

BIRDS OF SOUTH FLORIDA



Birds are some of the most colorful and interesting creatures that share our world. They belong to a group of animals called “vertebrates” (animals with backbones) and are a special group (class) of vertebrates called “Aves.” All birds have feathers, which distinguishes them from all other animals. Over 400 species of birds have been known to occur in southern Florida. They have many different habitat requirements and often use more than one habitat. Some are seasonal visitors and others are year round residents. Migratory birds travel great distances (South America to Canada, for example) and need places along the long trip to stop, rest, and feed. One natural way of grouping birds is by whether they are associated with watery habitats or land habitats. Some of South Florida’s more common land and water birds are discussed below, as well as current concerns for their survival.

Water Birds

Birds that are associated with watery habitats include waterfowl like ducks and geese, and wading birds such as herons, egrets, ibis, and cranes. It also includes birds associated with marine habitats like pelicans and gulls; shorebirds such as sandpipers and plovers; and sea birds like the magnificent frigatebird. South Florida’s abundance of freshwater wetlands, coastal shoreline, and tropical islands provides habitats for these birds to find food and shelter. This region is also crucial for birds who depend on these habitats for nesting. It is impossible to cover all the water birds that depend on South Florida habitats, but one group, the wading birds, has had a significant decline in population since the 1920s and will be discussed below.

Wading Birds

The warm, shallow, and vast Everglades “river” attracted wading birds to this region for thousands of years. Sixteen different species of wading birds live in the Everglades. All have long legs for wading into the water to catch their food. They often use multiple habitats, i.e. roosting (forming social nesting colonies) on mangrove islands and feeding inland in shallow drying ponds. In the 1800s, the well-known naturalist and artist, John James Audubon, wrote during a visit to South Florida, “We observed great flocks of wading birds flying overhead toward their evening roosts... They appeared in such numbers to actually block out the light from the sun for some time.”

The **white ibis** is the most common wading bird found in the Everglades. Unlike many wading birds that prefer to eat fish, the ibis dines primarily on crayfish. This white bird has a long, slender, curved beak that is used to probe the mud in search of food. Ancient Egyptians believed the ibis to be the reincarnation of their god, Thoth, the god of Wisdom and Learning.



white ibis

One of the most common herons encountered on a visit to the park is the **green-backed heron**. A relatively small wading bird, the antics of this fisherman are fun to watch. Slowly stalking in shallow water, or perching on a low tree branch, its dart-like jab at a fish is rarely off target.

Other wading birds you may encounter on a visit include the **great white heron, great blue heron, great egret, snowy egret, tri-colored heron, little blue heron, cattle egret, reddish egret, black-crowned night heron, yellow-crowned night heron, least bittern, glossy ibis,** and the very colorful **roseate spoonbill**.

In the 1930s approximately 250,000 wading birds nested in the Everglades. In the spring of 1990, scientists estimated as few as 2,200 wading birds nested in Everglades National Park. Ninety percent of the nesting wading bird population is gone. Two reasons are believed to have accounted for this dramatic decrease in the members of the wading bird community - fashion and the draining of "swampland."



green-backed heron

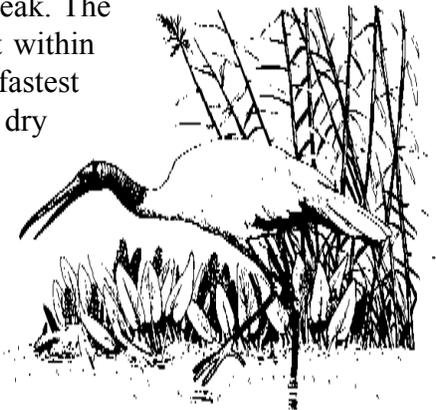


snowy egret

In the late 1800s, fashionable ladies' hats were adorned with lacy feathers called plumes. These were taken mostly from herons and egrets. Plume hunters would often shoot the adult birds during nesting season and leave the helpless young chicks to die. Plume hunting has been illegal for many years (thanks to actions from concerned citizens), but by the year 1900, only a few thousand herons and egrets remained.

