Exhibit Q

Florida Natural Areas Inventory Managed Area Tracking Record



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June 11, 2014

Jennifer Reed FL Dept of Agriculture & Consumer Services Florida Forest Service Conner Bldg., 3125 Conner Boulevard Tallahassee, FL 32399-1650

Dear Ms. Reed,

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

Babcock Ranch Preserve

Date Received: 6/9/2014

Location: Charlotte and Lee Counties

Based on the information available, this site appears to be located in a significant region of natural areas and habitat for several rare species. Special consideration should be taken to avoid and/or mitigate impacts to these natural resources, and to design land uses that are compatible with these resources.

FNAI 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.

Federally Listed Species

Our data include records of federally listed species, particularly Caracara cheriway, Deeringothamnus pulchellus, Drymarchon couperi, Eumops floridanus, Mycteria americana, and Picoides borealis, on or very near this site (see enclosed map and tables for details). This statement should not be interpreted as a legal determination of presence or absence of federally listed species on a property.

The FNAI Element Occurrences data layer includes rigorously documented occurrences of rare species and natural communities. 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 occurrence labels indicate the general vicinity of the occurrence. This may be due to lack of precision of the source data, or an element that covers an extended area (such as a wide-ranging species or large natural community). 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.



Florida Resource: and Environmental Analysis Center

Institute of Science The Florida State University

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

Tracking Florida's Biodiversity

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.

Biodiversity Matrix

In addition to element occurrences, other rare species and natural communities may be identified on or near the site based on habitat models and species range models. The Biodiversity Matrix Report compiles several data sources – including Element Occurrences, occurrence-based species habitat models, predictive range models, and natural community maps – to provide a broader list of documented, likely, and potential species on or near the site. These species could be taken into consideration in field surveys, land management, and land use decisions. Note that the Biodiversity Matrix Report lists species and communities by square-mile Matrix Unit, rather than by the site of interest, so the Documented list may vary from the Element Occurrence Table supplied with this report. Also, note that this list aggregates results from all matrix units that overlap the site, so the location of the elements are somewhat obscured.

FNAI occurrence-based 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 predictive 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 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.

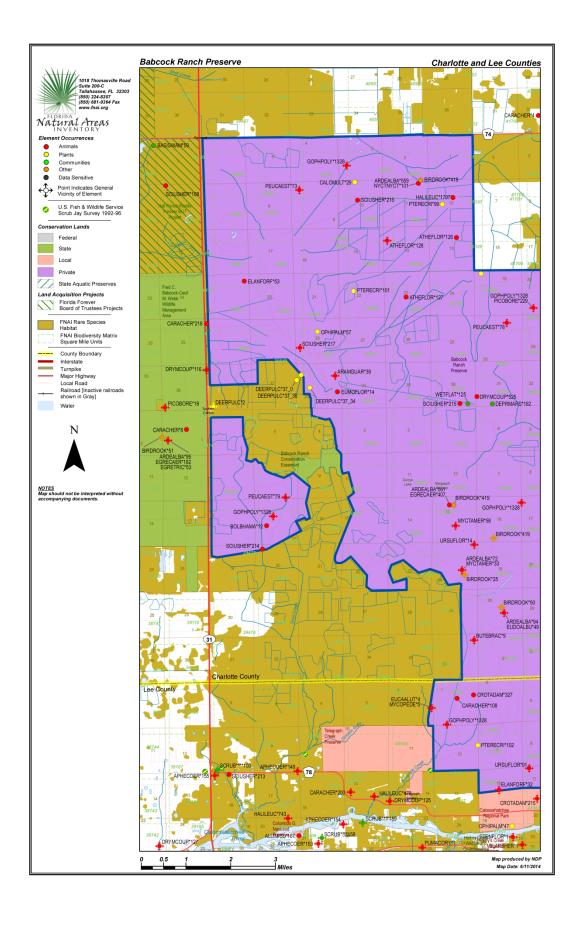
This report is made available at no charge due to funding from the Florida Department of Environmental Protection, Division of State Lands.

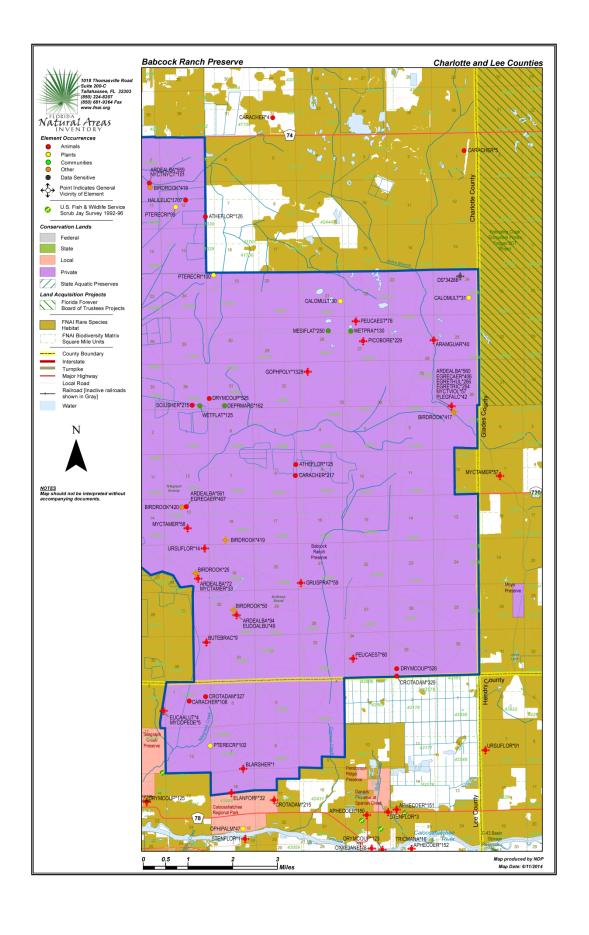
Thank you for your use of FNAI services. If I can be of further assistance, please contact me at $(850)\ 224-8207$ or at npasco@fnai.org.

