## Western Hognose Snakes (Heterodon Nasicus)

This care sheet is intended to provide the basic information necessary to keep hognose snakes. There is no "right way" to keep hognoses so we also recommend looking at other resources to develop a process that works for you and your snake(s).

Western Hognose snakes are relatively small, 15"-24" (males) & 28"-36" (females), heavy bodied snakes that are native to North America, South America, and Madagascar. They typically make great pets due to their mild disposition and the simplicity of taking care of them. Their average lifespan in captivity is 15 years but lifespans of 20+ years is not uncommon. Hognose snakes are in the Colubrid family and they get the name "hognose" from the upturned rostral scales on their snout which they use for burrowing and unearthing prey. Hognose snakes are not likely to bite but they are rear fanged which means they may be classified as venomous by some people. The venom is very mild and generally harmless to humans but you should be aware of this if you intend to keep a hognose snake.

**Enclosure/Housing**; A general rule for hognose enclosures is to allow 1 ft<sup>2</sup> of floor space for each foot of snake length with a height of about 1/3 of the snake's length. Adult hogs can be kept in a 20-29 gallon long aquarium, younger snakes can be accommodated in a 5-10 gallon aquarium, & a 30-40 gallon should be used for extra-large females & pairs. Snakes are territorial animals and do much better on their own than when kept in groups. Hogs can become insecure when kept in an enclosure that is too large and they may refuse to eat. When kept in an aquarium a tight fitting (locking) screen lid/cover is needed to allow adequate ventilation and to keep your snake in their enclosure. Keeping the enclosure clean is very important to reduce the risk of parasites and illness. Any waste should be cleaned up immediately and the enclosure should be sanitized at least monthly with a complete change of the substrate.

**Substrate**; Western hognose snakes are natural burrowers so a substrate should be used that will allow them to create burrows. We use aspen snake bedding. Aspen allows them to create a network of burrows that they use to move around their enclosure. Other types of snake friendly bedding can be used but make sure it allows the snakes to create a network of burrows. Bedding should be kept dry, free of feces, and changed completely monthly. Some of the alternative substrates can contribute to high humidity which is not healthy for your snake and some are also difficult for them to burrow in. The "soil" type substrates may also carry a risk of impaction. **Never use Cedar, Pine, or Redwood Shavings in any reptile enclosure as they are toxic to most reptiles.** 

**Furnishings**; All snakes need somewhere to hide and may become stressed if a place is not provided. We recommend keeping the cage accessories/furniture simple to reduce the amount of items that need to be cleaned. The minimum furnishings are (2) hide boxes and a water bowl. The hides should only be slightly bigger than the snake and have a single opening so the snake can feel secure. Having 2 hides allows you to place one on the cool side and one on the hot side so they can regulate their temperatures and feel secure. You can also put in branches, rocks, and other decorations in the enclosure just make sure they are cleaned before you put them in the enclosure, and cleaned monthly when the enclosure is sanitized.

**Heating and Lighting**; all reptiles including snakes are cold blooded and get heat from their surroundings. In the wild snakes bask in the sun to keep warm or move to a shady spot if they are too hot, this is called thermo-regulation. Heat is necessary for proper digestion. Failure to maintain a proper temperature and temperature gradient can lead to health issues. Heating can be accomplished by using an under tank heater, heat mats/pads, or heat tape controlled by a reliable thermostat. Temperatures at their hot spot should be around 88°F-90°F. The cool side of the enclosure should be about 80°F-82°F. The heat source should cover 1/3- 1/2 of the bottom of the enclosure. A thermostat with a "night drop" function allows you to slightly lower the temperatures at night.

**Lighting**; a proper day/night light cycle is important for the health of your hogs. Western Hognoses are diurnal and a consistent light cycle helps in regulating their activity. Hog noses do not need light 24 hours/day and will suffer from stress without a regular day/night light cycle. The length of the day/night cycle can be combined with the regulation of the temperature to provide seasonal breeding cues. UVB is a controversial subject in regards to hog noses and many other snakes. Many people believe they do not require UVB lighting while others believe it is necessary.

**Humidity/Water**; Western hog noses need to have a small bowl of clean water available at all times. The bowl should be big enough for the snake to completely submerse themselves in and deep enough so the water stays in the bowl. Change the water and sanitize the water bowl every 3-4 days or more often if the snake fouls the water. If there are any issues during shedding a small humid hide can be provided but it should be removed once the shedding is complete.

