
**Common Name: BARBOUR'S MAP TURTLE**

**Scientific Name:** *Graptemys barbouri* Carr and Marchand

**Other Commonly Used Names:** Barbour's sawback

**Previously Used Scientific Names:** none

**Family:** Emydidae

**Rarity Ranks:** G2/S2

**State Legal Status:** Threatened

**Federal Legal Status:** none

**Description:** Barbour's map turtle is known for the extreme sexual dimorphism it displays. While adult males reach a maximum carapace length of only 13 cm (5⅛ inches), females may obtain a length of 33 cm (13 inches) and a body mass 80% greater than that of males. In addition, females have enormous heads relative to males. The carapace has a mid-dorsal keel with black-tipped spines posteriorly, these often obscured in older females. Yellow, C-shaped markings adorn the pleural and marginal scutes on the otherwise olive to olive-brown carapace. The

plastron is pale yellow with narrow, dark markings confined to the seams. Skin color is generally dark-green to black with light green or yellow markings and stripes. A large yellowish blotch is present behind each eye; a conspicuous isolated light bar, following the curvature of the jaw, is found on the chin. The female has powerful jaws used for crushing snails and bivalves.

**Similar Species:** No other species of *Graptemys* occurs with this species.

**Habitat:** Relatively wide and swiftly flowing streams with abundant snags and fallen trees are the preferred habitat for this species. Concentrations of Barbour's map turtles are often associated with areas of exposed limestone.

**Diet:** Primarily snails and bivalves; also aquatic insects, especially caddisfly larvae.

**Life History:** Females, which may not reach sexual maturity until 15 or more years of age, typically deposit 4-11 eggs a few centimeters beneath the surface on sandbars or riverbanks. Several clutches may be produced in a season. Nesting occurs from June through August, and eggs take approximately 60 days to hatch. Barbour's map turtle, like many other turtle species, has temperature-dependent sex determination. Eggs incubated at 25°C (77°F) produce all males, while those incubated at 30°C (86°F) produce only females. A considerable amount of time is spent basking in full sun on logs or rocks.

**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 presumed natural range of this species is confined to the Apalachicola drainage of Florida, Alabama, and Georgia. The Flint and Chattahoochee rivers and their larger tributaries are home to Barbour's map turtles occurring in Georgia; and, although a few known localities along the Flint River are within the Piedmont physiographic province, most of their range is confined to the Coastal Plain. The discovery of a Barbour's map turtle population within the Ochlockonee River in Florida offers a possibility of their existence in the Georgia portions of this drainage. It is not known if this population is of a natural or human introduced origin.

**Threats:** The streams and rivers used by Barbour's map turtles have been negatively altered by impoundment, dredging, and pollution. These impacts have affected the turtles by slowing the natural water flow, reducing the available basking sites, and nearly eliminating the native mollusk prey base. Illegal collection for both meat and the pet trade continues to exacerbate the problem. Unattended or infrequently visited trotlines and bush hooks often snag and kill non-targeted animals such as Barbour's map turtle and may contribute to localized declines or extirpations. The shooting of basking turtles is an additional threat. The restricted natural range of the species makes them especially vulnerable.

**Georgia Conservation Status:** Public waterways inhabited by this species include stretches of the Flint and Chattahoochee rivers, as well as Spring Creek. Lake Blackshear and Lake Walter F. George are also home to Barbour’s map turtle. Public lands where this turtle may be observed

include Georgia Veterans State Park, Sprewell Bluff State Park, Florence Marina State Park, Joe Kurz Wildlife Management Area, Big Lazer Wildlife Management Area, Ft. Benning Military Reservation, and Eufaula National Wildlife Refuge.

**Conservation and Management Recommendations:** Remaining stretches of streams and rivers harboring this species should be protected from chemical poisoning, dredging, and further impoundment. The practice of removing trees and snags for boat navigability should be kept to a minimum. Trotlines and bush-hooks should be checked daily and removed when not in use to prevent snagging and ensnarement of non-targeted animals. Although creating competition problems for native mollusks, the introduction of the Asian clam has enhanced the prey availability for Barbour's map turtle.

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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