

# Bearded dragon CARE SHEET



The bearded dragon, *Pogona vitticeps*, originates from dry scrublands and woodlands in Australia. The biology of captive lizards is the same as that of wild lizards so their environment should reflect their natural habitat as much as possible, to meet their complex welfare needs. These include the need for a suitable environment; a healthy diet; to be housed with or apart from others; to allow normal behaviour and to be protected from harm. This is a basic guide, so also do your own research before getting a bearded dragon.

## Biology

Bearded dragons are named for the spiky folds of skin around the neck which inflate and turn black when they feel excited or threatened. Bearded dragons are 'diurnal', meaning they are active during the day. They live mainly on the ground but will also climb a short way up onto branches and rocks. They obtain their body heat from the sun so need access to safe, high temperatures when kept in captivity. 'Beardies' eat a variety of foods in the wild including vegetation, fruits, live insects, other reptiles, amphibians and hatchling birds. Bearded dragons grow to around 45 cm long.

All bearded dragons available are now captive bred. Before acquiring a bearded dragon you must be sure that you are able to provide the correct care and associated costs for its whole life. You can choose a reputable breeder or reptile shop but there are likely to be many bearded dragons available for rehoming, so check the RSPCA website:

[www.rspca.org.uk/findapet](http://www.rspca.org.uk/findapet)

## ENVIRONMENT

The enclosure, called a vivarium, must be secure to prevent escape and free from hazards that might cause injury. Good ventilation is essential to reduce the risk of respiratory infections and it should be made from solid material that is easy to clean and holds heat well.

A 120cm long, 60cm high and 60 cm deep vivarium is the minimum size we recommend for a single adult bearded dragon.

## Temperature

Reptiles are 'ectothermic' meaning they use their environment to warm up and cool down so we need to create a 'thermogradient'. This means positioning the heat source at one end of the vivarium while leaving the other end cool so the reptile can move around to regulate its body temperature.

Bearded dragons are need light to be able to detect heat. To create a 'basking zone', the warmest part that the reptile can reach, position a 60 to 100 watt light bulb at one end of the enclosure pointing downwards. Place a natural stone in the basking zone to provide access to the heat, though your bearded's back should not get closer than 25 to 30cm from the lamp. Heat lamps must be guarded to prevent burns, or injuries, should the bulb shatter. A thermostat, a simple device that regulates the temperature, must be used with all heat sources. Place the thermostat probe at the level where the animal will sit. Adjust the thermostat temperature and check the basking zone with a digital thermometer until it reaches 38 to 42°C. The cool end should be between 22 to 26°C. Thermostats are not always accurate so it is essential to record the temperatures daily.

LIFESPAN	SIZE	TEMPERATURE	HUMIDITY
10-15 years or more in captivity	Average of 45cm	Hot end: 38-42°C Cool end: 22-26°C	30-40%

# BEARDED DRAGON CARE SHEET

Use one digital thermometer at the cool end and the other at the basking zone. Position the vivarium away from heat sources that can affect the temperature. The temperature should not drop below 20 to 22°C at night, so you may need to use a safely set-up ceramic heater (non light-emitting) to maintain the air temperature.

## Humidity

Low humidity is essential for beardies to prevent skin or breathing problems. A hygrometer should be purchased to measure the humidity at the cool end, which should normally be around 30 to 40%. If it is too high, your vivarium will need more ventilation.

## Light

Reptiles use natural daylight to set their day and night patterns. Sunlight contains visible light and 'ultraviolet' (UV). Bearded dragons can see part of the UV light, called UVa, essential for their colour vision.

Another very important part is called UVb, which allows the lizard to make essential vitamin D<sub>3</sub> in its skin. D<sub>3</sub> allows the lizard to store and use calcium, an essential mineral. UVb does not pass through glass windows so do not place the vivarium near a window. Instead, a reptile UVb lamp must be used inside the vivarium.

Create a 'photogradient', from light to shade, by positioning your light source close to the basking zone. Choose a high output, 10 to 12% UVb fluorescent tube up to one half the length of the vivarium and fix it as far into the hot end as possible. The cool end will then be more shaded, just as in the wild. Use a reflector to direct the light onto your bearded dragon. Follow the UVb tube manufacturer's recommended distance back to ensure your bearded dragon can reach the area with richest UVb light. UVb output decreases over time, so the lamp must be replaced according to the brand's instructions. Turn off all lights at night to simulate night-time, controlled using a plug-in timer; 12 hours on, 12 hours off.

