

YOUR COMPLETE GUIDE TO THE PARKS

### SOUTH FLORIDA'S NATIONAL PARKS

ACTIVITIES • SIGHTSEEING • DINING • LODGING TRAILS • HISTORY • MAPS • MORE







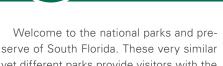






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**WELCOME** 

serve of South Florida. These very similar yet different parks provide visitors with the chance to explore rare and endangered ecosystems such as coral reefs, swamps and mangrove forests.

This American Park Network guide to South Florida's national parks will help to enhance your appreciation and enjoyment of these unique places. More than 2.1 million people visit the parks each year. With your interest and assistance, their magnificent resources will continue to be protected and preserved for future generations.

**Everglades National Park**, the largest remaining subtropical wilderness in the continental United States, is located less than an hour's drive from Miami. Nearby, **Biscayne National Park** protects the spectacular underwater life of Biscayne Bay and the coral reefs, as well as the

#### FAST FACTS

**Introduction**: Showcased by sparkling waters, marshy swamps and biodiversity, the national parks of South Florida are a paradise on the water. Biscayne, Dry Tortugas, Everglades and Big Cypress are all located on water. These settings give visitors an opportunity to experience underwater life in a way few other locations can.

**Wildlife**: Underwater wildlife is one of the reasons these parks are so important. Biscayne and the Dry Tortugas are both home to extensive coral reefs that are extremely fragile. Visitors can dive to shipwrecks that are in shallow water and relatively easy to reach.

[<u>@</u>]

Send us your stories and photos and you could be a part of our guide!

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PHOTO OP!

tropical hardwood hammocks of its keys. Dry Tortugas National Park, 68 miles west of Key West, includes seven islands amid 100 square miles of shoals, water and coral. The freshwater of **Big Cypress** National Preserve is vital to the health of South Florida, including Everglades and Ten Thousand Islands mangrove estuary. All are unparalleled wildlife sanctuaries, protecting an incredible diversity of mammals, birds, fish and flora.

The National Park Service is responsible for the management and protection of these resources, for the well-being of visitors and for overseeing all aspects of concession operations.

The guide has been made possible by the support of the sponsors whose messages appear inside. No matter what parks you decide to visit in South Florida, we hope this guide travels along with you!

Everglades and Big Cypress provide protected habitats for several endangered species like the Florida panther, manatee, Atlantic loggerhead turtle and American alligator. Biscayne and Dry Tortugas have thriving marine life.

**Popular Activities**: With miles of beaches, slowmoving rivers, sparkling lakes and lush swamps, boating is great in South Florida's national parks. Paddling, kayaking and canoeing are some of the best ways to explore the swampy areas and other waters that are otherwise inaccessible. **Boats can be rented from businesses outside the parks and Everglades Guest Services.** 

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\*Keep wildlife wild; Don't feed the animals.



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	Welcome	1
Q	What's New!	4
	Plan Your Visit	6
Ò	Important Numbers	9
!	Park Regulations & Safety	10
e e e e e e e e e e e e e e e e e e e	History & Culture	12
$\overset{\frown}{\simeq}$	everglades Visitor Services	15
$\oslash$	everglades Things To Do	17
<u>E</u>	EVERGLADES Walking & Hiking	19
$\lambda$	everglades Camping	21
$\overset{\frown}{\bowtie}$	biscanye Visitor Services	23
0	Centerfold Map	
	Centerfold Map BISCANYE Things To Do	25
Ø		25 28
⊘ ∡	BISCANYE Things To Do	
⊘ ∡ ☆	BISCANYE Things To Do BISCANYE Camping	28
	BISCANYE Things To Do BISCANYE Camping BIG CYPRESS Visitor Services	28 29
	BISCANYE Things To Do BISCANYE Camping BIG CYPRESS Visitor Services BIG CYPRESS Things To Do	28 29 32
	BISCANYE Things To Do BISCANYE Camping BIG CYPRESS Visitor Services BIG CYPRESS Things To Do Dry Tortugas	28 29 32 33
	BISCANYE Things To Do BISCANYE Camping BIG CYPRESS Visitor Services BIG CYPRESS Things To Do Dry Tortugas Nature & Wildlife	28 29 32 33 35
	BISCANYE Things To Do BISCANYE Camping BIG CYPRESS Visitor Services BIG CYPRESS Things To Do Dry Tortugas Nature & Wildlife Preservation	28 29 32 33 35 42

Cover: A Florida panther in Everglades National Park (iStock)



For answers to all your questions, go to **OhRanger.com** 

# WHAT'S NEW!

#### "When we try to pick out anything by itself, we find it hitched to everything else in the Universe." -John Muir

As a young man, John Muir, the naturalist known as, "Father of the National Parks," had an accident that left him temporarily blinded. It changed his life forever. When he regained his sight, he emerged into the light ever-determined to pursue his dreams of exploration. Fortunately for the world, Muir's trials led him to help move Congress to set aside Yosemite, one of his many contributions to our nation's preservation movement.

When faced with adversity, we have but two choices. We can either rise above our circumstance or succumb to our demons of doubt, fear, resentment and apathy. While Muir was lucky to have his sight return, his subsequent efforts drew strength from hope, compassion, kindness and love to rise up from personal adversity.

Lately, it feels like we're all dealing with too many hurdles. Every hour, "breaking" news spews forth accounts of tragedy and divisiveness. It was with this backdrop that I was preparing to teach a restorative yoga class, to create a safe environment for my students and provide an hour's worth of peace and quiet to carry out into the world. What theme would capture their imagination and neatly underscore our human need for connectedness?

When teaching, I try to use examples that marry ancient tradition with contemporary



Mark, Joel & Alex – connecting in parks!

science. I often find inspiration in parks. In its traditional form, yoga was about joining with the collective universe. So, too, is Muir's quote, best illustrated by an example from Yellowstone. When wolves were reintroduced there after a 70-year absence, the rampant elk population could no longer leisurely nibble on willows, graze in open meadows or congregate by the rivers. In a short period of time, the forests and meadows began to regenerate. Song birds appeared. Beavers flourished, building dams, which created habitats for otters, muskrats and ducks. Cooler waters, shaded by more trees, attracted different species of amphibians and fish. Tree roots stabilized the river banks, diminished erosion and even changed the geography of the park! Indeed, pick out anything by itself and we guickly find that everything is connected.

Now is the time to seek out connection whether in a park, a yoga studio or anywhere you find inspiration—to find strength to rise up and overcome the obstacles that face us all...

mark@americanparknetwork.com

#### GET CONNECTED AT YOUR FAVORITE PARKS!

Parks are about enjoying nature, but what if you want to share a great picture or are awaiting an important email? If you're looking to add connectivity to your park, or if you already have Wi-Fi and would like help adding content or generating sponsor revenues, please let us know at **wifi@americanparknetwork.com**.



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# **PLAN YOUR VISIT**

Visitors can enjoy most activities in South Florida's national parks and preserve year-round. Many people visit during the cooler, dry winter season, when temperatures range from the 40s at night to the 80s during the day. Summers can be warm and buggy on land, but it is the perfect time of year for visiting Biscayne's and Dry Tortugas' coral reefs.

During the summer season, from May through October, the weather is subtropical and humid, with temperatures in the 80s and 90s. Expect to find few other visitors and ample opportunities for solitude. Afternoon thunderstorms turn the sawgrass prairie at the Everglades a brilliant green. Abundant waters flow over and nourish the flat landscape, providing a lush habitat for diverse animal communities.

During the winter season, dry conditions and lower temperatures bring about significant changes in the landscape. Insects, such as mosquitoes and biting flies, become virtually non-existent in most areas. As water levels drop during the dry season, large numbers of animals congregate around remnant water holes in the Everglades, making wildlife viewing an easy



#### PACKING ESSENTIALS

#### Don't hit the trail without:

- Topographic Map and Compass + GPS
- Whistle
- Flashlight or Headlamp
- Sunglasses, Sunscreen and Hat
- High-energy Food and Plenty of Water
- Appropriate Clothing and Extra Layers
- Waterproof Matches
- Insect Repellent
- Pocket Knife
- First-Aid Kit
- Sturdy Footwear

endeavor. Birdwatching is exceptional, as many species winter in the relative warmth of the South Florida wilds.

On rare occasions, weather conditions may require temporary closures. Call each site or visit their websites for current conditions. For a 24-hour weather service recording out of Miami, call (305) 229-4550.

#### **GETTING TO THE PARKS**

Air service is available to Miami International Airport, 25 miles northeast of Homestead, where main entrances to both **Everglades** and **Biscayne** are located. **Big Cypress** is accessible via Miami International Airport and Fort Lauderdale Airport from Florida's east coast, and Fort Myers International Airport from the west coast. Dry Tortugas is located 68 miles off of Key West and is accessible by boat from Key West or by plane from Key West and Fort Myers.

**Bus service** is offered by Greyhound to Miami and Homestead. The Homestead National Parks Trolley provides free public transporFlavningo Adventures at Everglades National Park

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Southern Florida's waters are often best photographed at sunset, using long exposures.

tation every weekend from late December to late April to Everglades and Biscayne National Parks. Free transportation, parking and guided tours are provided. Trolley riders receive free admission to both national parks as well as the Homestead Bayfront Park beach, where the trolley also makes a stop.

**Car**: I-75, state road 29, and U.S. 41 all travel through Big Cypress, which has no available public transportation. Biscayne can be reached from the Florida turnpike south or from U.S. 1.

**Rental cars** are available in Homestead, at airports and in major towns near the parks.

**Train service** to Miami is offered by Amtrak.

Note: Some of the areas in the park (campgrounds, trails, etc.) may only be accessible by boat. If there is a specific location you would like to visit but are unsure if it is reachable by road, call the individual park. Many areas in the Everglades, Biscayne and Dry Tortugas require visitors to have small boats, such as canoes or kayaks.

#### **EVERY KID OUTDOORS**

To help engage and create our next generation of park visitors, supporters and advocates, the Every Kid in a Park initiative was launched in 2015—and the Every Kid Outdoors Act was signed into law in 2019. The immediate goal is to provide an opportunity for each and every fourth-grade student across the country to experience their federal public lands and waters in person.

All kids in the fourth grade have access to their own free Every Kid in a Park pass at **everykidinapark.gov**. This pass admits the pass owner and any accompanying passengers in a private non-commercial vehicle to the park. You can obtain the pass by visiting **everykidinapark.gov** and you must print it and present it at the park. The Every Kid in a Park pass is valid until August 31, 2019.

#### SPECIAL SERVICES 🔄

Most self-guiding trails are accessible. For trail descriptions, please see the "Hiking" chapter. Other accessible facilities include primitive campsites (ask at visitor centers for more information), Biscayne and Flamingo Marina, and all park visitor centers and restrooms. **Shark Valley Tram Tours** are wheelchair accessible (boarding assistance provided). The & symbol throughout this guide indicates wheelchair-accessible areas in the parks.

### **IMPORTANT NUMBERS**

EVERGLADES	
Park Headquarters/Information	(305) 242-7700 nps.gov/ever
Emergencies	911 or #NPS (844) 677-0911
Lost and Found	(305) 242-7700
Camping Information	(786) 335-3609
Campground Reservations	(855) 708-2207 flamingoeverglades.com/camping/
Everglades Guest Services – Flamingo	(305) 501-2852
Shark Valley Tram Tours	(305) 221-8455
BISCAYNE	
Park Headquarters/Information	(305) 230-PARK (7275) nps.gov/bisc
Emergencies	(844) 677-0911
Lost and Found	(305) 230-PARK (7275)
Camping Information	(305) 230-PARK (7275)
BIG CYPRESS	
Park Headquarters/ Information	(239) 695-2000 nps.gov/bicy
Emergencies	(844) 677-0911
Lost and Found	(239) 695-4111 or (239) 695-4758
Camping Information	(239) 695-4111 or (239) 695-4758
Campground Reservations	(877) 444-6777 or recreation.gov
Off-road Vehicle and Hunting Information	(239) 695-4111
DRY TORTUGAS	
Park Headquarters/Information	(305) 242-7700 nps.gov/drto
Emergencies	(844) 677-0911
Camping Information	(305) 242-7700
Yankee Freedom III (Ferry)	(800) 634-0939 or (305) 294-7009

# PARK REGULATIONS & SAFETY

Help protect these special places for other visitors and future generations by adhering to all NPS regulations and guidelines. Doing so will help keep the park clean and safe for everyone. At Dry Tortugas and the other sites, ask rangers about new or special regulations.

