

BEARDED DRAGONS



## **Bearded Dragons**

### **Past to Captivity**

Bearded Dragons, the common name comes from Australian lizards belonging to the genus Pogona. There are seven different known subspecies that vary in sizes and colors. The most common species is the Pogona Vitticeps, which is the Inland or Central Bearded Dragons. Bearded Dragons are diurnal lizards, and do most of their activities in daylight hours, and sleep at night. They live in hot, rocky desert conditions. They love to climb and bask in the heat on rocks and branches, but need their space for cooling down. All these living conditions must be created for their existence in captivity.

The Bearded Dragon gets its name from its appearance. On their throats is an area of skin that they flare out looking like a beard. The most common display for a Bearded Dragon is a flattening of their body, and a flare of their throat to look like a black beard. They usually display this when they are threatened or excited. In captivity, the flaring of the beards can also be a display for dominance. Beardies have a head bobbing ritual. Usually males will bob their heads quickly, and females respond with slower bobs. Both will communicate with arm waiving. Males quite often try to bite the back of female's necks if they don't respond and wave back. Dominant females will also flare black beards and bob quickly. It is seen more often in breeding season, when females are not interested in breeding, they try to fool their cage mates. Always watch your beardies for too much aggression. Some beardies may have to be separated if there is one that appears too dominate.

### **Selecting a Bearded Dragon**

Selecting a healthy dragon is very important. Beardies grow very quickly in the right conditions. A healthy dragon should be alert, with its eyes wide open, but not bulging; and their eyes should not look sunken in. Beardies tails can say a lot about their health. At the base of their tails, it should look and feel plump and firm. There should not be hip bones protruding from the skin. Under the base of the tail; check for any swollenness or discoloration. Beardies stomachs should seem somewhat plump and round. Beardies should not smell bad; check for noticeable odors. Check eyes, nostrils and mouth for discharge or crusty appearance. Always ask a lot of questions about the Bearded Dragon you want to purchase. You need proper information so you can provide proper care for the beardie and it won't be stressed out. Read General Care section, coming up after Handling, and make up your own questions page before purchasing a Bearded Dragon. Sample Questions for buying a beardie:

1. Age, birth date; determine how old the beardie is.
2. Sex; if possible;
3. Eating habits, what is it eating, how much is it eating etc.;
4. Habitat Conditions; housing, lighting, what has the beardie adjusted to; you need to know what it will need when you take it home.
5. What Kind/ Color is the dragon, Beware 1st time buyers, different color morphs can get costly.

### **Handling**

Bearded Dragons are very personable. They are usually very tame, and like to be handled. As with any pet, they require some special handling techniques. The age of the beardie is important to know; hatchlings (babies, very young dragons) are quite fragile and shouldn't be handled very much for their first 3 months. After 3 months, gradually increase the amount of handling. Handling hatchlings too much can be harmful to their skin; they are still developing. Before and after handling a Bearded Dragon you should wash your hands. Your hands should not be cold.

With your hand, gently scoop up the dragon under its belly, fully supporting the limbs by curling your fingers over their bodies. Do not squeeze or hold too firmly. Dragons do not generally hang on and may flail, so keep both hands available. It is important not to shock them. They will rest in the palm of your hand. When you become comfortable and the beardie trusts you it will sit on your shoulder, rest on your chest and travel around your body. Bearded Dragons are inquisitive, and can decide to jump off at any time; so take care. Never grab a beardie by its tail; tails can snap off causing damage. The tails are important for storage of excess fats and water. Bearded Dragons like to be gently stroked on their backs and under their chins.

### **General Care**

Bearded Dragons need daily maintenance. First you must set up a proper environment for which they can survive; housing/cage, substrates, cage accessories and heating and lighting; then maintain their environment; and set up proper feeding schedules. Once everything is in order, daily schedules become easy and you can enjoy your beardie as a pet.

In order to begin you must understand that the size and the age of the beardies is so very important and will determine how to set things up. Beardies can grow at a very fast rate and you will have to adapt their surroundings and maintenance accordingly.

Hatchlings are the babies, and require a lot of care. They are not recommended for beginners because they can be very fragile, up to 8 weeks old; shorter than 6 inches and less than 15 grams in weight. Babies are born just under 4 inches in length and weigh approximately 1/10th of an ounce (2 ? - 3 grams). Beardies can grow at a very fast rate; averaging 2 inches a month for the first 6 months. Then they taper off.

