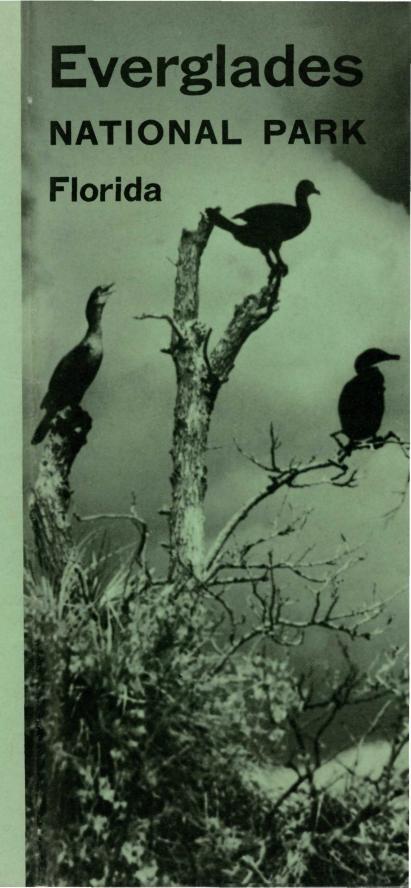
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE





Everglades

NATIONAL PARK

The superintendent and his staff are here to help you to enjoy and understand this unit of the National Park System—one of our Nation's newest and most unusual National Parks. While you are here, please help protect the park's natural values by leaving the plants and animals undisturbed so that others who come after you may enjoy them. Practicing good outdoor manners, such as putting litter in trash receptacles and observing the rules of safety and courtesy, will make your visit much more enjoyable—for you and for others.

The National Park System, of which this park is a unit, is dedicated to conserving the scenic, scientific, and historic heritage of the United States for the benefit and enjoyment of its people.

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WHY THIS BOOKLET?

Everglades National Park is like no other area you have visited. To enjoy it fully, you should carefully plan where you will go and what you will look for. This booklet is intended to help you discover some of the secrets of the sometimes spectacular, sometimes subtle Everglades wilderness.

The narrative sections will briefly reveal the geological past and the natural and human history of the Everglades region. You will learn where the birds may best be observed, and in what seasons; where you're most likely to see land animals and aquatic life; where to find the nature trails and the outdoor exhibits. The map on pages 30 and 31 will help you locate the main points of interest.

Before you drive down the park road from the main visitor center to Flamingo, be sure to read pages 11

through 19, which contain descriptions of things that you should see along the way. The few minutes you spend in reading before you start will yield dividends in greater understanding, safety, and enjoyment in the park. And as you drive down the park road, ask someone in your car to refer to these pages so that you will not miss the places of special interest.

A SUBTROPICAL WILDERNESS

Located at the southern end of the State of Florida, Everglades National Park extends farther south than any other part of the United States mainland. Bordering the Tamiami Trail on the north, the park reaches southward into Florida Bay and from the Florida Keys westward to the Gulf of Mexico. It covers an area larger than the State

Everglades wilderness.



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of Delaware and includes part of the Ten Thousand Islands and dozens of low islands—called keys—in the open water of the bay and gulf. Embracing more than 2,100 square miles of land and water, the park is the largest subtropical wilderness in North America.

If you look at a map of the United States, you will see that the shape of Florida suggests a neatly turned foot with the toe pointed toward the tropics. But the tip of the toe doesn't quite reach its mark. Instead, the tropics project their influences northward. Trade winds blowing over the Gulf Stream bring warm, moist air to Florida. Traveling with warm Caribbean ocean currents, countless forms of tropical marine life, for thousands of years, have colonized southern Florida shores. Tropical land-plant immigrants are abundant too. Seeds of these plants were ferried from the West Indies by birds, swept across by ocean currents, or air-borne by hurricane winds to be planted finally in the watery lands of southern Florida.

Many tropical plants and smaller land animals, as well as numerous species of marine life, mingle with those of the Temperate Zone in Everglades National Park. The larger land mammals were unable to make the crossing; therefore almost all the land mammals are continental species familiar farther north.

Here, in the third largest National Park in the United States, you will find a sprawling wilderness: hundreds of

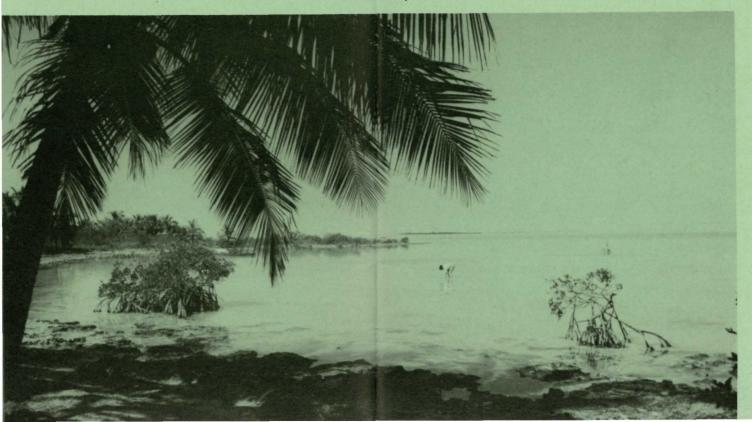
square miles of Jamaica sawgrass; clusters of trees, called hammocks, that form islands of dense vegetation in the open glades; and baldcypress and pine forests—a landscape wider than the horizon. Along the coast this expanse gives way to vast, shadowy mangrove swamps interlaced by a maze of placid, winding waterways.

