

Bearded Dragon (*Pogona vitticeps*)

Difficulty: Intermediate

Bearded dragons are 18-24" long lizards with spiky grayish, beige, or orange scales (although other colors are available in captivity). They earned their name from their spiky, expandable throat pouch, which can look very much like a beard, especially when it darkens.

These lizards are native to eastern and central Australia. They can be found in a variety of habitats, including desert, scrub, and dry forests. Although they are widely considered terrestrial lizards, bearded dragons are skilled climbers and enthusiastic burrowers in their native habitat.

Bearded dragons are one of the most popular pet lizards in the world, with a calm, personable temperament. They live an average of 10-15 years in captivity with good care, although 20-25 years is very possible.

Shopping List

- 6'L x 2'w x 2'H reptile enclosure (front-opening with a mesh top)
- Dual dome heat lamp with ceramic sockets
- 90-100w PAR38 halogen flood bulb, x2
- 50w ceramic heat emitter, x2
- 5.5" dome heat lamp with ceramic sockets, x2
- Large piece of flagstone or slate tile, for basking
- Rheostat, x2
- Digital thermometer/hygrometer device with probes
- Infrared thermometer ("temperature gun")
- 34" T5 HO desert UVB bulb (Arcadia or Zoo Med)
- 34" T5 HO light fixture with reflector (Arcadia or Vivarium Electronics)
- 48-72" of ~6500K LED plant grow lamp OR 2 T5 HO fluorescent lamps
- Surge protector with digital timer
- 4-6 sq ft clean sand
- Large reptile hideout/cave
- Environmental enrichment items (logs, branches, plants, rocks, etc.)
- Food and water dishes
- Calcium powder supplement (no D3)
- Multivitamin powder supplement (contains D3)
- Soft-tipped feeding tweezers

Housing

Per leading bearded dragon experts and international reptile welfare guidelines, a bearded dragon enclosure should be no smaller than 6'L x 2'W x 2'H, preferably larger. The enclosure

should be front- opening for easy access, and should have good ventilation to prevent overheating.

Can multiple bearded dragons be housed together?

Bearded dragons are territorial rather than social, which means that keeping multiple bearded dragons in the same enclosure can lead to fighting and serious (sometimes even fatal) injuries. So it's best to keep only one bearded dragon per enclosure.

Lighting & UVB

Bearded dragons are diurnal, which means that they are more active during the day. This also means that they are stimulated by the presence of bright white light in their environment, and they require high-quality UVB lighting for survival.

UVB Lighting

UVB lighting can be tricky, because in order to get the right strength of UVB (UV Index, or UVI), distance and potential mesh obstruction must be considered. To provide appropriate UVB in a 6x2x2 bearded dragon enclosure, you will need a 34" T5 HO Arcadia 12% or Zoo Med Reptisun 10.0 bulb, placed on the warm side of the enclosure.

The basking area should be placed as follows:

UVB mounted over mesh: basking area 11-13" below UVB lamp

UVB mounted inside enclosure: basking area 16-19" below UVB lamp

(These recommendations are approximations based on available data. For best results, use a Solarmeter 6.5 to determine the best placement to achieve a UVI of 4.0-6.0 in the basking area.)

Full-Spectrum Lighting

Bright light with a color temperature of ~6500K is suggested by experts to be important to bearded dragons' mental health. Bearded dragons with additional "daylight" lighting in their enclosure seem to be more alert and active than those without, as well as demonstrating better appetite and more natural behaviors.

Full-spectrum lighting is not the same as reptile UVB lighting, so you will need two separate lamps. The Arcadia Jungle Dawn LED Bar and Bio Dude Glow & Grow are both excellent lamps for this purpose. You will need enough lighting to illuminate 75-100% of the enclosure's length.

Heating

Humans are warm-blooded, which means that our body temperature is automatically regulated. Bearded dragons, however, are cold-blooded, which means that they have to move between areas of different temperatures in order to regulate their body temperature. Bearded dragons

warm up by basking under the sun in the wild. In captivity, they do best with a halogen heat lamp.

Basking surface temperature: 105-115°F (40-46°C)

Cool zone temperature: 70-85°F (21-29°C)

Generally speaking, a cluster of two 90-100w Zoo Med ReptiTuff or Arcadia Halogen Heat Lamp bulbs should be plenty to achieve those basking temperatures in a 24" tall enclosure and adequately heat your dragon's entire body. However, if you notice that they're getting too hot, dial it down with a plug-in lamp dimmer. If your basking area is too cool, you need higher wattage bulbs.

