

## Introduction to Bearded Dragon Care

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Bearded dragons are fast becoming popular pets. These lizards are native to Australia and are accustomed to dry, very warm days and slightly cooler nights. They enjoy climbing rocks and basking in the sunlight.

The information contained in this article will help acquaint you with your new bearded dragon and its basic needs. This will aid you in providing the best care for your pet as well as help you avoid many of the problems experienced by others who have kept bearded dragons as pets. Your bearded dragon will be happier, healthier and will live longer as a result.

### Housing

The primary goal of caging is to insure your bearded dragon's safety. As a general rule, as much space as possible should be given. A minimum would be an enclosure that is twice as long as your bearded dragon (from the tip of her nose to the tip of her tail). It should also be, at a minimum, as wide as the bearded dragon from nose to tail tip. Your bearded dragon should be able to exercise and turn around completely without bumping into anything. You should also provide her with a place to hide. You must consider that a full grown bearded dragon can be as big as two feet in length, including the tail. Pets of this size need an enclosure that is AT LEAST four feet wide. A healthy bearded dragon will grow quickly, reaching nearly adult size in less than six months! It is best to purchase an enclosure suitable for an adult at the outset.

The ability to clean your bearded dragon's cage is another important consideration. The cage should have a solid bottom and be constructed of a substance easy to clean. Glass, hard plastics, and stainless steel are good materials.

Regular cleaning of the cage is very important. Uneaten food should be removed daily. The cage should be thoroughly cleaned and disinfected at least once a week. The cage can be cleaned with a mild soap solution, and then disinfected with a solution of one capful bleach to one gallon of water. Your local pet stores should also carry a cleaning solution appropriate for reptiles. Betadine, Nolvasan, and Roccal are other commercial products that are available for disinfecting. **MAKE SURE TO RINSE THE CAGE WELL,** and dry it thoroughly before returning the bearded dragon to its cage.

Props are very important for the well being of your pet. Logs, rocks and plants (real or artificial) provide spaces to exercise and hide. It can be very stressful for a bearded dragon to have no place to hide. Rearrange the props in your pet's enclosure often to help prevent her from becoming bored. It is important to clean all props and cage decorations on a regular basis.

### Lighting

A UVA/UVB light should be used ten to twelve hours per day all year long. Bearded dragons that do not get the amount of UV light they need lose bone density and become susceptible to multiple fractures (similar to osteoporosis in humans).

Natural sunlight, when available, is the preferred source. Windows and aquariums filter out much of the beneficial sunlight. Placing the cage or aquarium with a screen top by an opened window or a SAFE place outside for a portion of the day is one option during warm weather. Your bearded dragon should always have a shaded area to go to if he chooses. Giving your dragon warm and cool areas in his

enclosure allows him to regulate his body temperature effectively on his own. This is crucial for all reptiles, as they can not regulate their own body temperature.

An ultraviolet light that emits both UVA and UVB should be used year round. These bulbs will stop emitting the necessary UV rays long before the bulb itself burns out. Change the UV bulbs at least every six months to be sure your bearded dragon is getting the rays it needs. UV light is invisible! Your bulb may still emit visible light but not produce any UV light. Date your bulbs and change them every six months even if they are still emitting visible light. Note that fluorescent UV lights do not produce heat and must be used in addition to a heat source. Any lights should be placed where your bearded dragon cannot climb on or come in contact with them.

## Bedding

Several types of bedding are available. Two recommended materials are reptile carpeting and newspaper. These products are easily obtained, clean, safe, and inexpensive. Reptile carpeting can be easily washed and reused. Although corncob, wood shavings, sand and gravel are commonly used as bedding material WE DO NOT RECOMMEND THEM. They are associated with multiple health problems. These products can be eaten by your reptile and result in an impaction that requires surgery to remove. Also, bacteria and fungi are able to grow in these substrates and dust from them can irritate the eyes and respiratory system of your bearded dragon. Shavings, corncob, sand, and gravel are also difficult to keep clean.

## Diet

Bearded dragons eat both insects and plant material in the wild. They should be raised on live insects such as crickets and meal or wax worms as well as vegetables. Offer live prey twice daily for ten minutes each feeding when juvenile. As adults offer once daily or every other day. The crickets you buy should be "gut-loaded" with calcium. Most crickets are sold this way. If your pet store does not "gut load" their crickets for you, purchase an insect food sold for this purpose and follow the directions on the package. (For example, the brand "Gut Load" cricket and insect food by ESU Reptile recommends feeding crickets for 24 hours before offering them to your bearded dragon). The crickets you provide for your dragon should be no bigger than the distance between your dragon's eyes. Do not feed crickets that are too large for your dragon! Remove any crickets that are not eaten within ten minutes. It is okay to leave live mealworms or wax worms in the enclosure as long as your dragon will eat them within the next 24 hours.