## Cleaning

Poorly maintained enclosures can become dirty quickly and create a health risk for you and your pet. Animal waste should be 'spot cleaned' as soon as it appears. Clean the vivarium once a month with a reptile-safe disinfectant, then rinse off well. Be careful as reptiles can carry *Salmonella*. Wash your hands before and after cleaning or handling to reduce the spread of infection between you and the lizard and other animals.

## DIET

### Water

Bearded dragons may not drink from water bowls often as a lot of their moisture is provided in their diet. However a large, shallow dish must be provided at all times the cool end with clean, fresh water, should they require it. This must be replaced at least daily and as soon as it is soiled.

### Feeding

Bearded dragons are 'omnivorous', meaning they eat both live invertebrates (called 'livefood') and plants and vegetables (called 'greens').

Safe greens include watercress, rocket, chicory, cress and grated butternut squash, as well as wild plants; dandelion, clover and plantain leaves. Research the other safe plants and vegetables to feed your bearded dragon and provide as much variety of those as possible. Avoid feeding spinach as this prevents calcium absorption. Also, avoid too much cabbage or kale as these can affect hormone production. Remove uneaten items every day and replace with fresh.

Feed a variety of live invertebrates such as crickets, locusts and 'calciworms', no bigger than the size of the dragon's mouth. Keep livefood in a large, well-ventilated container and feed them the same greens as you feed your dragon. The nutrition is passed to your dragon in a process called 'gut loading'. Remove uneaten livefood from the vivarium as some insects can bite your dragon.

Young dragons need more livefood than adults, so give them about 65% livefood, 35% greens, increasing the amount of greens as they grow. Baby dragons should be fed twice daily, with the greens chopped up small. Juveniles and adults should be fed once daily. Older bearded dragons (larger than 30cm) need about 40% livefood and 60% greens. Feed in the morning so that the dragon can digest its food during the day. It is a good idea to weigh your dragon regularly.

The captive environment does not supply all of the vitamins and minerals available in the wild so supplements are required. Dust the livefood lightly with supplement powders before feeding. Vitamins and minerals can be over-provided so always follow the instructions of the chosen brand. For example, with a well-set UV system you will not need to provide high dietary D<sub>3</sub> levels.

# BEARDED DRAGON CARE SHEET

## BEHAVIOUR

### Enrichment

It is important to provide opportunities for natural behaviour in captivity, called 'enrichment'. Provide stones and branches for climbing. Place a hide at both ends of the vivarium so the bearded dragon can feel secure. In the cool end, a box such as a plastic tub with an entrance cut in the top, filled with a sand/soil mixture, provides opportunities for digging.

### Substrate

Substrate is the name for the floor covering in your vivarium. It is important as it provides something for the lizard to grip onto. It can also permit natural behaviours such as digging and stops mess from spreading, though you must still clean up waste it as soon as you can.

There are many options of substrates for bearded dragons. With healthy adult dragons, sand substrate or a sand/soil mixture can be used. Always use reptile-safe sand such as clean children's play sand rather than builders' sand which has sharp edges. Stone tiles with rough surfaces or pieces of natural slate may be used, with a product like reptile carpet underneath to make cleaning easier. However, these non-loose substrates prevent the dragon performing natural digging behaviours, so if using slate tiles as the main substrate, also provide a digging box, as above.

A product called 'Calci-sand' is dangerous because with an incorrect environment, such as too cold for good digestive function or a vitamin deficiency, it can clog the digestive tract and cause a blockage. This condition is called 'impaction'. Loose substrates with large pieces such as bark and wood chips, crushed walnut or corn cob granules are unsafe as they can easily cause impaction if eaten.



### Bringing your lizard home

Set up the vivarium and run it for a minimum of a week before introducing your bearded dragon. This will allow time for you to adjust the heating, lighting and humidity before the animal arrives. On the first day, carefully allow the dragon to climb into the vivarium. Leave your bearded dragon with some food and water but with no further interaction until the following day. This will reduce stress and allow the dragon to explore in its own time. It is best not to start handling unnecessarily for the first week. Instead, let your dragon take time to become used to its surroundings.

