



Bearded Dragon

Care Guide

Enclosure

Bearded dragons can grow to be between 12 to 24 inches long (including their tail) and therefore require an enclosure with a width of at least 18 inches, allowing them to easily turn around in the tank. A 40-gallon tank (measuring 36"x18"x18") is the **minimum** size for an adult bearded dragon. Anything larger is welcome as many appreciate having the room to be more active and/or sprawl out.

Front-opening tanks work best because they allow for interaction with your dragon without disturbing the heating/lighting elements.



Figure 1 - Front-opening 40 Gal. tank setup



Figure 2 - Top-opening 40 Gal. tank setup

Lighting & Heat

Bearded dragons are native to the grasslands/deserts of Australia, which produce daytime temps of 85-120°F. The goal when heating the enclosure is to create a temperature gradient with a cool side around 80-90°F and a hot/basking side around 95-110°F. This will require two types of lighting, an Ultraviolet B (UVB) bulb to provide **essential** vitamin D and a heating bulb for the hot side.

UVB



Figure 1- Zilla brand size T8 UVB lighting fixture

We recommend implementing a tube configuration that stretches the length of the tank. Brands like ZooMed, Reptisun, and Zilla carry great options for tube UVB and come in T8 and T5 fixture/bulb sizes. We encourage you to research the different types of UVB lighting setups and their benefits/drawbacks. (A brief look into some of the different options can be found here: <https://mypetreptiles.com/best-uvb-bulbs-for-bearded-dragons/>)
!!! UVB CANNOT PENETRATE GLASS and therefore placement of the UVB lighting is crucial. Keeping the lighting structures above the enclosure (on the mesh top that most tanks come with) will be ideal.

Heat

For basking, a halogen floodlight is a great choice for the hot basking side and will raise temps in the enclosure to 100-105°F. A 100-watt bulb is sufficient for a 40-gallon tank. (Tip: Always use a lower wattage bulb than the lamp can accommodate. For example: with a 200-watt lamp, use a 150-watt bulb. Reason being: keeping your lamps at full resistance not only risks electrical surge, but burns out the bulbs way quicker!)



Figure 2- Ceramic dome lamps for heat bulbs atop mesh tank lid

Bearded Dragons require approximately 14 hours of light per day. An easy way to ensure this is with automatic timers and/or smart outlets.

Owners must also be conscious of nighttime temps. If the room that the enclosure is housed in does not fall below 65°F, no additional nighttime heat source is needed. However, if temperatures do fall below 65°F, a ceramic heat emitter (CHE) or under-tank-heating is required for nighttime heat. These produce no light and will keep the tank from plummeting below safe temps.

Bearded dragons need complete darkness and cool temperatures at night in order to maintain their immune system. If you have ambient light in the room your dragons will be residing, either turn it off before bedtime or shield the front of the dragon's tank from the light source. Never place blankets or combustible material over top of the tank as combining them with the heat sources can create a fire hazard.

!!! Pet supply stores will often try to sell you a red heat light or "infrared bulb" for nighttime heating. DO NOT purchase this!!! Red lights have been shown to cause eye irritations in lizards AND, as stated above, bearded dragons require complete darkness at night.

!!! Never employ the use of "heat rocks" (fake rocks that emit heat via electrical source) as sold in many pet supply stores. These devices lack temperature regulation and are almost guaranteed to cause a serious, life-threatening burn to your bearded dragon.

Testing Tank Temperatures

The best and most accurate way to measure temperatures is with an infrared temperature gun. This way you can point it specifically on the basking spot to get a good reading. The thermometers that stick to the side of the tank (typically sold with tanks) are only good for measuring ambient air temperature and are often inaccurate. We recommend getting a thermometer with a probe which is useful for monitoring temperature in a specific area in the tank.



Figure 3- testing basking spot with infrared

Substrate

We recommend something easy to clean such as stick-on tiles or vinyl.

Paper towels are an option but, obviously, will require replacing each time they are soiled to prevent bacterial growth in the tank.

Loose substrates (such as sand, aspen or cedar shavings, etc.) are less ideal because they have a high risk of causing impaction (a hard mass blocking the vent/anal cavity of reptiles) and can harbor unwanted

bacteria. Should your bearded dragon exhibit an excessive desire to dig, the best option would be coconut fiber as it's safer for them to ingest. However, you must sift it carefully to remove all large fibers from husk material leaving only the brown dust in the tank.

Another option that offers a bit more of a naturalistic look would be "sand mats". Sand mats are a spread of sand and small rocks permanently adhered to a sheet of foam that is meant to mimic a desert floor. While they are slightly more difficult to clean as you can't wipe them easily, they're hand-washable and provide a safer way to give your bearded dragon a sandy environment without risking impaction. You may also find it helpful to keep you dragons nails filed as they walk across it or scratch at it.