Indians gave the name Pa-hay-okee, or "grassy waters," to the open everglades. In these marshlike sections of the park, endless stretches of swaying sawgrass are broken only by the hammocks. While these grass regions are recognized as the true everglades, park lands also include other plant communities. Tropical hardwood trees such as West Indies mahogany, gumbo-limbo, seagrape, willow bustic, Florida strangler fig, and many others grow here.

Two trees poisonous to touch are Florida poisontree ("poisonwood") and manchineel ("death apple" or "tree of death"). Common poison-ivy also grows here in the park. It is well to learn to recognize these poisonous plants, especially the poisontree and poison-ivy, which are found in fair abundance in the pinelands and hammocks of the park. Contact with either of these two related plants can cause an uncomfortable, irritating rash.

Manchineel, on the other hand, is a small tree that you probably will not see during your visit. It is found sparsely in hammocks on the Florida Keys and in some coastal hammocks of the park. The name "tree of death"

Florida Bay.





Summer clouds

perhaps exaggerates its poisonous properties. Nevertheless, the fresh sap from the tree can produce a skin irritation more severe than ivy poisoning, and eating the small, crabapple-like fruits can be disastrous.

It is always best to avoid touching or eating the fruits of any strange plant. Park naturalists will be glad to help you learn something about the many interesting plants of the park.

The park is a mosaic of subtropical nature in abundance. On a typical summer day, sunshine and winds and rain alternately bathe the land. Swelling clouds tower above the horizon. Hundreds of square miles of tall grasses wet their roots in shallow, summertime marshes and bend to the touch of Florida breezes. Rivers snake through tropical mangrove forests, stretch past the horizon and are lost to view between land and sky.

Thousands of birds find nesting places in the park. Egrets and herons; gulls and terns; hawks, eagles, and kites; pelicans; cormorants and anhingas; ducks; and ibises and spoonbills are but a few of the many species that grace the scene and accent the Everglades picture with moving touches of color. Temperate and tropical marine life and land mammals share the near-tropical environment.

TWO SEASONS

Temperatures do not vary widely from summer to winter as they do in the four-season sections of the United States.

And yet the two seasons of southern Florida—wet and dry—cause great environmental differences for wildlife.

Summer

The majestic clouds of summer, though they may produce the brief torrential showers, give a beauty to the land-scape that you would miss in winter. During the summer, wildlife is distributed over wide areas and is not so easily seen; fishing is at its best, and the waters of the park are usually calmer than in winter.

Summer rains flood the Everglades and create extensive breeding grounds for small fish and other aquatic animals and feeding places for alligators, birds, and mammals.

Winter

With the onset of winter, surface waters recede. Deep ponds become reservoirs of life as the 'glades dry up. Wild creatures move into the ponds and sloughs and become "exhibits" for many park visitors.

Winter is the best time to see wildlife in abundance, because the animals tend to concentrate around the few remaining water areas. Many of the large wading birds—egrets, ibises, herons, and roseate spoonbills—nest in their rookeries during midwinter and early spring. Waterfowl and other bird migrants from the north are also found in the park.

Most of the trees, shrubs, and other plants stay green all winter, although drying grasses and sedges give the Everglades a brownish hue. Fishing is good, as a rule, but it is variable. Boating is generally good, but waters may become rough during this season. Weather is normally pleasant and clear, with little rain. Temperatures are often described as "about like June up north," and people dress accordingly. However, brief cold snaps do occur, sometimes with strong north winds and occasionally with frost.

HOW TO ENJOY THE PARK

Before driving through the park, you should first stop at the visitor center near the park entrance, which is located on State Route 27 not far from Homestead. The unique landscapes of Everglades National Park will be more meaningful to you after you have learned how the face of the land was formed, which plants grow in the different areas, and which wild creatures make their homes there. At the visitor center, you can learn all these things and more from park personnel, exhibits, and the wide-screen motion-picture film. After your stop at the visitor center, you will be prepared for a leisurely drive through the park to Flamingo.







Summer breezes play across miles of sawgrass and hardwood hammocks.

ALONG THE PARK ROAD

When you start the trip from the main visitor center to Flamingo, remember that you are at the fringe of the tropics. You will see many of the tropics' influences as you move across the almost imperceptible changes in elevation and on across the seasonally shifting zone that "separates" the fresh-water area from the salt-water area.

