

Listed Species Survey

Section 14 Township 49S Range 27E

Parcel ID# 00303200002

5.07 ac

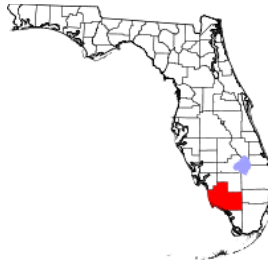
1301 IVY WAY

Naples FL 34117

Collier County

Survey conducted: 2018 January 17th

Submitted 2018 January 22nd



Prepared for:

Jamie Lee Rzewinicki- Owner/Applicant

Collier County Development Services

Growth Management Department

Environmental Services Section

2800 North Horseshoe Drive

Naples, FL 34104

Field survey and report completed by:

Brooke Hollander

Biologist/Consultant

Tropical Environmental Consultants, LLC.

3899 Mannix Dr. #409

Naples, FL 34114

239-455-6232

info@tropicalenvironmentalconsultants.com

&

Mark Lafurno – FWC Gopher Tortoise Authorized Agent

Apex Biological Services, LLC

Introduction 1.0

TEC conducted a species survey over the 5.07 acre property in Collier County, FL. The site is zoned Agricultural (Inactive), within the TDR "Neutral" lands overlay. The property is currently vacant with some clearing actions performed. The proposed project includes vegetation removal/clearing associated with house and yard development. Survey findings are mapped in **Figures 1 and 2**. The property contains the FLUCCS code area 4110 (Pine Flatwoods) and 2110 (Improved Pasture). Additional photographs of the site are included in **Exhibit 1**. The site is located within the *Consultation and Focal Area* for the Florida bonneted bat (*Eumops floridanus*- *Endangered*) and the Consultation area for the red-cockaded woodpecker (*Picoides borealis*), as well as potentially providing habitat to additional state/federal listed species. Property Tax data is provided on **Exhibit 3**.

Purpose 2.0

The following survey was conducted to determine whether federal/state listed species, or evidence thereof, are present within the subject property as request by Collier County Development Services during review of a fence and clearing permit application. A "resource" list of protected species present within Collier County was generated using the IpaC USFWS consultation tool and FNAI biomatrix tool (**Exhibit 4**). The project site is located in the Matrix Unit 43512 of the Florida Natural Areas Inventory Biodiversity Matrix. This square mile unit contains 1 Documented element, 5 Likely elements, and 12 potential elements including, but not limited to; Florida bonneted bat (FBB), red-cockaded woodpecker (RCW), and gopher tortoise (GT). The survey that was conducted follows the guidelines provided in the Draft Protocol for Florida Bonneted Bat Roosting Surveys- FWS, August 2014. The gopher tortoise survey was conducted in accordance with FWC regulation provided in the state permitting guidelines.

Biology 3.0

- The Florida bonneted bat (*Eumops floridanus* – *F.B.B.*) is federally listed as *Endangered* and is endemic to South Florida. Potential roost structures include tree cavities, caves, rock crevices, artificial structures including buildings, bridges, and bat houses constructed specifically to attract roosting bats (*Draft Protocol for Florida Bonneted Bat Roosting Surveys*- FWS, August 2014). The bat is approximately 6.5 inches in length with a wingspan of 20 inches, and is the largest free-tailed bat species in Florida. Colony size is generally small, totaling several individuals. The FBB is known to reproduce during the fall and spring and may be capable of reproducing year-round.
- The red-cockaded woodpecker (*Picoides borealis*- *R.C.W.*) is federally listed as *Endangered* and is found in mature pine-forests of the Southeastern United States, nesting and roosting exclusively in cavities excavated by the species within living pine trees. The bird is approximately 7 inches long, with a wingspan of about 15 inches, with a unique barred white and black back, with a black "cap" with white cheeks. Colony size may range from 1 or more cavities on 3 to 60 acres, with a foraging range averaging 125-200 acres.
- The gopher tortoise (*Gopherus Polyphemus*) is the only tortoise in the Southeast and can easily be distinguished from Florida's only other fully terrestrial turtle, the box turtle (*Terrapene carolina bauri*) by its large size and rigid unhinged plastron. Adult Gopher Tortoises are large 9-15 in and are tan or brown above with a yellowish plastron. The juveniles can be yellowish and brightly patterned. Males have a concave plastron and longer tail than females. This tortoise is listed as *State Threatened*.

