

**ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM**

Animal Abstract

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CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Heterodon kennerlyi*
COMMON NAME: Mexican Hog-nosed Snake
SYNONYMS: *Heterodon nasicus kennerlyi* (1860)
FAMILY: Serpentes:Colubridae

AUTHOR/PLACE OF PUBLICATION: Kennicot (1860)

TYPE LOCALITY:

TYPE SPECIMEN:

TAXONOMIC UNIQUENESS: The following synopsis is based on Crother et al. (2008) revision of Squamata: nakes, in Crother (ed.).

H. kennerlyi Kennicott, 1860—Mexican Hog-nosed Snake. Smith et al. (2003, J. Kansas Herpetol. 5: 17–20), based on two scale characters, separated *H. n. kennerlyi* from *H. n. nasicus* and elevated the former to species.

H. nasicus Baird and Girard, 1852—Plains Hog-nosed Snake. Because the three subspecies of *Heterodon nasicus* have been elevated to species, their respective standard English names remain associated with each. Hence, there is no longer a “Western Hog-nosed Snake.”

DESCRIPTION: A heavy-bodied blotched snake with an upturned snout. Total length 16-25 inches (41–64 cm); females much larger than males. Dorsal ground color tan, brown or gray with distinct series of dark brown, cinnamon or chocolate blotches down back, with similarly colored spots on the sides. Ventrally heavily marked with blackish marbling. Two to six small, irregular azygous scales separate the prefrontals from the frontal and internasals from the rostral. The rostral is sharply upturned and concave dorsally. The pre-, post-, and subocular scales form an ocular ring and range in number from 9-13. The anterior temporals number 2-5 and posterior temporals 3-7. Infralabials number 9-13, usually 10-11. The two large anterior chin shields are broadly in contact, whereas the posterior chin shields are reduced in size or are absent. The anal plate (cloacal scute) and subcaudals range from 35-50 in males and 26-41 in females. The dorsal body scales are keeled, with 21-26 rows anteriorly, 19-26 rows at midbody, and 16-23 rows anterior to the cloaca. The maxilla is short and deep, with the mesial process curving posteriorly toward the posterior process. About ten teeth occur on the maxilla, four in the palatine, nine of the pterygoid and fourteen on the dentary.

AIDS TO IDENTIFICATION:**ILLUSTRATIONS:**

Black and white drawing (Stebbins 1966: plate 34)

Color photo (Behler and King 1979: plate 572)

Color photos (www.hognose.com)

Color photos (www.arts.arizona.edu)

Color photos (www.reptilesfaz.com)

TOTAL RANGE: The full species is found from Southern Canada south to northern Mexico, southeast Arizona to central Illinois (*H. kennerlyi* along U.S. border from southeast Arizona to south Texas and southeasterly into Zacatecas, San Luis Potosi, and Aguascalientes, Mexico, generally east of Sierra Madre Occidental).

RANGE WITHIN ARIZONA: Although found in Graham, Pima and Santa Cruz counties, it is primarily found in Cochise County.

SPECIES BIOLOGY AND POPULATION TRENDS

BIOLOGY: Mostly nocturnal, spending a significant period of time underground. Uses its spade like snout to dig for its prey. Considered mildly venomous, but not dangerous. When disturbed, they flatten their head and neck and emit a loud hissing noise.

REPRODUCTION: Lays 4-10 (or more) eggs.

FOOD HABITS: Mainly toads, some frogs, salamanders and lizards.

HABITAT: In Arizona, occupies grassland, desert grassland or open areas of shrubby thornscrub deserts in southeast corner of state; mainly open, flat or rolling plains. Occasionally found in mountain canyon bottoms or floodplains of streams with canopies of broadleaf riparian trees (sycamore, walnut, cottonwood, willow, etc.) in evergreen woodlands to 5,100 feet.

ELEVATION: 3,610 – 5,400 ft (1100-1646 m), although more commonly found between 4,000-5,000 ft (1219-1524 m).

PLANT COMMUNITY: Unknown

POPULATION TRENDS: Presumed stable.

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None
STATE STATUS: None
OTHER STATUS: Full Species Determined Subject to Special Protection (Secretaria de Medio Ambiente 2000)

MANAGEMENT FACTORS: Habitat destruction, and over collection for export and domestic sales, are issues.

PROTECTIVE MEASURES TAKEN:

SUGGESTED PROJECTS: Distribution, habitat, population and life history studies.

LAND MANAGEMENT/OWNERSHIP: BLM – Tucson Field Office; USFS – Coronado National Forest; State Land Department; Private.

SOURCES OF FURTHER INFORMATION**REFERENCES:**

- Behler, J.L. and F.W. King. 1979. The Audubon Society field guide to North American reptiles. The vertebrates of Arizona. University of Arizona Press. Tucson, Arizona. Pp. 613-614.
- BISON, Biota Information System of New Mexico Web Site, http://www.fw.vt.edu/fishex/nmex_main
- Conant, R. 1975. A field guide to reptiles and amphibians of eastern and central North America. Second edition. Houghton Mifflin Company. Boston, MA. Pp. 170-171.
- Crothers et al. 2008. Squamata: Snakes. In B. I. Crother (ed.), Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, pp. 46-65 SSAR Herpetological Circular 37.
- Desmond, D., HerpTech Associates, <http://www.hognose.com>
- Lowe, C.H. 1964. Amphibians and reptiles. The vertebrates of Arizona. University of Arizona Press. Tucson, Arizona. Pp. 167-168.
- Secetia de medio Ambiente. 2000. Diario Oficial de la Federacion. P. 51.
- Shaw, C.E. and S. Campbell. 1974. The snakes of the American West. Alfred A. Knopf, New York. Pp. 68-72.
- Stebbins, R.C. 1954. Amphibians and reptiles of western North America. McGraw-Hill Book Company, Inc., New York. Pp. 364-366.
- Stebbins, R.C. 1966. A field guide to western reptiles and amphibians. Houghton Mifflin Company. Boston, MA. Pp. 145-146.

- Stebbins, R.C. 1985. A field guide to western reptiles and amphibians. Second edition, revised. Houghton Mifflin Company. Boston, MA.
- Webb, R.G. 1970. Reptiles of Oklahoma. University of Oklahoma. Pp. 229-232.
- Wright, A.H. and A.A. Wright. 1957. Handbook of snakes of the United States and Canada. Vol.I. Comstock Publishing Associates. Ithaca, New York. Pp. 297-304.

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ADDITIONAL INFORMATION:

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