It is important for young bearded dragons to get their fill of live prey. If they do not, they will start to cannibalize each other potentially resulting in serious damage or death. Never place a juvenile dragon in an enclosure with an adult. The adult may eat the smaller one! Insects should be dusted lightly with calcium, such as calcium carbonate powder, as well as a vitamin and mineral supplement before feeding them to your pet. This is important- especially for juveniles- bearded dragons will not get enough calcium without supplementation.

The best way to be sure your juvenile dragon is getting enough nutrients is to weigh and/or measure him every week. There should be a measurable gain in weight and body length over time. Look for an approximately two inch increase in length every month. A dragon that is not growing this quickly is either sick or not getting enough nutrients. Call us if your baby bearded dragon is not growing!

Provide a mix of at least three different vegetables and greens daily. Dark, leafy greens provide more calcium than other vegetables and fruits. It is important to always vary the veggies and fruits you offer. This practice will provide the best balance of essential vitamins and minerals. Chop the vegetables and greens into small pieces for juvenile dragons and larger pieces for adults. Serve them by themselves in a heaping pile. For fun and a natural feeding activity, hang a whole leaf from the top of the enclosure so that it dangles inside, and let your dragon grab and tear at it as he would in the wild.

As bearded dragons mature, they will eat less live prey and more vegetation. This is a normal age-related change in diet that also occurs in the wild. An adult may eat 90% plant material. Some adult

dragons enjoy eating juvenile mice (pinkies). Pink mice can be a great way to balance an adult diet. They provide trace minerals and vitamins not found in insects or plant material and do not need to be dusted with a calcium/vitamin supplement.

We do not recommend feeding tofu to your bearded dragon. Tofu is a plant based protein that is high in fat and can impede calcium absorption. Tofu should not be fed on a regular basis, and when fed, done so only in very small quantities.

Bearded dragons also DO NOT need bird gravel. Please do not give it to them!

Field greens are an excellent leafy green mix to offer your bearded dragon. Here are some others to try: red leaf or green leaf lettuce, butter lettuce, mustard greens (including flowers), dandelion greens (including flowers), water cress, escarole, collards, parsley, turnip greens, kale and spinach. Be sure that the greens you offer are free of pesticides!

Other foods to try include: cabbage, Napa cabbage, raisins, squash, carrots, Brussels sprout, raw or boiled mashed potatoes, sweet potatoes, cauliflower, broccoli, green beans, yellow wax beans, bokchoy, radish, red/green/yellow bell peppers and kale. DO NOT ADD BUTTER OR SEASONING TO ANY OF THE FOOD.

Experiment with the following to discover your dragon's favorites: watermelon, cucumber, papaya, cantaloupe, mango, banana, apple, berries, and kiwi fruit. These treats can be offered occasionally in small quantities (one or two bite-sized pieces).

No one vegetable or fruit should be fed exclusively. A mixture of many is important. When fed in excess, vegetables such as broccoli, Brussels sprout, kale, cabbage, cauliflower, and bokchoy can cause hypothyroidism (a thyroid deficiency). Spinach, rhubarb, beets and chards are high in oxalic acid, and may cause gout over a period of time. Additionally, these foods bind calcium, effectively preventing the body from utilizing dietary calcium. This can cause metabolic bone disease, a condition in which the bones lose their density and become prone to breaking.

Feed only fresh fruits and vegetables. Many fruits and vegetables lose their vitamins during the freezing process. However, always keep a bag of frozen mixed vegetables on hand in case of an emergency.

You may also feed alfalfa pellets (found in many rabbit foods) mixed with vegetables or fruits (which will break the pellets down due to their moisture content). Alfalfa pellets provide a good source of protein and calcium.

There are several edible flowers that you can grow on your own or buy in the produce section (not flower section) of the grocery store or plant nursery. Be sure that they have not been treated with pesticides of any kind. Edible plants include: hibiscus (flowers and leaves), nasturtium (flowers and leaves), rose petals, violets (flowers and leaves), and geraniums.

You may find that your bearded dragon has definite color and shape preferences when it comes to food. For example, he might pick collards as his favorite. Next you could try mixing in other dark green foods like parsley, broccoli, etc. If he likes carrots, try introducing sweet potato. Experiment! A bearded dragon that will not eat fresh sweet potato may eat cooked, mashed sweet potato. Use a vegetable peeler to make shavings of food or chop veggies and fruits into small pieces. Bearded dragons prefer to swallow much of their food whole.

