

# **Taking Care of Your Bearded Dragon**

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## **Dragon General Information**

Before purchasing a bearded dragon, please do research. Read my care sheets and any others you can find. Gather all points of view to find what will work for you and your dragon. You'll find in your search that I agree with some advice and disagree with other advice on different sheets. I have researched and experimented to identify what works for me and my dragons. I advise that you print out various care sheets and info to keep in a file for future reference.

Bearded dragons are friendly, sociable animals. Once you get their home set up correctly, they are not expensive to maintain. Bearded dragons make great pets for all ages. Even small children love to watch them in their homes.

Find a good reptile vet in your area before purchasing your dragon so you are prepared in case you need one. I suggest waiting for about a month before taking your new dragon for its first vet check-up, unless it shows signs of illness. The reason for this is simple. Traveling and change of habitat are very stressful to your dragon. Stress raises the normal levels of bacteria in your dragon. Let your dragon adjust to its new home and you, give it a chance to calm down and control the levels naturally. This way they get back to normal on their own without the use of medications, which can be hard on your dragon's system.

Some dragons will refuse to eat right after you receive them. Others may eat right away. Don't panic like I did, this is normal. Just offer food daily and you'll find one day they'll suddenly begin to eat when they are comfortable. Think about this. Someone you trust puts you into a strange place and then it goes dark. You think okay, let's rest and sleep, I trust them. But then you get awakened by bumping and jostling and there you are in that dark strange place wondering what the hell is going on? The bumping stops and then you see light. There looking at you is a stranger you don't know and everything around you is different and not familiar. Would you not be afraid, confused, stressed and uncomfortable? So be patient when you first get your dragon and let them learn to trust you.

Try not to handle your new dragon more than necessary for the first week. Let them adjust to their new home first and then as they settle, start letting them adjust to you. They'll learn to love you as you will love them. Feel free to contact me if you have any questions or concerns; whether you purchased a dragon from me or someone else. I love dragons and enjoy talking about them with others who also have a passion for them. No question is stupid or dumb. But you cannot learn without asking. I am not

implying I know everything, I don't. But if I don't have an answer I'll help you find the information you need.

### **What to Consider in Buying a Bearded Dragon?**

- Is the dragon **at least 5-½” long**? If not, there will most likely be problems that can lead to death.
- Do they have the necessary “fat stores”; built up from good daily nutrition that enables them to safely handle the stress from moving from their original home and then to adjust to living in your “new” home?
- What health guarantee is made on the dragon?
- Is it a male or female? What are the dragon’s genetics and blood lines?
- What diet, hydration, lighting and human contact has it been receiving?
- Does the dragon seem overly “wild” or “skittish”? Daily human contact by the breeder from the beginning relieves this and promotes a good dragon personality.
- What customer support is offered with the dragon? Who do you call with questions or problems and what is their phone number, Facebook and email?
- If you’re spending all the effort and expense on habitat set-up and taking care of your new dragon, then why buy a dragon that is not “well started”?

### **Who are you buying the dragon from?**

- Are they a true breeder or simply a re-seller?
- Are they here today and gone tomorrow if you have questions or a problem?
- Do they offer a business card and receipt that shows the company name / contact name, physical address, email and phone number information?
- Are they established on the internet; a website, on Facebook?

## **Dragon Housing**

### **Habitat Options:**

You can start with the minimum of a 20-gallon long tank (30”W x 12”D x 12”H) for

dragons up to 12" long. This provides enough length so that the end opposite their basking area (115-120°F) will be about 80°F; allowing the dragon to self-thermogate. After the dragon reaches 12", we recommend a minimum of a 40-gallon breeder tank's size (36"W x 18"D x 16"H). Therefore, unless you already have a suitable habitat, it makes more economic sense to simply go with a cage the size of a 40-gallon breeder tank from the beginning!

