

## Reptilia: Squamata (snakes)

### Noteworthy records of snakes of the *Lampropeltis mexicana* complex from northeastern Mexico

The geographic distribution of kingsnakes in the *Lampropeltis mexicana* complex in Mexico remains poorly known. Species in this complex range across rocky regions of the Chihuahuan Desert, Central Mexican Plateau, Sierra Madre Occidental, and northern Sierra Madre Oriental. Over the past decade, several reports have enhanced our knowledge of the distribution of these snakes in Mexico (Ingrasci et al., 2008; Farr et al., 2009; Hansen and Bryson, 2009; Savage and Hansen, 2009; Ahumada-Carrillo et al., 2011; Hansen et al., 2011; Roth-Monzón et al., 2011; Price et al., 2012; Ahumada-Carrillo et al., 2014; Carbajal-Márquez and Quintero-Díaz, 2014; Hansen et al., 2015; Hernández-Melo and Fernández-Badillo, 2015; Terán-Juárez et al., 2015; Grünwald et al., 2016; Hansen et al., 2016). Here we present new records for two species in the complex, *L. alterna* and *L. mexicana*, from the states of Coahuila and Nuevo León in northeastern Mexico. We follow the most recent taxonomy for the *L. mexicana* complex (Bryson et al., 2007). Previous studies, however, allocated *L. mexicana* from Coahuila and Nuevo León to the subspecies *L. m. thayeri* (Gehlbach, 1967; Hilken and Schleppe, 1998). We determined the geocoordinates using map datum WGS 84. The museum acronyms follow Sabaj (2016).

***Lampropeltis alterna*:** NUEVO LEÓN: Municipio de Hidalgo, Sierra El Fraile y San Miguel, Potrero Chico (25.949634°N, 100.476592°W); elev. 710 m; 8 June 2013; Adriana González-Martínez. Photo voucher TNHC 100686 (Fig. 1A). The snake was active during the day and photographed by rock climbers. This voucher represents a new municipality record.

***Lampropeltis alterna*:** NUEVO LEÓN: Municipio de Bustamante, Cañón de Bustamante (26.549595°N, 100.579611°W); elev. 521 m; 22 May 2016; Manuel Nevárez-de los Reyes; UANL 7662 (Fig. 1B). Camino de las Grutas (26.502450°N, 100.526222°W); elev. 840 m; 2 July 2016; Manuel Nevárez-de los Reyes; UANL 7672 (Fig. 1C). These specimens, both from the Sierra Gomas, represent a new municipality record and the northernmost records for this species in Nuevo León. Both collection sites are located in steep, rocky terrain within a submontane shrub (*matorral*) plant community. At the first site, the characteristic vegetation consists of *Populus nigra*, *Salix* sp., *Prosopis glandulosa*, and *Acacia farnesiana*. The dominant vegetation at the second locality includes *Acacia rigida*, *Fraxinus greggi*, and *Helietta parvifolia*.

***Lampropeltis alterna*:** NUEVO LEÓN: Municipio de García, vic. of Industrias del Alkali (25.758655°N, 100.558685°W); elev. 724 m; 13 June 2014; Iván Sánchez-Montiel; UANL 7405 (Fig. 1D). This specimen represents a new municipality record.

***Lampropeltis* cf. *mexicana*:** COAHUILA: Municipio de Saltillo, ca. 1.0 map km SW of Jagüey de Ferniza (25.222670°N, 101.045218°W); elev. 2,024 m; 16 July 2016; Arturo Cruz-Anaya; Photo voucher TNHC 100687 (Fig. 1E). This voucher, a field photo of a live snake partly obscured by vegetation, represents a new municipality record. Based on the dorsal pattern of the snake, we provisionally assign this individual to *L. mexicana*. Although a pattern of black-bordered orange blotches is found in both *L. alterna* and *L. mexicana*, the brown ground color is a better fit for the latter rather than regionally proximate *L. alterna*. The habitat consists of scrub dominated by *Larrea tridentata*, and was bordered by a cultivated area. Additional material from this area is necessary to confirm the identification of the species.

