# **Bearded Dragon Care Sheet**

This care sheet is designed only as a brief introductory guide to keeping these fascinating reptiles. Before you decide whether to bring a bearded dragon into your family please consult some of the many excellent books and websites available as well as talking to your vet or veterinary nurse at this practice.

Bearded Dragons originate in Australia. The most common species kept as a pet is the Inland Bearded Dragon, *Pogona vitticeps* The Inland Bearded Dragon is sometimes referred to as the Central, or Yellow-headed Bearded Dragon.

#### Natural environment

The Inland Bearded Dragon lives in the arid woodlands and deserts of central Australia. It spends much of its waking hours in bushes and trees, and basking on rocks. When it is extremely hot, the bearded dragon will burrow underground. The bearded dragon is diurnal (active during the day) and an omnivore (eats both plants and insects or small prey). It forages for food such as insects, small lizards and mammals, fruit, flowers, and other plant material during the day time.

## **Physical characteristics**

Bearded Dragons are very variable in colour. The 'beard' is the skin in the throat region which the dragon is able to flare out when it is feeling threatened or territorial. The body has a flattened appearance with spines on the throat, sides of the head, and sides of the body. The head is wedge-shaped, and the Bearded Dragon has a tail that is almost as long as the body.

It is difficult to distinguish males from females among hatchlings and juveniles. When they become adults, sexual differences become more apparent. The males generally have larger heads and larger, darker beards. The larger femoral pores of males also help to distinguish them from females.

#### **Habitat**

**Enclosure:** Vivaria (Glass walled or fronted enclosures) are most commonly used to house bearded dragons. If wood is used to make the vivarium this should be properly sealed to facilitate cleaning. The vivarium should not be kept in direct sunlight as they can easily overheat. Ensure that the vivarium is secure and well ventilated. The enclosure should be as big as possible but a tank measuring 4ft x 2ft x 2ft is the minimum size for 1-2 adults.

**Substrate:** The substrate is what lines the bottom of the cage. An ideal substrate is one that is inexpensive, aesthetically pleasing, easily cleaned, absorbent, and digestible if swallowed. Substrate can be flat newspaper, sheets of brown wrapping paper (the kind that comes in rolls), reptile matting or cork or slate tiles. Do **NOT** use cedar shavings, gravel, crushed corn cob, kitty litter, wood shavings, or potting soil that contains vermiculite, pesticides, fertilizer, or wetting agents. In particular, avoid Calcisand. Although this is commonly sold as safe for reptiles it can cause eye problems and intestinal blockages. Sand easily sticks to food and so can be ingested, building up in the intestines, particularly in young dragons and so is not recommended if you feed your bearded dragon in his or her vivarium.

**Landscaping and 'Furniture':** Branches for climbing and basking under the secondary heat source should be secure. These branches should be of various sizes, clean and non-toxic. The branches should be as wide as the width of the Bearded Dragon. Boards covered with indoor/outdoor carpet also make good climbing posts. Flat-bottomed, smooth rocks are a good addition to the habitat, and can help wear down the toenails, which in captivity, may need to be clipped occasionally.

Reptiles like a place where they can hide. This could be an empty cardboard box, cardboard tube, or flower pot. The hiding place should provide a snug fit and should be high in the enclosure. If your Bearded Dragon does not use its hiding place, try a different one or move it to a different location. If possible offer more than one hide.

Appropriate plants in the enclosure can provide humidity, shade, and a sense of security. They also add an aesthetic quality to the enclosure. Be sure they are nontoxic. Dracaena, *Ficus benjamina*, and hibiscus are good choices. Be sure the plants have not been treated with pesticides and the potting soil does not contain vermiculite, pesticides, fertilizer, or wetting agents. Washing the plant with a water spray and watering it thoroughly several times to the point where water runs out of the bottom of the pot, should help remove toxic chemicals, which may have been used. Keeping purchased plants in a different part of the house for a while before putting them in the enclosure will also be helpful. Edible plants can be grown specifically to be eaten by the dragon.

### **Temperature**

Bearded Dragons have the same body temperature as their surroundings. They come from arid woodland and desert environments, and require supplemental heat to be healthy and carry out their bodily functions such as digestion. They prefer 78-88°F during the day and temperatures in the 70's at night. If a reptile is cold, it cannot properly digest its food and is more likely to become ill. Lizards like a temperature gradient so if they are cold, they can move to a warmer part of the cage and vice versa. Place a good quality thermostat in the cage at the level the Bearded Dragon spends most of its time so that the temperature is automatically regulated.

