

Welcome to the Florida Keys. There are four National Wildlife Refuges located in this extraordinary and seemingly endless expanse of sea, keys and sky—the National Key Deer, Great White Heron, Key West and Crocodile Lake National Wildlife Refuges. They are part of a vast subtropical ecosystem. This distinctive chain of islands stretches almost 120 miles from the southeastern tip of Florida, curving gently westward as they divide the blue-green waters of the Gulf of Mexico from the Atlantic Ocean.

These are islands that have been weathered from ancient coral reefs and natural limestone deposits. They support several ecosystems and habitats that sustain a wide variety of plants and animals, some of which are not found anywhere else on earth. The four refuges include over 23,000 acres of land and 349,000 acres of open water.

Together they protect and preserve important habitats for wildlife such as freshwater wetlands, mangrove (saltwater) wetlands, tropical hardwood hammocks, and pine rocklands which help to protect the unique ecosystems and biodiversity of the ecoregion. Combined, the protected areas help provide food, water, shelter, and open space necessary for the survival of twenty-two Federally listed threatened or endangered species and other native wildlife. As commercial and residential development in the Keys continues to put pressure on limited land and water resources, protected habitats become more crucial to the survival of this fragile ecosystem.

Each key is fringed along the shoreline by red and black mangroves. On larger keys, this gives way to a wide variety of tropical and subtropical trees and shrubs on slightly higher ground. The larger keys, especially Big Pine Key, have extensive growths of Caribbean slash pine, silver and thatch palms, and poisonwood. Poisonwood produces an oil which can cause a rash similar to poison ivy. To identify it, look for the tell-tale “burn” marks on the leaves. Orchids, cactus, and air-plants add to the rich variety of plants. At least 466 species of plant life have been found on Big Pine Key alone.

The bird life of the refuges includes a variety of long-legged wading birds such as the great white heron and rarer species such as the roseate spoonbill and reddish egret. One can occasionally see these wading birds on their long, spindly legs patiently stalking the flats in the company of pelicans with their long pouched bills diving into the water for fish. Also on the refuges can be found the elusive mangrove



Key deer

brilliantly colored tropical fish. Anglers have opportunities to catch challenging sportfish such as bonefish, tarpon, and permit. Catch and release of these sportfish is a tradition and is encouraged.

National Key Deer Refuge

National Key Deer Refuge is located in the lower keys and consists of a patchwork of small and large tracts of dense mangrove, pine rockland, hardwood hammocks and freshwater wetlands.

The establishment of this refuge in 1957 was the result of conservation efforts begun in the 1940's to protect a herd of less than 50 Key deer. Today the population level is approximately 300. The best areas to see Key deer are on Big Pine and No Name Keys. For further information on the Key deer, refer to the free refuge brochure *Facts on the Key*

Deer. The refuge also protects other wildlife including the marsh rabbit, silver rice rat, a variety of unique West Indian plants, the eastern diamondback rattlesnake, and songbirds.

The refuge headquarters is located on Big Pine Key. Visitors are encouraged to stop at the office for information. The office and public restrooms are **accessible to the disabled**. The refuge has two self interpreted areas, the Blue Hole and the Watson Wildlife Trail.

cuckoo, the gray kingbird, black-whiskered vireo and white-crowned pigeon. A bird list is available at the refuge headquarters.

Visitors also may see the tiny Key deer, toothy alligators, and colorful butterflies. You may even catch a glimpse of leaping dolphin or a ray gliding along the bottom of the shallow flats. The waters teem with



American alligator

John & Karen Hollingsworth

The Blue Hole is a rock pit filled with saltwater with a layer of freshwater floating on top. It is teeming with fish, turtles, a few alligators and the occasional wading bird. Alligators can often be seen hugging the shoreline lazily sunning themselves.

Do not feed or molest the alligators—it is dangerous and illegal. Access for wheelchair users is provided via a pathway and a designated parking spot.

The Watson Wildlife Trail is a 2/3 mile loop through pine rockland forest and freshwater

typical habit for this area of the Keys. Access for wheelchair users and sight impaired visitors is moderately difficult.

Great White Heron and Key West National Wildlife Refuges

Key West and Great White Heron National Wildlife Refuges include numerous islands known locally as the Backcountry which are located off the main chain of keys. These islands are accessible only by boat. Refer to the map for their location. Both refuges are of great interest scenically and scientifically, exemplifying a tropical region unlike any other part of the United States. If you are planning a trip to the Backcountry, you should obtain a copy of the *Backcountry Regulations and Planning a Backcountry Trip* brochures.

Gazing westward from Key West at the southern most point in the continental U.S., one sees Key West National Wildlife Refuge. This refuge was the first national wildlife refuge to be established in the Florida Keys. The refuge encompasses over 375 square miles of open water and 2,019 acres of land.

