

Everglades

National Park
Florida

National Park Service
U.S. Department of the Interior



Tropical life from Caribbean islands blends with temperate species in the Everglades. The result is a rich mixture of plants and animals in a unique setting. The Everglades, never wholly known, invites you to explore its mysteries. Give this park half a chance, take the time, and you will discover wonder itself. You can drive through its skinny pine trees and miss its forests, or drive through its sawgrass and miss the glades. Many take such a hurried look. But try it another way. Talk and walk with a ranger. Slow down. Be moved by the slow, sure movement of this river of grass.

A freshwater river 15 centimeters (6 inches) deep and 80 kilometers (50 miles) wide creeps seaward through the Everglades on a riverbed that slopes ever so gradually. During the wet season the water may seem to be still, but it is flowing. Along its long course, the water drops 4.6 meters (15 feet), finally emptying into Florida Bay. Everglades . . . the name suggests a boundless refreshment. It actually means a marshy land covered with scattered tall grasses. The national park's 566,000 hectares (some 1.4 million acres) contain only part of the

watery expanse for which it is named. Despite the park's size, its environment is threatened by the possibly disruptive activities of agriculture, industry, and urban development around it. There is no guarantee that the endangered species protected in the park since its establishment in 1947 will survive. The importance and uniqueness of the Everglades ecosystem have now been recognized by its designation as an International Biosphere Reserve and a World Heritage Site. But it will take both human concern and prudent management to preserve the park's natural treasures. The Everglades' subtropical climate governs its life. The nearly uniform warm, sunny weather makes the park a year-round attraction, but there are two distinct seasons. Summer is wet; winter, dry. Heavy rains fall during intense storms from late May through October. Warm, humid conditions bring abundant insects, including mosquitoes, which are important to intricate food webs. Precipitation can exceed 127 centimeters (50 inches) a year.

Life hangs by a thread in the Everglades. The problem? Water, freshwater, the life-blood of the Everglades. It appears to be everywhere but

man has drastically blocked its free flow through south Florida. Conflicting demands compete for this precious water, leaving the Everglades, at Florida's southernmost tip, struggling to survive. Life hangs in the balance, a very delicate balance. Despite an apparent lush richness, water supplies are critical and porous limestone underlies the entire park. Rooting plants have only a thin mantle of marl and peat atop this limestone for their support. If not protected the Everglades' fragile richness would quickly vanish.

Problems persist. Agricultural development and the continued mushrooming of metropolitan Miami demand increasing amounts of water, depleting water supplies. This, in turn, increases the threat of fire, which can destroy thin soils, inviting the invasion of exotic plants and animals that upset natural habitats. Native vegetation critical to Everglades ecology is depleted. The diversity and complexity protecting the fabric of life are diminished. The problems are linked and mutually reinforcing. The continued unchecked population growth of south Florida poses severe ecological problems. An aerial view of the region and

its canals looks today like a plumber's schematic diagram. Once the benefactor of south Florida's naturally well-watered richness, the Everglades now competes at the end of a man-controlled supply line. To the north, flood prevention, irrigation, frost protection, pest control, drinking water, and sewage dilution systems siphon off shares. When rainfall is ample few problems arise. But in drought years agreements for sharing the limited amount of water have been required. Man is as much a part of the Everglades as the alligator, but our conflicting actions as consumers and conservers have irrevocably changed south Florida and altered the Everglades ecosystem. Concern for protecting rookeries of herons, ibis, and other wading birds from commercial plume hunting and other human impacts motivated creation of the park. Ironically, millions of people now seek sanctuary here. Ultimately places like the Everglades may be the last refuge, not just of eagles, crocodiles, and wood storks, but of people too.

Wildlife Treasures in a River of Grass



Summer's high water levels enable animals to range throughout the park. You will not then see the concentrations of wildlife that are typical of winter months. Summer offers different attractions—mountainous cumulus clouds, lush vegetation, spectacular sunsets, calm waters. It means rebirth and replenishment for the Everglades, and natural change. Violent winds and torrential rains of hurricanes may sweep northward from June to November. The Everglades winter is mild, with inclement weather rare and insects less bothersome. With winter's dry season, wildlife must congregate in and around the waterholes. Many are visible from nature trails. Birds change their feeding habits as food grows scarce toward the end of the dry season. They leave roadside ponds they frequent early in the season, moving northward to more abundant food supplies.

