

Miscellaneous Amphibians and Reptiles Guild

Black Swamp Snake *Seminatrix pygaea*

Island Glass Lizard *Ophisaurus compressus*

Striped Mud Turtle *Kinosternon baurii*

Gulf Coast Mud Salamander *Pseudotriton montanus flavissimus*

Four-Toed Salamander *Hemidactylium scutatum*

Pickerel Frog *Rana palustris*

Bird-voiced Treefrog *Hyla avivoca*

Eastern Box Turtle *Terrapene carolina*

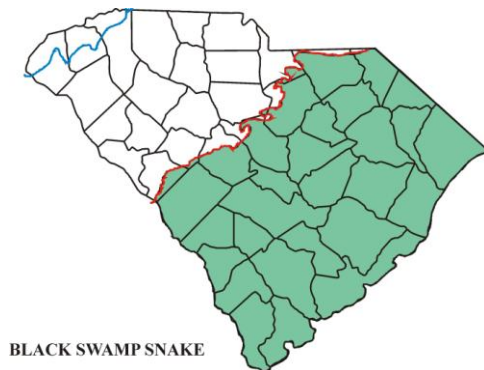
Contributor (2005): Stephen H. Bennett (SCDNR)

Reviewed and Edited (2012): Stephen H. Bennett (SCDNR) and Will Dillman (SCDNR)

The following amphibian and reptile species are currently listed as species of concern in South Carolina by the South Carolina Heritage Trust program. These species do not fit logically into any guild or group and are not the highest priority for conservation action in our state simply because we do not know enough about them to pass judgment. Therefore, they are included in this Plan because of data deficiencies and the potential risk of overlooking a species in need. For most of these species, the primary conservation objective will be to determine their status through survey in South Carolina. All photos by J.D. Willson except mud turtle and box turtle by Steve Bennett.

Black Swamp Snake *Seminatrix pygaea*

The black swamp snake is a semi-aquatic species that inhabits a variety of wetland types. This species is typically associated with wetlands that have abundant aquatic vegetation, including water lilies and other emergent species. The black swamp snake was added to the list of Species of Concern during the first South Carolina Endangered Species Symposium (1978) due to the perception that it was an uncommon species. The current rank is unknown in South Carolina (S?) and stable globally (G5). The black swamp snake is a poor overland disperser and loses body water rapidly (Winne et al. 2001); therefore, this species may be less able to re-colonize habitats once extirpated (Seigel 1995). Recent survey techniques developed to sample semi-aquatic reptiles have revealed that this species is more widespread and more common than previously believed. The species has been documented on the Savannah River Site, Donnelly Wildlife Management Area, the Tom Yawkey Wildlife Center, and the Charleston Naval Weapons Station in recent years (SCDNR surveys). The



primary conservation objective for this species is to document its distribution in our state and collect data on its life history and demography.

Island Glass Lizard *Ophisaurus compressus*

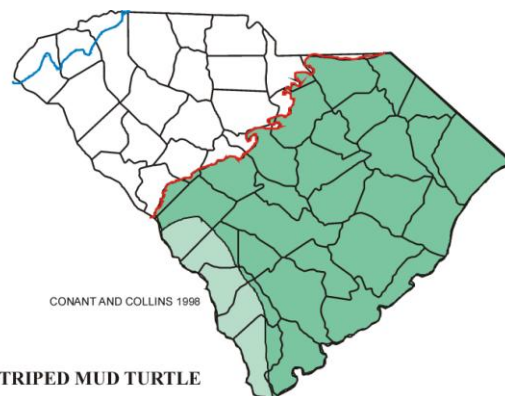


The island glass lizard is virtually unknown in South Carolina, with only 2 records of occurrence for this state. This species was listed as a species of concern at the 1978 Endangered Species Symposium based on our lack of knowledge. Very little information or data exists for any glass lizard species in our state; this whole group deserves attention regarding taxonomy, distribution, and demography.



The current rank for the island glass lizard in South Carolina is S1/S2 and globally is G3/G4. The primary conservation objective for the island glass lizard is to better document its occurrence in South Carolina and determine its distribution in this state.