**Beware of cages with limited ventilation;** they make it almost impossible to provide the temperature gradient that your dragon needs to self-thermogate. The habitat either gets too hot, or the basking spot will not be the correct temperature (not hot enough).

### **Babies up to 12" long; nose to tail**

You will need at least a 20L glass tank; 30"W x 12"D x 12"H. If you already have a larger tank then it can be partitioned off to make a smaller space for the small dragon until it gains size. There are several reasons that a small home is best to start with. First it makes it easier for your little one to find and catch its food. Second your little one can find its basking spot with ease. Third it makes it easier for you to catch the leftover food and remove them before bedtime.

We also suggest that you keep your young dragon's home simple. Just a basking rock or limb, maybe a hammock. This gives the dragon's food less places to hide so your dragon can catch it. Also this way your dragon can find its basking spot with ease; getting the heat and UVB light it needs to process its food. You do not want to provide your young one with places to hide initially, for they may chose them instead of basking in the light needed for growth. So with a small area and not too many items in the home your dragon can get all it needs and not feel overwhelmed. Tanks should be longer rather than higher to provide the most footpath you can for your pet.

### **Juveniles, 12" or longer Sub-adults and Adults**

The larger the footpath and space you can give your dragon the better once they reach this size. They should have a minimum of a 40 gallon tank to live in; 36"W x 18"D x 16"H. We use a 36"W x 24"D x 18"H cage. Glass tanks are fine, however to be sure not to use wood, plastic or any other solid material for the top. Screen is the best for ventilation and allowing the most light possible into the home. You don't want to allow too much humidity in the home as it is not healthy for your dragon. We offer several sizes of custom cages on our Products for Sale website page. The most popular sizes for dragons are the 36Lx18Wx18H, the 36Lx24Wx18H and the 48Lx18Wx18H. Their design has evolved over the years and we hope you will appreciate the level of features and quality that is now offered.

Building your own enclosures is also an option; using plexi-glass, wood and screen; I built some of mine. Some people think dragons do better with limited vision outside their habitat. I think they are right. When I first started with dragons, I felt it was better for them to see out of all sides of their houses. Over time I learned that they seemed to be more stressed seeing out of all sides. They also see more reflections which they think are other dragons. Also, the shadows created remind them of birds flying over, also stressing them out. This additional stress can lead them to not eating as well as they should. We have found that seeing out of one side seems to be the most comfortable for them. They are still able to see us, without worrying about predators.

When housing small dragons, they can be grouped together. But once they reach a sexable age, males should be moved out and housed alone. Females can normally be housed together as long as you are sure they're each provided a place to bask. Also make sure they are close to the same size. Smaller dragons will not eat or will eat very little, if housed with larger dragons. They have a social structure of dominate and submissive. You have to make sure the home is large enough for those housed there. Two girls can be housed together in a 40-gallon breeder size tank, but we prefer the extra space provided by our Carolina Custom Cages Terrarium, Large Deep 36Lx24Wx18H. It offers them 33% more space so they both have plenty of room.

I think if the girls live together from the time they are young, as they grow older they will keep living together with ease. If you are going to add an adult girl in with another, watch them. Make sure they are not head bobbing at each other or that one does not go hide, not coming out. If this happens they will need to be housed separately.

If you don't provide a basking area for each dragon, or a large enough basking area, they will pile onto each other under the one provided. When this happens the girl on bottom is not receiving the heat and light she needs to be healthy. I always say if in doubt, ask questions and go with the safer option for your dragon's sake.

## **Lighting and Heating**

Lighting and heating are very important to your dragon. Your dragon's health and well-being depend on good lighting and enough heat. A dragon needs 14 hours of light each day.

