

What's Not To Love About the Warm-Hearted Alligator

February is the month for romance and Valentine hearts, so who would have thought an alligator would make headlines as warm-hearted? This cold-blooded reptile is a topic for St. Valentine's Day? You bet! The American Alligator (*Alligator mississippiensis*) that we see in the Everglades, and occasionally in the canals of Marco Island, like all crocodylians, has a 4-chambered heart, a trait shared with mammals and birds. Most reptiles, lizards, snakes and turtles, have 3-chambered hearts, but the more complex heart structure in the alligator allows a lower metabolic state, enables them to dive for long periods and indicates they might have evolved from a warm-blooded ancestor more closely related to birds.

Warm-hearted alligators will not want chocolate or roses though; with their very strong jaws, they would prefer to crack a turtle shell, snap up frogs, snakes, fish, birds and mammals for their Valentine treat. The carnivorous reptile is an opportunistic feeder – they prey on any abundant or accessible species, using their sharp teeth to catch and hold prey. Most prey is small enough to swallow whole or shaken apart. If it is too large of prey, the gator will bite down and spin on the long axis of their body to tear off parts to swallow. This is known as a “death spin”. Not exactly the type of Valentine embrace you would want to receive.

Alligators live to be about 50 years of age, reaching sexual maturity when they are 6-7 feet in length. The smaller female could take 10-15 years and the male 8-12 years to reach maturity. Courtship begins in early April with eggs deposited in a large mounded nest made by the female of soil, vegetation and debris in late June. About two months later, in September or October, the approximate 35 eggs will hatch. Well, here is where the Valentine story ends: Of the 35 eggs that hatch, 15 hatchlings will emerge from the nest; only 6 of these will live to reach one year of age; of these five will reach 4 feet in length (subadults); and only 4 of these will reach sexual maturity, or 6 feet in length. If the population of alligators that the hatchlings emerge into has a larger amount of large animals, the survival rate is lower due to the high rate of cannibalism. These warm-hearted (!) reptiles just can't resist eating each other.

Alligators prefer fresh water in slow moving water systems like swamps, marshes and are very common to see along drainage ditches in South Florida. They can also be found in brackish to salt water for short periods of time, though without salt glands, their tolerance is low. Occasionally, there will be one or two spotted in the Marco River and canals of Marco Island. This is more common after heavy rains, warmer waters. You may even have been lucky enough to be on the Marco Island beach to have witnessed an approximate 6 foot alligator rolling in the surf. Disorientated, most likely brought around to the beach by tides and currents, the alligator was removed by a trapper.

Alligators are fascinating, historic creatures that can be enjoyed as part of the natural beauty of South Florida. They play an important role in the Everglades ecosystem. The Florida Fish and Wildlife Conservation Commission estimates there are approximately 1.25 million gators in Florida – (Note: This number does not include the University of Florida Gator fans!). A few precautions on our part can help us co-exist safely:

- Don't Feed Alligators
- Keep Your Distance
- Never Disturb Nests or Small Alligators
- Keep Pets and Children Away From Alligators
- Do Not Swim in Known Alligator Habitats
- Use the Nuisance Alligator Hotline: 1-866-FWC-GATOR (1-866-392-4286) if necessary.

Alligators are considered a nuisance by FWC when they are at least 4 feet in length and pose a threat to people, their pets or property. However, occasionally alligators less than 4 feet in length are problems. If an alligator is less than 4 feet in length approaches, does not retreat, or is in a location that is not natural, call the Nuisance Alligator Hotline. In 2009, there were more than 14,000 nuisance alligator complaints and close to 8,000 gators were removed by licensed nuisance alligator trappers.

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