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Conserving South Carolina's At-Risk Species:

Species facing threats to their survival

Chamberlain's dwarf salamander (*Eurycea chamberlainii*)



Chamberlain's dwarf salamander/Steve Bennett—SCDNR

Description

Chamberlain's dwarf salamander is a newly described species that was recognized as distinct from the more common, dwarf salamander (*Eurycea quadridigittata*). Chamberlain's dwarf salamander is lighter in color than the more common form, having a yellow underside that lacks any markings. Chamberlain's dwarf salamander is a very small salamander averaging approximately 2.5 cm (0.9 in.) in total length.

Range

Chamberlain's dwarf Salamander has a small or moderate range (not fully documented) in the southeastern United States; apparently not particularly rare nor abundant. Further taxonomic study is needed to clarify the range of this species. Chamberlain's dwarf salamander has been detected in the Piedmont region and central coastal plain of North Carolina, the Piedmont region and upper coastal plain of South Carolina, and also from Alabama, Georgia, and Florida.

In South Carolina, element occurrence records exist for the species from Aiken, Allendale, Barnwell, Calhoun, Colleton, Lee, Oconee, Pickens, Richland and Sumter counties.

Habitat

Chamberlain's dwarf salamander is typically found in wet areas, particularly seepages near small streams, and other wetland types. This species is most typically found under leaf litter and small debris in these habitats. The species can be difficult to survey for because unlike other species of dwarf salamanders that occur in a number of habitat types, Chamberlain's dwarf salamander was most commonly observed with leaf or pine straw litter along the edge of seep streams, or small debris piles in the terrestrial uplands adjacent to seepage wetlands. During recent survey work conducted by the South Carolina Department of Natural Resources (SCDNR), the species was occasionally observed at depths of 15 cm. or greater, thus leading researchers to believe that the salamander may be under-represented in collections due to low detection probability.



Chamberlain's Dwarf Salamander (*Eurycea chamberlainii*) occurrence records

Status

Little data exists on the population status of the Chamberlain's dwarf salamander in South Carolina and thus has no official State status. The U.S. Fish and Wildlife Service (Service) was petitioned in April 2010 to list the species and a 90-day finding by the Service found that listing may be warranted. Currently the species is undergoing a status review.

Threats

Little is known about the specific life history of this species, but like most other salamander species they are threatened by habitat loss and alteration, in particular, forestry practices that alter the canopy structure of their habitat. Chamberlain's dwarf salamander deposits eggs in aquatic habitats such as springs, seeps, and small streams, and has aquatic larvae which inhabit these wetlands. Any alteration of these habitats could affect the species.

Management/Protection Needs

Actions needed to manage and protect existing populations of the Chamberlain's dwarf salamander consist of: maintaining current regulations/statutes protecting wetlands and streams; protection of known populations; conducting further taxonomic study; supporting survey efforts; education.

References

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NatureServe. 2015. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. Available <http://explorer.natureserve.org>.

South Carolina Department of Natural Resources—State Wildlife Action Plan: 2010-2015.

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