LISTED SPECIES IN PASCO COUNTY

Natural Resources Division
Parks, Recreation, & Natural Resources



Laws and Regulations

- ► Endangered Species Act of 1973
- >Florida's Endangered and Threatened Species Rule
- ➤ Marine Mammal Protection Act of 1972
- ➤ U.S. Migratory Bird Treaty Act of 1918
- ➤ Bald and Golden Eagle Protection Act of 1940
- >A species may be federally listed, state listed, or both
- Preservation of Native Flora of Florida Act



Endangered Species Act of 1973

- ➤ Nation-wide law that protects at-risk species from extinction
 - Federally listed and administered by the U.S. Fish and Wildlife Service (USFWS)
- Lists species as "endangered", "threatened", or "threatened due to similarity of appearance"
 - Can take years before a species is listed
 - Without adequate funding, there is not enough staff or money to process species' protection and recovery plans
- >A species is added to the list for multiple reasons:
 - Habitat or range is overutilized and/or destroyed
 - Disease or predation occurs
 - Failing regulatory mechanisms
 - Other natural and/or human-made factors affecting species survival



Florida's Endangered and Threatened Species Rule

- Law that conserves or improves the status of endangered and threatened species in Florida to effectively reduce the risk of extinction
 - State listed and administered under the Florida Fish and Wildlife Conservation Commission (FWC)



Marine Mammal Protection Act of 1972

- Prohibits, with certain exceptions, the "take" of marine mammals in U.S. waters and by U.S. citizens on the high seas, and the importation of marine mammals and marine mammal products into the U.S.
- >Jurisdiction is shared by the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS).



U.S. Migratory Bird Treaty Act of 1918

- Intended to ensure the sustainability of populations of all protected migratory bird species.
- ➤ Prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service.
- ➤ A migratory bird species is included on the list if it meets one or more of the following criteria:
 - It occurs in the U.S. or U.S. territories as the result of natural biological or ecological processes and is currently, or was previously listed as, a species or part of a family protected by one of the four international treaties or their amendments.
 - Revised taxonomy results in it being newly split from a species that
 was previously on the list, and the new species occurs in the U.S. or
 U.S. territories as the result of natural biological or ecological
 processes.
 - New evidence exists for its natural occurrence in the U.S. or U.S. territories resulting from natural distributional changes and the species occurs in a protected family.

Bald and Golden Eagle Protection Act of 1940

- ➤ Prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" bald or golden eagles, including their parts, nests, or eggs.
- ➤ The Act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof."
- The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb."
- This definition also covers impacts that result from humaninduced alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagle's return, such alterations agitate or bother an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death or nest abandonment.

Preservation of Native Flora of Florida Act

- ➤ F.A.C. Rule Chapter 5B-40 includes native plants that are endangered, threatened, or exploited and is administered by the FDA
- Protects native flora from unlawful harvesting on both public and privately owned lands
- Provides an orderly and controlled procedure for restricted harvesting of native flora from the wild to prevent destruction of native plant populations



Pasco County Comprehensive Plan Chapter 800 Section 803: Listed Species

All applications for Developments of Regional Impact, zoning amendments, and site development where listed or protected species are documented, or have the potential to occur, shall include a preliminary habitat assessment, which at a minimum, shall include: identification of on-site habitats, soils maps, survey methods and/or transects, and direct observations of any listed and protected species.



Pasco County Comprehensive Plan Chapter 800 Section 803 : Listed Species (Cont.)

- Where a listed or protected plant or animal is present on the proposed development site, development applications must be submitted to the Florida Fish and Wildlife Conservation Commission (FWC) or U.S. Fish and Wildlife Service (USFWS), as appropriate.
 - FWC—state listed
 - USFWS—federally listed



Listed Species in Pasco County – Mammals and Reptiles

- > Mammals
 - West Indian manatee (Trichechus manatus)
- > Reptiles
 - American alligator (Alligator mississippiensis)
 - Eastern indigo snake (Drymarchon corais couperi)
 - Gopher tortoise (Gopherus polyphemus)
 - Short-tailed snake (Stilosoma extenuatum)
 - Florida pine snake (Pituophis melanoleucus mugitus)



