Osprey

Pandion haliaetus



(Photo by FWC)

Taxonomic Classification

Kingdom: Animalia **Phylum:** Chordata

Class: Aves

Order: Falconiformes **Family:** Accipitridae

Genus/Species: Pandion haliaetus

Common Name: Osprey

Listing Status

Federal Status: Not Listed

FL Status: State Species of Special Concern (only in Monroe County)

FNAI Ranks: G5/S3S4 (Globally: Demonstrably Secure/State: Insufficient data for specific

rank, but range from Rare to Apparently Secure)

IUCN Status: LC (Least Concern)

Physical Description

The osprey is a species of raptor that is sometimes mistaken for the bald eagle. This species can reach a height of 23 inches (58.4 centimeters) with a wingspan of 72 inches (182.9 centimeters) (The Cornell Lab of Ornithology 2011). Ospreys have a white underside and head, and a brownish upper body with a black line across the eyes that extends to the wings. Several features

Osprey 1 | Page

distinguish the osprey from other birds of prey, including a reversible fourth toe and spines located on their feet that are used to help grasp their prey as they fly over the water.

Life History

Osprey feed by flying over water and diving feet first to grasp fish with their talons The osprey's diet primarily consists of different species of fish including scatfish, mullet, spotted trout, shad, crappie, sunfish, and others. Feeding areas include most open-water habitats along the coast and freshwater lakes and rivers.

Nesting usually begins in December and lasts until February. Nests are found in large trees, utility poles, channel markers, and in urbanized areas where ospreys readily utilize man-made nesting platforms. Like other birds of prey, ospreys will reuse their nests for many years. In courtship, the male will bring food to the female to keep her from mating with another osprey (Katja Schulz, n.d.). Females lay two to four yellowish eggs that are incubated for approximately 32 days. Both adults tend to the eggs and nestlings, though the female does more while the male brings food to the nest. Young osprey take their first flight around 55 days after hatching, and the adults feed young until they are approximately 100 days old (Ogden 1996).

Habitat & Distribution

Osprey habitat includes the coast, lakes, rivers, and swamps in Florida (Florida Natural Areas Inventory 2001). The osprey is widely distributed in North America and highly migratory at higher latitudes. Most North American osprey winter in South and Central America, with the exception of the non-migratory, resident subpopulation in coastal southern Florida (Poole et al. 2002, Lott 2006). The geographic extent of this resident subpopulation is unknown. Some have suggested that osprey nesting in peninsular Florida south of 29° latitude are nonmigratory residents (Poole 1989, Houghton and Rymon 1997). However, recent satellite telemetry documented that osprey breeding in Lake Istokpoga (Highlands County; approximately 27.25° latitude)



routinely migrate to South America (Martell et al. 2004). In Florida, non-migratory, resident osprey have been well-documented and extensively studied only in Florida Bay, the southern Everglades, and the Florida Keys, which are primarily or entirely within Monroe County (Bass and Kushlan 1982, Kushlan and Bass 1983, Fleming et al. 1989, Poole 1989, Ogden 1996).

Osprey 2 | Page

Threats

Historically, one of the main threats to ospreys was Organochlorine pesticides (ex. DDT), which were used to control insects. This chemical caused osprey's egg shells to soften and prevented the young from developing, which caused a huge decline in the population. These chemicals are now banned in the U.S., allowing the population to rebound. One current threat for the osprey is exposure to mercury. Mercury is found in many waterways which can cause reproductive issues. Mercury builds up and remains in the food chain, so ospreys are exposed by eating fish which have fed on organisms containing mercury (Lounsbury-Billie et al. 2008). Another limiting factor is prey availability, which has decreased due to the development of coasts, degraded water quality, and pesticides.

Conservation & Management

The osprey is protected by the U.S. Migratory Bird Treaty Act and as a State Species of Special Concern (in Monroe County only) by <u>Florida's Endangered and Threatened Species Rule</u>.

<u>-Biological Status Review (BSR)</u> -Supplemental Information for the BSR

Other Informative Links

Birds of North America
Encyclopedia of Life
Florida Natural Areas Inventory
FWC Breeding Bird Atlas
FWC Species Profile
International Union for Conservation of Nature
The Cornell Lab of Ornithology

References

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Osprey 3 | Page

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Osprey 4 | Page