



The American Alligator

Alligator mississippiensis

Kingdom: Anamalia
Phylum: Chordata
Class: Reptilia
Order: Crocrodilia
Family: Alligatoridae
Genus: *Alligator*
Species: *mississippiensis*



History, Status, Conservation Challenges

History

- Alligators were once hunted to near extinction during the 1800s for their hides and meat. In the 1970s and 1980s, stricter regulations were put in place to protect alligator populations.
 - o The Endangered Species Act of 1973: listed the American alligator as endangered, prohibiting hunting so that the species could rebound.
 - o The Lacey Act of 1981: put protections on the buying and selling of alligator parts.

Current Status

- Populations have rebounded to the point that the American alligator is no longer listed as endangered. Instead, they are classified as “Federally Threatened by similarity of appearance to the American crocodile”, allowing for a combination of protections for alligators and sustainable use based on state management goals.

Conservation Challenges

- Alligators are dependent on marshes and freshwater for survival. These same places are also popular among people living and vacationing in South Carolina, which often result in increased interactions between people and alligators.
- Alligators are very long lived and reproduce slowly. Because of this, it can take decades for populations to rebound from overexploitation.



The alligator’s tail will drag when it walks, often creating a trail as seen above.



- Because growth, maturity, and reproduction are temperature dependent, alligators at the northern part of their range in the US mature at a slower rate than those found further south.

Importance of Alligators

- Alligators act as a keystone species in the environments where they live, physically altering the environment and impacting other species that live there.
 - o Habitat engineers: Alligators create trails, holes, and nests that provide habitat for birds, reptiles, and other species. During dry periods, alligator holes are often the only water source for wildlife in an area.
 - o Commensal relationship with wading birds: Breeding birds will choose to nest over areas where alligators live. The alligators keep other predators away from the nests and they feed on the chicks that fall out the nests.

**DID
YOU
KNOW?**



Their crocodylian ancestors lived alongside dinosaurs and are related to birds. Alligators still look very similar to their ancestors, having evolved very little in the past 80 million years.



Alligators will dig holes in the ground using their snouts and feet. These holes retain water in dry seasons & may be the only water source in an area.



Alligator Life Stages

	Clutch <ul style="list-style-type: none">- 20-60 eggs- Hard-shelled, white eggs about 3 in. long- Laid in June/July
	Hatchlings <ul style="list-style-type: none">- Hatch in August/September- Size: on average, about 9 in. long- Low survival → easy prey for other animals- Females protect their hatchlings from perceived predators (including people and/or pets)
	Juveniles <ul style="list-style-type: none">- Have several yellow & white bands along the body- Size: Typically range from about 1 to 6 ft. long- Diet: Primarily insects, amphibians, small fish, invertebrates
	Adults <ul style="list-style-type: none">- Black with creamy white bellies- Reach sexual maturity around 6 ft. (12-14 yrs. old)- Females can reach up to 9 ft. (average about 8 ft.)- Males can grow to 13+ ft.- Diet: fish, snakes, wading birds, turtles, small mammals, smaller alligators



Distribution & Habitat

DID YOU KNOW?

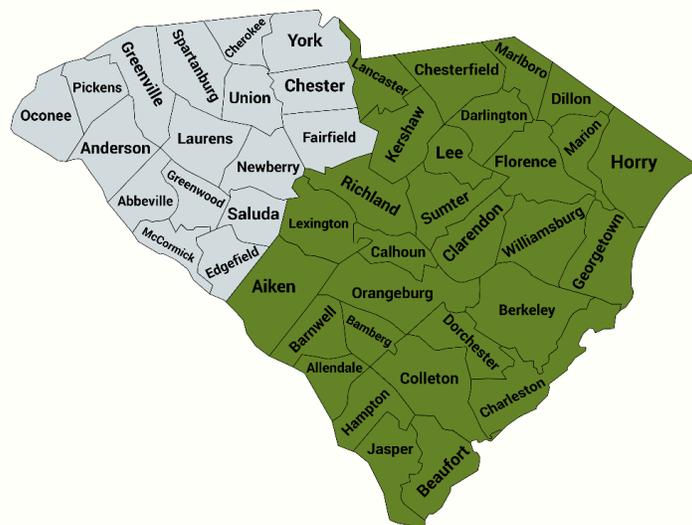


A group of alligators is called a congregation.

Alligators are common in many areas of the southeast and can be found from Texas to North Carolina. In South Carolina, below the fall line, alligators make extensive use of habitat offered by the coastal marshlands. They can be found in any freshwater environment, including rivers, lakes, streams, retention ponds, swampy areas, and occasionally venturing into brackish and salt water.



Home range of the American alligator in the United States.



Home range of the American alligator in South Carolina.

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<https://www.dnr.sc.gov/wildlife/herps/alligator.html>

Prey & Food

Alligators are ambush predators and attack from the water where they can use their camouflage to hide from prey. They are also opportunistic feeders and can't necessarily distinguish their normal prey from small house pets, or a splash in the water from a fish. Alligators are most active from dusk to dawn and feed on a variety of animals dependent on size.

Hatchlings & Juveniles	Adults
Invertebrates (insects, crawfish) Small fish Small amphibians (frogs, lizards)	Larger fish Turtles Wading birds Snakes Small mammals Smaller alligators



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Behavior/Activity

ALLIGATOR ACTIVITY



SPRING

Breeding (Apr/May)
adult males looking for females; bellowing

Adults
moving, feeding and basking frequently

Juveniles
moving into retention ponds

SUMMER

Nesting (Jun/Jul)
adult females building nests and laying eggs

Adults
moving, feeding and basking frequently

Juveniles
traveling among retention ponds

FALL

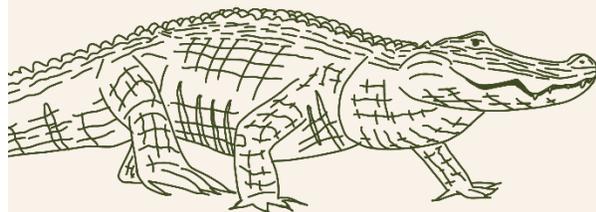
Hatchlings
hatch in August, chirp for females

Adults & Juveniles
feeding, putting on fat for the winter

Adult Females
guarding nests

WINTER

Brumation
all ages “hibernating;” occasionally basking and feeding



Typical Behaviors:

Basking: Laying in the sun to warm their bodies. They will sometimes do this with their mouths open.

Bellowing: Loud guttural/rumbling calls made by males to attract females during mating season.

Brumation: A form of hibernation for alligators during the winter months.

Freezing: Alligators may freeze in place when afraid (a typical response when surrounded by people on land). In these situations, it's best to give them space to move on.

Hissing: Used as a warning when someone gets too close, or they feel threatened. In some cases, if you spook an alligator that's out of water, it may quickly spin around and hiss, the same way you would turn and face a threat. If you find yourself in this situation on, give the alligator a wide berth and slowly back away.



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Sources

Bennett, S. H., & Buhlmann, K. A. (2015). American Alligator. *SC State Wildlife Action Plan, Supplemental Volume: Species of Conservation Concern*.

Rice, K., & Mazzotti, F. (2014, February). *American Alligator Ecology and Monitoring for the Comprehensive Everglades Restoration Plan*. USGS: science for a changing world.

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