The draining of interior South Florida has had a detrimental affect on the wading birds. All creatures, including birds, need food, water, shelter, and space to survive. Draining the water from the wetlands destroyed their food source. As the habitat was altered, many bird populations declined or never returned to the Everglades. The wood stork, now an endangered species, is an example.

The **wood stork** is a large, long-legged, wading bird about 35 - 45 inches tall with a wing span of 60 - 65 inches and an unusual way of feeding. With its beak held in the water, the wood stork shuffles its feet. As a frightened fish swims away from its feet, it bumps into the bird's beak. The sensitive beak feels the vibration of the fish, and clamps down on it within a fraction of a second. (This movement is believed to be one of the fastest of any vertebrate.) The wood storks' method of feeding is best in the dry season when water levels drop and the fish are concentrated in the few remaining water holes. This is also the best time for wood storks to raise their young. Unfortunately, modern water control programs do not time the water releases to the historical pattern the wood storks (and other wading birds) require. Too much water released in the dry season will cause fish concentrations to disperse. Too little water in the dry season will destroy the fish these birds depend on for raising their young. The impacts to wildlife of the altered water flows in South Florida can also be seen in some of our land birds.



Land Birds

Land birds spend their lives in drier areas of the park, like the tree islands (hammocks) or pinelands, but can also be seen flitting around in the mangroves and prairies. Land birds can be divided into groups such as birds of prey, woodpeckers, owls, and songbirds. Like the water associated birds, not all land birds nest here (just over 70 species breed in southern Florida). Nor do they all remain here year round. Colorful, migratory warblers are some that are seen only during the winter months. Everglades year round residents

include the **red-bellied woodpecker** and songbirds like **cardinals**, **blue jays**, and **meadowlarks**. One year round resident, the **Cape Sable seaside sparrow**, is in danger of becoming extinct.

This endangered sparrow builds its nests in marsh grasses. The nests are easily flooded out if water rises during their nesting season (winter dry season). Increased rainfall from 1995-1998 has caused South Florida water managers to release excess water into Everglades National Park during the dry season, threatening the sparrows' nests. Luckily, the sparrow, like the wood stork, is protected under the Endangered Species Act (see the "Endangered Species" section). Biologists, park managers, and water control managers are working together to protect this bird's habitat. The sparrow, like the wood stork, is an example of what can happen to wildlife when humans alter habitats. They are also examples of how important it is to understand the needs of wildlife in order to protect them. Two of our birds of prey show us that some species' populations can rebound strongly if people are sensitive to their needs.



Birds of Prey

The term, "birds of prey," describes birds that catch their food by using a hooked beak and claws. Hawks, owls, eagles, kites, and falcons are all considered birds of prey. The most common hawk seen in the Everglades is the **red-shouldered hawk**. This very vocal bird swoops down to feed on lizards and snakes. The most common owl is the **barred owl**. If you hear an owl hooting late at night in South Florida, most likely it is a barred owl. "Who cooks for you-- who cooks for you all" is one common "English" translation of this call.

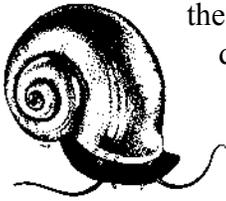


A bird of prey you are likely to see along the mangrove island areas of South Florida is the **osprey**, a land bird that dives into the water to catch fish. There are also about fifty pair of **bald eagles** (land birds who also feed on fish) that nest along the mangroves in Everglades National Park. The bald eagle is a success story. Our nation's symbol was considered an endangered species until just recently. Eagles nationwide were not successfully reproducing because certain pesticides (chemicals people used to kill insect pests) got into the food chain. The eagles

