species may be discussed in the evaluation text. FNAI Global and State ranks and Federal and State legal statuses are given for each species in the table. Rank and statuses provided in the text are listed in the same order after the scientific species name. A rank/status explanation sheet is included at the end of this document.

**Maps:** This report provides two maps of each proposed site. The first is a small-scale map showing the proposed site in the context of surrounding conservation lands and land protection projects. The second map is of larger scale and uses recent aerial imagery that provides a view of the overall landcover of each site.

Florida Forever Measures Evaluation: Accompanying each evaluation is a table illustrating to what extent each proposed site meets 15 Florida Forever performance measures. These 15 measures were selected because they are resource-based criteria that can be used to set acquisition priorities. For each measure, we report the acres of the resource found on the proposed site and the percentage of the site containing the resource. The data in this assessment represent a highly standardized, statewide perspective of natural resource distributions. More detailed information may be gathered during the Project Assessment phase for those proposals voted upon for further evaluation. The data used in this evaluation are described in detail in the Florida Forever Conservation Needs Assessment Summary Report and Technical Report, available at www.fnai.org.

## ADAMS RANCH // (OSCEOLA AND ST. LUCIE COUNTY)

Less-than-Fee Simple

## **Preliminary Evaluation**

Biological Conservation Priority: Medium-High

**Natural Resources Description:** The Adams Ranch II proposal includes three disjunct blocks of working ranch land totaling 28,321 acres— the St. Lucie Ranch in St. Lucie County, and two disjunct blocks of the Lake Marian Ranch in Osceola County. All three properties are under the same ownership, and all three are proposed for less-than-fee acquisition.

This evaluation is based on information gathered from the proposal application, aerial photography from 1995 to 2015, U.S. Geologic Survey (USGS) 7.5' topographic maps, Cooperative Land Cover data (Florida Natural Areas Inventory, Florida Cooperative Land Cover Map, version 2.3), and information in the FNAI database.

This proposal includes the remaining portions of the Lake Marian Ranch that are not already encumbered by conservation easements or included in the Adams Ranch Florida Forever BOT Project. These lands are located approximately eight miles northwest of Yeehaw Junction in Osceola County, on the eastern slope of the Kissimmee Valley Lowlands, five miles east of the Kissimmee River. Together, these two portions of Lake Marian Ranch extend south from the shore of Lake Marian to State Road 60, with a small gap of intervening land that is already protected by conservation easement or included in the Adams Ranch Florida Forever BOT project. The ranch lies directly northwest of UF's DeLuca Preserve and north of the Pine Island Slough Florida Forever BOT project. Along with these surrounding lands, the Lake Marian Ranch could provide connectivity between Kissimmee Prairie Preserve State Park, six miles to the south, and Three Lakes Wildlife Management Area, less than 1.5 miles to the north and west.

Both of the blocks of the Lake Marian Ranch are predominantly improved pasture, with some former citrus lands on the southern block, and scattered areas of remnant upland and wetland natural communities. Upland natural communities include several areas of dry prairie, generally on the western portions of both properties. This community is endemic to a limited area of the Florida peninsula and dependent on frequent fire. Aerial photos show evidence of fire being used in dry prairie areas onsite, suggesting that they may be in good condition. A large area of mesic flatwoods occurs on the highest elevations of the northern block. These flatwoods appear to be open and relatively healthy; this may be the site of old growth longleaf pine that is mentioned in the application.

Except for a small part of the southern property, which drains to the St. Johns River, the properties are in the Kissimmee River watershed. The northern block drains north into Lake Marian via two waterways, which although channelized, still are bordered at points along their length with forested wetlands and marshes. The westernmost of the two channelized creeks feeds into a large basin marsh adjoining the lake. The proposal encompasses over 4 miles of lake shore, or approximately one quarter of the frontage of Lake Marian.

The southern parcel contains depression marshes that form much of the headwaters of Blanket Bay Slough, which flows west into the Kissimmee River. Numerous smaller, isolated depression marshes occur on both parcels, some of which show evidence of being ditched.

