

1018 Thomasville Road Suite 200-C Tallahassee, FL 32303 850-224-8207 fax 850-681-9364 www.fnai.org September 15, 2009

Fred Crabill Southeast Environmental Solutions, Inc. 801 North Park Road Plant City, FL 33563

Dear Mr. Crabill,

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

**Project:** Innovation Environmental Park – Project # 1218

Date Received: August 25, 2009

**Location:** Near Mulberry, Polk County

#### **Element Occurrences**

A search of our maps and database indicates that currently we have several Element Occurrences mapped within 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.

Several of the species and natural communities tracked by the Inventory are considered **data sensitive**. Occurrence records for these elements contain information that we consider sensitive due to collection pressures, extreme rarity, or at the request of the source of the information. The Element Occurrence Record has been labeled "Data Sensitive." We request that you not publish or release specific locational data about these species or communities without consent from the Inventory. If you have any questions concerning this please do not hesitate to call.

### **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



Florida Resources and Environmental Analysis Center

Institute of Science and Public Affairs

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.

The Inventory always recommends that professionals familiar with Florida's flora and fauna should 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.

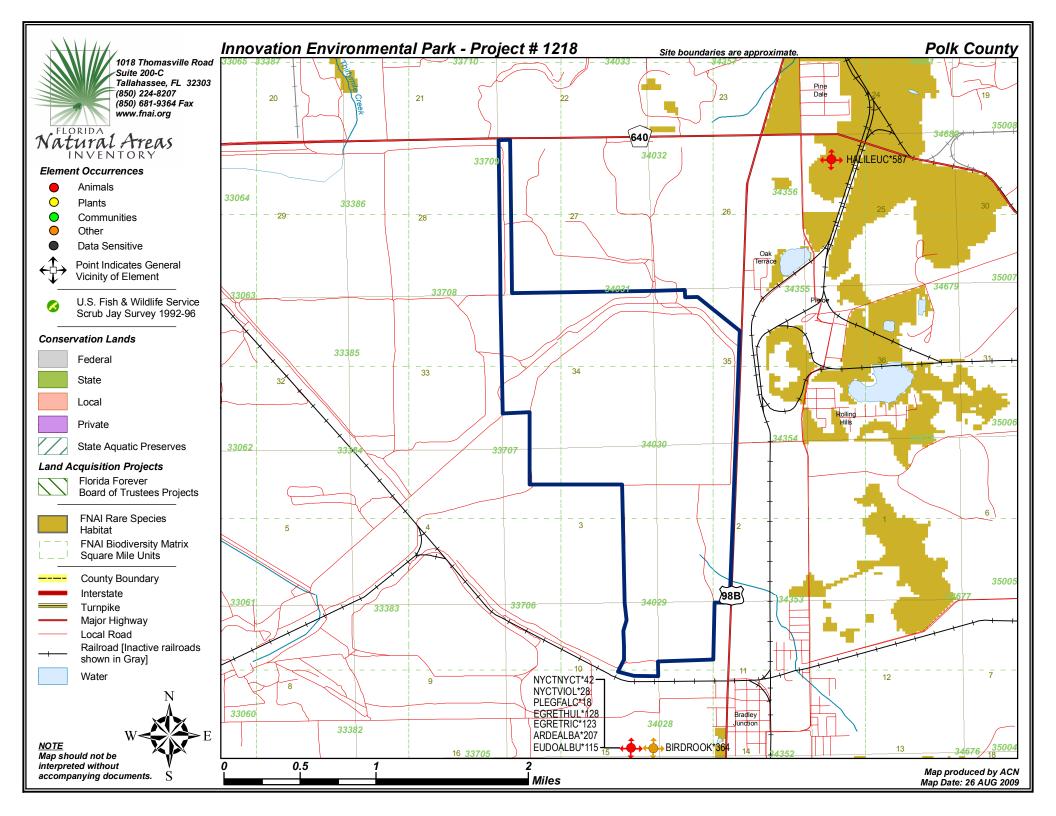
Information provided by this database may not be published without prior written notification to the Florida Natural Areas Inventory, and the Inventory must be credited as an information source in these publications. FNAI data may not be resold for profit.

