SUWANNEE ALLIGATOR SNAPPING TURTLE



Macrochelys suwanniensis

Order:TestudinesFamily:ChelydridaeFNAI Ranks:G2/S2U.S. Status:noneFL Status:Threatened

Description: This species, separated in 2014 from the widespread (western) alligator snapping turtle (*M. temminckii*), is similar to the latter in most respects. It reaches immense proportions: adult males as large as 30 in. (76 cm) and more than 200 lbs. (90 kg), with females somewhat smaller (to 24 in. = 60 cm). Like all snapping turtles (Chelydridae), it has a rough brown shell and very long tail, nearly as long as the body. Both currently recognized species of alligator snapping turtles are characterized by three sharp ridges or keels that run the length of the carapace, an exceptionally large head that is roughly triangular from above, a strongly hooked beak, laterally placed eyes, and an extra row of scales near the edge of the carapace between the outer marginals and inner costals. The caudal notch (posterior edge of carapace over the tail) is very wide and lunate (like a portion of a semicircle).

Similar Species: The two species of alligator snapping turtles are genetically distinguishable but also show minor morphological differences, the most obvious being the shape of the caudal notch (that of *M. temminckii* tending to be narrower and triangular or U-shaped); other minor skull and shell differences exist. Both are often confused with the common snapping turtle (*Chelydra serpentina*), which can also reach large size (to 18 in. = 46 cm). Although common snappers may have low keels on the carapace, especially when young, these are never as pronounced as those of alligator snappers. Also, the common snapping turtle has more dorsally situated eyes, a less strongly hooked beak, more rounded head in dorsal aspect, considerably longer neck, and no extra scale rows on the carapace between the marginals and costals. The long neck of *Chelydra* allows it to strike more rapidly and viciously than its larger cousins (*Macrochelys*), a character that is almost invariably demonstrated in the field.

Habitat: Strictly a turtle of rivers and their tributaries, though utilizing backwater swamps and oxbow lakes. Presumably released animals have been reported from inland lakes.

Seasonal Occurrence: Present year-round but rarely observed because of secretive, bottom-dwelling habits. Females nest from mid-April through much of May, with young presumably emerging in August and September.

Florida Distribution: This species is endemic to the Suwannee River system and occurs from the river's mouth on the Gulf of Mexico upstream into all major tributaries.

Range-wide Distribution: Restriction to the Suwannee River system makes this turtle nearly endemic to Florida. However, it is expected to occupy stretches of the Alapaha and Withlacoochee rivers that extend into southernmost Georgia.

Conservation Status: The species may have been reduced by commercial and private trapping in past decades, but apparently less than *M. temminckii*, though this threat has been ameliorated by recent state rules prohibiting take. Important portions of the floodplain of the Suwannee River system in Florida have been protected by state and federal land acquisition, but water quality in at least part of the system remains threatened by pollution. Global warming (which could reduce numbers of male offspring produced) and coincident sea level rise (inundating the lower river) are expected to impact the species' long-term viability negatively, particularly in Florida.

Protection and Management: Take or possession of this species (statutorily included with *M. temminckii*) from the wild, as well as purchase, sale, or possession of turtles, eggs, or parts, is prohibited by Florida Fish and Wildlife Conservation Commission rules, except as authorized by agency permit. Enforcement requires continued vigilance by Commission law enforcement personnel. Management should focus on publicly acquiring remaining unprotected floodplains and immediately adjacent uplands within the Suwannee River system, as well as protection of water quality and flow throughout the drainage. Remove illegal or unattended trotlines, setlines, bush hooks, and traps, and consider prohibiting such methods in inhabited waters.

References: Enge et al. 2014, Ewert et al. 2006, Moler 1996, Pritchard 2006, Thomas et al. 2014.



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Suwannee Alligator Snapping Turtle



caudal notch © Travis Thomas

juvenile © Kevin Enge