***Lampropeltis mexicana*:** COAHUILA: Municipio de Saltillo: Mina de La Lechuza, Ejido Cuauhtémoc, Sierra Zapalinamé (25.279037°N, 100.956886°W); elev. 2,283 m; 28 July 2016; Javier Banda-Leal and Arturo Cruz-Anaya; UANL 7693 (Fig. 1F). This specimen represents the second record for the municipality of Saltillo, and the first documented example of a melanistic individual found in the wild. Although anecdotal field reports exist for melanistic specimens from Nuevo León, and the genetic basis for melanism in captive *L. mexicana* is well known (Osborne, 1983), there are no melanistic specimens in museum collections and the geographic distribution of melanistic phenotypes is unknown. The collection site is located within an open pine forest with *Agave*, *Hechtia*, and *Opuntia*.

***Lampropeltis mexicana***: COAHUILA: Municipio de Arteaga, Carretera entronque a El Diamante (25.367818°N, 100.814711°W); elev. 2,025 m; 13 September 2016; Arturo Cruz Anaya; UANL 7705 (Fig. 1G). this specimen represents the third record from the municipality of Arteaga (Garstka, 1982), which spans an extensive area and range of habitats in the northern Sierra Madre Oriental.



**Fig. 1.** Records of the *Lampropeltis mexicana* complex from northeastern Mexico: (A) *L. alterna* (TNHC 100686) from Sierra El Fraile y San Miguel, Potrero Chico, Municipio de Hidalgo, Nuevo León; (B, C) *L. alterna* (UANL 7662, 7672) from Sierra Gomas, Municipio de Bustamante, Nuevo León; (D) *L. alterna* (UANL 7405) from vic. of Industrias del Alkali, Municipio de García, Nuevo León; (E) *L. mexicana* (TNHC 100687) from ca. 1.0 km (by air) SW of Jagüey de Ferniza, Municipio de Saltillo, Coahuila; (F) *L. mexicana*, melanistic phenotype (UANL 7693) from Sierra Zapalinamé, Municipio de Saltillo, Coahuila; and (G) *L. mexicana* (UANL 7705) from Municipio de Arteaga, Coahuila. © Adriana González-Martínez (A), Manuel Nevárez-de los Reyes (B, C, and F), Robert W. Bryson, Jr. (D), and Arturo Cruz-Anaya (E, G)

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**MANUEL NEVÁREZ-DE LOS REYES<sup>1</sup>, JAVIER BANDA-LEAL<sup>1</sup>, DAVID LAZCANO<sup>1</sup>, ROBERT W. BRYSON, JR.<sup>2</sup>, AND ROBERT W. HANSEN<sup>3</sup>**

<sup>1</sup>*Universidad Autónoma de Nuevo León, Facultad de Ciencias Biológicas, Laboratorio de Herpetología, Ciudad Universitaria, San Nicolás de los Garza, Nuevo León, Mexico.*

*E-mails: digitostigma@gmail.com, javierbandaleal@gmail.com, and imantodes52@hotmail.com*

<sup>2</sup>*Department of Biology and Burke Museum of Natural History and Culture, University of Washington, Box 351800, Seattle, Washington 98195-1800, United States; and Moore Laboratory of Zoology, Occidental College, 1600 Campus Road, Los Angeles, California 90041, United States. E-mail: brysonjr.rob@gmail.com*


<sup>3</sup>*16333 Deer Path Lane, Clovis, California 93619-9735, United States.*

*E-mail: hansenranch2@gmail.com (Corresponding author)*

### Family: Colubridae

***Stenorrhina freminvillii* (Duméril, Bribon and Duméril, 1854).** MEXICO: OAXACA. Municipio de San Bartolo Coyotepec, Paraje El Palenque (16°56'51.4"N, 96°40'31.7"W; datum WGS 84), elev. ca. 1,600 m; 20 March 2016; Pablo R. Simón-Salvador. The snake, an adult male (Fig. 1), was found in riparian vegetation. A photograph of this individual is deposited in the University of Texas at El Paso Vertebrate Digital Collection (Photo Voucher UTEP G-2016.34). This voucher (Fig. 1) represents a new municipality record, and fills a gap between the closest reported localities at ca. 16 km to the N (airline distance) in the vicinity of Agencia de San Luis Beltrán, Municipio de Oaxaca de Juárez, and at ca. 43 km to the ESE (airline distance) in the vicinity of Hierve El Agua, Municipio de San Lorenzo de Albarradas (García-Padilla and Mata-Silva, 2014).



**Fig. 1.** An adult *Stenorrhina freminvillii* (UTEP G-2016.34) from Paraje El Palenque, Municipio de San Bartolo Coyotepec, Oaxaca, Mexico.  © Pablo R. Simón-Salvador

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