### REGULATIONS

#### **BOATS AND OFF-HIGHWAY VEHICLES**

Airboats, swamp buggies, personal watercraft/jet skis and all-terrain vehicles are not permitted in Everglades, Dry Tortugas and Biscayne. Big Cypress, however, does allow airboats and off-road all-terrain vehicles with a proper permit.

#### **BOATING SAFETY**

Boaters must observe no-wake zones and also reduce speeds in marked manatee caution areas and in narrow creeks where paddlers may be obscured by heavy vegetation. Waterskiing is prohibited in Everglades.

#### **FISHING**

A Florida saltwater or freshwater fishing license is required for most anglers. You must contact **(888) 347-4356** or visit **myfwc.com** for updated Florida State fishing regulations or to purchase a Florida State fishing license. **Fishing licenses are not sold in parks**.

Go online at **nps.gov/ever** for Everglades National Park Fishing Regulations and **visit nps.gov/drto** for Dry Tortugas National Park Fishing Regulations, which vary slightly from Florida State Regulations.

**Lobstering** is not permitted in Everglades, Dry Tortugas or within the Bis-

cayne Bay-Card Sound Lobster Sanctuary. Fishing is prohibited in Biscayne's harbors, no-wake zones and marked channels.

#### **BACKCOUNTRY CAMPING**

Backcountry permits are required for camping overnight in the backcountry and may be purchased for a small fee at Flamingo and Gulf Coast visitor centers. Backcountry camping is not permitted in Biscayne National Park. Most **backcountry camping** sites at the Everglades are chickees (elevated platforms with a roof and a chemical toilet; you must bring ALL of your gear including a tent) and are accessible only by boat.

#### **SMOKING**

Smoking is not permitted on trails in the Everglades or inside Fort Jefferson at Dry Tortugas.

#### **FIRES**

Ground fires are allowed only within Big Cypress and at the group campsite on Biscayne's Elliott Key. Ground fires are also permitted on certain backcountry campsites at Everglades. "Leave No Trace" ethics are strongly encouraged, and visitors should pack-in and pack-out all trash.

#### **WEAPONS**

Firearms regulations vary by location. Check with the NPS or the park you plan to visit before your trip for the most up-todate information.

#### PETS

Pets must be leashed in the parks and preserve. At Everglades, they are not

allowed on trails, in the backcountry or in amphitheaters where programs are held. At Biscayne, pets are allowed only in the developed areas of Convoy Point and Elliott Key. There are no kennels in the parks or preserve. State law prohibits leaving pets unattended in any vehicle other than an RV.

#### DRIVING

Speed limits are posted in the park and preserve. Drive safely and watch carefully for animals. Use the wide shoulders to stop and view the scenery.

#### VANDALISM

Vandalism and the removal or disturbance of any **plants**, **animals**, **artifacts** or any other **cultural** or **natural resource** is prohibited. Use of metal detectors is prohibited in the parks.

### SAFETY TIPS

#### HIKING

Be extremely careful when hiking; sharp rocks and jagged holes can make walking tricky and even dangerous. Always let someone know your itinerary before you leave and bring extra water.

Bring **insect repellent** to ward off biting insects, particularly in the warm, wet summer months. Mosquitoes are the biggest annoyance.

Please keep in mind your physical limitations when hiking in the Everglades. The subtropical environment can be very hot and humid, especially in the summer.

#### WATER SAFETY

**Swimming** in the Everglades is prohibited outside of designated areas. Alligators live in freshwater ponds and saltwater areas that are shallow with muddy bottoms. Stingrays are plentiful and underwater visibility is poor. Use a navigation chart or GPS when boating on park waters. Have all required safety gear accessible on your boat. If you are **snorkeling** or **scuba diving** outside of designated swim areas at Biscayne or Dry Tortugas, you must display a dive flag. Do not touch fragile coral. Many kinds of coral are razor sharp and may also cause painful skin irritations. Swimming is prohibited in Biscayne's harbors, no-wake zones and marked channels.

#### WEATHER

Watch for weather changes, especially if you are on the water. Severe thunderstorms with **lightning** and **high winds** can develop rapidly. The sun can be intense, so remember to apply **sunscreen** liberally and to wear sunglasses, long sleeves, long pants and a hat.

#### WILDLIFE

Disturbing or feeding wildlife is dangerous and is prohibited. Although **alligators** appear slow and clumsy, they can move with incredible speed. These predators will eat anything they can catch, so keep yourself, children and pets at a distance. **Raccoons** and other wildlife are unpredictable and can bite.

South Florida is home to four types of **poisonous snakes**. Watch out for eastern diamondbacks, pygmy rattlesnakes, eastern coral snakes and water moccasins. When in doubt, ask a ranger for descriptions.



# **HISTORY & CULTURE**

Through the years, colorful characters have populated, explored and preserved South Florida. Spanish explorer **Juan Ponce de León**, who came to Florida searching for the Fountain of Youth, eventually died from an American Indian's arrow. **Black Caesar**, the pirate, ambushed sailing ships passing his refuge at present-day Caesar Creek.

Nineteenth-century South Florida welcomed naturalist **John James Audubon**, and 20th-century Florida would not be the same without writer and conservationist **Marjory Stoneman Douglas**.

#### **PALEOINDIANS**

The history of South Florida begins with indigenous people who migrated here about 11,000 years ago.

Over thousands of years, the descendants of these "paleoindians" became known as the **Tequesta** on the southeastern coast and the **Calusa** on the southwestern coast at the time of Spanish contact.

These early people used no metal or stone. From shells, they created picks, drinking cups,



Israel Jones and his family farmed, fished and sponged in today's Biscayne National Park.

hammers, chisels, fishhooks, and other tools and household implements. They used sharks' teeth to make knives, chiseled out cypress logs for canoes, and made pottery from mud.

The huge shell mounds along southern Florida's coast and on nearby islands mark sites where these villagers settled. Archeologists have determined that some mounds were used as burial sites, ceremonial sites and habitation sites, but that they most probably began as **middens** (refuse piles) of discarded shells.

#### **THE EUROPEANS ARRIVE**

When the Spanish first arrived in the early 1500s, the Tequestas' territory extended north to present-day Pompano and south to the Florida Keys. In the 16th century, the Tequestas numbered about 800, while the population of the Calusas was about 2,000.

In 1513, Spanish explorer Ponce de León sailed from his governor's mansion in Puerto Rico to Florida, searching for gold and slaves. After giving Biscayne Bay its name, he stopped briefly at a place he called **Manataca**—present-day Cape Romano. The Calusas at Manataca had heard about Spanish cruelty from indigenous traders who traveled throughout the area in great seagoing canoes.

In 1565, Spanish Captain-General **Pedro Menéndez de Avilés** sailed to South Florida to make peace with the indigenous peoples and settle the lands for his king. His fleet was caught in a storm and the crew took refuge in a Tequesta village in Biscayne Bay.

Menéndez returned in 1567 and established a mission that was protected by 30 soldiers. The soldiers occasionally provoked acts of hostility, culminating in the killing of one of the uncles of the Tequesta chief. This enraged the Tequestas, who attacked and forced the missionaries to retreat.

The Spanish continued to establish missions and forts along the Florida coasts in an effort to strengthen their hold on the New World. During this time, however, the Tequestas and Calusas began to feel the decimating effects of slave raids and European diseases. By 1800, the native populations of South Florida were reduced to a handful of survivors.

#### **THE SEMINOLE WARS**

Spain surrendered Florida to British control at the end of the **Seven Years' War** in **1763** and the Spanish missionaries and soldiers departed. After 20 years as part of Britain, Florida returned to Spanish Control. The Spaniards did little with the territory, leaving South Florida to native bands of **Creek**, **Muskogee Creek** or **Maskoki** people who moved after the Creek War of 1813–1814 and were pushed south from the Carolinas, Georgia and Alabama by the ever-growing United States. They became known by non-natives as **"Seminoles."** 

By 1821, the population of Seminoles in Florida was about 5,000. They lived and hunted throughout the state and provided refuge for runaway slaves. Florida's officials sequestered the Seminoles on a reservation north of Lake Okeechobee, and the Seminoles retaliated by raiding white settlements.

In 1830, Congress decreed that all Indians east of the Mississippi be relocated "far beyond the possibility of any contact with white men." Many American Indians were forced to travel west on the **Trail of Tears** to present-day Oklahoma. A number of Seminoles



The completion of the Tamiami Trail in 1928 interfered with the way of life of the Seminole people, shown here in 1934.

refused to leave and declared war on the U.S. Army. The Seminole Wars of 1835–1842 and 1855–1859 inflicted heavy losses on both sides, finally ending with an 1859 truce. After the battles ended, the 150 Seminoles that remained hid deep in the cypress stands and sawgrass prairies. Today, some descendants of that small band, now recognized as the **Miccosukee Tribe of Indians of Florida**, still live within Everglades National Park.

The Miccosukee have preserved their culture by retaining their native language, living in strong matriarchal family units, practicing traditional medicine and utilizing ancestral and modern skills to create a viable economy.

#### "WRECK ASHORE!"

When the United States acquired the territory in 1819, Florida's coast was a wellknown haunt for pirates such as **Black Caesar**. By the 1820s, the U.S. Navy cleared out the pirates, making room for a new industry—salvaging ships.

Whenever a ship grounded, the cry "Wreck ashore!" halted all onshore activities as residents rushed to scavenge the unlucky vessel. Today, more than 40 **shipwrecks** are located within the boundaries of Biscayne. You can still view the remains of some of these wrecks on boat tours, or



President Lyndon Johnson signed the bill establishing Biscayne as a national monument.

by diving and snorkeling sites on the park's **Maritime Heritage Trail**.

Turn-of-the-century South Florida also became home to poachers and **plume hunters**. Plumes of great and snowy egrets were in demand as fashion accessories.

In 1905, the **National Audubon Society** hired **Guy Bradley** to protect heron and egret breeding colonies in the area. It was during this work that Bradley was tragically killed while investigating shots he heard near Oyster Keys rookery. The resulting publicity and outrage fueled the demand for protecting the wading birds' remaining colonies. In 1916, a small area of Paradise Key was granted protection by the creation of **Royal Palm State Park**.

#### **NATIONAL PARK STATUS**

Thanks to the Everglades' foremost supporter, **Ernest F. Coe**, Congress tried to pass a bill in 1934, dubbed by opponents as the "Alligator and Snake Swamp Bill." The legislation stalled during the Great Depression and World War II, but on December 6, 1947, President Harry S. Truman finally dedicated Everglades National Park.

In that same year, **Marjory Stoneman Douglas** first published *The Everglades: River of Grass.* She understood its importance as the major watershed for South Florida and as a unique ecosystem. The first line of Stoneman's book reads, "There are no other Everglades in the world."

In the 1960s, developers proposed a chain of resorts on the keys of Biscayne Bay. Conservationists reacted by campaigning and fighting to preserve the bay and its remaining untouched islands. In 1968, Congress designated Biscayne a national monument, citing its "rare combination of terrestrial, marine and amphibious life in a tropical setting of great natural beauty." In 1980, Congress expanded this area of reefs, keys, bay and mangroves and renamed it Biscayne National Park, becoming the park we know today.

