

Companion Animal Hospital Exotic Animal Care



African Pygmy Hedgehog Care

The African Pygmy Hedgehog (*Atelerix albiventris*), also known as the White-bellied or Four-toed Hedgehog, is a small species of hedgehog from arid planes and savannah of central Africa. They are shy, crepuscular (active at dawn and dusk) animals but can make rewarding companion animals with patience and dedication. These hedgehogs have an average lifespan of 5-8 years; however some individuals may surpass 10 years of age.

Previously, hedgehogs were classified within the mammal order Insectivora- this classification is now defunct. New genetic information using molecular biology has given us a more accurate picture of many species' shared ancestry, and has necessitated reclassification of many mammal species. Hedgehogs are now considered within the order Eulipotyphla and are related to gymnures ("moonrats"), solenodons, moles, shrew-like moles, and true shrews.

1. Feeding your pet hedgehog

Wild hedgehogs are predominantly insectivorous, spending most of their activity cycle foraging for insects (adults and larvae), snails, and spiders, occasionally eating some plant matter and rarely other vertebrate prey (like young reptiles or amphibians).

In captivity, it can be difficult to provide a balanced diet using only commercially-produced insects. For this reason, we recommend feeding a balanced pellet or kibble formula made for hedgehogs as the main diet, and supplementing with healthy insect and fruit or vegetable choices. Some low-fat cat foods are also suitable for hedgehogs, but please talk to our staff first.

We recommend the following feeding regimen for most hedgehogs:

- Appropriate pelleted/kibble diet: 2-3 teaspoons/day
- Live insects 3-4 times weekly, such as mealworms (5-6/meal) or crickets (1-2/meal)
- Fresh produce (vegetables and fruits): 1-2 teaspoons/day

We strongly recommend purchasing a small kitchen scale to weigh your hedgehog monthly. This is to help you monitor for any weight gain or loss.

Insects:

There are many commercially-raised insects available in pet shops to offer as prey to your hedgehog. Suitable insect choices include:

- House Cricket, *Gryllodes sigillatus* and *Acheta domestica*: Crickets are bred by the tens of thousands in commercial facilities, and are available in many pet shops in multiple size categories. Crickets are a good staple feeder and offer an opportunity for exercise as they often need to be chased, although some hedgehogs are shy with very “bouncy” crickets. Crickets tend to be poorly fed in most pet shops and need gut-loading and supplementation to make them a more nutritionally complete meal.
- Mealworms, *Tenebrio molitor*: Mealworms are the larvae of a species of darkling beetle. They also need gut-loading and supplements to make them more nutritious.
- Superworms, *Zophobas morio*: Superworms are the larvae of a different species of darkling beetle. Although they are “meatier” and larger than mealworms, they still require gut-loading and supplements. Superworms may be too large for some smaller hedgehogs. One superworm is a substitute for 4-6 mealworms.
- Waxworms, *Achroia grisella* and *Galleria mellonella*: Two species of wax moths are commonly bred as feeders and bait. Their larvae, or caterpillars, are called waxworms. These feeder insects are naturally calcium-rich, but also have a high fat content. They should be fed only rarely as a treat, to avoid obesity.
- Canadian Nightcrawler (earthworm), *Lumbricus terrestris*: Not truly an insect (they are classified as oligochaetes, a group of aquatic and terrestrial worms), but a nice prey item to add diet variety. They are rich in protein and calcium. A small to medium-sized nightcrawler may be offered occasionally. Please note that the smaller compost worms (sometimes called “red wigglers,” or *Eisenia foetida*) have a foul taste and are not a good choice for prey.

Most commercially-raised insects are nutrient-poor until they have been fed a nutritious meal. This is partially for cost-effective insect breeding (they do not need optimal nutrition to breed in vast numbers), and partially because feeding nutrient-rich foods can affect their lifespan.

“Gut-loading” consists of feeding insects a healthy, balanced diet to ensure that they are providing good nutrition to your pet. There are a number of gut-loading diets available commercially. Please consult with our staff for product recommendations. Most diets are recommended to be fed to insects for 24-48 hours before those insects are then fed to your pet hedgehog.

Feeding cat and dog food as a gut-load is not recommended. While they are an excellent source of some nutrients, they are a significant source of cholesterol. Insects cannot synthesize their own sterol molecules (including cholesterol), and are not a common natural source of cholesterol unless they eat other cholesterol-containing animals. Dogs and cats need dietary cholesterol, but it can lead to serious health issues in insectivores that have not adapted to needing it in their diet. For this reason, we even prefer hedgehog diets to cat food for the pelleted portion of your hedgehog’s diet.

Prey insects should always be kept in clean, well-ventilated containers to prevent mold growth. Feeding prey raised in moldy, unsanitary conditions will contribute to disease in your pet.

Vegetables and fruits:

Offer 1-2 tsp. of fruits and vegetables daily. They should be finely chopped or grated, and tough vegetables may be lightly steamed then cooled so that they are easier to eat. Safe fruits and vegetables include:

- Apple
- Asparagus
- Banana
- Bell pepper
- Broccoli
- Carrot
- Cherries
- Cucumber
- Green beans
- Melon
- Papaya
- Peach
- Pear
- Plum
- Radishes
- Squash
- Strawberries
- Sweet potato
- Zucchini

Talk to our staff about recommended brands of hedgehog diet and insect gut-load to keep your pet happy and healthy. Whenever you are offering a new food item, introduce it slowly (and only one new food at a time) in case it causes gut upset in your pet. As hedgehogs are crepuscular to nocturnal, please offer food at night.