Thank you for your use of FNAI services. If I can be of further assistance, please give me a call at (850) 224-8207.

Alicia C. Newberry

Alicia C. Newberry
Data Services Coordinator

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## ELEMENT OCCURRENCES DOCUMENTED ON OR NEAR Innovation Environmental Park - Project # 1218



INVENTORY		Global	State	Federal	State	Observation	n		
Map Label	Scientific Name	Common Name			Status			Description	EO Comments
BIRDROOK*364	Bird Rookery		GNR	SNR	N	N	1989-04-26	Near strip mine.	Multi-species rookery, 9 species. 11-100 birds 1987-04-30, >1,000 birds 1989-04-20 and 1989-04-26. Great Egret present 1987; Snowy Egret present 1987, 1989-04- 26; Tricolored Heron present 1989-04-26; White Ibis present 1989-04-26; Glossy Ibis present 19
ARDEALBA*207	Ardea alba	Great Egret	G5	S4	N	N	1987-04-30	Near strip mine.	Species present 1987-4-30. Not observed 1989-04-20 and 1989-04-26.
PLEGFALC*18	Plegadis falcinellus	Glossy Ibis	G5	S3	N	N	1989-04-26	Near strip mine.	Species present 1989-04-26. Not observed 1987-04-30 and 1989-04-20.
EGRETHUL*128	Egretta thula	Snowy Egret	G5	S3	N	LS	1989-04-26	Near strip mine.	Species present 1987-04-30 and 1989-04-26. Not observed 1989-04-20 (but unidentified small white waders ->1000 birds - present).
NYCTNYCT*42	Nycticorax nycticorax	Black-crowned Night-heron	G5	S3	N	N	1989-04-26	Near strip mine.	Species present 1989-04-26. Not observed 1987-04-30 and 1989-04-20.
NYCTVIOL*28	Nyctanassa violacea	Yellow-crowned Night-heron	G5	S3	N	N	1989-04-26	Near strip mine.	Species present 1989-04-26. Not observed 1987-04-30 and 1989-04-20.
EUDOALBU*115	Eudocimus albus	White Ibis	G5	S4	N	LS	1989-04-26	Near strip mine.	Species present 1989-04-26. Not observed 1987-04-30 and 1989-04-20, (but unidentified small white waders ->1000 birds - present 1989-04-20).
EGRETRIC*123	Egretta tricolor	Tricolored Heron	G5	S4	N	LS	1989-04-26	Near strip mine.	Species present 1989-04-26. Not observed 1987-04-30 and 1989-04-20.
HALILEUC*587	Haliaeetus leucocephalus	Bald Eagle	G5	S3	N	N	2003	No general description given	Nest status 1999-2003: Active - 2003, 2001, 2000, 1999; Inactive - 2002; Status 1995-98: Continuously active. (U03FWC01FLUS). Previous data (note different format) NEST: 1987-1988 ACTIVE. FLEDGED YOUNG 1988.

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## Florida Natural Areas Inventory **Biodiversity Matrix Report**