Sincerely,

Nathan Pasco Nathan Pasco GIS / Data Services

Encl









Natural	Areas		Clahai	Ctata	Fadam	Canan	Observatio	_	1851
Map Label	Scientific Name	Common Name				Listing	Date Date	n Description	EO Comments
APHECOER*150	Aphelocoma coerulescens	Florida Scrub-Jay	G2	S2	LT	FT	1992-1997	2005-09-21: Area converted to residentie/agricultural areas, though some xeric habitat remains (PND,EN04FLUS). 1981:RESIDENTIAL AREA, SOME MYRTLE OAKS (U81COX01FLUS).	2005-09-21: No scrub jays found on informal survey using audio tapes. Small scrub remnants extremely fire suppressed w/ closed canopy of Quercus geriminate. Most scrubs have been converted to orange groves, residential areas, and pasture (PROJENO4FLUS) 18
APHECOER*151	Aphelocoma coerulescens	Florida Scrub-Jay	G2	\$2	LT	FT	1992-1997	2005-09-21: Residential areas have replaced allot of xenc habilital here. The rest is mostly pasture, otrus groves, and is covered in exotic plants such as Schrinus terbinitrhifotia and Rhynchelytrum repens (PNDUEN04FLUS), 1981: 4 M MYRTLE OAKS, 2 M SAWPA	2005-09-21: No jays found on informal survey using audio tapes. Area morell residential, offus groves, pastures, and covered in excite plants. Very residential oriented. Small scrub fragments exist but are extremely fire suppressed (PNDLENGELUS). 1992-
ARAMGUAR*39	Aramus guarauna	Limpkin	G5	S3	N	SSC	2007-03-27	2007-03-27: basin swamp (F08FNA04FLUS).	2007-03-27: Two birds observed, 1 foraging and 1 heard celling. See Source Observations Tab for more specific details (F08FNA04FLUS).
ARAMGUAR*40	Aramus guarauna	Limpkin	G5	S3	Ν	SSC	2007-03-08	2007-03-28: strand swamp (F08FNA04FLUS).	2007-03-28: Two birds observed foraging (F08FNA04FLUS).
ARDEALBA*559	Ardea alba	Great Egret	G5	S4	N	N	2008-04-29	2008-04-29: Small depression marsh with willow in middle of pasture (F08FNA04FLUS).	2008-04-29: Observed 2 nests; one with 2 blue eggs (F08FNA04FLUS).
ARDEALBA*500	Ardea alba	Great Egret	Ģ5	S4	N	N	2008-04-29	2008-04-29: shrubby open slough dominated by willow and buttonbush within Jacks Branch strand swamp (F08FNA04FLUS).	2009-04-29: ca. 25 great egrets and nests with chicks and eggs were observed, at least 240 cattle egrets, 15 little blue herons (low estimate), 5 snow egrets, 1 ticolored heron, 1 anhing, glossy bits, and yellow-crowned right-heron were also observed
ARDEALBA*561	Ardea alba	Great Egret	G5	S4	N	N	2008-04-29	2008-04-29: small slough opening in strend swamp; consists of scattered Taxodium and dominated by Salix caroliniana and Arnona glabra (F08FNA04FLUS).	2008-04-29: a conservative estimate of 30 great egrets was made from a helicopter survey, many nests observed with young, approximately 30 cattle egrets and 25 little blue herons were also observed. (F08FNA0RLUS). 2008-03-11: observed several loafing i

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FNAI ELEMENT OCCURRENCE REPORT on or near Babcock Ranch Preserve



INVEN							Observatio		
Map Label	Scientific Name	Common Name	Rank	Rank	Status	Listing	Date	Description	EO Comments
ARDEALBA*72	Ardea alba	Great Egret	G5	S4	N	N	1978-08	COLONY SITE IS AN IMPOUNDED CYPRESS SWAMP (LEVEE ON BOTH SIDES), NESTING SUBSTRATE OF CYPRESS OVER WATER.	ACTIVE NESTING COLONY; 20 PRS IN 8/78, SOME NON-NESTING INDIVIDUALS IN 4/78.
ARDEALBA*94	Ardea alba	Great Egret	G5	S4	N	N	1978-04	COLONY SITE IS WILLOW HEAD IN CYPRESS STRAND. HABITAT SURROUNDING COLONY IS AN IMPOUNDED CYPRESSSWAMP WITH LEVEES ON BOTH SIDES. NESTING SUBSTRATEIS WILLOWS OVER WATER MORE THAN 3 KM FROM HUMANS.	ACTIVE ROOKERY SOME NESTING PRS SEEN IN 4/78).
ARDEALBA*96	Ardea alba	Great Egret	G5	\$4	N	N	1978-07	COLONY SITE IS WILLOWS IN A MARSHY POND, HABITAT SURROUNDING COLONY IS MARSHY POND AND PALM/PNE WOODS. NESTING SUBSTRATE IS WILLOWS OVER WATER. MORE THAN 0.8 KM FROM HUMAN DISTURBANCE (U82NES01).	SPECIES PRESENT 1978-07 (INNSPECIFIED NUMBER OF NESTING PAIRS), NOT OBSERVED 1889-04-05 AND 1989-05-16, BUT UNIDENTIFIED LARGE WHITE WADERS PRESENT 1989-04-05.
ATHEFLOR*125	Athene cunicularia floridan	a Florida Burrowing Owl	G4T3	S3	N	SSC	2008-04-24	2008-04-24: severely disturbed improved pasture habitat with active agriculture fields and cattle disturbance (F08FNA04FLUS).	2008-04-24: Two owls observed sitting next to burrow that faces west with sandy apron on edge of road embankment; owls flew 36m to the southeast to another active burrow 50cm deep (FOBFNAO4FLUS).
ATHEFLOR* 126	Athene cunicularia floridan	a Florida Burrowing Owl	G4T3	\$3	N	SSC	2008-04-30	2008-04-30: heavily disturbed cattle pasture and agricultural area (F08FNA04FLUS).	2008-04-30: Nine owls observed mostly near active burrows, some flying or resting, observed mainly along the road. See Source Observations Tab for specific details on each point (F08FNA04FLUS).
ATHEFLOR*127	Athene cunicularia floridan	a Florida Burrowing Owl	G4T3	\$3	N	SSC	2007-10-24	2007-10-24: Improved pasture habitat with severe agricultural and cattle disturbance (F08FNA04FLUS).	2007-10-24: Two adults standing near burrow (F08FNA04FLUS).
ATHEFLOR*128	Athene cunicularia floridan	a Florida Burrowing Owl	G4T3	\$3	N	SSC	2007-2008	2007-2008: improved pasture with heavy disturbance from argriculture and cattle (F08FNA04FLUS).	2007-2008: Observed 16 owls and 12 burrows. Many of the owls were near burrows, but some were observed flying or calling (F08FNA04FLUS).