Today, Everglades National Park is a Wetland of International Importance, as well as a World Heritage site and International Biosphere Reserve.

# K EVERGLADES VISITOR SERVICES

The park is open year-round, but peak visiting season is from mid-December through mid-April. For more information about visiting the park, please contact Park Headquarters at **(305) 242-7700.** 

#### **ENTRANCE FEES**

A seven-day visitor pass can be bought for \$30 per private vehicle—commercial vehicle fees are higher-\$25 per motorcycle and \$15 per person for pedestrians, motorcycles and bicycles. An annual pass is available for \$55. Fees are set to increase in 2020. (However, the fee to launch a motorized or nonmotorized boat in the park has been discontinued as of 2019; completion of the Boater Education Program is necessary). Prices are subject to change. All park passes are available at the park entrances. Visitors can also purchase annual and seven-day digital entrance passes online at yourpassnow.com. Simply present your device at the gate.

#### **ENTRANCES**

From the north, use the Shark Valley entrance, located on U.S. 41, 35 miles west of downtown Miami and 70 miles east of Naples.

From the west, use the Gulf Coast Visitor Center, located at Everglades City, 83 miles west of downtown Miami and about 37 miles southeast of Naples.

From the Florida Keys, the park is accessible only by boat or the main entrance west of Florida City.

#### **VISITOR CENTERS**

The **Ernest F. Coe Visitor Center**, located at the park's main entrance on State Road 9336, features orientation films, educational displays, activity schedules and boat and canoe rental information. Souvenirs and limited supplies can be purchased here.

Located a little more than a mile from the main entrance station, **Royal Palm Information Station and Bookstore** offers

#### FEDERAL RECREATIONAL LANDS PASSES

A federal recreation pass is helpful if you plan to visit many national parks, forests or other federal lands. For information, call **(888) 275-8747** or visit **store.usgs.gov/pass**.

Туре	Cost	Availability	Details
Annual	\$80	General Public	This one-year pass is available on site, by phone or
Pass	\$20	Adults age 62+	online (see above).
Senior	\$80	U.S. residents age 62+	This lifetime pass is available on site, online or via
Pass	ФОО	0.3. Tesidents age 02+	mail order. ID required.
Military	Free	U.S. active military and	This one-year pass is available on site.
Pass	riee	their dependents	ID (CAC Card or DoD Form 1173) required.
Access	Free	U.S. residents with per-	This lifetime pass is available on site or via mail or-
Pass	riee	manent disabilities	der. ID and documentation required.
Volunteer	Free	250 cumulative volunteer	Inquire locally to obtain information about this one-
Pass	riee	service hours with NPS	year pass.

books, film, postcards, insect repellents, vending machines and other items. Royal Palm is the departure point for the Anhinga and Gumbo Limbo trails.

Located 38 miles from the main entrance at the park's southern end, is the **Flamingo Visitor Center**. It offers educational displays, park information and backcountry permits. The Flamingo Marina provides fuel, tours, canoe/kayak/boat and bike rentals and a food truck is available 11 a.m. to 6 p.m.

The original **Gulf Coast Visitor Center**, located at the west entrance, was destroyed by Hurricane Irma in September of 2017. A temporary Visitor Contact Station is now open with maps, informational displays, backcountry permits, and restrooms. **Shark Valley Visitor Center**, on the Tamiami Trail (U.S. 41), offers sightseeing trams, bike rentals, access to trails, and a bookshop.

#### **BOATER EDUCATION PROGRAM**

As of summer 2019, nearly everyone operating a motorboat in Everglades National Park must take the **Boater Education Course** and obtain a permit (free of charge). It is a roughly one-hour online course to provide all boaters with information, not only on boat safety in the park, but also on the key elements of the park's marine areas. Access the course at **nps.gov/ever/planyourvisit/ boater-education-faq.htm** and print out the permit—or save it to your phone or other device—and bring it with you. The course is also available at the Flamingo and Gulf Coast Visitor Centers in English and Spanish.

#### **EMERGENCIES**

In case of an emergency, please call **911**, **(305) 242-7740** or **(844) 677-0911** from a cell phone. First aid is available from park rangers and at ranger stations. Check lo-

cally for the location of the closest hospital or urgent care facility.

#### **GAS AND SERVICE STATIONS**

Gas and propane may be obtained in nearby towns or at Flamingo Marina.

#### LODGING

Lodging is not currently available in Everglades National Park. Flamingo Lodge is permanently closed due to the damage sustained from Hurricanes Wilma and Katrina; however, 24 cottages and 40 eco-tents are set to open in Flamingo December 2019 (as is a restaurant). Lodging is available in the nearby communities of Homestead, Florida City and the greater Miami area. Contact the Tropical Everglades Visitor Association at **(800) 388-9669** or the Homestead and Florida City Chamber of Commerce at **(305) 247-2332** for more information.

#### LOST AND FOUND

To recover lost items or report found ones, check the nearest visitor center or ranger station or call **(305) 242-7700.** 

#### **MARINAS AND BOAT RAMPS**

Boat-launching **ramps** are available in Everglades City near the Gulf Coast Visitor Center, in Flamingo, and at West Lake along the Main Park Road. Check visitor centers for horsepower restrictions. Overnight docking for boats is available at the Flamingo Marina for a fee of \$2/foot.

#### **SUPPLIES AND SOUVENIRS**

Books, postcards, film and other digital media are available at the Ernest F. Coe Visitor Center and the Shark Valley Visitor Center. The Flamingo Marina store carries groceries, camping supplies, bait, tackle and fuel.



The Everglades offers endless options of things to see and do in its more than 1.5 million acres.

**Bicycling** is a popular activity in Everglades National Park. Bicycles can be rented year-round at the Shark Valley Visitor Center and the Flamingo Marina.

**Fishing** in the inland and coastal waters of the Everglades is excellent yearround. Snapper, redfish, sea trout, bass, bluegill and tarpon are plentiful. **Saltwater fishing** areas include Florida Bay and Ten Thousand Islands in the park's coastal zone. Freshwater and saltwater fishing require separate Florida fishing licenses.

Wildlife-watching in the Everglades

Stock

is very rewarding. Hundreds of egrets, herons, wood storks and other water birds feed here. Some species that are uncommon or endangered throughout other parts of the world are relatively common in the Everglades. The best places to see birds are at Shark Valley and Royal Palm, particularly in the dry winter months. The best times to see birds and animals are the early morning and late afternoon.

The **Anhinga Trail** at Royal Palm is one of the most dependable areas for wildlife viewing. The region with cypress trees on the main park road near Rock Reef Pass, 10 miles west of the Ernest F. Coe Visitor Center, is also particularly



Check out an airboat ride to see the Everglades' backwaters and byways — far faster than a kayak!

#### good for wildlife viewing.

Guided hiking, canoeing and wilderness walks are offered by park rangers. Numerous tours are available on a year-round basis at Everglades, but schedules are limited in the summer months. Call ahead or visit **nps.gov/ever** for current schedules.

**Tram tours** are a great way to see the Everglades. A two-hour guided tram tour departs from the Shark Valley Visitor Center.

The tram tour journeys through the sawgrass prairie that is dotted with small tree islands. Guides identify trees, plants, birds, alligators and other points of interest. The tour stops at an observation tower to provide a panoramic view of the Everglades. For reservations call Shark Valley Tram Tours at **(305) 221-8455**.

**Boat Tours** are available from the Flamingo District of Everglades National Park. Boat tour tickets may be purchased in the Marina Store. Visit **flamingoeverglades**. **com** or call **(352) 701-6581** for more information.

Everglades Guest Services operates a seasonal backcountry boat tour from Flamingo into Whitewater Bay. This area is one of the best places in South Florida to view an American Crocodile in the wild. For more information, call **(305) 501-2852**.

Guided Eco Tours are also available in several areas. For a full list of the outfitters, visit **nps.gov/ever/planyourvisit/ guidedtours.htm.** 

As of May 2019, boat tours along the Gulf Coast will cease being offered through Everglades National Park Boat Tours. The National Park Service is working to resume interpretive boat tours in this area later in the year. Check the park website or Facebook page for more specific, up-to-date information.

**Paddling** is one of the best ways to explore

the park, as more than one-third of it is made up of marine areas and estuaries under shallow water. Birds, sea turtles, a variety of fish and endangered manatees live in the park's water ways where food is plentiful. Skiffs, kayaks, canoes and houseboats are available for rent at Flamingo. Call for more information Everglades Guest Services at **(305) 501-2852**.

The following are one-way **water trails** and their estimated times and distances. All of these trails begin near Flamingo. Check with the Flamingo Visitor Center for mosquito and trail conditions.

Noble Hammock Trail: Two-mile loop, one to two hours.

**Hell's Bay Trail**: Three miles to Lard Can, two hours; 3.5 miles to Pearl Bay, three to four hours; 5.5 miles to Hell's Bay Chickee, five to six hours.

West Lake Trail: 7.7 miles, five to six hours.

**Nine Mile Pond Trail**: 5.2 miles, three to four hours.

The Wilderness Waterway is a 99mile inland water route between Flamingo and Everglades City (six to eight hours with an outboard motor, eight to 10 days by canoe). Numbered markers guide you through the area. Boats more than 18 feet in length should not attempt the trip because of narrow channels. Campsites are available along the route. A backcountry camping permit is required if you will be staying overnight. Permits may be obtained in person at the Flamingo or Everglades City visitor centers. Rental canoes are available in Flamingo Marina.



# EVERGLADES WALKING & HIKING

Everglades National Park is the thirdlargest park in the contiguous United States, after Death Valley and Yellowstone. Unlike those parks, Everglades is comprised of water and waterways. For this reason, the longest "trails" in the park are designed for boat and canoe travel. See the "Things To Do" chapter for details on canoe trails.

Land lovers can also explore the numerous short, self-guided walking trails that introduce visitors to the unique flora and fauna of southern Florida. Trailheads are well marked and most hikes begin just off the main road. Bring along your best pair of waterproof shoes because sometimes the trails can get a little soggy. Stick to the trails with boardwalks to avoid getting wet. All of the nature trails are **open yearround** for hiking, conditions permitting. To avoid the worst of the mosquitoes, stay on designated trails away from grass and walk during midday. Evening and early morning hours, when there is little breeze, are when bugs seem most voracious. Wear insect repellent, long-sleeved shirts, long pants and a head cover. It may be necessary to follow these precautions even in winter.

Select trails also offer a variety of observation points where visitors can try to spot some of the unique wildlife that lives in the Everglades. Often wading birds and other creatures can be found not far from the boardwalk trails that cut through swampy areas.



The elevated Anhinga Trail is a great spot viewing the diverse wildlife of the Everglades.