Juveniles 6 – 10 inches;

Sub adult 10-16 inches;

Adult 16-24 inches;

All the sizes vary for each stage of the beardies life, depending on the morph (type of beardie). German Giants tend to be one of the largest Beardies in captivity.

### **Housing**

Housing beardies depends on the size. Beardies must be able to find their food. Hatchlings can not be housed with any thing but hatchlings; I recommend always housing the same size; because beardies tend to eat pray that is smaller then themselves. They see movement of smaller arms, toes, tails etc.; and go for them. This can lead to injuries and problems with beardies. Always remember, anything that moves can be a potential food item. Over crowding can be a problem. It leads to stress, aggression and loss of appetite. Beardies need to be able to run around and hide. The larger the enclosure is, the happier your beardie will be; except for hatchlings, they can feel lost in a big cage and may not be able to find their food. Sometimes with hatchlings you must show them their food.

The cage/enclosure should be large enough to provide areas for hot temperatures, cooler temperatures and be well ventilated, but the ventilation shouldn't let the heat out.

The top of the beardies cage must be large enough and sturdy enough to hold a full-spectrum / UV light and a fixture for heat. Some screens on the top of cages can block out UV rays.

Housing: Glass tanks/aquariums

The main housing units are glass tanks. Never use cracked or broken glass tanks. Baby beardies only need a 10-20 gallon tank. Not too big to start out, so they don't feel lost and they can find their food. Juveniles and lager beardies need larger enclosures because they are more active and it helps keep them happy and healthy. Their tanks should be minimum 40-60 gallons: For housing 1 beardie 40 gallon minimum, and for 2 beardies 60 gallons minimum. I recommend if you're housing more than one Juvenile to adult stage Beardie a 75-100 gallon tank. Glass aquariums come in all sizes. There are standard aquarium tanks and reptile tanks. Reptile tanks

tend to be more expensive but last a long time and are easier to clean. The reptile tanks are different because of their heights and widths. They give you a better range for your basking lights and more floor area to run around.

Some people have wooden enclosures for their Beardies, but with wood there can be more problems, wood is very hard to keep clean. You shouldn't use any pre treated wood; but need to have a finished wood product. So if you build a wooden enclosure, you must finish it, and air it out for weeks before putting any Beardies into it. Bare wood could hold too many germs and odors; making it very hard to keep clean. Beardies can get sick if their housing isn't kept up; cleaned and sanitized regularly.

Most standard sizes of glass tanks have lids that fit them. Sometimes mesh lids can block out UV rays. I prefer to house my Beardies in glass aquariums with no lids, but they are tall enough they can't climb or jump out. My lights sit length wise across my tanks and my heat lamps are clamped on properly; they will not fall off and my Beardies get the full advantage from them.

I house my adult Beardies in a large glass cage with an Oak stand and Oak lid with a built in Helix Super system controlling the lighting and heating, and plexy glass doors. There is some controversy about using side doors, but if carefully planned out and properly put into place, work out very well. In the Calgary area is a cage designer/builder that has worked with me and my Beardies to build a suitable housing/living environment. **Greg West of Cornels World.com** does quality customized terrariums, (see Links page). For pictures of my cage, see Gallery page.

## **Substrates**

Substrates are the materials used to line the bottom of Beardies cages. This topic is very controversial, and leads to differences of opinions. Beardies in the wild live in sandy deserts and so sand is the most likely substrate to have. There are a variety of sands available, Sterilized Playground Sands are inexpensive and available in home improvement stores like Home Depot, and comes in a 50lb bag. It is also available in different sizes at Pet stores and nursery's at a higher price. With sands, you may have to remove large pebbles; or use a household strainer if there appears to be a lot of larger pieces. I usually don't have too many problems with Target and Stone Mason sterilized play sand. With using sand, I don't recommend Cal-C sand or Vita sand (usually sold in pet stores), Beardies like the taste and the colors of these sands and eat too much and can get gut impaction. Gut impaction can kill Beardies.

Line your cage with a layer of sand (approximately 2-3 inches). Beardies like to dig in the sand. The sand also works well for placing cage accessories into. A small kitty litter scooper works great for cleaning out feces daily. Once a month a thorough cleaning and disinfecting of cage is required. This will mean taking out all the sand and discarding it, washing the cage and accessories and putting in new sand.