Methodology 4.0

On January 17th from approximately 1:30 PM to 5:45 PM and January 18th from approximately 3:00 PM to 5:30 PM, biologists conducted meandering pedestrian transects through the property, traversing from south to north ensuring 100 percent visual coverage of the site. Transects were spaced approximately 50' apart. Staff also conducted straight line transects for ground inspection

approximately 25'-30' apart maintaining visual coverage of the site. Potential occurrences of listed species use were recorded, GPS coordinates obtained, locations flagged onsite, and further investigated. Both subject property as well as the area immediately adjacent to the property line was inspected. Photos were taken of all identified tortoise burrows and assessed as "Abandoned" or "Potentially Occupied" as per FWC guidelines. Potentially occupied burrows were then further classified as "Inactive" or "Active." Photographs of the burrows as well as tree cavities are provided in **Exhibit 2** along with the resulting classification.

On January 9th, from approximately 10:10 AM to 12:00 PM, tree cavity contents were assessed using a high resolution boroscope camera attached to a telescoping rod and remote view screen.

Summary of Findings and Observations 5.0

A total of three (3) tree cavities were located and scoped with no listed species present upon inspection. A total of five (5) gopher tortoise burrows were discovered within the property boundary and classified as "Potentially Occupied". TEC did not find any other indications of use of the site by any other listed species.

Property Notes: A man-made clearing was discovered on site with property owner documented clearing action on 12/6/18. Survey results for this area should not be limited by occurrence, as survey was performed in excess of 28 days. Gopher tortoises will most likely re-emerge within approximately 28 days following a ground disturbance, depending on temperature.