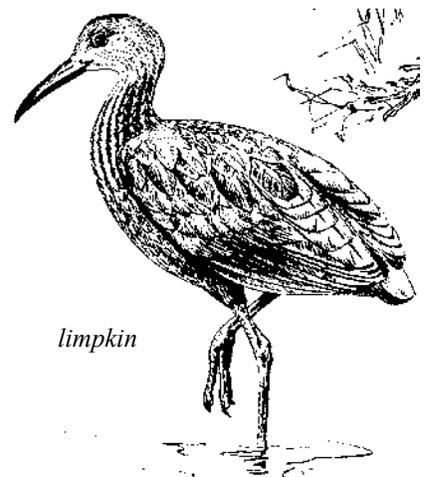


ate the chemicals when they ate fish (fish were contaminated when the chemicals got into the water). Eagles affected by the pesticides laid eggs with shells that were too thin, and most of the eggs never hatched. By banning these harmful pesticides, the chemicals in the environment have been reduced, and the eagle population has come back. Similarly, Arctic peregrine falcon populations were extirpated due largely to pesticides. Today, these falcons have increased in number so they are listed as "threatened" rather than "endangered," and may be seen wintering or migrating through South Florida. By understanding the impacts peoples' actions were having on the eagles and the falcons, and by making laws to protect them, we were able to help them.

Today, the **snail kite** is an endangered bird of prey. The population of the snail kite was only about thirty-six birds in the early 1960s. This bird does not have a varied diet. In fact, it feeds almost exclusively on the meat of the large, brown, aquatic apple snail (see "Invertebrates," p. 171). Any changes to



the snail population affects the snail kite. It is believed that the improper flooding of areas drowns the pearl-like snail eggs before they hatch, and draining of prime snail habitat, kills the adult snails. Recognizing that the snail kite was in trouble, and listing it as an endangered species, provided special protection for the snail kite. Today its population is about 1300. Researchers are still studying the kite and the apple snails to discover how best to keep protecting both.



The Everglades has been designated a “Wetland of International Significance” for its critical role in protecting South Florida’s important wildlife habitat. Together with Biscayne National Park, Big Cypress National Preserve, and Dry Tortugas National Park, Everglades is monitoring bird populations for indications of the health of this habitat. Endangered species like those discussed on the preceding pages, are signs of the condition of our environment. Since many birds in South Florida migrate, it is important that we protect enough areas along their migration routes, as well as their winter and summer homes, to ensure their survival.

REPTILES

Reptiles are vertebrate animals whose body temperatures change with their surroundings (“cold-blooded”). South Florida, with its semi-tropical climate, is an ideal home for these creatures. Various reptiles are found in all four of our South Florida national parks. Just within Everglades National Park, there are over fifty species of reptiles, including twenty-six snake species, sixteen turtle species, and several lizard species. Each one has an important role to play in the environment. Listed below are a few of the more common of these animals. For more information, refer to the references in the “Resources” section of this guide.



Crocodylians

The most famous reptiles in South Florida are the alligators and crocodiles. They belong to the group crocodylians which contains eleven other species found in other parts of the world. South Florida is the only place in the world where the American alligator and the American crocodile are found living together.

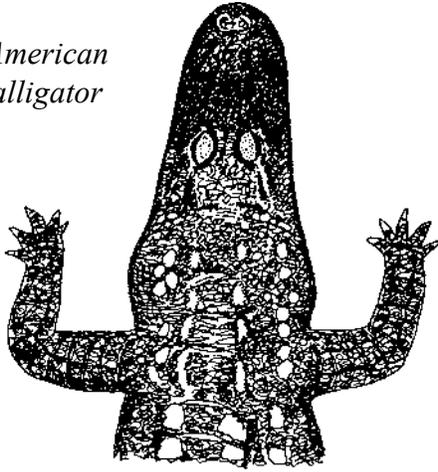
The **American alligator** is the “king of the Everglades.” Without the alligator, the Everglades might not survive. During the dry season (December through April), alligators dig out pockets, or holes, in depressions in the limestone. “Gator holes” are one of the few places in the park where there is standing water during the winter months. These holes become home to many insects, turtles, fish, and wading birds. During the summer wet season, these same animals are scattered throughout the “river of grass.”

