



1018 Thomasville Road
Suite 200-C
Tallahassee, FL 32303
850-224-8207
fax 850-681-9364
www.fnai.org

Richard Noyes
Florida Fish and Wildlife Conservation Commission
620 South Meridian Street
Tallahassee, FL 32399

March 9, 2012

Dear Mr. Noyes,

Thank you for requesting information from the Florida Natural Areas Inventory (FNAI). We have compiled the following information for your project area.

Project: Mill Creek Crossing
Date Received: 03/07/2012
Location: Township 18S, Range 21E, Section 30/31
Sumter County

Element Occurrences

A search of our maps and database indicates that we currently have several element occurrences mapped in the vicinity of the study area (see enclosed map and element occurrence table). Please be advised that a lack of element occurrences in the FNAI database is not a sufficient indication of the absence of rare or endangered species on a site.

The element occurrences data layer includes occurrences of rare species and natural communities. The map legend indicates that some element occurrences occur in the general vicinity of the label point. This may be due to lack of precision of the source data, or an element that occurs over an extended area (such as a wide ranging species or large natural community). For animals and plants, element occurrences generally refer to more than a casual sighting; they usually indicate a viable population of the species. Note that some element occurrences represent historically documented observations which may no longer be extant. Extirpated element occurrences will be marked with an 'X' following the occurrence label on the enclosed map.

Likely and Potential Rare Species

In addition to documented occurrences, other rare species and natural communities may be identified on or near the site based on habitat models and species range models (see enclosed Biodiversity Matrix Report). These species should be taken into consideration in field surveys, land management, and impact avoidance and mitigation.

FNAI habitat models indicate areas, which based on land cover type, offer suitable habitat for one or more rare species that is known to occur in the vicinity. Habitat models have been developed for approximately 300 of the rarest species tracked by the Inventory, including all federally listed species.

FNAI species range models indicate areas that are within the known or predicted range of a species, based on climate variables, soils, vegetation, and/or slope. Species range models have been developed for approximately 340 species, including all federally listed species.

The FNAI Biodiversity Matrix Geodatabase compiles Documented, Likely, and Potential species and natural communities for each square mile Matrix Unit statewide.



Florida Resources
and Environmental
Analysis Center

Institute of Science
and Public Affairs

The Florida State University

Tracking Florida's Biodiversity

Managed Areas

Portions of the site appear to be located within the Half Moon Wildlife management area, managed by the Florida Fish and Wildlife Conservation Commission.

The Managed Areas data layer shows public and privately managed conservation lands throughout the state. Federal, state, local, and privately managed conservation lands are included.

The Inventory always recommends that professionals familiar with Florida's flora and fauna conduct a site-specific survey to determine the current presence or absence of rare, threatened, or endangered species.

Please visit www.fnai.org/trackinglist.cfm for county or statewide element occurrence distributions and links to more element information.

The database maintained by the Florida Natural Areas Inventory is the single most comprehensive source of information available on the locations of rare species and other significant ecological resources. However, the data are not always based on comprehensive or site-specific field surveys. Therefore this information should not be regarded as a final statement on the biological resources of the site being considered, nor should it be substituted for on-site surveys. Inventory data are designed for the purposes of conservation planning and scientific research, and are not intended for use as the primary criteria for regulatory decisions.

Information provided by this database may not be published without prior written notification to the Florida Natural Areas Inventory, and the Inventory must be credited as an information source in these publications. FNAI data may not be resold for profit.

This report is made available at no charge due to funding from the Florida Department of Environmental Protection, Division of State Lands.

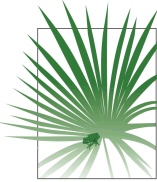
Thank you for your use of FNAI services. If I can be of further assistance, please contact me at (850) 224-8207 or at mobrien@fnai.org.