## COMPANY

This is a territorial species and males lead a solitary life in the wild. Each bearded dragon occupies a range and will chase off visiting males. Females maintain a 'pecking order' and if kept in groups in captivity they may fight. Sometimes dragons bite off others' toes and tails and smaller animals may even be killed so it is best to house bearded dragons separately.

### Handling

Handling your bearded dragon often makes it easier to check for health issues. Never surprise or grab your lizard as this can cause stress and lead to a struggle. The bearded dragon should be gently scooped up with both hands so all four legs are supported. If your dragon backs away from you when you try to pick it up or threatens to bite, it is better to leave it alone and wait for another time. The lizard should not be taken from the vivarium for so long that its core temperature drops. Around 10 to 15 minutes at a time is a safe period for this, depending on the air temperature.

Keep other pets separate, regardless of how trustworthy they have been before. If contained safely, such as in a secure pen, the bearded dragon can be taken outdoors on bright summer days for some natural UV and enrichment. In this case, ensure that your bearded dragon has access to shade and supervise constantly.

# BEARDED DRAGON CARE SHEET

## HEALTH & WELFARE

Clear, bright eyes are one of the signs of a healthy bearded dragon. A well-fed bearded dragon will have a thick base to its tail and the hips will not be protruding. Healthy dragons become brighter in colour after basking.

### Shedding

Bearded dragons shed their skin in large pieces. There is no rule as to how often this will happen but young bearded dragons will shed skin more frequently.

When ready to shed, the dragon may look dull as the old skin becomes dry. The skin should then come off easily over a day or so. Do not pull off old skin if it seems stuck as it can tear the new skin underneath. If patches still remain after a shed, try bathing the dragon in shallow, tepid water for about five minutes to soften it.

Poor shedding on the feet can cut off the blood supply and lead to the loss of toes. However, if your dragon is well hydrated this should not be an issue. Most shedding issues can be corrected with adjustments in hydration and humidity. As long as it does not create high humidity throughout the vivarium, the digging box can be lightly sprayed to provide an area of humidity which aids shedding.

### Brumation

Brumation is a natural energy saving process, similar to hibernation, seen in some adult dragons over the cooler months. It is triggered by the reduction in room temperatures and natural daylight hours. Beardies will commonly reduce the amount that they eat whilst increasing the time spent sleeping, but typically should not lose weight, so monitor your beardy during this time.

### Diseases & concerns

Bearded dragon droppings should be long and quite firm. They are made up from faecal waste (the dark part) and urates (the white part); there may also be a small amount of clear liquid when well hydrated.

### Transport

If you need to transport your bearded dragon, for example to the vets, it is important that it is done safely. Choose a suitable sized carrier; young lizards such as hatchlings can be transported in ventilated plastic containers with soft, absorbent paper. Adults can be transported in a well-ventilated plastic tub to prevent injury. This should be kept warm; the addition of a heat pack may be required but make sure this will not over-heat. Keep transit time to a minimum to reduce stress.

Look for signs of abnormal droppings: constipation or diarrhoea coupled with weight loss, which can be due to internal parasites. If you have any concerns, have your vet run a parasite test on a fresh sample of droppings.

One of the most common problems for captive reptiles is metabolic bone disease, 'MBD', a term used to describe a range of nutritional diseases. However, it is most often due to a lack of UVb lighting, resulting in vitamin D<sub>3</sub> deficiency. This prevents the dragon absorbing calcium from food, causing muscle weakness and softening of the bones. Symptoms include muscle twitching, swollen legs, fragile bones and eventually, permanently deformed limbs, jaws, the spine or tail.

It is quite common for female dragons to develop eggs even if they have never been with a male. This is not a problem if she is offered a digging box in which to lay her eggs but without this she may become 'egg bound', a serious condition. Remove any eggs you find and freeze them before disposal if there is a possibility they are fertile. In some cases a female may start laying eggs very frequently. This can place a dangerous load upon her calcium and energy reserves, so she will need careful supplement use.

It is essential that you take the time to research further before obtaining a reptile. If you do get a bearded dragon, monitor its health and behaviour daily and see your reptile vet if you have ANY of the above concerns.

This care sheet is a basic guide only. Further information must be sought before you decide to take responsibility for any exotic pet. Find more information on our website:

[www.rspca.org.uk/beardeddragon](http://www.rspca.org.uk/beardeddragon)