Always ensure that your hedgehog has access to fresh, clean water in a dish or water bottle. We prefer water bottles as they cannot be accidentally tipped over.

2. Behaviour, socialization, and handling

Hedgehogs are nocturnal (active at night) and prefer a calm, quiet, and dim environment when active. We recommend keeping them in a calm part of the home that does not have a lot of activity during the day to allow them to sleep without interruption. A natural daylight cycle is important to help regulate their day-to-night rhythm; do not deprive them of light during the day.

It is not unusual to hear hedgehogs running around for hours at a time during the evening. Wild hedgehogs will travel several miles a night in search of food, and this behaviour is reflected in pet hedgehogs.

Hedgehogs tend to be shy and cautious animals, however with time and patience they may become more tame and accepting of handling and interactions. As their quills can be quite painful when erect, we recommend picking up your hedgehog with a small towel or light work gloves. We recommend allowing the hedgehog to wander the floor of a small room, and you may offer him or her treats such as fruit or mealworms.

Understanding hedgehog body language can help you understand how your pet is feeling. Hedgehogs that feel safe and are happy with their surroundings will have their quills laying flat against the body, and will explore their environment. Happy hedgehogs will make low-pitched chirps, whistles, and purrs. When startled, hedgehogs will snort or grunt, and furrow their brow—if they continue to be scared they will curl up into a tight ball to protect themselves. If left alone for several minutes, the frightened hedgehog will gradually uncurl.

Some hedgehogs will perform a behaviour called “anting” or “self-anointing” when presented with a new object, especially with a potent odour, in the environment. The hedgehog will lick the object repeatedly, froth at the mouth and then proceed to groom itself for several minutes to an hour. This behaviour is normal.

3. Housing

Hedgehogs may be kept in a cage that provides at least 0.38 m² (4 ft²) of space to allow for them to exercise at night. Wire-top cages with a solid plastic bottom intended for guinea pigs (or the larger version intended for rabbits) can work very well as a hedgehog habitat. Avoid using cages with smaller wire bars or mesh, as hedgehogs will try to climb these walls and often suffer limb injuries from getting their hands and feet stuck in the small openings.

The cage should be kept at a comfortable room temperature, between 23-27 °C (75-80 °F). Hedgehogs should not be allowed to experience temperatures cooler than about 18 °C (65 °F) as they may attempt a hibernation that often results in a sick hedgehog. If you are concerned that your hedgehog’s enclosure may be too cool, using a heating pad under one end of the cage or a ceramic heat emitter (in a lamp fixture) above the cage can allow for a warm spot. Please follow all manufacturers’ recommendations to ensure that you are using these heating devices safely.

The cage bottom should be lined with a safe substrate, or bedding. We recommend using a fluffy recycled newspaper bedding such as CareFRESH® or Boxo®. Wood shavings of a non-aromatic wood, like aspen, are also safe. Aromatic wood shavings such as cedar and pine are not safe: The fumes (aromatic hydrocarbons) are irritating to the respiratory tract and are hepatotoxic (harm the liver) in large concentrations.

You may offer a litter box to your hedgehog, although not all animals will use it exclusively. Small corner plastic litter boxes fit well in many cages. Recycled compressed newspaper, like Yesterday’s News®, is recommended as a litter.

Exercise wheels are important for exercise, however the classic “stand-up” wheels are not considered safe. Limbs may get caught in-between the bars, and back and neck injuries are unfortunately common. We recommend the more horizontal “flying saucer” or “flying disc” type wheels, pictured below:

Figure 1: "Flying saucer" style exercise wheel



Providing a variety of hiding places will help your hedgehog feel secure: We recommend offering both a "snug" fabric pouch-style hide as well as a rigid (plastic or wood) hide.

4. Health

We recommend an annual exam for hedgehogs to provide early detection of disease processes. Regularly weighing your hedgehog is a good habit to ensure they are not gaining excessive amounts of weight; obesity is a common problem in pet hedgehogs and there are many health problems associated with it.

Healthy hedgehogs will periodically shed their quills throughout their lifetime. Generally, the first quilling will occur at about one month of age until about two months of age as the hedgehog grows its adult quills, then it will occur every 3-5 months as adults. While hedgehogs will sometimes be less sociable and may eat less while they shed their quills, this process is normal. Healthy quills that fall out will have a tiny ball-shaped follicle at one end. If your hedgehog is experiencing severe quill loss, especially if they are not growing back, or the quills appear "broken" without the small ball-tipped follicle end, this is unhealthy and your hedgehog should be seen by the veterinarian. Parasites and other skin disease are possible causes of abnormal quill loss.

Like other companion mammals, hedgehogs benefit from oral care: Periodontal disease is a common problem in aging hedgehogs, and oral infections can certainly travel to other organs. We recommend offering a small amount (less than 1/8 tsp.) of poultry or beef-flavoured enzymatic toothpaste 2-3 times a week as a treat. In larger pets we may use a toothbrush to more easily apply it to the teeth, however because it uses enzymes (proteins) to break down plaque on the teeth this provides some cleaning action even if you are not scrubbing with a toothbrush. We recommend starting with oral care as early as possible.

Unfortunately, tumours seem to be quite common in hedgehogs. If you notice any lumps or bumps we recommend having them investigated as soon as possible. Some tumours are treatable with surgical removal, but early identification and action are key.