Natural Areas				. 18	51 · ®
Scientific Name	Common Name		tate Rank	Federal Status	State Listing
Matrix Unit ID: 33707					
Potential					
Calopogon multiflorus Centrosema arenicola Drymarchon couperi Gopherus polyphemus Grus canadensis pratensis Gymnopogon chapmanianus Lechea cernua Matelea floridana Mustela frenata peninsulae Nemastylis floridana Neofiber alleni Panicum abscissum Pteroglossaspis ecristata Rostrhamus sociabilis plumbeus	Many-flowered Grass-pink Sand Butterfly Pea Eastern Indigo Snake Gopher Tortoise Florida Sandhill Crane Chapman's Skeletongrass Nodding Pinweed Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Cutthroat Grass Giant Orchid Snail Kite	G2Q G3 G3 G5T2T3 S2 G3 G3 G2 G5T3 G2 G3 G3 G3 G2G3	2S3 S2 S3 S3 2S3 S3 S3 S2 S3 S2 S3 S3 S3 S2 S3 S2 S3	ZZTZZZZZZZZ	LE LT LT NT LE NE NE LT LE
Matrix Unit ID: 33708					
Potential					
Calopogon multiflorus Centrosema arenicola Drymarchon couperi Gopherus polyphemus Grus canadensis pratensis Gymnopogon chapmanianus Lechea cernua Matelea floridana Mustela frenata peninsulae Nemastylis floridana Neofiber alleni Nolina atopocarpa Panicum abscissum Pteroglossaspis ecristata Rostrhamus sociabilis plumbeus	Many-flowered Grass-pink Sand Butterfly Pea Eastern Indigo Snake Gopher Tortoise Florida Sandhill Crane Chapman's Skeletongrass Nodding Pinweed Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Florida Beargrass Cutthroat Grass Giant Orchid Snail Kite	G2Q G3 G3 G5T2T3 S2 G3 G3 G2 G5T3 G2 G3 G3 G3 G3 G2G3	2S3 S2 S3 S3 2S3 S3 S3 S2 S3 S2 S3 S3 S3 S3 S2 S3 S3	Tzzzzzzzzzz T	E E T T T N T E N E N T E T E
Matrix Unit ID: 33709 Potential					
Calopogon multiflorus Centrosema arenicola Drymarchon couperi Gopherus polyphemus Grus canadensis pratensis Gymnopogon chapmanianus Heterodon simus Lechea cernua Litsea aestivalis Matelea floridana	Many-flowered Grass-pink Sand Butterfly Pea Eastern Indigo Snake Gopher Tortoise Florida Sandhill Crane Chapman's Skeletongrass Southern Hognose Snake Nodding Pinweed Pondspice Florida Spiny-pod	G2Q S G3 S G5T2T3 S G3 S G2 S G3 S	2S3 S2 S3 S3 2S3 S3 S2 S3 S2 S3 S2	X	LE LE LT LT N N LT LE 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.

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## **Biodiversity Matrix Report**



Natural Areas				10	31
INVENTORY		Global	State	Federal	State
Scientific Name	Common Name	Rank	Rank	Status	Listing
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	ĹĖ
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Nolina atopocarpa	Florida Beargrass	G3	S3	N	ĹŤ
Panicum abscissum	Cutthroat Grass	G3	S3	N	LE
Podomys floridanus	Florida Mouse	G3	S3	N	LS
	Giant Orchid	G2G3	S2	N	LT
Pteroglossaspis ecristata		G2G3 G3	S2 S3		
Rana capito	Gopher Frog	G4G5T3Q		N LE	LS LE
Rostrhamus sociabilis plumbeus	Snail Kite	G4G513Q	S2	LE	LE
Matrix Unit ID: 34028					
Likely					
Bird Rookery		GNR	SNR	Ν	N
Egretta thula	Snowy Egret	G5	S3	Ν	LS
Egretta tricolor	Tricolored Heron	G5	S4	N	LS
Eudocimus albus	White Ibis	G5	S4	N	LS
Nyctanassa violacea	Yellow-crowned Night-heron	G5	S3	N	N
Nycticorax nycticorax	Black-crowned Night-heron	G5	S3	N	N
Plegadis falcinellus	Glossy Ibis	G5	S3	N	N
•	Glossy Ibis	00	00	14	14
Potential	Davidson de Oceans	00	00	<b>.</b>	<b>.</b>
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Andropogon arctatus	Pine-woods Bluestem	G3	S3	N	LT
Ardea alba	Great Egret	G5	S4	N	. N
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Lechea cernua	Nodding Pinweed	G3	S3	N	LT
Litsea aestivalis	Pondspice	G3	S2	Ν	LE
Matelea floridana	Florida Spiny-pod	G2	S2	Ν	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	Ν	N
Nemastylis floridana	Celestial Lily	G2	S2	Ν	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	Ν	Ν
Panicum abscissum	Cutthroat Grass	G3	S3	N	LE
Podomys floridanus	Florida Mouse	G3	S3	Ν	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	Ν	LT
Rana capito	Gopher Frog	G3	S3	Ν	LS
Rostrhamus sociabilis plumbeus	Snail Kite	G4G5T3Q	S2	LE	LĒ
Zephyranthes simpsonii	Rain Lily	G2G3	S2S3	N	LT
Matrix Unit ID: 34029					
Potential					
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Andropogon arctatus	Pine-woods Bluestem	G3	S3	N	LT
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	Ň	LE.
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
	23 23	<i>52</i>	<u> </u>		