Sincerely,

Michael O'Brien

Michael O'Brien
GIS / Data Services

Encl



1018 Thomasville Road
Suite 200-C
Tallahassee, FL 32303
(850) 224-8207
(850) 681-9364 Fax
www.fnai.org

FLORIDA
Natural Areas
INVENTORY

Element Occurrences

- Animals
- Plants
- Communities
- Other
- Data Sensitive

Point Indicates General Vicinity of Element

U.S. Fish & Wildlife Service Scrub Jay Survey 1992-96

Conservation Lands

- Federal
- State
- Local
- Private
- State Aquatic Preserves

Land Acquisition Projects

- Florida Forever
- Board of Trustees Projects

- FNAI Rare Species Habitat
- FNAI Biodiversity Matrix Square Mile Units

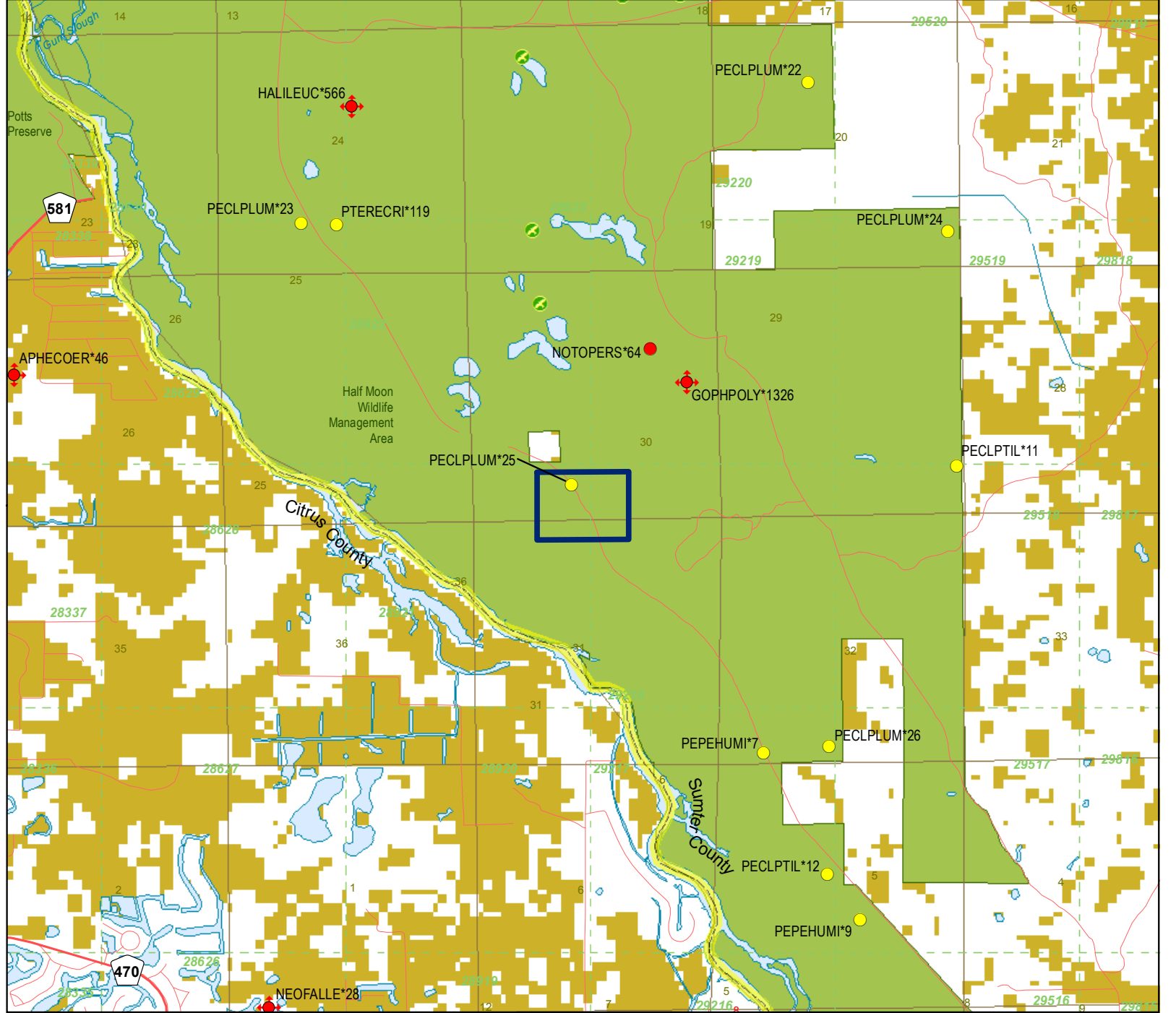
- County Boundary
- Interstate
- Turnpike
- Major Highway
- Local Road
- Railroad [Inactive railroads shown in Gray]
- Water

NOTE
Map should not be interpreted without accompanying documents.

Mill Creek Crossing

Site boundaries are approximate.