The continued survival of the Everglades now depends on careful, complementary management programs carried out by the National Park Service and other agencies. These programs often promote positive economic values. Recently new fishing regulations have been adopted to limit the taking of spiny lobsters and some fish to protect against overharvesting. Research into the role of fire in some plant communities, into the ecology of endangered species, and into the ways in which exotic plants might be controlled is continuing.

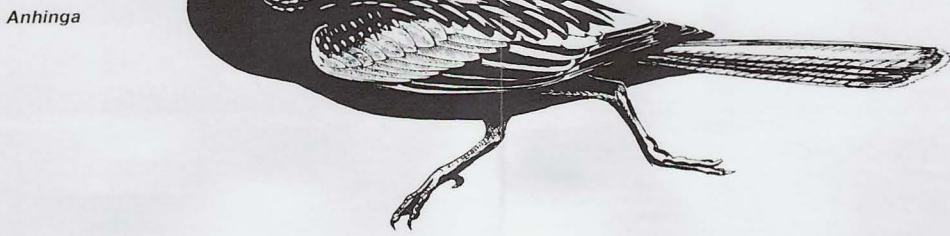
Large populations of Cape Sable sparrows once found at Cape Sable and Big Cypress are almost gone. Only widely scattered individuals remain. Taylor Slough's muhly grass prairie supports an active population, but exotic, non-native plants threaten to close in the open prairie this sparrow needs for survival. Short-tailed hawks prey on the sparrow. When abundant habitat fostered an abundance of Cape Sable sparrows this natural predation posed no great threat to the species.

Crocodiles, much less common than alligators, are distinguished by their narrower snouts and greenish-gray color. You would be very lucky to see one of these shy and secretive creatures. They are found only in estuaries in extreme southern Florida, particularly in northeast Florida Bay. Their survival hinges on the preservation of their dwindling habitat. A crocodile sanctuary has been recently established in Florida Bay for their protection.

The rare, shy, harmless manatee weighs close to a ton and measures more than 4.6 meters (15 feet) in length. Also called a sea cow, the animal is entirely herbivorous, feeding on aquatic plants. Man's motorboats and propellers kill many manatees yearly and pose this easy-going creature's greatest threat. The Florida panther, or cougar, is among North America's rarest mammals. The major threat to the survival of these big cats is loss of the extensive habitat over which they stealthily stalk their prey. They are still seen, though rarely, in the pinelands and along the main park road.