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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.

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#### 24-8207 B1-9364 Fax Biodiversity Matrix Report

INVENTORY Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Drymarchon couperi Gopherus polyphemus Grus canadensis pratensis Gymnopogon chapmanianus Lechea cernua Litsea aestivalis Matelea floridana Mustela frenata peninsulae Nemastylis floridana Neofiber alleni Panicum abscissum Podomys floridanus Pteroglossaspis ecristata Rana capito Rostrhamus sociabilis plumbeus	Eastern Indigo Snake Gopher Tortoise Florida Sandhill Crane Chapman's Skeletongrass Nodding Pinweed Pondspice Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Cutthroat Grass Florida Mouse Giant Orchid Gopher Frog Snail Kite	G3 G3 G5T2T3 G3 G3 G3 G2 G5T3 G2 G3 G3 G3 G2G3 G3 G4G5T3Q G2G3	\$3 \$3 \$2\$3 \$3 \$3 \$2 \$2 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3	T Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	LT LT N LT LE N LE N LE S LT S LE LT
Zephyranthes simpsonii  Matrix Unit ID: 34030	Rain Lily	G2G3	3233	IN	LI
Potential					
Calopogon multiflorus Centrosema arenicola Corynorhinus rafinesquii Drymarchon couperi Gopherus polyphemus Grus canadensis pratensis Gymnopogon chapmanianus Lechea cernua Matelea floridana Mustela frenata peninsulae Nemastylis floridana Neofiber alleni Panicum abscissum Pteroglossaspis ecristata Rostrhamus sociabilis plumbeus	Many-flowered Grass-pink Sand Butterfly Pea Rafinesque's Big-eared Bat Eastern Indigo Snake Gopher Tortoise Florida Sandhill Crane Chapman's Skeletongrass Nodding Pinweed Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Cutthroat Grass Giant Orchid Snail Kite	G2G3 G2Q G3G4 G3 G3 G5T2T3 G3 G2 G5T3 G2 G3 G3 G4G5T3Q	\$2\$3 \$2 \$2 \$3 \$3 \$2\$3 \$3 \$3 \$2 \$3 \$2 \$3 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3	X	LE LN LT LT N LT LE N LE LT LE
Matrix Unit ID: 34031					
Potential					
Calopogon multiflorus Centrosema arenicola Corynorhinus rafinesquii Drymarchon couperi Gopherus polyphemus Grus canadensis pratensis Gymnopogon chapmanianus Lechea cernua Mustela frenata peninsulae Nemastylis floridana Neofiber alleni	Many-flowered Grass-pink Sand Butterfly Pea Rafinesque's Big-eared Bat Eastern Indigo Snake Gopher Tortoise Florida Sandhill Crane Chapman's Skeletongrass Nodding Pinweed Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat	G2G3 G2Q G3G4 G3 G3 G5T2T3 G3 G3 G5T3 G2 G3	\$2\$3 \$2 \$2 \$3 \$3 \$2\$3 \$3 \$3 \$3 \$3 \$3 \$3	N N N T N N N N N N N N N N N N N N N N	LE LE N LT LT LT N LT N LE N

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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.