The third block of land in this proposal is the St. Lucie Ranch, approximately 13 miles west of Fort Pierce in western St. Lucie County, abutting the border of Okeechobee County. It extends between County Road 68 to the north and State Road 70 to the south, a distance of nearly 6 miles. The property is adjacent to St Lucie County's Adams/Eaves preserve across SR 70, to a small Conservation Reserve Program easement to its west, and to the South Florida Water Management District's C-23/C-24 reservoir properties to the east. The Bluefield to Cow Creek Florida Forever BOT project adjoins the property to the south and west. Despite these existing and proposed conservation lands in the immediate vicinity of the property, the St. Lucie Ranch has less potential as a component of a large-scale wildlife corridor than the Marian Ranch properties, as the lands needed to connect this complex of conservation areas to other protected lands near Lake Okeechobee, the Kissimmee River, or to the north and east are not currently protected or considered for acquisition.

The St. Lucie Ranch lies near the northern end of the Southeast Florida watershed, in a broad low area with very little topographic relief. Accordingly, the property is very nearly level, losing only about eight feet of elevation over approximately seven miles from the western edge of the property to its eastern edge. As is common in this poorly-drained region, the hydrology has been modified by an extensive network of canals and ditches. The applicant states that current ranch managers coordinate with the South Florida Water Management District on release of water from a dispersed water storage facility on the west side of the ranch, and from impoundments near the ranch's north and eastern boundaries. The ranch is adjacent to proposed reservoirs associated with the C-23/C-24 Stormwater Treatment Area, intended to reduce nutrient and sediment inputs to the St. Lucie River and the Indian River Lagoon. Based on its location and the potential for water storage in both natural wetlands and the large artificial impoundments onsite, protection of the St. Lucie Ranch would be expected to continue to help protect water quality in the Indian River Lagoon.

Vegetation of the St. Lucie Ranch is predominantly pasture, with some extensive areas of former citrus production on the east edge of the property. Natural communities on site include a large basin swamp that extends onto the property from the west, mesic hammock of cabbage palm and live oak found in several large and many small patches in the northern part of the property, and several areas of mesic to wet flatwoods, many with a cabbage palm component. Frequent depression marshes are scattered within the matrix of pasture, flatwoods, and agricultural land, and some areas of wet prairie and a few dome swamps are onsite as well. A small area surrounded by citrus cultivation appears to be xeric hammock, and may have been scrub at one time.

Table 1. Natural communities and landcover types within Adams Ranch II Florida Forever proposal.

Community or Landcover	Acres	Percent of Proposal
Depression marsh	1424	5
Mesic hammock	1393	4.9
Dry Prairie	1098	3.9
Wet prairie	911	3.2
Mesic flatwoods	882	3.1
Basin marsh	519	1.8
Basin swamp	413	1.5
Freshwater forested wetlands	257	<1
Wet flatwoods	176	<1
Dome swamp	55	<1
Xeric hammock	24	<1
Floodplain marsh	15	<1
Flatwoods lake	5	<1
Floodplain swamp	2	<1
Pasture—improved	16253	57.4
Pasture—semi-improved	2431	8.6
Agriculture	1575	5.6
Impoundment	440	1.6
Abandoned field	307	1.1
Road	47	<1
Canal/ditch	43	<1
Developed	42	<1
Artificial pond	11	<1
Total		100

Rare wildlife species documented on the Lake Marian and St. Lucie Ranch properties are shown in table 2. Additional surveys of the sites, particularly for rare plants in the remnant natural communities, could reveal noteworthy species that have not previously been documented.

The applicant notes that protection of the Lake Marian Ranch could play a role in the recovery of the narrowly-endemic Florida grasshopper sparrow (G5T1, S1, E, FE\*). The Lake Marian Ranch lies within the species' range, and although this species has not been documented on the site, remaining populations are within a very short distance. The sparrow relies on dry prairie, which appears to be present on both Marian Ranch blocks contained in this proposal. It is unknown whether surveys have been conducted for this species on the property.

Wading bird rookeries are recorded in close proximity to both the Lake Marian and St. Lucie ranches; the locations of these rookeries are in some cases not precisely documented, and one or more may be within the proposal area. Wood stork, great egret, tricolored heron, snowy egret, and little blue heron have been documented nesting in the immediate vicinity of the proposal. A number of other rare animals have been documented in the vicinity of both ranches, and may be documented on the site with additional surveys.

June 2021 ARC Meeting

<sup>\*</sup> Rarity rankings in the following order: FNAI (global and state ranks), federal status, state status. Rank explanations attached.

Table 2. Rare plants and animals documented or reported to occur within Adams Ranch II Florida Forever proposal.