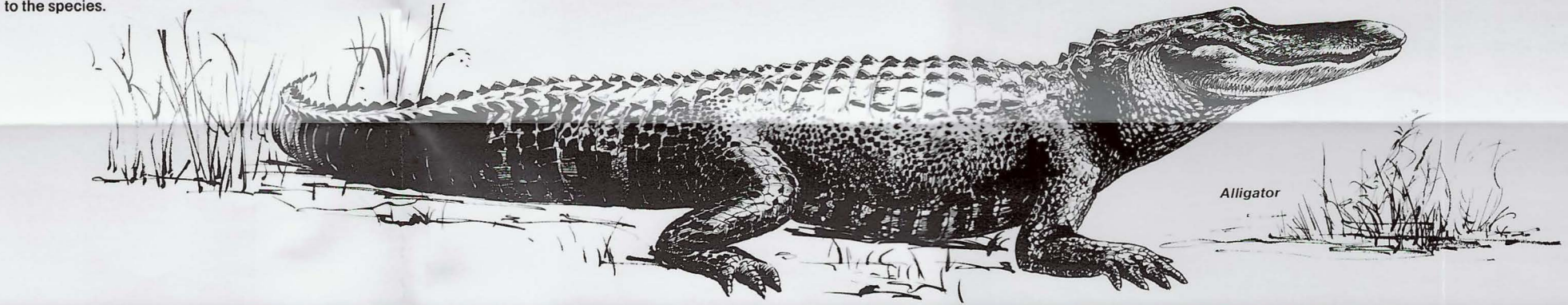


The Everglades is best known for its abundance and variety of birdlife. At Flamingo you may be able to watch roseate spoonbills, large pink birds often mistaken for flamingos. Flamingos do regularly visit north Florida Bay from their Caribbean homes, but they are rarely seen. Reddish egrets and rare great white herons live and breed in Florida Bay. About 50 pairs of southern bald eagles nest along the coast. Some of the endangered birds can sometimes be seen from the breezeway of the Flamingo Visitor Center. Other rare and endangered species found in the park include the Florida panther, manatee, Everglades mink, green sea turtle, loggerhead turtle, brown pelican, Florida sandhill crane, Everglades kite, short-tailed hawk, peregrine falcon, Cape Sable sparrow, and crocodile. Other species also require the special protection Everglades National Park provides. These include the alligator, reddish egret, spoonbill, Florida mangrove cuckoo, osprey, and roundtail muskrat. But for this protected habitat, many would soon be threatened.



The alligator is the best known Everglades citizen. Unfortunately, its hide has been greatly prized for high fashion shoes and handbags. The alligator once waged a losing battle against poachers and habitat loss, but it has now staged a comeback, aided by nation-wide protection. Recently, 75 percent of the nation's alligators were removed from the endangered species list and reclassified as threatened.

The alligator has earned the title "Keeper of the Everglades." It cleans out the large holes dissolved in the Everglades' limestone bed. These serve as oases in the dry winter season. Fish, turtles, snails, and other freshwater animals seek refuge in these life-rich solution holes, which become feeding grounds for alligators, birds, and mammals until the rains come. Survivors, both predators and prey, then quit the holes to repopulate the Everglades.



Things to See and Do

Visitor Centers Stop by a park visitor center and pick up free park information. A short introductory film is shown regularly at the Main Visitor Center, 17 kilometers (10.8 miles) southwest of Homestead, Florida. Books on the Everglades are sold here too. An entrance fee is charged only if you enter the park through the main entrance. Descriptions of trails and points of interest appear above the map.

Birdwatching The chance to see rare birds—the American bald eagle and the Everglade kite—and spectacular seasonal displays of water birds lure people to the Everglades. Some species that are uncommon or endangered throughout the United States or the world are relatively common in the park. Early morning and late afternoon are the best times for birdwatching.

Ranger-Guided Activities Naturalists give hikes, talks, canoe trips, tram tours, demonstrations, and campfire programs during the year. Activities change daily. One day there may be a sunrise bird walk or a paddle out into Florida Bay or a slough slog crosscountry or a moonlight tram tour. Ask at the visitor centers for schedules.

Hiking Trails range from easy walks of less than 800 meters (½ mile) to more strenuous ones 23 kilometers (14 miles) long. See "Walking Trails" or ask a park ranger.

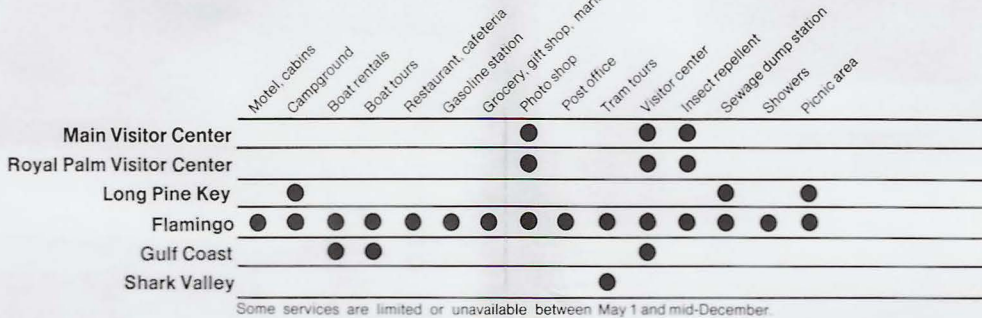
Fishing Inland and coastal waters of the Everglades are popular fishing grounds. There is largemouth bass fishing in freshwater ponds. The most sought-after saltwater species are snapper, snook, redfish, and trout, good-eating fish caught year-round. Freshwater fishing re-

