

Western Hognose Snake (Heterodon nasicus)

Difficulty: Easy-Intermediate

Western hognose snakes are small, stout-bodied North American snakes best known for their upturned snout, which is adapted for digging. **Adult males commonly reach about 17-24 inches, while females are often 24-36 inches and substantially heavier.** They are primarily diurnal and spend much of their time burrowing through loose soil.

Western hognoses are native to grasslands, prairies, and other relatively dry habitats across central North America. **With proper care, they commonly live 15 years or more in captivity, and some individuals may reach 20 years.**

Important: Western hognoses are rear-fanged venomous snakes. Bites are uncommon and usually cause only localized pain, itching, or swelling in people, but reactions can vary. Use feeding tongs, wash prey scent from your hands, and do not intentionally allow a snake to chew on skin.

Shopping List

- Secure enclosure - adult female: at least about 36" x 18" x 18"; smaller adult males can use roughly 30" x 12" x 12"
- 50w-75w halogen or incandescent basking bulb (depending on room and enclosure temperature)
- 5.5" dome lamp with ceramic socket
- Dimming thermostat or lamp dimmer
- Plug-in light timer
- Infrared thermometer
- Two digital probe thermometers and a digital hygrometer
- Optional low-output linear UVB fixture and bulb
- Reptisafe or similar water conditioner
- 4-6" of loose, burrowable substrate for an adult
- At least two snug hides plus a humid hide
- Heavy, shallow water bowl
- Decor and cover (cork, branches, foliage, leaf litter, securely placed rocks, etc.)
- Long feeding tongs
- Appropriately sized frozen/thawed whole prey

Housing

Western hognoses are terrestrial and fossorial, but they are active snakes when given enough space and cover. A typical adult female should have at least a 36" x 18" footprint. Smaller adult males can be maintained in a roughly 30" x 12" enclosure, although larger is beneficial when the enclosure is properly furnished. The enclosure must be escape-proof, because hatchlings and juveniles can squeeze through surprisingly small gaps.

Young snakes may be raised in smaller grow-out enclosures, but a larger enclosure can also work if it has deep substrate, multiple snug hides, and enough clutter that the snake does not feel exposed. A hognose should be able to move between the warm and cool sides while remaining partly concealed.

Lighting & UVB

Western hognoses are active during the day, so provide a clear day/night cycle. About 12 hours of light and 12 hours of darkness is a practical year-round schedule for most pets. Never place a glass enclosure where direct sunlight can shine into it, because temperatures can become dangerous very quickly.

UVB is not strictly required for survival when the snake receives appropriate whole prey, but low-to-moderate UVB can be beneficial. If used, provide a linear low-output bulb over part of the enclosure, with plenty of shade and a completely unlit retreat. A basking-area UVI around 2-3 is appropriate; follow the lamp manufacturer's distance chart and account for any mesh between the bulb and the snake.

Heating

Like all reptiles, Western hognoses rely on external heat to regulate body temperature. Heat one end of the enclosure and leave the opposite end cooler so the snake can choose the temperature it needs.

Basking surface temperature: 90-95°F (32-35°C)

Warm/mid-zone temperature: 75-85°F (24-29°C)

Cool zone temperature: about 70-78°F (21-26°C)

Nighttime temperature: a drop into the mid 60s to low 70s°F is generally well tolerated

Overhead heat from a halogen or incandescent bulb is preferred because it warms both the air and the surface below it.

Position the heat source over one end rather than the center. Use an infrared thermometer to measure basking surfaces and probe thermometers to verify the warm and cool air temperatures. Any heating device must be regulated so it cannot overheat the enclosure.

Most homes do not require supplemental heat at night. If the room regularly falls below about 60°F, use a lightless heat source controlled by a thermostat. Avoid colored night bulbs and heat rocks. Heat mats should not be relied on as the primary heat source.

Humidity

Western hognoses generally do best in relatively dry, well-ventilated conditions. An average enclosure humidity around 30-50% works well for most animals. The enclosure should not remain damp throughout, because persistently wet substrate and poor ventilation can contribute to skin and respiratory problems.

Keep a humid hide available, especially during shedding. Damp sphagnum moss or a similar moisture-holding material works well inside the hide. In a very dry home, lightly moisten a small portion of the cool side rather than heavily misting the entire enclosure.

Substrate

Burrowing is one of the most important natural behaviors for a hognose. Provide at least 3" of loose substrate for small juveniles and roughly 4-6" or more for adults when enclosure height allows. A larger female should have enough depth to disappear below the surface and construct temporary tunnels.