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## **Biodiversity Matrix Report**



Natural Areas			1031
INVENTORY	O a married Married	Global State	Federal State
Scientific Name	Common Name	Rank Rank	Status Listing
Pteroglossaspis ecristata Rostrhamus sociabilis plumbeus	Giant Orchid Snail Kite	G2G3 S2 G4G5T3Q S2	N LT LE LE
Matrix Unit ID: 34353			
Likely			
Rostrhamus sociabilis plumbeus	Snail Kite	G4G5T3Q S2	LE LE
Potential			
Aimophila aestivalis Andropogon arctatus Calopogon multiflorus Centrosema arenicola Drymarchon couperi Gopherus polyphemus Grus canadensis pratensis Gymnopogon chapmanianus Lechea cernua Litsea aestivalis Matelea floridana Mustela frenata peninsulae Nemastylis floridana Neofiber alleni Podomys floridanus Pteroglossaspis ecristata Rana capito Zephyranthes simpsonii	Bachman's Sparrow Pine-woods Bluestem Many-flowered Grass-pink Sand Butterfly Pea Eastern Indigo Snake Gopher Tortoise Florida Sandhill Crane Chapman's Skeletongrass Nodding Pinweed Pondspice Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Florida Mouse Giant Orchid Gopher Frog Rain Lily	G3 S3 G3 S3 G2G3 S2S3 G2Q S2 G3 S3 G3 S3 G5T2T3 S2S3 G3 S3 G3 S3 G3 S2 G2 S2 G5T3 S3 G2 S2 G3 S3 G3 S3 G3 S3 G2 S2 G3 S3	N N LT N LE N LT LT N LT N LT N LT N LT
Matrix Unit ID: 34354			
Likely	0 1146	0.40===0	
Rostrhamus sociabilis plumbeus	Snail Kite	G4G5T3Q S2	LE LE
Calopogon multiflorus Centrosema arenicola Drymarchon couperi Gopherus polyphemus Grus canadensis pratensis Gymnopogon chapmanianus Lechea cernua Litsea aestivalis Matelea floridana Mustela frenata peninsulae Nemastylis floridana Neofiber alleni Podomys floridanus Pteroglossaspis ecristata Rana capito Zephyranthes simpsonii	Many-flowered Grass-pink Sand Butterfly Pea Eastern Indigo Snake Gopher Tortoise Florida Sandhill Crane Chapman's Skeletongrass Nodding Pinweed Pondspice Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Florida Mouse Giant Orchid Gopher Frog Rain Lily	G2G3 S2S3 G2Q S2 G3 S3 G3 S3 G5T2T3 S2S3 G3 S3 G3 S3 G3 S2 G2 S2 G5T3 S3 G2 S2 G3 S3 G3 S3 G3 S3 G2 S2 G3 S3 G2G3 S2 G3 S3	N LE N LE LT LT N LT N LT N LT N LE

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Potential - This site lies within the known or predicted range of the species listed.

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### **Biodiversity Matrix Report**