Sumter County



Map produced by MGO
3/9/2012



1018 Thomasville Road
Suite 200-C
Tallahassee, FL 32303
(850) 224-8207
(850) 681-9364 Fax
www.fnai.org

FLORIDA
Natural Areas
INVENTORY

Florida Natural Areas Inventory

DOCUMENTED ELEMENT OCCURRENCES ON OR NEAR Mill Creek Crossing



Map Label	Scientific Name	Common Name	Global State Federal State Observation				Date	Description	EO Comments
			Rank	Rank	Status	Listing			
APHECOER*46	<i>Aphelocoma coerulescens</i>	Florida Scrub-Jay	G2	S2	LT	FT	1981-03-05	OAK SCRUB BETWEEN HOUSES	1981-03-05: 2 SCRUB JAYS
GOPHPOLY*1326	<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	ST	2008	2001-2008: many burrows in pasture with some in sandhill and mesic and scrubby flatwoods. Disturbance from roads and trails, fire suppression, agriculture (F08FNA08FLUS, F01FNA01FLUS, F04FNA03FLUS).	2001-2008: at least 180 active burrows observed and 116 tortoises (F08FNA08FLUS, F01FNA01FLUS, F04FNA03FLUS). 2004: burrow size distribution for all habitats combined was as follows: 183 large, 107 medium, 23 small; this distribution of burrow sizes ind
HALILEUC*566	<i>Haliaeetus leucocephalus</i>	Bald Eagle	G5	S3	N	N	2003	No general description given	Nest status 1999-2003: Continuously active; Status 1995-98: Active - 1997, 1995; Inactive - 1998, 1996; (U03FWC01FLUS). Previous data (note different format) NEST; 1995: PRODUCED 2 YOUNG; 1994: PRODUCED 2 YOUNG; 1993: PRODUCED 1 YOUNG; 1992: ACTIVE, NO D
NEOFALLE*28	<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N	1991-07-22	1991-07-22: Depression Marsh (U97GFC02FLUS).	1991-07-22: D.S. Crowe, GFC, observed 1 adult dead on road (U97GFC02FLUS).
NOTOPERS*64	<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2S3	C	N	1998-08-19	2006-Spring: scrubby to mesic flatwoods, with loblolly, slash, and pond pine; sand live oak, gallberry, palmetto (U06DWY03FLUS). 2004: isolated wetlands visible in aerial photographs (PNDJAC01FLUS).	2006-Spring: none collected during dipnet surveys of nearby wetlands (U06DWY03FLUS). 1998-08-19: one individual caught at drift fence (U06DWY03FLUS).
PECLPLUM*22	<i>Pecluma plumula</i>	Plume Polypody	G5	S2	N	LE	2004-06-04	2004-06-04: mesic hammock (F04FNA03FLUS).	2004-06-04: Observed 62-150 plants in leaf; some with leaves to 24 inches long and some to 16 inches long. Growing on fallen and leaning Quercus virginiana; some plants are 20-30 feet above the ground (F04FNA03FLUS).
PECLPLUM*23	<i>Pecluma plumula</i>	Plume Polypody	G5	S2	N	LE	2004-05-04	2004-05-04: Mesic hammock (F04FNA03FLUS).	2004-05-04: 1-10 plants in leaf with leaves up to 18" long growing on Quercus virginiana (F04FNA03FLUS).



