

# Big Cypress

National Park Service  
U.S. Department of the Interior

Big Cypress  
National Preserve



Photo courtesy of Niki Butcher

## The American Alligator

*The American alligator (*Alligator mississippiensis*) is an amazing reptile that has remained unchanged since the time of the dinosaurs. The alligator is the symbol of wildlife and of untouched lands in the Southeastern United States. The early Spanish settlers to South Florida were amazed by the largest lizard they had ever seen, calling it “el legarto” meaning “the lizard.” The term has evolved to alligator, but the feeling is still the same.*

Crocodylians have survived for millions of years and their species has changed relatively little over time other than in overall length. As living fossils passed down from prehistoric times, these relics from the past are incredible for their tenacity. They are the planet’s largest living reptiles. Part of their success can be explained by their anatomy. Armed with sharp conical teeth, muscular tails and tough, scaly skin, they are extremely efficient predators.

### A Stealthy Hunter

Known for their strong bite, the American alligator—our local crocodylian, can exert massive pressure per bite, inflicting one of the most powerful bites in the animal kingdom. The jaws, however, are not the only weapon in the alligator’s arsenal. Like other nocturnal animals such as owls, the eyesight of an alligator is exceptional at night. Like cats, the alligator has a thin layer of special reflecting tissue behind each retina called a tapetum lucidum. This tissue acts like a mirror to concentrate all available light during the darkest of nights. It also causes the eyes to reflect when caught in a flashlight beam. A secondary set of eyelids,

known as the nictitating membrane, act as underwater goggles, allowing the alligator to see underwater. Alligators can stay underwater for much longer than humans. A typical dive might last 10 to 20 minutes. In a pinch an alligator can stay submerged for up to two hours if it is at rest. And, in very cold water, an alligator can last up to eight hours submerged.

### What’s for Dinner?

Alligators are carnivorous. Their very strong jaws can crack a turtle shell. They eat snails, invertebrates, fish, birds, frogs, and other mammals that come to the water’s edge such as raccoons, otters, white tail deer, and even small black bears. They use their sharp teeth to seize and hold their prey. Smaller prey is swallowed whole, and larger prey is ripped into smaller, more manageable pieces. If it is very large, alligators take a bite, and spin on the long axis of their bodies to tear off smaller more easily swallowed pieces. Despite being a top predator, the alligator may only feed 15-20 times per year with the majority of feeding taking place during the spring months.

### Alligator or Crocodile?

- Alligators have a broader snout than a crocodile.
- The bottom teeth of the alligator are mostly hidden when the mouth is closed. The crocodile’s teeth are always visible.
- Alligators tend to be grayish-black in color, but crocodiles have a grayish-green appearance.
- Crocodiles have a salt excreting gland in their mouths making them comfortable in saltwater. The alligator lacks these glands, and is therefore found more often in freshwater.
- In the U.S. the alligator is much more common and is usually larger than the crocodile.

## Habitat

Out of the 11 species of crocodylians found throughout the world, the American alligator inhabits the coldest regions. The geologic flatness of Florida provides the alligator with ample sunshine throughout the day, which is necessary for the cold-blooded creature to survive. The Florida ecosystem also provides many millions of gallons of freshwater daily, which allows for easy hunting. The clear water helps the alligator to see and selectively choose the best prey from a distance. The Big Cypress Swamp is especially attractive to the alligator because of its protected status. There are over 729,000 wild acres which offer the alligator ample habitat to live and hunt with limited human interaction. This ecosystem allows the alligator to live between 35 and 60 years old.

## New Family

Most alligators become sexually mature before reaching seven feet in length, although females can reach maturity at six feet. It may take 10–15 years for a female to reach this length and a male 8–12 years. Courtship begins in early April, and mating occurs in May or June. In late June or early July females deposit an average of 32 to 50 eggs into a mounded nest that she builds out of soil and vegetation. The eggs incubate and hatch after approximately 60–65 days, which typically occurs in late August or early September. Sex of the young is determined during the first three weeks of incubation. Warmer temperatures inside the nest will produce males, while eggs at cooler temperatures will become females. Unlike almost all other types of reptiles, the female alligator will raise her young for up to three years after birth. Eighty percent of all newborn alligators do not make it to adulthood as they are a preferred food source for many wading birds and other animals. The mother's presence provides some protection to the young until they are old enough to fend for themselves.

## Survival Story

The American alligator has been a vital part of the South Florida ecosystem for millions of years. During the late part of the 19th century and the early part of the 20th century,

the alligator was hunted to near extinction as a food source as well as for their hides which are used to make alligator leather. In 1962 a Florida law was passed to protect the alligator. Part of this law included the creation of alligator farms to provide meat and hides, helping to keep wild numbers high. Since the inception of the Florida law, the alligator population has increased to more than a million in Florida. While no longer a threatened species the alligator is still protected under Florida law due to its similarity to the endangered American crocodile.

## Living With Alligators

Every day in the state of Florida there are over 400 new residents moving in and calling Florida home. As the human population grows there is a greater chance of an alligator encounter. There are a few things to keep in mind as we live in closer proximity to these prehistoric reptiles.

Under no circumstances should you ever approach an alligator; they are very agile even on land. There have been reports of alligators running at speeds of over 15 mph, much faster than a human. Stay aware when you are around any body of water; there is a good chance that there is an alligator inhabiting the waters surrounding you. Always keep pets safe when in alligator territory; keep them on leashes and within your sight at all times. Never swim in areas alligators inhabit unless otherwise posted for swimming. The American alligator, as with all wild animals, deserves respect and should be given the same courtesy.

## Did you know?

The largest alligator measured in the United States was 19 feet 2 inches, from the state of Louisiana. In Florida the largest alligator ever measured was 17 feet 5 inches.

## References

- U.S. Fish and Wildlife-[www.fws.gov/species/species\\_accounts/bio\\_alli.html](http://www.fws.gov/species/species_accounts/bio_alli.html)
- Florida Fish and Wildlife Commission-[www.myfwc.com/gators/](http://www.myfwc.com/gators/)
- Florida Museum of Natural History: [www.flmnh.ufl.edu/cnhc/cbd.html](http://www.flmnh.ufl.edu/cnhc/cbd.html)

Photo courtesy of Jan Shirey, NPS/VIP



**A juvenile alligator takes in some sun on a branch.**