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Natural	Areas		0/-1		F - d	. 04-4-	0 4		1651
Map Label	Scientific Name	Common Name				Listing	Observatio Date	n Description	EO Comments
BASISWAM59	Basin swamp		G4	S3	N	N	1996-05-02	Pond cypress swamp (northwest corner of large swamp system extending ca 10 miles southeast of proposal boundaries).	Swamp composed of uniform stand of medium-sized pond cypress trees (Taxodum ascendens) with a sparse understory of scattered clumps of sedges, hatpins and serrated fern (Blechnum serrufatum)
BIRDROOK*25	Bird Rookery		G5	SNR	N	N	1978-08	1978-08: COLONY SITE IS AN IMPOUNDED CYPRESS SWAMP (LEVEE ON BOTH SIDES); NESTING SUBSTRATE OF CYPRESS OVER WATER.	1978-08: GREAT BLUE HERCN (10-20 PRS IN 4/78); GREAT EGRET (20 PRS 8/78); WOCD STORK (75 PRS 4/78, 15-20 PRS 8/78; 250-300 NON-NESTING INDIVIDUALS IN 4/78).
BIRDROOK*417	Bird Rookery		G5	SNR	N	N	2013-03-19	2008-04-29: shrubby open slough dominated by willow and buttonbush within Jacks Branch strand swamp (F08FNA04FLUS).	2013-03-19: 1 counted; nesting; only one great blue heron nest observed, mating and nest building. possibly too early in the season for other species. thorough survey (F13F-NA01FLUS), 2008-04-29. At least 240 cattle egrets, 25 great egrets, 15 little bl
BIRDROOK*418	Bird Rookery		G5	SNR	N	N	2008-04-29	2008-04-29: Small depression marsh with willow island in middle of an improved pasture (F08FNA04FLUS).	2008-04-29: Observed 2 great egret nests – one with 2 blue eggs; also, 2 black-crowned night-herons flying in area; observations made during helicopter survey (F08FNA04FLUS).
BIRDROOK*419	Bird Rookery		G5	SNR	N	N	2008-04-29	2008-04-29: small dome swamp at the end of a finger of strand swamp extending from the east side of the swamp; nests are midway up the cypress (F08FNA04FLUS).	2008-04-29: 2 nests of great blue herons were observed midway up cypress, one with 2 young chicks (F08FNAMFLUS). 2008-03-11 no birds were observed at site during fixed-wing survey over swamp (F08FNAMFLUS).
BIRDROOK*420	Bird Rookery		G5	SNR	N	N	2008-04-29	2008-04-29: small slough opening in strand swamp; consists of scattered Taxodium and dominated by Salx caroliniana and Arnona glabra (F08FNA04FLUS).	2008-04-29: a conservative estimate of 30 great egrets, 30 cattle egrets, and 25 title blue herons was made from a helicopter survey, many nests observed with young (FOSF NAGEFLUS), 2008-03-11: observed several loafing individuals but no nests in same ar

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FNAI ELEMENT OCCURRENCE REPORT on or near Babcock Ranch Preserve



Natural			Global	State	Federa	State	Observation	1	
Map Label	Scientific Name	Common Name	Rank	Rank	Status	Listing	Date	Description	EO Comments
BIRDROOK*50	Bird Rookery		G5	SNR	N	N		COLONY SITE IS WILLOW HEAD IN CYPRESS STRAND. HABITAT SURRESS STRAND. GOLONY IS AN IMPOUNDED CYPRESSWAMP WITH LEVEES ON BOTH SIDES. NESTING SUBSTRATEIS WILLOWS OVER WATER MORE THAN 8 KM FROM HUMANS.	LITTLE BLUE HERON (100 NESTING PRS IN 4/78), CATTLE EGRET (1000 NP 4/78, 150-20) IN 8/78), GREAT EGRET (UNIANOWI NO. OF NP IN 4/78, WHITE IBIS (UNIANOWI NO. OF NP IN 4/78 AND 8/78)
BIRDROOK*51	Bird Rookery		G5	SNR	N	N		COLONY SITE IS WILLOWS IN A MARSHY POND, HABITAT SURROUNDING COLONY IS MARSHY POND AND PALMPINE WOODS. NESTING SUBSTRATE IS WILLOWS OVER WATER. MORE THAN 0.8 KM FROM HUMAN DISTURBANCE (U82NES01).	MULTI-SPECIES ROOKERY, 4 SPECIES 1000+ NESTING PAIRS 1978-07 (U82NES01), 1-10 BIRDS 1989-04-05, 11-100 BIRDS 1989-05-16, CATILE EGRET PRESENT 1978-08 (1000 NESTING PAIRS) AND 1989-05-16, GREAT EGRET PRESENT 1978-07, TRICOLORED HERON PRESENT 1978-07, LIT 1978-07, LIT
BLARSHER*1	Blarina shermani	Sherman's Short-tailed Shrew	G1	S1	N	SSC	1955	No general description given	museum specimen
BOLBHAMA*12	Bolbocerosoma hamatum	Bicolored Burrowing Scarab Beetle	G3G4	S3	N	Ν		2007-12-07: hydric hammock with ORV trail disturbance (F08FNA04FLUS).	2007-12-07: One beetle found in funnel trap associated with drift fence (F08FNA04FLUS).
BUTEBRAC*9	Buteo brachyurus	Short-tailed Hawk	G4G5	S1	N	N		2008: mesic/wet flatwoods, strand swamp, basin/depression marsh, pasture, and fallow and active agricultural fields (F08FNA04FLUS)	2007-2008: Eight observations of the birds flying throughout Babcock Rainch Preserve; seweral observed carrying prey (F08FNA04FLUS), 1991-05-02 M S Robson, GFC, observed 1 adult. Flew up out of canopy (U97GFC02FLUS).
CALOMULT*29	Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE		2007-03-30: Mesic flatwoods, burned within the month (F08FNA04FLUS).	2013-03-18: 0 counted; area has not been burned recently; thorough survey (F13FNA01FLUS). 2007-03-30: 1-10 plants in fruit within 1 square meter (F08FNA04FLUS).
CALOMULT*30	Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE		2008-04-30: Mesic flatwoods with cattle disturbance, past logging and stumping; burned Jan/Feb 2008 (F08FNA04FLUS).	2013-03-19: 0 counted; area has not been burned recently, thorough survey (F13FNA01FLUS). 2008-04-30: 1 plant in flower/bud (F08FNA04FLUS).
CALOMULT*31	Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE		2007-06-20: Scattered in recently burned mesic flatwoods, light orv trail disturbance (F08FNA04FLUS).	2013-03-19: 0 counted; area has not been burned recently; thorough survey (F13FNA01FLUS), 2007-06-20: 1-10 plants in flower/bud in 10-100 square meters (F08FNA04FLUS).

