Catalogue of American Amphibians and Reptiles.


**Lampropeltis Fitzinger**

*Kingsnakes*


*Sphenophis* Fitzinger, 1843:25. Type species, *Coronella coccinea* Schlegel = *Lampropeltis triangulum* (Lacépède), by original designation.

*Ophisaurus* Baird and Girard, 1853:82. Type species, *Herpetodryas getulus* Schlegel, by original designation.

*Osceola* Baird and Girard, 1853:133. Type species, *Calamaria elapospidea* Holbrook = *Lampropeltis triangulum* (Lacépède), by original designation.

**Bellophis Lockington, 1876:52. Type species, Caluber zonatus** Blainville.

*Oreophis Dugès, 1897:284. Type species, O. boulengeri Dugès = *Lampropeltis mexicana* (Garman), by monotypy.*

*Triaenopholis Werner, 1924:SO. Type species, *Coronella coccinea* Schlegel = *Lampropeltis getulus* (Linnaeus).**

- **CONTENT.** Nine species are currently recognized, including two fossil species: *calligaster* (2 subspecies), *getulus* (7 subspecies), *intermedius* (fossil), *leonis*, *mexicana* (3 subspecies), *pyromelana* (4 subspecies), *similis* (fossil), *triangulum* (23 subspecies), and *zonata* (7 subspecies). These species fall into two natural groups, the Getulus group, comprised of *getulus* (7 subspecies), and *intermedius* (fossil).

- **DEFINITION.** A genus of colubrid snakes in which the smooth, lanceolate dorsal scales are arranged in 17 to 27 rows, each scale having 2 apical pits. The head is indistinct or only slightly distinct from the neck. The eye is moderate in size with a round pupil. The nasal scale is divided. The ventrals are normally divided. The tail is short. There are 12 to 18 palatine teeth, 12 to 18 dentary teeth, 8 to 14 palatine teeth, and 12 to 23 pterygoid teeth. The hemipenis is asymmetrically clavate or bilobed, calculate apically, spinose on the lower distal half, naked or with minute spines on the basal half, and it has a single centrifugal sulcus spermaticus.

- **DESCRIPTIONS.** The only complete account of the genus was that of Blanchard (1921). *L. getulus* was reviewed by Blaney (1971). *L. mexicana* by Webb (1961), Gehlbach and McCoy (1965), Gehlbach (1967), and Tanzer (1970), *L. pyromelana* by Tanner (1953), *L. triangulum* by Williams (1970), and *L. zonata* by Zweifel (1952).

- **ILLUSTRATIONS.** Colored plates figuring *calligaster*, *getulus*, *intermedius*, and *mexicana* appear in Conant (1958), and *getulus*, *pyromelana*, *zonata*, and Zweifel (1952) illustrated pattern variation in *getulus* and *tripilum*, respectively. Photographs of mexicana have been published by Webb (1961), Gehlbach and McCoy (1965), and Tanzer (1970). Drawings of the hemipenis of *calligaster* appeared in Blanchard (1921) and Dowling and Savage (1960), and Blaney (1971) provided photographs of the hemipenis of *getulus*.

- **DISTRIBUTION.** North America south of the 40th Parallel (southern Ontario and southwestern Quebec, west to southern Washington) southward to northwestern South America (Colombia, Ecuador, and into the Cordillera de la Costa of Venezuela).

- **FOSSIL RECORD.** Holman (1964b) described *L. similis* from the Miocene of Brown County, Nebraska, and stated that this form may be ancestral to *L. intermedius*; both fossil species are related to the Triangulum group of kingsnakes. *L. calligaster* is represented in the Pleistocene of Kansas (Brattstrom, 1967) and possibly in Arkansas (Dowling, 1958). *L. getulus* has been recorded from California (Brattstrom, 1953b, c), Florida (Auffenberg, 1963; Brattstrom, 1953a; Gehlbach, 1965; Holman, 1958), Nebraska (Holman, 1964b), Nevada (Brattstrom, 1954), and Texas (Holman, 1964b). *L. pyromelana* was reported from the Pleistocene of Nevada by Brattstrom (1954). *L. triangulum* has been found in the Pleistocene of Arkansas (Dowling, 1958), Florida (Auffenberg, 1963), Georgia (Holman, 1967), Kansas (Brattstrom, 1967), Missouri (Holman, 1965), Oklahoma (Brattstrom, 1967), Texas (Brattstrom, 1967; Holman, 1963, 1964b, 1966, 1969), and Virginia (Guidry, 1962).