Scientific Name	Common Name	Global	State	Federal	State
		Rank	Rank	Status	Status
Rare plants documented on site					
none					
Additional rare plants reported on					
site by applicant					
none					
Rare animals documented on site					
Caracara cheriway	crested caracara	G5	S2	Т	FT
Haliaeetus erythrocephalus	bald eagle	G5	S3	N	N
Athene cunicularia floridana	Florida burrowing owl	G4T3	S3	N	ST
Additional rare animals reported on					
site by applicant					
Falco sparverius paulus	southeastern American	G5T4	S3	N	ST
	kestrel				
Drymarchon couperi	eastern indigo snake	G3	S3	Т	FT
Sciurus niger niger	southeastern fox squirrel	G5T5	S3	N	N
Rostrhamus sociabilis	snail kite	G4G5	S2	Е	FE
	I .	1		1	

The Florida Forever Measures Evaluation (FFME) at the end of this memo is based on the Florida Forever Conservation Needs Assessment developed by FNAI. The data used in that analysis represents a standardized, statewide perspective of natural community distributions based primarily on the Cooperative Land Cover data (Florida Natural Areas Inventory, Florida Cooperative Land Cover Map, version 2.3), which explains differences in natural community acreages between Table 1 and the FFME. This proposal contributes most notably to Aquifer Recharge and Surface Water Protection, and also significantly to FNAI Habitat Conservation Priorities and Ecological Greenways, with some contribution to Natural Floodplain Function, Strategic Habitat Conservation Areas, Sustainable Forestry, and Underrepresented Natural Communities.

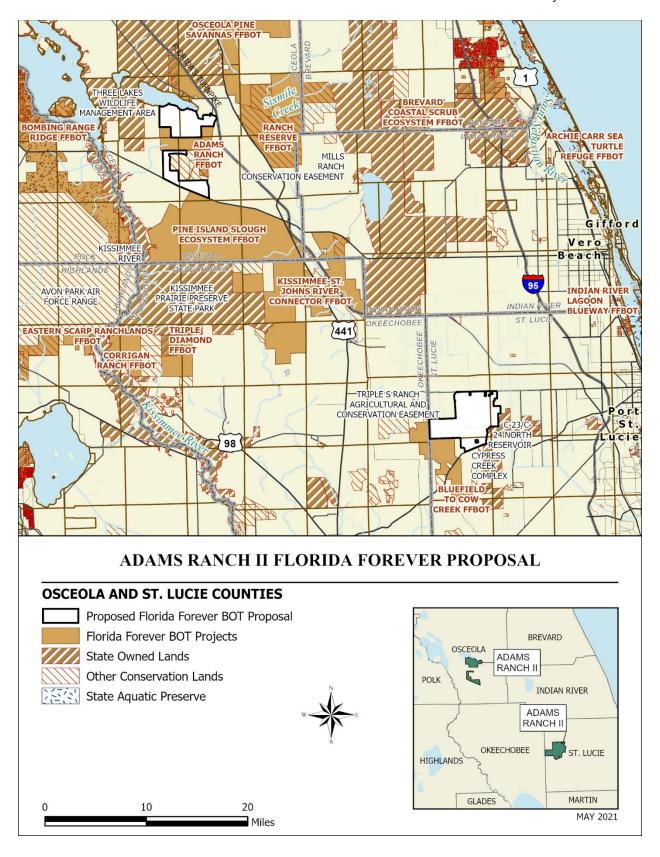
Adams Ranch II: Florida Forever Measure Evaluation 20210507