Substrates must be digestible and easy to clean. Natural substrates are usually better; holds less bacteria and easier to clean. Substrates should be kept as dry as possible; sometimes when misting Beardies, the substrate should be checked within an hour to make sure it has dried out. Size of Beardedie can also determine what you choose for a substrate. With hatchlings, it is probably better to start off with an easy substrate or no substrate at all. Newspapers, butcher paper, paper towels, shop towels (looks like blue paper towels) are easy to change daily and you don't have to worry about the hatchlings eating these. As the Beardies get older move them onto a more suitable substrate. They will want to move around and dig. Another suggestion for a substrate besides the sterilized play sand is 100% Natural wheat bran, sold in grocery stores. It is finer substrate than sand, but is easy to scoop out daily feces with small mesh scoop, and still requires monthly changing. All substrates need to be changed monthly; cage and accessories washed and sanitized; with sand and bran you can add more between the monthly changes.

**Not recommended substrates are as follows:**

Flukers Repta Bark Bedding, Repti Sand, Cal-C Sand, Vita Sand, Soil/Dirt, Turf (fake grass), Corn Cob, Walnut or Crushed Walnut Shells, Pebbles, Gravel, Kitty Litter, Lizard Litter, Alfalfa or Rabbit Pellets (not easy to keep clean), most Wood Shavings (contain aromatic oils and kill beardies); All of these have been proven to be fatal to Bearded Dragons. Safe substrate is always best for a happy and healthy Beardie.

### **Cage Accessories**

Once you have a house/cage and substrate you need to add the furniture. All accessories must be prepared properly before putting into cages. Accessories from outside must be parasite free and store bought items germ free. Soaking accessories in a diluted bleach solution (10% bleach to 90% water), rinsing 2-3 times, and then air drying, till accessories are totally dry. Wood products and driftwood can be cleaned then baked in an oven (approximately 300F for 10-15 minutes). Always keep an eye on baking items in an oven.

Beardies need a variety of accessories to be healthy and happy, but you do not want to over crowd because they need lots of room to roam around. Hiding spots are very important for Beardies Shelter and their own space. Cave like structures and half logs are sold in pet stores. You want to get larger ones because Beardies grow very fast. Flower pots on their sides, half buried into substrate can be decorative as well as useful. Branches, sticks, and logs are also needed in a cage. These items should be large enough, sturdy, and as wide as a Beardie when laying out flat. Beardies need to climb on them, lay flat out on them, and bask on them. Bury the ends into substrate on an incline so they extend high enough for Beardies to reach their basking lights. (See next section lighting and heating)

Large flat rocks in substrate are good. They need to be close to a heat source but in a safe manner. Bury rocks into substrate and be sure the rocks will not fall, and that they are buried well enough that the Beardies can't dig under them. Rocks will hold heat so be careful how close you have them to the heat source. Beardies like to lay flat in heat and it helps in their digestion. Plants, real and artificial, are questionable. Beardies are very hard on them. This can make for an expensive and dangerous situation. Plants must be totally free of chemicals; Beardies love their greens (see food section) so they tend to eat them. In my Juvenile tank I have a sturdy artificial plant that sits attached to the plastic cave. It is big enough to hold a Beardie and the plastic of the plant is thick enough that Juveniles can't eat it. Otherwise, I have found that plants are not suitable for my Beardies. I let my Beardies roam around my house, but always keep an eye on the house plants. Because the plants are green, my Beardies tend to run towards them, and try to eat them. Remember that house plants can be poisonous, so always know what plants are safe.

### **Not recommended cage accessories are as follows:**

Heat Rocks, Heat Caves, Heat Logs etc.; they are very hard to clean/sanitize and can be harmful/deadly to Beardies. Reminder: all accessories, substrates and tanks/cages must always be cleaned/sanitized regularly.

### **Lighting and Heating**

Another controversial topic on Bearded Dragons is lighting and heating. There are so many products on the market, and new products coming out all the time. So researching lighting and heating is very important for healthy and happy Beardies.