### **The Basics:**

- ZooMed's ReptiSun 10.0 UVB straight fluorescent tube and a separate basking heat bulb.
- Required temps by age, basking spot area:
  - Hatchling to six months, 115 to 120 degrees
  - Six months to one year, 110 to 115 degrees
  - One year and older, 100 to 110 degrees
- Cool side area for all ages should be around 80 degrees

### **Lighting:**

We recommend our Carolina Custom Cages' Reptile T5HO UVB + GU10 Basking Light Fixtures; a compact T5HO (high output) fluorescent fixture and efficient halogen basking light. This all-in-one fixture can be easily mounted under the habitat's top screen for greatest effectiveness. This is your best option. I have found that my dragons (even the older ones) are more active, their appetite is stronger and they seem happier under the T5HO lighting assembly.

## **Natural Sunlight Outdoors**

This is the best for your dragon, even if you can only provide a small amount it helps. Your dragon needs UVB rays to process its food. I use 40 gallon plastic tubs which can be purchased at your local discount store for about \$14 each. They are high enough your dragon can't climb out so you don't have to get a cover for it. Unless you have other animals around that may wish your dragon for dinner. I place a single layer of paper towels on the bottom of the tub. Try to position the tub so there is a shaded area for your dragon to cool as well as a sunny area for basking. If you don't have a safe place like that, then use the lid the tub comes with, place it sideways over 1/4 -1/2 of the tub to create shade. I like to take my dragons outside several times a week to bask in their tubs on my back deck. I place them out from either 10am to 1pm or from 3 pm until 6 or 7pm. I try to avoid the hottest part of the day as I have found they get very restless during that time and seem to enjoy mornings and late afternoons better, relaxing and basking in the sun. I always mist the dragons with water while they are basking; about once an hour to help them stay hydrated in the heat. You'll find they will often open their mouths and flick out their tongues to drink during misting.

## **Enclosure Lighting and Heating**

Your dragon has to have UVB rays to produce vitamin D-3. You'll also need to use supplements containing D-3 and that is covered in the Supplements and Diet section. However, nothing fully replaces your dragon being able to naturally produce what it needs.

There are two ways to light and heat your dragon's home. I use both ways depending on the home and what the dragon responds to best. I tried a lot of different things to begin with until I found what works best for me and my dragons. I suggest you research to find what you are satisfied with.

## **Fluorescent tube bulbs and basking heat bulbs**

Fluorescent bulbs produce just UVB light and not heat, so using these means you'll also have to have a heat source. The fluorescent bulb should run at least two thirds the

length of your enclosure; the heat source needs to be at one end or the other. Your dragon needs a basking spot as well as an area to cool down. We recommend Zoo Med ReptiSun 10.0 tubes for UVB.

ReptiSun bulbs now come in two types; the T8 which we were using for years and the T5HO which is what we are using now. The T5HO is a superior bulb as proven by the testing that we have been doing over the last few months. They provide a greater amount of UVB and hold acceptable levels longer than the older T8 bulbs.

We feel that mounting your fixture under the screen is much more efficient since you don't have the loss of going through the screen mesh which can be 25 to 30%. We have produced fixtures that are lightweight, streamlined and easy to mount under the screen. These fixtures are available with a combined basking light so that you are able to provide heat and UVB with just one fixture. These fixtures are available on our Products for Sale page.

You'll need to change T8 tubes every 4 months as they noticeably degrade after 3 months and provide no benefit to your dragon for the UVB it needs. We find that with our T5HO fixture we are getting a useful life of at least 7 to 8 months because it is starting at such a superior output to begin with and the electronic ballast improves the length of time before degradation begins.

You'll need a surface temp thermometer to help you keep the enclosure temperatures regulated. We offer two styles on our Products for Sale page. Young dragons need a slightly higher temperature in their basking spot than adults. Young dragons need the temperature in the basking area to be 110-120 degrees and adults need 105-110 degrees. The other end for their cool area needs to be 80-85 degrees.

Dragons need to be able to get close to the UVB light, between 6" to 8" if using a T8 tube and 10" to 14" if using a T5HO tube. The ways to achieve this are explained in the Cage Accessories section. Make sure that the dragon cannot touch the basking bulb.