It is possible to make this 38-mile trip over the paved road in less than an hour, but don't do it. You should allow yourself at least half a day to become acquainted with some of the park's unusual attractions. Take the time to explore some of the places at the ends of the short spur roads—Royal Palm, Pa-hay-okee, Mahogany Hammock, and others. Each is a chapter in the Everglades story, briefly outlined for you in the following paragraphs.

Royal Palm Station

Just 2 miles from the main visitor center, a roadside sign will direct you to Royal Palm Hammock, sometimes called Paradise Key. This area is famed for its Florida royal-palms and rich variety of tropical plants. Here, too, along the Anhinga Trail is one of the finest and most dependable wildlife shows in the park. Like human visitors to Everglades National Park, the wild creatures congregate in greatest numbers in winter. Taylor Slough, a permanent watercourse, provides a dry-season refuge for fish and aquatic animals and for the alligators, birds, and mammals that feed on them. Here, to the watchful, nature presents a dramatic story. A tiny ripple, a sudden splash, a frightened squawk—all mark the stark realism of life in the slough.

There are two nature trails in the Royal Palm area.

On the *Gumbo-Limbo Trail* you will enjoy your first close contact with the tropical flavor of the park's plantlife.

Walking along the $\frac{1}{3}$ -mile loop trail; you will sense the atmosphere of a tropical hammock, where airplants, ferns, orchids, and a great variety of tropical hardwoods grow. Many are identified by trailside labels.

The *Anhinga Trail* features the wildlife of the slough. Among the many inhabitants you may see, especially during the winter, are alligators, fish, water snakes, and birds, including the purple gallinule, American coot, and numerous wading birds.

Ask about the special programs presented daily by park naturalists.

Note.—After leaving Royal Palm, you will find the turnoff to the Long Pine Key campground and picnic area 2 miles toward Flamingo.

The Pineland Trail

Back on the main park road, and $4\frac{1}{2}$ miles from the Royal Palm turnoff, is the Pineland Trail. Here within the park a small piece of the pine forest is assured protection for all time. The slender Caribbean pines are here spread thinly over the rough limestone, and the forest is open in comparison with the coniferous stands of the north. In very few places is the forest canopy dense enough to provide any shade.

Understory growth in the pineland includes some interesting plants. Coontie, the Seminole staff of life, grows here, as do saw-palmetto, shortleaf fig, and many others. Labels along the trail help you to identify many plants.

Rock Reef Pass

When you leave the Pineland Trail and travel again along the park road, look for the sign, on your right about 3 miles from the Pineland Trail parking area, which reads "Rock Reef Pass—elevation 3.1 feet." Watch carefully, or you may miss the "towering" rock formations which can be seen on both sides of the road. Although its height seems insignificant, this eroded limestone ridge, an outcropping of Miami oolite, represents a significant elevation on the flat tip of the Florida peninsula.

Pa-hay-okee

As you pass the rock reef, notice the change in landscape. You are traveling across the "River of Grass." The small trees are the baldcypress. Although they look dead in the winter, they are not—this conifer sheds its needles. To appreciate fully the far-sweeping region of the sawgrass, you should leave your car in the parking area at Pahay-okee and walk over the elevated trail to the high platform. When you look out from the platform across the Shark River Basin, main watercourse of the Everglades, you will be viewing a region completely wild and untracked. Occasionally scores of birds and small alligators gather here. If you happen along late in the day and the weather is right, this is an exceptionally good spot for a striking sunset photograph.

Seven miles farther toward Flamingo, another turnoff leads to an outstanding tree island—Mahogany Hammock. Here are the largest mahogany trees in the continental United States. The hammock, seen from the parking lot, frames a picture of a clump of paurotis palms. Inside and shaded by the canopy of large trees are many kinds of airplants—epiphytes—including orchids, bromeliads, and ferns. Even the strangler fig starts its amazing life as one of these epiphytes. This forest is a favorite habitat of the barred owl. Listen carefully for its weird hooting and for other sounds of wildlife.

Mahogany Hammock was one of the jewels of Everglades National Park, but it sustained a terrible beating from the

Airplants above the elevated trail at Mahogany Hammock.



winds of Hurricane Donna in September 1960. Very gratifying, however, is the rapid recovery being made by the vegetation in the hammock. From the elevated boardwalk you can see evidence of the extensive damage—especially the marked thinning of the normally dense canopy; but the worst scars have been covered by new growth, and the area is already regaining some of its former beauty.

Paurotis Pond

Five miles from Mahogany Hammock is a small lakeside picnic area, ideal for a lunch stop. The quiet lake is surrounded by small mangroves. In the center of the lake is a little tree island where slender paurotis palms project above the other trees.

