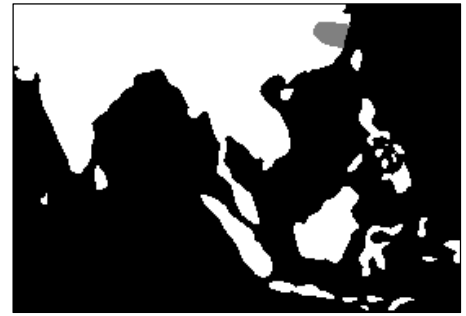


# CHINESE ALLIGATOR

*Alligator sinensis*

## Reptile - Crocodilians



**Location:** Chinese alligators were once spread throughout much of China. Today, they reside within the lower Yangtze River basin, located along the central Pacific coast of China. These reptiles occupy a subtropical, temperate region. They inhabit ponds, lakes, wetlands, marshes, swamps, and freshwater rivers and streams.

**Diet:** Chinese alligators are nocturnal, carnivorous predators. Adults prey mostly on fish, snails and clams, as well as small mammals and waterfowl. Their blunt teeth can crush shelled animals. There is some speculation that they may prey on turtles as well. Younger alligators eat insects and other small invertebrates.

**Life Cycle:** Chinese alligators are dormant from late fall into early spring, residing in elaborate burrows built into the banks of wetlands. The burrows are approximately 3 feet deep, a foot in diameter and almost 5 feet long. These burrows are used throughout the year and may house multiple alligators.

Once they emerge from their burrows in the spring, Chinese alligators spend time basking in the sun to raise their body temperature. Once their body temperature has normalized, they return to their nocturnal ways. They are aquatic animals, and can also use the water to thermoregulate by staying in the upper water columns heated by the sun or moving to shaded waters to cool off.

In the spring, the normally solitary Chinese alligator participates in bellowing choruses. Both males and females vocalize with a bellow or a roar to communicate their location. Once groups have gathered, mating rituals occur. Both males and females use body language to communicate. They may snap their jaws as a warning signal or slap the water with their lower jaws, which distributes an attractive scent produced by a musk gland under the lower jaw. The male may create sub-audible vibrations in the water to attract a mate. The female may rub up against the male to indicate she is ready to mate. Male alligators are polygynous; a male may fertilize multiple females in a mating season. Females are known to have a single mate each season. Breeding occurs once a year.

In mid-summer, the female makes a mound nest on land by using vegetation and mud. The nest is usually located near the mother's burrow. Utilizing her front and hind limbs, the female forms a mound almost 3 feet high, in which she deposits approximately 10-40 eggs in a depression on top. The eggs are covered with more vegetation. During the incubation process, sex is determined by the temperature of the egg. Females are produced at lower incubation temperatures, while males are produced at higher temperatures. The mother visits the nest frequently and guards her eggs from predators for the roughly 70-day incubation period. Males have no parental involvement.

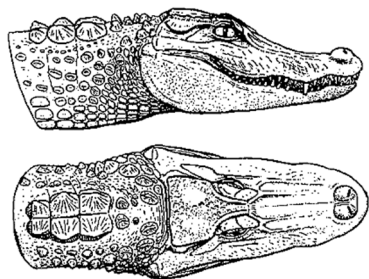
When the hatchlings begin to emerge from their eggs, the female responds to their vocalizations and removes debris covering the nest. The female may help the hatchlings break out of their egg shells by slowly rolling them around in her mouth and lightly cracking the shell by pressing the egg between the roof of the mouth and tongue. The neonates are helped to the water.

The offspring reside with the female through their first winter, but little else is known about the specific interactions between adult Chinese alligators and their young. Typically, rapid growth occurs for the first 5 years of life. Reproductive maturity in Chinese alligators is reached after about 5-7 years. Usually the Chinese alligator attains an adult length of around 5 feet and a mass of about 80 pounds. Exceptionally large males have reached 7 feet in length and 100 pounds in weight.

Juvenile alligators and eggs are most at risk due to their size. Despite the protection of the mother alligator, the young are at a high risk of predation by other larger animals, such as other adult alligators, large birds and fish. The average life span in the wild is 50 years; captives may live to be 70 years or so.

**Culture:** Humans use parts of Chinese alligators for alternative medicine to cure a number of ailments. The meat and organs of this species are thought to cure colds and prevent cancer. They were also used as a food source. Chinese alligators are not hunted for their skin because the abdominal skin, customarily used as a textile in other crocodilian species, is covered in osteoderms and therefore inadequate. Osteoderms are bony deposits forming scales, plates or other structures in the layers of the skin, and aid in protecting the animal.

**Remarks:** The Chinese alligator is 1 of 2 known living species of in the family Alligatoridae. The Chinese alligator is yellowish-gray in color with black spotting on the lower jaw. This species typically has 4 short claw-tipped limbs with 5 partially webbed toes on each limb. The long, thick tail provides a primary locomotive force in the water. Juveniles appear similar to adults with the exception that juveniles have distinctive yellow bands along their bodies. They have an average of 5 bands on their bodies and 8 on their tails. As adults mature, their coloring becomes less conspicuous.



While its appearance is similar to the American alligator, there are differences. The Chinese version is relatively small and has a more robust head than its American counterpart. The Chinese alligator has a tapered snout that turns up slightly at the end. Unlike the American alligator, the Chinese alligator has a bony plate in each of the upper eyelids and has abdominal osteoderms. Unlike crocodiles, the fourth mandibular teeth in the lower jaw lie in sockets in the upper jaw and are unexposed when the jaws are closed.

The Chinese alligator, unlike the abundant American alligator, is critically endangered. It was estimated in 1998 that the geographic range of Chinese alligators had decreased by over 90% in the previous 20 years. The main threat facing this species is habitat loss. Their traditional wetland habitat has been largely converted to rice paddies, and the remaining wild populations are confined to drainage ditches and farm ponds in a small Chinese province. Other factors include pollution, and human intolerance and predation.

**Sources:** Chinese Alligator (<http://www.stlzoo.org/animals/abouttheanimals/reptiles/alligatorsandcrocodiles/chinesealligator>)  
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([http://animaldiversity.ummz.umich.edu/accounts/Alligator\\_sinensis/](http://animaldiversity.ummz.umich.edu/accounts/Alligator_sinensis/))