



Bearded Dragon Husbandry Guidelines (*Pogona vitticeps*)

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Set-Up/Enclosure

Lighting/Heating - Captive habitat should always mimic an animal's natural environment as closely as possible. Bearded dragons are diurnal (day active), Australian animals; keeping this in mind there are several factors to take into consideration if one is to successfully keep these animals in captivity. Lighting is one of the most important aspects of the set-up as it enables basking lizards to properly synthesize and metabolize nutrients and encourages natural behavior. Bearded dragons should have an average 9-13 hour photo (daylight) period induced with synthetic UVB lights. There are three types of UVB lights available in pet stores. The first, in order of efficacy is the mercury vapor bulb which produces around 30-35% UVB radiation as well as heat. This bulb is ideal for a bearded dragon. The mercury vapor bulb produces UVB radiation for as long as it's producing light and the radiation is more focused and penetrates with full potency at 36 inches so this bulb can be used in large enclosures. The second option is a compact fluorescent bulb that is available with 10% UVB output. This bulb needs to be used in conjunction with an incandescent, basking heat bulb as it does not give off heat of its own. Animals need to be able to bask within six inches of this bulb and it needs to be changed every six to eight months as the gases that produce the UVB dissipate. The third option is a fluorescent tube light which is available in varying percentages of UVB output from 2.0-10.0; only the high end of this range will prove effective for a bearded dragon so go with an 8.0 or 10.0. This bulb like the other fluorescent mentioned should be used in conjunction with a heat bulb, within six inches of the animals basking site and changed every six to eight months. No matter which UVB bulb one chooses, make sure that there is no glass or plastic between the bulb and the bearded dragon as this will filter out all of the beneficial radiation (this is why setting an animal in front of a window is useless); not to mention a potential fire hazard. The regions of Australia bearded dragons inhabit are somewhat arid, in the wild they experience a dramatic temperature gradient with daytime basking temperatures reaching upwards of 115 degrees F and night time lows sinking as low as 60 degrees F. To recreate this in captivity one should use the aforementioned lights to create a basking spot at one extreme end of the enclosure with temperatures that reach at least 100 degrees F, while the cool side of the enclosure may fall into the 70's or 80's. Because bearded dragons are a diurnal, basking lizard, it has a small organ located on top of its head between its eyes called the pineal organ, that tells the animal how warm its getting and allows it to thermoregulate (control its body temperature) and adjust its position accordingly. If the dragon just needs to lower its body temperature by a few degrees, it may opt to gape (open its mouth to allow excess heat to escape) rather than move to a cooler area. Avoid heat pads or heat rocks as they can potentially cause burns due to their inability to fully sense ventral heat. At night, all heat sources may be turned off allowing the enclosure to fall to your home's ambient room temperature.

Substrate - There are several options for appropriate substrate (bedding). Because a healthy bearded dragon is nothing short of ravenous and often gets an accidental mouthful of substrate when going after prey, substrate needs to be either digestible or eliminate the possibility of ingestion all together. Good digestible substrates include VERY FINE calcium sand (CaribSea's Reptilite is a good option), a fine bird seed (parakeet or finch), or alfalfa/timothy based rabbit pellets. If one doesn't mind the unnatural look of

newspaper or paper towel, these eliminate the potential for ingestion and are easy to change out frequently for a clean enclosure.

Furniture - Cage décor is a welcome addition, but keep in mind that bearded dragons appreciate some flat surface area. An elevated basking perch on the hot side of the enclosure is easily achieved with logs or rocks. Be sure not to use pine or cedar because of harmful phenols in softwoods. If you collect limbs from outdoors be sure to bake (200 degrees for an hour or two) or bleach them (soak in one part bleach to 10 parts water solution then let dry) to make them safe for use in a terrarium with an exotic animal. A makeshift cave or half log for cover on the cooler side of the terrarium would make for a happy animal as well. I do not encourage any artificial foliage because of the feeding response elicited by colors such as green leaves or the bright colors of flowers, which if eaten by a bearded dragon can be potentially harmful. However, in a large enclosure, planting a garden for your beardie can be fun for you and will surely be appreciated by your dragon.

Diet- Diversify; the more variety the better! As a young animal, your bearded dragon will eat mostly protein (about 75%), but as the animal matures, this ration will do a bit of a flip-flop and the majority of his or her diet will be rich, leafy greens interspersed with vegetables and fruits. Some examples of readily available food include: mealworms, crickets, wax or butter worms, silk worms and tomato horned-worms are all great for protein. Visit the produce section of your local market for greens, veggies and fruits. There is no predetermined amount that your dragon should eat, so let them have their fill (especially as they are growing for the first couple years). As an adult, if your dragon does not have a well balanced diet and some exercise, obesity can be an issue.

Supplementation- A powdered Calcium/Vitamin D3 supplement with little to no phosphorus should be applied to food every other meal and a multi-vitamin supplement should be given about once a week.

If done properly, a bearded dragon terrarium can be conducive to a mentally and physically healthy bearded dragon as well as an aesthetically pleasing display for one's home.

Interaction/Handling

Human Interaction - We should always bear in mind when keeping reptiles is that they are naturally cryptic (secretive) and typically solitary animals. Though as social creatures we generally thrive on social interaction and contact, bearded dragons are quite the opposite. Handling for the first three to six months of a bearded dragon's life should be minimal and for six to twelve months following that handling may be difficult for the following reasons. Hatchlings are fragile and skittish and may run out of open hands or succumb to other accidental trauma. They may also become stressed by the interaction and quit eating or alter their natural behavior in some other, undesirable manner. Imagine from the animals perspective how it must feel to have a predator as large as us looming over them or restraining them. After your hatchlings are established and are at a size where they can be handled with less of a possibility of detrimental effects, the dragon may be starting to go through "lizard puberty" and encroaching on sexual maturity. During this time they may adopt a bit of an "attitude", but they will generally snap out of it as quickly as they snapped into it. An adult bearded dragon is usually willing to endure handling with no issues and though do not "like it" they readily tolerate it.

Dragon to Dragon Interaction – I will reiterate here that Bearded Dragons and reptiles in general are not social animals so they definitely do not *need* cage mates. Young bearded dragons that have not reached sexual maturity can cohabitate with one another but they have a tendency to attempt to eat anything and everything, which can lead to missing tails, toes or worse. Sexually mature males cannot cohabitate together as there will inevitably be territorial skirmishes. Bearded dragons of the opposite sex should only be housed together if one is willing and fully prepared to take on the problems and responsibility that can

accompany reproductive animals, though it's appropriate to note here that female bearded dragons can produce infertile eggs without a male.