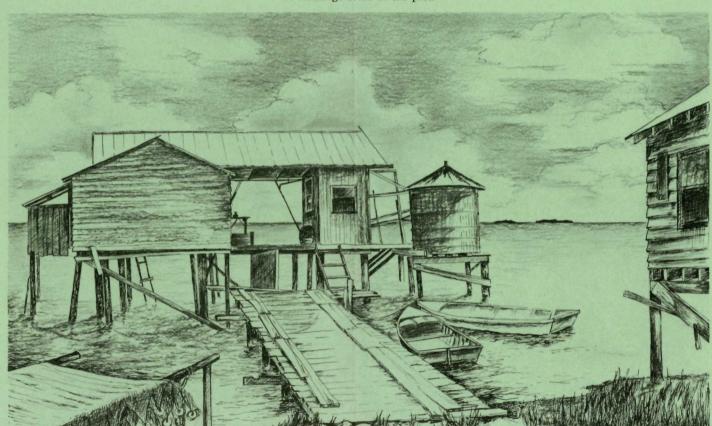
At Paurotis Pond you are just inside the fringe of one of the most striking landscapes. This is the beginning of the mangroves, or the "zone of transition" between fresh and salt water, sometimes called "the mangrove line." You have left the sawgrass everglades and entered the mangrove swamp, which covers thousands of acres in the coastal areas.

West Lake

It's just a 6-mile drive from Paurotis Pond to West Lake, where you may walk the Mangrove Trail. An elevated boardwalk takes you into the heart of a broken forest. Nowhere in the park is the evidence of the great force of Hurricane Donna more convincingly displayed than in the mangrove forests. The young mangrove jungle penetrated by the Mangrove Trail once formed a canopy over the trail and harbored a host of orchids. Now it is a shambles. Only time can tell how much it will recover.

In the United States, the mangrove forest grows only on the central and southern coasts of Florida, including the Keys. In Everglades National Park, a wide belt of mangrove swamp borders the shoreline of Florida Bay and the Gulf of Mexico and extends inland to meet the sawgrass of the Everglades. Around the mouth of Shark River the mangroves form dense forests of tall trees. Farther inland they more often grow as smaller bushes perched on arching aerial roots. A boat trip along some of the quiet waterways that wind for hundreds of miles through the mangroves brings home clearly the refreshing solitude and wilderness character of the park.

A Flamingo scene of the past.



Continuing toward Flamingo and Florida Bay you will penetrate miles of low, tangled jungle of mangroves and other salt-tolerant trees of the coastal swamps. Large areas of vegetation around Flamingo and along the gulf coast also were devastated by Hurricane Donna. At some places almost all the trees were killed. For years to come the scars will offer mute evidence of the fury of this tropical hurricane. Such natural disasters have come many times before. The mangrove forests will recover gradually, and meanwhile the traces of the storm will add another element to the fascination of the wilderness at Florida's southern tip.

West Lake also is the departure point for regular boat trips to Cuthbert Lake Rookery, perhaps the most rewarding short boat trip in the park. During the nesting season (mid-February to June) small tour boats make their way across three lakes and through two tree-lined creeks to view this celebrated rookery, where many hundreds of water birds gather annually to nest. The bizarre wood ibis is the most common tenant, but the tiny rookery island also provides nesting accommodations for many egrets and other herons, cormorants, and anhingas. In April, white ibises sometimes move in just before the "lease" of the wood ibises

expires. As the tour boat slowly and carefully circles the island, these birds can be observed going about the business of raising their families.

Hurricane Donna did little damage to the low mangroves of Cuthbert Rookery, and the birds proceed with housekeeping as usual. The effects of the storm will long be evident, however, along the route to Cuthbert Lake. Creeks that formerly were inviting green tunnels under the arched mangroves now are open aisles through storm-killed forest

FLAMINGO

If you plan to stay at Flamingo Lodge, very likely you will want to go there first to register and relax awhile before exploring the area which, not many years ago, was a quaint fishing village. Only a few decades past, old frame dwellings, small boats, fish nets, and patched-plank piers etched the picture along this Florida Bay shoreline. In recent years the scene at Flamingo has changed; new buildings and other developments have reshaped the landscape near old Cape Sable. Now you will find a visitor center with a modern museum, a restaurant, a motel, a large boat marina, campgrounds, and a picnic area.

The visitor center at Flamingo houses exhibits that describe Everglades' natural and human history.



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Museum exhibits at Flamingo Visitor Center summarize the part of the park story that you saw at the stops and on the trails along the main park road. The exhibits depict highlights of the park's natural history. But by no means does the story end here at Flamingo. This relatively small area in the middle of the Everglades wilderness was developed to make your stay more enjoyable and to help you appreciate more fully the undisturbed features of all of Everglades National Park.

This is your base of operations for exploratory trips into the vast wilderness of Whitewater Bay and the hundreds of miles of winding mangrove rivers and lakes, the channels and keys of Florida Bay, the gulf area, and the mangrove coast and its tropical beaches. Flamingo is an excellent base for the sports fisherman, for the wildlife enthusiast, or for the photographer—hobbyist or professional—who seeks to record the handsome birds and other animals in pictures.