quires a Florida state license; saltwater does not. Florida fishing regulations apply in most cases, but special additional Federal regulations must be followed within the park boundary. Special bag limits have been established. The taking of spiny lobster, or crawfish, is prohibited. Spearguns are not allowed. Commercial fishing is allowed only with a special park permit. Some freshwater and saltwater areas are closed to fishing. For a list of closed areas, and a copy of the park's fishing regulations, ask at visitor centers or ranger stations.

Boating The park's many inland and coastal waterways lead to remote parts of the Everglades. Several marked canoe trails near Flamingo, rivers near Everglades City, Whitewater Bay, and many other areas also offer good boating opportunities. Boaters can explore the shallow waters of Florida Bay, too. Most bay islands are closed to boat landings to protect nesting birds. A small portion of the bay has been closed to protect the endangered American crocodile. See "Marina and Boats."

For More Information The nonprofit Everglades Natural History Association has books and pamphlets available at the Main Visitor Center or by mail. To obtain a sales catalog, write the association at P.O. Box 279, Homestead, Florida 33030.

Facilities and Services



Camping Park campgrounds, located at Long Pine Key and Flamingo, provide drinking water, picnic tables, fire grills, tent and trailer pads, and restrooms. Flamingo has cold water showers. Recreational vehicles are permitted, but there are no electrical, water, or sewage hook-ups. Campground stays are limited to 14 days from December 1 to March 31. Campground fees are charged during the winter season. Group sites can be reserved in advance from December 1 to April 30. Write or call headquarters for details. You may camp, without charge, at other designated sites, on beaches, or in the backcountry. Access is either on foot or by boat. You must first obtain a free backcountry use permit at the park entrance station or at a ranger station.

Marina and Boats The Flamingo marina rents small powered skiffs, houseboats, and canoes. The marina can accommodate boats up to 18.3 meters (60 feet) long, with ample boat trailer parking and free launch access. Slip fees are based on boat length. Canoes can also be rented seasonally from a concessioner in Everglades City. Navigation charts can be purchased in

Homestead, Miami, Everglades City, at the Flamingo marina, and at the Main Visitor Center. Boat tours at Flamingo year-round travel through the mangrove wilderness and into Florida Bay. Sightseeing boats go into the Ten Thousand Islands region and the mangrove swamps of the northwestern Everglades. These concession-operated tours leave from the Gulf Coast Ranger Station between November 1 and May 1 only.

For More Information For motel or cabin reservations for the Flamingo Inn and information about what to do in Flamingo write the Flamingo concessioner. The concessioner operates the inn, marina, boat rentals, grocery and gift store, restaurant and cafeteria, boat tours, and gas station. The address is Everglades Park Catering, Flamingo Inn, Flamingo, Florida 33030. Motel and cabin reservations should be made well in advance by calling (813) 695-3101, any time of day. Some facilities are closed between June 1 and October 31, so call ahead. For information about boat tours and boat rentals at the Gulf Coast Ranger Station, write the concessioner at Everglades National Park Boat Tours, P.O. Box 119, Everglades City, Florida 33929.

Regulations and Safety

Please help us protect the Everglades. Practice good outdoor manners. Put litter in trash receptacles. Backcountry users are asked to carry their litter out with them. Observe safety and courtesy rules. Enjoy your visit in a way that lets others enjoy theirs.

Plants and Animals After years of protection many animals, such as alligators, lose their natural fear of people. You can view them at close range, but this does not mean they are tame. They are still wild. Do not feed or disturb any animals, including birds. Also, do not damage, remove, or disturb any plants. They, like the animals, are protected under park regulations.

