



Common Name: ALLIGATOR SNAPPING TURTLE

Scientific Name: *Macrochelys temminckii* (Harlan)

Other Commonly Used Names: loggerhead turtle, alligator turtle

Previously Used Scientific Names: *Macrolemys temminckii*

Family: Chelydridae

Rarity Ranks: G3G4/S3

State Legal Status: Threatened

Federal Legal Status: none

Description: One of the largest freshwater turtle species in the world, the alligator snapping turtle may obtain weights over 100 kg (220 lbs) and carapace lengths up to 80 cm (31½ inches). The carapace is broad and relatively flat and bears three jagged ridges along its length, prominent in all but the oldest of individuals. In addition, the presence of 1-5 (usually 2-3 in Georgia individuals) supramarginal scutes is unique to this species. The carapace is dark-brown to reddish-brown and patternless. The similarly colored plastron is very reduced and cross-shaped. The enormous head, which has earned it the nickname "loggerhead," is triangular in shape and has an elongated snout with strongly hooked jaws. The skin is typically dark brown in color, but some individuals may be flesh-colored. Many small dermal projections are present on the chin and neck. The relatively long tail has three dorsal rows of tubercles.

Similar Species: Common snapping turtles (*Chelydra serpentina*) are similar in color and general appearance but have less conspicuous carapace ridges, a much smaller head with no elongation of the snout, lack supramarginal scutes, and have a jagged keel on the tail. Further, common snappers are frequently seen on land while alligator snappers almost never leave the water except to nest.

Habitat: Large streams and rivers (and associated impoundments) draining to the Gulf of Mexico are the habitat for this reptile. Microhabitat preferences include portions of streams with undercut banks, log jams, and deep holes.

Diet: Alligator snappers have a broad diet that includes crayfish, mollusks, fish, smaller turtles, water birds, carrion, and submerged or floating plant material such as acorns and wild grapes.

Life History: Mating takes place in late winter or early spring and is subsequently followed by an April through June nesting season. Nests are usually dug in riverbanks, where 10-61 round, leathery eggs are deposited. Females are capable of producing only one clutch each year and some may nest only every other year. Hatchlings, whose gender is determined by the incubation temperature of the eggs, emerge 2½ -3½ months following nesting. Sexual maturity is reached in approximately 11-13 years. Alligator snapping turtles, especially younger individuals, are known for the unusual feeding behavior of lying otherwise motionless on the stream bottom with their jaws agape, wiggling their specialized, worm-like tongue appendage. This action lures small, unsuspecting fish within range of their lightning-quick and extremely powerful jaws. Thought to be relatively sedentary by some, alligator snapping turtles have been documented moving considerable distances upstream.

Survey Recommendations: Large, heavy duty, hoop traps baited with fish and placed upstream of suitable stream microhabitats is the preferred survey technique for this species. Individuals can also be found by snorkeling and diving clear-water streams

Range: Alligator snapping turtles are found in Gulf of Mexico drainages from southeastern Georgia west to Texas, and north along the Mississippi River to southeastern Iowa. Though they occur in the Okefenokee Swamp, they are not known from the St. Mary's River, which drains from the swamp south and east to the Atlantic Ocean. A few individuals have been found in the Flint River drainage above the Fall Line, otherwise this species is primarily confined to the Coastal Plain.

Threats: Prior to receiving protection in the state, these giants were trapped heavily for commercial purposes, particularly to supply meat for the turtle soup industry. One individual trapper was responsible for harvesting between 4,000 and 5,000 adult alligator snapping turtles from the Flint River during the period 1971-1983. This individual also reported catching up to 450 kg (1,000 lbs) of this species per day in one of the Flint River's tributaries. Removing this many adult turtles, especially of a late maturing species like the alligator snapping turtle, can seriously impact a local population. This was substantiated after a 1988-1989 survey of the Flint River conducted by the aforementioned trapper yielded only 62 alligator snappers in 783 trap nights. Many turtles also die after becoming hooked or ensnared on abandoned bush hooks and trotlines. In Japan and some European countries, they are still sought out as pets as well as for food. Water pollution and stream dredging have also been implicated as threats to this species.

Georgia Conservation Status: Public waterways in Georgia known to contain populations of this species include, but are not limited to, the Chattahoochee, Flint, Ochlockonee, Withlacoochee, Alapaha, and Suwannee Rivers.

Conservation and Management Recommendations: The addition of this turtle to the state protected species list should help its recovery, in part. Trotlines and bush-hooks should be checked daily and removed when not in use to prevent snagging and ensnarement of nontargeted animals. The impact of trotline and bush-hook fishing on all aquatic turtles should be investigated.

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Author of Account: John B. Jensen

Date Compiled or Updated:

J. Jensen, Dec. 2007: original account

K. Owers, Sept. 2009: updated status and ranks, added picture