

AMPHIBIA: CAUDATA: PLETHODONTIDAE

PSEUDOEURYCEA LONGICAUDA

Catalogue of American Amphibians and Reptiles.

Lynch, J.F. and D.B. Wake. 1999. *Pseudoeurycea longicauda*.

Pseudoeurycea longicauda
Lynch, Wake, and Yang

Pseudoeurycea longicauda Lynch, Wake, and Yang 1983:887.

Type locality, "forested slope just South Mex. hwy 15, 23.1 km (by rd) W. Villa Victoria, State of Mexico, Mexico (elevation 2,850–2,970 m)." Holotype, Museum of Vertebrate Zoology (MVZ) 137880, an adult female, collected 7 July 1976 by M. Feder, J.F. Lynch, and D.B. Wake (examined by authors).

• **CONTENT.** No subspecies are recognized.

• **DEFINITION.** Compared with other species in the genus, *Pseudoeurycea longicauda* is medium-sized (mean SVL of adults = 52 mm; maximum = 65 mm), with moderately long limbs (length of hind limb + forelimb/SVL = 0.48 in adults), and a long tail (tail length/SVL = 0.98 in adults). Adults (SVL > 40 mm) have an average of 41 maxillary/premaxillary teeth and 19 vomerine teeth. Adult females average slightly larger (mean SVL = 53 mm; maximum = 65 mm) than males (mean SVL = 51 mm; maximum = 62). Adult males possess a conspicuous round mental gland.

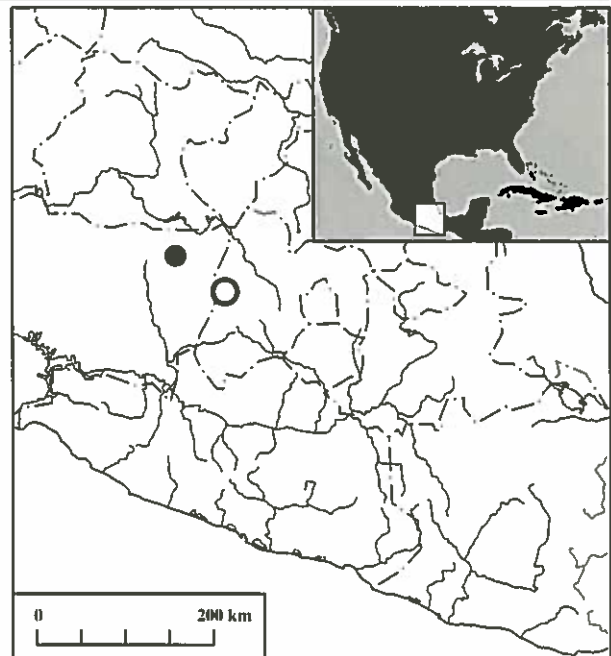
The color pattern is variable. Dorsal coloration ranges from gray-black, through various shades of gray-brown, to almost pink. Most individuals have a ragged mid-dorsal stripe, the color of which may be tan, yellow, orange, or brown. The lateral area is pale- to medium-gray, and is marked by varying amounts of silvery iridophore "frosting." The color of the venter ranges from slate-gray to pale gray, but the chin is invariably lighter than the belly. Small white iridophores are scattered on the chin and, in some specimens, extend onto the chest.

• **DIAGNOSIS.** Although *Pseudoeurycea longicauda* was previously referred to *P. robertsi* (Duellman 1961), the two species are very different genetically, and differ also in external morphology (Lynch et al. 1983). Compared with *P. robertsi* adults (SVL > 40 mm), adult *P. longicauda* have a longer tail (TL/SVL = 0.98 versus 0.80), narrower head (head width/SVL = 0.14 versus 0.16), and more maxillary/premaxillary teeth (41 versus 28). The ventral coloration of *P. longicauda* is pale to medium gray, and the chin is invariably paler than the belly; the chin and belly of *P. robertsi* are a uniform gray-black. The long tail also distinguishes *P. longicauda* from the widespread and relatively common *P. leprosa*. Although these species are generally somewhat similar in coloration, *P. longicauda* also has longer limbs, larger hands and feet, and fewer maxillary and vomerine teeth.

• **DESCRIPTIONS.** Lynch et al. (1983) present a detailed morphological description of *Pseudoeurycea longicauda*, as well as an electrophoretic comparison between this species and seven populations of *P. leprosa* and one population each of *P. altamontana* and *P. robertsi*.

