

Common Name: SPOTTED TURTLE

Scientific Name: Clemmys guttata Schneider

Other Commonly Used Names: none

Previously Used Scientific Names: none

Family: Emydidae

Rarity Ranks: G5/S3

State Legal Status: Unusual

Federal Legal Status: none

Description: The spotted turtle is perhaps Georgia's most striking native reptile. This relatively small turtle reaching 12.5 cm (5 inches) maximum carapace length has a smooth, black carapace marked with 16 to more than 100 small, randomly arranged yellow spots. These spots may be faded or lost in older individuals. The yellow or yellowish-orange plastron has a large, dark blotch on each scute. An elongated black mark is present on the bridge. Dorsal skin color is dark gray or black, and the head, neck and limbs are also covered with scattered yellow spots, although some on the head are often orange. A broken yellow or orange band is also present near the tympanum. The underside of the limbs are usually orange, pink, or salmon-red. Male spotted turtles have tan chins and brown eyes while those features of females are yellow and orange,

respectively. Hatchlings have a less random arrangement of yellow spots, with typically one on each carapace scute, except the nuchal which has none.

Similar Species: No other Georgia species should be confused with a spotted turtle.

Habitat: Heavily vegetated, shallow wetlands with standing or slowly flowing water are the typical habitat for the spotted turtle. These include Carolina bays, bogs, swamps, marshes, wet meadows, and even tidally-influenced brackish streams. Wetlands with a soft, mucky substrate seem to be preferred. During certain times of the year, spotted turtles spend a considerable amount of time on land. Unfortunately, upland habitat requirements are not well understood.

Diet: A wide variety of plant and animal (live or carrion) material is consumed, including filamentous algae, aquatic grasses, aquatic insect larvae, crustaceans, snails, tadpoles, salamanders, and fishes.

Life History: The spotted turtle has a relatively short annual activity period, which may account for its secretive nature. Most activity is limited to late winter and early spring when temperatures are 15-32 °C (59-90 °F). During this short activity period, terrestrial movements are often made from one wetland to another. At other times of the year, most spotted turtles bury themselves in moist, organic soil or muck either to aestivate or hibernate. Hibernating congregations of spotted turtles have been documented. Courtship and mating occur in early spring, followed by nesting in early summer. Nest sites include grass tussocks, hummocks of sphagnum moss, and loamy sand, usually in well drained areas exposed to full sunlight. Females may produce one or two clutches per year, which contain 1-8 elliptical eggs each. Hatching occurs in late summer after an incubation period of 70-83 days, though hatchlings may wait until the following spring to emerge. The gender of the hatchlings is dependent on the incubation temperature. Eggs incubated at temperatures 22.5-27 °C (73-81 °F) produce a predominance of males, while those incubated at 30 °C (86 °F) produce all females. Eggs and adult spotted turtles are preyed upon by raccoons and striped skunks.

Survey Recommendations: Visual searches for basking turtles in early spring is probably the most reliable way of locating spotted turtles, however these turtles are very secretive and difficult to detect by any means. Most individuals in Georgia have been found while crossing roads. Spotted turtles are less inclined to enter baited hoop or funnel traps than many other Georgia turtles.

Range: Spotted turtles range from southern Maine southward along the Atlantic Coastal Plain and portions of the Piedmont to central Florida. Populations also occur in the midwestern states and even southern Canada. This species has been observed or collected from approximately 40 sites scattered throughout the upper and lower Coastal Plain of Georgia.

Threats: Because of the extremely secretive nature of the spotted turtle, virtually nothing is known about its population trend in Georgia. Primarily due to the increased interest in all nongame wildlife and the increased number of trained biologists, more sites for this species are being documented each year. However, without knowing past distribution and population densities in Georgia, it is impossible to determine its relative status today. Furthermore, without knowing what terrestrial habitat characteristics are needed, it may be premature to assume that

the widespread alteration of uplands within the Coastal Plain of Georgia has affected the spotted turtle. Nonetheless, the extensive loss and alteration of wetlands within its range has reduced the habitat available for this animal. Spotted turtles are highly valued in both the legal and illegal turtle trade.

Georgia Conservation Status: Public lands known to be inhabited by spotted turtles include Ft. Stewart Military Reservation, Moody Air Force Base, Okefenokee National Wildlife Refuge, Big Dukes Pond Natural Area, General Coffee State Park, and Reed Bingham State Park.

Conservation and Management Recommendations: Avoidance of further degradation to the non-alluvial wetlands of the Coastal Plain of Georgia is of great importance to the survival of this and many other sensitive reptile and amphibian species. Studies should be conducted to determine what upland habitat conditions and characteristics are required for spotted turtles in Georgia.

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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