Flamingo is also designed for those who do not wish to join in all the activities: those who prefer to relax and enjoy the inspiration which comes from just being here on the shore of Florida Bay, on this tropical toe of Florida's mainland.

Accommodations

A park concessioner, the Everglades Park Co., 3660 Coral Way, Miami, Fla., whose standards and prices are approved by the National Park Service, operates the marina service store, the restaurant and snackbar, and the 60-room, modern motor lodge. Since facilities are limited, you should make your reservations well in advance. Summer rates are in effect from May 1 to December 15.

The Marina

Some visitors come to Flamingo by boat; others bring their boats on trailers. Both groups find marine facilities available. Boats up to 100 feet long can be accommodated. Parking for boat trailers is ample, and a free launching ramp is nearby. Slip fees for boat storage are reasonable and are based on the length of the boats. Small powered skiffs may be rented at the service store. A park ranger or one of the concessioner employees can give you full information about the many other services offered at the marina.

All visitors who explore the park by boat must know and practice rules of water safety and must have a keen awareness of potential dangers. Every boat should be equipped with a U.S. Coast Guard approved lifejacket for each passenger. Remember: You are safest with an experienced guide, and navigational charts of the area are indispensable.

Charts may be purchased from authorized dealers in Homestead, Miami, and Everglades, and from the marina store at Flamingo. Please register with the park ranger on duty when you leave, and check with him again when you return.

Other Activities At Flamingo

There's always something to do at Flamingo. Park rangers and naturalists give talks daily during the winter season and conduct frequent autocades; sightseeing boats move in and out of the marina landings from 8:30 a.m. until 5 p.m. Skilled skippers who know the intricate waterways of the Everglades can usually find a berth for you on board their charter fishing boats. These are checked for safety and are well equipped with the kind of bait, tackle, and supplies needed to catch the game fish.

On most Saturdays during the winter season a park ranger-organized boat-a-cade leaves Flamingo for a wilderness trip into Whitewater Bay and through some of the remote mangrove rivers and waterways. In good weather, this maritime caravan gets underway promptly at 9:30 a.m., after a 9 o'clock briefing of all boat captains. For safety's sake, all captains must attend the briefing or be excluded from the trip. Boats must be supplied with provisions, gassed for a 65-mile trip, assembled in the designated boat basin, and ready to go—before the briefing.

CAMPING

Camping space is available at Long Pine Key or Flamingo campground on a first-come, first-served basis. Stay is limited to 14 days per year. Housetrailers are permitted in the campgrounds; however, there are no water, electrical, or sewage connections for trailer use. The Long Pine Key Picnic Area and Campground is located 6 miles from the park entrance, and you will have to bring all your supplies except water. Supplies can be purchased in Homestead and Florida City. The Flamingo Campground, located in the Flamingo developed area, offers picnic and campground facilities with drinking fountains, tables, charcoal burners, and restrooms. Limited staple groceries are available at the Flamingo Marina, 1 mile from the campground.

A post office is located at Flamingo, and visitors' mail may be received there by having it addressed to Flamingo, Fla. Visitors using Long Pine Key Campground are requested to have their personal mail addressed to General Delivery, at either Homestead or Florida City, Fla.

You may also camp in the back country at designated locations, but you must first obtain a campfire permit at park headquarters or at a ranger station.

KEY LARGO, TAMIAMI TRAIL, AND THE WESTERN WATER GATEWAY

Three other important centers of interest in Everglades National Park, at some distance from Flamingo and the main visitor center, are the Key Largo Ranger Station, the Tamiami Trail Ranger Station on the northern boundary of the park, and the Gulf Coast Ranger Station in the town of Everglades. The last mentioned has come to be known as the park's Western Water Gateway. Government facilities for visitor services at these three areas are not yet completed, but motel or hotel accommodations are available on Key Largo and in the town of Everglades. Camping facilities are available at Collier-Seminole State Park, 19 miles north of the town of Everglades on the Tamiami Trail (U.S. 41).

Two boat trips operate from the vicinity of Everglades. A park concessioner offers the Mangrove Wilderness Trip, which takes you up Halfway Creek into the mangrove wilderness and down Turner River into Chokoloskee Bay. On the trip you will see the Turner River shell mounds built by the Calusa Indians perhaps 2,000 years ago. The other trip is operated by the concessioner through the Ten Thousand Islands. On this trip you will learn much about the interesting Indian history as well as the present-day fishing story of Chokoloskee Island. Directional signs will show you the way to the point of departure for the trips, or you may ask a park ranger how to get there.

Under MISSION 66, National Park Service plans include additional interpretive facilities for the Western Water Gateway and for the Tamiami Trail and Key Largo stations.

THE HISTORY OF THE LAND

Above all, Everglades is a land of unusual plant communities and wildlife. Its remarkable features of tropical and temperate marine life, plants, and spectacular bird life

Chow time for Girl Scout campers on Long Pine Key.





