

BAKER, JAMES KENNETH. 1966. *Eurycea troglodytes*.  
Catalogue of American Amphibians and Reptiles, p. 23.

***Eurycea troglodytes* Baker**  
**Valdina Farms salamander**

*Eurycea troglodytes* Baker, 1957:328. Type-locality, "a pool approximately 600 feet from the entrance of the Valdina Farms Sinkhole, Valdina Farms, [16 miles (9.9 km) north of D'Hanis, in northwestern] Medina County, Texas." Holotype, Univ. Texas Nat. Hist. Coll., 21791, adult female, collected by James K. Baker, 26 January 1957.

• CONTENT. No subspecies are recognized.

• DEFINITION. This neotenic *Eurycea* has a maximum length of 78 mm and a snout-vent length of 40 mm. Costal grooves number 13 or 14, with 0-4 grooves between adpressed limbs. Average numbers of teeth are: 26 premaxillary, 13 vomerine, 24 dentary, 10 pterygoid, and 8 splenial. Presacral vertebrae number 18, the last one fused to the sacrum. The phalangeal formula for fingers is 2-3-4-3, for toes 2-3-4-4-3; in order of increasing length, fingers are 1-4-2-3, toes 1-5-2-4-3. Coloration is pale, appearing white in the natural habitat. Eyes are reduced in size and may be entirely covered by skin or only partially exposed. The species is more highly modified for subterranean existence than are the other neotenic *Eurycea*, except for *E. tridentifera*.

• DESCRIPTIONS. Baker (1957) gives a detailed description of the holotype and 19 paratypes and compares these with related species of *Eurycea*. Morphological variations are discussed, and scatter diagrams are provided showing eye diameters and leg lengths plotted against snout-vent lengths. Baker (1961) furnishes a key for determination of *E. troglodytes* and related species.

The eyes of *E. troglodytes* are reduced in size as compared to epigeal species. In sexually mature individuals eye diameter varies from 0.7 mm to 0.9 mm. The limbs and digits are long and attenuated. Mature individuals have leg lengths from 8.1 mm to a maximum of 10 mm. Leg width varies from 1.5 mm to 0.7 mm, and length over width gives ratios indicating that the legs are 5-11 times longer than broad. Legs of the longest legged individuals will touch when adpressed, while those of the shortest legged ones are separated by as many as 4 costal grooves.

*E. troglodytes* has a triradiate posterior basibranchium which is not connected with the remainder of the hyobranchial apparatus. The shape and position of the posterior

basibranchium is variable among the neotenic species of *Eurycea*.

Coloration varies from pale cream to light gray. White specks and indistinct yellow stripes are visible along the side of the body and on the dorsal surface of the tail. In those specimens with the palest coloration, pigment is concentrated on the dorsal surface of the head and along the back and tail. Sides and ventral surfaces are pigmentless and the skin translucent. The larger internal structures are easily visible.

• ILLUSTRATIONS. Baker (1957) has two photographs of paratypes, one illustrates this species in comparison with *Eurycea neotenes* and *Typhlomolge rathbuni*. Mitchell & Reddell (1965) provide two drawings of the species.

• DISTRIBUTION. The species is known only from the type-locality. Within the Valdina Farms Sinkhole, the species is found in isolated intermittent pools of a subterranean stream. Periodic torrential rains cause the stream to flow, and it is likely the species is distributed underground over a wide area of that particular drainage system.

• FOSSIL RECORD. None.

