

AMPHIBIA: CAUDATA: PLETHODONTIDAE

HAIDEOTRITON
H. WALLACEI

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***Haideotriton* Carr**
Georgia blind salamander

Haideotriton Carr, 1939:334-335. Type-species *Haideotriton wallacei* Carr, 1939, by monotypy.

• CONTENT. One species, *H. wallacei*, is described, but see COMMENT under *H. wallacei*.

• DEFINITION. A paedogenetic salamander of typical plethodontid larval form—3 pairs of gill slits; 3 pairs of gills with simple rami; no lungs; dorsal fin restricted to tail; dentary, coronoid, premaxillary, prevomerine, and palatopterygoid bones denticerous; teeth of the latter two series together form longitudinal arches that converge anteriorly. The premaxilla is single with unfused frontal processes enclosing a fontanelle, the maxilla and orbitosphenoids are absent, the squamosal (incorrectly called quadrate by Carr) is long and slender, and the occipital condyles are not stalked. The eyes are vestigial and nonfunctional.

• DESCRIPTIONS, ILLUSTRATIONS, DISTRIBUTION, FOSSIL RECORD, PERTINENT LITERATURE. See *Haideotriton wallacei*.

• ETYMOLOGY. The name *Haideotriton* refers to the subterranean habitat of the species, and derives from the Greek *Haides*, in Greek mythology the dark and gloomy subterranean abode of the dead, and from *triton* meaning "salamander." *Haideotriton* is of masculine gender.

***Haideotriton wallacei* Carr**
Georgia blind salamander

Haideotriton wallacei Carr, 1939:335-336. Type-locality, "from a 200-foot artesian well at Albany, Dougherty County, Georgia." Holotype Mus. Comp. Zool. 19875, collected 19 May 1939 by Mr. Hummel, Dougherty County Sanitary Engineer.

• CONTENT. No subspecies are described.

• DIAGNOSIS. The pale body and tiny eyes distinguish this species from all other North American larval salamanders except *Typhlomolge rathbuni* and *T. tridentifera*. The limbs of *T. rathbuni* are more attenuate. The snouts of both species of *Typhlomolge* are extremely flattened, and both are found only in central Texas.

• DESCRIPTIONS. Little is known of this small (specimens range 16-44 mm snout to vent), slender, paedogenetic, troglitic salamander; fewer than 20 specimens are mentioned in the literature. In life, the pale body has distinct, uniformly scattered melanophores dorsally and laterally; Pylka and Warren (1958) report that xanthophores are also present. The head is broad but not flattened anteriorly and is roughly rectangular in shape when viewed dorsally. The eyes are tiny, barely visible, dark dots of unknown structure; Carr (1939) erroneously reports that eyes are absent on the holotype (Valentine, 1964). There are 12-13 costal grooves (13-14 trunk vertebrae). The slender legs, relatively long in comparison to body length, have 4 fingers and 5 toes. Size at sexual maturity is incompletely known, but the holotype (44 mm in snout-vent length) is a sexually mature, gravid, female. Dundee (1962) reported four females 22-27 mm snout to vent, but did not state that they were mature; 2 others (16 and 18 mm) were immature.

The eggs are unknown.

For more detailed descriptions of the holotype see Carr (1939) and Valentine (1964). Wake (1966) described important features of the osteology and compared *Haideotriton* with other plethodontids.

• ILLUSTRATIONS. Excellent photographs of the holotype, the largest specimen known, were given by Carr (1939, Plate 11) and Bishop (1943:356). Conant (1958:241) outlined the body form of the same specimen, and Valentine (1964:101) illustrated details of the ventral surface of the head and throat. A color photograph is presented by Mohr and Poulson (1966) and photographs of dorsal and lateral surfaces of a specimen (51 mm in total length) from Florida were given by Pylka and

Warren (1958:335). A radiograph of the holotype was shown by Carr (1939, Plate 12) and drawings of the skull and first two vertebrae (made from Carr's radiograph) by Hilton (1945:101).

• DISTRIBUTION. In addition to the holotype from Dougherty County, Georgia, specimens are known from several caves in Jackson Co., Florida, and one in Decatur Co., Georgia. All localities are associated with the Dougherty Plain region, where additional localities are expected.

• FOSSIL RECORD. None.

• PERTINENT LITERATURE. Fewer than a half-dozen publications contain primary information on this salamander. Pylka and Warren (1958) described the habitat, feeding in the laboratory, gross response to visual and auditory stimuli, and external pigmentation and morphology of nine immature individuals. Valentine (1964) added some morphological details to Carr's (1939) description of the holotype, compared it with a 42 mm-long specimen from Florida, and commented on size, ovarian eggs, dentition and degree of metamorphosis. Dundee (1962) investigated the metamorphic response of five individuals to thyroxin. Wake (1966) gave additional anatomical information and discussed relationships and evolution. Other publications repeat previously reported data (e.g., Bishop, 1943; Conant, 1958; Hilton, 1945; Vandel, 1965; and Warren, 1961).

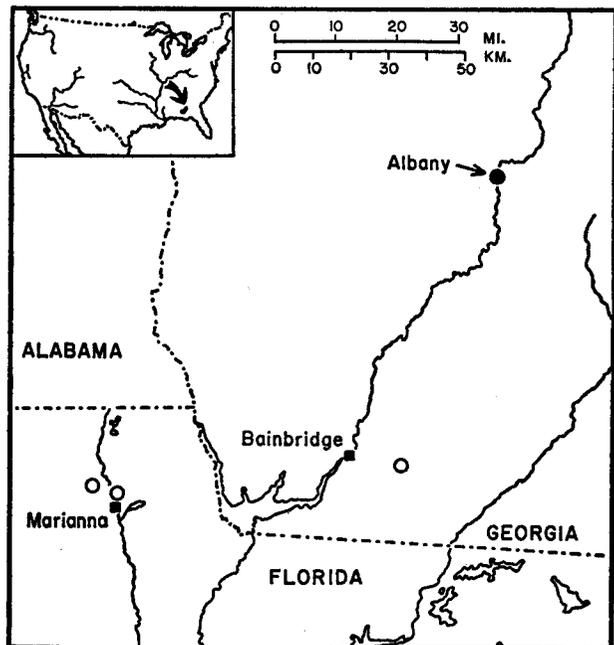
• ETYMOLOGY. The specific name *wallacei* is a patronym for Howard K. Wallace, Department of Zoology, University of Florida.

COMMENT

Interpopulation variation has not been studied. Pylka and Warren (1958) were uncertain of the specific identity of their Florida specimens, but both Dundee (1962) and Valentine (1964) consider them *H. wallacei*. Dundee has questioned the familial position of *Haideotriton*, but Valentine cited reasons for retaining it in the family Plethodontidae. Wake (1966) included *Haideotriton* in the tribe Hemidactyliini of the Plethodontidae.

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MAP. The solid dot marks the type-locality; hollow dots show other localities.

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R. A. BRANDON, SOUTHERN ILLINOIS UNIVERSITY, CARBONDALE, ILLINOIS 62901.

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