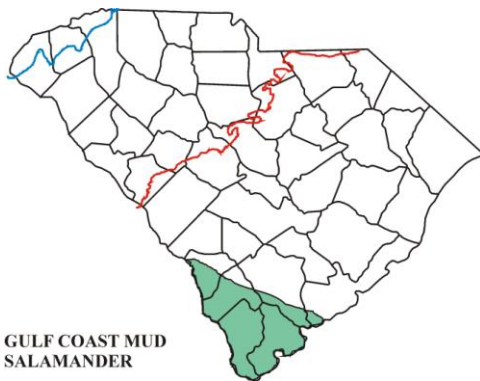
Striped Mud Turtle *Kinosternon baurii*



The striped mud turtle was first documented to occur in South Carolina in the late 1960s. Since that time, additional surveys have confirmed the occurrence of the species in this state and revealed that it is more widespread than previously believed. It is currently ranked unknown in South Carolina (S?) and secure globally (G5). In the heart of its range (Florida and Georgia), the

striped mud turtle has 3 stripes on its carapace and stripes on the side of its head. In South Carolina many individuals of this species lack the carapacial and head stripes, making it easy to confuse them with the more common Eastern mud turtle. Based on museum searches (Lamb and Lovich 1990), this species occurs throughout the Coastal Plain of South Carolina and may be relatively common. However, it seems to be found around and in the floodplain swamps of rivers, and populations do not appear to occur in isolated wetlands. The primary conservation objective for this species is to determine its distribution in South Carolina and collect data on its life history and demography.

Gulf Coast Mud Salamander *Pseudotriton montanus flavissimus*

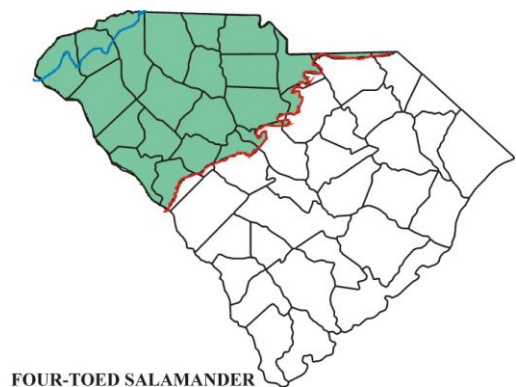


salamanders are difficult to survey. They are fossorial and occur in wetland areas such as cypress-tupelo ponds, floodplain forests, and seepage slopes. The primary conservation objective for this subspecies is to document its distribution in South Carolina and resolve any outstanding taxonomic issues.

The Gulf coast mud salamander was added to the list of species of concern in South Carolina at the 1978 Endangered Species Symposium based on its problematic taxonomic status. The current rank for this species in South Carolina is S3/S4 and is secure globally (G5). This is one of two subspecies of the more widely distributed mud salamander that occur in South Carolina; this subspecies is peripheral in this state. The mud



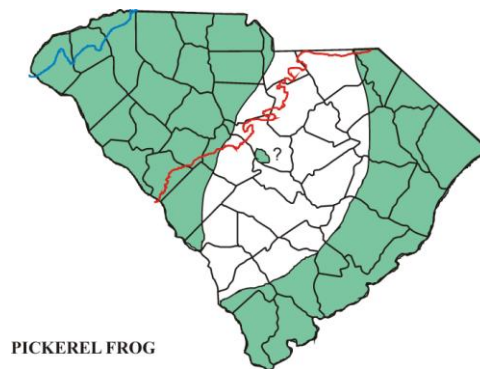
Four-Toed Salamander *Hemidactylium scutatum*



The four-toed salamander was added to the list of species of concern in South Carolina at the 1978 Endangered Species Symposium based on its apparent rarity in the State. It is not ranked in South Carolina but has a global rank of G5 (NatureServe 2013). The four-toed salamander occurs around the edges of wetlands and seepage slopes that have abundant *Sphagnum*. Currently, only one recently verified occurrence exists for this species in South Carolina; the single four-toed salamander was found at Kings Mountain State Park in York County. Several historical sightings remain unverified or the habitat where they occurred has been destroyed by development. The primary conservation objectives for this species are to document its distribution and determine its abundance as well as life history traits in South Carolina.