Ferrying nest materials, the wood ibis drops in for a treetop landing.

are influenced by climate, geography, and to an extent by the geologic history of the area.

But south Florida hides her geologic past. Buried under the sawgrass and mangroves lies a long and dramatic story. Revealed, this is the story of a foundation of igneous and metamorphic rock overlaid by several thousand feet of sedimentary rock. Most of the upper layers are limestone. The surface rock, exposed in the pineland and hammock areas, is known as Miami oolite.

Miami oolite was formed and accumulated as lime particles in a very warm, shallow sea during the last interglacial period, about 50,000 years ago. Ocean currents that swept around the southern tip of Florida at this time piled these sediments into an elongated flat bank, which today is represented by Long Pine Key in the park. As the climate again gradually grew cooler, and as glacial ice accumulated

on northern parts of the continent, the seas receded below the present-day water level. The natural cementation of the loose oolitic particles into limestone occurred during this period.

Today, after a long time of weathering and erosion by rainwater and soil acids, the surface limestone is rough, pinnacled, and riddled with solution holes. Highly porous, it provides underground storage of water for plants and animals during the dry season.

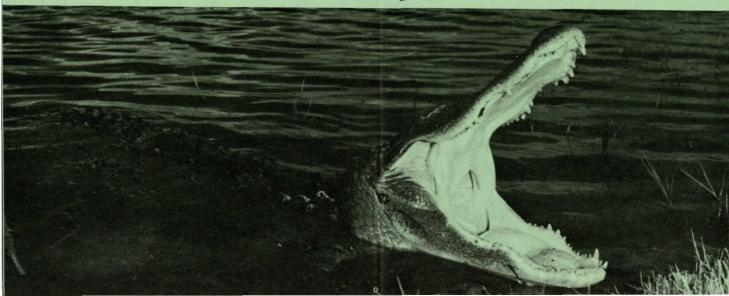
Why is the land so flat? The region has been geologically stable; that is, movements within the earth's crust have not been pronounced here through the geologic ages. Also, the region was covered by a shallow sea during much of its later geologic history. The slight relief is largely the result of deposition and erosion. Though the relief features are small, they are extremely significant, for they play a major role in determining the nature of the plant communities (and related animal communities) that make up the landscape.

LAND AND WATER CREATURES

The park's land mammals include the black bear, panther (properly called mountain lion in other parts of its range), white-tailed deer, otter, raccoon, and opossum. Marine forms are the manatee, or sea cow, and porpoise. There are many varieties of fishes and countless crustaceans and shellfish.

Everglades National Park, however, is probably more widely known for its reptiles. These include the alligators, found abundantly in fresh waters, and the rarer crocodiles of the salt-water areas. Other important reptiles are

American alligator.



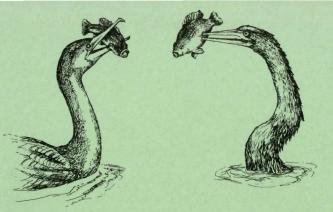
the snakes and turtles. Although not as common as generally believed, many beautiful and rare snake species are present. The two largest and perhaps most exciting in North America are here—the deadly diamondback rattlesnake and the colorful, but docile and harmless, indigo snake, whose glossy black skin feels like satin. Other poisonous snakes found in the Everglades are the pigmy rattlesnake, cottonmouth (or "water moccasin"), and coral snake.

A thrilling, but rare, experience at Everglades is to watch the giant loggerhead turtles on a moonlight night when they crawl onto the beaches at Cape Sable to lay their eggs. These creatures may grow 6 feet long, weigh nearly half a ton, and have a head the size of a football. The female digs a shallow hole in the sand, deposits her eggs, and lumbers back into the sea.

A great diversity of water habitats occurs within the park, producing an uncounted variety of aquatic life. Salt waters range from the clear depths of the gulf on the west to the often muddy, super-saline shallows of most of Florida Bay. Clear fresh waters of the 'glades and the brown-stained waters of the mangrove rivers teem with aquatic life. The aquatic forms that live in the wide range of water abodes include game fishes, small tropical fishes, and a great many kinds of marine and fresh-water invertebrates.

Raccoon.





The cormorant with a fish in his beak—the anhinga with his beak in a fish.

EVERGLADES BIRDS—A PRIME ATTRACTION

South Florida is well known for its rich birdlife. Few places in the United States can offer a comparable variety of beautiful, rare, and unusual birds. The large concentrations of wading birds claim the greatest share of attention. These waders find an almost unlimited supply of fish and other aquatic animals in the shallows and mudflats. Without the abundant source of food these dense bird populations would not be possible.

Fishing habits of the birds are varied. If you are a photographer, have your camera ready. You may get the picture of your lifetime. The wildlife drama goes on constantly, and by watching carefully and quietly you should see a part of it.