GIS ACRES = 28,322

GIS ACRES = 28	,322	
	Resource	% of
MEASURES	Acres <sup>a</sup>	project
<b>B1: Strategic Habitat Conserva</b>	ation Areas	
Priority 1	9	< 1%
Priority 2	5,707	20%
Priority 3	4,352	15%
Priority 4	0	0%
Priority 5	339	1%
Total Acres	10,407	37%
<b>B2: FNAI Habitat Conservation</b>	Priorities	
Priority 1	0	0%
Priority 2	26	< 1%
Priority 3	3	< 1%
Priority 4	1,012	4%
Priority 5	2,461	9%
Priority 6	13,438	47%
Total Acres	16,939	60%
B3: Ecological Greenways		
Priority 1	9,794	35%
Priority 2	8,102	29%
Priority 3	0	0%
Priority 4	0	0%
Priority 5	267	< 1%
Priority 6	0	0%
Total Acres	18,162	64%
B4: Under-represented Natura	Communities	
Upland Glade (G1)	0	0%
Pine Rockland (G1)	0	0%
Scrub and Scrubby Flatwoods (C	32) 0	0%
Rockland Hammock (G2)	0	0%
Dry Prairie (G2)	1,018	4%
Seepage Slope (G2)	0	0%
Sandhill (G3)	0	0%
Sandhill Upland Lake (G3)	0	0%
Upland Pine (G3)	0	0%
Mesic/Wet Flatwoods (G4)	1,184	4%
Upland Hardwood Forest (G5)	0	0%
Total Acres	2,202	8%
<b>B6: Occurrences of FNAI Track</b>	ked Species	
G1	0	
G2	0	
G3	1	
G4	1	
G5	11	
Total	13	
C4: Natural Floodplain Function	on	
Priority 1	104	< 1%
Priority 2	858	3%
Priority 3	2,649	9%
Priority 4	2,505	9%
TO CONTRACT OF THE CONTRACT OF	2,152	8%
Priority 5		
	591	2%
Priority 6 Total Acres	8,860	31%

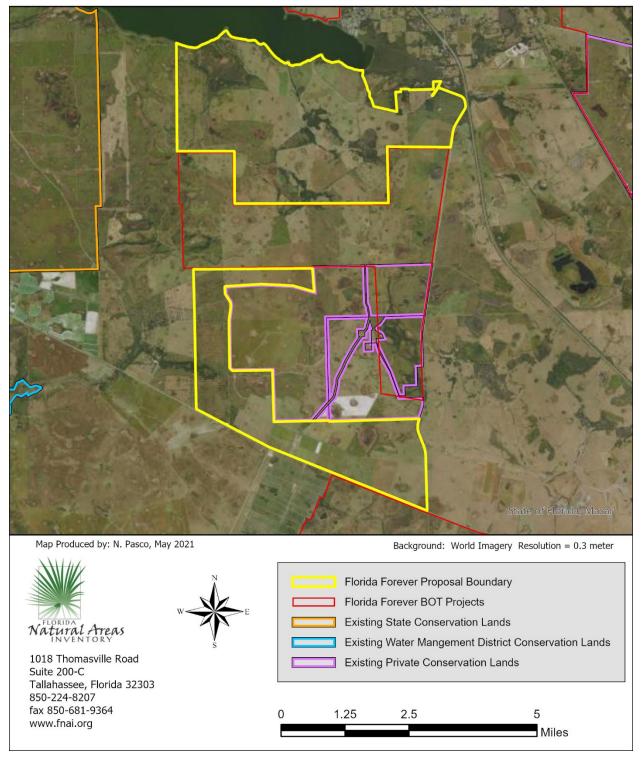
	Resource	% of
MEASURES (continued)	Acres <sup>a</sup>	project
C5: Surface Water Protection		
Priority 1	0	0%
Priority 2	2,887	10%
Priority 3	11	< 1%
Priority 4	10,953	39%
Priority 5	135	< 1%
Priority 6	14,182	50%
Priority 7	0	0%
Total Acres	28,169	99%
C7: Fragile Coastal Resources		
Fragile Coastal Uplands	0	0%
Imperiled Coastal Lakes	0	0%
Coastal Wetlands	0	0%
Total Acres	0	0%
C8: Functional Wetlands		
Priority 1	92	< 1%
Priority 2	722	3%
Priority 3	1,865	7%
Priority 4	1,312	5%
Priority 5	714	3%
Priority 6	63	< 1%
Total Acres	4,768	17%
D3: Aquifer Recharge		
Priority 1	0	0%
Priority 2	569	2%
Priority 3	1,093	4%
Priority 4	12,204	43%
Priority 5	7,986	28%
Priority 6	6,423	23%
Total Acres	28,275	100%
E2: Recreational Trails (miles)	,	
(prioritized trail opportunities from Office of Greenway	s and Trails & U	niv. Florida)
Land Trail Priorities	4.4	
Land Trail Opportunities	2.7	
Total Miles	7.1	
F2: Arch. & Historical Sites (number	) 1	sites
G1: Sustainable Forestry		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	133	< 1%
Priority 4	0	0%
Priority 5 - Potential Pinelands	4,892	17%
Total Acres	5,025	18%
G3: Forestland for Recharge	5	< 1%

<sup>a</sup>Acres of each resource in the project and percentage of project represented by each resource are listed except where noted. This analysis converts site boundary into pixels, which causes slight differences from GIS acres; this effect is most noticeable on small sites.