At one time an endangered species because of overhunting and loss of habitat, the alligator is now making a comeback. They are common throughout the fresh water marshes of the park, and occasionally enter the brackish waters of Florida Bay. Once poaching (illegal hunting of wildlife) was controlled, alligator populations rebounded quickly. Despite their recovery, “gators” are still threatened. The biggest threat now comes from habitat destruction. Loss of wetlands in South Florida makes the gators even more dependent on the habitats preserved within the national parks. However, because the parks depend on artificially controlled water levels outside their borders, their protection is not assured. Female alligators usually begin building nests in mid-June. The nest mounds are usually built on slightly higher banks, or on the edge of small tree islands called bayheads. If excess water is released into the park in late June, many of the nests flood and the developing eggs drown. Restoring the water flow in South Florida to its historic patterns will help protect the alligator.

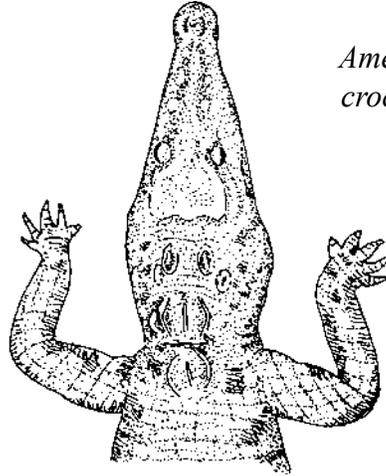
The best time to see alligators in the park is during the winter dry season. At that time, they gather near the deeper water holes. All sizes and ages, from ten-inch “babies” to an occasional ten-foot-long adult, can be seen lounging on the bank along the Anhinga Trail. Alligators are critical to the survival of Everglades National Park. Without “gator holes,” many animals would not make it through the winter dry season. Unless enough water is released at the right time of the year, alligators will not be around to create these “gator holes.”

The **American Crocodile** is a lizard-shaped reptile that ranges in length between nine inches (at hatching) to fifteen feet. The crocodile is slimmer than the alligator and has a longer, more tapered snout. The crocodile feeds primarily on fish, although it is an opportunistic feeder and will eat almost any animal that

*American
alligator*



*American
crocodile*



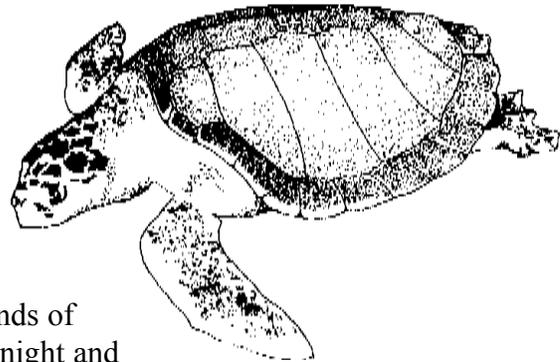
comes into its territory. Crocodiles in Florida inhabit the coastal mangrove swamps, brackish and saltwater bays (including northern Florida Bay), creeks, and coastal canals.

Most crocodiles, and their habitat from Biscayne Bay northward, have been lost due to human development along the coast and Keys. Crocodiles will survive in South Florida as long as there is proper protection of their habitat.

Turtles

Of the turtles found in the Park, most live in the fresh water marshes and ponds. The ones you are most likely to see include the **striped mud turtle**, common along the Anhinga Trail, the **peninsula cooter**, which is often seen at Shark Valley, and the **Florida red-belly**, found in fresh water marshes, ponds and solution holes. The **Florida softshell** turtle is another turtle often seen at Shark Valley and along the Anhinga Trail. While walking on a trail through the pinelands or a hammock, you may see a **Florida box turtle** crawling along. You may even come across one that has been fire-scarred or lost one of its legs. The only other land turtle found in the park is the **gopher tortoise**, and you are likely to see it only if you visit the most southwestern section of the park called Cape Sable. On Cape Sable, you might also see a **diamondback terrapin** basking along the shoreline. This species likes the brackish water of the mangrove estuary.

