



Common Name: COMMON MAP TURTLE

Scientific Name: *Graptemys geographica* Le Sueur

Other Commonly Used Names: none

Previously Used Scientific Names: none

Family: Emydidae

Rarity Ranks: G5/S1

State Legal Status: Rare

Federal Legal Status: none

Description: Like other species of map turtles, the common map turtle exhibits strong sexual dimorphism in both total size and head size. While males reach a carapace length of only 15 cm (6 inches), females may attain a carapace length of up to 27 cm (10½ inches). In addition, females have a much broader head than do males. The carapace is olive-green, with fine, lighter green or yellow lines that form a reticulated pattern, similar in appearance to the contour lines of a topographic map. A low, vertebral keel is present, though not nearly as prominent as the keel found on other species of map turtles. Absent on adult females, low vertebral spines may be evident on the posterior portion of the carapace in both juveniles and adult males. The cream to yellow plastron is unmarked in adults, though the bridge and lower marginal scutes have longitudinal dark lines and circular dark markings, respectively. The skin is olive to dark-brown or black with many narrow yellow to light green stripes. Behind each eye is a small yet distinctive yellow spot, not connected to any of the stripes. Juveniles have dark markings along the seams of the plastron and a more intricate carapace pattern.

Similar Species: Common map turtles may be found in association with Alabama map turtles (*Graptemys pulchra*) within the Coosa River drainage, but the latter can be distinguished by their prominent spiny keel on the carapace (except old adult females) and the large yellow or light-green blotch present on the head between and behind the eyes.

Habitat: Large streams and rivers with an abundance of basking sites, either exposed rocks or fallen trees and logs, are the preferred habitat for this species. Within Georgia, common map turtles are currently known only from such streams of the Ridge and Valley and Cumberland Plateau provinces. Elsewhere within its range, the common map turtle often inhabits large reservoirs and even small brooks.

Diet: The diet consists of primarily mollusks (females, both snails and bivalves; males, primarily snails); also fishes, crayfish, earthworms, aquatic insects, and some plant material.

Life History: Common map turtles spend a considerable amount of time basking on logs and rocks, but they will drop into the water at the slightest disturbance. Breeding occurs in both spring and fall, and nesting lasts from late May to mid-July. Females dig flask-shaped nests in soft soil or sand exposed to full sunlight and typically deposit 9-17 eggs. Up to three clutches may be produced by a single female each year. Although hatchlings begin to emerge in August or September, some may over-winter in the nest cavity and emerge the following spring. As with many other species of turtles, environmental sex determination also occurs in common map turtle. Incubation temperatures of 25 °C (77 °F) produce a predominance of males, while 30 °C (86 °F) or higher incubation temperatures result in a predominance of females.

Survey Recommendations: Although basking traps may be effective, baited hoop traps, which are successful at catching many species of freshwater turtles, are not likely to capture any Georgia map turtle species unless long fyke nets are used to draw them in. The most effective survey technique is visual surveys for turtles basking on exposed rocks or logs during warm, sunny days.

Range: The common map turtle is widely distributed in eastern and central North America, ranging from southern Canada south to central Alabama and west to Oklahoma. In Georgia, this species is found in the extreme northwestern corner of the state and has been found only in the upper tributaries of the Coosa River drainage, primarily the Conasauga River, as well as Little Chickamauga Creek of the Tennessee River drainage. It is puzzling why this species has not been observed in the Georgia section of the Coosa River itself or in the river's upper stretches in Alabama. Though the majority of the streams and rivers in which it occurs drain into the Mississippi River, populations within the Coosa drainage and those of the northeastern states drain into Mobile Bay and the Atlantic Ocean, respectively.

Threats: A significant threat to common map turtles in Georgia is the decline or potential loss of their mollusk prey base as a result of stream degradation. Siltation, loss of stream-side shading, and various sorts of water pollution contribute to eutrophic conditions unfavorable to aquatic invertebrates. Illegal collection for the pet trade may also be threatening this species. The amount of egg and hatchling predation by raccoons is unknown but may be significant in areas of increased human activity.

Georgia Conservation Status: There are no known public lands that contain or are adjacent to streams inhabited by common map turtles; however, the streams in which they are found are considered public waterways.

Conservation and Management Recommendations: The low number of known populations in Georgia may be more an artifact of the species' peripheral range than an indication of rarity. However, common map turtles have not been seen in the Conasauga River for many years. More survey work is needed to determine whether this species occurs in other portions of the Coosa River drainage and in other northwestern Georgia streams of the Tennessee River drainage.

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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 pictures



Male