# Adams Ranch II Florida Forever Proposal (Map 1 of 2)

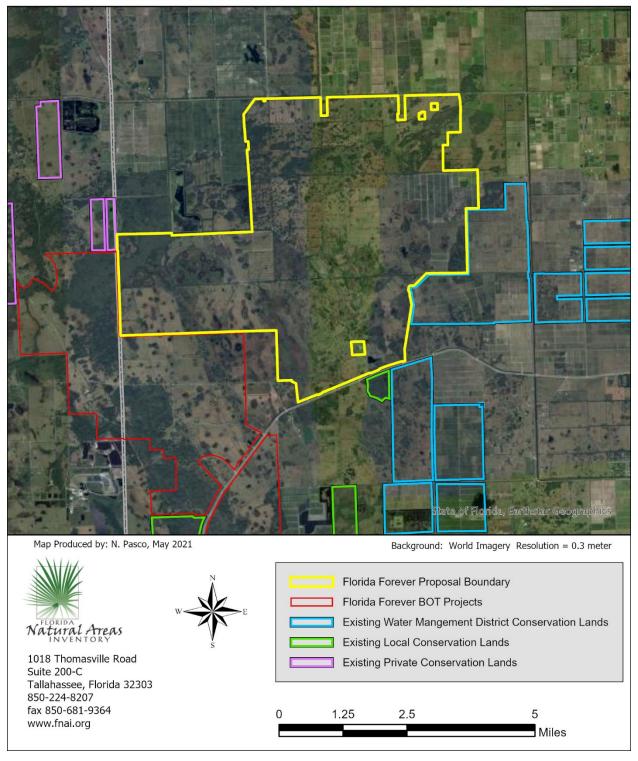
## FLORIDA FOREVER BOARD OF TRUSTEES PROJECT PROPOSAL BOUNDARY AS OF MAY 2021



June 2021 ARC Meeting Page 11 of 15

# Adams Ranch II Florida Forever Proposal (Map 2 of 2)

## FLORIDA FOREVER BOARD OF TRUSTEES PROJECT PROPOSAL BOUNDARY AS OF MAY 2021



June 2021 ARC Meeting Page 12 of 15

## **Elements and Element Occurrences**

An **element** is a biodiversity unit of conservation attention, such as a species, population, natural community, bird rookery, spring, sinkhole, or cave.

An **element occurrence (EO)** is an area of land and/or water in which a species or natural community is, or was, present. An EO should have practical conservation value for the Element as evidenced by potential continued (or historical) presence and/or regular recurrence at a given location.

## **Element Ranking and Legal Status**

Using a ranking system developed by NatureServe and the Natural Heritage Program Network, the Florida Natural Areas Inventory assigns two ranks for 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 (EOs), estimated abundance (number of individuals for species; area for natural communities), geographic range, estimated number of adequately protected EOs, relative threat of destruction, and ecological fragility.