Dragons don't process sensation like humans, so if most of their body is comfortable and one spot is being burned they are not aware of this. So it is your job to protect them from harm. Be sure you have enough basking spots for each dragon if more than one is housed in the enclosure. Otherwise someone may get left out and not receive what they need.

Putting your lights on timers is the best. We offer the one that we found to be the best on our Products for Sale page. I started by turning mine on and off every day and night, but sometimes life gets busy and you miss the time you scheduled. Your dragon needs a routine. So, for the price of a timer, it makes your life easier and your dragon's life happier. I change my lighting times with the seasons to keep the dragon's routine in sync with the natural passing of the year. I keep my lights set to come on at 7:00 am each morning. In the summer my lights are set to go off at 9:00 pm this gives the dragon 14 hours of light and coincides with the sunrise and sunset.

I keep dragons that are under a year old at 14 hours of light a day during the entire year. Adults' lighting time changes with the fall season for brumation.

As fall season comes around October, I begin to slowly move the off time back as the days get shorter. I change the time each week so the dragons have time to adjust to each change. I'll go from 9pm to 8pm then a week later go from 8pm to 7pm and so on until I get to 5pm. This reverses the daylight and dark hours just as it does naturally between summer and winter. Come November, they'll have 10 hours of daylight and 14 hours of dark. This will also help your dragon brumate which is an important cycle for your dragon after it turns a year old; especially if you plan to breed. Brumation is covered in its own section, so read that for more information on the subject. In December, I start to reverse the lighting back towards summertime. As you do, your dragon will begin to be more active as they would in their natural habitat.

I can't express strongly enough how important lighting and heat are to your dragon. Your dragon can't function properly and be healthy without the proper heat and light. So if you have any questions please ask.

## **Substrates**

Everyone has their own opinion about this as in most other areas. However, everyone does seem to mostly agree on a few things.

### **The Basics:**

- Paper towels, butcher paper, kraft paper or Carolina Designer Dragons' Reptile Carpet (felt-like material made from recycled plastic bottles, machine washable).
- **We do not recommend sand**; because of the well-known risk of impaction, especially with younger dragons. There is also an additional risk of eye abrasions for all dragons. Using sand also increases the risk of your dragon getting bacteria or fungus originating from the urine soaking into the sand.

### **What NOT to use as they are dangerous and deadly for your dragon.**

- 1) Chippings or mulch from wood or bark
- 2) Corn cob granules
- 3) Any reptile sands
- 4) Calci-sand or any sand stating that it has calcium in it
- 5) Walnut shells
- 6) Gravel
- 7) Kitty litter
- 8) Play sand

These things lead to impaction, which can cause the death of your dragon.

### **There are several other options.**

- 1) Paper towels (remember crickets can hide under these, so move them around at night before lights out to be sure you have all the crickets out of your dragon's home.

- 2) Reptile carpet – We offer the type of Reptile Carpet that we use on our Products for Sale page. It comes in 12 different colors.
- 3) Non-stick shelf paper
- 4) Newspaper if the ink used is not harmful. Also, the ink on the paper will turn your dragons' feet black. As with paper towels, watch for hidden crickets and remove them before lights out.
- 5) Indented Kraft paper (it comes in rolls so you can cut it to size)
- 6) Brown butcher paper

There are other things that some people suggest you can use. However, before using any of them, I would advise that you research them thoroughly.

## **Cage Accessories**

I use a variety of items depending on the size of the dragon and what I find they like the best and therefore use the most. Sometimes I'll switch items out that I don't see them using and try other things, until I find a balanced home space. The following list of items is what I use combinations of. Experiment for yourself to see what you find that accomplishes filling the needs of your dragon.

