

Bearded Dragon Husbandry

Bearded Dragons (*Pogona vitticeps*) are native to the lands of Australia and New Guinea. They live in deserts and arid woodlands. Adults can be 16-20 inches long. Affectionately called "beardies," they have a calm temperament and enjoy handling. They are excellent climbers and can be found on tree trunks in their natural habitat. They are diurnal (active during daytime, and sleep at night), but will burrow underground during the day to avoid excessive heat. Males can be distinguished from females by their femoral pores, but these do not develop until they are fully mature. This makes juveniles more difficult to sex.

Housing

A 20-gallon long tank is good for a starter tank for a bearded dragon, but this size will only last a couple months. An adult bearded dragon should not be housed in a tank smaller than a 40-gallon breeder tank (36" L x 18" W x 16" H). Bearded dragons are solitary animals and should not be housed together due to their tendency to dominate each other and fight for space. Bearded dragons are cold-blooded and require a temperature gradient to properly digest food. The basking spot should be 90-95°F for adults and no higher than 110°F for babies. The cool side should be 75-85°F during the day, and night temperatures should not drop below the 70°F. You can obtain proper temperature by using overhead lights/basking bulbs. Do not use heating rocks because these can burn your dragon easily. Thermostats and timers can help maintain proper temperature if desired. Digital temperature probes or temperature guns are very useful tools to monitor your tank temperatures.

Mercury vapor bulbs are recommended for use in a bearded dragon tank. These provide the full UVA and UVB spectrums of light to allow for proper calcium absorption. This light will need to be on for 12-14 hours a day. Using either heat or UVB bulb alone is not enough as both heat and the UVA/UVB spectrum are needed for proper health. The UV portion of the lighting can also be provided with a tube fluorescent UV light as well. Be sure to replace any UVB light source every 6 months even if the light is still functioning as this is typically when the UV in the light starts to wane. If using a glass aquarium, be sure to have a screen top so the humidity and heat does not build up inside the tank. If needed, do not use white or colored lights at night for supplemental heat, as this can disrupt a bearded dragon's circadian rhythm and lead to health issues. Nocturnal ceramic heat emitters are recommended for nighttime and provide no visible light.

Sand, or any other loose substrate is not recommended. Dragons can ingest the sand and become impacted. This is when the sand blocks the intestinal tract and prevents the animal from defecating. This happens more commonly in juveniles as well as in combination with poor husbandry practices. It is recommended that you use newspaper, paper towels, non-adhesive shelf liner. Cage carpet is commercially sold in most pet stores as another option. Substrates should be cleaned or replaced regularly. Pine and cedar chips as well as crushed walnut shells should not be used either due to various associated health issues.

Your dragon will want places to hide in order to have a sense of security. There are commercially available reptile hides, or you can make your own with Tupperware containers – make sure there are no sharp edges. Reptile hammocks, branches and basking platforms will make your dragon feel like it is in its natural habitat. Be sure not to place them too high in the tank to prevent injuries if there is a fall.

Feeding

Bearded Dragons are omnivores and eat insects as well as fruits and veggies. Adult beardies require 20% insects, and 80% fruits and vegetables, and juveniles need 80% insects and 20% fruits and vegetables. A variety of fruits and vegetables should be introduced at a young age. If this is not done, young dragons may refuse these options later in life. Leafy greens should be a part of every daily salad. Salads should be dusted with a multi-vitamin a few times weekly for supplementation.

Good staple greens include collard, mustard, turnip, dandelion greens, endive, and escarole. Anything green with the term "lettuce" is likely mostly water and not a great choice. Spinach, though healthy for humans, can bind to calcium and prevent your bearded dragon from absorbing it properly. Other good fresh fruits and vegetables to feed are things like squash, raw bell pepper, snap peas, hibiscus flowers, fresh basil, asparagus, peeled apple, fresh blue/black/raspberries, carrots. A list of safe vegetation for your dragon can be found at <u>http://www.thebeardeddragon.org/bearded-dragon-nutrition-data.php#fruit</u> or http://www.beautifuldragons.com/Nutrition.html.

Regardless of age, a fresh salad should be offered to your bearded dragon daily. Baby and juvenile beardies should be offered live insects 2-3 times daily, and adults should be offered just once daily or every other day. You should feed your bearded dragon as much as it wants to eat within a 5-10-minute time frame. Baby bearded dragons can eat around 20-60 crickets a day.

In general, they should be fed food no larger than the space between their eyes. This is especially important as a baby or juvenile. If offered a larger tank as a juvenile, it may be beneficial to feed live food in a smaller, separate container. Never leave live insects overnight with your dragon as many can bite and cause injuries. Dust insects with calcium supplement powder (such as Rep Cal or Repashy Calcium Plus). This should be done daily for young beardies and three times a week for adults. This helps prevent potentially fatal metabolic bone disease. Crickets, Dubia roaches, black soldier fly larvae, superworms and locusts are safe insects to give. Though a variety of feeders is always best. Waxworms should only be given occasionally as treats as they are fatty.

Fresh, clean water should always be offered, or the salad can be misted with water. Dragons can also be misted or soaked occasionally to help hydrate them. Soaking also helps with bowel movements and skin shedding. The water should be warm, but not hot and last for around 20 minutes. They should also be wiped dry before returning to the cage.

Do not feed any insects from outside or inside your home. They may have been exposed to pesticides or parasites that can harm your dragon. Glowing insects should never be fed either as the chemical that makes them glow is lethal to dragons.

Cleaning

The cleaner your dragon's cage is, the healthier it will be. Substrate should be cleaned or replaced once a week or sooner. About once per month a deep cleaning of everything in the cage and the cage itself should be done. Feces should be scooped out regularly. Fresh clean water should be given every day, as stagnant water breeds harmful bacteria. Many over the counter cage cleaners are widely available. Dilute bleach is also a good at home option but should be rinsed and dried thoroughly prior to the animal returning to the cage.

Enrichment

Living in captivity can be very stressful for reptiles. This chronic stress and confinement can lead to a suppressed immune system and increased risk of illness. If we can mimic their natural behaviors and habitat, this can lessen those risks dramatically. Below are some options to try with your pet:

- Food dispensers: any container or feeding outside the cage where live food is released slowly rather than dumping in the cage encourages hunting behavior
 - \circ $\,$ Do not leave live food items unattended with your pet
- Novel foods: offer new food items may or may not be eaten
- Ball pit / Box with wadded paper: hide treat / food items for your beardie to find
- Leash training: some bearded dragons enjoy the outdoors. Keep in mind, some find it very stressful
 - Natural sunlight can be very good for your bearded dragon, but they should always be monitored closely and either be on a leash or in a safe outdoor enclosure
- Dig boxes: encourage digging behavior. Careful of loose substrates should not always be available. A common option is organic potting soil or packed, damp play sand
- Video games: touchscreen or just with lots of movement
- Ramps/steps: adding new levels for your pet to explore
- Offer larger pieces of greens allow your beardie to tear it apart
- Soft beds: Give your pet a soft bed or a pillow

Just make sure to avoid tape, sharp edges, and chemicals. Be careful about disease transfer using anything from outside or another animal. Keep in mind that reptiles can and will eat things they are not supposed to – monitor closely.