



*\*Photo Credit: Amino Apps*

## Plains, or Western Hognose Snake *(Heterodon nasicus)*

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### **Chubby Diggers Even Non-Snake People Love**

Western, or Plains hognose snakes are relatively small, stocky or heavy bodied colubrid snakes that can be somewhat variable in appearance. They can vary in color from tan, grayish, to light brown background color with numerous darker dorsal blotches and darker alternating spots along the sides. As with other hognose snakes, they are named for, and can easily be identified by their sharply upturned rostral scales, which they use for digging and burrowing. The western hognose snakes are perhaps the most popular and widely kept species of hognose, due to their ready acceptance for rodents in captivity, and due to their small, pudgy, and “cute” faces and appearances that often win even non-snake lovers over. Also as with other hognose snake species, they will bluff by hissing, flattening their heads and necks, and sometimes feigning death, regurgitating, and/or expelling musk and feces when disturbed or if continued to be harassed or threatened. Hognose snakes also belong to a subfamily of snakes, Xenodontinae, which possess specialized, enlarged rear teeth in their mouths designed for capturing and swallowing frogs, toads, and amphibians. However, hognose snakes are harmless to humans and other larger animals, and serious complications from their bites are quite rare and atypical.

### **Taxonomy**

**Life:** All living, physical, and animate entities

**Domain:** Eukaryota

**Kingdom:** Animalia

**Phylum/Sub Phylum:** Chordata/Vertebrata

**Class:** Reptilia

**Order:** Squamata

**Suborder:** Serpentes

**Infraorder:** Alethinophidia

**Family:** Colubridae

**Subfamily:** Xenodontinae

**Genus:** Heterodon

**Species:** *Heterodon nasicus*\*

*\*Taxonomy subject to change and revision.*

### **Lifespan and Longevity**

If provided the proper care, plains hognose snakes can attain longevity of 15 to 25 years or more.

### **Distribution and Habitat**

The western, or plains hognose snake is a relatively small, thick bodied terrestrial to semi-fossorial colubrid snake indigenous from portions of southern and south-central Canada in Alberta, Saskatchewan, and Manitoba, through the central and disjunct portions of the Midwestern United States, and into northern Mexico, where the similar Dusty hognose snake occupies. Within this range, the western or plains hognose snake occupies primarily terrestrial environments, including sandy, loamy, to gravelly soiled floodplain sand prairies, open savannahs, grasslands, and agricultural areas to semi-arid deserts and scrubland regions, depending upon their range.

### **Origin/History**

*Heterodon nasicus* Baird & Girard, 1852.

The western hognose snake, now known formally as the “plains hognose snake”, has been kept and bred in herpetoculture for several decades. The exact date and year that this species was first bred in captivity is not known; however, it most likely occurred sometime during the 1960’s or early 1970’s. By the early 2000’s, western hognose began to increase in popularity as more color and pattern morphs became produced such as “anaconda”, “hypo”, “lavender”, and many others.

### **Experience Level Required**

Novice/Beginner to Intermediate/Moderate.

### **Size**

Western, or plains hognose snakes range from 5 to 8 inches as hatchlings, and about 1 ½ to 2 ½ feet, or 18 to 30 inches as most adults. Males tend to remain smaller than females.

### **Housing and Enclosure**

***Enclosure System: Primarily Terrestrial to Semi-Fossorial.*** Housing must be sealed, secure, and escape proof. Hatchling and juvenile western or plains hognose snakes can be housed in a 10 gallon terrarium or enclosure. Adult plains hognose snakes should be housed in a 20 gallon long terrarium or enclosure. These snakes are primarily terrestrial, and floor space is more important than height. Provide a substrate that can enable burrowing or hiding such as fine aspen shavings, cypress mulch, or coconut fibers. Do not use pine or cedar shavings, as these substrates are toxic to snakes. Provide additional basking and hiding opportunities using live or artificial foliage, rocks, logs, driftwood, or other hides. Also be sure to include a sturdy water bowl or dish as well.

### **Temperature, Lighting, and Humidity**

Create a thermal gradient (or a warm side) in the cage/enclosure with an appropriate sized UTH (or tank heating pad), ceramic or radiant heat emitter, or incandescent, UVA/UVB, or other heat producing bulb. Ideal temperatures for plains hognose snakes range from 75 to 80 degrees F on the cool side and 80 to 88 degrees F on the warm side. Most species of snakes have fairly simple and undemanding heating and lighting requirements in captivity, and do not require additional UVA/UVB lighting, although providing it can be greatly beneficial for their health, immune system, and overall wellness. Also be sure to spot clean the enclosure for urates, feces, or uneaten food at least once per week. Be sure to periodically replace the substrate, clean, and disinfect the enclosure and its furnishings at minimum every 2 to 3 months. More specific lighting, heating, and humidity product suggestions and recommendations that can best suit one’s needs, as well as those of one’s animals can be given as well. Western hognose snakes should be maintained at relatively low relative humidity levels from about 30 to 50%, with additional humid hides or retreats to assist with shedding and overall health.

### **Feeding, Diet, and Nutrition**

**Carnivorous;** In the wild, plains hognose snakes are carnivorous, and tend to be amphibian and specifically frog and toad specialists, although other vertebrates are also occasionally eaten. In captivity, unlike most other hognose snake species, plains hognose snakes can readily be switched to, and be given feeder rodents of appropriate size, such as rats or mice, although many hatchlings and juveniles may still require scenting. In most circumstances, it is recommended to provide humanely pre-killed rodents acquired from a reputable source, as offering live rodents to any snake can carry risk of serious injury or even death to your snake when the rodent bites to defend itself or otherwise gnaws on your animal. A general rule of thumb when selecting feeder rodent sizes for your snake is to provide prey items that are approximately the same width as the snake's widest point. It should also be noted that many snakes may refuse food for longer periods of time over several weeks or months, especially in the fall and winter months or if several other husbandry conditions are not being met. While this can be alarming to new pet owners, it is oftentimes normal, but their overall health and weight should be monitored during these times to make sure they do not lose weight or otherwise deteriorate. Most snakes typically are fed whole prey items, and do not usually require additional calcium or vitamin D3 supplementation unless otherwise directed. Their feeding frequency will also depend on the age, size, and overall health of your animal. Use care as to not overfeed them, as obesity and other health related issues can become an issue. More specific dietary and supplementary product suggestions and recommendations that can best suit one's needs, as well as those of one's animals can be given as well.

### **Handling**

As with many snakes, hatchling and juvenile hognose snakes may initially be nervous and defensive. They may flatten their necks, hiss, and mock strike, or occasionally death feign. Handle your plains hognose gently and deliberately, but do not drop or injure the animal. Most plains hognose snakes will become more tolerant and accustomed to handling as they become older and tend to grow out of this behavior. As with other hognose species, these species do possess enlarged rear teeth and are mildly venomous. However, they very seldom bite people, and should not be considered dangerous or medically significant, although localized reactions have been reported from these species to varying degrees.

**\*\*Also be sure to practice basic cleanliness and hygiene associated with proper husbandry after touching or handling any animals or animal enclosures to prevent the possibility of contracting salmonellosis or any other zoonotic pathogens\*\***

### **Contact**

Authored by Eric Roscoe. For any additional questions, comments, and/or concerns regarding this animal, group of animals, or this care sheet, please email and contact:

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