### WALKING & HIKING TRAILS

<b>Trail</b> Trailhead	Description	Round-Trip Distance Time	<b>Difficulty</b> Elevation Gain
Shark Valley Loop Road Shark Valley Visitor Center	An observation tower provides a panoramic view. In wet weather, roads may be temporarily underwater.	15 miles <i>several</i> <i>hours</i>	moderate fairly level
<b>Bobcat Boardwalk</b> South of Shark Valley Visitor Center	A boardwalk trail crosses an open sawgrass prairie and into a bayhead of coco plum and red bay.	0.4 mile <i>30 minutes</i>	easy <i>level</i>
<b>Otter Cave Trail</b> 0.5 mile from Shark Valley Visitor Center	A gently rolling footpath following Park Loop Road to Otter Cliffs with views of the rock-bound coast.	0.2 mile 20 minutes	easy fairly level
<b>Anhinga Trail</b> Pine Island	The trail winds through Taylor Slough where you may see alligators, turtles, herons and egrets.	0.8 mile <i>50 minutes</i>	easy to moderate mostly level
<b>Gumbo Limbo Trail</b> Main Park Road	Walk through a jungle-like hammock of royal palms, gumbo limbo trees, lush ferns and orchids.	0.5 mile <i>30 minutes</i>	easy mostly level
Long Pine Key Trail Pine Island	This network of trails ranges through unusually diverse pinelands that are home to approximately 200 types of plants!	28 miles <i>4-5 day trip</i>	strenuous <i>mostly level</i>
<b>Pinelands Trail</b> Pine Island	The trail loops through pinelands and a variety of small, flowering plants that are beautiful.	0.5 mile <i>30 minutes</i>	easy mostly level
<b>Pahayokee Trail</b> Pine Island	This boardwalk trail ends with an observation tower that gives visitors a sweeping view of the "river of grass."	0.2 mile <i>15 minutes</i>	easy level
<b>Mahogany Hammock Trail</b> Pine Island	The trail winds through a dense, jungle-like hardwood hammock where the largest living mahogany tree in the U.S. grows.	0.2 mile <i>15 minutes</i>	easy fairly level
<b>West Lake Trail</b> Flamingo	The trail wanders through a forest of red, white, black and buttonwood mangroves beside a brackish lake.	0.4 mile <i>30 minutes</i>	easy mostly level
<b>Rowdy Bend Trail</b> Flamingo	This trail travels through shady buttonwoods. The old road is great for woodland bird watching.	5.2 miles <i>3-4 hours</i>	moderate <i>mostly level</i>
<b>Snake Bight Trail</b> Flamingo	The trail parallels a canal, home to alligators and birds, and ends at Florida Bay. Prepare for mosquitoes!	3.2 miles <i>2.5 hours</i>	moderate mostly level
<b>Christian Point Trail</b> Flamingo	The trail passes through buttonwood forest and coastal prairie habitats, ending with a view of Florida Bay.	3.6 miles <i>2-3 hours</i>	moderate <i>mostly level</i>
<b>Coastal Prairie Trail</b> Flamingo	Travel back in time on this old road to Florida Bay that was once used by fisherman and cotton pickers.	15 miles <i>1-2 day trip</i>	strenuous fairly level



Everglades' campgrounds are open yearround and offer a great diversity of choices. Front country campgrounds in Flamingo and Long Pine Key are ideal places to pitch your tent and sleep under the stars. For the more adventurous, 45 designated wilderness campsites offer solitude along 156 miles of canoe and walking trails. Carl Ross Key is open for day use only and is periodically closed for nesting birds.

Campground reservations are accepted up to five months in advance. During the winter season (November 1–April 30), camping is limited to 14 consecutive days and may not exceed 30 days in one year. Camping from May through October is by self-registration (no fees charged from June to August).

#### FLAMING0க்

The largest campground sits on Florida Bay at the end of the main park road in Flamingo. This site offers easy access to hiking and canoe trails and fishing in the bay. There is also an amphitheater in the winter. There are 234 drive-up sites, including 55 with water views and 40 walk-up sites (nine on the water's edge). Flamingo has solar-heated showers and cold-water showers, two dump stations, picnic tables and grills. Forty-one of Flamingo's pull-through sites have electricity, no other hook-ups are available. EcoTents are scheduled to be available as of December 2019 (as is a restaurant!). Reservations are strongly recommended



As they say—and it's even more true in Southern Florida—"half the park is after dark."

for electric sites at Flamingo as they go quickly. For reservations, go to **flamingoeverglades.com** or call **(855) 708-2207.** 

#### LONG PINE KEYக்

Located seven miles from the main entrance, just off the main road, the campground at Long Pine Key has 108 drive-up sites. There are restrooms, water, showers and a sewer dump station with freshwater fill. Recreational vehicles are welcome, but there are no hookups. Hiking trails are also in the area. Reservations for groups and RVs only; closed May to October. Go to **flamingoeverglades.com** or call **(855) 708-2207.** 

#### **GROUP CAMPING**

The Long Pine Key campground has one group site and the Flamingo campground has three, all available for \$30 per night.

The limit per group site is 15 people. For group site reservations at Flamingo, please call **(855) 708-2207.** 

#### WILDERNESS CAMPING

There are 45 backcountry campsites in the park-three are accessible by land, the others can only be reached by water. Eighteen are chickees (raised wooden platforms with thatched roofs adopted by Seminoles during the Second and Third Seminole Wars); the others are beach and ground sites. The Pearl Bay Chickee is accessible to people with mobility impairments, equipped with handrails, a canoe dock and an accessible chemical toilet. Backcountry camping permits are available on a first-come, first-served basis from the Flamingo or Gulf Coast Visitor Centers. Permits cost \$15 each plus \$2 per person, per night and can only be obtained the day before or the day of the start of your camping trip.



#### RESTAURANT COMING SOON! GIFT SHOP • KAYAKING • CAMPING & RV SITES

Located at the southernmost tip of the Florida Peninsula within Everglades National Park, Flamingo provides beautiful campgrounds, an abundance of recreational activities and phenomenal views of the largest subtropical wilderness in the nation. Visitors are delighted by the exotic wildlife and bird watching, as well as a variety of concession services, such as boat slips & launch ramps, houseboat rentals, boat tours, canoeing and kayaking, fishing and hiking.



### BISCAYNE VISITOR SERVICES

#### **GENERAL INFORMATION**

Convoy Point, where most people begin their visit to Biscayne National Park, houses a visitor center, bookstore, picnic grounds and boardwalk. The park waters and islands are open 24 hours a day, while the Convoy Point mainland grounds and facilities are open daily from 7 a.m. to 5:30 p.m (hours scheduled to change on major holidays). Elliott Key and Boca Chita Key are accessible 24 hours a day, but Adams Key is for day use only. Park personnel are available to answer questions and help you to plan your trip. For more information, call **(305) 230-PARK (7275);** or visit **nps.gov/bisc**.

#### FEES

There are no fees to enter Biscayne National Park. There is a \$25-per-night boat camping fee at Boca Chita and Elliott keys. Boca Chita pavilion is available for half-day rentals at \$100 for a four-hour period of exclusive use.

#### **ENTRANCES**

From the west, **Park Headquarters**, **Convoy Point Grounds** and the **Dante Fascell Visitor Center** are located south of Miami, nine miles east of the city of Homestead on North Canal Drive (SW 328th Street), adjacent to Homestead Bayfront Park.

#### **VISITOR CENTER**

The **Dante Fascell Visitor Center** offers stunning views of Biscayne Bay from 9 a.m. to 5 p.m. daily (closed on Christmas Day). From the Florida Turnpike, take exit 6 and follow the signs. The center is nine miles east of U.S. Route 1 on North Canal Drive (SW 328th Street). Exhibits cover the park's cultural and natural histories.

#### **FOOD SERVICES**

There are no dining facilities in Biscayne, though grab-and-go items are available at Convoy Point, along with picnic tables and grills.

#### **EMERGENCIES**

In case of an emergency, call 911 from your cell phone. First aid is available from park rangers at the Dante Fascell Visitor Center. The nearest hospital is in Homestead, five miles from the main entrance.

#### **GAS AND SERVICE STATIONS**

There is no gasoline in the park. There are stations in Homestead or Florida City.

#### LODGING

There is a wide range of lodging options in nearby Homestead, Florida City and in the greater Miami area. Contact the Tropical Everglades Visitor Asso-



Take a glass-bottom boat tour to see Biscayne's vibrant, but threatened, reefs.



Boca Chita Lighthouse, a 65-foot beacon in the Upper Floriday Keys, dates back to the 1930s.

ciation at **tropicaleverglades.com**, or call **(800) 388-9669**; or visit the South Dade Chamber of Commerce website at **southdadechamber.org**, or call **(305) 247-2332** for more information.

#### **SUPPLIES AND SOUVENIRS**

Non-perishable snacks, water and soft drinks are available on Convoy Point, but groceries and supplies are not. They can be purchased in Homestead or Florida City.

The Dante Fascell Visitor Center, Gallery and Museum sells books, cards, postcards and nature-related games as well as other souvenirs.

#### **LOST AND FOUND**

To report a lost or found item, go to the park visitor center or call **(305) 230-7275.** 

#### **POSTAL SERVICES**

Post offices are located in Florida City and Homestead.

#### **MARINAS AND BOAT RAMPS**

The park maintains harbors at Elliott and Boca Chita Keys, where boaters may spend the day or night. Docking is first come, firstserved and there is a \$25-per-night fee.

Boat ramps are located in several nearby county and city parks, including Homestead Bayfront Park, Black Point Marina, Matheson Hammock Park, Dinner Key and at Crandon Park on Key Biscayne. Check size regulations before you go to these locations.

Boca Chita pavilion is available for halfday rentals at \$100 for a four-hour period of exclusive use plus an additional \$100 refundable deposit. Docking space is available on a first come, first served basis.

### BISCAYNE THINGS TO DO

Biscayne National Park is an amazing location for any marine enthusiast. Approximately 95 percent of the park is underwater, but it is easy to access.

#### BIRDWATCHING

**Birdwatching** is rewarding along the mangrove shorelines of Biscayne Bay. You can see numerous species of wading birds, including many that nest within the park. Several birds winter here and more than 170 species have been observed within the park. Canoeing the mainland mangrove shoreline in the shallow waters is a good way to birdwatch.

The **Biscayne Birding Trail** is a fun, certificate-earning program for visitors who like wildlife and the outdoors. The program awards achievement certificates at various levels based on the numbers of bird species spotted in the park. The program is free and available to any park visitor at the park's Dante Fascell Visitor Center. Full-color certificates will be awarded at four lifetime achievement levels starting at a life list of 30 native park bird species (double-crested cormorant, beginner) and culminating at 120 species (mangrove cuckoo, expert).

#### BOATING

Boating is the best way to appreciate the beauty of Biscayne. Canoeing and kayaking are great ways to explore the park's mangrovefringed shorelines and shallow bay waters. Protective islands make the park good for small crafts. Boaters should use NOAA Nautical Chart 11451 and pay close attention to channel markers. (Search online for the chart.) Stay at least 300 feet from a boat flying a diver's flag.

**Boat launches** are available at Homestead Bayfront Park, Black Point Marina and other nearby marinas. No boat launches are available at Convoy Point unless you can self-launch your vessel. The park maintains a 66-slip harbor at Elliott Key. Boat owners can also tie up at Boca Chita Key's harbor. Docking operates on a first-come, first-served basis and there is a \$25-per-night fee imposed between 6 p.m. and 6 a.m. Anchorage areas may be found off of Elliott and Sands Keys.

#### **BOAT TOURS**

Many visitors would prefer to explore the park's coral reefs and islands on the water but don't own a boat. The **Biscayne National Park Institute** offers guided boat tours and programs at the Dante Fascell Visitor Center. Tours include a Boca Chita Key interpretive cruise, snorkeling and sailing excursions, paddleboating, and camping shuttle trips to Elliott Key. Check out **biscaynenationalparkinstitute.org** for more information.

#### FISHING

Fishing is exceptional at Biscayne all year. Snapper, grouper and sea trout are plentiful in the bay. On the ocean



Biscayne is a birdwatcher's paradise, with a huge number of resident and migratory species

#### BISCAYNE THINGS TO DO



More than 90% of Biscayne is under water.

side of the keys, you'll find hogfish and barracuda. You must possess a Florida state fishing license and adhere to catch regulations on size, number, season and method of take. Copies of regulations are available at the visitor center, marinas and bait shops.

#### **SWIMMING & DIVING**

Swimming is popular throughout the park, but beaches are rare. Homestead Bayfront Park, which is adjacent to Biscayne National Park's Convoy Point, has a man-made swimming lagoon that is popular with locals.

Excellent areas for bay seagrass snorkeling are south of Billy's Point and east of Long Arsenicker Key. Try Elkhorn Reef (good for beginners) and the wreck of the Mandalay. Avoid damaging delicate coral and anchor your boat in sandy patches which appear as light areas underwater or use mooring buoys. Be sure to display a dive flag and stay clear of other boats flying them.