The refuge protects habitat for a wide variety of birds including nesting and/or wintering populations of terns, frigate birds, white-crowned pigeons, ospreys, and great white herons. Also, the sandy beaches are nesting habitat for the endangered Atlantic green and loggerhead sea turtles. The refuge was established by Theodore Roosevelt in 1908 to curtail the slaughter of birds whose feathers were highly valued in the clothing industry. Wading birds were threatened with extinction before this refuge began providing a safe haven for them and other threatened plant and animals species.



great white heron wetlands which is

Great White Heron National Wildlife Refuge is a vast array of pristine, isolated keys, extending over 264 square miles of open water in the Gulf of Mexico. The habitat of these keys are almost without exception low mangrove and are not easily accessible. Established in 1938, the refuge now gives permanent protection to the largest of North America's wading birds—the great white heron. With long graceful plumes, this color variation of the great blue heron is found only in the Florida Keys and the southern part of the Florida mainland. Rare birds, such as the white-crowned pigeon, roseate spoonbill, and the only known colony of laughing gulls in the lower keys nest here as well. The refuge also helps in substantial measure to preserve the scenic character of the Florida Keys. The keys within the refuge total almost 7,500 acres.

Crocodile Lake National Wildlife Refuge

Crocodile Lake National Wildlife Refuge is located in the upper keys but is closed to public access to protect critical habitat for the endangered American crocodile, Key Largo wood rat, Key Largo cotton mouse and other wildlife. Undisturbed habitats are critical to the survival of these rare animals.

Natural History

“It is difficult to imagine how different the Keys were only 12,000 short years ago in the Pleistocene period. The sea level was much lower then, and the peninsula of what we



marsh rabbit

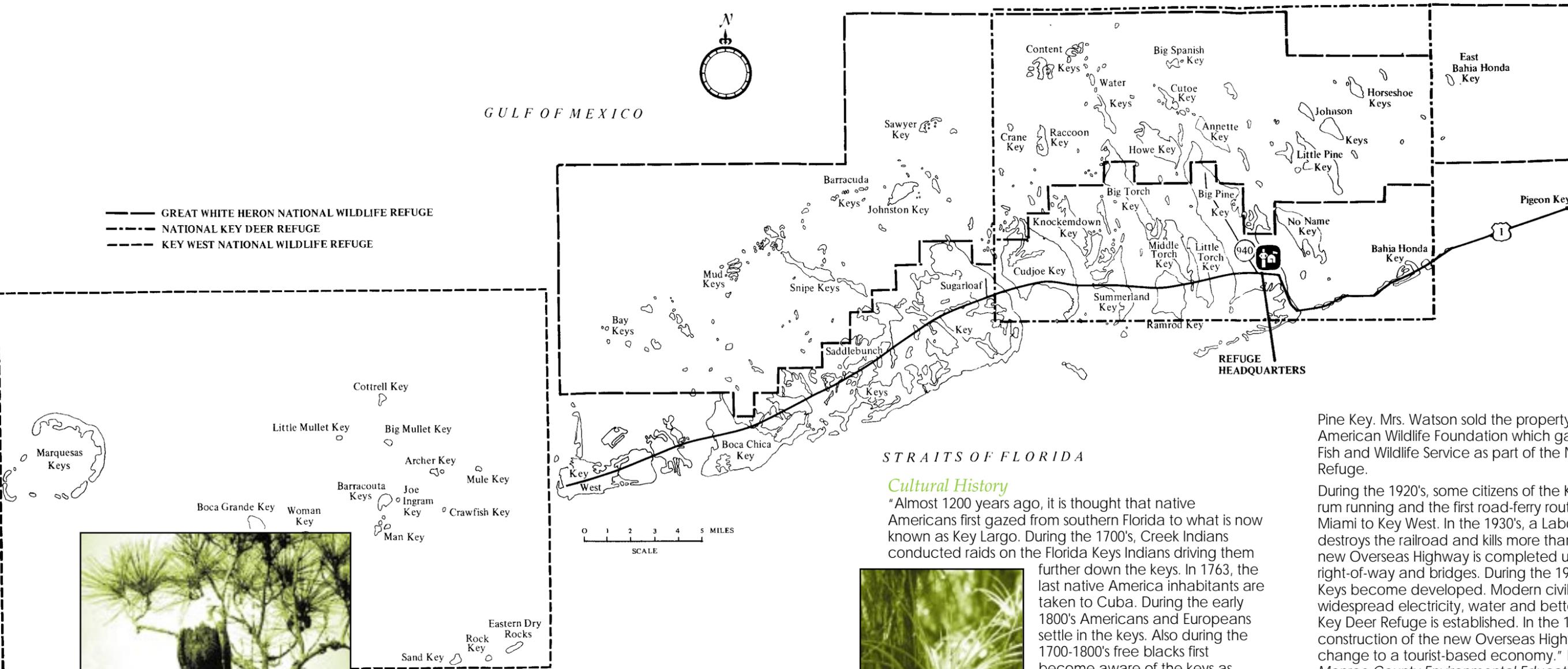
now call South Florida extended uninterrupted by water all the way to Key West. Since that time, sea levels have risen to their present heights and inundated much of Pleistocene Florida, creating our chain of islands. This was a very different world than the tropical Keys we presently know. The climate was milder and more temperate. Hurricanes may have been less common.



