

## Roger's Aquatics & Pet Supplies: Bearded Dragons

*Pogona vitticeps* are an Australian species of lizard, commonly known as the Bearded Dragon. They make a good choice as a first reptile, as they can become very tame, and ranging from 18 – 24 inches, they are a reasonable size for younger children to learn to handle. They don't have any extreme care requirements, but will require you to put in some time with them on a daily basis. As babies, they do require more attention but are fairly easy to maintain as adults. They seem to all have their own little personalities, and are very aware of what is going on outside their cage. They have an average lifespan of 10 -14 years, with 14 + being uncommon, but not unheard of. These lizards are diurnal, meaning they enjoy being out during the day.

### Enclosure: Size, Substrate, and Accessories

The minimum requirement for an adult is 40 gallons (36" L by 18" H by 18" W). Depending on the size of your dragon, you may want to consider upgrading to a 75 gallon tank (48" L by 18" H by 18" W). If your dragon is not going to be getting a lot of time out the tank you may want to consider getting a larger enclosure so you can add more logs and rocks for your dragon to get exercise. Babies should not be introduced into a large tank immediately as they may not be able to find all their food. Usually they can be started in a 20 gallon long tank, (30" L by 12" H by 12" H), or in a 40 gallon that has been sectioned off, but typically by 4 months old they are ready to be upgraded.

Babies should be housed on reptile carpet until they are at least 12 inches long . At this point, you have the option of changing them onto different substrates, such as a bioactive substrate (babies can be started on bioactive from the start if you wish) or excavator clay. It is important to note that there is a risk of impaction with any animal that is being housed on loose substrate. Typically, impaction only occurs with animals that are dehydrated, not receiving adequate lighting or diet, or in some other way are unhealthy, and it is much rarer than people think, but if you choose to keep your animal on loose substrate you should familiarize yourself with the signs of impaction and see what local vets deal with reptiles. Furthermore, non-bioactive substrates should be completely cleaned out every 4 – 6 months as it is absorbent and will hold onto the bacteria from the dragon's feces.

The minimum set of accessories for a dragon includes a basking spot (this could be a log, a rock, or a ledge, but it must be sturdy and be able to support the dragons whole body) and a food dish. However, the more you give your dragon to climb and explore the more it will do so and the more natural it will act. Having pieces of slate or similar rocks can also help wear down the dragons nails.

### Lighting and Heat

A basking area of 100 – 110 F (37.7 – 43.3 C) should be provided. This can be achieved with a ceramic heat emitter, a mercury vapour bulb, or a daylight basking bulb. On the cold side the temp should be 80 – 85 F (26.6 – 29.4 C). Usually the basking light alone creates enough heat that the other side of the tank warms up, however if needed a smaller wattage bulb on the other side can be used. During the night they can drop down to 65 – 75 F (18.3 – 23.8 C). If this can't be achieved at night, a ceramic heat emitter is the ideal choice for warming up the enclosure. Infrared lights are not recommended at night because dragons have a parietal eye, also known as their "third eye" that senses light and shadow, and the red light from the bulb can prevent them from sleeping properly. It is important to have a proper thermometer to measure all your temperatures. The best thermometers are those that are digital as they are much more accurate.



A 10.0 UVB bulb or a mercury vapour bulb, both of which should be replaced every 6 – 12 months, must be provided. A linear bulb is preferred over coil UVB bulbs, as they are better quality as far as UVB (output depends on brand) and look better as a display. The dragon should be able to get within 6 inches of their UV light. If a coil bulb is being used, it should be on the same side as the basking light to ensure they can get within this distance. This type of lighting is essential in maintaining proper vitamin D3 levels, which allows them to properly absorb and metabolize calcium, regulates the immune system, and promotes proper organ development. Since these lights are aren't quite the same as the sun, providing a calcium with added D3 once a week is beneficial.

### Diet and Supplements

Beardies require both a daily “salad” as well as insects. For the first year of their live, dragons depend on insects for roughly 80% of their diet, and vegetation for roughly 20%. They should still be offered daily greens that are chopped up to an appropriate size for your dragon, whether or not they are eating them every day. Babies should be offered their bugs three times a day, typically eating anywhere from 30 – 60 + bugs a day depending on the appetite of your dragon. Once they are over a year old, the ratio flips and 80% of their diet is veggie based and 20% insect based. While some adults will still eat their bugs every day, some will only eat them every second day.