Beardies are diurnal lizards, which means they do all their eating and roaming around during daylight hours, and sleep at night. It is very important and essential to provide proper lighting and heating, and to set up and maintain an environment for Beardies to survive. The proper amount of lighting and heating for daylight hours, and the night time changes. Beardies require 2 types of lighting; 1.) Fluorescent lights; which supply ultraviolet A (UVA) and ultraviolet B (UVB);

and 2.) Heat lights; incandescent bulbs used to heat and stimulate daytime activities.

A full spectrum fluorescent lamp supplies UVA and UVB. They come in a variety of sizes and your choice will depend on your tank size; but they should cover the length of your tank. These lights help produce Vitamin D3, which helps them absorb the calcium they need to be healthy and aids in bone formation. Without these light sources Beardies can get Metabolic Bone Disease. I recommend such fluorescent lamps like Zoomed Repti Sun 5.0, Exoterra Repti Glo 5.0 and 8.0, and Verilux.

Full spectrum lights should be adjusted to 12 inches of the Beardies basking spot; I have some at 8-10 inches, for more absorption on my Beardies. Replace fluorescent bulbs every 6 months, because the amount of UVA & UVB diminishes. Many plant and aquarium lights are wide spectrum, not full spectrum; you need to supply full spectrum lighting. Incandescent lights are good for heat sources but do not provide the full spectrum UVA/UVB.

Natural sunlight is of course your best source of light; but not too much direct sunlight it can overheat and kill Beardies; or not sunlight through windows, glass filters out the benefits of natural sunlight. I take my Beardies outside in the summer and we bask up some rays. I never leave them unattended; you don't know about birds, cats, etc. in the yard.

The fluorescent light sources helps Beardies behaviors, appetite, coloring, breeding, and overall general health.

Timers made for table lamps are great for light systems; they turn on and off automatically. Your lights should be on a daylight cycle of 10-14 hours in the summer and 8-10 hours in winter. Never use light at night, it will stress Beardies; they need their sleep. If you need light at night use a nocturnal reptile bulb; this provides a blueish-purple night light; like a moon glow.

Heat lighting bulbs should be over the basking spot on one side of the cage. This area needs to be between 90-110F (33-44C) during the day light hours. It is very important to Beardies, mainly for proper digestion, but also to keep them active.

Incandescent bulbs; standard household bulbs; all heat bulbs should be used with ceramic fixtures; plastic ones could melt. I like to use halogen light bulbs; I buy at hardware stores, like Canadian Tire, Home Depot, or Wal-Mart; rather than purchasing expensive halogen bulbs from pet stores. Standard household bulbs usually go up to 100 watts; but also you can find 150-200 watts at hardware stores. Clear bulbs usually produce more heat than the coated ones. The main thing about using heat bulbs is the monitoring of the temperatures. Monitor enclosures carefully before putting Beardies into them. The different bulbs and different watts give off different amount of heat. So monitoring is done with thermometers.

Temperatures need to be different in Beardies cage: They need a range of temperatures to choose from at any particular time, this is called a heat gradient. You could almost divide your cage in 3 sections. One side hottest for basking between 90-110F (32-44C), for adults I like 88-95F (31-35C); 95-105F (35-41C) for hatchlings. Middle section of cage is warm but not as hot as basking temps, 75-90F (24-32C). Then a cool side, with temperature approximately 70-80F (22-27C). Beardies love their basking heat, and may gape their mouths (like panting) under this area of the cage; if you see your Beardie gaping on the cool side; check your thermometer. It is important that Beardies have their cool down moments. In their natural habitat the desert, Beardies will bask in the heat for so long; but when the heat of the day hits its hottest point, they usually bury or hide themselves to cool down. At night you should not need heating unless your cage drops below 60F (C). If this is the case, under tank heating pads can be placed under the warm side; or infrared heat lamps can be used. I do not recommend any heat rocks, heat logs, or heat caves, etc.; these can harm your Beardies. Timers again work great for heat as they do with lights. You can set timers for the same hours of heat and light throughout the day. There are now bulbs on the market that provides both full spectrum light and heat. These can get pricey, but work well. Some of the better names are Zoo Med (Power Sun) and T-Rex (Active UV

Heat). These combo UVA/UVB heat bulbs come in different watt sizes; the Zoo Med Power Sun comes in 100 watts and 160 watts, the T-Rex Active UV Heat comes in 100 watts, 160 watts, and 275 watts; it will depend on how big your cage is.