1018 Thomasville Road
Suite 200-C
Tallahassee, FL 32303
(850) 224-8207
(850) 681-9364 Fax
www.fnai.org

FLORIDA
Natural Areas
INVENTORY

Florida Natural Areas Inventory

DOCUMENTED ELEMENT OCCURRENCES ON OR NEAR Mill Creek Crossing



Map Label	Scientific Name	Common Name	Global State Federal State Observation				Date	Description	EO Comments
			Rank	Rank	Status	Listing			
PECLPLUM*24	<i>Pecluma plumula</i>	Plume Polypody	G5	S2	N	LE	2004-06-04	2004-06-04: Bottomland Forest for the western 2 points and Mesic Hammock for the 3 eastern points, with light disturbance from cattle and hogs (F04FNA03FLUS).	2004-06-04: Observed 45-210 plants growing mainly on <i>Quercus virginiana</i> but also on <i>Magnolia grandiflora</i> . Some with leaves 24 inches long (F04FNA03FLUS).
PECLPLUM*25	<i>Pecluma plumula</i>	Plume Polypody	G5	S2	N	LE	2004-06-02	2004-06-02: Western point is high quality mesic hammock. Eastern point is floodplain swamp (F04FNA03FLUS).	2004-06-02: Observed 52-110 plants in leaf. Plants at western point with leaves 24 inches long, growing on <i>Quercus virginiana</i> in high quality habitat. Plants at eastern point young (less than six inches long), growing on an old cypress stump (F04FNA03FLU).
PECLPLUM*26	<i>Pecluma plumula</i>	Plume Polypody	G5	S2	N	LE	2004-06-03	2004-06-03: mesic hammock (F04FNA03FLUS).	2004-06-03: Observed 2-20 plants in leaf, with leaves 12 inches long, growing on <i>Quercus virginiana</i> (F04FNA03FLUS).
PECLPTIL*11	<i>Pecluma ptilodon</i>	Swamp Plume Polypody	G5?	S2	N	LE	2003-10-06	2003-10-06: natural community not identified; disturbance from cattle and firebreaks exists(F04FNA03FLUS).	2003-10-06: Observed 51-100 plants in a 10-100 square meter area (F04FNA03FLUS).
PECLPTIL*12	<i>Pecluma ptilodon</i>	Swamp Plume Polypody	G5?	S2	N	LE	2004-06-03	2004-06-03: hydric hammock (F04FNA03FLUS).	2004-06-03: Observed 1-10 plants fruiting over area less than 1 square meter; growing on <i>Quercus virginiana</i> ; leaves 24" long (F04FNA03FLUS).
PEPEHUM*7	<i>Peperomia humilis</i>	Terrestrial Peperomia	G5	S2	N	LE	2004-06-03	2004-06-03: Extensive mesic hammock dominated by mature <i>Quercus virginiana</i> (PNDSCH03FLUS).	2004-06-03: Clump of plants covering about one meter square on horizontal <i>Quercus virginiana</i> log. Stems 100+, erect, 8 inches or less tall. Growing with <i>Phlebodium aureum</i> (PNDSCH03FLUS).
PEPEHUM*9	<i>Peperomia humilis</i>	Terrestrial Peperomia	G5	S2	N	LE	2004-06-03	Mesic hammock adjacent to floodplain of the Withlacoochee River (PNDSCH03FLUS).	2004-06-03: 51-100 plants in 1-10 square meter area; plants in leaf in clumps < 20 cm tall; epiphytic on <i>Quercus virginiana</i> log. (PNDSCH03FLUS).
PTERECRI*119	<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT	2003-12-09	2003-12-09: semi-improved pasture with heavy agriculture and cattle disturbance (F04FNA03FLUS).	2003-12-09: observed 10 plants in flower/fruit (F04FNA03FLUS).

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Matrix Unit ID: 28921					
Documented					
<i>Pecluma plumula</i>	Plume Polypody	G5	S2	N	LE
Likely					
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	ST
Mesic flatwoods		G4	S4	N	N
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	FE
Potential					
<i>Acipenser oxyrinchus desotoi</i>	Gulf Sturgeon	G3T2	S2	LT	FT
<i>Asplenium heteroresiliens</i>	Wagner's Spleenwort	GNA	S1	N	N
<i>Asplenium plenum</i>	Ruffled Spleenwort	G1Q	S1	N	N
<i>Asplenium x curtissii</i>	Curtiss' Spleenwort	GNA	S1	N	N
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	G3G4	S2	N	N
<i>Digitaria floridana</i>	Florida Fingergrass	G1	S1	N	N
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	FT
<i>Forestiera godfreyi</i>	Godfrey's Swampprivet	G2	S2	N	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	ST
<i>Justicia cooleyi</i>	Cooley's Water-willow	G2	S2	LE	LE
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Monotropis reynoldsiae</i>	Pygmy Pipes	G1Q	S1	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Myotis austroriparius</i>	Southeastern Bat	G3G4	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2S3	C	N
<i>Picoides borealis</i>	Red-cockaded Woodpecker	G3	S2	LE	FE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	SSC
<i>Pseudemys concinna suwanniensis</i>	Suwannee Cooter	G5T3	S3	N	SSC
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Pycnanthemum floridanum</i>	Florida Mountain-mint	G3	S3	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	SSC
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	SSC
<i>Spigelia loganioides</i>	Pinkroot	G2Q	S2	N	LE
<i>Trichomanes punctatum ssp. floridanum</i>	Florida Filmy Fern	G4G5T1	S1	C	LE
<i>Triphora craigheadii</i>	Craighead's Nodding-caps	G1	S1	N	LE

Matrix Unit ID: 29218

Documented

Pecluma plumula Plume Polypody G5 S2 N LE

Likely

Gopherus polyphemus Gopher Tortoise G3 S3 N ST
 Mesic flatwoods G4 S4 N N
Mycteria americana Wood Stork G4 S2 LE FE

Definitions: Documented - Rare species and natural communities documented on or near this site.
 Documented-Historic - Rare species and natural communities documented, but not observed/reported within the last twenty years.
 Likely - Rare species and natural communities likely to occur on this site based on suitable habitat and/or known occurrences in the vicinity.
 Potential - This site lies within the known or predicted range of the species listed.