Figure 1

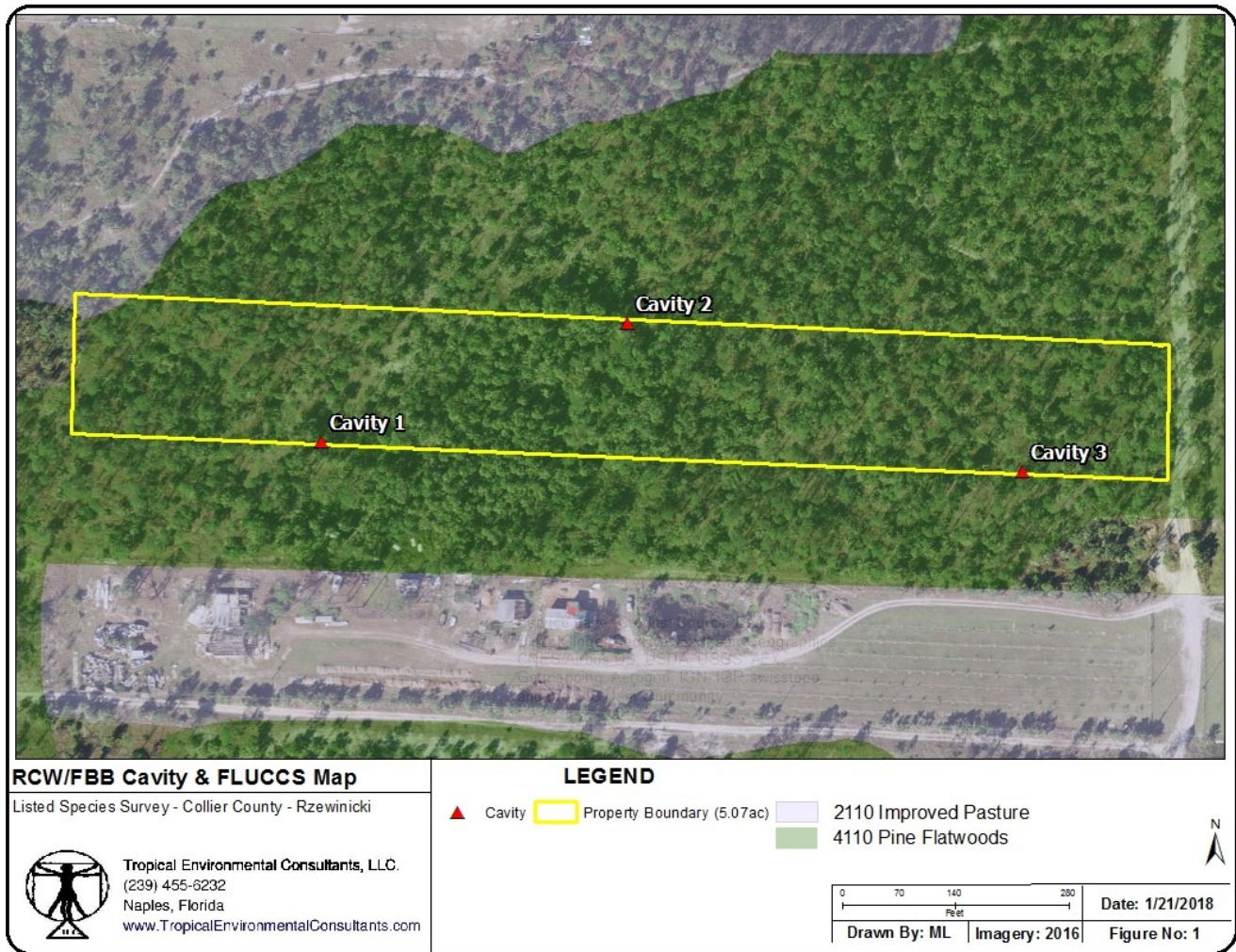


Figure 2

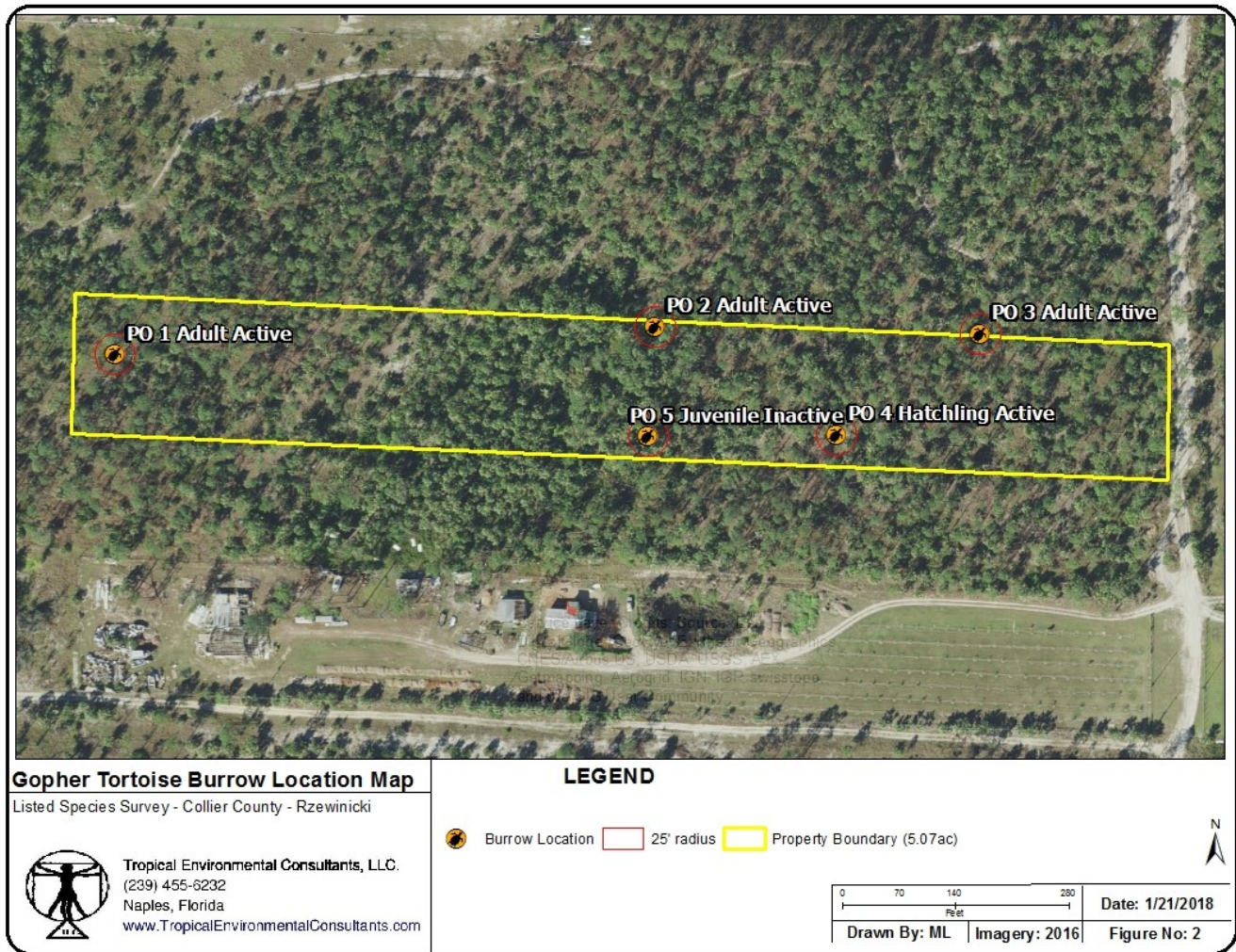


Exhibit 1



View from road



View of cleared area

Exhibit 2



Cavity 1



Cavity 2



Cavity 3

Exhibit 2



PO 1 Adult Active



PO 2 Adult Active



PO 3 Adult Active



PO 4 Hatchling Active



PO 5 Juvenile Inactive

Exhibit 3 Property Information

1/16/2019

Property Description

Owner and Property Description		Parcel Map					
Owner Name:	RZEWNICKI, JAMIE LEE 31505 KENNOWAY CT						
Mailing Address:	31505 KENNOWAY CT						
Site Address:	BEVERLY HILLS MI 48028						
Subdivision:	1301 IVY WAY NA FL 34117						
County:	COLLIER						
Land Use Code:	99						
Land Use Desc:	Acreage not zoned agricultural						
Land Use FDOR Code:	99						
Land Use FDOR Desc:	Acreage not zoned agricultural						
Zoning:							
Acres:	5.07						
PIN:	00303200002						
PIN2:	00303200002						
ALTKEY:	000100 035 4C14						
Last Data Update:	01/11/2019						
Legal Description (not official)							
14 49 27 E1/2 OF S1/2 OF N1/2 OF S1/2 OF S1/2 OF NW1/4 LESS E. 35FT. 5 AC. OR 1608 PG 1038							
Building Summary		2017 Certified Values					
Actual Year Built:		Land:	\$29,400				
Effect. Year Built:		Land Agricultural:	\$0				
Living SqFt:		Building:	\$0				
Total SqFt:		Misc:	\$0				
Adjusted SqFt:		Just Value:	\$29,400				
Beds:		Assessed Value:	\$0				
Baths:							
Stories:							
Num. of Buildings:							
Recent Sales							
Sale Date	Book/Page	Docnum	Price	Instrument	Qualified	Vac. or Impr.	Grantor
2018-11-08	5570 / 1513		\$0				
2018-05-22	5516 / 1935		\$160,000				
2010-04-30	4563 / 1512		\$100,000				
1991-04-30	1608 / 1038		\$0				
Sunbiz Corporate Data							
Title	Name	Address1	City	State	Zip Code		

https://maps.mapwise.com/fmo2/property_info_main.php?pinid=00303200002&county=COLLIER&aggType=noagg&print=true&