To measure the basking surface temperature, use an infrared thermometer (a.k.a. temperature gun). To passively track basking temperature, use a digital probe thermometer, with the probe placed on the basking surface under the heat source. The Etekcity 774 is a good infrared thermometer, and most reptile-brand digital probe thermometers function well.

If your cool zone temps are too low, you will need to add ambient heating equipment such as ceramic heaters, heat projectors, or a radiant heat panel to bump them back up to an acceptable range.

All heating equipment should be turned off at night. Humidity

Bearded dragons should have an average ambient humidity of 30-60%, as measured by a digital probe hygrometer with the probe placed on the ground on the cool side of the enclosure. Humidity levels that are consistently higher than 60% or lower than 30% can make your bearded dragon sick. However, occasional spikes or dips outside of this range are perfectly safe.

Lightly misting your bearded dragon's enclosure 1-2x/week with a spray bottle of water can be a good way to help them stay hydrated.

Substrate

Bearded dragons are healthiest and happiest when they are housed on a substrate (a.k.a. "bedding") that imitates the conditions of their natural habitat. In eastern and central Australia, that habitat includes very sandy soil. So the substrate in your bearded dragon's enclosure should be fine sand or sandy soil, packed at least 4" deep — preferably deeper, if possible.

Jurassic Natural Australian Desert Dragon Habitat, Jurassic Reptile Substrate, Zoo Med ReptiSand, and The Bio Dude Terra Sahara are all suitable bearded dragon substrate options. You can also make your own DIY desert mix of 50% play sand, 30% organic topsoil, and 20% Zoo Med Excavator Clay. That said, plain sand is inexpensive and also works pretty well as long as it's clean!

Sick or wounded bearded dragons should not be kept on loose substrate. Instead, use paper towels until they have recovered.

Feces and urates should be removed daily, and contaminated substrate should be scooped out and replaced. Substrate should be completely replaced once every 4-6 months, depending on how diligent you are about spot-cleaning.

Décor

Decorations play an important role in your bearded dragon's enclosure as environmental enrichment. Enrichment items encourage exercise, stimulate your dragon's natural instincts, and help promote overall wellbeing. And, of course, they make the enclosure look nice!

Here are some ideas: cork logs, cork flats, sturdy branches, live or artificial plants, large resin terrarium ornaments, rocks, textured backgrounds

Your enclosure is only as functional as the décor inside it, so make sure to be generous with the furnishings. The setup should not look sparse.

Food

Bearded dragons are omnivores, which means that they need both animal- and plant-based foods to get the nutrition that their bodies need. How often and how much they need to eat depends on age:

Hatchlings (0-6 months old): Insects 2x/day, vegetables daily

Juveniles (6-12 months old): Insects 1x/day, vegetables daily

Adults (>12 months old): Insects 2-3x/week, vegetables daily

To put this in percentages, you're looking at roughly 60-80% protein for hatchlings, 50-60% for juveniles, and 20-30% for adults. It is perfectly fine to occasionally skip a feeding, and helps keep your beardie at a healthy weight.

The key to providing a healthy, balanced diet for your pet bearded dragon is VARIETY. Provide as varied of a diet as you possibly can, and you will be rewarded with a healthier pet that always looks forward to mealtime.

Feeder insects: crickets, dubia roaches, discoid roaches, black soldier fly larvae, mealworms, darkling beetles, hornworms, silkworms, snails, grasshoppers

Safe vegetables: collard greens, cactus pads, spring mix, arugula, kale, pea shoots, alfalfa, bok choy, carrot greens, spinach, dandelion greens/flowers, hibiscus leaves/flowers

Fruit is high in sugar and should be generally avoided.

Supplements

To ensure that your bearded dragon is getting all of the vitamins and minerals that they need, you will need a calcium powder and a multivitamin powder — or a good all-in-one. There are many options, but you can't go wrong with the Arcadia Earthpro supplement system or Repashy Calcium Plus LoD. For best results, use as directed by the label.

All living things on this planet need water, including the ones that live in the desert. Bearded dragons are no exception, and should have free access to a shallow bowl of fresh, clean water daily.

Bathing or soaking your bearded dragon is an unnecessary practice, and is not beneficial to your dragon's health.