1018 Thomasville Road
Suite 200-C
Tallahassee, FL 32303
(850) 224-8207
(850) 681-9364 Fax

FLORIDA
Natural Areas
INVENTORY

Florida Natural Areas Inventory

Biodiversity Matrix Report



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Potential					
<i>Acipenser oxyrinchus desotoi</i>	Gulf Sturgeon	G3T2	S2	LT	FT
<i>Asplenium heteroresiliens</i>	Wagner's Spleenwort	GNA	S1	N	N
<i>Asplenium plenum</i>	Ruffled Spleenwort	G1Q	S1	N	N
<i>Asplenium x curtissii</i>	Curtiss' Spleenwort	GNA	S1	N	N
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	G3G4	S2	N	N
<i>Digitaria floridana</i>	Florida Fingergrass	G1	S1	N	N
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	FT
<i>Forestiera godfreyi</i>	Godfrey's Swampprivet	G2	S2	N	LE
<i>Justicia cooleyi</i>	Cooley's Water-willow	G2	S2	LE	LE
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Monotropis reynoldsiae</i>	Pygmy Pipes	G1Q	S1	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Myotis austroriparius</i>	Southeastern Bat	G3G4	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2S3	C	N
<i>Picoides borealis</i>	Red-cockaded Woodpecker	G3	S2	LE	FE
<i>Pituophis melanoleucus mugitus</i>	Florida Pine Snake	G4T3	S3	N	SSC
<i>Pseudemys concinna suwanniensis</i>	Suwannee Cooter	G5T3	S3	N	SSC
<i>Rana capito</i>	Gopher Frog	G3	S3	N	SSC
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	SSC
<i>Spigelia loganioides</i>	Pinkroot	G2Q	S2	N	LE
<i>Triphora craigheadii</i>	Craighead's Nodding-caps	G1	S1	N	LE

Definitions: Documented - Rare species and natural communities documented on or near this site.
 Documented-Historic - Rare species and natural communities documented, but not observed/reported within the last twenty years.
 Likely - Rare species and natural communities likely to occur on this site based on suitable habitat and/or known occurrences in the vicinity.
 Potential - This site lies within the known or predicted range of the species listed.

Elements and Element Occurrences

An **element** is 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 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

- G1** = Critically imperiled globally because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
- G2** = Imperiled globally because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
- G3** = Either very rare and local throughout its range (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from 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).
- G#Q** = Rank of questionable species - ranked as species but questionable whether it is species or subspecies; numbers have same definition as above (e.g., G2Q).
- G#T#Q** = Same as above, but validity as subspecies or variety is questioned.
- GU** = Unrankable; due to a lack of information no rank or range can be assigned (e.g., GUT2).
- GNA** = Ranking is not applicable because the element is not a suitable target for conservation (e.g. a hybrid species).
- GNR** = Element not yet ranked (temporary).
- GNRTNR** = Neither the element nor the taxonomic subgroup has yet been ranked.

FNAI STATE ELEMENT RANK

- S1** = Critically imperiled in Florida because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
- S2** = Imperiled in Florida because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
- S3** = Either very rare and local in Florida (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.
- S4** = Apparently secure in Florida (may be rare in parts of range).
- S5** = Demonstrably secure in Florida.
- SH** = Of historical occurrence in Florida, possibly extirpated, but may be rediscovered (e.g., ivory-billed woodpecker).
- SX** = Believed to be extirpated throughout Florida.
- SU** = Unrankable; due to a lack of information no rank or range can be assigned.
- SNA** = State ranking is not applicable because the element is not a suitable target for conservation (e.g. a hybrid species).
- SNR** = Element not yet ranked (temporary).