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Natural			0/-1		Fd		0.		7851 %
Map Label	Scientific Name	Common Name				Listing	Observation Date	n Description	EO Comments
CARACHER*108	Caracara cheriway	Crested Caracara	G5	S2	LT	FT	1978	No general description given	ACTIVE TERRITORY/BREEDING PAIR. CENTROID MARKS ESTIMATED CENTER OF TERRITORY (MEAN DIAMETER 5 MI.)
CARACHER*200	Caracara cheriway	Crested Caracara	G5	\$2	LT	FT	2012	area of cattle pastures, rural residential, small patches of mesic flatwoods and wetland communities	2011-2012: Caracaras observed regularly in this area along SR 78 (U120LSTCFUS, U11MEW01FLUS). 1999: Caracara nesting territory (J. N. Layne), no other information given (part of Crested Caracara population survey February 1899-July 1999 conducted by FG February 1899-July 1999 conducted by FG
CARACHER*217	Caracara cheriway	Crested Caracara	G5	S2	LT	FT	2001-09-25	2001-09-26: Extensive surrounding area is a mosaic of mesic flatwoods, wet flatwoods, wet prairie, depression marshes, and pastures.	2001-09-25: Three birds (2 adults, 1 immature) observed flying from pasture to edge of pasture. Ranch personnel mentioned seeing seven birds on the ranch recertly (PNDNES03FLUS).
CARACHER*218	Caracara cheriway	Crested Canacana	G5	S2	LT	FT	2008-05-01	2008-05-01: improved pasture with cattle and road disturbance in vicinity of snag but large acreage of pinelands, pasture, swamp in area (F08FNA04FLUS).	2008-05-01: Four birds seen perching in a snag, some possibly juveniles. Suspected nesting area, but no nest found (F08FNA04FLUS).
CARACHER*8	Caracara cheriway	Crested Caracara	G5	S2	LT	FT	1978	No general description given	ACTIVE TERRITORY/BREEDING PAIR.
CROTADAM*215	Crotalus ad amanteus	Eastern Diamondback Rattlesnake	G4	S3	N	N	2007-10-16pre	No general description given	2007-10-16pre: one adult diamondback was observed (PNDEAS02FLUS). 1995pre: snake observed by Jm Beever (M95MAR01FLUS).
CROTADAM*326	Crotalus adamanteus	Eastern Diamondback Rattlesnake	G4	S3	N	N	2008-03-21	2008-03-21: hydric hammock near mesic flatwoods. Disturbance from forestry operations (F08FNA04FLUS).	2008-03-21: One snake observed, commuting, with 7 rattles. Another snake was observed commuting about 5m away in November 2007 (F08FNA04FLUS).
CROTADAM*327	Crotalus ad amanteus	Eastern Diamondback Rattlesnake	G4	\$3	N	N	2008-01-29	2008-01-29: mesic flatwoods habitat with disturbance from forestry operations and a dtch/canal (F08FNA04FLUS).	2008-01-29: Observed 5.5ft long rattlesnake commuting towards a gopher tortoise burrow (F08FNA04FLUS).
CROTADAM*329	Crotalus adamanteus	Eastern Diamondback Rattlesnake	G4	S3	N	N	2007-06-21	2007-06-21: scrub (F08FNA04FLUS).	2007-06-21: One large shed skin about 2m long with 8cm-wide belly scutes (F08FNA04FLUS).
DEERPULC*2	Deering othernnus pulche	allus Beautiful Pawpaw	G1	S1	LE	LE	1928-05	None given.	1928: in flower and fruit when collected (S28SMASFFLUS).

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FNAI ELEMENT OCCURRENCE REPORT on or near Babcock Ranch Preserve



INVEN Map Label	Scientific Name	Common Name				State Listing	Observation Date	n Description	EO Comments
DEERPULC'37_0	Deering othernnus pulchei	(UsBeautiful Pawpaw	G1	S1	LE	LE	2005-06	This is a parent EO. Refer to individual sub-EOs for detailed information.	No EO data given
DEERPULC*37_34	Deeringothamnus pulchel	llis Beautiful Pawpaw	G1	S1	LE	LE	2006-06	2006-06: Mesic flatwoods with few trees of south Florida slash pine (Pinus elliottii var. densa) with a few clumps of saw palmetto (Serenca repens) and was dominated by herbs and graminoids (U07VWO02FLUS).	2008-04-02: Searched general area and all exact points and bund no Deeringothamnus (F08FNA04FLUS; PNDGUL01FLUS). 2007-10-03: Searched general area and found no Deeringothamnus (F08FNA04FLUS; PNDGUL01FLUS). 2008-06: 22
DEERPULC*37_36	Deering othernnus puichei	(lus Beautiful Pawpaw	G1	\$1	LE	LE	2008-06	2006-06: In both mesic flatwoods and disked flatwoods (U07WO002FLUS).	2008-08: 151-1100 total sterile plants in three separate points. See Source Observations tab for detailed Number of plants at each point (U07WOC02FLUS).
DEPRMARS*162	Depression marsh		G4	S4	N	N	2001-09-26	2001-09-26: Open mosaic of mesis flatwoods, wet flatwoods, wet flatwoods, wet prairie, depression marshes, and small stream systems. Large area of approximately 10,000 unfenced acres, according to ranch manager (PNDK/NO2FLUS).	2001-09-26: Depression marsh with sawgrass (Cladum jamaicense) and duck potato (Sayttenses) in enterty. St. Johns wort (Hypencum sp.), wax myttle (Myricia cenfera) in shallower areas. Herbaceous ecotone of wet praine vegetation dominated by beaker.
DRYMCOUP*116	Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	FT	1980-PRE	No general description given	POST-1970: T. CRUTCHFIELD OBSERVED INDIGO SNAKE (P. MOLER INTERVIEWOF 3 NOV 1981: U82MOL01FLUS).
DRYMCOUP*125	Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	FT	1980-PRE	2005-09-21: Xeric habitats mostly converted to agricultural lands (pasture) and residential development, lower lands though, such as wet flatwoods, reman large and abundant (PNDJEN04FLUS).	2005-09-21: M. Jenkins (PND_ENDFLUS) visited site, observed no snakes but made habitat notes (see General Description). POST-1970. T. CRUTCHFIELD OBSERVED INDIGO SNAKE (P. MOLER INTERVIEW OF 3 NOV 1981: U82MOL01FLUS).
DRYMCOUP*525	Drymarchon couperi	Eastern Indigo Snake	G3	\$3	LT	FT	2007-11-12	2007-11-12: Pasture and mesic flatwoods with firebreak disturbance (F08FNA04FLUS).	2007-11-12 One snake more than 7 feet long observed crossing freshly plowed firebreak (F08FNA04FLUS).
DRYMCOUP*526	Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	FT	2007-06-21	2007-06-21: scrub (F08FNA04FLUS).	2007-06-21: One shed skin over 1m long with 6.5cm-wide belly scales (F08FNA04FLUS).
DS*34288	Data Sensitive Element	Data Sensitive	G1	S1	N	N	2009-09-25	Data Sensitive	Data Sensitive