#### **WALKING & HIKING**

Only five percent of Biscayne consists of land, and while limited, there are walking and hiking trails. Access to the islands is by boat only. A self-guiding trail at **Elliott Key** harbor takes you through a tropical hardwood hammock of rare vines, flowers and trees. For a longer hike, take the old road that runs the length of the seven-mile island.

There is a quarter-mile boardwalk and jetty walk at **Convoy Point** where you can observe birds, boats and an occasional manatee or dolphin. All other trails are on islands and accessible only by boat. Both **Adams** and **Boca Chita Keys** offer short nature trails with interpretive waysides to guide you.

#### WATERSPORTS

**Waterskiing** is allowed in the park, but water skiers are required to stay out of anchorage areas and at least 100 feet away from the dock and other boats.

Windsurfing and stand-up paddleboarding is excellent because of the park's shallow, protected waters. Rentals, including stand-up paddleboards and kayaks, are available at a private vendor at the park's visitor center from Wednesday– Sunday; call (305) 390-0393.

#### **EDUCATIONAL PROGRAMS**

**Ranger programs** offered year-round include guided walks, lectures, boat tours and a variety of special events. For information, call **(305) 230-PARK (7275).** From December through April, the monthly Family Fun Fest provides hands-on learning opportunities.

Dante Fascell Visitor Center is home to the park's museum exhibits, community artist gallery and auditorium where bilingual video presentations are shown on request. The gallery hosts various exhibits of local artists inspired by the park and its surroundings.

The Discovery Room serves as a staging area and indoor classroom for Biscayne's education program. For more information on these programs, call (305) 230-1144 ext. 08.

#### **BOATING SAFETY**

Boating in Biscayne Bay, Florida Bay and the Everglades backcountry can be a challenge. Much of the water is quite shallow, and you can ground your boat easily. In addition to damaging your boat, groundings destroy precious seagrasses that provide food and shelter to creatures that inhabit these waters. To prevent damage to your property and to the fragile resources of the park:

#### **PLEASE COME PREPARED!**

- Learn how to read and use nautical charts.
- Know the tides. Stop by any local marina or the park visitor center for the latest tide information.
- Learn how to use your electronic navigation equipment and always keep a visual watch on your soundings.
- Check the marine forecast prior to leaving the dock and watch for any changes in weather.
- Always file a float plan. Be sure that a family member or friend knows where you are going and when you are planning to return. Provide them with a written description of your vessel and directions about whom they should contact if you do not return as scheduled.
- Be sure that your vessel has all safety equipment, including Coast Guardapproved personal flotation devices (PFD), fire extinguisher, flares, noise-making device and a working VHF radio.
- Remember that all passengers six years of age and younger must wear a PFD at all times.
- Be sure that your VHF radio, and any other communication equipment, is in good working order. Do not depend on cellular phone service in remote areas.

• Refer to your chart prior to leaving the dock.

### REMEMBER THESE RHYMES, WHICH HAVE AIDED MARINERS FOR YEARS:

- *Brown, brown, run aground.* Avoid brown areas! This water color indicates that reef formations or seagrass beds are close to the surface.
- *White, white, you just might.* Use caution! Sand bars and rubble areas may be much shallower than they appear.
- *Green, green, nice and clean.* Green waters are generally safe for shallow draft boats. Larger, deeper draft vessels should exercise caution.
- *Blue, blue, cruise on through.* Clear sailing in deep water areas.

### OH NO! YOU RAN AGROUND, NOW WHAT?

Stop! Attempting to power off can cause significant damage to your vessel and to the living bottom communities. If you do run aground or if you venture into shallow water and start stirring up mud in your wake, stop!

- Turn your motor off. Do not attempt to power off.
- Trim your motor up.
- Try to push or pole your boat off, following the route in.
- Wait for high tide in order to drift off.
- Call for commercial assistance on VHF channel 16.

Alcohol is a major contributor to boating fatalities. Don't drink and boat—impaired boaters become impaired drivers.



Biscayne National Park offers a wonderful respite from the rapid pace of urban life. One of the best ways to enjoy the park's beauty is to spend a few days camping on Elliott Key or Boca Chita Key, both accessible only by boat.

Before you go, remember that fuel and supplies are not available on the islands. Bring whatever you will need with you, including **repellent**—mosquitoes are present throughout the year. Always keep food, supplies and trash in rigid, animal-proof containers to keep raccoons from making a mess of your gear or you. Never keep food in your tent and always pack out all trash for disposal. Call (**786**) **335-3609** for more information.

#### **ELLIOTT KEY**

Elliott Key, the park's largest island, was once a thriving community of pioneers engaged in pineapple farming, sponging, wrecking and other pursuits.

Camping on Elliott Key is allowed yearround in designated campsites which have a picnic table and a grill. There is a group campsite located on the ocean side of the island. Elliott Key also has cold, freshwater showers and restrooms. Please call (305) 230-7275 for more details.

Pets are only allowed in the developed areas of Elliott Key and must be kept on an attended leash no longer than six feet.

There are trails and a buoyed swim area. Fishing is permitted (with a license) from the maintenance dock and from the shoreline outside of the harbor and swimming area.

Ground fires are only permitted in the fire ring located at the group site, a quarter-mile east of the harbor on the ocean side of the island.

#### **BOCA CHITA KEY**

Camping on Boca Chita Key is allowed year-round wherever there are picnic tables and grills. There are restrooms, but no sinks or showers. Fishing is permitted (with a license); however, it is not permitted in the harbor, western bulkhead or creek going into the wetlands. There is **no potable water** on the island; bring your own to use for drinking and cooking.

Pets are neither permitted on Boca Chita Key, nor on vessels in the harbor or tied up to the island. No ground fires are allowed.

#### FEES

Individual campsites (max. two tents/ six people) are \$25 per night and include a docking fee. Group campsites (max. six tents/25 people) are \$30 per night. **Senior Pass** or **Access Pass** holders receive a 50 percent discount on camping and boat camping fees. Reservations are not accepted. All camping is on a firstcome, first-served basis.

Register on the islands at the kiosk located next to the harbor. Fees are payable in U.S. currency only.



### BIG CYPRESS VISITOR SERVICES

The fresh water of Big Cypress National Preserve is vital to the health of the neighboring Everglades and supports the marine estuaries along Florida's southwest coast. This vast swamp contains a mixture of tropical and temperate plant communities that are home to an array of wildlife, including the elusive **Florida panther**. Culturally, the region has served as home and refuge to many people throughout time including the Miccosukee and Seminole Nations and early settlers.

#### **OPERATING HOURS AND ENTRANCES**

Big Cypress National Preserve is open year-round, 24 hours a day. Most of the preserve's facilities are accessible from U.S. 41, Turner River Road, U.S. Interstate I-75 and State Road 29.



Nearly 200 species of birds may be seen in Big Cypress throughout the year!

#### **ENTRANCE FEES**

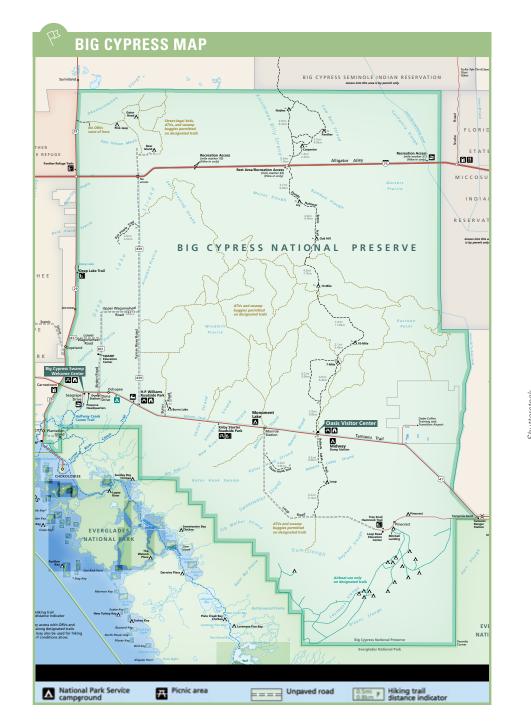
There are no entrance fees to access the preserve, however, there are fees for some campgrounds within Big Cypress. There are also fees for off-road vehicle (ORV) permits and park passes. For more information, contact the off-road vehicle office at **(239) 695-4111.** The office is open 9 a.m.-12 p.m., Friday–Sunday for walk-in permits, from 12:30 p.m.–4 p.m. by appointment only. Monday, the office is open by appointment only.

#### **VISITOR CENTERS**

Big Cypress National Preserve has two information centers located along U.S. 41 (Tamiami Trail). The Oasis Visitor Center and the Big Cypress Swamp Welcome Center. Both centers are open daily from 9 a.m. to 4:30 p.m. except on December 25th. The centers offer exhibits related to natural and cultural history, a wildlife exhibit, books about Big Cypress, and an introductory film. National Park Service staff are available to assist visitors with information about activities. The Oasis Visitor Center. (239) 695-4111 is located 50 miles west of Miami. The Big Cypress Swamp Welcome Center, (239) 695-4758, is located 33 miles east of Naples. For more information, please call (239) 695-4111, visit nps.gov/bicy or write to Big Cypress National Preserve Headquarters, 33100 Tamiami Trail East, Ochopee, FL 34141.

#### **EMERGENCIES**

In case of an emergency within the Preserve call **(800) 788-0511.** The closest medical facilities are located within Naples or Miami.



#### **GAS AND SERVICE STATIONS**

A number of service stations operate within the community of Everglades City on the western boundary and the Miccosukee Village on the eastern boundary of Big Cypress.

#### **LOST AND FOUND**

To report lost or found items, contact Oasis Visitor Center at (**239**) **695-4111** or Big Cypress Swamp Welcome Center at (**239**) **695-4758**.

#### **MARINAS AND BOAT RAMPS**

Turner River Canoe Access is marked by brown signage along U.S. 41. Within Big Cypress, motors are not allowed along this marked canoe trail. It is recommended to call one of the information centers for water levels while trip planning. There is a second small boat launch at the end of Seagrape Drive. Airboats, with proper permits, can launch from the Mitchell's Landing and Boundary Line Trail sites along Loop Road. Canoe rentals and other marinas can be found within the neighboring communities.

#### **POSTAL SERVICES**

Post offices are located in the small community of Ochopee within Big Cypress and in neighboring communities of Everglades City and Chokoloskee.

#### **RELIGIOUS SERVICES**

Churches of several denominations are located outside the preserve in the communities of Everglades City, Chokoloskee, Copeland and Naples.

#### **SUPPLIES AND SOUVENIRS**

Books, souvenirs and insect repellent are available at the Everglades Association sales area within the Oasis Visitor Center.



They may look slow and ungainly, but Alligators are deceptively fast-don't get within reach.

### BIG CYPRESS THINGS TO DO

Big Cypress is the backyard to the residents and visitors of southern Florida. Encompassing more than 729,000 acres, Big Cypress provides the protection of a national park area while still allowing for a broader array of recreational opportunities like hunting and off-road vehicle use. Offroad vehicle permits are available at Oasis Visitor Center at (**239**) **695-4111.** For information on obtaining a hunting license, visit **myfwc.com.** 

For the general visitor, exploring Big Cypress may begin with a driving tour along the Loop Road or the Turner River/Birdon Roads route. Views of the variety of Florida's sub-tropical habitats and wildlife can be found along these routes.

Visitors may also want to visit **wildlife viewing areas** at the H.P. Williams Wayside and the Oasis Visitor Center.

Popular **canoe routes** within Big Cypress include the Turner River and the Halfway Creek Canoe Trails.