- **PERTINENT LITERATURE.** Blanchard (1921), Blaney (1971), and Webb (1961) discussed evolution within the genus, and Blanchard (1921), Blaney (1971), Tanner (1953), Webb (1961), Williams (1970), and Zweifel (1952) presented specific and infraspecific phylogenies. Gehlbach (1967) provided a summary of *L. mexicana*. Tanzer (1970) discussed polymorphism in *L. mexicana* and provided evidence that *L. m. bleri* is a polymorphic phase of *L. m. alterna*, suggesting that *L. m. thayeri* also might be the bleri phase of *L. m. alterna*. He further suggested that *L. leonis* could be a polymorph of *L. mexicana*. Smith, Lynch, and Browne (1965) presented evidence for the supression of the name *Caluber daliatus* in favor of *L. triangulum*, and Burt (1958) discussed the nomenclature of *L. zonata* versus *L. multiscincta*. The natural history of *L. mexicana* was discussed by Tanzer (1970), that of the genus and individual species by Conant (1958), Stebbins (1966), and Wright and Wright (1957).

- **ETYMOLOGY.** The name *Lampropeltis* is derived from a combination of the Greek words *lampros*, meaning shiny, and *peltis*, shield.

- **REMARKS.** *Lampropeltis* is closely allied to the group of colubrine genera that includes *Elaphe*, *Pituophis*, *Cemophora*, and *Arizona* (Blaney, 1971; Dowling, 1951; Underwood, 1967; Williams and Wilson, 1967).

The validity of *Lampropeltis leonis* (Günther), known only from the original description (holotype lost), is highly questionable. It is not possible to distinguish *L. leonis* from *L. mexicana* and Tanzer (1970) has implied that they be considered synonyms, a suggestion with which I concur.

**MAP 1. Geographic distribution of the genus Lampropeltis.**
• **KEY TO THE SPECIES OF *LAMPROPELTIS*.** Numbers in parentheses after the names indicate the account numbers in this catalogue.

1. Last two maxillary teeth usually not longer and stouter than the preceding ones.  
2. Last two maxillary teeth usually longer and stouter than the preceding ones.  
3. Dorsal pattern consisting primarily of a dark ground color with light crossbands, longitudinal stripes, or spots on at least the lateral scales; hemipenis moderately or deeply bilobed  
   — *Lampropeltis getulus* (151)  
   Dorsal pattern consisting primarily of a light to dark brown ground color with darker dorsal and lateral blotches; hemipenis only slightly and asymmetrically bilobed  
   — *calligaster* (152)  
3. Dorsal pattern consisting of white-bordered gray bands or blotches alternating with black-bordered reddish brown ground color with light crossbands, longitudinal stripes, or spots fewer than 40 (body length)  
4. Dorsal pattern of black-red-black triad annuli separated by more than 40 (body + tail) white annuli; top of head black, snout uniformly white  
   — *pyromelana*  
   Dorsal pattern of annuli or dorsal blotches, usually fewer than 40 (body + tail) white annuli, or if more, with snout black  
5. Dorsal pattern of black and white annuli, white annuli more or less alternating with red dividing black annuli into two; snout black  
   — *zonata*  
   Dorsal pattern of brown, gray, or red dorsal blotches, or red, black, and white or yellow annuli or dorsal hands, white or yellow annuli fewer than 30  
   — *triangulum*  

**LITERATURE CITED**

— 1963. Late Pleistocene amphibians and reptiles of the Clear Creek and Ben Franklin local faunas of Texas. J. Grad. Research Center Southern Methodist Univ. 31 (3):152-167.  
R. M. BLANEY, LOUISIANA STATE UNIVERSITY, BATON ROUGE, LOUISIANA 70803  
Primary editor for this account, Douglas A. Rossman.  
Published 25 October 1973 by the SOCIETY FOR THE STUDY OF AMPHIBIANS AND REPTILES.