Catalogue of American Amphibians and Reptiles.

**Blaney, Richard M. 1973.** Lampropeltis.

**Lampropeltis Fitzinger**

**Kingsnakes**


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

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

_Osceola_ Baird and Girard, 1853:133. Type species, *Calauatria cryptopidae Holbrook* = *Lampropeltis triangulum* (Lacépède), by original designation.

_Bellophis_ Lockington, 1876:52. Type species, *Coluber sonatus* Blainville.

_Orophis_ Dugès, 1857:284. Type species, *O. boulengeri Dugès* = *Lampropeltis mexicana* (Garman), by monotypy.

_Trianeopholis_ Werner, 1924:50. Type species, *T. arenarius Werner* = *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 *calligaster* and *getulus*, and the Triangulum group, which includes the remaining species (Blaney, 1971).

**Definition.** A genus of colubrid snakes in which the smooth, lancetlike 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 not angular, the anal plate is entire, and the subcaudals are normally divided. The tail is short. There are 12 to 20 maxillary teeth (none grooved), 12 to 18 dentary teeth, 8 to 14 palatine teeth, and 12 to 23 pterygoid teeth. The hemipenis is asymmetrical, with a large, pointed, unpaired condyle 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 Tanner (1970). *L. pyromelana* by Tanner (1953), *L. triangulum* by Williams (1970), and *L. zonata* by Zweifel (1952).

**Illustrations.** Colored plates figuring *L. calligaster, getulus, eastern triangulum, and mexicana* appear in Conant (1958), and *L. getulus, pyromelana, western triangulum, and zonata* in Stebbins (1966). Pattern drawings of most species were provided by Blanchard (1921), and Blaney (1971) and Williams (1970) illustrated pattern variation in *getulus* and *triangulum*, respectively. Photographs of *mexicana* have been published by Webb (1961), Gehlbach and McCoy (1965), and Tanner (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 48th Parallel (southern Ontario and southwestern Quebec, west to southern Washington) southward to southwestern South America (Colombia, Ecuador, and into the Cordillera de la Costa of Venezuela).

**Fossil Record.** Holman (1968) reported 5 precanal vertebrae of a *Lampropeltis* (unidentified as to species, but thought to be a member of the *Triangulum* group) from an Upper Miocene site in Twin Falls County, Idaho. Other records of the genus appear in the Pliocene of Nebraska, Kansas, Oklahoma, and Michoacan, Mexico (Blattstrom, 1958; Holman, 1964b). *L. intermedius* was described by Blattstrom (1955) from the Upper Pliocene of Morelia, Michoacan, Mexico, and the lower Miocene of Cochise County, Arizona. Holman (1964b) described *L. similis* from the Mio-Pliocene of Brown County, Nebraska, and stated that this form may be ancestral to *L. intermedias*; 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 (Affenberg, 1963; Brattstrom, 1953a; Gehlbach, 1965; Holman, 1958), Nebraska (Holman, 1964b), Nevada (Brattstrom, 1965), 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 (Affenberg, 1963), Georgia (Holman, 1967), Kansas (Brattstrom, 1967), Missouri (Holman, 1965), Oklahoma (Brattstrom, 1967), Texas (Brattstrom, 1967; Holman, 1963, 1965b, 1966, 1969), and Virginia (Guider, 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 speciation, and infraspecific phylogenies. Gehlbach (1967) provided a summary of *L. mexicana*. Tanner (1970) discussed polymorphism in *L. mexicana* and provided evidence that *L. m. blairi* is a polymorphic phase of *L. m. alternus*, suggesting that *L. m. thayeri* might also be the blairi phase of *L. m. alternus*. He further suggested that *L. leonis* could be a polymorph of *L. mexicana*. Smith, Lynch, and Brown (1965) presented evidence for the supression of the name *Coluber dolius* in favor of *L. triangulum*, and Brown (1965) discussed the nomenclature of *L. zonata* versus *L. multicolor*. The natural history of *L. mexicana* was discussed by Tanner (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* (Güntner), known only from the original description (holotype lost), is highly questionable. It is not possible to distinguish *L. leonis* from *L. mexicana* and Tanner (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 LAMPROPELIS. 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
2. Last two maxillary teeth usually longer and stouter than the preceding ones 3
3. Dorsal pattern consisting of black-red-black triad annuli separated by more than 40 (body + tail) white annuli; top of head black, snout uniformly white 4
4. Dorsal pattern of black-red-black triad annuli separated by more than 40 (body + tail) white annuli; top of head black, snout red 5
5. Dorsal pattern of black and white annuli, white annuli more than 40, sometimes with red dividing black annuli into two; snout black 6
6. Dorsal pattern of brown, gray, or red dorsal blotches, or red, black, and yellow or white annuli or dorsal bands, white or yellow annuli fewer than 30 7

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.


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