Bearded dragons can be fed crickets, superworms, phoenix worms, silkworms, butterworms, waxworms, and hornworms. Feeding a mix of superworms, phoenix worms, silk worms, and crickets is great for a staple diet and provides lots of variety for your dragon. Butter, wax, and hornworms should only be used as a treat once or twice a week. Typically the size of the prey they can take is a little bit bigger than the space in between the eyes, but always be careful to not go to big. All feeder insects should be properly gut loaded 1 – 24 hours before being fed to your dragon.

There are many types of vegetables and fruits that dragons can consume, but only few that can be used as a staple. <http://www.beautifuldragons.com> offers a full list of what can be fed and how frequently. For this care sheet, we've included a shortened version. It is important to offer as much variety as you can to ensure your dragon is getting the best nutrients.

#### Staple Veggies

*Items that can be fed daily*

Alfalfa plant, cactus pad, prickly pear, collard greens, dandelion greens, endive, escarole, mustard greens, butternut squash turnip greens

#### Occasional Veggies

*Items that can be fed 3 – 4 times a week*

Alfalfa sprouts, arugula, bok choy, carrots, cilantro, kale, pea sprouts, snap peas, radicchio

#### Rare Items

*Items that can be fed 1 – 2 times a week*

Bananas, red leaf lettuce, romaine lettuce, parsley raspberries, swiss chard

There are three main supplements required for a bearded dragon – calcium without vitamin D3, calcium with vitamin D3, and a multivitamin. Frequency will depend on the age and condition of the dragon. Dragons less than a year old will require calcium 7 days a week and a multivitamin 4 – 5 days a week, dragons 1 – 2 years old will require calcium 4 – 5 days a week and a multivitamin 3 – 4 days a week, dragons 2 years or older will require calcium 3 – 4 days a week and a multivitamin 2 – 3 days a week. During breeding season, females should be provided with calcium 5 – 6 days a week and a multivitamin 2 – 3 days a week. For all supplement schedules, calcium without D3 should be the main calcium, and calcium with D3 should be used once a week.



## Hydration

While a water dish can be offered to your dragon, most of them do not recognize standing water as a water source. A more appropriate way of hydrating your dragon is by giving them baths. Babies, who are more prone to dehydration than adults should be bathed 2 – 3 days a week, while adults are usually good 1 – 2 days a week. While these guys can swim, you shouldn't fill it so much that they can't stand. You should also thoroughly clean whatever it is you are using to bathe the dragon – Tupperware, a sink, or a bath tub are the most common choices. Baths are also a good time to take a soft-bristled tooth brush and give your dragon a good cleaning, as sometimes they can run through their own feces. If a water dish is provided, it should be replaced every second day, and bleached once a week to prevent the growth of bacteria.

## Cohabitation

Males should never be housed together as they will fight. Females may sometimes get along for short periods of time, but can still become aggressive towards each other and will be much happier alone where they do not have to compete for food or for the best basking spot. Male/female groups should be avoided unless there is the intention to breed, and the means to raise and, if needed, keep *all* the babies – this could mean up to 120 dragon babies over a short period of time!

## Sexing

Dragons can't be reliably sexed until they are between 4 – 6 months. There are two methods to do this: looking for hemipenial bulges and pores, or candling. Males will have two raised linear bumps coming up from their vent on the tail and larger pores, while females will lack the bumps and have either small or no pores. To candle the dragon for its sex, which can be done before 4 months old, hold a flashlight at the base of the tail so it shines through. A male will have two prongs and a female will have nothing. It is important to note that in younger bearded dragons, a dragon that is sexed by candling and looks female could be an underdeveloped male, so it is a good idea to wait for visual signs as well.

## Checklist of Supplies

- ✓ Appropriate size tank for your dragon
- ✓ Screen top
- ✓ Substrate or carpet
- ✓ Heat lamp + appropriate wattage day time bulb/night time bulb (if needed)
- ✓ Thermometer
- ✓ Insect keeper
- ✓ Basking spot
- ✓ UVB light + fixture
- ✓ Supplements
  - Calcium without D3/Calcium with D3
  - Multivitamins
- ✓ Food dish
- ✓ Water dish (optional)
- ✓ Insect diet
- ✓ Insect gut load