#### **FNAI GLOBAL ELEMENT RANK DEFINITIONS**

G1	<b>Critically Imperiled—</b> At very high risk of extinction or elimination due to extreme rarity, very steep
	declines, or other factors.
G2	Imperiled—At high risk of extinction or elimination due to very restricted range, very few populations or
	occurrences, steep declines, or other factors.
G3	Vulnerable—At moderate risk of extinction or elimination due to a restricted range, relatively few
	populations or occurrences, recent and widespread declines, or other factors.
G4	Apparently Secure—Uncommon, but not rare; some cause for long term concern due to decline or other
	factors.
G5	Secure—Common; widespread and abundant.
GH	Possibly Extinct—Known from only historical occurrences, but still some hope of rediscovery.
GX	<b>Presumed Extinct</b> —Not located despite intensive searches and virtually no likelihood of rediscovery.
GXC	Captive or Cultivated Only—Taxon at present is extinct in the wild across their entire native range, but is
	extant in cultivation, in captivity, or as a naturalized population or populations outside of its native range or
	a reintroduced population not yet established.
G#?	Inexact Numeric Rank—Denotes inexact numeric rank (e.g., G2?).
G#G#	Range Rank—Used to indicate uncertainty about the exact status of the element (e.g., G1G3, G2G3).
G#T#	Infraspecific Taxon—Rank of a taxonomic subgroup such as a subspecies; the G portion of the rank
	refers to the entire species and the T portion refers to the subgroup; numbers have same definition as
	above (e.g., G3T1).
G#Q	<b>Questionable Taxonomy—</b> Distinctiveness of this element as a taxon or ecosystem type at the current
	level is questionable; numbers have same definition as above (e.g., G2Q).
G#T#Q	Questionable Taxonomy (T)—Same as above, but validity as subspecies or variety is questioned.
GU	<b>Unrankable</b> —Currently unrankable due to lack of information and/or conflicting information (e.g., GUT2).
GNA	<b>Not Applicable—</b> The element is not a suitable target for conservation activities (e.g., a hybrid species).
GNR	Unranked—Global rank not yet assessed.
GNRTNR	
	The state of the s

### **FNAI STATE ELEMENT RANK DEFINITIONS**

S1	<b>Critically Imperiled</b> —At very high risk of extirpation from Florida due to extreme rarity, very steep declines, or other factors.
S2	<b>Imperiled</b> —At high risk of extirpation from Florida due to very restricted range, very few populations or occurrences, steep declines, or other factors.
S3	<b>Vulnerable</b> —At moderate risk of extirpation from Florida due to a restricted range, relatively few populations or occurrences, recent and widespread declines, or other factors.
<b>S4</b>	<b>Apparently Secure</b> —Uncommon, but not rare, in Florida; some cause for long term concern due to decline or other factors.
S5	Secure—Common; widespread and abundant in Florida.
SH	Possibly Extirpated—Known from only historical occurrences in Florida, but still some hope of rediscovery.
SX	<b>Presumed Extirpated—</b> Not located in Florida despite intensive searches and virtually no likelihood of rediscovery.
SU	<b>Unrankable—</b> Currently unrankable in Florida due to lack of information and/or conflicting information.
SNA	Not Applicable—Not a suitable target for conservation activities in Florida (e.g., a hybrid species).
SNR	<b>Unranked</b> —Neither the element nor the taxonomic subgroup/population has yet been ranked for Florida.

June 2021 ARC Meeting Page 13 of 15

#### **FEDERAL LEGAL STATUS**

Legal status information provided by FNAI for information only. For official definitions and lists of protected species, consult the United States Fish and Wildlife Service (USFWS).

Definitions derived from U.S. Endangered Species Act of 1973, Sec. 3. Note that the federal statuses given by FNAI refer only to Florida populations and that federal statuses may differ elsewhere.

С	Candidate species for which federal listing agencies have sufficient information on biological vulnerability
	and threats to support proposing to list the species as endangered or threatened.
E	Endangered: species in danger of extinction throughout all or a significant portion of its range.
E, T	Species currently listed endangered in a portion of its range but only listed as threatened in other areas.
E, PDL	Species currently listed endangered but has been proposed for delisting.
E, PT	Species currently listed endangered but has been proposed for listing as threatened.
E, XN	Species currently listed endangered but tracked population is a non-essential experimental population.
T	Threatened: species likely to become endangered within the foreseeable future throughout all or a
	significant portion of its range.
PE	Species proposed for listing as endangered
PT	Species proposed for listing as threatened
SAE	Treated as endangered due to similarity of appearance to a species that is federally listed such that
	enforcement personnel have difficulty in attempting to differentiate between the listed and unlisted species.
SAT	Treated as threatened due to similarity of appearance to a species that is federally listed such that
	enforcement personnel have difficulty in attempting to differentiate between the listed and unlisted species.
S	Not currently listed, but considered a "species of concern" to USFWS.
N	No federal status

## **STATE LEGAL STATUS**

Legal status information is provided by FNAI for information only. For official definitions and lists of protected species, consult the relevant state agency.

**Animals:** Definitions derived from "Florida's Endangered Species and Species of Special Concern, Official Lists" published by Florida Fish and Wildlife Conservation Commission (FWC), 1 August 1997, and subsequent updates.

