

# Western Hognose care sheet and maintenance

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## Western Hognose Snake (*Heterodon nasicus*.)

### Difficulty: Intermediate

Western hognose snakes are small fossorial snakes native to the grasslands and dry rock lands of western North America — anywhere with sandy, well-drained soil that they can burrow in. As a fossorial species, hognoses spend most of their time underground, but their diurnal they can also be found occasionally aboveground basking or hunting.

Western hognoses are generally between 17-35" long, with females being significantly larger than males. They have a blunt triangular head, an upturned nose, and keeled scales along the body. Their blotched tan-and-brown pattern and keeled scales cause them to be occasionally mistaken for rattlesnakes.

Hognose snakes are generally fairly easy to care for, but occasional refusal to feed on non-amphibian prey and their mild venom creates certain special considerations for their care. With good care, they typically live 10-15 years.

### What You Need for a Bioactive Western Hognose Snake Enclosure

- • 36" x 18" x 18" reptile enclosure (preferably front-opening)
- • [Exo Terra Reptile Glow Light, small](#) (x2)

- [50w Exo Terra Sun Glo Halogen Lamp \(x2\)](#)
- Plug-in lamp dimmers, x2
- Flagstone or paver stone (for basking)
- [Bio Dude Digital Thermometer / Hygrometer](#)
- Infrared thermometer (“temp gun”)
- [22” Arcadia Forest D3 6% UVB T5 Bulb](#)
- [24” Bio Dude Solar Grow T5 HO Single Bulb Light Strip \(x2\)](#)
- [Exo Terra 2qt Pressure Sprayer Mister](#)
- [Zilla 24/7 Digital Timer Power Center](#)
- [Bio Dude Terra Sahara Bioactive Kit for 40 Breeder](#)
- [Bio Dude Western Hognose Snake Clean Up Crew Pack](#)
- [Bio Dude Western Hognose Starter Plant Pack](#)
- Environmental enrichment items ([caves](#), [hollow logs](#), [sturdy branches](#), etc.)
- [Water bowl](#)
- [Zoo Med Stainless Steel 10" Curved Feeding Tongs](#)
- Frog/lizard scenting liquid

### **Terrarium Size**

The minimum enclosure size recommended for housing a single western hognose is 18”L x 18”W x 24”H. However, when it comes to choosing a terrarium for pet reptiles, keep in mind that larger is always better!

Multiple hognose snakes should not be housed together in the same enclosure.

### **Lighting**

Although technically hognose snakes can survive without UVB lighting, it’s best practice to provide UVB to them. UVB provides benefits beyond just vitamin D3 synthesis, such as: preventing illness, improving nervous and digestive function, and improving mental health.

In other words, we recommend installing appropriate UVB lighting as part of your snake’s setup. The **22” Arcadia 6% or Zoo Med T5 HO Reptisun 5.0** is likely to work the best for a hognose snake in a 40 gallon enclosure. Position the basking spot no closer than 6” below the UVB lamp.

Your UVB bulb must be replaced every 12 months to maintain its output. Resist the temptation to use other, cheaper brands — when it comes to UVB, *brand matters!*

Because this is a bioactive setup, you will also need a plant light to encourage healthy plant growth. We recommend the **24” Bio Dude Solar Grow T5 HO Single Bulb Light Strip** for this purpose.

Both lighting and heating should be on for 12 hours/day.

### **Heating**

Like other reptiles, western hognoses are *poikilothermic*, which means that they need a range of temperatures within their enclosure so they can regulate their own body temperature as needed. Areas of heat speed up their metabolism and promote activities like digestion and healing. Cool areas slow the metabolism and promote activities like rest and energy conservation.

Western hognose snake temperature gradient:

- **Basking surface temperature:** 90-95°F
- **Cool zone temperature:** 70-75°F

To create a basking area for your hognose, you will need a halogen heat bulb like the **50w Exo Terra Sun Glo Halogen Lamp** (optimum wattage may vary) and a fixture like small **Exo Terra Reptile Glow Light**. If the basking area gets too warm, you can plug the lamp into a lamp dimmer like the **Lutron Credenza** and reduce the heat that way. If the basking area is too cool, you will need a higher-wattage bulb.

The most accurate way to keep track of your terrarium's temperature gradient is to use a temperature gun like the **Etekcity 774**.

## Humidity

Western hognose snakes need a moderate to low humidity environment, with most of the moisture being underground rather than in the air. To be specific, they need an **average of 30-50% humidity**. Keep track of your humidity levels with a digital hygrometer like the **Bio Dude Digital Thermometer / Hygrometer**, with the probe placed in the middle of the enclosure.