1/2

Listed Species Survey - Collier County - Rzewinicki

Map Layer Stats

Soils							
MUID	Map Unit Name	Component Name	Component Pct	Hydric	Hydric Grp	Percent of Total	Acres
14	PINEDA FINE SAND, LIMESTONE SUBSTRATUM	PINEDA	88	YES	C/D	67.1	3.4
16	OLDSMAR FINE SAND	OLDSMAR	90	NO	A/D	32.9	1.67
TOTAL ACRES							5.07
Land Cover 2014 (includes wetlands)							
LUCODE	Description			WMD	YEAR	Percent of Total	Acres
6250	Hydric Pine Flatwoods			SFWMD	2008-2009	100	5.07
TOTAL ACRES							5.07
Future Land Use							
FLU Code	Description			Jurisdiction	County	Percent of Total	Acres
Agricultural / Rural Designation				UNINCORPORATED	COLLIER	100.6	5.1
RF-Neutral				UNINCORPORATED	COLLIER	100.6	5.1
TOTAL ACRES							5.07
City Limits							
City name	County	Percent of Total		Acres			
TOTAL ACRES				5.07			
Census Demographics							
Census Tract							
12021010413							

Exhibit 4 IPaC

12/14/2018

IPaC: Explore Location

IPaC

U.S. Fish & Wildlife Service

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Florida



Local office

South Florida Ecological Services Field Office

☎ (772) 562-3909

📠 (772) 562-4288

1339 20th Street
Vero Beach, FL 32960-3559

<http://fws.gov/verobeach>

<https://ecos.fws.gov/ipac/location/FUT16N65GFCQLNT3WFAUNFIYKQ/resources>

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Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
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Florida Bonneted Bat	<i>Eumops floridanus</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8630	Endangered
Florida Panther	<i>Puma (=Felis) concolor coryi</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1763	Endangered
Key Deer	<i>Odocoileus virginianus clavium</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6326	Endangered
Key Largo Cotton Mouse	<i>Peromyscus gossypinus allapaticola</i> There is proposed critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/7246	Endangered
Key Largo Woodrat	<i>Neotoma floridana smalli</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/3921	Endangered
Lower Keys Marsh Rabbit	<i>Sylvilagus palustris hefneri</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/2658	Endangered
Puma (=mountain Lion)	<i>Puma (=Felis) concolor</i> (all subsp. except <i>coryi</i>) No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6049	SAT
Rice Rat	<i>Oryzomys palustris natator</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/6988	Endangered
West Indian Manatee	<i>Trichechus manatus</i> There is final critical habitat for this species. Your location overlaps the critical habitat. https://ecos.fws.gov/ecp/species/4469	Threatened Marine mammal

Birds

NAME	STATUS
Audubon's Crested Caracara	Threatened
<i>Polyborus plancus audubonii</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8250	

Bachman's Warbler (=wood) <i>Vermivora bachmanii</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/3232	Endangered
Cape Sable Seaside Sparrow <i>Ammodramus maritimus mirabilis</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/6584	Endangered
Everglade Snail Kite <i>Rostrhamus sociabilis plumbeus</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/7713	Endangered
Florida Grasshopper Sparrow <i>Ammodramus savannarum floridanus</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/32	Endangered
Florida Scrub-jay <i>Aphelocoma coerulescens</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6174	Threatened
Ivory-billed Woodpecker <i>Campephilus principalis</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8230	Endangered
Kirtland's Warbler <i>Setophaga kirtlandii</i> (= <i>Dendroica kirtlandii</i>) No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8078	Endangered
Piping Plover <i>Charadrius melodus</i> There is final critical habitat for this species. Your location overlaps the critical habitat. https://ecos.fws.gov/ecp/species/6039	Threatened
Red Knot <i>Calidris canutus rufa</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1864	Threatened
Red-cockaded Woodpecker <i>Picoides borealis</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/7614	Endangered

Whooping Crane <i>Grus americana</i>	EXPN
No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/758	
Wood Stork <i>Mycteria americana</i>	Threatened
No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8477	