**Primary heat source:** A primary heat source is necessary to keep the temperature of the entire cage within the proper range. A ceramic infrared heat emitters or panels which produce heat, but little visible light, can be used. Alternatively, a series of incandescent lights over the cage can be used but at night these lights will need to be turned off and another heat source may be needed depending on the ambient temperature. For larger enclosures, a space heater or separate room thermostat can be used to keep the room at the appropriate temperature. Fire alarms should be placed in rooms where lights or other heat sources are used.

**Secondary heat source:** A secondary heat source creates more heat in specific areas of the cage to provide a temperature gradient. To best supply this gradient, the secondary heat source should cover only 25-30% of the surface of the enclosure. There are also special 'basking lights' available. Either type of light should shine down on a particular basking area from outside the cage or from behind a guard. The temperature under the light in the area in which the Bearded Dragon would be basking should be 95-100°F. Hatchlings housed in smaller aquariums will require lights of lower wattage, or the aquarium temperature may become too warm very quickly. Do not use hot rocks as heat sources. Like the primary heat source this heat should be under the control of a thermostat to keep temperatures within the correct range.

### Light

**Visible white light:** In addition to heat, incandescent bulbs also provide visible white light. A combination of fluorescent and incandescent light fixtures can be used to provide visible light to all areas of the enclosure.

**Ultraviolet light:** In addition to heat and white light, bearded dragons must have access to natural sunlight for good health. This is because they need a certain spectrum of ultraviolet (UV) light called UVB. UVB is necessary for the bearded dragon to make Vitamin D. No artificial light is as good as sun in providing UVB, so when the outside temperature on a sunny day is over 70°F, place your Bearded Dragon outside in a secure screen or wire cage with a locking door. Provide some shade and a hiding place within the enclosure. UV rays do not penetrate window glass so bearded dragons placed in a sunny window are not receiving UV light.

When a bearded dragon does not have access to bright sunlight, special lights are used to provide the UVB light. Fish/aquarium and plant 'grow' lights, either incandescent or fluorescent, do NOT produce UVB. You need a light which emits light in the 290-320 nanometer range. Lights producing only UVB, and lights which produce a combination of UVB and white lights designed specifically for reptiles are available. These UVB light sources should be replaced every 6 months.

Remember that UV light can not penetrate glass, so when overhead UVB light sources are used, the top of the enclosure must be a wire mesh that is not too fine. It is recommended that the UVB light source should be less than 18 inches from where the Bearded Dragon spends most of its time; 10-12 inches is optimal.

The areas illuminated by the incandescent basking light and the UV light should overlap. If the Bearded Dragon spends almost all his time basking under the incandescent light, and the UV light is at the other end of the cage, he is not going to receive any benefit from it.

# Water and humidity

Although Bearded Dragons receive most of their water requirement from the food they eat, fresh drinking water should be available at all times in a shallow bowl that cannot be tipped over. Proper humidity is necessary for proper shedding. Especially during the winter months when the humidity is low, mist the Bearded Dragon with water several times a week. Some Bearded Dragons appear to enjoy soaking in a tub of water. Be sure the Bearded Dragon is able to get in and out of the container easily. You will need to clean the container and replace the water regularly, since the dragon may urinate or defecate in the water. In fact, water usually stimulates them to eliminate, so immersing them in water is a part of the treatment for constipation.

### Hygiene

The cage and food and water bowls should be cleaned routinely. Rinse the items well after cleaning. Bearded dragons can harbour the bacteria *Salmonella* which is dangerous to people as well as other potentially seriously harmful organisms. Be sure to wash your hands after handling the Bearded Dragon or its cage. Children, the elderly, pregnant or sick should not come into direct contact with bearded dragons or contaminated materials. Always seek prompt medical attention should you become unwell.

### If you have more than one

Reptiles are territorial and may fight when caged together. A male and female bearded dragon can generally be kept together, however, the male may become too aggressive during the breeding season and have to be removed. Larger bearded dragons may keep smaller cage mates away from food and heat sources, and may even see them as food. If housing bearded dragons together, a larger cage will decrease the possibility of aggression; nevertheless, monitor the dragons closely and separate them if there is any sign of aggression.

### Temperament and handling

Bearded dragons tend to be mellow and docile. Although hatchlings and juveniles may be skittish, the adults will often appear to enjoy human company, making bearded dragons one of the better reptilian pets. Bearded dragons tend to be curious, and will enjoy exploring, so if you can, provide a safe, larger enclosure. Although it is very unusual for bearded dragons to bite they can scratch.

To pick up a Bearded Dragon, place your hand under its abdomen and gently scoop it up. As the dragon lays on your palm, gently curve your fingers around its abdomen.

