

Spotted Turtle

Clemmys guttata

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DESCRIPTION

Taxonomy and Basic Description

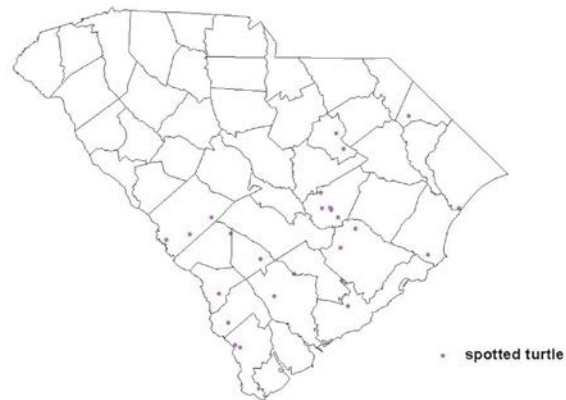
The spotted turtle is a small turtle, reaching lengths of only 9 to 11 cm (3.5 to 4.3 in.); maximum size is approximately 12 cm (4.7 inches) (Conant and Collins 1991). This species is often called the polka dot turtle as its black carapace is sprinkled with numerous orange-yellow dots. The head and neck of this species also has orange-yellow blotches. The carapacial spots of juveniles are sometimes reduced or absent (Martof et al. 1980).



Status

The spotted turtle was listed as a species of concern until 2001 when its status was changed to Species in Need of Management (threatened). The South Carolina Department of Natural Resources Heritage Trust Program currently ranks this species as secure, both in South Carolina and globally (S5/G5). This change in status was based on the growing popularity and price of

Element Occurrence Records for the Spotted Turtle in South Carolina



SPOTTED TURTLE

Generalized Range of the Spotted Turtle in South Carolina
Adapted from conant and Collins 1991

the spotted turtle in the pet trade and the fact that most of South Carolina's neighboring states already protect this species. This change in status made South Carolina particularly vulnerable to commercial spotted turtle collectors.

POPULATION SIZE AND DISTRIBUTION

The spotted turtle is not an abundant species in South Carolina, but it can be common in appropriate habitat throughout the Coastal Plain. Little data exists on the status of the spotted turtle in South Carolina. This species is known to occur on several tracts of public land in the state including the Savannah River Site, Francis Marion National Forest, Webb Wildlife Center, and the Carolina Sandhills National Wildlife Refuge (Garton and Sill 1977; Gibbons and Semlitsch 1991; Lovich 1990).

HABITAT AND NATURAL COMMUNITY REQUIREMENTS

The spotted turtle is a semi-aquatic species that inhabits a variety of wetland types including small ponds, small streams, swamps, flooded forests and other shallow bodies of water (Conant and Collins 1991; Martof et al. 1980; Ernst and Barbour 1989). Spotted turtles are most active during early spring when they can be observed occasionally basking on logs and other objects. Individuals, in particular males, will wander some distance from wetlands, especially during the spring. This species is difficult to find during the summer months and may undergo a period of summer dormancy (aestivation) in some areas (Litzgus and Mousseau, 2004).



CHALLENGES

The primary challenge facing the spotted turtle is collection for the pet trade; a skilled trapper may be able to eliminate or greatly reduce a local population. Habitat loss or alteration is another threat. Draining and filling isolated wetlands, a preferred habitat of the spotted turtles, has reduced the number of populations and continues to impact this species. Small shallow ponds, Carolina bays and other related wetlands have recently lost protection under the revised Clean Water Act. According to the revised act, isolated wetlands (those not contiguous with any permanently flowing water) may be drained and altered without any permits.

CONSERVATION ACCOMPLISHMENTS

The spotted turtle was listed as a species in need of management in 2001. As such, a set of regulations was adopted that now controls the take and possession of spotted turtles in South Carolina. Effective July 1, 2002, anyone possessing spotted turtles in South Carolina must have applied for a free permit to possess these animals. The limit for wild-caught spotted turtles for a permitted individual is nine turtles. There is no limit on the number of captive-born spotted turtles an individual may possess, but all births must be reported as part of the annual permit

renewal process. SCDNR will allow persons who possess more than nine wild-caught spotted turtles to apply for a one-time designation exemption for these animals; this application needed to be filed prior to September 30, 2002. The exemption was granted upon the condition that every individual spotted turtle in the applicant's possession was made available for a photograph to document the animal. These photographs are kept on file, in digital format, by SCDNR and may be used in the future to identify these specimens. Applicants for this exemption were not allowed to collect additional wild-caught adult spotted turtles and they were not permitted to replace exempt animals with wild caught animals if the animals were lost due to mortality unless the total number of spotted turtles in their possession fell below nine. SCDNR reserves the right to verify spotted turtle mortality by requiring the carcass or shell of the dead spotted turtle to match against the file photo.

CONSERVATION RECOMMENDATIONS

- Consider spotted turtle habitat needs when managing Carolina bays and floodplain ecosystems.
- Work with SRS-DOE, SR-USFS, and SREL to protect spotted turtle habitat on the Crackerneck Wildlife Management Area on SRS.
- Include the importance of protecting spotted turtles and their habitat in general education materials.
- Enforce regulations that limit spotted turtle personal possessions to levels that allow possession but do not adversely affect populations.
- Prohibit commercial trade of the spotted turtle.
- Work with SRS to design a habitat management plan for spotted turtles on their property at Crackerneck WMA.
- Identify locations of viable spotted turtle populations by conducting early spring surveys when basking turtles are easily seen.
- Continue research on life history of this species, focusing on recruitment, mortality and habitat requirements.
- Monitor known spotted turtle sites to determine poaching for the pet trade.

MEASURES OF SUCCESS

As results from current research and surveys or future efforts are identified and analyzed, projects will be initiated to address specific needs that arise from these results. Stable or growing populations of this species on protected lands will be considered a measure of success.

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