Listed Species in Pasco County - Birds

>Birds

- Florida scrub-jay (Aphelocoma coeruluscens)
- Wood stork (Mycteria americana)
- Red-cockaded woodpecker (Picoides borealis)
- Florida burrowing owl (Athene cunicularia)
- Little blue heron (Egretta caerulea)
- Tricolored heron (Egretta tricolor)
- Southeastern American kestrel (Falco sparverius paulus)
- Florida sandhill crane (Grus canadensis pratensis)
- Bald eagle (Haliaeetus leucocephalus)
- Osprey (Pandion haliaetus)
- Roseate spoonbill (Platalea ajaja)
- Least tern (Sternula antillarum)



Listed Species in Pasco County - Plants

>Plants

- Auricled spleenwort (Asplenium erosum)
- Hammock fern (Blechnum occidentale var. minor)
- Sand butterfly pea (Centrosema arenicola)
- Peidmont jointgrass (Coelorachis tuberculosa)
- Tampa vervain (Glandularia tampensis)
- Pondspice (Litsea aestivalis)
- Pygmy pipes (Monotropsis reynoldsiae)
- Celestial lily (Nemastylis floridana)
- Britton's beargrass (Nolina brittoniana)
- Hand fern (Ophioglossum palmatum)
- Plume polybody (Pecluma plumula)
- Comb polypody (Pecluma ptilota var. bourgeauana)
- Giant orchid (Orthochilus ecristatus)



West Indian manatee (*Trichechus manatus*)

- Status: Federally listed as threatened
- Protected under the Endangered Species Act and the Marine Mammal Protection Act
- Often called "sea cows" because they eat sea grass and other aquatic vegetation
- Lives in marine, brackish, and freshwater systems in coastal and riverine areas
- Most significant causes of death and injury for manatees are watercraft collisions
- It's important to obey all posted signs in manatee protection zones
- Polarized glasses allow boaters to see manatees clearer



Photo courtesy of Keith Ramos, USFWS



American alligator (Alligator mississippiensis)

- Status: Federally listed as threatened due to similarity of appearance to the American crocodile
 - Provides federal protection but still allows state-approved management and control programs
 - Was previously listed as endangered due to overhunting but has since recovered
- Protected under the Endangered Species Act
- Lives in freshwater lakes, rivers, wetlands, and brackish water
- Threats primarily caused by habitat destruction



Photo courtesy of FWC



Eastern indigo snake (Drymarchon corais couperi)

- Status: Federally listed as threatened
- Protected under the Endangered Species Act
- >Non-venomous
- Lives in pine flatwoods, hardwood forests, and moist hammocks
- Threats are due to habitat fragmentation, loss and degradation



Photo courtesy of FWC



Gopher tortoise (Gopherus polyphemus)

- > Status: State-threatened
- Only in the portion of its range occurring west of the Mobile and Tombigbee Rivers in Alabama
- Protected under the Endangered Species Act
- One of five North American tortoise species
- Spends 80% of time in burrows
- Keystone species because burrows provide habitat for up to 350 other species
- Lives in well drained, sandy soils found in long leaf pine sandhills, xeric oak hammocks, scrub, pine flatwoods, dry prairies, and coastal dunes
- Threats include habitat degradation, fragmentation, and destruction due to development



Photo courtesy of FWC



Short-tailed snake (Stilosoma extenuatum)

- Status: State-designated threatened
- Protected under Florida's Endangered and Threatened Species Rule
- Also called short-tailed kingsnake
- >Endemic to Florida
- Lives in sandy soils of longleaf pine and xeric oak sandhills
- Threats include alteration and destruction of xeric uplands



Photo courtesy of FWC



Florida pine snake (*Pituophis melanoleucus mugitus*)

- Status: State-designated threatened
- Protected under Florida's Endangered and Threatened Species Rule
- ➤ One of the largest snakes in eastern North America
- Lives in well-drained sandy soils with a moderate to open canopy
- Main threats are due to habitat loss, such as the longleaf pine community



Photo courtesy of FWC



Florida scrub-jay (Aphelocoma coeruluscens)

- Status: Federally listed as threatened
- Protected under the Endangered Species Act and the U.S. Migratory Bird Treaty Act
- Only bird species that is endemic to Florida
- Lives in sand pine and xeric oak scrub, and scrubby flatwoods
- Primary threats are due to habitat destruction, fragmentation, and degradation from development and agriculture



Photo courtesy of Mark Eden, National Audubon Society



Wood stork (Mycteria americana)