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Natural			Global	State	Endors	State	Observation	_	1851
Map Label	Scientific Name	Common Name				Listing		Description	EO Comments
EGRECAER*182	Egretta caerulea	Little Blue Heron	G5	S4	N	SSC	1989-05-16	COLONYLOCATED IN IMPOUNDED POND, HABITAT SURROUNDING COLONY IS CYPRESS, POND, AND PASTURE, NESTING SUBSTRATE OF CYPRESS OVER WATER (U82NES01).	SPECIES PRESENT 1989-05-16. NOT OBSERVED 1978-07 AND 1989-04-05.
EGRECAER*406	Egretta caerulea	Little Blue Heron	G5	S4	N	SSC	2008-04-29	2008-04-29: shrubby open slough dominated by willow and buttonbush within Jacks Branch strand swamp (F08FNA04FLUS).	2008-04-29. 15 little blue herons (low estimate) were observed; at least 240 cattle egrets, 5 snowy egrets, 25 great egrets, 1 hicotored heron, 1 arhinga, glossy ibis, and yellow-crowned night-heron were also observed (F08FNA04FLUS). 2008-03-11: no bir
EGRECAER*407	Egretta caerulea	Little Blue Heron	G5	S4	N	SSC	2008-04-29	2008-04-29: small slough opening in strand swamp; consists of scattered Taxodium and dominated by Salix caroliniana and Annona glabra (F08FNA04FLUS).	2008-04-29: a conservative estimate of 25 little blue hirrons was made from a helicopter survey, many nests observed with young, approximately 30 great egrets and 30 cattle egrets were also observed (FOSFNAQAFLUS). 2008-03-11: observed several loafing ind
EGRETHUL*296	Egretta hula	Snowy Egrét	G5	\$3	N	SSC	2008-04-29	2008-04-29: shrubby open slough dominated by willow and buttonbush within Jacks Branch strand swamp (F08FNA04FLUS).	2008-04-29: 5 snowy egrets were observed, at least 240 cattle egrets, 25 great egrets, 15 little blue herons (low estimate). I throolored heron, 1 anhinga, glossy ibis, and yellow-crowned night-heron were also observed (F08FNA04FLUS). 2008-03-11: no bi
EGRETRIC*254	Egretta tricolor	Tricolored Heron	G5	S4	N	SSC	2008-04-29	2008-04-29: shrubby open slough dominated by willow and buttonbush within Jacks Branch strand swamp (F08FNA04FLUS).	2008-04-29: at least 1 tricolored heron was observed; at least 240 cattle egrets, 15 little blue herons (low estimate), 5 snowy egrets, 25 great egrets, 1 arininga, glossy ibis, and yellow-crowned inglith-heron were also observed (F08FNA04FLUS). 2008-03-11

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FNAI ELEMENT OCCURRENCE REPORT on or near Babcock Ranch Preserve



INVEN	TORY		Global	State	Federa	State	Observatio	n	
Map Label	Scientific Name	Common Name	Rank	Rank	Status	Listing	Date	Description	EO Comments
EGRETRIC*\$3	Egretta vicolor	Tricolored Heron	G5	S4	N	SSC	1978-07	COLONY SITE IS WILLOWS IN A MARSHY POND; HABITAT SURROUNDING COLONY IS MARSHY POND AND PALMPINE WOODS. NESTING SUBSTRATE IS WILLOWS OVER WATER MORE THAN 0.8 KM FROM HUMAN DISTURBANCE (U82NES01).	SPECIES PRESENT 1978-07 (UNSPECIFIED NUMBER OF NESTING PAIRS), NOT DOSSERVED 1989-04-05 AND 1989-05-16.
ELANFORP*32	Elanoides forficatus	Swallow-tailed Kite	Ģ5	\$2	N	N	2007-03-29	Strand swamp	2007-03-29; J. Surdick observed 2 birds mating just to the northwest, one was missing right tall feether. (F08FNA04FLUS, PNDSUR01FLUS) 1991-05-02; M.S. Robson, GFC - Adult on nest with 2 eggs (U97GFC02FLUS).
ELANFORF*53	Elanoides forficatus	Swallow-tailed Kite	Ģ5	\$2	N	N	2007-06-13	2007-06-13: depression marsh with narrow band of pines around it surrounded by pasture; mesic flatwoods is extenive in area (F08FNA04FLUS).	2007-06-13: Two adults and a begging fledgling sitting in pines. 22 other observations were made on Babcock Ranch of birds foraging or commuting in 2007-2008 [F08FNA04FLUS]. PNDSUROTEUS).
EUCAALUT*4	Eucanthus alutaceus	Mat Red Globe Scarab Beetle	G2G3	S1S2	N	N	2007-11-27	2007-11-27: mesic flatwoods with disturbance from cattle and forestry operations (F08FNA04FLUS).	2007-11-27: One beetle captured, commuting, in funnel trap associated with drift fence (F08FNA04FLUS).
EUDOALBU*49	Eudocimus albus	White Ibis	G5	S4	N	SSC	1973-08	COLONY SITE IS WILLOW HEAD IN CYPRESS STRAND HABITAT SURROUNDING COLONY IS AN IMPOUNDED CYPRESSSWAMP WITH LEVEES ON BOTH SIDES. NESTING SUBSTRATEIS WILLOWS OVER WATER MORE THAN 3 KM FROM HUMANS.	ACTIVE ROOKERY, SOME NESTING PRS SEEN IN 4/78 AND IN 8/78.
EUMOFLOR*14	Eumopsfloridenus	Florida bonneted bat	Ģ1	S1	LE	FE	2007-06-12	2007-08-12: strand swamp (U07MAR01FLUS).	2007-08-12: George and Cynthia Marks recorded 11 passes, while stationary, of the Florida bonneted bat (PNDMAR10FLUS, PNDMAR11FLUS, and U07MAR01FLUS).