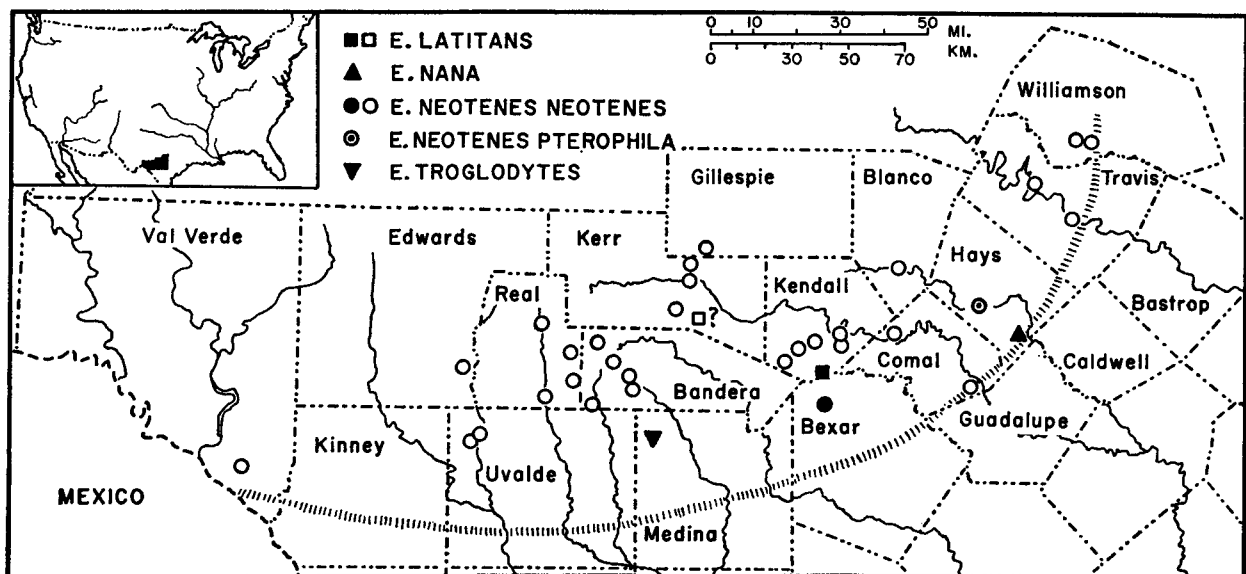
• PERTINENT LITERATURE. Baker (1957) describes the species and discusses its relationships with other species of the Edwards Plateau region of Texas. Baker (1961) provides keys, a distributional map, and specific localities for the Edwards Plateau species. Mitchell & Reddell (1965) describe *Eurycea tridentifera* and compare it with *E. troglodytes* and the other Edwards Plateau species.

• ETYMOLOGY. The species name indicates it to be a cave dweller. The name, *troglo-dytes*, stems from the Greek words *trōglē*, a "hole" or "cavern," and *dytēs*, "to enter," and refers to an animal that crawls into holes.

The vernacular name, Valdina Farms salamander, refers to the type-locality.

COMMENT

Schmidt (1953) considers all the Edwards Plateau species described prior to his checklist as races of *Eurycea neotenes*; but in the absence of supporting data, Baker (1957) considers the forms as distinct species following the nomenclature of the original authors of the taxa. He suggests that *E. troglodytes* also be recognized as a distinct species. Conant (1958) follows Schmidt's lead in listing the species as races of *E. neotenes*, but he does recognize the specific status of *E. troglodytes*, mentioning only parenthetically that it too may be a race of *E. neotenes*. Mitchell & Reddell (1965) consider all forms from the Edwards Plateau as distinct species.



MAP. Distribution of neotenic species of *Eurycea* on the Edwards Plateau of Texas. Hatching marks the approximate edge of the Plateau. Open symbols indicate localities other than type-localities. *E. troglodytes* is known only from the type-locality.

## LITERATURE CITED

- Baker, James Kenneth. 1957. *Eurycea troglodytes*: a new blind cave salamander from Texas. *Texas Jour. Sci.*, 9:328-336.
- 1961. Distribution of and key to the neotenic *Eurycea* of Texas. *Southwestern Nat.*, 6:27-32.
- Conant, Roger. 1958. A field guide to reptiles and amphibians of the United States and Canada east of the 100th meridian. Houghton Mifflin Co., Boston. xviii + 366 pp., 40 pls.
- Mitchell, Robert W., & James R. Reddell. 1965. *Eurycea tridentifera*, a new species of troglobitic salamander from Texas and a reclassification of *Typhlomolge rathbuni*. *Texas Jour. Sci.*, 17:12-27.
- Schmidt, Karl P. 1953. A check list of North American amphibians and reptiles. Sixth edition. *Amer. Soc. Ichthyol. and Herpetol.* viii + 280 pp.
- J. K. BAKER, JOSHUA TREE NATIONAL MONUMENT, P. O. BOX 875, TWENTYNINE PALMS, CALIFORNIA 92277.
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