Thermometers are very important in Beardies cages and should be checked daily. Keeping at least 2, one at each end of the cage is required. Place them where the Beardies will spend most of their time. One definitely around the basking area; one at the cool end; a 3rd one could be in the middle. There are so many thermometers on the market, and you should try to look for accuracy, some of my favorites are: Marina Thermo sensor/digital, it has a very long cord so it can be placed anywhere in the cage, and seems to be very accurate, sold in Fish supplies/Pet store; another one I like to use in my cages is the Exo-terra thermometers, they are the size of a toonie and you can place 2 or 3 in a cage; there is Hagen Wide Range Horizontal thermometers that you can place on the glass. There is a good variety of thermometers to use and it is mandatory to use some for a happy and healthy Beardie.

## **Food**

Bearded Dragons are omnivore's, which means they require both animals and plants; the animals include insects and pinky mice, and the plants make up a large portion of vegetable food substances. Beardies will eat mostly insects, but this is not good for them. They need their veggies/greens, so it is best to start feeding hatchlings after one week old and juveniles veggies as a training procedure. You can start by putting veggies in first, so they eat them and enjoy them, and then give them their live insects. There are a variety of live insects on the market that Beardies eat; Crickets, Meal worms, King Meal worms, Super worms, Butter worms, Wax worms, Silk Worms, and Cockroaches. When Beardies get to sub-adult and adult stage small pinky mice (new born baby mice) is a great snack. I like to offer my Beardies pinkies once a month. During breeding season, Beardies can have pinkies more often; as added proteins. I do not recommend any canned foods and reptile soft foods. Beardies prefer and stay more interested in live moving insects; and canned products usually contain preservatives. So you can avoid Can O'Worms, Can O'Crickets, Vitakraft, and other reptile soft foods.

Beardies need a variety of dark leafy greens, veggies and fruit. All should be washed thoroughly and free from pesticides and insecticides. These could include Dandelion greens, Mustard greens, Watercress, Collard greens, Turnip greens, fresh Parsley, Romaine lettuce, stay away from Iceberg (head) lettuce because it has no real nutrient value and can cause diarrhea in Beardies; Escarole, Endive, grated Carrots, grated Apple, Kiwifruit, Berries, Broccoli, Green Peas, Green Beans, Mixed Veggies, Alfalfa & Clover hays, Sweet Potato, Squash, Grapes, Mangos, Bokchoy (especially the leafy greens), Papaya, Chicory, Sweet Peppers, and Hibiscus flowers. There is a very good variety to start feeding Beardies. Some stores carry a Spring Mix of greens in the salad departments, for an easy ready mix. I add some powdered greens occasionally to my salads; this is an organic blend of young barley juice powder (80%) and young alfalfa juice powder (20%). As with all pets, there are some foods to avoid and some to have in small portions. Avoid Cabbage, Onions, and Avocados. Spinach, Kale, and Swiss chard are greens that should not be fed too frequently, and fed in very small amounts. These are high in iron /oxalic acid which prevents calcium absorption in Beardies.

It is important to feed properly sized food items, especially to the babies and juveniles. Too large of prey (insects) and too big of pieces of veggies and fruit can actually kill your Beardies. The rule of thumb is not to feed anything larger than the space between your Beardies eyes. So remember, smaller is better. Finely chop and grate veggies and fruit for your small Beardies. Hatchlings can start veggies after they are 1 week old; otherwise hatchlings need to be offered pinhead crickets 3 times daily. Juveniles, Sub-adults, and Adults need insects offered once a day; veggies and fruits every other day. You should try to give them their veggies in the early morning and insects later. Incorporate more greens as Beardies grow; Hatchlings require 80%

protein/insects, 20% greens; by Sub-adult to Adult they require 80-85% greens and 15-20% protein/insects.

