

## Catalogue of American Amphibians and Reptiles.

Ernst, C.H. 2008. *Storeria hidalgoensis*.

***Storeria hidalgoensis* Taylor**  
**Mexican Yellow-bellied Brown Snake**

*Storeria occipitomaculata*: Storer 1839:230 (part).

*Storeria hidalgoensis* Taylor 1942:78. Type-locality, "near Zacualtipan, Hidalgo," Mexico. Holotype, University of Illinois Museum of Natural History (UIMNH) 25061 (originally E.H. Taylor-Hobart M. Smith Collection 16145), a male, collected by E.H. Taylor, 13 August 1938 (not seen by author).

*Storeria occipito-maculata hidalgoensis*: Trapido 1944:14.

*Storeria occipitomaculata hidalgoensis*: Fugler and Webb 1956:171.

• **CONTENT.** *Storeria hidalgoensis* is a monotypic species.

• **DEFINITION.** *Storeria hidalgoensis* is a small, somewhat slender, snake with a maximum TL of 33.7 cm (maximum female TL, 33.3 cm; maximum male TL, 33.7 cm); most individuals are 23–28 cm long. Neonates have not been described. The pitless body scales are at least faintly keeled (first two most ventral rows are only faintly keeled at best), and occur in 17 rows near head, 15–17 rows at midbody, and 15 rows near the tail; scales on tail lie in 6 rows. Ventral scutes number 124–136, subcaudals 43–63 (in 2 rows); cloacal scute (= anal plate) divided. Males with 124–134 (mean 128.6) ventrals, 52–63 (mean 56.7) subcaudals, and tail lengths 23.4–27.2 (mean 24.8)% of TL; females have 128–136 (mean 132.1) ventrals, 43–53 (mean 49.7) subcaudals, and tail lengths 20.0–29.6 (mean 22.8)% of TL. Head obtusely-shaped, rostral broader than long, 2 internasals, a medial frontal, 2 suproculars, 2 parietals; 2 (occasionally 1) nasals, nares situated on suture between nasals; 2 preoculars (dorsal largest), 1(1–3) + 2(1–3) temporals (anterior much larger than smaller posteriors), 6(5–7) supralabials (third and fourth enter orbit), and 7(6–8) infralabials (fourth and fifth largest); small triangular mental scale, 2 long anterior chin shields in contact for most of their length (not separated by small scales).

Dorsal body color varies from gray to light brown, tan, reddish, or dark brown (grayish to dark brown in preservative); small gray flecks are usually present, but no dark spots or crossbands. Ventrals are either immaculate gray to pink, or have dark gray pigment at least laterally which might extend over 50% of the scute. Head black, especially posteriorly, with small gray flecks. A dark wedge-shaped mark lies behind each parietal; a light spot is usually present within the mark; some individuals have light occipital marks. Labials are either immaculate gray, or bear variable amounts of dark pigment which may extend ventrally onto mental scale and chin shields. Fifth supralabial is lightest of the series; lower labials may contain a few dark speckles. The hemipenis has not been des-



FIGURE 1. *Storeria hidalgoensis*, Tamaulipas, Mexico, 3203 m (10,500 ft.). Photo courtesy of Tim Burkhardt.



FIGURE 2. Habitat of *Storeria hidalgoensis*, Tamaulipas, Mexico, 3203 m (10,500 ft.). Photo courtesy of Tim Burkhardt.

cribed. Each maxilla has 15–17 teeth, posterior teeth enlarged, and the last longest and fang-like; dentary contains 14(13–15) teeth; platopterygoid series consists of 27 teeth. Karyotype has not been described, but is probably like that of other species of *Storeria*, consisting of 36 chromosomes (34 macrochromosomes, 2 microchromosomes) with females ZW and males ZZ (Hardy 1971).

• **DESCRIPTIONS.** General descriptions are in Dunn (1936, as *Storeria occipitomaculata*), Taylor (1942), Trapido (1944), Smith and Taylor (1950, 1966), and Fugler and Webb (1956). The habitat is described by Trapido (1944), Fugler and Webb (1956), and Mendoza Quijano (1990). Identification keys are presented in Trapido (1944) and Smith and Taylor (1950, 1966).

• **ILLUSTRATIONS.** Trapido (1944) contains black-and-white photos of head scalation, and a diagram of the hypothetical phylogeny. Color photographs are in Lemos Espinal and Smith (2007).

• **DISTRIBUTION.** *Storeria hidalgoensis* is found in the eastern and south-central regions of the central Mexican plateau, from central Coahuila and central Nuevo León south through western Tamaulipas, San Luis Potosí to central Hidalgo, and west through Querétaro to Guanajuato, and possibly Guadalajara.



**MAP.** Distribution of *Storeria hidalgoensis*. The circle marks the type-locality; dots indicate other records.

• **FOSSIL RECORD.** None.

• **PERTINENT LITERATURE.** General accounts are presented in Trapido (1944) and Lemos Espinal and Smith (2007). Other topics are as follows: **checklists and similar compendia** (Liner 1994; Smith 1950a,b), **ecology** (Dixon et al. 1972; Liner and Olson 1973), **evolutionary relationships** (Trapido 1944), **geographic distribution** (Canseco-Márquez et al. 2004; Dunn 1936 [as *S. occipito-maculata*]; Fugler and Webb 1956; Günther 1885 [as *Ischnognathus occipito-maculatus*]; Lazcano et al. 2004, 2006; Martin 1955, 1958; Mendoza Quijano 1990; Smith 1944; Smith and Taylor 1950, 1966; Taylor 1949; Trapido 1944), **reproduction** (Greene 1970), **systematics and taxonomy** (Flores-Villela 1993; Trapido 1944), **type specimen** (Smith et al. 1964; Taylor 1944).

• **ETYMOLOGY.** The species name is composed of two parts, 'Hidalgo' and the Latin adjectival suffix 'ensis' [belonging to], referring to the Mexican state in which the type specimen was collected.

• **COMMENT.** *Storeria hidalgoensis* was first considered a Mexican population of *Storeria occipitomaculata* (Storer 1839; Müller 1870; Cope 1885; Günther 1885; Bocourt 1893; Dunn 1936) until it was described as separate species by Taylor (1942). It was later reassigned as a subspecies of *Storeria occipitomaculata* by Trapido (1944). There it remained until Flores-Villela (1993) reinstated it to full species rank, based partly on allopatry. This re-evaluation to full species rank requires additional study.

The biology of *S. hidalgoensis* is poorly known, despite its being fairly common in some localities; a thorough ecological study would be useful.

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