**Biking** is popular in the Bear Island area of Big Cypress, located in the northwest corner of the protected area.

#### **HIKING**

Big Cypress offers hikers a variety of challenging terrain—pinnacle rock, muddy prairies and shallow water provide incredibly diverse hikes. The southernmost sections of the **Florida National Scenic Trail**—which stretches across the state from Gulf Islands National Seashore to Big Cypress National Preserve—lie within Big Cypress (parts of this trail can get very wet in the rainy season). The Big Cypress portion of the Florida Trail can be divided into two sections: U.S. 41 to Interstate 75 (approximately 28 miles one-way), and Interstate 75 to the preserve's north boundary (approximately eight miles one-way). Big Cypress also offers miles of unspoiled areas to explore, although this area of flat terrain and varied vegetation is challenging and appropriate for the most experienced hikers. Grab a map, compass or GPS unit to explore the preserve by orienteering. For more information, please visit **floridatrail.org** or contact the **Florida Trail Association**.

There is an easy one-mile round-trip boardwalk at the Kirby Storter Wayside that explores the depths of a cypress strand. The **Fire Prairie Trail** is a five-mile round-trip walk that provides sweeping views of prairies affected by fire.

Ranger-led activities such as canoe trips, boardwalk explorations and swamp walks are typically available during winter months. Visit **nps.gov/bicy**, or inquire at the Oasis Visitor Center for details.

#### CAMPING

Frontcountry campgrounds with various amenities can be found at the Midway and Monument Lake campgrounds on U.S. 41. More primitive camping can be found at the Burns Lake, Mitchell's Landing, Pinecrest and Bear Island campgrounds. All campgrounds require a fee and some are by reservation only. Pink Jeep, Gator Head, Burns Lake and Monument Lake campgrounds are closed until August 15. Call **(239) 695-4111** for more details.

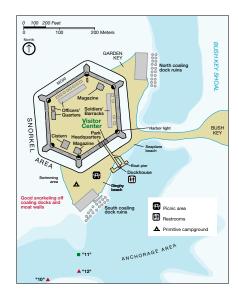


# ⇒) DRY TORTUGAS

Dry Tortugas National Park—a destination as well-known for its legendary intrigue as it is for its natural wonders—is comprised of coral reefs and rubble and surrounded by generous shoals and waters. One major attraction is Fort Jefferson, one of the largest forts ever built in the United States.

The Dry Tortugas is a cluster of seven small islands that lie 68 miles off the coast of Key West in South Florida. Ponce De León was the first European to name them in 1513. He relied on the massive sea turtles or "tortugas" found there as a food source for his sailors. Dry was added to the area's name to warn mariners that no fresh water could be found here. The Dry Tortugas' reefs and shoals have proved hazardous to seafaring navigators; they are the site of hundreds of shipwrecks.

In the early 1800s, the tiny group of islands came to the attention of the U.S. military mostly because of its strategic location in the



Florida straits. In 1846, construction of massive **Fort Jefferson** began and lasted almost 30 years, but it was never completed. Changing technologies and times rendered the fort obsolete. In the early 20th century, the Dry Tortugas' abundant sea life and unusual variety of birds became its central attraction. In 1935, President Franklin Roosevelt designated Fort Jefferson and its surrounding waters as a national monument. Congress redesignated it Dry Tortugas National Park in 1992 to better protect the area.

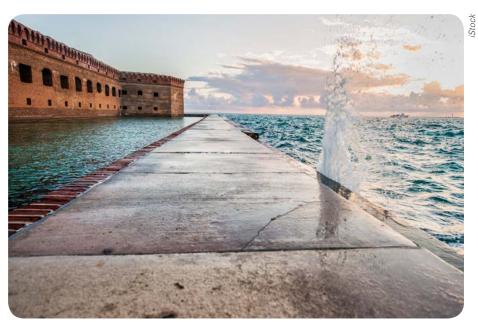
#### **ACTIVITIES AT DRY TORTUGAS**

Visitors to Dry Tortugas National Park can participate in a variety of activities on both land and sea. The visitor center in Fort Jefferson offers an overview of the island's activities. Self-guided walking tours of Fort Jefferson are a perfect way to explore the island. Nature lovers will enjoy birdwatching and wildlife-watching (the Dry Tortugas are known for spring bird migrations and tropical bird species), picnicking and a variety of water sports. Snorkelers and scuba divers will enjoy the incredible marine life in the coral reefs that dot the islands. New regulations are in effect at Dry Tortugas. Boaters should call (305) 242-7700 or go to nps.gov/drto for updates.

#### **PLANNING YOUR VISIT**

Dry Tortugas National Park is open all year; Fort Jefferson on Garden Key is open during the daylight hours—as is Loggerhead Key. Bush Key is usually open from mid-October–mid-January. All other keys are closed year-round.

The Garden Key Visitor Center is located inside Fort Jefferson and is open all



Fort Jefferson is the largest brick masonry structure in the U.S.-even though it's unfinished.

year from 8:30 a.m.-4:30 p.m. It features artifacts, a video on the fort's history, souvenirs and a bookstore. For additional information, call **(305) 242-7700.** 

The **Florida Keys Eco-Discovery Center** hosts exhibits, a gift shop and information about the Dry Tortugas and other preserved lands and waters in the area. The center is open Tuesday–Saturday, from 9 a.m.–4 p.m., is closed Thanksgiving and Christmas, and is located at 35 East Quay Road, Key West, FL 33040. For more information, call **(305) 809-4750** or visit **floridakeys.noaa.gov**.

#### **GETTING THERE**

Since there are no roads to Dry Tortugas National Park, visitors can only reach the area by seaplane or ferry. Private pleasure boats and charters are welcome, as long as they are totally self-sufficient; no provisions—food, water or fuel—are available in the park. For ferry schedules, prices and reservations, contact Key West Seaplane Adventures at (305) 293-9300 or keywestseaplanecharters.com; or Yankee Freedom III at (800) 634-0939, (305) 294-7009 or drytortugas.com.

#### THE FLORIDA KEYS

Few marine environments in the U.S. compare to the Florida Keys in terms of natural beauty and natural resources. The 126-mile island Keys chain boasts an extensive coral reef ecosystem in its shallow ocean-side waters, and mangrove forests and seagrass meadows are found throughout the region. Together, these habitats support one of the most unique and diverse assemblages of plants and animals in North America. In 1990, the Florida Keys National Marine Sanctuary, which encompasses the 2,900 square nautical miles surrounding the Florida Keys, was designated to protect and manage this national treasure.

# NATURE & WILDLIFE

The South Florida national parks provide a sanctuary, as well as a breeding and feeding ground, for many species of wading birds that depend on the climate's wet and dry cycles to reproduce. The **great egret**, **snowy egret** and **roseate spoonbill** live relatively undisturbed in the Everglades with other rare and unique birds.

The **anhinga**, sometimes called the "snakebird" because it swims through the water with only its thin neck showing, also lives here. Another resident, the threatened **wood stork**, is the only stork native to North America. The few hundred remaining endangered **snail kites** are also at home in the Everglades.

For years, botanists from around the world have marveled at the more than 2,000 species of plants—both tropical and temperate—living side by side in southern Florida. **Palms** and other tropical trees such as the **gumbo limbo** and **mahogany** grow in jumbled harmony alongside **willows**, **pines** and **oaks**.

#### **FRESHWATER MARSH**

**Sawgrass** covers approximately 572,200 acres of open, flat prairie. This member of the sedge family is the most dominant plant, flowing through the park as a broad, sweeping river of grass.

This seemingly endless plain of sharptoothed sawgrass is interrupted only sporadically by gentle humps of **hammocks**, which are limestone outcrops where tropical plants and trees grow. Ranging in size from a few feet to several acres in area, hammocks conceal within their cool and gloomy retreats **deer**, **raccoons**, **bobcats**, **barred owls**, **hawks** and



It's photos like this that warrant you packing a zoom lens. Never get this close to an alligator.



Mangrove forests and estuaries provide safe marine habitat for developing organisms.

**marsh rabbits**. Water moccasins may live in the ring of water that often collects around the hammocks.

The aptly-named parasitic **strangler fig** drops its long aerial roots to the ground and twists itself around its host tree's trunk. Soon it robs its host of light, water and nutrients, ultimately killing it.

In contrast, the **air plant**, or epiphyte, grows harmlessly on other plants, obtaining water and nutrients from the air. The most celebrated epiphytes are wild **orchids**. Most grow in the damp, dimly-lit hammocks and cypress sloughs. The **night-blooming epidendrum**, with its showy white blossom and spiky leaves, is often considered to be the most beautiful and fragrant orchid in the park.

A rare and special member of the hammock community is the **liguus tree snail**. Snails of each hammock have their own unique color variations—their intricate patterns range from orange and lavender to yellow and deep blue.

#### PINELANDS

Another unique environment occasionally disrupts the sawgrass plains. The rough and rocky **pinelands** that remained after widespread logging are located on Long Pine Key and in nearby eastern sections of the Everglades.

At the highest, driest elevations (three to seven feet above sea level), the **slash pine**, or Dade County pine, is a hardy tree that can put roots down in minimal soil. It can grow in the hollows of limestone bedrock, which contain peat and marl, a rich combination of decayed vegetable matter, clay and shells.

The pinelands are also home to the **saw palmetto**; the **moonvine**, a type of morning glory; and the **coontie**, which is a plant resembling a palm tree. The **cotton mouse**, **opossum**, **raccoon**, **pine war-bler** and **reef gecko** all find food and shelter within the pinelands.

#### **MANGROVE FORESTS**

From the southern end of the park, along the shoreline of Florida Bay, the tangled, dense **mangrove forests** wind their way up the western side to the Ten Thousand Islands in a swampy maze that is part land and part water. It is here that the freshwater of Okeechobee mingles with the ocean's saltwater, creating a brackish, nurturing environment. **Water birds, sea turtles, fish, alligators, manatees** and **crocodiles** find shelter and abundant food here.

The sturdy **red mangrove**, found nearest the shoreline, is well supported on numerous above-ground prop roots that arch from its trunk and take hold in the muck below. Growing farther inland, the **black mangrove** displays unusual aerial roots, pneumatophores, which stand like pencils all around the base of the tree. They serve as respiratory organs in this marsh plant. **White mangroves** prefer higher, inland ground. They often form hammocks with mahogany and gumbo limbo trees.

#### **ENDANGERED SPECIES OF THE PARKS**

At Everglades and Biscayne, habitat loss and degradation are increasingly impacting the native wildlife. Threatened species have low or declining populations and if not protected, may become endangered. Endangered species are in immediate threat of extinction, but the future of these animals is not without hope.

The **Cape Sable seaside sparrow** has the most restricted range of any North American bird and is found almost entirely within the Everglades and Big Cypress. Due to loss of habitat and water management activities, the **snail kite** is one of America's rarest birds, and several hundred are believed to exist here. The **Florida semaphore cactus**, considered one of the world's rarest plants, has a population numbering 600 individuals in Biscayne.

The National Park Service has joined federal, state and private agencies to actively preserve these animals. Sea turtles, manatees and Florida panthers are all endangered species who live in the parks.

Decomposed mangrove leaves contribute generously to the food chain, providing nourishment for bacteria, fungi and other microorganisms, which in turn, feed wildlife higher on the food chain.

There are four "worlds" at Biscayne: the mangrove shoreline, the waters of the bay, the keys and the coral reefs. Since 95 percent of Biscayne is comprised of water, most animals that live there are associated with ocean or shoreline habitats.

Biscayne's **mangrove shoreline** acts as a nursery for all types of land and marine animals. The mangrove swamps also keep the waters of Biscayne Bay clear and sparkling by trapping eroding soil and pollutants from inland sources.

The turquoise and aquamarine waters of the bay teem with **sea stars**, **sponges**, **soft corals**, hundreds of types of fish and other marine life. The endangered **manatee**, or sea cow, also inhabits many of the park's waterways (see the sidebar in this chapter).