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Natural			Global	State	Fodora	State	Observatio	,	1851 *
Map Label	Scientific Name	Common Name				Listing		Description	EO Comments
GOPHPOLY*1328	Gopherus polyphemus	Gopher Tortoise	G3	S3	С	ST	2009-04-24	Very large tract of conservation land, much of which experienced past disturbance, especially cleaning, dtching, cattle grazing, and conversion of some to improved pasture. 2007-2009; northeastern portion = mesic flatwoods, scrub, scrubby flatwoods, and	Southern portion of ranch: 2007-2008: a survey that concentrated on higher quality habitats revealed 177 active burrows, 33 inactive or abendoned burrows, and 13 surface-active toriouses (FGB*NAGFEUS, PNDNESGE*LUS). Northeastern portion of ranch
GRUSPRAT*59	Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	ST	2008-04-29	2008-04-29: basin marsh surrounded by flatwoods (F08FNA04FLUS).	2008-04-29: one sandhill crane sitting on nest; 2 other similar platforms nearby; several other observations were made on the managed area of foraging and commuting birds (F08FNA04FLUS).
HALILEUC*1707	Haliaeetus leucocephalus	Bald Eagle	G5	S3	N	N	2008-04-24	2008-04-24: narrow band of mesic flatwoods with few trees bordering a basin marsh; surrounded by pasture (F08FNA04FLUS).	2008-04-24: One nest with juverille in nearby tree. Three other commuting bald eage observations on Baboock Ranch (F08FNA04FLUS).
MESIFLAT*250	Mesic fatwoods		G4	S4	N	N	2001-09-26	2001-09-26: A large area of mesic flatwoods, wet flatwoods and wet praire mosaic, with depression marshes and stream systems. Flatwoods mosaic in this NE portion of the ranch is approximately 10,000 acres, according to the the landowner (PNDK NO2*FLUS)	2001-09-26: Open, sparse caropy of longle af pine with some south Florida slash pine. The stand with diverse ages of trees, including occasional old growth flat tops and abundant regeneration. Midstory is practically nonexistent because of frequent free.
MYCOPEDE'S	Mycotrupes pedester	Southwest Florida Mycotrupes Beetle	G1G2	\$1\$2	N	N	2007-12-07	The habitat is mesic flatwoods but on the drier side. Dominated by (30% over) of Pinus elliotii var. dense. Serence repens covers approx 60% with scattered sandy areas with low herb cover inbetween. The area has been lightly grazed by cattle.	2007-12-07: One specimen was collected from a funnel trap on a drift fence that was set for a hep survey. The habitat was mesic flatwoods, but on the dry side (P07SUR01FLUS).
MYCTANER*33	Mycteria americana	Wood Stork	G4	S2	LE	FE	1986	COLONY SITE IS AN IMPOUNDED CYPRESS SWAMP (LEVEE ON BOTH SIDES), NESTING SUBSTRATE OF CYPRESS OVER WATER (U82NES01FLUS).	Colony inactive in 2010 (U11TSA01FLUS). Colony active for 7 years; species present most years from 1978 through 1986, with a maximum of 550 nests in 1983 and 1984 (U11TSA01FLUS). Spreadsheet in U11TSA01FLUS gives number of nests by year.

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FNAI ELEMENT OCCURRENCE REPORT on or near Babcock Ranch Preserve



INVENT	TORY						Observation		
Map Label	Scientific Name	Common Name	Rank	Rank	Status	Listing	Date	Description	EO Comments
MYCTAMER*57	Mycteria americana	Wood Stork	G4	S2	LE	FE	1974-01-26	No general description given	34 STORKS OBSERVED FORAGING. FEEDING SITE ASSOC, WITH NEARBY ROOKERIES; USE OF SITE IS HIGHLY SEASONAL.
MYCTAMER'58	Mycleria americana	Wood Stork	G4	S2	LE	FE	2008-04-29	2008-04-28: Telegraph Swamp - strand swamp with scattered, open sloughs dominated by willow (F08FNA04FLUS).	2008-04-29: 15 wood storks seen foraging and roosting, observed from helicopter (F06FNa0RLUS), 1974-04-16: 8 STORKS OBSERVED FORAGING BETYMEEN 16 AND 18 APRIL FEEDING SITE ASSOC. WITH NEARBY ROOKERIES, USE IS HIGHLY SEASONAL (ASIGROPICLUS).
NYCTNYCT*101	Nycticorax nycticorax	Black-crowned Night-heron	G5	S3	N	Ν	2008-04-29	2008-04-29: Small depression marsh with willow in middle of pasture (F08FNA04FLUS).	2008-04-29: Observed 2 birds flying around in vicinity of rookery; unable to find nest (F08FNA04FLUS).
NYCTVIOL*57	Nycfanassa violacea	Yellow-crowned Night-heron	G5	S3	N	N	2008-04-29	2008-04-29: shrubby open slough dominated by willow and buttonbush within Jacks Branch strand swamp (F08FNA04FLUS).	2008-04-29: Yellow-crowned night-heron observed but no estimate on numbers; at least 240 cattle egrets, 25 great egrets, 15 little blue hirons (low estimate), 5 snowy egrets, 1 thicolored heron, 1 arhinga, and glossy ibis álso observed (F08FNA04FLUS). 2
OPHIPALM*47	Ophioglossum palmatum	Hand Fern	G4	S2	N	LE	2005-09-20	2005-09-20: On cabbage palm in oak hammock (U05GRE02FLUS).	2005-09-20: 3 individuals in leaf observed on cabbage palm (U05GRE02FLUS).
OPHIPALM57	Ophioglossum palmatum	Hand Fern	G-4	S2	N	LE	2007-12-06	2013-03-18: Besin swemp with moderate disturbance from ditch/canal (F13FNA01FLUS) 2007-12-66: On Sabal palmetto in strand swamp, moderate hog digging and cattle disturbance (F08FNA04FLUS).	2013-03-18: 0 counted; likely extirpated original specimen appeared stressed five years ago, thorough survey (F13FNA01FLUS), 2007-12-06: 1-10 plants in leef, epiphyte on Sabal palmetto (F08FNA04FLUS).
PEUCAESTY73	Peucaea aestivalis	Bachman's Sparrow	G3	S3	N	N	2007-07-12	2007-07-12: mesic flatwoods and wet flatwoods communities with cattle disturbance (F08FNA04FLUS).	2007-07-12: 13 birds singing (F08FNA04FLUS).
PEUCAESTY78	Peucaea aestivalis	Bachman's Sparrow	G3	S3	N	N	2008-05-12	2007-2008: mesic flatwoods, dry prairie and wet flatwoods (F08FNA04FLUS).	2007-2008: 104 observations of birds singing. Unknown if all observations indicate individuals, or if some birds were observed more than once (F08FNA04FLUS).

