

# Alligator



Figure 1: American alligators can often be seen in the swamps of the southeastern United States.

## Introduction

Alligators are large reptiles with powerful tails that are used in both swimming and defense. They belong to the order Crocodylia, which includes true crocodiles, gavials, and caimans. Alligators are, in fact, often confused with crocodiles, but they actually belong in their own family, Alligatoridae. Alligators have a distinctive U-shaped snout and an “overbite”—that is, all the teeth of the lower jaw fit within the teeth of the upper jaw and cannot be seen when the lipless mouth is closed. In contrast, crocodiles (of the family Crocodylidae) have a narrow, V-shaped snout, and the large fourth tooth on each side of the crocodile’s lower jaw projects outside the snout when the mouth is closed.

## Distribution and Habitat

Only two species of alligator exist, and they both live along the edges of permanent bodies of freshwater, such as lakes, swamps, and rivers. The larger and more common American alligator (*Alligator mississippiensis*) inhabits the southeastern United States. The smaller and little-known Chinese alligator (*A. sinensis*) is found in the Yangtze River valley of China.



Figure 2: American alligator (*Alligator mississippiensis*).

## Physical Characteristics



Figure 3: The skin of an alligator is thick and is made up of many bony plates.

Alligators are characterized by a lizardlike shape and a thick skin composed of close-set overlapping bony plates. The American alligator is black with yellow banding when young and is generally brownish when adult. These animals have been known to reach about 19 feet (5.8 meters), though 6 to 12 feet (1.8 to 3.7 meters) is the average. The Chinese alligator is similar to the American form but may attain a maximum length of about 7 feet (2.1 meters) while averaging about 5 feet (1.5 meters). Chinese alligators are blackish with faint yellowish markings.

Alligators are most at home in the water but are able to travel on land by sliding on their bellies, stepping along with their legs extended, or galloping

awkwardly. Large adults can stay underwater for over an hour without breathing. They swim primarily by snakelike movements of their bodies and by powerful strokes of their muscular, oarlike tails, which are also effective weapons.

When alligators float in the water, they leave only their nostrils, eyes, and ears above the surface. They possess unusual protective features for these organs. Their eyes can be covered with semitransparent membranes, and the ears and nostrils can be closed over by folds of skin.



*Figure 4: Even when an alligator is submerged (here in algae-covered water), its eyes, ears, and nostrils can be kept above the water.*

## ***Behavior***



*Figure 5: An American alligator (*Alligator mississippiensis*) basks in the sun in Everglades National Park in southern Florida.*



*Figure 6: An alligator eats a catfish in Everglades National Park.*

Alligators are predators and are nocturnal—that is, active mostly at night. During the day they often lie at the water's edge in large numbers, sunning themselves. At night they retreat to the water, where they live solitary lives and establish individual territories. A resident alligator roars loudly at the approach of an intruder.

Alligators are carnivores, or meat eaters. The young eat worms and insects, and, as they mature, they add frogs, tadpoles, and fish to their diets. Adults eat small mammals and birds, and sometimes the larger American alligators feed on deer or cattle.

Alligators capture water animals in their jaws. To catch land animals, they knock unsuspecting prey into the water with their long, powerful tails. Animals too large to be swallowed whole are either torn to pieces or are drowned and permitted to decay in burrows. These burrows, which are dug at or just above the waterline, can extend for many feet and eventually end in a den, or chamber. The alligators hibernate in these burrows during cold weather.

## Reproduction



Figure 7: An American alligator hatches from an egg. The eggs of alligators and other reptiles are protected by a shell.

Alligators are egg-laying animals. After a period of courtship and mating, which takes place in shallow water, the eggs are deposited in nests prepared by the mother. She then watches over them until they hatch, in two to three months. The number of eggs in a nest depends on the age and size of the mother but may range from 30 to 70. The eggs are incubated by sun-warmed rotting vegetation placed on them by the mother. The temperature of the eggs during this time determines the sex of the alligator.

When still in the shell but ready to hatch, the alligators utter squeaking sounds. The mother, alerted by these sounds, removes the debris covering the eggs, and the young emerge by puncturing the egg with a horny growth on the tip of the snout.

Newborn alligators are about 8 to 10 inches (20 to 25 centimeters) long and are vulnerable to many predators, including fish, birds, and larger alligators. They increase in length about one foot (30 centimeters) per year for their first three to four years. Growth then continues more slowly. Sexual maturity occurs at about 10 years of age. Alligators in the wild live to about 50 years old. There have been some reports of captive alligators living beyond 70 years.

## Conservation

The American alligator has been hunted for its hide, and its young have been sold in large numbers as pets. It disappeared from many areas where it was once abundant and was later given legal protection from hunters, until it made an excellent comeback and limited hunting seasons were again established. Because of habitat loss and overhunting, the Chinese alligator is considered endangered by the International Union for Conservation of Nature and Natural Resources (IUCN).

### Cite (MLF Format)

"Alligator." *Britannica School*, Encyclopædia Britannica, 5 Aug. 2019.  
[school.eb.com/levels/middle/article/alligator/272817](https://school.eb.com/levels/middle/article/alligator/272817). Accessed 26 Sep. 2019.

### Cite (APA Format)

Alligator. (2019). In *Encyclopædia Britannica*. Retrieved from  
<https://school.eb.com/levels/middle/article/alligator/272817>