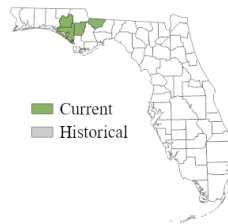


## HILLIS'S DWARF SALAMANDER

*Eurycea hillisi*

**Order:** Caudata  
**Family:** Plethodontidae  
**FNAI Ranks:** G3/S1S2  
**U.S. Status:** none  
**FL Status:** none



**Description:** A very small (to 2.8 in. = 7.2 cm), slender terrestrial salamander with only four toes on the hind foot, 14 costal grooves, and no constriction at the base of the tail, which is round in cross-section and lacks a keel. Dorsal coloration copper, bronze, or orangish-brown, and ranging from patternless to boldly marked with a herring bone pattern; dorsolateral stripe brown and of variable intensity, with irregular edges, and usually most prominent on posterior half of body and tail. Grayish to white flecking common on head and adjacent to dorsolateral stripe. Ventral surface of head gray to white, which extends onto body. Underside of tail and groin yellow, which usually extends anteriorly to include most of the ventral surface. Cirri (a pair of fleshy protruberances below the nostrils) present in males during breeding season.

**Similar Species:** The southeastern dwarf salamander, *E. quadridigitata*, which also inhabits the Florida panhandle and from which this recently named species was split, has a silver to light gray belly (and undertail) with diffused flecking, 14–17 costal grooves, a body length up to 9 cm (3.5 in.), and usually an obvious keel on the tail, which is square-like to wedge-shaped in cross-section. The related *E. spagnicola*, which may have a non-overlapping range with *E. hillisi*, has a number of features that distinguish the two (see companion field guide account). However, definitive identification of species within this complex may require genetic testing. The only other terrestrial salamander in the panhandle with four toes on the hind foot, the four-toed salamander (*Hemidactylium scutatum*), has a constriction at the tail base and a white belly with black spots. All others have five toes on the hind foot, including the somewhat similarly colored southern two-lined (*E. cirrigera*) and three-lined (*E. guttolineata*) salamanders; the latter also is substantially larger and bears a conspicuous mid-dorsal stripe in addition to lateral ones.

**Habitat:** A wetland species associated with seepage along swampy stream systems typically with hardwood canopies of black gum, cypress, and sweetbay magnolia; adults are usually found in association with sphagnum moss. Eggs are laid in water and develop into gilled larvae that presumably remain aquatic for only a few months before metamorphosing and moving to slightly more terrestrial though still damp microhabitats for adult life.

**Seasonal Occurrence:** Metamorphs and adults are found in appropriate habitat year-round. Gilled larvae presumably occur only seasonally.

**Florida Distribution:** Thus far known only from the central panhandle between the Choctawhatchee and Chipola rivers (Wray et al. 2017), but this may be extended with additional research.

**Range-wide Distribution:** Common just below the Fall Line in Alabama and Georgia, extending southward into the western half of the Florida panhandle.

**Conservation Status:** Its restricted range and specific habitat requirements make this a species of conservation concern in Florida. Presently, most or all known populations occur on private lands. Determining whether any inhabit public lands, and if so their current status and needs, is critical to protecting the species in the state.

**Protection and Management:** Protect private lands known to support, or which contain appropriate habitat for, populations of this species. Survey public lands within range (e.g., Econfinia Creek Water Management Area) to determine if the species is present and in need of active land management. Maintain forests on slopes and uplands above stream courses. Prevent siltation and pollution that may emanate from upslope roads, bridges, and culverts. Efforts to eliminate or control feral hogs may be important, at least at some sites.

**References:** Means 2018a, Wray et al. 2017.



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