At one time, turtles were quite common in the marine environments of Florida Bay, the Dry Tortugas and Biscayne Bay. Today, there are fewer marine turtles because their nesting sites have been disturbed. The **hawksbill turtle**, **Atlantic Ridley turtle**, **leatherback turtle**, and **green turtle** are all endangered species. The leatherback turtle nests within Biscayne National Park. The green turtle as well as the **loggerhead turtle** nest on the islands of Dry Tortugas National Park. If you are walking the beach at night and sight any one of these marine turtles nesting, do not disturb them; they are all protected species.



Snakes

Many of the snakes found in South Florida are adapted to survive in the water. The **striped crayfish snake** is considered the best swimming snake in Florida, but you're not likely to see one unless you look carefully among the marsh plants in the northern part of Everglades National Park. Much more common is the **brown water snake** which is the most frequently seen snake along the Anhinga Trail. People often mistake it for the poisonous **Florida cottonmouth** which is found in the same area. The water snake, if cornered or mistreated, will bite - but it is not poisonous. While most of the snakes living in or near the water are adapted to a fresh water environment, some, like the cottonmouth and **mangrove salt marsh snake**, can survive in the mangrove swamps and saltwater marshes.



Many snakes are beautifully colored; standing out in their surroundings, while others are drab colored and blend in perfectly with their background. Some of the most beautiful snakes in the park belong to a group called the rat snakes. The **Everglades rat snake** is brilliant orange with four dark stripes; the **corn snake** has reddish blotches with a black border in a background of grey, tan, yellow, or orange; the common **yellow rat snake** has four black stripes on a bright golden yellow background. They are very good climbers and may be seen climbing a tree to get to eggs in a bird's nest. They also feed on small rodents, frogs, and toads, which they constrict, or squeeze, to death. Another brightly-colored snake is the very poisonous **eastern coral snake**. With its red, yellow, and black rings and black snout, its coloration warns predators, "Stay away from me, I'm dangerous." The black snout is the coral snake's most distinguishing feature. The coral snake is found in hardwood hammocks and pinelands under leaves, rocks, and logs. Both the **scarlet** and **scarlet king snakes** imitate (mimic) the coral snake in appearance and are found in the same habitat. All three species have red, black, and yellow rings, but the scarlet and scarlet king have red snouts. Another difference is that in the coral snake, the red and yellow rings touch. The scarlet and scarlet king snakes have their red and yellow rings separated by black.

Snakes are found in nearly every habitat in the Everglades. They range in size from the poisonous **dusky pygmy rattlesnake**, seldom more than two feet long, to the threatened **indigo snake**, which can grow to be over eight feet long. Some are brilliantly colored, some may be poisonous, but many help balance the rodent population. Each one has an important role to play in the South Florida environment.

Lizards



The native **green anole**, which many of you know as the chameleon, was once very common throughout the Everglades. Now, it is being gradually replaced in the pinelands and hardwood hammocks by the exotic brown anole which is native to Cuba. The **Florida reef gecko** is the only native gecko found in Florida. It is found in the hammocks and pinelands under rocks and leaves, and is the smallest lizard in North America (2 - 2-1/4 inches). **Inland glass lizards** are common in fresh water marshes and pinelands that are flooded during certain times of the year. During high water and after fire, you may see them along roads that are next to their habitats. They may be up to two feet long.

Several exotic species (see "Exotics," p. 176) of lizards have been able to adapt to the Everglades environment. These exotics often compete for food, shelter, and territory with native lizards. Many exotics are pets that have escaped or have been released into the wild. You can help protect the native lizards by not releasing exotic pets anywhere in South Florida.