

# Barataria Preserve

Jean Lafitte National Historical Park and Preserve

## American Alligator

Natural History Series

Alligators are visitors from another time, out of place in our modern, urban lives. Yet they exist. Observing an alligator seems like watching a statue. They lay still for hours moving only to breath and blink, and then when spotting prey, suddenly lunge forward at speeds in excess of 30 miles per hour. Not at all normal behavior, unless you are North America's largest reptile, *Alligator mississippiensis*.

### Where can we find an alligator?

Of all the animals that can be seen throughout the Barataria Preserve, the species that attracts the most attention is the American alligator. That is hardly surprising, since the alligator sits at the top of the wetland food chain here in the Southeastern United States. In the past, alligators were hunted to the brink of extinction, thirty years of protection and management have allowed the species' numbers to rebound. Nowadays, the alligator is once again common, and you can see them sunning along the bank, or submerged, with only their eyes and nostrils above the water.

Alligators are found all over peninsular Florida and northeastward through the Okefenokee Swamp and up the south Atlantic coast to North Carolina. Westward their range stretches from Florida along the Gulf coast to Louisiana, then expands inland up the Mississippi Valley into Arkansas and into all of the lowlands of eastern Texas.

Alligators can live in lots of different habitats, but they prefer freshwater swamps, marshes and rivers. They are indiscriminate feeders and will eat any animal it can catch from a deer or hog to a beetle, depending on the size of the alligator, the season, and locality.

### What's the difference between an alligator and a crocodile?

The American alligator and the American crocodile look very similar. But there are several ways to distinguish the two. Alligators are covered with hard scales, reinforced by little plates of bone. The shape of the snout of the alligator is also broader and more round at the tip.

The teeth are another way to tell the difference. A crocodile's mouth and lower jaws are in line with each other. When a crocodile's mouth is closed, you can see both the upper and lower teeth. Not so of the alligator whose top jaw closes in front of the lower jaw. You cannot see its bottom teeth when its mouth is closed because of this "overbite." Unlike other reptiles, their teeth are embedded in sockets.

Alligators spend most of their time in the water. They can spend hours just floating in the water. They can swim at the surface or below. The alligator can sink to the bottom and stay down for a long time, depending on the weather. The eyes, ears, and nose are located on the top of the alligator's head. When it floats or swims at the surface, they are above the water and the alligator can see, hear, and smell. The alligator's sight and hearing are good.

Alligator's feet are partially webbed so they serve as paddles when swimming slowly. To swim fast the alligator uses its long and powerful tail. The alligator tucks its leg against its body and sweeps its tail back and forth. They can swim faster than a person can paddle a canoe and on land, they can move quickly for short distances.

## Alligator Nesting

Mating takes place in the spring. The male has a deep booming roar that can be heard as far away as a mile. The female answers with a bellow. Both sexes also have two pairs of scent glands that secrete during mating season. This is how they find each other. The female and male alligator race around in circles above the water. Mating takes place in the water for one or two days, then the male leaves in search of another mate. The female alligator begins building her nest about a month after she has mated. She chooses a dry spot on land, usually under a tree, to build the nest. The tree keeps the nest from direct sun, because the eggs cannot survive hot sun very long. The alligator carries plants in her mouth, and scrapes dirt and leaves with her body and tail. She packs the material down by walking back and forth over it. A finished nest is almost three feet high.

After the nest mound is built, the female scoops out a hole in the middle of the mound where she lays 29-68 eggs. It takes from late May throughout the month of June to lay that many eggs. After the eggs have been laid, the female covers the eggs with more leaves and plants. As the plant mixture decays, it produces heat in the nest and in this way the eggs are kept warm day and night. The female alligator will guard her nest by sitting next to it. Raccoons, opossums, and wild pigs are fond of alligator eggs. If an animal tries to break into the nest, the alligator will scare off the intruder by opening her mouth and hissing loudly.

The sex is determined by the temperature of the eggs. Above 90 degrees the sex will be male, below 86 degrees the sex will be female. In between these, the sex is determined by how close they are to either temperature. The natural birth ratio is five females to one male. When the eggs are ready to hatch, about two months later, the baby alligator breaks open the egg with a sharp pick on the end of the nose called an "egg tooth" which falls off shortly after it hatches. As they are hatching, the babies begin to grunt. When the grunts are heard by the mother, she removes the material covering the nest so the babies can get out. She then carries a few at a time in her mouth to the water.

We are still not sure if the babies stay with their mother after entering the water. Alligators measure about 9 inches at birth and they grow 12 inches a year in their first five or six years. They grow very slowly after that. It is unusual to find an alligator more than 12 feet in the wild today.

Alligators often allow you to view them at close range, however, you must respect their power and size. Please do not feed the alligators. Besides being extremely unhealthy for their diet, continued feeding will cause them to associate food with people, removing their natural tendency to avoid us.

Alligators lead solitary lives and tend to seek each other's company only during mating season (early spring). There is one exception to this rule: during an alligator's first two years of life they stay close to Mom for protection. This is important when you are only six inches long and are considered a tasty snack by raccoons, turtles, great blue herons, and larger alligators.

### SAFETY TIPS

Give alligators some room, at least 20 to 30 feet. If you want to get a close-up photo use a telephoto lens (not your arms) to get close. Don't become an alligator trainer! Never feed them. This trains them to attack humans.