### **The Basics:**

- Dragons until they are at least 12" long need a simple habitat. Give them nowhere to hide from their necessary UVB exposure and keep it easy for them to find their live food.
- Once dragons are 12" or longer, decorate with extra items if you wish. Just remember your dragon needs to have proper UVB exposure and find its food readily.

### **1) Rocks**

I use Pennsylvania-style field stone and flagstone. I have found they retain heat well so the dragon gets heat from the lamps above as well as the rock below. Different rocks retain and hold varied amounts of heat. I advise that before allowing your dragon to

bask on the rock you chose, test it; using an IR Surface Temp Thermometer. Make sure the rock you use does not exceed the temperature ranges suggested for your dragon's size and age. This is covered in the Lighting and Heating section.

## **2) Branches or Limbs**

First it is NOT safe to just grab branches or limbs from the back yard; they will carry bugs, parasites or bacteria that can be harmful to your dragon. Also, any bark on the branch or limb can be ingested by your dragon and cause impaction. There are websites that explain how to make outside branches and limbs safe to use. I don't wish to take the chance of missing something and harming one of my dragons. Even when purchasing from a reliable supplier, be sure to sanitize the item before placing it into your enclosure. This process is explained in the Cleaning Your Enclosure section. We offer a Gnarled Large Root, a Rock Arch and a Reptile Bridge on our Products for Sale page that are cute and easy to clean.

## **3) Hammocks**

Most of my dragons enjoy hammocks. They're a safe, easy way to allow your dragon to get close enough to its light and heat sources. Hammocks are easy to clean, which is a plus. I only have a couple dragons that don't use hammocks and prefer large limbs instead. My mother and I hand sew the hammocks that I use. I find it easier to throw them in the washer / dryer to clean them rather than having to scrub the mesh type hammocks in the sink. We have a variety of hammock fabrics to choose from on our Products for Sale page.

## **4) Hidey Places**

Except for small dragons, you will need to provide a hidey place. They use the area to cool down as well as to sleep. Dragons seem to feel safe in a closed-in area when sleeping. There are hidey items for sale however I created some of my dragon's hiding places with rocks so I get more than one benefit from the area. Just be very careful that what you create is sturdy and your dragon is not able to knock the rocks over and hurt

themselves. We offer a couple of hidey place accessories on our Products for Sale page.

Chaise lounges – I have found my dragons love the chaise lounges. They lay on them for basking and many of them curl up and sleep on them as well. We have several with different fabrics offered on our Products for Sale page.

Keep the enclosure layout simple, avoid over-crowding to allow footpath area for your dragon. Keeping it simple allows for easy cleaning, keeps your dragon's food from having too many places to hide and gives your dragon space to roam and explore in. We offer several options for serving worms effectively on our Products for Sale page. But be sure that what you chose to use gives your dragon a place to climb and be near its UVB source, I am emphasizing this again as it's very important to the health of your dragon.

## **Cleaning Your Enclosure**

I use chlorhexidine to clean my enclosures and accessories.

I clean my enclosures out daily with chlorhexidine. It's an anti-bacterial / anti-fungal cleaner that is not toxic to bearded dragons or humans. I use it to spot clean my reptile carpet and to spot clean the floors of my enclosures. I also use it to clean poop off of rocks and limbs.

Monthly cleaning of all the items in your dragon's home with 10% bleach water (1 cup of bleach per gallon of water) is contributory to its health. This is because 10% bleach water is necessary to actually kill coccidia. Chlorhexidine, an anti-bacterial / anti-fungal cleaner is great for daily cleaning; either on a spot basis or weekly, "take everything out" type cleaning. Using chlorhexidine regularly will reduce the likelihood of coccidia, but you'll want the 10% bleach water treatment to absolutely kill any that could still be present.