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Natural	HTORY		Global	State	Federa	State	Observatio	n	7831
Map Label	Scientific Name	Common Name	Rank	Rank	Status	Listing	Date	Description	EO Comments
PEUCAEST*79	Peucaea aestivalis	Bachman's Sparrow	G3	S3	N	Ν	2007-03-30	2007: mesic flatwoods (F08FNA04FLUS).	2007: 4 birds observed singing (F08FNA04FLUS).
PEUCAEST*80	Peucaea aestivalis	Bachman's Sparrow	G3	S3	N	N	2008-05-07	2007-2008: mesic flatwoods, dry prairie and wet prairie (F08FNA04FLUS).	2007-2008: 11 birds observed singing. Unclear whether all observations represent individuals, or if some individuals were observed more than once (F08FNA04FLUS).
PICOBORE*18	Picoides borealis	Red-cockaded Woodpecker	G3	S2	LE	FE	ZZ	No general description given	ACTIVE COLONY.
PICOBORE*229	Piccides borealis	Red-cockaded Woodpecker	G3	\$2	LE	FE	2008-05-15	2007-2008: mesic flatwoods with light to moderate disturbance from frebreaks, ORV trails, and forestry operations (F08FNA04FLUS). 2001-09-28: Mosaico firenesic flatwoods, wet flatwoods, wet prairie, and depression marshes. Mostly dominated by longleaf pin	2007-2008: Data were collected on 176 cavity trees 61 were considered active (including 15 extree staff holes), 102 inactive (including 27 enlarged cavilies and 14 inactive staff holes), and 13 dead or dying, numerous observations of birds foraging and
PLEGFALC*42	Plegadis falcine llus	Glossy Ibis	G5	\$3	N	N	2008-04-29	2008-04-29: shrubby open slough dominated by willow and buttonbush within Jacks Branch strand swamp (F08FNA04FLUS).	2008-04-29: Glossy ibis observed but no estimate on numbers; at least 240 cattle egrets, 25 great egrets, 15 tittle blue herons (low estimate), 5 snowy egrets, 1 ticolored heron, 1 arhinga, and yellow-crowned night-heron also observed (FOBF NAOFLUS). 2
PTERECRI*600	Pterogikssaspis ecristata	Giant Orchid	G2G3	S2	N	LT	2007-11-13	2007-11-13: Dry prairie or treeless mesic flatwoods with light hog digging and cattle disturbance (F08FNA04FLUS).	2007-11-13: 1plant in fruit (F08FNA04FLUS).
PTERECRI*101	Pterogicssaspis ecristata	Giant Orchid	G2G3	S2	N	LT	2007-11-15	2007-11-15: Improved Paspalum notatum pasture with widely scattered small clumps of Serenoa repens. Area is severely disturbed by agriculture and dtch/canal. (F08FNA04FLUS).	2007-11-15: 152-1100 plants(>220) in leaf or fruit. See Sources tab for individual record information (F08FNA04FLUS).
PTERECRI*f02	Pterogikssaspis ecristata	Giant Orchid	G2G3	S2	N	LT	2007-10-22	2007-10-22: Mesic flatwoods lightly disturbed by forestry operations and cattle (F08FNA04FLUS).	2007-10-22: 1-10 plants in fruit within 10-100 square meters (F08FNA04FLUS).

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FNAI ELEMENT OCCURRENCE REPORT on or near Babcock Ranch Preserve



INVEN	INVENTORY		Global State Federal State			State	Observation	n	
Map Label	Scientific Name	Common Name	Rank	Rank	Status	Listing	Date	Description	EO Comments
PTERECRI'99	Pterogikssaspis ecristata	Giant Orchid	G2G3	S2	N	LT	2007-10-04	2007-10-04: Mesic flatwoods with dense wiregrass, light cattle disturbance (F08FNA04FLUS).	2007-10-04: 2 plants, one in leaf and one in fruit in area < 1square meter (F08FNA04FLUS).
SCIUSHER*108	Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	\$3	N	SSC	1996-05-02	Mesic flatwoods with open grassy understory. Cored pine tree 23" in diameter had 122 rings.	Squirrel seen to run up a south Florida slash pine and sit stretched out along upper branch. Seen about 10am on a relatively cool cloudy morning. Two other squirrels were sighted in flatwoods on this property both n
SCIUSHER*214	Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	SSC	2008-03-23	2008-03-23: ruderal community with moderate disturbance from fire suppression and road (F08FNA04FLUS).	2008-03-23: One squirrel observed commuting (F08FNA04FLUS).
SCIUSHER*215	Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	SSC	2008-03-13	2008-03-13: mesic flatwoods community with light disturbance from a road and a recent burn (F08FNA04FLUS).	2008-03-13: One squirrel observed foraging and climbed pine tree (F08FNA04FLUS).
SCIUSHER*216	Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	SSC	2008-04-29	2008-04-29: mesic flatwoods habitat with moderate disturbance from agriculture and cattle (F08FNA04FLUS).	2008-04-29: One adult squirrel observed foraging (F08FNA04FLUS).
SCIUSHER*217	Sciurus niger shermani	Sheman's Fox Squirrel	G5T3	\$3	N	SSC	2007-2008	2007-2008: pasture community with cattle and road disturbance (F08FNA04FLUS).	2007-2008: Nine squirrel observations were made over the time period of squirrels foreging and commuting (F08FNA04FLUS). It is unlikely that the area is home to 9 different squirrels, but it is not clear exactly how many there are (PNDNIP01FLUS).
STENFLOR*1	Stenacron floridense	AMayfly	G3G4	S3S4	N	Ν	2008-10-29	2008-10-29: No description given (U09DEP01FLUS).	2008-10-29: Staff from the Florida Department of Environmental Protection collected this species (U09DEP01FLUS).
URSUFLOR*14	Ursus americanus floridan	vsFlorida Black Bear	G5T2	S2	N	ST*	1982	WET PRAIRIE AND FLATWOODS, * [EORANKCOMM]: BASED ON PNDBRA02.	SEVERAL REPORTS OF SIGHTINGS AND SIGN, CA. 1982.