## Behaviour and body language

To better relate to your bearded dragon, you need to understand what various behaviours and body positions mean. During breeding season, to display dominance, or if startled or threatened, a dragon may puff out its beard. Both males and females will display this behaviour. To appear even more menacing, the bearded dragon may also "gape," or open his mouth very wide. This can certainly make him look more aggressive, since his mouth is quite large. Another way dragons show dominance, is to bob their heads. To show submission, a dragon will hold up one front leg and may slowly wave it.

### Reproduction

Bearded Dragons reach sexual maturity and start to breed between 8 and 18 months. The female will generally lay around 20 eggs in a clutch. If fertile, the eggs will hatch in 55-75 days. Unmated females may also lay eggs. During egg laying female bearded dragons require additional calcium.

#### **Diet**

Because Bearded Dragons are omnivores, they need a balanced diet of meat and vegetable matter. Hatchlings eat mostly small insects. As they grow, they will start to eat more vegetable matter. The diet of a juvenile dragon (2-4 months of age) will consist of approximately 80% insects and 20% greens. Young dragons should be fed 2-3 times daily. If insufficient food is fed, young beardeds may nip at the tails and toes of their cage mates. By the age of 18 months the diet should be almost entirely made up of vegetable material with only a few insects fed per week.

Meat: Meat can include pinky mice (for breeding adults) and insects such as:

- Crickets; pinhead crickets for juveniles
- Locusts
- Mealworms low in nutritional value so avoid
- Wax worms high in fat, so feed sparingly
- King worms
- Earthworms

**Preparing insects for food:** Freshly moulted insects are easier for the bearded dragon to digest. Feeder insects should be coated with calcium supplement (powdered calcium carbonate or calcium gluconate) before feeding. The insects should also be "gut-loaded," which means the insects are fed nutritious and vitamin-rich foods for at least 24 hours before they are given to the dragon. Good foods to feed the insects include carrot peelings, green leafy vegetables, sweet potato, squash, cuttlefish and other vegetables suitable for the dragon to eat directly. There are also commercial products rich in calcium and vitamins which can be fed to the insects. Insects may be purchased or wild-caught (without the use of pesticides).

Uneaten insects may attack a sleeping, small or unwell dragon and so should not be left in the tank with the dragon unsupervised, particularly overnight.

**Food particle size:** For Bearded Dragons, it is very important that the size of food be proportional to the size of the animal. Malnourishment, seizures, and intestinal blockages can occur if hatchlings and juveniles are fed insects that are too large for them to capture or digest. As a guideline the length of the insect should not exceed two thirds of the distance between the animal's eyes.

#### Vegetation

Plant matter in the diet should consist mainly of green leafy vegetables. Other vegetables can be included. Fruit should make up the smallest portion of the diet. The vegetables and fruits can be shredded or torn into small pieces and mixed together to encourage the dragon to eat all that is offered, and not just pick out his favourite foods.

Feed cabbage, kale and spinach only as an occasional treat, if at all. They contain oxalates which can bind calcium and could pose a problem if fed in high amounts.

Greens	Vegetables	Fruit and Flowers
<ul> <li>Edible weeds such as dandelions, brambles. These are the very best components of the diet</li> <li>Rocket</li> <li>chives</li> <li>bok choy</li> <li>chard</li> <li>parsley</li> <li>clover</li> <li>alfalfa</li> <li>romaine lettuce</li> <li>turnip greens</li> <li>mustard greens</li> <li>Sprouting edible seeds</li> </ul>	<ul> <li>broccoli</li> <li>okra</li> <li>peas</li> <li>green beans</li> <li>courgette</li> <li>squash</li> <li>grated / sliced carrots</li> <li>sweet potato</li> <li>peppers</li> <li>celery</li> <li>Opuntia cacti</li> </ul>	<ul> <li>figs</li> <li>kiwi</li> <li>papaya</li> <li>melon</li> <li>apple</li> <li>grapes</li> <li>peaches</li> <li>apricots</li> <li>strawberries</li> <li>plums</li> <li>tomatoes</li> <li>Pansies</li> <li>Rose petals</li> <li>Hibiscus</li> <li>Iceplant</li> </ul>

#### **Veterinary care**

Most of the medical problems experienced by bearded dragons can be prevented by paying close attention to good husbandry and nutrition but they can still develop just as many health problems as any other pet. Often a bearded dragon will try to conceal signs of ill health so if you are worried in any way seek prompt veterinary advice. Common problems to look out for include weight loss, diarrhoea, retained skin especially around the

head, eyes and digits, loss of appetite or constipation. Your vet is the best person to advise you about your pet's health and will be happy to answer any questions you may have. Rather than wait for a problem to occur why not make an appointment for your bearded dragon to have a regular check up, just as you would with a dog or cat.

#### **Pet Insurance**

Pet insurance is available for bearded dragons and means that financial concerns do not add to the worry of having a sick pet.