Don't forget to add calcium and vitamins/minerals to your pet's food. A powdered reptile vitamin supplement should be sprinkled over the food once weekly. All live prey should be dusted with a calcium supplement without phosphorus (e.g. Rep-Cal) before feeding them to your dragon.

Water

Water should be available to your bearded dragon at all times. A low-sided bowl or container is best. The container should be washed and fresh water given every day. Some juvenile bearded dragons prefer to drink water droplets sprayed on the sides of their enclosure with a spray bottle.

### Taking your Bearded dragon Outdoors

If you would like to bring your pet outside, there are a few things to consider. Make sure that the temperature will be comfortable (70-90 degrees). Remember that your pet cannot regulate his body temperature by sweating or shivering the way we do. The only way your pet can warm or cool herself is by moving to a warmer or cooler location. Bearded dragons can move with amazing speed when they want to! They can also climb very well. A cat harness and leash will help avoid the heartbreak of losing your pet when you take him outside. Always keep a close eye on your pet and protect him from contact with predators such as dogs, cats, hawks, etc.

### Recommended Exam Schedule

We recommend a yearly physical examination for all adult bearded dragons and twice yearly exams for all juveniles. The signs of poor health in bearded dragons can be subtle and if they are not recognized early, it can be too late to successfully treat a problem. Also, it is possible for bearded dragons to get internal parasites and have them for a long period of time before they display any symptoms. Because of this, we recommend a yearly fecal test. We also recommend a yearly blood test to check calcium and phosphorus levels. This will ensure that your bearded dragon's dietary needs are being met and will allow us to address any deficiencies before they cause a major problem such as metabolic bone disease.

### Bathing

Your dragon may enjoy an occasional bath. Soaking will help him to shed his skin normally. Warm water will also stimulate a reptile to empty its bowels and bladder. Some owners will bath their pet before a daily exercise period to prevent accidents. We recommend that you use a separate container for bathing your bearded dragon. Any reptile can carry salmonella bacteria and you do not want to expose yourself to it by using the same tub as your pet.

Clean your pet's tub and rinse it well before and after use. The water should be lukewarm, not hot. Fill the tub so that the water is level with your dragon's body but not over his head. Never put a sickly or weak bearded dragon in water over its head. You may find your dragon changes color when bathing. This is normal. Also, you may see him breathing or puffing more than usual. These are signs that he is adjusting to the temperature of the water.

### Salmonella

Any reptile may be carrying salmonella, even animals that are perfectly healthy. Many reptiles are persistently infected. This means that they harbor the bacteria in their bodies and at times of stress begin to shed the bacteria into their environment. The most common sources of stress are inappropriate habitats and poor diet. If you follow the guidelines in this handout, you will be doing everything you can to keep your dragons healthy and stress-free. The healthier your pets are, the less the risk that they will shed salmonella.

It is safest, however, to assume that your reptile is always shedding salmonella. Be sure to wash your hands after handling your dragon. It is especially important to supervise any small children. Prevent access to the enclosure when you are unable to watch them. Children and immunosuppressed individuals are at most risk of serious illness. Instruct all children and adults of the importance of hand washing after touching a reptile or its habitat (ex. water, basking spot, or inside of the enclosure).

### Other Diseases

Most diseases in bearded dragons result from dirty enclosures, poor diets, cool temperatures and not enough ultraviolet light. Proper care of your bearded dragon will greatly reduce the incidence of disease. Diseases in bearded dragons often come on very slowly. It can be very difficult to detect these diseases before they become advanced.

Knowing what is normal for your dragon is very important. Become familiar with your bearded dragon's normal appetite, activity level, amount and frequency of urination and defecation, the appearance of waste products, and the general appearance of your reptile. A change in one of these normal parameters may be a sign of disease. If you notice a change in your bearded dragon, observe your pet very closely. If the signs or symptoms persist for one or two days, or you notice new signs/symptoms, please call us for an appointment. The sooner we are able to address a problem, the more successful we will be in treating it. Bloody waste products, heavy breathing or panting, seizures, bloody discharges and lameness may suggest an emergency. Call us immediately if you notice any of the above.

For More Information

We recommend the following book as a source of additional information about your bearded dragon:

The Bearded Dragon Manual by Philippe de Vosjoli, Robert Mailloux, Susan Donoghue, Roger Klingenberg and Jerry Cole; 2001 Advanced Vivarium Systems, Inc  
ISBN: 1-882770-59-5