- Status: Federally listed as threatened
- Protected under the Endangered Species Act and the U.S. Migratory Bird Treaty Act
- Only stork species that breeds in the U.S.
- Nest in mixed hardwood swamps, sloughs, mangroves, and cypress domes/strands
- Population collapsed due to agricultural expansions and altered hydrocycles (movement of water)
 - Need normal flooding to increase prey population with a natural drawdown to concentrate prey in one area



Photo courtesy of Ira Runyan, FWS



Red-cockaded woodpecker (Picoides borealis)

- Status: Federally listed as endangered
- Protected under the Endangered Species Act and the U.S. Migratory Bird Treaty Act
- Only nest in self-made cavities carved from older, live pine trees
- Lives in slash, longleaf, and loblolly pine habitats
- Main threat is loss and deterioration of habitat due to extensive logging



Photo courtesy of USFWS



Florida burrowing owl (Athene cunicularia)

- Status: State-designated threatened
- Protected under the U.S. Migratory Bird Treaty Act and Florida's Endangered and Threatened Species Rule
- One of the smallest owls in Florida
- Lives in open prairies that have very little understory (floor) vegetation
- Main threat is habitat loss due to construction, harassment, and predation



Photo courtesy of FWC



Little blue heron (*Egretta caerulea*)

- Status: State-designated threatened
- Protected under the U.S. Migratory Bird Treaty Act and Florida's Endangered and Threatened Species Rule
- Lives in fresh, salt, and brackish water environments that include swamps, estuaries, ponds, lakes, and rivers
- Threats include coastal development, disturbance at foraging and breeding sites, reduced prey availability, and predation



Photo courtesy of FWC



Tricolored heron (*Egretta tricolor*)

- Status: State-designated threatened
- Protected under the U.S. Migratory Bird Treaty Act and Florida's Endangered and Threatened Species Rule
- Named for its distinct coloration
- Lives in fresh and saltwater marshes, estuaries, mangrove swamps, lagoons, and river deltas
- Threats include development of wetlands, pollution/pesticide exposure, and hydrology alterations



Photo courtesy of National Audubon Society

Southeastern American kestrel (Falco sparverius paulus)

- Status: State-designated threatened
- Protected under the U.S. Migratory Bird Treaty Act and Florida's Endangered and Threatened Species Rule
- > Smallest falcon in the U.S.
- Nest in tree cavities that they do not excavate or human-made nest boxes
- Lives in woodlands, sandhills, fire-maintained savannah pine habitats, pastures, and open fields
- Threats include loss of longleaf pine and open foraging habitats due to development and fire suppression



Photo courtesy of Jack Rogers, FWC



Florida sandhill crane (Grus canadensis pratensis)

- Status: State-designated threatened
- Protected under the U.S. Migratory Bird Treaty Act and Florida's Endangered and Threatened Species Rule
- Flies with its neck completely stretched out
- Lives in freshwater marshes, prairies, and pastures
- Threatened because of habitat loss and degradation from development and wetland drainage



Photo courtesy of Joseph C. Boone, USFWS



Bald eagle (Haliaeetus leucocephalus)

- >Status: Delisted in 2007
- Protected under the U.S. Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act
- Both bald eagles and their nest trees must be protected
- Keep buffers between activity and nests, maintain natural areas or landscape buffers between activity and the nest tree, and avoid certain activities during the nesting season
- Florida has the densest concentration of bald eagle nests in the lower 48 states



Photo courtesy of FWC`



Osprey (Pandion haliaetus)

- >Status: Delisted in 2018
- Protected under the U.S. Migratory Bird Treaty Act
- ➤ Has a 5 to 6 foot wingspan
- Lives along coasts, lakes, rivers, and swamps
- Nests in large trees, utility poles, and human-made nesting platforms
- Population originally declined due to pesticides (i.e. DDT). Current threats are mercury exposure and prey availability



Photo courtesy of FWC`



Roseate spoonbill (Platalea ajaja)

- Status: State-designated threatened
- Protected under the U.S.
 Migratory Bird Treaty Act and Florida's Endangered and Threatened Species Rule
- Only spoonbill endemic to the western hemisphere
- Lives in bays and mangroves
- Threats are due to food availability and habitat degradation



Photo courtesy of FWC



Least tern (Sternula antillarum)

- Status: State-designated threatened
- Protected under the U.S. Migratory Bird Treaty Act and Florida's Endangered and Threatened Species Rule
- Lost nesting habitat due to beach development and increased human activity
- Nests on beaches, rooftops and barren, sandy soils