Among the park's wading birds are the egrets, the Louisiana and little blue herons, and the white ibises. The so-called wood ibis is actually a stork, the lone representative of its family in the United States. In addition, there are limpkins, roseate spoonbills, and other uncommon birds to add to your life list. In the coastal areas are many shore birds, such as sandpipers, stilts, willets, and plovers.

Equal in interest to all of the others are some of the swimming birds. The anhinga and cormorant, both frequently seen in the Royal Palm area, are expert "fishermen." They feed on fish, but each catches them in a different manner. The cormorant dives down to pursue and capture the fish in his strongly hooked beak. The anhinga submerges, swimming underwater to stalk his prey, and with a quick thrust impales the fish on his straight, sharp-pointed bill. He then must rise to the surface, shake the fish off his bill and into the air, and catch it head first in order to swallow it. In this fishing process the anhinga, lacking the large oil glands common to most waterfowl, gets soaking wet. He must then climb out of the water and hang his wings out to dry. Watch carefully and you may see an anhinga with outstretched wings drying in the Florida sunshine.

You will never tire of watching the big brown pelican perform his dive by plunging into the water while flying as high as 30 to 60 feet. Though awkward in appearance, this bird rates well in flying aptitude. Going into the dive, he sometimes appears to "peel off" in a wing-over-wing maneuver just for the fun of it. Actually, the pelican makes this turn to get his back to the wind. He breaks the surface with a mighty splash at amazingly high speeds, and he always emerges headed into the wind with his catch. After all the effort, he may lose the fish to an alert gull. Laughing gulls (their name, not their mood) have been observed to swoop down and snatch the catch from the pelican's pouch, sometimes even alighting on the big bird's head to assure the steal.

A western cousin of the brown pelican is the white pelican, which is one of the largest water birds in North America. In winter, the white pelican is reported to migrate to the Everglades from as far away as the Yellowstone area. Instead of tracking his prey in a solo flight and diving from heights, the white pelican is known to join with a number of others to form a cordon of pelicans on the water's surface. Together they herd large numbers of fish shoreward, flapping their wings and splashing the water to keep their prey encircled until they close in for the catch.

The reddish egret does a weird dance. Instead of stalking his fish, as most other heron relatives do, the reddish egret lurches, stumbles, and dashes about in a comical manner in an attempt to catch his prey.

MAN'S INFLUENCE IN THE EVERGLADES

The Calusa and Tequesta Indians were the first people known to inhabit this region of southern Florida. Archeologists say that they were here before the Christian era began. These people lived mainly by hunting and fishing. Shellfish was a major food source, as evidenced by the huge shell mounds along the coasts. Good examples of these mounds may be seen at Chokoloskee Island and along the Turner River.

These mound builders had their first contact with the white man when ships of Spanish explorers touched the Florida coasts. The intrusion was not welcomed, and at first the Calusas successfully repelled the Spaniards in their attempts to penetrate the peninsula. But by the end of the 18th century most of the Calusas were gone. No one knows why the population dwindled or what happened to the last of them. Perhaps their numbers were reduced by war among themselves and by white man's diseases.

It is believed that most of the few Calusas remaining as late as the 19th century eventually were absorbed by the



The anhinga hangs out his wings to dry.

Seminoles, who retreated into south Florida during the 18th and first half of the 19th centuries, as a result of various campaigns by settlers, slave-raiders, and the United States Government—chiefly the Seminole War of 1835–42.

The newcomers, although they often occupied sites left by the Calusas, adapted their own culture to this radically different environment. In addition to hunting and fishing, the Seminoles planted small gardens and grew corn, sugarcane, melons, beans, bananas, citrus, and other foods. They observed certain rituals, such as the green corn dance. They traded 'gator hides, otter skins, and egret plumes with the white settlers. Increasing white settlement slowly broke down tribal customs, but even today some of the Seminoles retain traces of their earlier way of life.

White settlement developed slowly at first, and, with the exception of Fort Jefferson in the Dry Tortugas, south Florida remained outside the main stream of American history. But the area's economy and growth abruptly changed with the coming of the railroad in 1896, when the city of Miami sprang into existence.

Around the turn of the century widespread plume hunting threatened extinction of some of the most beautiful species of Florida birds. The tragic episode reached its climax in 1905 with the murder of Audubon Warden Guy Bradley. This gave impetus to the bird conservation movement in the United States.

PROTECTION OF THE PARK

The park is a sanctuary—all plants and animals are protected. You can help protect the wildlife by leaving it alone. If you set a good example, others will follow. Leave picnic areas, campsites, roadsides, and trails as clean as you find them.

Uniformed park rangers are ready to help you at all times. You may help them by observing these few rules.

Hunting or the use of firearms is prohibited. Years of protection have made many species lose their fear of man; thus you can view them at close range. However, they are not tame! Do not disturb snakes, alligators, birds, or any form of wildlife. If you see anyone throwing objects at alligators or other animals, please report the violation to a park ranger.