Aspen shavings are a simple option that holds burrows well when kept dry. A naturalistic mix of approximately 70% organic, fertilizer-free topsoil and 30% washed play sand also works well. Paper towel is useful for quarantine or medical observation but should not be the permanent setup for a healthy hognose because it prevents normal digging behavior.

Avoid cedar, aromatic pine, corn cob, gravel, and sharp or strongly scented substrates. Place heavy rocks and decorations directly on the enclosure floor or otherwise secure them so a burrowing snake cannot undermine them and become trapped.

Water

Provide clean, fresh water at all times in a sturdy bowl that is difficult to tip. Replace the water daily or whenever it becomes soiled, and wash the bowl regularly to prevent biofilm buildup. Position it where spills will not keep a large area of substrate permanently wet.

Food

Western hognoses consume a variety of small vertebrates in the wild and are especially associated with amphibian prey. In captivity, most established Western hognoses can be maintained successfully on appropriately sized frozen/thawed whole prey. Frozen/thawed feeders are preferred because live rodents can injure a snake.

Choose prey around the width of the snake's head, or only slightly wider. Hognoses do not handle oversized meals as well as many constrictors, so when in doubt, offer a smaller item rather than a very large one. Thaw prey safely, warm it before feeding, and offer it with long tongs. Do not handle the snake for 24-48 hours after a meal.

Typical feeding schedule:

- Hatchlings and small juveniles - every 4-5 days
- Growing juveniles/subadults - every 5-7 days
- Adults - about every 7 days, adjusted for body condition, activity, and prey size

Some hognoses, especially males, may occasionally refuse meals. First check temperature, security, seasonal changes, and enclosure setup rather than repeatedly offering food every day. Track body weight and condition. A brief fast in an otherwise healthy snake is different from persistent refusal accompanied by weight loss or other signs of illness.

Supplements

A complete whole-prey diet normally supplies the nutrients a healthy Western hognose needs, so routine calcium or vitamin dusting is generally unnecessary. Do not supplement feeders unless directed by a qualified reptile veterinarian.

Decor & Enrichment

Decor is functional, not just cosmetic. Provide a snug hide on both the warm and cool sides, plus a humid hide. Cork bark, leaf litter, artificial foliage, low branches, and securely placed rocks create cover and exploration opportunities. Keep decor stable and provide enough surface cover that the snake can move without feeling exposed.

Handling & Behavior

Give a new snake time to settle in and ideally wait until it has accepted one or two normal meals before routine handling. Once established, brief sessions a few times per week are usually well tolerated. Approach from the side, support the body, and avoid tight restraint.

A nervous hognose may hiss, flatten the neck, make closed-mouth bluff strikes, musk, or occasionally play dead. These are defensive behaviors, not proof of aggression. End the session if handling causes prolonged distress.

Bite safety: Most bites are feeding-related. Wash your hands after handling prey and use tongs for feeding. If a hognose bites and holds on, do not pull the snake away, which can injure its mouth. Calmly disengage it as soon as practical. Significant or rapidly spreading swelling, breathing difficulty, faintness, or other systemic symptoms require prompt medical attention.

Shedding

Before shedding, the snake may become duller, hide more often, refuse food, and develop cloudy blue-gray eyes. Keep fresh water available and make sure the humid hide is damp but not soggy. A healthy shed should include the eye caps and tail tip. Persistent retained shed is usually better addressed by improving access to appropriate humidity than by peeling dry skin from the snake.

Cleaning

Remove feces, urates, shed skin, wet bedding, and other contamination promptly. Wash the water bowl frequently. Periodically replace substrate and, during full cleanings, wash and disinfect the enclosure and decor with a reptile-safe disinfectant; rinse as appropriate and allow everything to dry before returning the snake.

Cohabitation

Can multiple Western hognoses be housed in the same enclosure? No. Western hognoses are solitary. Permanent cohabitation can create competition, stress, feeding accidents, or injury. House each snake individually except for brief, supervised breeding introductions.

Health

A healthy hognose should be alert when active, maintain a stable body condition, breathe quietly, and shed cleanly. Keep simple records of feeding, sheds, and body weight so gradual changes are easier to notice.

Watch for wheezing, bubbles or mucus around the mouth or nostrils, repeated open-mouth breathing, burns, mites, swelling of the mouth, persistent regurgitation, abnormal stool, retained shed, unusual weakness, or prolonged food refusal with meaningful weight loss. These signs warrant evaluation by a reptile-experienced veterinarian.

RED ROCKS

EXOTIC REPTILES

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