С	Candidate for listing at the Federal level by USFWS
FE	Listed as endangered Species at the Federal level by USFWS
FT	Listed as threatened Species at the Federal level by USFWS
FXN	Listed as a non-essential experimental population in Florida by USFWS
FT(S/A)	Listed as threatened due to similarity of appearance by USFWS
ST	State population listed as threatened by the FWC. Defined as a species, subspecies, or isolated population that is acutely vulnerable to environmental alteration, declining in number at a rapid rate, or whose range or habitat is decreasing in area at a rapid rate and as a consequence is destined or very likely to become an endangered species within the foreseeable future.
SSC	Listed as Species of Special Concern by the FWC. An element that warrants special protection, recognition, or consideration because it has an inherent significant vulnerability to habitat modification, environmental alteration, human disturbance, or substantial human exploitation, which in the foreseeable future may result in its becoming a threatened species. (SSC* for Pandion haliaetus (Osprey) indicates that this status applies in Monroe county only.)
N	Not currently listed, nor currently being considered for listing.

**Plants:** Definitions derived from Sections 581.011 and 581.185(2), Florida Statutes, and the Preservation of Native Flora of Florida Act, 5B-40.001. FNAI does not track all state-regulated plant species; for a complete list of state-regulated plant species, call Florida Division of Plant Industry, 352-372-3505 or see: http://www.doacs.state.fl.us/pi/.

E	Endangered: species of plants native to Florida 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; includes all
	species determined to be endangered or threatened pursuant to the U.S. Endangered Species Act.
Т	Threatened: 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 number as to cause them to be endangered.
N	Not currently listed, nor currently being considered for listing.

## **Element Occurrence Ranking**

FNAI ranks of quality of the element occurrence in terms of its viability (EORANK). Viability is estimated using a combination of factors that contribute to continued survival of the element at the location. Among these are the size of the EO, general condition of the EO at the site, and the conditions of the landscape surrounding the EO (e.g., an immediate threat to an EO by local development pressure could lower an EO rank).

Α	Evaplicat actimated viability
Α	Excellent estimated viability
A?	Possibly excellent estimated viability
AB	Excellent or good estimated viability
AC	Excellent, good, or fair estimated viability
В	Good estimated viability
B?	Possibly good estimated viability
ВС	Good or fair estimated viability
BD	Good, fair, or poor estimated viability
С	Fair estimated viability
C?	Possibly fair estimated viability
CD	Fair or poor estimated viability
D	Poor estimated viability
D?	Possibly poor estimated viability
E	Verified extant (viability not assessed)
F	Failed to find
Н	Historical
NR	Not ranked, a placeholder when an EO is not (yet) ranked.
U	Unrankable
X	Extirpated

<sup>\*</sup>For additional detail on the above ranks see: http://www.natureserve.org/explorer/eorankguide.htm

FNAI also uses the following EO ranks:

H?	Possibly historical
F?	Possibly failed to find
X?	Possibly extirpated

The following offers further explanation of the H and X ranks as they are used by FNAI:

The rank of H is used when there is a lack of recent field information verifying the continued existence of an EO, such as (a) when an EO is based only on historical collections data; or (b) when an EO was ranked A, B, C, D, or E at one time and is later, without field survey work, considered to be possibly extirpated due to general habitat loss or degradation of the environment in the area. This definition of the H rank is dependent on an interpretation of what constitutes "recent" field information. Generally, if there is no known survey of an EO within the last 20 to 40 years, it should be assigned an H rank. While these time frames represent suggested maximum limits, the actual time period for historical EOs may vary according to the biology of the element and the specific landscape context of each occurrence (including anthropogenic alteration of the environment). Thus, an H rank may be assigned to an EO before the maximum time frames have lapsed. Occurrences that have not been surveyed for periods exceeding these time frames should not be ranked A, B, C, or D. The higher maximum limit for plants and communities (i.e., ranging from 20 to 40 years) is based upon the assumption that occurrences of these elements generally have the potential to persist at a given location for longer periods of time. This greater potential is a reflection of plant biology and community dynamics. However, landscape factors must also be considered. Thus, areas with more anthropogenic impacts on the environment (e.g., development) will be at the lower end of the range, and less-impacted areas will be at the higher end.

The rank of X is assigned to EOs for which there is documented destruction of habitat or environment, or persuasive evidence of eradication based on adequate survey (i.e., thorough or repeated survey efforts by one or more experienced observers at times and under conditions appropriate for the Element at that location).