

Common Name: ALABAMA MAP TURTLE

Scientific Name: Graptemys pulchra Baur

Other Commonly Used Names: Alabama sawback

Previously Used Scientific Names: none

Family: Emydidae

Rarity Ranks: G4/S1

State Legal Status: Rare

Federal Legal Status: none

Description: The Alabama map turtle reaches a maximum carapace length of 27.3 cm (10¾ inches). The medially-keeled carapace has a series of laterally compressed spines which are especially pronounced posteriorly. A narrow dark stripe extends along the length of the keel, though it may be interrupted. The majority of the carapace is olive-colored with faint yellow reticulations. Relatively conspicuous concentric yellow markings are found on the dorsal surface of the marginal scutes. The pale yellow plastron has dark markings along the seams, and the ventral surface of the marginals is patterned with a set of concentric dark rings. The skin is dark

brown or olive and has many light-green or yellow stripes. A large yellow or light-green patch or "mask" is present on the head, between and behind the eyes. Adult females are much larger than males and have greatly enlarged heads.

Similar Species: Common map turtles (*Graptemys geographica*) may be found in association with Alabama map turtles 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: This species prefers large streams or rivers with swiftly flowing water and an abundance of basking sites in the form of fallen trees or snags.

Diet: The diet consists primarily of snails and bivalves; aquatic insects are also consumed by males and immature females.

Life History: Relatively little is known about the life history of this species as compared to other species of southeastern map turtles. Females, which reach sexual maturity at about 14 years of age, begin nesting in late April and may continue into August. An average of 4-6 eggs are laid in nests dug in the sandy soils of stream beaches and bars. Females may produce up to seven clutches in a single year. Like all map turtles, Alabama map turtles spend a great deal of time basking in full sunlight, but they will quickly dive into the water if approached.

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 Alabama map turtle is nearly endemic to its namesake state, known elsewhere from only a few sites in extreme northwestern Georgia. In Georgia, the species has been collected from only the Conasauga River in the Ridge and Valley province, where it apparently occurs with the common map turtle. Why it has not been observed in the Oostanaula or Coosa rivers of Georgia is a mystery.

Threats: In Georgia, Alabama map turtles are very localized and are therefore vulnerable to habitat alterations. Disturbances to the natural hydrology and water quality from impoundment, siltation, and pollution threaten the existence of native mollusks, and ultimately the Alabama map turtle. The removal of snags and fallen logs along waterways limits the availability of basking sites. Illegal take of this species for both human consumption and the pet trade may be a significant problem.

Georgia Conservation Status: There are no known public lands that contain or are adjacent to streams inhabited by Alabama map turtles; however, the Conasauga River is considered a public waterway.

Conservation and Management Recommendations: The relatively short stretch of the Conasauga River inhabited by this species should be protected from further degradation. Suitably sized forested buffer strips should remain intact along the river and its larger tributaries. The

removal of snags should be discouraged. Surveys should be conducted to determine if this turtle occurs in other portions of the Coosa River drainage in Georgia.

Selected References:

Cagle, F. R. 1952. The status of the turtles *Graptemys pulchra* Baur and *Graptemys barbouri* Carr and Marchand, with notes on their natural history. Copeia 1952: 223-234.

Lovich, J. E., and C. J. McCoy. 1992. Review of the *Graptemys pulchra* group (Reptilia: Testudines: Emydidae), with descriptions of two new species. Annals of the Carnegie Museum 61: 293-315.

Marion, K. R. 1986. Alabama map turtle. Pages 50-52 *in* Mount, R.H. ed. Vertebrate animals of Alabama in need of special attention. Alabama Agricultural Experiment Station, Auburn University, Auburn. 124pp.

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Date Compiled or Updated:

J. Jensen, Dec. 2007: original account

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



Juvenile