Watch for poisonous plants (poison ivy, poisonwood, and manchineel) and poisonous snakes (coral, water moccasin, and diamond-back and pygmy rattlers).

Be prepared for mosquitoes, particularly during the warmer, wetter months of summer. Bring insect repellent, or plan to buy some when you arrive. A longsleeved shirt, long pants, and a cover for your head help guard against being bitten.

Hiking Off Trails Be careful of your footing. Mucky soil, sharp-edged pinnacle rock, and holes can make walking tricky. Let someone know your schedule and planned route before you leave.

Fire Be careful with fires. Do not smoke on trails. Self-contained cooking stoves should be used at backcountry campsites.

Driving The maximum driving speed is 88 kilo-

meters (55 miles) per hour. Reduced speed limits are posted. Drive slowly; the road is designed for your enjoyment of the scenery.

Pets Pets must be under physical restrictive control. They are not allowed on trails or in amphitheaters.

Airboats, Swamp Buggies, and All Terrain Vehicles These vehicles are not permitted in the park. They destroy vegetation, and their noise scares the wildlife.

Hunting Using any firearms or other hunting apparatus that could injure wildlife is prohibited.

Park rangers are here to help you enjoy your visit. Do not hesitate to ask their assistance or guidance. Please report any fire, accident, violation, or other unusual incident to them.

Everglades

The map shows the many things to see and do in the Everglades. And its diverse ecosystems are represented in separate colors to illustrate the park's natural complexity, for this is not just a big swamp, but a dynamic fabric of terrestrial and aquatic plant and animal communities. With the

map and pictures you can locate yourself in environments you encounter along the roads, foot trails, canoe trails, and wilderness waterway. Facilities and services provided by the National Park Service and its concessioners are also shown.

Points of Interest

Dwarf Cypress Forests can be found along the main park road near Rock Reef Pass, a 1-meter-(3-foot-) high limestone ridge that rises out of the otherwise flat landscape. These open areas of scattered, stunted pond cypresses develop where marl or lime muds build up in solution holes. Despite their small size, the cypresses may be more than 100 years old. During the winter months the pond cypress, which is a variety of bald cypress, look dead. But they have just lost their leaves.

The many ponds in the park, from **Mrazek Pond to Coot Bay Pond** and **Eco Pond**, offer good chances to view birds, particularly in the dry winter months. Sometimes flocks of hundreds of egrets, herons, wood storks, and other water birds fly in to feed.

The shallow waters of **Florida Bay** are best explored by boat. About a third of the park is composed of the bay and its tiny islands, or keys. Most are protected refuges for nesting birds. White and brown pelicans, roseate spoonbills, ospreys, bald eagles, and many shore birds share the warm waters with fish, porpoises, sea turtles, and sharks.

Walking Trails

The main park road begins at the main visitor center and ends 61 kilometers (38 miles) later at Flamingo. Many trails take off from this road, and several more begin at Flamingo. **Trails marked by an asterisk (*) are accessible for the handicapped.**

The Anhinga Trail* (less than 800 meters/0.5 mile) offers one of the best opportunities to see wildlife close-up. Alligators, turtles, fish, marsh rabbits, and many birds, including anhingas, herons, egrets, and purple gallinules, frequently inhabit the area. Taylor Slough, a slow-moving, freshwater, marshy river, acts as a reservoir, supplying needed water for plants and animals through the winter dry season.

The Gumbo Limbo Trail* (less than 800 meters/0.5 mile) winds through a hardwood hammock, a jungle-like grove of tropical trees and smaller plants. Statuesque royal palms, gumbo limbo trees, wild coffee, and lush aerial gardens of ferns and orchids grow in this dense, moist forest. Hardwood hammocks usually sit about a meter (3 feet) higher than the surrounding terrain. Floods, fires, and the invasion of saline waters can threaten the survival of a hammock.

At **Long Pine Key**, a network of interconnecting trails (11 kilometers/7 miles) runs through the pinelands, an unusually diverse pine forest. About 200 types of plants, including 30 found nowhere else on Earth, grow under the slash pine canopy. Without periodic fires to destroy competing vegetation and expose mineral soils for seedlings, the pines would not survive. Whitetail deer, opossums, raccoons, and the endangered Florida panther live in the pinelands.

