Florida Green Watersnake

Nerodia floridana

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DESCRIPTION

Taxonomy and Basic Description

The Florida green watersnake is moderate to large in size, reaching lengths from 76 to 140 cm (30 to 55 inches); maximum length is approximately 188 cm (6.2 feet). (Conant and Collins 1991). It was considered a subspecies of the green watersnake, *Nerodia cyclopion*, until recently when it was determined to be a separate species (Pearson 1966, Lawson 1987, Sanderson 1993). The Florida green watersnake is uniformly green or brown, with crossbars present occasionally (Conant and Collins 1991; Martof et al. 980) and a plain white or cream-colored belly.

Status

The Florida green watersnake is listed as a species of concern in South Carolina and has a rank of imperiled state-wide (S2). This species is considered secure globally (G5) (NatureServe 2005).

POPULATION DISTRIBUTION AND SIZE

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

Little data exists concerning the population biology of the Florida green watersnake in South Carolina. This species occurs on the Savannah River Site (SRS) in Aiken and Barnwell Counties. It has also been found in the Cooper River area of Charleston and Berkeley Counties. There are reports of this species from old rice fields in Georgetown County (Charleston Museum). There are no records from the counties between these two South Carolina population areas, suggesting that two meta-populations of this species may occur in South Carolina. The South Carolina populations of the Florida green watersnake are disjunct from the primary range of this species, which is extreme south Georgia and Florida, by over 300 kilometers (200 miles).

HABITAT AND NATURAL COMMUNITY REQUIREMENTS

In South Carolina, the Florida green watersnake has been reported from such wetland types as Carolina bays, lakes, old rice fields and reserves and lakes. Sites where the Florida green watersnake has been reported typically 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 (Gibbons and Dorcas 2004).

CHALLENGES

Draining and filling wetlands may impact this species. The green watersnake is a poor overland disperser and if extirpated from wetlands due to ditching, draining or drought, populations may not easily become re-established (Seigel et al.1995).

CONSERVATION ACCOMPLISHMENTS

Simply identifying populations of the Florida green watersnake is an accomplishment. The species occurs on the Savannah River Site where it is identified as an uncommon to rare species. This species also occurs at 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.

CONSERVATION ACTIONS:

- Encourage SRS to protect known wetland sites that contain Florida green watersnakes.
- Educate fishermen and recreational users about the differences between the venomous cottonmouth and the Florida watersnake. This could be accomplished by posting signs at popular fishing sites and/or boat landings.
- Consider habitat needs of the Florida green watersnake when managing Carolina bays and similar wetland ecosystems.
- Couple conservation of Florida green watersnake with waterfowl management, where appropriate.
- Determine the distribution of the Florida green watersnake in South Carolina, including inventories of known populations. Monitor populations once the inventory is complete.
- Investigate drought responses and re-colonization abilities of the Florida green watersnake.

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. Data from basic surveys will be used to develop specific life history and ecology projects and determine limiting factors to population growth and dispersal. Stable or increasing populations on public lands will be a measure of success.

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