The **keys** (islands) are made of ancient **coral rock**. Similar to those found in the Everglades, the **hardwood hammocks** of the keys support **gumbo limbo trees**, **Jamaican dogwood**, **strangler fig**, **ma**- **hogany** and other tropical plants common to the West Indies.

Biscayne's **coral reefs** are the work of billions of tiny individual coral animals called **polyps**. Relatives of the sea anemone, these soft-bodied animals live in small cups of calcium carbonate (limestone) that they secrete around themselves as external skeletons. Thin layers of these skeletons form coral reefs, with only the thin outermost layer being alive.

More than 500 species of fish, both large and small, inhabit Biscayne National Park. Most of them live in or near coral reefs. Such congestion partially explains the coral reefs' brilliant colors and distinctive patterns.

To survive, a fish must be able to instantly identify potential rivals or mates. Some are even able to change color at night to better hide from predators. The vividly colored fish include the **rock beauty**, the **queen angelfish** and the **parrotfish**, which has sharp front teeth that resemble a parrot's beak to rasp algae from coral.

Also in residence are the gold-flecked **moray eel**, **stingrays**, **squid** and five species of **sea turtles**.

#### **SAVING THE MANATEES**



West Indian manatees are large, gray aquatic mammals with bodies that taper to a flat, paddle-shaped tail. They are native to Florida and are common residents of Biscayne, Big Cypress National Preserve and Everglades National Parks. Manatees, or sea cows, usually frequent shallow, slow-moving rivers, estuaries, canals and coastal areas. propelling themselves with two flippers and their flat, broad tail. It may seem hard to believe, but the manatee's closest land relatives are the elephant and the hyrax, a small, gopher-sized mammal. The average adult manatee is about 9.8 feet long and weighs between 800-1,200 pounds.

West Indian manatees have few, if any, natural enemies, and it is believed they can live for more than 60 years. Today, human activities are the greatest threat to the species' survival. Most manatee mortalities occur from collisions with watercraft, ingestion of fishhooks, litter and monofilament line and entanglement in crab trap lines. Ultimately, loss of habitat is the most serious threat fac-

ing manatees today. There are approximately 3.000 West Indian manatees left in the United States. Without aggressive protection, their future remains in jeopardy.

Boaters must observe all manatee protection zone requirements and are urged to report any accidental strikes to the National Park Service or the Florida Fish and Wildlife Conservation Commission. Boaters will not be subject to prosecution provided they were operating in accordance with any applicable vessel speed restrictions at the time of the strike.

To reduce the chance of hitting a manatee, stay in deep water channels when boating and avoid seagrass beds and shallow areas where manatees may be feeding. If you see a manatee when operating a powerboat, maintain a safe distance of at least 50 feet. If you want to observe the manatee, cut the motor, but don't drift over the animal.

To learn how you can help protect these unique mammals, contact the Save the Manatee® Club at (800) 432-5646 or visit savethemanatee.org.

ϔ ALLIGATORS VS. CROCODILES				
Alligators		Crocodiles		
COLOR	Alligators tend to be a black-gray color and are never green.	Crocodiles generally appear to be a grayish- olive green color, closer to that of a dark army camouflage.		
LENGTH	Range from nine to 14 feet, depending on gender.	Can reach a top length of 15 feet in the wild and up to 20 feet in captivity.		
WEIGHT	Weigh less than crocodiles, usually not exceeding 1,000 lbs.	Average about 1,000 lbs, with the largest up to 2,000 lbs.		
SNOUT	A wider "U" shaped snout than its croco- dile counterpart.	Have a much pointier "A" shaped snout that tends to be much longer and thinner.		
HABITAT	Alligators inhabit freshwater areas, mostly swamps and marshes with warm temperatures.	Crocodiles prefer areas with a higher concen- tration of salt water, but can live in freshwater.		
TEETH	Top jaw overlaps bottom jaw. Lower teeth are hidden with mouth closed.	Have interlocking teeth and both sets are vis- ible when the animal closes its mouth.		
	SAFETY TIPS			

Alligators and crocodiles both call the waters of Florida home. In order to stay safe it is important to keep a few important rules in mind.

Do not feed wildlife under any circumstances. When animals associate people with food, they are more likely to approach and return to areas with humans.

Do not try to move an alligator or crocodile from the road or pathway. Approaching and touching the animal can cause them to feel threatened and attack.

Although these animals may not appear

overly fast, appearances can be deceiving. In the water, alligators can reach a speed of 20 mph and hold their breath for an hour. They can also move quickly in short bursts while on land.

Properly dispose of all garbage.

Keep away from the edges of lakes, ponds, streams, rivers, canals and other freshwater bodies. Be sure to swim only in designated areas.

If an alligator takes hold of you, make sure to fight back. Hit the animal in the snout/nostrils or in the eye.



#### **1. ATLANTIC BOTTLENOSE DOLPHIN**

(Tursiops truncates) • The bottlenose dolphin is seen off Flamingo and Cape Sable. The name comes from their short snouts that resemble the top of an old-fashioned gin bottle. This social species travels in pods of about 12 individuals and displays a variety of vocalizations. • Weight 419–573 lbs • Length 8.2–8.9 ft • Active year-round. Photo: Shutterstock

2. ATLANTIC LOGGERHEAD TURTLE (*Caretta caretta*) • Aptly named for their massive heads with sharp beaks, loggerheads are the most commonly observed sea turtles in Biscayne. Their threatened status may be elevated to endangered due to nest predation, mortality in boat collisions and entanglement in gear. • Weight 170–350 lbs • Size 31–48 in • Migrates south in winter. Photo: Shutterstock

**3. BOBCAT** (*Lynx rufus*) • Bobcats roam within the pinelands, coastal prairies and hardwood hammocks of the park. Look carefully and you may catch a glimpse of these creatures, as they remain active during the day. Bobcats hunt smaller animals, but are capable of bringing down large prey like deer. • Weight 20–30 lbs • Length 3.5 ft • Active year-round. Photo: Shutterstock

**4. BROWN PELICAN** (*Pelecanus occidentalis*) With white heads, black feet and brown bodies, brown pelicans are hard to miss. Their signature long bill, about 9 to 13 inches long, helps them scoop up water as they search for fish. Once endangered, the brown pelican has made a comeback. • Weight 6.6–11 lbs • Height: 50 in • Active yearround. Photo: Shutterstock

**5. FLORIDA PANTHER** (*Puma concolor*) • The only panther thought to be remaining in the eastern U.S., the Florida panther was hunted almost to extinction. Protected by state law since 1966, this feline is now endangered due to shrinking habitat and highway traffic. Fewer than 200 panthers are thought to remain. • **Weight** 85–100 lbs • **Length** 5–7 ft • **Active** year-round. Photo: Shutterstock

**6. GLOSSY IBIS** (*Plegadis falcinellus*) • The glossy ibis is defined by its distinct dark coloring and long bill and is often spotted in marshlands. Its downward curved bill is advantageous for catching small fish and is distinct from other waders with straight bills. Glossy ibises also live in Europe, Asia, Africa and Australia. • Weight 4–5.5 lbs • Size 19–24 in • Active year-round. Photo: Shutterstock



7. GREAT BLUE HERON (Ardea hernias) With its long legs and thin beak, the blue heron wades into the waters of the Everglades in search of food. Its diet consists mainly of small fish and some land animals. The heron uses its sharp beak to pierce prey. These birds are year-round inhabitants of the park. • Weight 5–8 lbs • Length 5.5– 6.5 ft • Active year-round. Photo: Shutterstock

8. GROOVED BRAIN CORAL Diploria labyrinthiformis) Found in the reefs of Biscayne, grooved brain coral is one of the largest types of coral and can reach a diameter of five feet! With intricate grooves covering the surface, this type of coral is easily identifiable. Often a yellowish hue, the species is in danger due to habitat loss and pollution. • Weight varies by size • Length up to 5 ft • Active year-round. Photo: Shutterstock

9. PEREGRINE FALCON (Falco peregrinus) The peregrine falcon can be found wintering in Biscayne National Park. The name "peregrine" means wanderer, as the peregrine falcon has one of the longest migrations of any North American bird—wintering in South America. They can travel 15,500 miles annually. • Weight 3–4 lbs • Height 1.5 ft; 3–3.5-ft wingspan • Migrate south in fall. Photo: Shutterstock. **10. QUEEN ANGELFISH** (Holacanthus ciliaris) Queen angelfish live in the colorful reefs of South Florida and are easily spotted when snorkeling in warm waters. These shy fish rarely swim in schools and are found alone or in pairs. Queen angelfish are omnivorous and their diet includes algae, plankton and coral. • Weight up to 3.5 lbs • Size 8–14 in • Active yearround. Photo: Shutterstock

#### 11. RIVER OTTER (Lutra Canadensis)

Otters are always on the move, attempting to avoid predators like bald eagles while keeping their hard-caught fish away from larger animals. As long as an otter stays in sliding distance of water, it is safe. Otters prey on fish and frogs, but will eat almost anything that swims or floats. • Length 2–3.5 ft • Weight 6 to 31 lbs • Active year-round. Photo: Shutterstock

12. WHITE PELICAN (Pelecanus erythrorhynchos) • A resident of the Everglades, white pelicans are often found feeding in Snake Bight. Equipped with long bills and extensible pouches, pelicans plunge underwater and scoop up fish. Look for wintering pelicans on the mudflat at low tide, at the end of the Snake Bight Trail. • Weight 9.9–19.9 lbs • Length 50–65 in • Active year-round. Photo: Shutterstock

## PRESERVATION

The South Florida ecosystem is one of our country's richest biological preserves and it is in peril. Canals and levees now capture and divert its water for human needs, including drainage, drinking water, irrigation and flood control. These factors are challenging and altering the Everglades' delicate ecological balance.

#### WATER CONSERVATION

The campaign to drain the Everglades started in the early 1900s under the direction of **Governor Napoleon Bonaparte Broward**. In 1905, the governor himself lifted the first shovelful of dirt, thus beginning the digging of hundreds of canals. These canals would harness the water from the lake and redirect it for use by developers, farmers and businesses.

In 1909, the Everglades Drainage District completed the **Miami Canal**, connecting Lake Okeechobee to the Miami River and the sea. The land south of the lake was then available for farming. People moved into the area and, with limited success, began to farm in the Everglades. But hurricanes in 1926 and 1928 swept the lake and, in 1930, the Army Corps of Engineers built the **Hoover Dike**, which prevented the lake from overrunning its banks. Beginning in 1948, more than 1,900 miles of levees and canals south of Lake Okeechobee were built. The flow of water became dependent on the decisions of engineers and the interests of business, not nature.

Farming has dealt two blows to the fragile and complex Everglades ecosystem. The first comes from its need for water, which, until this century, flowed freely into the Everglades from the lake. The second comes from agricultural runoff— rich in nutrients, it has caused an explosion in the growth of certain plants like cattails. In certain areas of the ecosystem, cattails are spreading at the rate of four acres per day, clogging open waterways and crowding out animal life.

#### **ENDANGERED SPECIES**

The Everglades no longer teems with wildlife as it had for thousands of years. Many of the larger animals, including the panther, are now either endangered or threatened. According to the National Audubon Society, the number of wading birds, like **wood storks** and egrets, that nest in the southern Everglades has declined from 265,000 to 18,500 (93 percent) since the 1930s. The **roseate spoonbill** population has declined by 50 percent since 1980. In the past few years, the park's alligators have experienced reduced reproduction and the threatened wood stork has sometimes failed to reproduce at all.

A recent count within Everglades and Biscayne National Parks, Big Cypress National Preserve and Dry Tortugas National Park indicates that there are 14 federally listed endangered and nine threatened species of wildlife.