The Pineland Trail* (less than 800 meters/0.5 mile) also circles through the pinelands. The shallow bed of limestone that underlies the pinelands, and in fact all of south Florida, can be clearly seen along the trail. Solution holes, formed when rainwater and acidic plant matter mix and dissolve the rock away, dimple the ground.

The Pa-hay-okee Overlook Trail (less than 800 meters/0.5 mile) leads to an observation tower offering a view of part of the vast "river of grass"—the true glades that gave the park its name. Muhly grass, Everglades beardgrass, arrowhead, and many other grasses that grow in the glades are found here. Sawgrass, which is

not a true grass, but a sedge, grows here, too. Patient observers may see red-shouldered hawks, red-winged blackbirds, common yellowthroats, vultures, pygmy rattlesnakes, indigo and king snakes, and an occasional alligator along the trail.

The Mahogany Hammock Trail* (less than 800 meters/0.5 mile) enters the cooler, damp environment of a dark, jungle-like hardwood hammock. Rare paurotis palms and massive mahogany trees (including the largest living specimen in the United States) thrive. Colorful Liguus tree snails, tiny and jewel-like, and delicate webs of golden orb weaver spiders are suspended overhead from tree branches. At night, barred owls awaken to hunt.

The West Lake Trail* (less than 800 meters/0.5 mile) winds through mangrove trees along the edge of the large, brackish lake. Four types of mangroves—red, black, white mangrove and buttonwood—grow in this region where the southward-creeping glades meet saltwater. The mangroves' unusual above-ground root systems enable the trees to tolerate poorly oxygenated soils and help anchor Florida's hurricane-ravaged

coastline. The mangrove region also is a nursery for fish and crustaceans: mullet, snapper, stone crabs, shrimp, and spiny lobsters.

Several longer trails near Flamingo lead into southwestern parts of the Everglades. These trails include the **Christian Point Trail** (6 kilometers/4 miles), **Snake Bight Trail** (6 kilometers/4 miles), **Rowdy Bend Trail** (8 kilometers/5 miles), the **Coastal Prairie Trail** (21 kilometers/13 miles), and **Alligator Creek Trail** (23 kilometers/14 miles). Many of these trails pass through coastal prairie. Salt-tolerant plants usually associated with deserts—cactus, agave, yucca—grow here. Hardwood hammocks have developed in some prairies.

Shark Valley* lies off State Route 41, the Tamiami Trail. Here, along the 24-kilometer (15-mile) loop road you may see a variety of wildlife that inhabits the wide shallow waterway which eventually empties into Shark River. Alligators, otters, snakes, turtles, and birds, including rare wood storks and the Everglade kite, are native to this watery expanse. Hardwood hammocks and other tree islands dot the landscape. The loop road is used for tram rides, bicycles, and

walking. An observation tower along the road provides a spectacular bird's-eye view. Seasonal tram rides include the services of rangeland naturalists; reservations are recommended.

Canoe Trails

The **Wilderness Waterway** twists 160 kilometers (99 miles) through the expansive marine and estuarine areas of the park. These areas harbor almost every type of marine organism found in the Caribbean and serve as spawning grounds and nurseries for many of them. Larger creatures such as water birds, sea turtles, many types of fish sought by fishermen, and the endangered manatee are attracted to these waters because of their abundant food supplies.

Other shorter trails offer opportunities to explore the park's backcountry. These include the **Noble Hammock Trail** (5 kilometers/3 miles), the **Hells Bay Trail** (6 kilometers/4 miles), the **Nine Mile Pond Trail** (8 kilometers/5 miles), the **West Lake Trail** (13 kilometers/8 miles), and the **Bear Lake Trail** (19 kilometers/12 miles), which all begin near Flamingo. Rivers near Everglades City are also popular canoeing spots.

Map produced in cooperation with the Everglades National Park Association.