**Diet, Nutrition, & Feeding;** in the wild hognose snakes predominantly eat amphibians, mice, lizards, turtles, reptile eggs, and occasionally insects and carrion. Most captive bred hognose snakes are raised to eat rodents because this is the most widely available food source. It is better to feed a prey item that is about the same diameter as the snake's head. It should produce a noticeable lump that is not visible after about 24 hours. Hatchlings should be fed small pinkies every 4-5 days and adults should be fed a mouse every 6-7 days. Some larger adults may require 2 mice or a small rat. Always feed frozen/thawed rodents to your snake. You should always use tweezers to feed your hog because it allows you to

## Western Hognose Snakes (Heterodon Nasicus)

move the mouse so it appears to be alive and also avoid accidental bites. Unlike a lot of other snakes hogs may strike at their prey from any direction.

The most common technique to get hatchlings, wild caught snakes, and reluctant feeders to eat mice is called "scenting". Scenting is the process of adding an external scent to a pinkie/mouse. This can be done by rubbing the scent onto the mouse or by applying a "liquefied" scent with a Q-tip. Some of the more common foods/scent's that are used include Fresh or canned fish or fish juice (salmon, trout, tuna, sardines, mackerel, etc.), Hotdog or Vienna sausage broth, Chicken Broth or chicken, Boiled Egg or Egg Yolk. Some of the animal scents that are frequently used include frog, toad, anole, & Gecko.

Do not feed your snake live food because even a small mouse may bite or injure your snake which can lead to an infection. Wild rodents and amphibians always carry parasites so they should not be fed to your snake. Freezing also kills bacteria and parasites.

When purchasing a Western hognose or any snake, always ask the seller what the snake is eating and when the last feeding was. Only purchase established feeders unless you are experienced.

**Behavior**; The Western hognose snake is probably best known for its wide variety of harmless and amusing defensive behaviors. When threatened they will flatten their bodies to appear larger and more dangerous to predators. They also produce a loud hissing noise and they will frequently flatten out the ribs along their neck and "hood up" like a cobra. They will also strike repeatedly with a closed mouth. If none of these displays works their last ploy is to play dead. Western hognoses will roll over onto their back and stick their tongues out. If you turn them over they will turn themselves over onto their backs continue playing dead. This behavior may also be accompanied by the hognose releasing a terrible smelling musk from its anal glands. Unfortunately they generally stop displaying many of these behaviors when kept in captivity.

**Shedding**; all snakes shed their skin periodically throughout their lives and this is called ecdysis. Young snakes will shed more frequently than adult snakes because of their rapid growth, but even adult snakes should shed several times a year. This is a natural process and most snakes will shed their skin without any issues as long as there is always fresh clean water in a bowl that is big enough for them to fit in. When your snake is getting ready to shed their color will become dull or dark, and their eyes will turn a bluish color. They are generally less active and may refuse to feed and may also avoid being handled. When your snake is in shed it is best to leave them alone because their vision is impaired and it may stress them out.

**Handling**; Western hognose snakes are easy to handle but they are fast and quite active so be careful not to drop them while you are handling them. Do not try to handle a snake that is displaying their defensive behaviors to avoid stressing out the snake. Wait until it calms down and then you can handle them. Never handle your snake right after feeding because it may regurgitate its meal. It is advisable to leave your snake approximately 48 hours to digest their meal before handling.

Bites from western hog noses are very rare and usually occur due to the snake's aggressive feeding response. If you are accidentally bitten by your hognose do not pull or pry the snake off because you may hurt the snake. If possible submerse the snakes head in water and this will cause them to let go. If you do get bitten wash the area with soap & water. For mild symptoms you can take an allergy medication like Benadryl. Although there are no reports of a serious envenomation from hognose snakes if you experience severe allergic type symptoms you should seek medical help immediately.

**Sexing**; Hognose snakes are generally easy to sex visually once they are older. The tail of the female's short and stubby while in males it is long. Females will have generally have around 30 rows of scales after the vent and males usually more than 40. Probing and popping are other methods which can be used to determine the sex but they should be left to more experienced keepers as you could hurt your snake.

**Brumination or Brumation**; Brumination is the reptile equivalent of mammalian hibernation and is not generally necessary if you are not intending to breed your snake. It is a cooling period of 6-8 weeks to allow your snake to reduce their metabolism and store up hormones for the breeding season which occurs shortly after the end of brumination. Some snakes will suddenly reduce their activity and refuse to eat for a couple of months on their own accord.