Airplants, trees, shrubs, and other plants should not be removed, marred, or disturbed in any way.

Fishing is permitted in most areas of the park in accordance with State laws. Fresh-water fishing with rod and reel requires a State fishing license; none is required for fishing in salt water. Ask a park ranger about the few areas that are closed to fishing.

Fire sweeping across the 'glades can be a terrifying and destructive force. Smoking is not permitted on nature trails, and campfires may be built only in designated areas.

Maximum speed on the park road is 45 miles per hour. Reduced speed limits are posted. The road is designed for leisurely enjoyment of the scenery. Drive slowly and see it.

Pets must be on a leash or under other restrictive control.

Boating offers one of the finest ways of seeing the back country, and a trip into the watery wilderness will enhance your appreciation of the area. Park rangers will be glad to assist you in planning a trip. Before starting out in your private boat, file a "float plan" of your proposed trip—then you can be assured that a park ranger will be looking for you if you get into difficulty. U.S. Coast and Geodetic Survey charts of park waters are available at nominal cost at most bait and tackle shops in the vicinity of the park as well as at the Flamingo marina.

Privately operated airboats and 'glades buggies are not permitted in the park.

You can help protect the park by reporting fires, accidents, violations, or any unusual happenings to park rangers. They are here to help you enjoy the area. Do not hesitate to ask their assistance.

SUGGESTED READING

You may purchase books that will increase your knowledge of the Everglades while you are here, or you may order them by mail from the Everglades Natural History Association, Box 279, Homestead, Fla. You may write to the association (a nonprofit organization) for a complete list of publications available.

Here are some of the titles:

Everglades, River of Grass, by Marjory Stoneman Douglas. Everglades—The Park Story, by William B. Robertson, Jr. They All Called It Tropical, by Charles M. Brookfield.

ADMINISTRATION

Everglades National Park is administered by the National Park Service, U.S. Department of the Interior. A superintendent, with offices adjacent to the main visitor center, is in immediate charge. For further information, call in person, telephone CIrcle 7–6211, or write to the Superintendent, Box 279, Homestead, Fla.

MISSION 66

Aware of its responsibilities to present and future generations, the National Park Service, in 1956, started the Mission 66 program to conserve and protect—to an even greater extent—National Park areas in their natural state and to improve the quality of their usefulness.

In Everglades National Park you will find recent accomplishments of this program, such as the visitor center and park headquarters building near the park's eastern entrance; the main park road to Flamingo; along this road, the markers and signs, exhibits, and picnic grounds; and, at Flamingo, the visitor center, picnic ground, boat basins and launching ramp, and campground. The concessioner-operated motel, restaurant, and marina store were developed by private capital. All these have been put into operation since Mission 66 was initiated.

By 1966, when the National Park Service will observe its 50th anniversary, this park expects to have completed facilities adequate to meet visitor needs. New docks, for example, are planned for the Western Water Gateway to the park, near the town of Everglades, to provide facilities for boat trips to Cape Sable and Flamingo.

But Mission 66 is not confined to buildings alone. In fact, construction and development for visitor accommodation is limited to small acreages within park boundaries. In Everglades National Park these facilities occupy less than 5 of its 2,100 square miles. And yet, these facilities make it possible for thousands of visitors to enjoy the true wilderness values which lie in nature's silence beyond view and earshot of civilization.

Archeological research at the important but little-known great shell mounds along the west coast and at the Bear Lake mounds at Flamingo are examples of studies which may be completed under MISSION 66. Biological research is also part of this program, so that future generations may know more about the Everglades than we know today.



UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE



For sale by the Superintendent of Documents, U.S. Government Printing Office Washington 25, D.C.—Price 15 cents



Self-guiding Trails, Exhibits, and Facilities Along the Park Road

(Trails do not exceed 20 minutes walking time)

Miles from entrance

- 2 Royal Palm area: Royal Palm Visitor Center—exhibits, naturalist programs, restrooms; Anhinga Trail—a wildlife trail; Gumbo Limbo Trail—a jungle trail through tropical hardwood hammock.
- 4 Long Pine Key area: Campground—limited facilities; picnic area—limited facilities, picnic tables, toilets.
- 6.5 Pinelands Trail—a pinewoods community trail.
- 12.5 Pa-hay-okee—boardwalk and tower for panoramic view.
- 19.5 *Mahogany Hammock*—elevated boardwalk into mahogany forest.

Miles from entrance

- 24.5 Paurotis Pond—parking for view of rare palms.
- 26.5 Nine Mile Pond—limited picnicking facilities.
- 30.5 West Lake area: Mangrove Trail—an elevated boardwalk into dense, tropical, mangrove swamp; West Lake Pond—Cuthbert rookery boat trip (Feb.—May), waterfowl.
- 38 Flamingo area: Exhibits, naturalist programs, marina, sightseeing boats, restaurant, motel, service station, picnic area, campground.