Figure 4- sand mat

"Reptile carpet" isn't recommended as the fibers catch on the dragon's nails and can quickly become stressful for them. (For the same reason, avoid using cloth towels with looped fibers.) Also, while reptile carpet can be washed, it can conceal mold that will cause lung issues.

Décor



Figure 5- this hide provides a basking platform as well as a dark cave for sleeping

Enclosure décor should include both climbing structures and hiding places.

Bearded dragons require the option to hide. Be sure to provide a "hide" big enough for them to turn around in. Placing the hide on the cool side of the enclosure is best, however it's best to have a hide on each the warm and cool sides.

On the hot basking side, hammocks and big pieces of wood provide basking platforms and places to climb.

Be careful when using plants. Bearded dragons are curious and will test everything with their tongue. Live plants can provide enrichment and dietary nourishment but you'll need to do your

research before providing grazing greens to avoid the risk of poisoning your dragon. (Here's a short list of approved plants safe for your dragon to consume: <https://www.reptileadvisor.com/bearded-dragon-plants/>) If you choose to use fake greenery, supervise your dragon when introducing it to the plastic décor. A common cause of vet visits for bearded dragons involves a blockage in their gut which often turns out to be a fake leaf from their enclosure.

!!! When placing rocks in the basking area, test the temperature of the rocks once they warm up BEFORE allowing the dragon to climb on it. Too close to the light/too hot will result in a **burn**. Reptiles do not recognize burning sensations until significant tissue damage has already been done.

!!! Sanitize all décor before introducing it to your bearded dragon's enclosure.

Diet

Bearded dragons are omnivores, which means they eat both fruits/vegetables and insects/protein. Offering variety is best. Dubia roaches are a great high-protein option, but indulge your bearded dragon in a fatty hornworm or juicy silkworms every other week or so to round out their diet and provide enrichment.



!!! Avoid mealworms all together as they are too small and too keratinous to be of nutritional value to bearded dragons.

Different life stages require different feeding needs. Below are the general requirements for the three life stages of bearded dragons:

Baby Bearded Dragons (birth to 4-5 months):

- Small bugs (medium crickets and small dubia roaches are fine) offered **3 times a day**, as much as they will eat within 10 minutes
- Vegetables offered daily (don't be concerned if they refuse; baby dragons are typically disinterested in fruits and veggies but should still be introduced to them regularly)
- **Daily** dose of calcium and multivitamin supplement

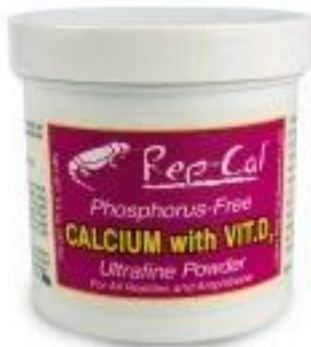
Juvenile Bearded Dragons (5-18 months):

- Vegetables and bugs **4-5 times** a week (20-30% veggies, 70-80% bugs weekly)
- Calcium and multivitamin supplement dose **3-4 times** per week



Adult Bearded Dragons (1.5 years and up):

- Vegetables and bugs **1-2 times** per week (70- 80% veggies, 20-30% bugs weekly)
- Calcium and multivitamin supplement dose **twice** per week



To dose calcium and multivitamins, you can either “dust” the bugs by tossing them in the calcium powder or sprinkle it on veggies. For specific bug and veggie nutrition including what to feed and how often, find a couple of great online resources here:

- (1) <http://www.beautifuldragons.com/Nutrition.html>
- (2) <https://dubiaroaches.com/blogs/feeder-insects/best-staple-feeder-insects-reptiles>

!!! Not all veggies are equal! Vegetables high in oxalates, like spinach or broccoli, while they can be fed occasionally, fed long-term will bind to calcium in their gut, preventing the calcium from being metabolized. A calcium deficiency will lead to **Metabolic Bone Disease** (MBD; the cause of death in over 60% of captive reptiles). For a list of

foods that affect calcium absorption see <https://beardeddragonsworld.com/calcium-for-bearded-dragon/> or http://www.anapsid.org/iguana/cal_ox.html (Note: While this last page is advertised for iguanas, the info is relevant to omnivorous diets).

Water

Bearded dragons get most of the water they need for bodily function from their diet. Feeding on fruits and veggies regularly will certainly keep them hydrated. However, especially during the warmer months, it's nice to provide a small pool for them to dip themselves into and drink from. A small water source also helps maintain humidity within the enclosure which is *essential* during shedding. You may also choose to give them a weekly soak/bath as many dragons will drink deep during bathtime.

