

# **WESTERN HOGNOSE SNAKE CARE SHEET**

***(Heterodon nasicus)***

**\*\*For generalized, background information on snake care and husbandry, please see the "General Snake Care Sheet" first\*\***

The western hognose snake is a small, stout bodied colubrid indigenous to north-central Mexico, central North America, and into south-central Canada. Hognose snakes are so named due to their pointed, upturned rostral (nose) scale that enable them to dig through sandy or other loose substrate in search of prey. Hognose snakes are well known for their defensive behaviors. When first encountered, they will produce a loud raspy hiss, flatten their heads and necks to mimic a cobra, and will mock strike in order to appear larger and more intimidating. If that display fails, hognose snakes will often flip themselves upside down and writhe about in the substrate with their mouth open in order to appear dead and lifeless to the predator while exuding a foul smelling musk. Western hognose snakes have become increasingly popular in the reptile industry due to their small size, and rodent eating habits when compared to other species of hognose.

## **\*Overall Difficulty Level: Novice**

Western hognose are a species that are suitable for the beginning reptile owner due to their small size and ease of care provided that one has a general knowledge of reptile, and specifically, snake husbandry. Unlike other North American hognose, captive born and well established western species adapt far more readily to eating rodents making them the most commonly and easily kept species of hognose. Given the proper care, western hognose snakes can attain longevity of 15-25 years on average in captivity.

## **Western Hognose Taxonomy**

**Kingdom:** Animalia

**Phylum:** Chordata

**Class:** Reptilia

**Order:** Squamata

**Suborder:** Serpentes

**Family:** Colubridae

**Subfamily:** Xenodontinae

**Genus:** Heterodon

**Species Epithet:** Heterodon nasicus

## **Size and Description**

Hatchling western hognose snakes typically range from five to nine inches in length. As adults, western hognose snakes can range between 18 and 30" on average. This is a small stout bodied and keeled scaled colubrid with a distinctive pointed and upturned rostral (nose) scale. Ground color can vary from grayish, tan, to tawny brown with numerous reddish brown dorsal blotches and dark lateral spots or blotches. There is often a pair of large spots or blotches on the neck behind the head. The ventral (belly) is usually black with variable amounts of yellow spots and flecks.

Many color and pattern morphs of the western hognose snake achieved through selective captive breeding have also been produced and continue to emerge as Hognose gain popularity. These include Albinos, Pastels, Hypos, Ghosts, Axanths, Anerythistics, “Red” phases, and “Green” phases, and “Anaconda” phases to name a few.

### **Temperament and Handling**

Hatchling western hognose snakes, like many species of snake, are often initially more defensive as hatchlings or juveniles. As hatchlings or juveniles, they may exhibit the aforementioned bluffing and/or death feigning behavior. However, with regular handling, most hognose snakes will become more tolerant of handling when handled and will lose their inclination to “perform”. It should be kept in mind however that even a supposedly docile snake may bite or react defensively if suddenly startled or frightened or when food is detected (resulting in a feeding response bite).

### **Enclosure/Housing**

The enclosure you choose must be secure to prevent the escape of the inhabitant and provide adequate ventilation. Hatchling to juvenile western hognose can be maintained in a 10-15 gallon long glass terrarium with a secure screen top. Larger numbers of hatchling to juvenile hognose can be kept in commercially available rack systems consisting of appropriately sized plastic shoe box sized containers with holes punched or melted for ventilation. These containers are made by Iris, Rubbermaid, and Sterilite. Racks are usually heated with Flexwatt heat tape either installed along the back wall of the rack as back heat or on the rear half of the floor of each slot as belly heat, and should be monitored with a quality thermostat.

Adult Western hognose snakes can easily be maintained in a 20-gallon long glass terrarium or similar sized commercially available plastic, wooden, melamine, or PVC enclosure with front opening sliding or hinged acrylic or glass doors. These types of enclosures provide increased security for snakes within them and space can be better utilized with them since they are stackable, and temperature and humidity can be relatively easy to control within them. Many of these types of caging are also available with built in lighting and heating elements as well. Adults can also be kept in commercially available rack systems consisting of appropriate sized sweater to blanket box sized containers (28-32 quart or similar sized), as previously described.

A hide-box for allowing the snake to retreat from view is recommended as part of a terrarium setup as well. Besides commercially available hide boxes, you could modify many things to serve as a hide box. They can include opaque plastic storage container, plastic litter pans for cats, and inverted flowerpots for example. A water dish should also be provided within the enclosure and be changed at least once weekly or sooner if fouled. The dish should be heavy enough so that it isn't easily tipped over (plastic or ceramic crock dishes work well). It should also be cleaned and disinfected periodically.

### **Temperature and Heating**

As with all reptiles, western hognose snakes are ectothermic animals, meaning it is important to provide them with an external heat source and thermal gradient for proper digestion and gestation. There should be a warm side and a cooler side to the enclosure. To create the warm

side, you can use an under tank heater (UTH), Flexwatt heat tape, or a radiant heat panel on one half of the enclosure. Many commercially available plastic and PVC enclosures and racks come with their own heating elements. The warm side should remain around 85-90 degrees Fahrenheit. It is also important to disallow any snake to come into direct contact with any heating element, as thermal burns can result, and can sometimes be severe, requiring professional veterinary attention. UV or other overhead lighting is not required for most species of snakes. However, overhead UV lighting or fluorescent lighting can improve the cage's aesthetics as well as visibility within.

### **Substrate**

The substrate is the enclosure's bedding. Cypress mulch, aspen shavings or aspen Sani Chips are all acceptable substrates for western hognose. Avoid pine and cedar shavings, as these substrates are toxic to snakes. The substrate should be kept dry and be spot cleaned when needed to reduce the likelihood of bacterial outbreaks. A complete substrate change and replacement should be done periodically as well, with that interval depending on the substrate being used.

### **Feeding and Diet**

Being members of the Xenodontinae snake subfamily, western hognose possess enlarged rear teeth and mildly toxic saliva designed primarily to seize and subdue small prey items such as small lizards, small rodents, amphibians, and the occasional rodent or other small mammal. As with other hognose species, these snakes specialize in feeding on anurans (frogs and toads) and possess enlarged rear teeth, which are designed to deflate their anuran prey when seized.

Neonate western hognose snakes can be started off two to three times weekly on pinkie mice or fuzzie mice. The size of the prey item should be increased accordingly as the snake grows. A general rule of thumb to follow is to offer prey items that are no larger than the widest point of the snake. Adult western hognose snakes can be offered small to adult mice every five to seven days. It is important to not to overfeed your hognose snake, since obesity and compromised health of the snake can result over time. On occasion, some neonate or juvenile hognose snakes may be fussier eaters and may initially accept only frogs, toads, or lizard prey items. In these cases, if one wishes to switch the snake over to rodents, various scenting techniques may need to be performed. In some cases, mixing the rodent prey item within a bag of the preferred prey item will work. Other scenting options that are available include "braining" the pre-killed prey items as a means of enticing the snake to feed.

### **Summary:**

In recent years, western hognose snakes have seemed to gain increasing amounts of popularity within the herpetocultural hobby and industry, as an even greater number of different color and pattern morphs and variations are, and continue to be produced each year. There is now widespread speculation that this species will experience a significant increase in popularity in years to come. Along with most specimen's readiness to feed on a rodent diet (unlike most other hognose snake species), therefore making them easier to maintain, even non-snake owners are often attracted to this species' small size, upturned snout, and "cute" and "chubby" appearance.