Florida Green Watersnake

Nerodia floridana

Contributors (2005): Stephen H. Bennett and Kurt A. Buhlmann [SCDNR]
Reviewed and Edited (2012): Stephen H. Bennett (SCDNR) and Kurt A. Buhlmann (SREL)

DESCRIPTION

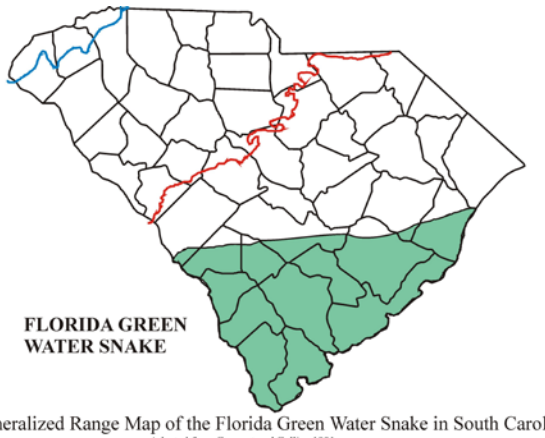
Taxonomy and basic description

The Florida green water snake is a large to moderately-sized snake that reaches lengths of between 76 to 140 cm (30-55 in.) with a maximum length of approximately 188 cm. (Conant and Collins 1991). It was considered a subspecies of the green water snake, *Nerodia cyclopion*, until recently when it was determined to be a separate species.
The Florida green is uniformly green or brown, with crossbars present occasionally (Conant and Collins 1991; Martof et al. 1980). The Florida green water snake has a plain white or cream-colored belly.

Status

The Florida green water snake is listed as a Species of Concern in South Carolina and has a rank of S2/G5 (NatureServe 2013).

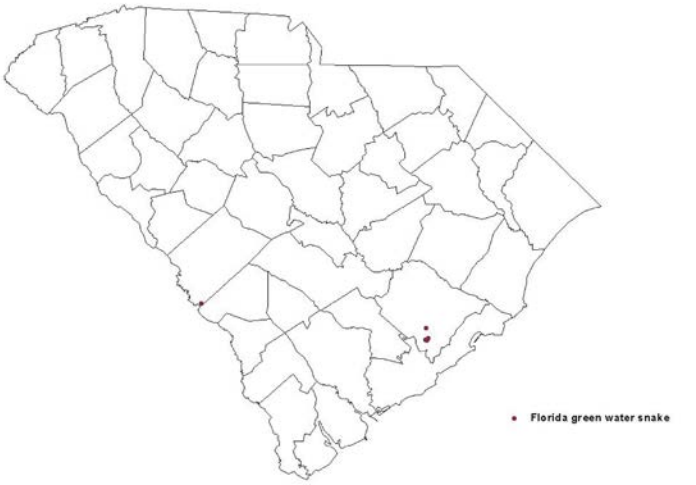
POPULATION SIZE AND DISTRIBUTION



Generalized Range Map of the Florida Green Water Snake in South Carolina
Adapted from Conanat and Collins 1991

Little data exists concerning the population biology of the Florida green water snake in South Carolina. This species is known from the Savannah River Site in Aiken, as well as Barnwell and from the Cooper River area of Charleston and Berkeley Counties. There are also reports of this species from old rice fields in Georgetown County. There are no records from the counties between these two South Carolina population areas. The South Carolina populations of the Florida green water snake are disjunct from the primary range of this species, which is extreme south Georgia and Florida, by over 300 kilometers (200 miles).

Element Occurrence Records for the Florida Green Water Snake in South Carolina

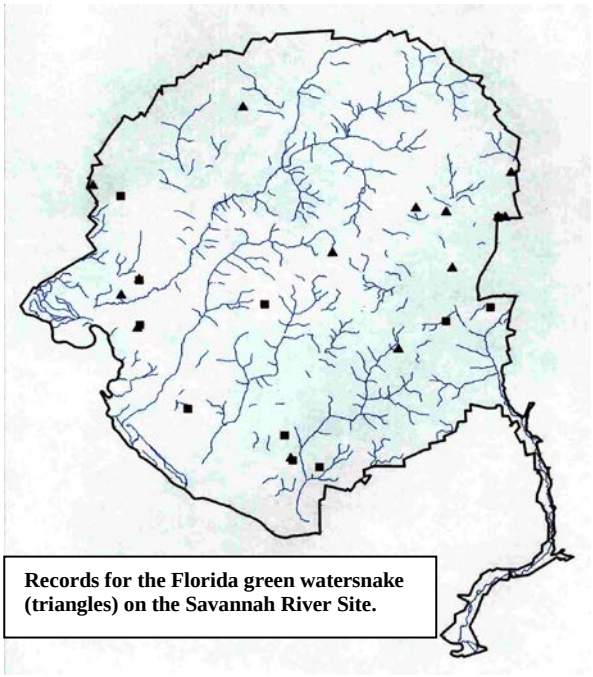


HABITAT AND NATURAL COMMUNITY REQUIREMENTS

In South Carolina the Florida green water snake has been reported from such wetland types as Carolina bays, lakes, old rice fields, and reserves. Sites where the Florida green water snake has been typically reported have open water with little or no canopy of trees and an abundance of "pad plants" such as water lily, cow lily, lotus, and water shield.

CHALLENGES

This species may be threatened by wetland alterations such as draining and filling. The green watersnake is a poor overland disperser, and if extirpated from wetlands due to ditching, draining, or drought, then populations may not easily become re-established (Seigel et al.1995).



Records for the Florida green watersnake (triangles) on the Savannah River Site.

CONSERVATION ACCOMPLISHMENTS

Simply identifying populations of the Florida green water snake is an accomplishment at this stage. The species is known to occur on the Savannah River Site where it is identified as an uncommon to rare species. This species is also known from the Charleston Naval Weapons Station. Both areas are currently under management, but no specific actions have been implemented for green watersnakes. Awareness of this species among SRS land managers has increased and SRS is restoring Carolina bay wetlands. If we encourage SRS to manage for the broad hydrological array of Carolina bay wetlands on SRS, then green watersnakes will benefit.

To date no conservation actions directly related to the Florida green watersnake have been initiated by SCDNR. It is possible that some SCDNR properties within the range of this species harbor populations, but that has not been verified.

CONSERVATION RECOMMENDATIONS

- Conduct surveys for the Florida green watersnake on public properties, and private properties—with appropriate permission—within the range of this species.
- Conduct life history research on this species, at selected sites, to determine habitat requirements and management requirements.

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.

LITERATURE CITED

Conant, R. C. and J. T. Collins. 1991. A Field Guide to Reptiles and Amphibians: Eastern and Central North America. Peterson Field Guide series. Houghton Mifflin Co. Boston, Massachusetts. 450 pp.

Gibbons, J.W. and M.E. and Dorcas. 2004. North American Watersnakes. University of Oklahoma Press, Norman.

Gibbons, J.W. and R.D. Semlitsch. 1991. Guide to the Reptile and Amphibians of the Savannah River Site. University of Georgia Press, Athens, GA. 131 p.

Martof, B. S., W. M. Palmer, J. R. Bailey and J. R. Harrison III. 1980. Amphibians and Reptiles of the Carolinas and Virginia. University of North Carolina Press. Chapel Hill. 264 pp.

NatureServe. 2013. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, VA. (On-line) Accessed Feb. 21, 2013 at http://www.natureserve.org/explorer.

Seigel, R.A., J.W. Gibbons, and K. Lynch. 1995. Temporal changes in reptile populations: effects of a severe drought on aquatic snakes. Herpetologica 51: 424-434.