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Conserving South Carolina's At-Risk Species:

Species facing threats to their survival

Spotted turtle

(*Clemmys guttata*)



Spotted turtle

Description

Spotted turtles are small aquatic turtles (3 ½ - 4 ½ inches or 9-11.5 cm) that are black in color with yellow spots. Hatchlings usually have one spot per large scute on the shell but adult spotting patterns are variable. The shell is flattened and there is orange or yellow coloration on the head, neck, and forelegs. Males have longer tails than females.

Range

This species can be found throughout the east coast of the United States and the Great Lakes region. In South Carolina, spotted turtles are found throughout the Coastal Plain, including several barrier islands, but are found in spotty populations and are generally fairly uncommon. Spotted turtles have been reported from the following counties in South Carolina: Aiken, Allendale, Bamberg, Barnwell, Berkeley, Charleston, Chesterfield, Clarendon, Colleton, Dillon, Dorchester, Florence, Georgetown, Hampton, Horry, Jasper, Lee, Lexington, and Marion.

Habitat

Favored habitats are shallow aquatic habitats, often with abundant vegetation, including ditches, Carolina Bays, bogs, and

cypress swamps. 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 in some areas.

Status

Spotted turtles are uncommon but are not federally protected in our state. However, their specific habitat requirements and slow reproductive rates make this species a conservation concern. 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 U.S. Fish and Wildlife Service was petitioned to list the species in July 2012 and published a substantial 90-day finding in September 2015 indicating listing may be warranted.

Threats

The primary threat to the spotted turtle in South Carolina is collection, both legal and illegal. Many important spotted turtle localities are well known and poached frequently. Skilled trapping can quickly wipe out local populations and opportunistic collection (often of females crossing roads) places an additional burden on the species. While collection of wild spotted turtles is regulated by permit in South Carolina, significant illegal collection still occurs. It is unknown if the current limit of nine wild-caught spotted turtles per permitted individual is a sustainable number. Additionally, the South Carolina spotted turtle permit may also provide a means for turtles collected in other portions of the range to become "legal" once in South Carolina. Habitat loss or alteration is another threat. Isolated freshwater wetlands, important habitat for spotted turtles, do not receive any protection.

Additionally, contiguous habitat has been fragmented by development and roads isolating some populations, limiting connectivity, and presenting increased chances of mortality. Climate change also has the potential to impact the species. Changes in rainfall patterns may affect their favored wetland habitats and warming temperatures have the potential to skew sex ratios.

Management/Protection Needs

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. Continue to inventory and monitor known populations. Consider spotted turtle habitat needs when managing Carolina bays and floodplain ecosystems and protect via land acquisition or conservation easement, if/when appropriate. Continue research on life history of this species, focusing on recruitment, mortality and habitat requirements. Include the importance of protecting spotted turtles and their habitat in general education materials.

References

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