Supplements go hand in hand with food. Beardies grow at such a fast rate supplements are required. Dusting insects with supplements is very important for proper growth and maintenance. I recommend Rep-Cal with Vit. D3; or a phosphorus free calcium powder; insects are high in phosphorus so using a phosphorus free calcium is better; too much phosphorus will stop calcium absorption. This is recommended once daily for Babies and Juveniles; and every other day for Sub-adults and Adults. Rep-Cal Herptivite is a multivitamin powder recommended at least once a week for all stages of Beardies, except hatchlings, twice a week, be careful with other multivitamins. Beardies are susceptible to Vit. A toxicity and deficiency, a beta carotene product is better. Miner-all is a mineral powder to use once every 2 weeks for all stages of Beardies. Dusting insects is a simple procedure. You can use a clean empty plastic container or Zip lock bag, place insects into it, sprinkle with 1/2 teaspoon powder, shake gently, and drop dusted insects into cage for Beardies. Always remember the size of the insects is important; smaller is better. Once your Beardies are at Juvenile Stage you can mix your Rep-Cal Calcium with Vit. D3 and Rep-Cal Herptivite when dusting. Keep an eye on hatchlings, be sure they are catching their insects; they may need a little guidance at first.

Feeding Schedules for the different stages of Beardies can seem tricky at first, but it all comes together as you watch them grow. I recommend a feeding schedule, but with the different growth rates you may have to adjust your schedule slightly. I like to start feeding after the lights and heat sources have been on at least an hour, and stop feeding 1-2 hours before the lights and heat goes off.

Less than 1 month, feed 2-4 pinhead (1 week old) crickets 3 times daily, once a day dusted with Rep-Cal Calcium and 2 times during the week dusted with Rep-Cal Herptivite; remember at this young stage don't mix the Calcium and the Herptivite. I don't recommend other insects yet. After Beardies are 2 weeks old you can dust crickets once every 2 weeks with Miner-all. Start green and veggies chopped very fine every other morning; 1/2 - 1 teaspoon approximately. Take out greens and veggies after 2 hours. The lights and heat will wilt the nutrition out of it. Cricket feeding, allow 10 minutes to figure out how many they may be able to eat.

1-4 months old, feed 2 week old crickets 2-3 times a day, you can substitute an occasional Meal worm or Wax worm for crickets now, but at this young stage of the Beardies life the worms should be freshly shed (molted) which is the loss of their exoskeleton, they should appear a creamy white color. The thick exoskeletons can cause impact on the smaller Beardies digestion. Dust insects once daily with Rep-Cal Calcium, 2 times a week with Herptivite, and every 2 weeks with Miner-all.

Add larger portions of finely chopped greens and veggies every other day in the mornings, before insects.

4-9 months old, this is the time to taper off insects daily, bump up greens and veggies, and start adding bits of fruit; larger portions of greens every other morning; insects 1-2 times a day every other day dusting with once with Rep-Cal Calcium, and once a week a Herptivite dusting (which you can mix with the Calcium now); Miner-all dusting every 2 weeks.

9 months and older, larger veggies/ greens and fruit mixes every other day in the mornings, insects every other day. Only once a day is required now; a small amount of the crickets can now run around the cage and the Beardies will eat them as they please The insects should be dusted with Rep-Cal Calcium; and once a week add Rep-Cal Herptivite to Calcium; and dust every 2 weeks with Miner-all. Pinky mice can be a treat once a month now. Remember that adult Beardies

should be at approximately 80% veggies and greens, and 20% insects. You should take out veggies and greens after 2-3 hours under heat and lights.

I like to supplement my Beardies with a greens powder occasionally to their greens and veggies. Insects should be gut loaded before feeding them to your dragon. Gut loading is a term for feeding your insects prior to giving them to the Beardies. With Crickets, you could give them a Cricket food. If you are keeping Crickets for a period of time, there is an easy set up to follow so you can have them daily for your Beardies. Start off with a tall plastic bin. Layer only 1/3 of the container with cardboard pieces, e.g.: cardboard rolls (from paper towels, toilet paper) or cardboard egg cartons, egg cups lying flat so Crickets can hide in the dips, or crumpled newspaper will work also. Put your crickets into plastic container and add some food; Cricket food sprinkled on the cardboard, pieces of fruits and vegetables, hi protein baby cereals, tropical fish flacks, rodent chow etc. The Crickets need water. Water can be the tricky part. Crickets tend to drown very fast and easily. There is a product that works great and crickets don't drown; this is Cricket gel; you only need a teaspoon every 2-3 days. You can feed and water crickets at the same time; every 2-3 days. I throw in some of my vegetables with Cricket food on the days I'm making vegetables for my Beardies. When buying Crickets, it is usually cheaper to buy more; and depending on the size of your dragon, keeping a cricket bin works very well. When ordering crickets from a pet store or Cricket distributor remember that smaller is better to start. Smaller Crickets are more nutritious than larger ones, proportionately less exoskeleton. It is always better to feed smaller ones than the big ones. Some of the Meal worms, Super worms, King worms come in plastic containers on bran. You can add some cricket food and fresh 100% bran every 2nd day, and throw in a piece of potato, carrot, celery, or apple as well. They will devour the bran and food fast; so keep an eye on your worms daily. Some of the other insects and pinky mice are usually fed to Beardies as soon as you buy them. They require special foods and care. Once you are all set up you can start experimenting with your insects. Quantity buying is always cheaper. For Crickets, I recommend **Crickets from Krickets UN Ltd., Bill & Yvette Duckworth; phone (403) 782-7902**; they supply Crickets, Cricket food, Meal worms, King worms, and Wax worms, etc. For Silk worms and Butter worms in Calgary area there is **Gone Buggy, Jeff Barber; phone (403) 337-3533**. If in the Edmonton area there is **Silkworms World, Jim Bondy; phone (780) 967-3526**.