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INVEN	TORY		Global	State	Federa.	State	Observatio	n	
Map Label	Scientific Name	Common Name	Rank	Rank	Status	Listing	Date	Description	EO Comments
URSUFLOR'91	Ursus americanus fioride	anusFlorida Black Bear	G5T2	S2	N	ST*	2012	Large area of conservation lands with lakes, strand and dome swamps, pine fathvoods, hardwood hammocks, wet prairies, subject to flooding in we season (USS)M01FLUS). The vast Golden Gate Estates residential development is also within the primary range	2012: The latest population estimate of 516-878 individuals is from 2002 (UOSSMOTPLUS). This EO represents the Primary and Secondary Beer Ranges for the Big Cypress Bear Management Unit, Primary is the FWC-designated core area that represents breeding
WET FLAT*125	Wet flatwoods		G4	S4	N	N	2001-09-26	2001-09-26: Open mosaic of mesic flatwoods, wet flatwoods, wet prairies, depression marshes, and small stream systems. (PNDKIN02FLUS).	Open, wet stash pine flatwoods with low (<1 m tall) understory of wiregrass (Anstida stricta), beakrushes (Rhynchospora spp.), gallberry, saw palmetto (Serenoa repens), runner oak (Quercus minima), wax myttle (Nyrica cenfera ver pumila). Other species
WET PRAI*130	Wet prairie		G2	S2	N	N	2001-09-26	2001-09-26: Open mosaic of mesic flatwoods, wet flatwoods, wet flatwoods, wet praine, depression marshes, and small stream systems. Large area of approximately 10,000 unfenced acres, according to ranch manager (PNDK N02FLUS).	2001-09-26: Open, grassy wet prairie dominated by wire-grass, wirey Rhynchosporas (R. cf ohapmani), and Panic grasses (P. cf spretum), and with diverse plant taxa. Seen during visit: Rhexia nutallii, Ludwig

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Florida Natural Areas Inventory Biodiversity Matrix Report



Natural Areas			. 1851 · ®		
INVENTORY		Global	State	Federal	
Scientific Name	Common Name	Rank	Rank	Status	Listing
Documented					
Aramus guarauna	Limpkin	G5	S3	N	SSC
Ardea alba	Great Egret		S4	N	Ν
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	SSC
Bird Rookery		G5	SNR	N	Ν
Bolbocerosoma hamatum	Bicolored Burrowing Scarab Beetle	G3G4	S3	N	N
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Caracara cheriway	Crested Caracara	G5	S2	LT	FT
Crotalus adamanteus	Eastern Diamondback Rattlesnake	G4	S3	N	N
Deeringothamnus pulchellus	Beautiful Pawpaw	G1	S1	LE	LE
Depression marsh	·	G4	S4	N	N
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	FT
Egretta caerulea	Little Blue Heron	G5	S4	N	SSC
Egretta thula	Snowy Egret		S3	N	SSC
Egretta tricolor	Tricolored Heron		S4	N	SSC
Elanoides forficatus	Swallow-tailed Kite		S2	N	N
Eucanthus alutaceus	Mat Red Globe Scarab Beetle	G2G3	S1S2	Ň	Ň
Eumops floridanus	Florida bonneted bat	G1	S1	ĹĖ	FE
Gopherus polyphemus	Gopher Tortoise	G3	S3	C	ST
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	Ň	ST
Haliaeetus leucocephalus	Bald Eagle	G5	S3	Ň	N.
Mesic flatwoods	Daid Edgio	G4	S4	Ň	Ň
Mycteria americana	Wood Stork	0,	S2	ĹĚ	FE
Nyctanassa violacea	Yellow-crowned Night-heron	G5	S3	N	N
Nycticorax nycticorax	Black-crowned Night-heron	03	S3	Ň	N
Ophioglossum palmatum	Hand Fern	G4	S2	Ň	ĹÈ
Plegadis falcinellus	Glossy Ibis	G5	S3	Ň	N
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	Ň	ĹŤ
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	Ň	SSC
Wet flatwoods	Orientian's rox oquirer	G4	S4	Ň	N
Wet prairie		G2	S2	N	N
wet praine		02	02	14	14
Likely					
Aphelocoma coerulescens	Florida Scrub-Jay	G2	S2	LT	FT
Atrytonopsis loammi	Loammi Skipper	G1	S1	N	N
Buteo brachyurus	Short-tailed Hawk	G4G5	S1	N	N
Dry prairie		G2	S2	N	N
Mycotrupes pedester	Southwest Florida Mycotrupes Beetle	G1G2	S1S2	N	N
Peucaea aestivalis	Bachman's Sparrow	G3	S3	N	Ν
Picoides borealis	Red-cockaded Woodpecker		S2	LE	FE
Puma concolor coryi	Florida Panther	G5T1	S1	LE	FE
Scrub		G2	S2	N	N
Ursus americanus floridanus	Florida Black Bear	G5T2	S2	N	ST*
Potential					
Ammodramus savannarum floridanus	Florida Grasshopper Sparrow	G5T1	S1	LE	FE
Andropogon arctatus	Pine-woods Bluestem	G3	S3	N	LT
					SSC
Blarina shermani Calamintha ashei Centrosema arenicola Corynorhinus rafinesquii	Sherman's Short-tailed Shrew Ashe's Savory Sand Butterfly Pea Rafinesque's Big-eared Bat	G1 G3 G2Q G3G4	\$1 \$3 \$2 \$2	N N N N	

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.



Florida Natural Areas Inventory Biodiversity Matrix Report



Natural Areas Global State Federal State Status Scientific Name Common Name Rank Rank Listing G4T2 Elytraria caroliniensis var. angustifolia Narrow-leaved Carolina Scalystem S2 SSC Eudocimus albus White Ibis G5 S4 Ν Gymnopogon chapmanianus Chapman's Skeletongrass G3 S3 Ν Southern Hognose Snake G2 S2 Heterodon simus Ν Ν Short-tailed Snake G3 S3 Lampropeltis extenuata Ν ST Lechea cernua Nodding Pinweed S3 LT Linum carteri var. smallii Small's Flax G2T2 S2 Ν LE Lithobates capito Carolina Gopher Frog G3 S3 Ν SSC S2 G3? LE Litsea aestivalis Pondspice Ν Matelea floridana Florida Spiny-pod G2 S2 Ν LE Mustela frenata peninsulae Florida Long-tailed Weasel G5T3 S3 Ν Celestial Lily Nemastylis floridana S2 LE G2 Ν Round-tailed Muskrat S3 Neofiber alleni G3 Ν Ν LT Nolina atopocarpa Florida Beargrass S3 Ν Panicum abscissum Cutthroat Grass S3 Ν LE Platanthera integra Yellow Fringeless Orchid G3G4 S3 LE Ν Podomys floridanus Florida Mouse G3 S3 Ν SSC Rostrhamus sociabilis plumbeus FΕ Snail Kite G4G5T2 S2 LE Florida Willow Salix floridana G2 S2 Ν LE Schizachyrium niveum Scrub Bluestem G1G2 S1S2 Ν LE Sciurus niger avicennia Mangrove Fox Squirrel G5T2 S2 Ν ST Florida Prairie Warbler Setophaga discolor paludicola G5T3 S3 Ν Ν Warea carteri Carter's Warea G3 S3 LE LE

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).
- $\mathbf{G\#Q} = \mathrm{Rank}$ 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

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 (Horida 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 stateregulated 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.

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).