National Wildlife Refuges of the Florida Keys

Four of almost five hundred refuges in the United States.





bald eagle

Pleistocene Florida was home to a wide range of Ice Age animals. These included grazing animals such as the horse, camel, mammoth and mastodon. Higher on the food chain were carnivores such as the dire wolf, Florida lion, shortfaced bear, saber tooth cat,

jaguar and Florida panther. Bird life was diverse and included the California condor which today is found only in California. Scientists are certain of this diversity of species in South Florida during the Late Pleistocene period because of recent discoveries at the Cutler Fossil Site and at Monkey Jungle, both located south of Miami. More than 104 species have thus far been identified by paleontologists from Florida's Museum of Natural Science." Excerpt from the *Monroe County Environmental Education Story, Early History-Prehistoric Settlement of The Florida Keys* by Robert S. Carr.

STRAITS OF FLORIDA

Cultural History

"Almost 1200 years ago, it is thought that native Americans first gazed from southern Florida to what is now known as Key Largo. During the 1700's, Creek Indians conducted raids on the Florida Keys Indians driving them further down the keys. In 1763, the last native America inhabitants are taken to Cuba. During the early 1800's Americans and Europeans settle in the keys. Also during the 1700-1800's free blacks first become aware of the keys as crewmen aboard Bahamian sailing vessels engaged in wrecking, turtling and timber cutting. The U.S. is ceded Florida from Spain in 1821. By 1830, the Key West population included 83 free Negroes and 66 slaves.



In 1904 Henry Flagler decides to extend his railroad from Miami to Key West. In 1905, Robert Watson received a homestead deed for 107 acres in a hammock on Big

Pine Key. Mrs. Watson sold the property to the North American Wildlife Foundation which gave it to the U.S. Fish and Wildlife Service as part of the National Key Deer Refuge.

During the 1920's, some citizens of the Keys engaged in rum running and the first road-ferry route opened from Miami to Key West. In the 1930's, a Labor Day hurricane destroys the railroad and kills more than 400 people. A new Overseas Highway is completed using the railroad right-of-way and bridges. During the 1950's, much of the Keys become developed. Modern civilization arrives with widespread electricity, water and better roads. In 1957, Key Deer Refuge is established. In the 1980's, with the construction of the new Overseas Highway, the Keys change to a tourist-based economy." Excerpt from the *Monroe County Environmental Education Story*.

Enjoy your visit to the Florida Keys National Wildlife Refuges. Remember, wildlife can best be viewed when you approach them quietly. If you note a problem on the refuge, please let us know. Information that benefits wildlife, benefits you.

Regulations

To have an enjoyable visit and to protect yourself and the natural and cultural resources of the refuges, the following regulations apply. Special Use Permits may be required for some activities. When in doubt, contact the refuge manager.

-  Hiking on designated trails
-  No camping on refuge lands
-  No fires on refuge lands
-  No weapons unless cased and left in vehicles/boats

- No metal detectors and/or removing artifacts
- Personal watercraft, airboats, hovercraft, seaplanes and waterskiing in designated areas only
- Feeding/molesting wildlife is prohibited
- Storing equipment on refuge lands is prohibited

Refuge hours:

1/2 hour before sunrise—1/2 hour after sunset

For your safety, please read the following information: The Florida Keys are a paradise, but also have wild areas; the environment can be harsh and some of the wildlife can be harmful. During extended outdoor exposure, the use of a sunblock for your skin, a hat, insect repellent, and sunglasses may be necessary. Native vegetation includes poisonwood (a toxic plant similar to poison ivy). Learn to identify it. Alligators, which are present in freshwater pools such as the Blue Hole, can be dangerous. Keep control of children and keep pets on leashes. Also, though rarely seen, the local wildlife includes scorpions (which are usually found under objects such as logs) and rattlesnakes. Using reasonable caution will ensure a safe and enjoyable visit.

Organized groups visiting the refuges need to make reservations at the refuge headquarters at least two weeks prior to their visit. For additional information on these or other activities call or write:

Refuge Manager
Florida Keys National Wildlife Refuges
P.O. Box 430510
Big Pine Key, Florida 33043-0510
(305)872-2239

Or visit the refuge headquarters at National Key Deer Refuge, located in the shopping center off Key Deer Boulevard, north of the traffic light on U.S. 1.