With very busy schedules some of us tend to be running out the door the odd day and need a fast food for our Beardies. I don't recommend that you skip feeding the Beardies, but there are some fortified daily diet foods available. There are varieties on the market, my Beardies like the colorful pellets. I use them as snack foods, Rep-Cal Juvenile Bearded Dragon Food and Adult Bearded Dragon Food. Place the colorful pellets into a shallow dish in their cage. You can order all your Rep-Cal products; Rep-Cal Calcium, Rep-Cal Herptivite, and Rep-Cal Bearded Dragon Food, **Mice & Things, Walter & Bonnie Pacholko; (403) 748-3746**.

Remember when ordering from distributors, there is usually a minimum order required for delivery; so ask questions. You can tell them that you heard about them from Lizard Woman, Trina Karr.

### **Water**

Beardies do not instinctively drink water from a dish, but I believe a water dish with fresh water daily should be supplied. Beardies don't always need to drink water; they can absorb it through their skin. Beardies will sit in their water dish, so the water should only be deep enough they can stand in it, not drown in it. Misting with a spray bottle, but not soaking them down, is another way for Beardies to absorb water. If your Beardie doesn't appear to have anything to do with water, sprinkle a couple of drops on its lips and head, and it may get them interested.

## **Cleaning**

Keeping Beardies and their environments clean is very important. Beardies can have baths; usually weekly unless they appear dirty from feces. Under the heat in their cages the feces grows bacteria quickly, and the odors can be over whelming. Beardies can go into your bathtub or sink; you should clean out the area before and after you bathe them. Some human products left behind can harm your Beardies, and Beardies are natural carriers of Salmonella so cleaning after is important to us. When bathing Beardies it is important to have water at a lukewarm temperature and only deep enough that the Beardies can stand in; approximately at their elbows to start. Introduce them slowly; and then raise the water level. Always watch Beardies in water. Some will swim around; and some will look like their sinking. Pat them dry and put them back into their heat source. I don't recommend bathing them too late at night; they well need to adapt their body temperatures before sleeping. My Beardies seem to enjoy their bath time.

Daily cleaning in Beardies cages includes removing feces, changing some substrate materials, e.g.: newspaper, paper towels; and changing water and removing dishes. Beardies will defecate (poop) where ever they want, so don't be surprised if they climb into their food or water dishes and leave something behind. It is important to wash their dishes daily; using mild dish soap and a little vinegar; rinse well. I like to keep a couple of extra Beardie dishes on hand so I can change them daily without worrying. Washing and sanitizing everything monthly; this includes dishes, branches, rocks, cage accessories, and the cage. This is the time to remove old substrate and replace with new, and wash and sanitize their cage. You must air the cage out good before putting your Beardie back into it. Sanitizing can be done by washing with a diluted bleach and soapy water solution (90% water and only 10% bleach), or Nolvasan, a veterinary disinfectant,(use diluted ), the generic version is Chlorhexadine diacetate which is cheaper. Then rinse every thing well, usually at least 2-4 times. Cleaning solutions can leave residue behind and it could kill your Beardie, but not cleaning and sanitizing can do as much harm. You may have to sanitize some things more often. Remember, Beardies will poop on whatever, so these items should be removed as soon as possible, and washed and sanitized.