Reptiles

NAME	STATUS
American Alligator <i>Alligator mississippiensis</i>	SAT
No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/776	
American Crocodile <i>Crocodylus acutus</i>	Threatened
There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/6604	
Eastern Indigo Snake <i>Drymarchon corais couperi</i>	Threatened
No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/646	
Hawksbill Sea Turtle <i>Eretmochelys imbricata</i>	Endangered
There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/3656	
Kemp's Ridley Sea Turtle <i>Lepidochelys kempii</i>	Endangered
There is proposed critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/5523	
Leatherback Sea Turtle <i>Dermochelys coriacea</i>	Endangered
There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/1493	
Loggerhead Sea Turtle <i>Caretta caretta</i>	Threatened
There is final critical habitat for this species. Your location overlaps the critical habitat. https://ecos.fws.gov/ecp/species/1110	

Fishes

NAME	STATUS
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Florida Bristle Fern *Trichomanes punctatum* ssp. *floridanum*

Endangered

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/8739>

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

This location overlaps the critical habitat for the following species:

NAME	TYPE
Loggerhead Sea Turtle <i>Caretta caretta</i> https://ecos.fws.gov/ecp/species/11110#crithab	Final
Piping Plover <i>Charadrius melodus</i> https://ecos.fws.gov/ecp/species/6039#crithab	Final
West Indian Manatee <i>Trichechus manatus</i> https://ecos.fws.gov/ecp/species/4469#crithab	Final

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds
<http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds
<http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
American Kestrel <i>Falco sparverius paulus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 1 to Aug 31
American Oystercatcher <i>Haematopus palliatus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8935	Breeds Apr 15 to Aug 31
Bachman's Sparrow <i>Aimophila aestivalis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/6177	Breeds May 1 to Sep 30

Bald Eagle *Haliaeetus leucocephalus*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1626>

Breeds Sep 1 to Jul 31

Black Scoter *Melanitta nigra*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Breeds elsewhere

Black Skimmer *Rynchops niger*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/5234>

Breeds May 20 to Sep 15

Black-legged Kittiwake *Rissa tridactyla*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Breeds elsewhere

Black-whiskered Vireo *Vireo altiloquus*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds May 1 to Aug 15

Bonaparte's Gull *Chroicocephalus philadelphia*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Breeds elsewhere

Brown Pelican *Pelecanus occidentalis*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/6034>

Breeds Jan 15 to Sep 30

Clapper Rail *Rallus crepitans*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds Apr 10 to Oct 31

Common Ground-dove *Columbina passerina exigua*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds Feb 1 to Dec 31

Common Loon *gavia immer*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/4464>

Breeds Apr 15 to Oct 31

Common Tern *Sterna hirundo*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/4963>

Breeds May 10 to Sep 10

Double-crested Cormorant *phalacrocorax auritus*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/3478>

Breeds Apr 20 to Aug 31

Dunlin *Calidris alpina arctica*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds elsewhere

Great Black-backed Gull *Larus marinus*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Breeds Apr 15 to Aug 20

Henslow's Sparrow *Ammodramus henslowii*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/3941>

Breeds elsewhere

Herring Gull *Larus argentatus*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Breeds Apr 20 to Aug 31

King Rail *Rallus elegans*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/8936>

Breeds May 1 to Sep 5

Least Tern <i>Sterna antillarum</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 20 to Sep 10
Lesser Yellowlegs <i>Tringa flavipes</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Limpkin <i>Aramus guarauna</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 15 to Aug 31
Magnificent Frigatebird <i>Fregata magnificens</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Oct 1 to Apr 30
Mangrove Cuckoo <i>Coccyzus minor</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 20 to Aug 20
Northern Gannet <i>Morus bassanus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds elsewhere
Prairie Warbler <i>Dendroica discolor</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Jul 31
Prothonotary Warbler <i>Protonotaria citrea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 1 to Jul 31
Razorbill <i>Alca torda</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Jun 15 to Sep 10
Red-breasted Merganser <i>Mergus serrator</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds elsewhere

Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10
Reddish Egret <i>Egretta rufescens</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/7617	Breeds Mar 1 to Sep 15
Ring-billed Gull <i>Larus delawarensis</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds elsewhere
Royal Tern <i>Thalasseus maximus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Apr 15 to Aug 31
Ruddy Turnstone <i>Arenaria interpres morinella</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere
Semipalmated Sandpiper <i>Calidris pusilla</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Short-billed Dowitcher <i>Limnodromus griseus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Short-tailed Hawk <i>Buteo brachyurus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8742	Breeds Mar 1 to Jun 30
Smooth-billed Ani <i>Crotophaga ani</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/1754	Breeds Jan 1 to Dec 31

Surf Scoter *Melanitta perspicillata*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Breeds elsewhere

Swallow-tailed Kite *Elanoides forficatus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/8938>

Breeds Mar 10 to Jun 30

Whimbrel *Numenius phaeopus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9483>

Breeds elsewhere

White-crowned Pigeon *Patagioenas leucocephala*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/4047>

Breeds May 1 to Sep 30

White-winged Scoter *Melanitta fusca*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Breeds elsewhere

Willet *Tringa semipalmata*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Apr 20 to Aug 5

Wilson's Plover *Charadrius wilsonia*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Apr 1 to Aug 20

Yellow Warbler *Dendroica petechia gundlachi*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds May 20 to Aug 10

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

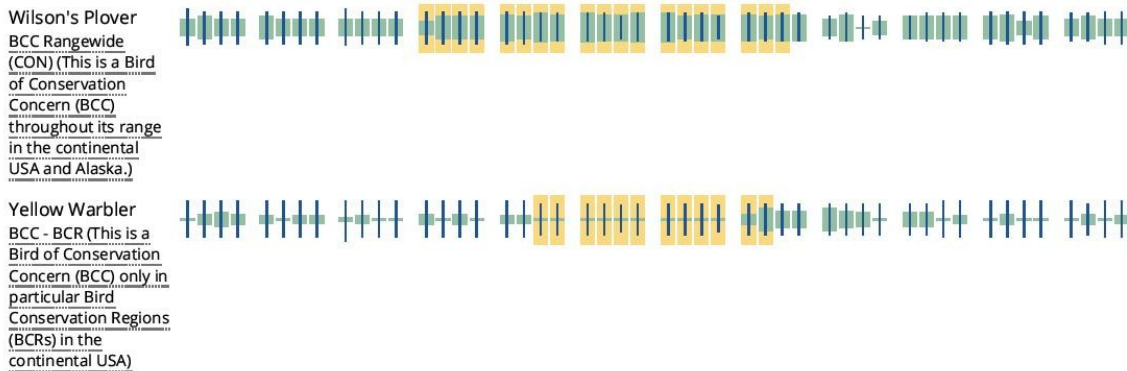
Probability of Presence

<https://ecos.fws.gov/ipac/location/FUT16N65GFCQLNT3WFAUNFIYKQ/resources>

15/30

12/14/2018

IPaC: Explore Location



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) and/or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [E-bird Explore Data Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds](#)

[guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

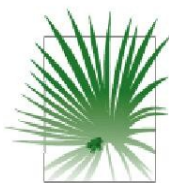
What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or