• **ILLUSTRATIONS.** Lynch et al. (1983) contains a photograph of the preserved holotype.

• **DISTRIBUTION.** The known range of *Pseudoeurycea longicauda* exists as two clusters of localities at high elevations (2,850–3,000 m) in the Cordillera Volcanica of eastern Michoa-



MAP. Distribution of *Pseudoeurycea longicauda*. The circle represents the type locality and another nearby locality. The dot indicates the only other known locality.



Figure 1. *Pseudoeurycea longicauda* from the type locality. Photographs by G. Parra-Olea (GP 292–3).

cán and adjacent México (Duellman 1961, Lynch et al. 1983). All known localities are in pine-fir or pine-oak forest. Most of the 64 individuals in the type series were collected beneath the loose bark of large downed pine, fir, and cypress logs, but specimens have also been collected beneath logs, wood chips, and other surface debris. No other salamander species were collected at the type locality, but Duellman (1961) collected *P. bellii* and *Ambystoma ordinarium* in sympatry with *P. longicauda* in pine-fir forest just west of the type locality and at Atzimba National Park, approximately 50 km northwest of the type locality.

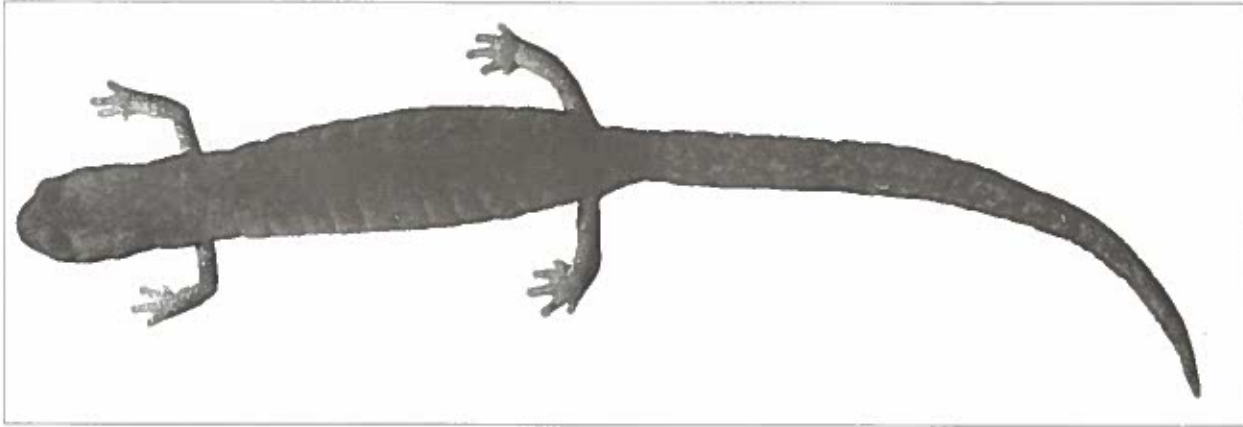


Figure 2. Holotype of *Pseudoeurycea longicauda* (MCZ 137880).

• **FOSSIL RECORD.** None

• **PERTINENT LITERATURE.** Lynch et al. (1983) presented detailed information on external morphology, osteology, and genic variation. Duellman (1961) and Lynch et al. (1983) included habitat descriptions.

• **ETYMOLOGY.** The name *longicauda* combines two Latin words meaning "long" and "tail," in reference to the fact that the tail is essentially equal to SVL.

• **COMMENT.** A combination of morphological differences separates *Pseudoeurycea longicauda* from *P. altamontana*, *P. robertsi*, and *P. leprosa*, the other medium-sized species of *Pseudoeurycea* that inhabit the Transverse Volcanic ranges of central México. Genetically, *P. longicauda* is strongly divergent from these three species (Lynch et al. 1983).

LITERATURE CITED

- Duellman, W.E. 1961. The amphibians and reptiles of Michoacán, México. Univ. Kansas Publ. Mus. Nat. Hist 15:1-148.
 Lynch, J.F., D.B. Wake, and S.Y. Yang. 1983. Genic and morphological differentiation in Mexican *Pseudoeurycea* (Caudata: Plethodontidae), with a description of a new species. Copeia 1983:884-894.

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