

Common Name: GEORGIA BLIND SALAMANDER

Scientific Name: Haideotriton wallacei Carr

Other Commonly Used Names: none

Previously Used Scientific Names: none

Family: Plethodontidae

Rarity Ranks: G2/S1

State Legal Status: Threatened

Federal Legal Status: none

Description: The Georgia blind salamander is a fully aquatic troglobite (cave-dweller) that averages 2.5 - 5.0 cm (1 - 2 inches) in total length, though some individuals may exceed 7.6 cm (3 inches). Its somewhat translucent body is pinkish- to silverish-white and, especially in juveniles, small, faint specks are apparent. Bright red, bushy gills are located on each side of the body just behind the slightly flattened, wide head. Minute, dark eye spots can be seen below the skin of juveniles. The tail of this salamander is laterally flattened and equipped with a dorsal fin for easier locomotion. The legs are relatively long and thin.

Similar Species: None

Habitat: This is a species that has evolved in the dark, subterranean waters of limestone caves. The earliest record of this species was reported from a deep well in Albany, Georgia. Populations may also occur in recharge areas around sinkholes.

Diet: Small, troglobitic crustaceans, such as amphipods.

Life History: Very little is known about the natural history and reproductive biology of this unusual amphibian. Gravid females have been collected in the third week in May and the second week of November. Although these salamanders may occur in aquifers well away from

accessible caves, their densities are not likely to be as great due to the lack of organic debris and bat guano that help enrich the aquatic ecosystems in and near caves.

Survey Recommendations: Visual searches of subterranean pools while caving or cave diving is the only proven technique for finding these salamanders.

Range: In Georgia, this species is restricted to the Dougherty Plain in the extreme southwestern corner of the state. Specimens have been found from only one site in Decatur County and two in Dougherty County. The majority of known sites occur in the Marianna Lowlands of the upper Florida Panhandle.

Threats: With only three known localities in Georgia, the continued existence of this species is vulnerable. Practices that significantly alter the natural water table or aquifer levels are likely to have a negative impact on the Georgia blind salamander. These may include impoundment of streams near cave systems and widespread center-pivot irrigation. Agricultural pollution from pesticide and herbicide-tainted surface runoff lowers the water quality found in cave pools and may lead to local declines and extirpations of any aquatic cave-dwelling organism. Disturbance by careless spelunkers may also have harmful consequences on the well-being of these salamanders.

Georgia Conservation Status: State-owned Radium Springs is the only protected site where this species has been observed.

Conservation and Management Recommendations: The establishment of conservation easements on lands containing the caves inhabited by Georgia blind salamanders, or the acquisition of these lands by conservation agencies or organizations, would greatly benefit this species.

Selected References:

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Date Compiled or Updated:

J. Jensen, Dec. 2007: original account

K. Owers, Sept. 2009: updated status and ranks, added picture