Ensure the water is safe for them drink, free of chlorine and not too hot/cold. Use a reptile-safe water conditioner to neutralize harsh chemicals in tap water.



Figure 6- ReptiSafe brand terrarium water conditioner

Health & Safety

Nail Trimming

Just like other pets, bearded dragons have nails that will require trimming if you plan to interact with them safely. You can find trimming services offered by local herpetological retailers, but you can also do it yourself to reduce stress on your dragon (and save some money)! You'll want to be very careful not to cut too much. We recommend watching a few videos before attempting the process starting with this one from Snake Discovery: https://www.youtube.com/watch?v=E8JG_9FsNQI

Sperm Plugs

A common problem (affecting both male and female dragons) that causes lack of appetite, discomfort, impaction, etc. is that the plugs aren't being cleared. Plugs occur naturally when the hemipenes produce sperm that coagulates and hardens within the dragons cloaca. These plugs are typically ejected with regular excrement. However, when dragons become dehydrated or constipated, the plugs continue to accumulate and harden causing the surrounding tissue to swell. This is another reason why regular baths are extremely beneficial to bearded dragons! Ensuring their cloaca is well hydrated, and therefore lubricated, will facilitate more successful evacuations of their plugs.

Brumation

A behavior developed to conserve energy during cold months when bearded dragons in the wild would have less access to food and sunlight. Brumation is a hibernation period lasting from a few weeks up to four (4) months. Some captive beardies still instinctively observe the change in atmospheric pressure and will enter brumation during winter. They will hardly eat or move at all over the course of a few months and it's best to disturb them as little as possible until brumation is over. For a deeper look into brumation habits, dos, and don'ts, check out:

<https://www.reptiledirect.com/bearded-dragon-brumation/>

Water Aspiration

Never lift or move a bearded dragon when they're drinking water! Beardies have a special valve in their throat that allows them to continue to breathe through their nose while drinking water. If you disturb the dragon before they've finished closing the valve, water can enter their lungs causing all sorts of problems.

Femoral Pores

All bearded dragons have femoral pores but they are most prominent in males. Femoral pores are the dots you'll find running along the inner-thigh of your dragon. These pores become clogged and, left unchecked, can cause serious health problems and stress levels over extended periods of time. Emptying them can be painful for the dragon and yourself if they fight against your efforts. The best practice to help relieve the pores is to keep your dragon well-hydrated with weekly soaks and gingerly massaging the area with a small, gentle brush.



Figure 7- soak in a small tub



Polysporin

There may come a time when your dragon gets a small wound from themselves or their environment. It's important to know that Polysporin is the only safe topical ointment readily available without a prescription that can be used to keep your dragon's mild injury from becoming infected.

Mouth Rot

A common illness in bearded dragons that can cause appetite loss and lethargy. The first line of defense against this is probiotics. Fed twice weekly (or once daily if getting over sickness) will strengthen your dragon's immune system.



Figure 8 - Recommended Brand: "Pet Ag: BENE-BAC Plus" probiotic gel for birds and reptiles

Tank Maintenance

Do your best to clear debris when you see it. For some more active dragons (or those going through shed), this could be daily. For spot cleaning, mild cleaning solutions such as soap and water or vinegar and water are great. For disinfecting, Chlorhexidine is a safe, yet effective animal-grade disinfectant that can be used regularly. Follow instructions for any cleaning solutions as provided by the manufacturer.

Sometimes, bearded dragons can accumulate/smear feces on themselves, in which case you'll need to bathe them. Reptile soap can be purchased at almost any pet supply store that caters to reptiles and is a safe option for getting grime off of sensitive areas and is non-toxic if ingested.



Figure 9- Lugarti brand reptile soap

Exercise

Bearded dragons love to wander around the house/room. It's best practice to close off your dragon's exploration space and remove other pets and young children from the area as they're unfamiliar and can harm the dragon without much effort.

A lot of bearded dragons also enjoy being held by their caretakers. Only do this if you are confident in handling your dragon and know how to do so without causing discomfort to them.

Co-habitation

!!! DO NOT HOUSE MORE THAN ONE BEARDED DRAGON PER ENCLOSURE!

Bearded dragons are solitary lizards. In the wild, they will only seek each other out to mate. Even then, both parties often leave injured. Pet stores keep baby bearded dragons housed together because they're "less aggressive", but they will neglect to inform you of how many bearded dragons they've lost due to this practice. As bearded dragons grow, they will compete for resources like food and UVB. It may look like they are getting along, one sitting on top of the other, but this is a sign of dominance.

If you have multiple bearded dragons, only have one dragon out-of-tank at a time. Accidents happen and bearded dragons can run at almost 10 mph! All it takes is a few seconds of ill-supervision and you're looking at an expensive vet visit at best.