As handlers of Beardies keeping our selves clean is as important as keeping the Beardies and their environments clean. Most reptiles carry Salmonella naturally. Always wash your hands before and after handling of Beardies and any of their cage items. Always keep your Beardies stuff, like dishes, waste, garbage, towels, separate from your personal. I quite often wear a smock over my clothes when I'm handling my Reptiles, then remove it when I'm finished and wash up.

## **Hibernation**

Beardies can go into a form of hibernation in their 2nd winter. It is a semi-dormant state of hibernation during the winter months, this is when your light and heat cycles must be shorter, and Beardies may not eat as much or be as active during this time. They may stay under their shelters for long periods of time. You should still keep an eye on your Beardie in case it's not hibernation but a health issue. Beardies usually won't lose weight and remain healthy, relatively alert and wide-eyed when picked up, during this hibernation time. Do not try to force feed during this winter shut down time.

## **Sexing**

Sexing your Beardie can be difficult at hatchling stage, but not impossible. Sexing Beardies properly gets easier as they get bigger, but does require experience and care. If you have one Beardie it is not essential to be correct in sexing; but if you have 2 or more, you should know their sexes. Beardies can be aggressive, especially 2 males together. A male and 1 or more females are usually fine together; or 2 or more females are usually fine also. You still have to watch for signs of aggression; in some cases an aggressive Beardie will be aggressive to both

sexes.

Determining sex can be done by watching Beardie behaviors; the size of their heads; their tail taper, vent sizes, and presence of pre-anal pores and scales. Both sexes have a vent; which is a narrow opening at the base of their tails. Both look similar from the top, you have to look underneath. Males have distinct set of preanal pores between their back legs and have hemipenial bulges at their vent area. Females don't have the pores and bulges. The pores are fairly easy to see under the Beardie, but the bulges are not. You have to very gently and slowly pull the Beardies tail upward towards their head. It is very important not to pull the tail further than 90 degrees; it may hurt the Beardie or break its spine. On males you should see 2 bulges and an indentation, and on females there will be one bulge at the base of the vent. Find someone who knows how to properly sex your Beardie; keep in mind that if your Beardie is still very young even an expert may sex improperly.

### **Veterinarians**

Beardies are like any other pet and may require a vet; or vet check. Finding a good reptile vet before your Beardie needs one is important. Ask anyone you know with reptiles questions on vets. Researching is always good, phone vets in your area and see if they know how to treat reptiles and have treated them before.

If you are in the Calgary area I have a very good Beardie vet. **Dr. E. Murphy, 7738 Elbow Dr SW, Calgary; (403) 253-7044.**

## **Bearded Dragon Information**

**The following items are essentials and should be obtained right away:**

Books, Magazines, Videos, CD-Rom, Information or Care Sheets, etc...

Tank or cage

Cover or lid (to keep lizard in and children or other pets out)

Half Log (an all natural ruff surface for the animal to take shelter and to aid in shedding)

Water Dish and Food Dish

Hygrometer and Thermometer

Rep-Cal Phosphorus-Free Calcium with D-3

Rep-Cal Herptivite

Heat source (Heat lamp, Heat emitter, Under tank heater)

Single or Dual Fluorescent Fixture

Fluorescent lights (providing UVA and UVB)

More dishes

**Dragons need a large variety of Live Insects:**

Crickets

Meal Worms

Butter Worms

Wax Worms

King Meal Worms

Super Worms

Silk Worms

And as an extra snack, once dragons are big enough, Pinky mice (new born baby mice)

**Large variety of Greens and other fruits and vegetables:**

(Red) Dandelion Greens, Mustard Greens, Rainbow Chard, Watercress, Collard Greens, Kale, Parsley, Romaine Lettuce, Escarole, Endive, Grated Carrots, Grated Apple, Bits of Kiwifruit, Berries, Green Peas, Green Beans, Mixed Vegetables, Alfalfa and Cover Hays, Sweet Potato, Squash, Grapes, Mango, Strawberries, Papaya etc....

**Note:** I own both of these great books and highly recommend that all owners of Bearded Dragons should own one if not both of them;

**The Bearded Dragon Manual by Philippe de Vosjoli, Mailloux, Donoghue, Klingenberg, Cole**

**And**

**Your Bearded Dragon's Life by Liz Palika**