Since the park was established not to safeguard a geographic feature like a forest or river canyon, but to protect a fragile and complex ecological system, the situation is all the more poignant. While legislation such as the Endangered Species Act of 1973 has afforded some measure of legal protection, it is unclear if it is too late to save these species.

#### **RESTORING THE BALANCE**

On December 13, 1989, President George H.W. Bush signed the Everglades National Park Protection and Expansion Act into law. This bill authorized the addition of 109,506 acres of the east Everglades to the park. In 2000, Congress passed the Comprehensive

#### MOTHER AND FATHER OF THE EVERGLADES

Marjory Stoneman Douglas was a force to be reckoned with. Called the "mother of the Everglades," she was an environmentalist, activist, feminist and independent thinker in a time when each of those titles was an accomplishment. Her name is synonymous with the Everglades for her tireless, groundbreaking efforts to protect a region her adversaries considered a worthless swamp.

Douglas lived in South Florida from 1915 until her death and became absorbed in the movement to preserve the Everglades. She served on the committee to create Everglades National Park, worked toward establishing Biscayne National Park, helped form the Friends of the Everglades and advocated for legislation to protect the parks and their wildlife.

Douglas is perhaps most known for her bestselling book, The Everglades: River of Grass. Published in 1947, her prose portrays the strange beauty

Everglades Restoration Plan, a state-federal partnership to disassemble part of southern Florida's flood-control canal system and restore the meandering Kissimmee River and its surrounding wetlands.

Efforts to restore the Everglades continue, but the vision and commitment of elected officials are not enough. The Everglades and all other areas that are home to threatened and endangered species need your support.

#### **REVENUE WELL SPENT**

Everglades, Dry Tortugas and Biscayne National Parks participate in the Recreation Fee Program. There's no entrance fee at Biscayne. The parks retain 80 percent of funds collected—including entrance and interpretive fees—to improve visitor facilities and protect resources. Completed maintenance projects include rehabilitated boat ramps, repaired boardwalks, restroom improvements and resurand history of the region's watershed and addresses modern civilization's impact on this fragile ecosystem.

**Ernest F. Coe** was a Connecticut landscaper who settled with his wife in Coconut Grove, Florida, in the 1920s. During his trips to the Everglades, he was shocked to learn of orchids and rare birds being destroyed. Coe was insistent that the state save its wildlife and unparalleled tropical beauty. He created the Tropical Everglades National Park Association (later Everglades National Park Association) and outlined a proposal for a national park. But it wasn't until 1947, nearly 20 years later, that Everglades National Park was established.

In 1996, on the eve of the park's 50th anniversary, a new visitor center was christened "Ernest F. Coe Visitor Center" in honor of the man who dedicated his life to the preservation of the Everglades.

faced trails. The remaining 20 percent is distributed to other parks.

#### WHAT YOU CAN DO TO HELP

- Recycle. At Everglades and Biscayne, recycle glass, plastic and aluminum cans using the bins located next to park trash cans and dumpsters. At Shark Valley, dispose of aluminum cans in the provided receptacles.
- Join Biscayne National Park's cleanup campaigns, which are held several times a year.
- Support conservation legislation.
- Avoid purchasing products you suspect come from endangered or threatened plant or wildlife species.

The National Park Service reminds us: "It is not enough to merely appreciate nature, we must actively work to protect it. What we do today toward that end is the legacy we leave our children and their children. The extinction of a species is forever... and the decision is ours."

# () JUST FOR KIDS

### "This experience has changed me forever."

#### **BECOME A JUNIOR RANGER**

While becoming a junior ranger, you can learn more about three of southern Florida's national park sites: **Everglades National Park, Biscayne National Park** and **Big Cypress National Preserve**. Discover their different habitats and learn why each park is a unique and special place.

Ask for a junior ranger booklet at any visitor center and complete the section for the park you're visiting. When you're finished with the pages for a specific park, stamp the inside of the back cover with the stamp found in the park's visitor center. To receive a junior ranger badge, tell the park ranger you have finished the pages for that park.

If you collect badges from all three parks, you can send a copy of the stamped booklet page to the park headquarters and you will receive an awesome patch!

Dry Tortugas National Park has its own junior ranger program that differs from the other parks in the area. Complete the book and earn a badge. You



Kids will get a kick out of junior ranger activities.

can also become a WebRanger! Go to **nps.gov/webrangers** to find out more.

#### **HABITAT HUNT**

Check off the habitats you can find (a **habitat** is a place where animals and plants live). What animals live in each habitat? Where would you want to live? Draw a habitat for yourself that you would like to live in (include a place to sleep, things to eat, etc.).

- **Coral reef**: ocean habitat where tiny polyps build stone fortresses for other animals and plants. (Biscayne and Dry Tortugas)
- **Swamp**: low, watery areas with trees. (Big Cypress and Everglades)
- **Hammock**: densely forested areas with dry land. (Big Cypress, Biscayne and Everglades)
- Cypress stands: watery area with special trees—the roots above the water look like knobby knees; long moss strands hang from the branches. (Big Cypress and Everglades)
- Mangrove forest: ocean shoreline community with trees growing partly on land and partly in saltwater. (Biscayne, Big Cypress and Everglades)
- Seagrass meadow: dense patches of plant growth in shallow ocean areas. (Biscayne, Everglades and Dry Tortugas)

#### OUR READER FEEDBACK

"My daughter was so proud to become a junior ranger, and we had so much fun watching her learn!" - Melissa Meyer







Conserving Lands. Transforming Lives.

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# ) PHOTOGRAPHY

For millennia, we've looked towards the heavens and contemplated what's beyond our orbit and universe. More recently, stargazing has become increasingly difficult for millions of people living in developed areas. If you live you in a populated area east of the Mississippi or along the Pacific coast, odds are that you can count the number of stars you see on your hands. National and state parks—remote and minimally developed not only protect our land, but also our dark skies which are ideal for astrophotography.

There are two primary types of astrophotography shots that yield different, but stellar compositions. A long exposure setting will show stars trailing across the sky, while a shorter exposure will show pinpoints of light—objects that a camera can capture that the unaided eye cannot. Both require a camera with interchangeable lenses and manual controls to set aperture, ISO, and exposure settings. Here's what you'll need to start:

- A sturdy tripod: Simply put, a shaky tripod will yield blurry photos.
- A cable release or remote control or intervalometer: You'll want to avoid touching your camera to minimize shake. The addition of an intervalometer will allow you to take sequential long exposures
- **Batteries:** Your aperture may be open for several hours, so it's important to have multiple fresh and fully charged batteries.
- A wide lens: Use the fastest, widest lens available.
- A head lamp: It'll be useful to set up your equipment and illuminate your foreground. Check the cloud cover; if there's too much wait until you have a clearer night. Before you start, set your focus to infinity and turn off your autofocus and high ISO noise reduc-

tion. Next, set your white balance to daylight settings (5500k) and turn on your mirror lock to avoid mirror shake. Wait until the moon is out, too, as it'll illuminate and add detail to your foreground. Make sure that it's behind you. To capture star trails:

- Set your ISO at 200 to reduce digital noise.
- Compose your image, making sure you have interesting features in the foreground.
- Choose your focal length. The longer the focal length, the quicker your star trails will start to form.
- Set your camera to manual mode so that you can select your shutter speed and aperture.
- Set your aperture between f/2.8 and f/4 for best results.
- Select "bulb mode" as your shutter speed.
- Use your cable release or remote to open the shutter or set your timer for two to four minutes.

Check your results. If your picture is too dark, increase the exposure time. If your trails are to short, increase the exposure time. Keep playing around with your settings to get the results you desire. To learn how to take photos of the milky way and millions of points of light, visit **ohranger.com/brightskies.** 



Photographing the night sky is as close as many of us will get to exploring space.



# Discover Moab in the Off-Season

With unmatched solitude, spectacular views, and discounted rates, the off-season in Moab is fast becoming one of the most rewarding times to visit. Enjoy year-round access to Arches and Canyonlands National Parks, Dead Horse Point State Park and thousands of square miles of spectacular red rock scenery. No matter what time of year you visit, Moab's warmth and hospitality will shine through.



For a free Moab Travel Planner call 435-259-8825 or visit **discovermoab.com** 







# ) IF YOU ONLY HAVE A DAY

Although spread out over a wide area, South Florida's parks promise the possibility of adventure filled with water, sunshine and wildlife. Each offers a variety of activities and outdoor experiences. If you only have one day, try to visit one park and explore everything it has to offer—the distance and wet landscape between them makes park jumping extremely difficult.

#### BIRDWATCHING

The Everglades, Biscayne, Big Cypress and the Dry Tortugas are all home to a diversity of rare and endangered birds. Rent a kayak, pack a lunch, grab your binoculars



The Shark Valley observation tower offers 360-degree views of the River of Grass.

and head to the mangrove shoreline at Biscayne Bay for some great and relaxing birdwatching.

The roseate spoonbill, great blue heron, brown pelican and wood stork are just a few of the species you may catch a glimpse of on your search. Each is extremely colorful and beautiful to observe in its natural habitat.

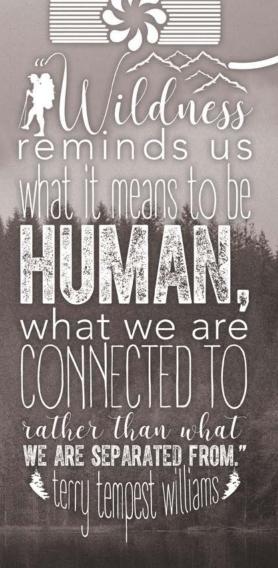
#### **EXPLORE THE WATER**

Visiting parks comprised primarily of water creates unparalleled opportunities to see marine life found only in warm water areas. Snorkeling and scuba diving are two excellent ways to explore the coral reefs in Biscayne National Park. The view is made even more special because the reefs harbor some species that are on the brink of extinction.

Spot colorful fish, otherworldly coral and even historic shipwrecks! In total, over 500 species of tropical fish live in the waters of the reef. The fish share their habitat with sponges, conch, squid and sea turtles. If you decide to go on a boat ride through the parks, be sure to keep your eyes peeled for bottlenose dolphins. These animals enjoy swimming alongside boats and traveling in groups. Manatees and alligators also inhabit the swamps of South Florida.

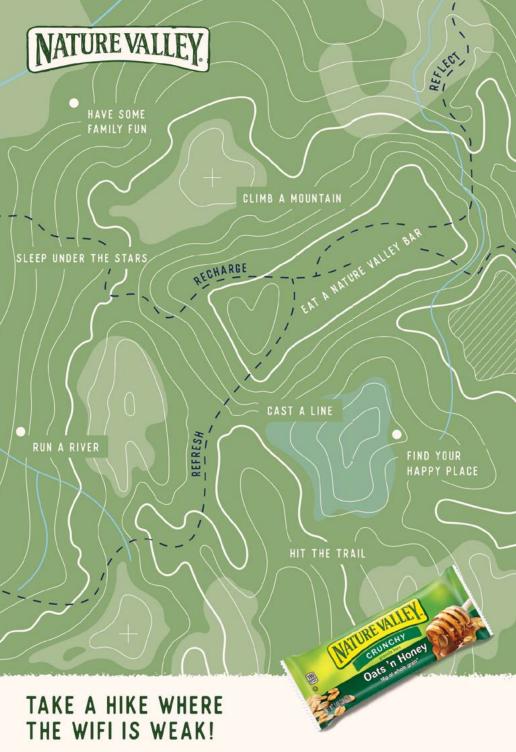
#### WATCH A SUNSET

After a day filled with sunshine and warmth, find a sandy spot to watch some of the best sunsets in the country. Bring your camera along to capture a stunning silhouette of the mangrove trees or, if you get lucky, a beautiful bird wading in the water.





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You're not going to remember the time you spent surfing the web. Get back to nature and and see why you'll find the best tweets outside, not online.

#NatureGives