Exhibit 4 FNAI



FLORIDA
Natural Areas
INVENTORY

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

Florida Natural Areas Inventory

Biodiversity Matrix Query Results

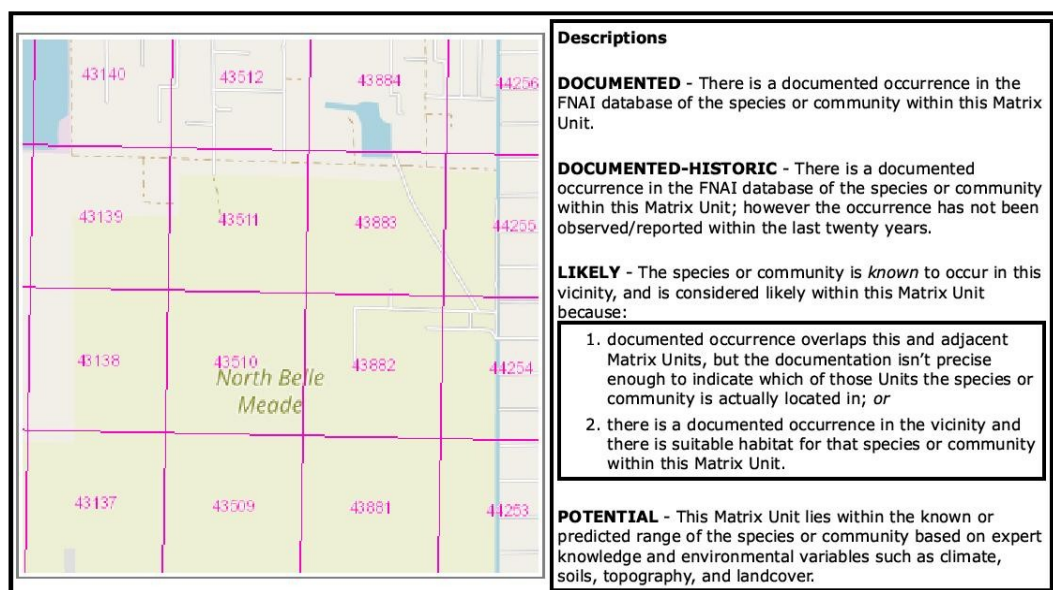
UNOFFICIAL REPORT

Created 1/17/2019

(Contact the FNAI Data Services Coordinator at 850.224.8207 or
kbrinegar@fnai.fsu.edu for information on an official Standard Data Report)

NOTE: The Biodiversity Matrix includes only rare species and natural communities tracked by FNAI.

Report for 1 Matrix Unit: 43512



Matrix Unit ID: 43512

1 Documented Element Found

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
<i>Puma concolor coryi</i> Florida Panther	G5T1	S1	LE	FE

0 Documented-Historic Elements Found

5 Likely Elements Found

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
Mesic flatwoods	G4	S4	N	N
<i>Mycteria americana</i> Wood Stork	G4	S2	LT	FT
<i>Picoides borealis</i>	G3	S2	LE	FE

Red-cockaded Woodpecker				
<i>Sciurus niger avicennia</i>	G5T2	S2	N	ST
Mangrove Fox Squirrel				
<i>Ursus americanus floridanus</i>	G5T2	S2	N	N
Florida Black Bear				

Matrix Unit ID: 43512

12 Potential Elements for Matrix Unit 43512

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
<i>Athene cunicularia floridana</i> Florida Burrowing Owl	G4T3	S3	N	SSC
<i>Drymarchon couperi</i> Eastern Indigo Snake	G3	S3	LT	FT
<i>Encyclia cochleata</i> var. <i>triandra</i> Clamshell Orchid	G4G5T2	S2	N	E
<i>Eumops floridanus</i> Florida bonneted bat	G1	S1	LE	FE
<i>Gopherus polyphemus</i> Gopher Tortoise	G3	S3	C	ST
<i>Lechea cernua</i> Nodding Pinweed	G3	S3	N	T
<i>Linum carteri</i> var. <i>smallii</i> Small's Flax	G2T2	S2	N	E
<i>Mustela frenata peninsulae</i> Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i> Celestial Lily	G2	S2	N	E
<i>Polyrrhiza lindenii</i> Ghost Orchid	G2G4	S2	N	E
<i>Rostrhamus sociabilis</i> Snail Kite	G4G5	S2	LE	N
<i>Roystonea elata</i> Florida Royal Palm	G2G3	S2	N	E

Disclaimer

The data maintained by the Florida Natural Areas Inventory represent the single most comprehensive source of information available on the locations of rare species and other significant ecological resources statewide. 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. FNAI shall not be held liable for the accuracy and completeness of these data, or opinions or conclusions drawn from these data. FNAI is not inviting reliance on these data. 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.

Unofficial Report

These results are considered unofficial. FNAI offers a [Standard Data Request](#) option for those needing certifiable data.