Common Name	Global Rank	State Rank	Federal Status	State Listing
Snail Kite	G4G5T3Q	S2	LE	LE
Many-flowered Grass-pink Chapman's Sedge Sand Butterfly Pea Eastern Indigo Snake Gopher Tortoise Florida Sandhill Crane Chapman's Skeletongrass Nodding Pinweed Pondspice Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Florida Mouse Giant Orchid	G2G3 G3 G2Q G3 G3 G5T2T3 G3 G3 G2 G5T3 G2 G3 G3 G3	\$2\$3 \$3 \$2 \$3 \$3 \$2\$3 \$3 \$2 \$2 \$3 \$3 \$3 \$3	X	LE LE LT LT N LT LE N LE N LS LT LS
Rain Lily	G2G3	S2S3	N	LT
	Snail Kite  Many-flowered Grass-pink Chapman's Sedge Sand Butterfly Pea Eastern Indigo Snake Gopher Tortoise Florida Sandhill Crane Chapman's Skeletongrass Nodding Pinweed Pondspice Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Florida Mouse Giant Orchid Gopher Frog	Common NameRankSnail KiteG4G5T3QMany-flowered Grass-pink Chapman's Sedge Sand Butterfly Pea Eastern Indigo Snake Gopher Tortoise Florida Sandhill Crane Chapman's Skeletongrass Nodding Pinweed Florida Spiny-pod Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Florida Mouse Giant Orchid Gopher FrogG3 G4G5T3Q G2 G3 G3 G3 G3 G3 G3 G3 G3 G3	Common NameRankRankSnail KiteG4G5T3QS2Many-flowered Grass-pink Chapman's Sedge Sand Butterfly Pea Eastern Indigo Snake Gopher Tortoise Chapman's Skeletongrass Chapman's Skeletongrass Nodding Pinweed Florida Spiny-pod Florida Spiny-pod 	Common Name         Rank         Rank         Status           Snail Kite         G4G5T3Q         S2         LE           Many-flowered Grass-pink Chapman's Sedge         G3         S2S3         N           Sand Butterfly Pea         G2Q         S2         N           Eastern Indigo Snake         G3         S3         LT           Gopher Tortoise         G3         S3         N           Florida Sandhill Crane         G5T2T3         S2S3         N           Chapman's Skeletongrass         G3         S3         N           Nodding Pinweed         G3         S3         N           Pondspice         G3         S2         N           Florida Spiny-pod         G2         S2         N           Florida Long-tailed Weasel         G5T3         S3         N           Celestial Lily         G2         S2         N           Round-tailed Muskrat         G3         S3         N           Florida Mouse         G3         S3         N           Giant Orchid         G2G3         S2         N           Gopher Frog         G3         S3         N

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### **GLOBAL AND STATE RANKS**

Florida Natural Areas Inventory (FNAI) defines an **element** as any rare or exemplary component of the natural environment, such as a species, natural community, bird rookery, spring, sinkhole, cave, or other ecological feature. FNAI assigns two ranks to each element found in Florida: the **global rank**, which is based on an element's worldwide status, and the **state rank**, which is based on the status of the element within Florida. Element ranks are based on many factors, including estimated number of occurrences, estimated abundance (for species and populations) or area (for natural communities), estimated number of adequately protected occurrences, range, threats, and ecological fragility.

#### **GLOBAL RANK DEFINITIONS**

G1	Critically imperiled globally because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
G2	Imperiled globally because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
<i>G3</i>	Either very rare and local throughout its range (21-100 occurrences or less than 10,0000 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).
<i>G</i> 5	Demonstrably secure globally.
<i>G#?</i>	Tentative rank (e.g., G2?)
<i>G#G#</i>	Range of rank; insufficient data to assign specific global rank (e.g., G2G3)
<i>G#T#</i>	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.
GH	Of historical occurrence throughout its range, may be rediscovered (e.g., ivory-billed woodpecker)
<b>GNA</b>	Ranking is not applicable because element is not a suitable target for conservation (e.g. as for hybrid species)
GNR	Not yet ranked (temporary)
<b>GNRTNR</b>	Neither the full species nor the taxonomic subgroup has yet been ranked (temporary)
GX	Believed to be extinct throughout range
GXC	Extirpated from the wild but still known from captivity/cultivation
GU	Unrankable. Due to lack of information, no rank or range can be assigned (e.g., GUT2).

### STATE RANK DEFINITIONS

Definition parallels global element rank: substitute "S" for "G" in above global ranks, and "in Florida" for "globally" in above global rank definitions.

## FEDERAL AND STATE LEGAL STATUSES (U.S. Fish and Wildlife Service – USFWS) PROVIDED BY FNAI FOR INFORMATION ONLY.

For official definitions and lists of protected species, consult the relevant state or federal agency.

#### FEDERAL LEGAL STATUS

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.