FEDERAL LEGAL STATUS

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

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

- C** = 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.
- LE** = Endangered: species in danger of extinction throughout all or a significant portion of its range.
- LE, LT** = Species currently listed endangered in a portion of its range but only listed as threatened in other areas
- LE, PDL** = Species currently listed endangered but has been proposed for delisting.
- LE, PT** = Species currently listed endangered but has been proposed for listing as threatened.
- LE, XN** = Species currently listed endangered but tracked population is a non-essential experimental population.
- LT** = Threatened: species likely to become Endangered within the foreseeable future throughout all or a significant portion of its range.
- SAT** = Treated as threatened due to similarity of appearance to a species which is federally listed such that enforcement personnel have difficulty in attempting to differentiate between the listed and unlisted species.
- SC** = Not currently listed, but considered a "species of concern" to USFWS.

STATE LEGAL STATUS

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, 1 August 1997, and subsequent updates.

- FE** = Listed as Endangered Species at the Federal level by the U. S. Fish and Wildlife Service
- FT** = Listed as Threatened Species at the Federal level by the U. S. Fish and Wildlife Service
- F(XN)** = Federal listed as an experimental population in Florida
- FT(S/A)** = Federal Threatened due to similarity of appearance
- ST** = State population listed as Threatened by the FFWCC. Defined as a species, subspecies, or isolated population which is acutely vulnerable to environmental alteration, declining in number at a rapid rate, or whose range or habitat is decreasing in area at a rapid rate and as a consequence is destined or very likely to become an endangered species within the foreseeable future. (ST* for *Ursus americanus floridanus* (Florida black bear) indicates that this status does not apply in Baker and Columbia counties and in the Apalachicola National Forest. ST* for *Neovison vison* pop.1 (Southern mink, South Florida population) indicates that this status applies to the Everglades population only.)
- SSC** = Listed as Species of Special Concern by the FFWCC. Defined as a population which warrants special protection, recognition, or consideration because it has an inherent significant vulnerability to habitat modification, environmental alteration, human disturbance, or substantial human exploitation which, in the foreseeable future, may result in its becoming a threatened species. (SSC* indicates that a species has SSC status only in selected portions of its range in Florida. 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/>.

- LE** = 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.
- LT** = 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).

- A** = Excellent estimated viability
- A?** = Possibly excellent estimated viability
- AB** = Excellent or good estimated viability
- AC** = Excellent, good, or fair estimated viability
- B** = Good estimated viability
- B?** = Possibly good estimated viability
- BC** = Good or fair estimated viability
- BD** = Good, fair, or poor estimated viability
- C** = 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
- H** = Historical
- NR** = Not ranked, a placeholder when an EO is not (yet) ranked.
- U** = Unrankable
- X** = Extirpated

*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).



Atlas of Florida's Natural Heritage

Biodiversity, Landscapes, Stewardship, and Opportunities

The Florida Natural Areas Inventory is pleased to announce the publication of the ***Atlas of Florida's Natural Heritage: Biodiversity, Landscapes, Stewardship, and Opportunities***. This high-quality, full-color *Atlas* is sure to become a standard reference for anyone involved in the conservation, management, study, or enjoyment of Florida's rich natural resources. We hope the *Atlas* will inspire, educate, and raise awareness of and interest in biodiversity and conservation issues.



*Institute of Science
and Public Affairs*



AUDIENCE:

The ***Atlas of Florida's Natural Heritage: Biodiversity, Landscapes, Stewardship, and Opportunities*** was envisioned as a resource that would appeal to a wide-ranging audience. Through its use of colorful maps, graphics, and photography, Florida's Natural Heritage and appeal is dramatically highlighted. It is intended to appeal to a wide audience. Hopefully, it will increase awareness of the resources we take for granted, and the challenges we face in preserving them.

It is for those who are informed, interested, and/or influential in environmental issues, but may lack specific information and expertise. These may include planners, policymakers, and environmental/conservation advocates from the local to state level. It is also for environmental/conservation/natural resource managers. While the atlas may not provide "new information" to this audience, it will serve as a useful reference that brings many of the elements of biodiversity together in one publication. The final audience are the citizens of Florida and those who may visit our state.

We want the atlas to inspire, educate, and raise awareness of and the interest in biodiversity and conservation issues. Florida's biodiversity is not only important to maintain our quality of life, but it is a primary reason why so many people visit our state.

FEATURES INCLUDE:

- 176 pages, 10" x 12" format, soft cover and hard cover editions
- Visually striking presentation with hundreds of maps, photos, illustrations, and other information-rich graphics
- Wide-ranging overview of natural communities and over 400 species of plants, and animals
- Coverage of timely conservation and land management issues



Learn more about the *Atlas*, view sample pages and order your copy today at:

FloridasNaturalHeritage.org