Photo courtesy of FWC



Auricled spleenwort (Asplenium erosum)

- Status: State-designated endangered
- Protected under the Preservation of Native Flora of Florida Act
- Also called eared spleenwort
- Can be found in mixed woodlands and pine thickets



Photo courtesy of Florida Plant Atlas



Hammock fern (Blechnum occidentale var. minor)

- Status: State-designated endangered
- Protected under the Preservation of Native Flora of Florida Act
- Also called sinkhole fern
- Can be found in wetland hammocks, strand swamps, and wet woods



Photo courtesy of Florida Plant Atlas



Sand butterfly pea (Centrosema arenicola)

- ➤ Status: State-designated endangered
- Protected under the Preservation of Native Flora of Florida Act
- Also called pineland butterfly pea
- Can be found in mixed woodlands and pine thickets



Photo courtesy of Florida Plant Atlas



Peidmont jointgrass (Coelorachis tuberculosa)

- Status: State-designated threatened
- Protected under the Preservation of Native Flora of Florida Act
- Also called Florida jointtailgrass
- Can be found in shallow water and herbaceous wetlands



Photo courtesy of Florida Plant Atlas



Tampa vervain (Glandularia tampensis)

- ➤ Status: State-designated endangered
- Protected under the Preservation of Native Flora of Florida Act
- Also called Tampa mock vervain
- Can be found in live oakcabbage palm hammocks and pine-palmetto flatwoods



Photo courtesy of Florida Plant Atlas



Pondspice (Litsea aestivalis)

- Status: State-designated endangered
- Protected under the Preservation of Native Flora of Florida Act
- Can be found in pond margins, bayheads, and cypress swamps



Photo courtesy of Florida Plant Atlas



Pygmy pipes (Monotropsis reynoldsiae)

- ➤ Status: State-designated endangered
- Protected under the Preservation of Native Flora of Florida Act
- Can be found growing on the roots of hardwood trees



Photo courtesy of Florida Plant Atlas



Celestial lily (Nemastylis floridana)

- Status: State-designated endangered
- Protected under the Preservation of Native Flora of Florida Act
- Also called fallflowering ixia and happyhour flower
- Can be found in wet flatwoods, prairies, marshes, and cabbage palm hammock edges



Photo courtesy of Florida Plant Atlas



Britton's beargrass (Nolina brittoniana)

- Status: Federally and state-designated endangered
- Protected under the Endangered Species Act and the Preservation of Native Flora of Florida Act
- Can be found in scrub, sandhill, scrubby flatwoods, and xeric hammocks





Photo courtesy of Florida Plant Atlas

Hand fern (Ophioglossum palmatum)

- Status: State-designated endangered
- Protected under the Preservation of Native Flora of Florida Act
- ➤ Epiphytic—grows on the surface of other plants
 - old leaf bases and unburned cabbage palms in wet hammocks





Photo courtesy of Florida Plant Atlas

Plume polybody (Pecluma plumula)

- Status: State-designated endangered
- Protected under the Preservation of Native Flora of Florida Act
- Also called plumed rockcap fern
- Can be found in rockland hammocks, strand swamps, and wet woods
- Often on the bases of fallen logs



Photo courtesy of Florida Plant Atlas



Comb polypody (Pecluma ptilota var. bourgeauana)

- Status: State-designated endangered
- Protected under the Preservation of Native Flora of Florida Act
- Also called swamp plume polypody and palmleaf rockcap fern
- Can be found in rockland hammocks, strand swamps, and wet woods
- Often on the bases of fallen logs



Photo courtesy of Florida Plant Atlas



Giant orchid (Orthochilus ecristatus)

- Status: State-designated threatened
- Protected under the Preservation of Native Flora of Florida Act
- Also called non-crested eulophia
- Can be found in sandhill, scrub, pine flatwoods, pine rocklands, and occasionally old fields





Photo courtesy of Florida Plant Atlas

Additional Resources

- Florida Fish and Wildlife Conservation Commission (FWC) https://myfwc.com/
- ➤U.S. Fish and Wildlife Service (USFWS) southeast region https://www.fws.gov/southeast/
- Florida Department of Agriculture and Consumer Services https://www.fdacs.gov/
- ▶ Pasco County Natural Resources Division https://www.pascocountyfl.net/3317/Natural-Resources-Regulation