To raise the humidity in your snake's enclosure and moisten the substrate, use an **Exo Terra 2qt Mister** to wet things down once a week or as needed. Don't forget to water your plants!

## Substrate

A thick layer of bioactive-compatible substrate is essential to creating a bioactive hognose snake enclosure. Aside from providing plenty of soil for the plants' roots, your hognose also needs a thick substrate layer to burrow around in!

Because this is an arid setup, no drainage layer is needed. Instead, you can jump right into the dirt. You will need a soil-like mix that mimics the sandy soil of prairie grassland and will nurture drought-tolerant plants. If you want to make your own, you will need a mixture of 40% organic topsoil, 40% fine sand, and 20% Zoo Med Excavator Clay. Mix that with leaf litter, sphagnum moss, and 1 doses of **36qt Bio Shot** to inoculate your soil with beneficial microfauna. This layer of soil should be at least 4" deep, preferably more.

Alternatively, you can let The Bio Dude do the work for you with **The Bio Dude's Terra Sahara 40 Breeder bioactive substrate kit**.

To make the substrate functional, make sure to add drought-tolerant CUC organisms like powder blue/orange isopods, arid springtails. You can also add other species like mealworms, super worms, and buffalo beetles!

### **Decorating the Enclosure**

Enclosure décor is more than just making your setup look good. It's also an important part of providing *environmental enrichment* to your hognose, which enhances your pet's quality of life by providing opportunities to express natural behaviors. Although hognose snakes are fossorial, it's still important to give them things to slither around on and explore. Use things like sturdy **branches**, **cork flats/hollows**, **caves**, and **plants** to fulfill that need. Don't be afraid to clutter it up!

Live plants in particular are critical to helping your mini-ecosystem function properly. Make sure the plants that you choose are drought-tolerant and won't be too bothered if their roots get disturbed. Succulents, cacti, and grasses can be great choices!

### **Feeding Your Western Hognose**

Like other snakes, western hognoses are *carnivorous*. In the wild they prefer to eat toads, but in captivity they generally do well on a rodent diet. Here is a quick feeding schedule you can reference:

- **Hatchlings:** Pinky mouse every 3-4 days
- **Adults:** 2-3 rat fuzzies/pups every 4-5 days

The key to providing a healthy, balanced diet for any reptile is VARIETY! Here's a quick list of options that are appropriate for your hognose:

Prey item ideas: young mice, young rats, quail eggs, green anoles, captive-bred frogs/toads, Reptilinks

If your snake doesn't seem interested in its food, scent it with some frog or lizard "flavored" scenting liquid to get their attention. To reduce the risk of accidentally getting bitten by your snake, offer prey with a soft-tipped pair of feeding tongs.

### **Water**

Keep a large, shallow bowl of fresh water in the enclosure at all times. The water should be changed at least twice weekly or whenever it gets soiled. Scrub the bowl with an animal-safe disinfectant before replacing.

## Handling Tips

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After bringing your new pet home, do not handle it until it is eating regularly. This can take anywhere from two weeks to two months, so be patient and use this time to make sure your husbandry is on point. Once your snake is ready for handling, handle it at least 1-2x weekly to keep it accustomed to you, but no more than once daily.

### Wash Your Hands First

Before you pick up your hognose snake, first wash your hands with soap or hand sanitizer. This removes potentially harmful bacteria, viruses, or parasites from your hands, as well as makes your hands smell distinctly inedible. Hognose snakes find prey via smell. If your hands smell like anything remotely appetizing, your pet may confuse you for food.

### How to Pick Up a Snake

Next, use a paper towel roll to tap its head (gently). This sets expectations by letting the snake know that it's time for handling, not food. Pick it up with two hands, one behind the head and one supporting the rest of the body. NEVER pick up a snake by its tail — this can really hurt their spine!

### Safety with Hognose Snakes

Hognose snakes are mildly venomous. Their venom is not considered medically significant, but it can cause local swelling and discomfort. If this is something you're worried about, wear a pair of leather gloves while handling.

### DO NOT Handle If...

Don't handle your snake within 48 hours of a meal, as this can stress them out and lead to regurgitation, which is a traumatic experience that can actually lead to death. Also do not handle if your pet's eyes have turned opaque or cloudy. This means that the snake is preparing to shed and can't see well, which makes them jumpy and defensive.

Care information courtesy of [ReptiFiles](#).

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