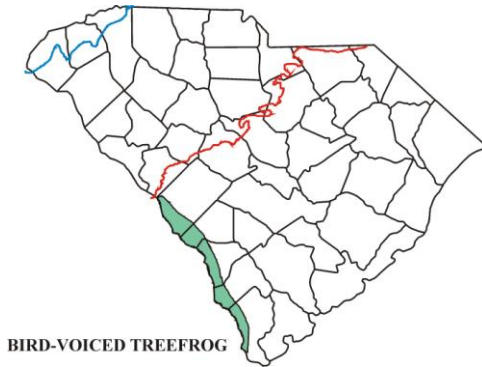
Pickerel Frog *Rana palustris*

The pickerel frog was added to the list of species of concern in South Carolina at the 1978 Endangered Species Symposium based on its status as uncommon to rare in South Carolina. The species has a current rank of unknown in South Carolina (S?) and is secure globally (G5). This species may be more widespread and common than once believed. Recent reports of this species have come from the Savannah River Site in Aiken and Barnwell Counties (Gibbons and Semlitsch 1991), the Webb Wildlife Center in Hampton County, the Congaree National Monument in Richland County, and the Old Santee Canal State Park in Berkeley County. The primary conservation objectives for this species are to document its distribution in our state and collect data on its life history and demography.



Bird-voiced Treefrog *Hyla avivoca*

The bird-voiced treefrog was added to the list of species of concern in South Carolina at the 1978 Endangered Species Symposium based on its status as a peripheral species. Its current ranking is secure both in South Carolina (S5) and globally (G5). In South Carolina, the bird-voiced treefrog is only found along the southern portion of the Savannah River floodplain swamp (Gibbons and Semlitsch 1991). While the species has a very limited distribution in our state, it is common to abundant within its range. The primary conservation objectives for this species are to monitor the populations in South Carolina and collect data on the life history and demography of the species.

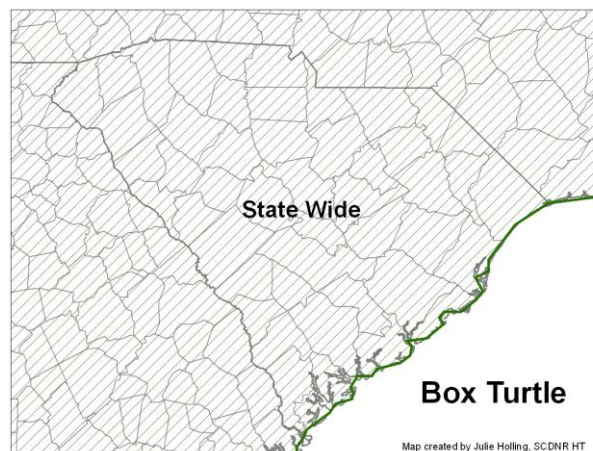


Eastern Box Turtle *Terrapene carolina carolina*



This species is relatively common in SC but has become a target for the “wild-caught” pet trade. It was included in the list of turtles protected under the “turtle law” due to the concerns of researchers who have worked with the species for years. It is common for wild caught box turtles from SC to show up with some frequency at reptile shows and on reptile websites. This species occurs in 30 states and is listed as Endangered in one state, Maine. It also has some type of regulatory protection in 13 states, including SC (based on the turtle law). In

addition, 18 states have identified it as a Species in Need of Conservation; that does not include SC. Also, 16 states allow take/harvest for personal use, and only one state, SC, allows take for commercial purposes, though the number which can be removed from the State is limited under the turtle law. Box turtles are a long-lived species who’s life history may not allow population recovery if large numbers of reproductively active members are removed from the population (Dodd et. al. 2006). The Eastern box turtle is being added to the list with a moderate priority, and the sale of wild-caught box turtles and habitat fragmentation are the primary conservation issues.



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