- **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 which is in danger of extinction throughout all or a significant portion of its range.
- **LE,XN** A non essential experimental population of a species otherwise Listed as an Endangered Species in the List of Endangered and Threatened Wildlife and Plants. LE,XN for Grus americana (Whooping crane), Federally listed as XN (Non essential experimental population) refers to the Florida experimental population only. Federal listing elsewhere for Grus americana is LE.
- **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 which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.
- **LT,PDL** Species currently listed Threatened but has been proposed for delisting.
- **PT** Proposed for listing as Threatened Species.
- C Candidate Species for addition to the list of Endangered and Threatened Wildlife and Plants, Category 1. Federal listing agencies have sufficient information on biological vulnerability and threats to support proposing to list the species as Endangered or Threatened.
- **SAT** Threatened due to similarity of appearance to a threatened species.
- SC Species of Concern, species is not currently listed but is of management concern to USFWS.
- N Not currently listed, nor currently being considered for addition to the List of Endangered and Threatened Wildlife and Plants.

### FLORIDA LEGAL STATUSES (Florida Fish and Wildlife Conservation Commission – FFWCC/ Florida Department of Agriculture and Consumer Services – FDACS)

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

- LE Listed as Endangered Species by the FFWCC. Defined as a species, subspecies, or isolated population which is so rare or depleted in number or so restricted in range of habitat due to any man-made or natural factors that it is in immediate danger of extinction or extirpation from the state, or which may attain such a status within the immediate future.
- LT Listed as Threatened Species by the FFWCC. Defined as a species, subspecies, or isolated population which is acutely vulnerable to environmental alteration, declining in number at a rapid rate, or whose range or habitat is decreasing in area at a rapid rate and as a consequence is destined or very likely to become an endangered species within the foreseeable future.
- LT\* Indicates that a species has LT status only in selected portions of its range in Florida. LT\* for Ursus americanus floridanus (Florida black bear) indicates that LT status does not apply in Baker and Columbia counties and in the Apalachicola National Forest. LT\* for Neovison vison pop. 1 (Southern mink, South Florida population) state listed as Threatened refers to the Everglades population only (Note: species formerly listed as Mustela vison mink pop. 1. Also, priorly listed as Mustela evergladensis).
- LS Listed as Species of Special Concern by the FFWCC, defined as a population which warrants special protection, recognition, or consideration because it has an inherent significant vulnerability to habitat modification,

environmental alteration, human disturbance, or substantial human exploitation which, in the foreseeable future, may result in its becoming a threatened species.

LS\* Indicates that a species has LS status only in selected portions of its range in Florida. LS\* for Pandion haliaetus (Osprey) state listed as LS (Species of Special Concern) in Monroe County only.

PE Proposed for listing as Endangered.PT Proposed for listing as Threatened.

**PS** Proposed for listing as a Species of Special Concern.

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 please visit: http://DOACS.State.FL.US/PI/Images/Rule05b.pdf

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.

**PE** Proposed by the FDACS for listing as Endangered Plants.

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. LT\* indicates that a species has LT status only in selected portions of its range in Florida.

**PT** Proposed by the FDACS for listing as Threatened Plants.

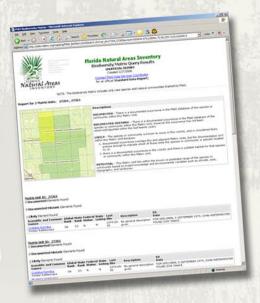
Not currently listed, nor currently being considered for listing.











FOR IMMEDIATE RELEASE

## FNAI's Biodiversity Matrix Online

The Biodiversity Matrix Map Server is a new screening tool from FNAI that provides immediate, free access to rare species occurrence information statewide. This tool allows you to zoom to your site of interest and create a report listing documented, likely, and potential occurrences of rare species and natural communities.

The FNAI Biodiversity Matrix offers built-in interpretation of the likelihood of species occurrence for each 1-square-mile Matrix Unit across the state. The report includes a site map and list of species and natural communities by occurrence status: Documented, Documented-Historic, Likely, and Potential.

Try it today:

www.fnai.org/biointro.cfm

Please note: FNAI will continue to offer our Standard Data Report service as always. The Standard Data Report offers the most comprehensive information available on rare species, natural communities, conservation lands, and other natural resources.