First, I remove all items from the enclosure to the kitchen sink, spraying each one thoroughly with bleach water and letting them soak for 15 minutes. While everything is soaking, I remove all paper towels or reptile carpet to clean the glass or Plexiglas and melanine sides and floor of the enclosure. Then use chlorhexidine to re-clean the enclosure; essentially cleaning away the bleach residue. After the 15-minute soak, rinse all of the items. I rinse each one at least twice and then smell them. If you are still able to smell the bleach, rinse again until no smell of bleach is left. Dry the items before returning them to the enclosure. Make sure all of the bleach is gone and the items are dry. This is important as you'll find your dragon flicks its tongue out and licks everything all the time. You do not want your dragon to become ill and possibly die from getting bleach into its system. I know this all sounds like a lot, but once you get the routine down it takes only about 30 minutes. This is time well spent for your dragon to stay healthy and happy.

## **Dragon Feeding**

I'm sharing the information I have gained and the ways I have found best for my dragons. I am not claiming to be an expert. Some friends thought I fed a diet that was too rich, as what I feed would not be available to the dragons in their natural habitat. However after visiting and meeting my "children" they reconsidered and began a mix of richer feeders for their dragons. Is the way I feed the only good way, I doubt it, but it works for me. My dragons are big, healthy and happy. My dragons are active, alert and very friendly. I suggest you read what is good and mix items until you find what works for you.

### **The Basics:**

- Dragons of all ages must have fresh greens and vegetables every day. Chop everything so it is no bigger than the dragons head.
- Fruit should be offered twice a week.
- Protein by age:
  - Hatchlings until 6 months of age, all the protein they can eat in 15 minutes,

- twice a day.
- Six months to two years, all the protein they can eat in 15 minutes, once a day.
  - Two years and older should be offered protein every other day. But they still get greens and veggies every day.
  - Proteins include:
    - Crickets and roaches: These can be fed all they can eat in 15-minute periods twice a day, depending on age. Never feed crickets or roaches that are longer than the space between your dragon's eyes.
    - Superworms: I suggest starting dragons at 12" long with 5 for the first day, then if there are no issues you can raise the number by 1 a day until you reach the limit of 10 per day. The reason for limiting the number they can have per day is the higher fat content.
    - Phoenix worms (for dragons under 12") and hornworms (for dragons over 12") are soft and full of protein and calcium. They are great diet supplements for dragons and can be used daily in addition to their protein staples; crickets, roaches or superworms. Up to 10 Phoenix worms and 1 or 2 hornworms are suggested.
  - Rep-Cal Calcium with vitamin D3, given 6 days a week. Rep-Cal Herpivite multivitamin given 1 day per week. Sprinkled on salad after misting salad with water.

## **Veggies and Fruits**

Offer greens to your dragon every morning. Six mornings I give each dragon a mix of greens and veggies, sprayed with water and sprinkle on Rep-Cal Calcium with D-3 (Phosphorous Free). The seventh morning, I sprinkle the wet greens and veggies with Rep-Cal Herpivite Multivitamin. I leave the greens in until lights out at night. My vet suggested spraying the greens with water for two reasons, first it helps supply the dragons with extra water and second, the supplement powder sticks to the wet greens better. The water also helps keep the greens moist and fresh longer. If I suspect a

cricket or two might be hiding in the enclosure, I leave the greens overnight to give the crickets something to munch on besides the dragon.

I use ceramic salad bowls for greens and veggies as they are easier to clean and look nice in the dragon's habitat. We offer them on our Products for Sale page.

There are those who state to just dust the worms and crickets and not the greens. I feel that I never know how much they are getting from the crickets, so I just dust the greens. Never use Iceberg lettuce to feed your dragon, it is all moisture but has no nutritional value. I received the following guide with one of my dragons, but don't remember which one. I have found it to be very helpful so I am sharing it with you, but can't take credit for creating it. It lists greens, veggies and fruits along with the nutritional value of each, plus how often to feed them or if you should not feed them ever. Remember to chop or grate veggies and fruits for small dragons and tear greens into dragon head-size pieces to help your dragon digest them well.

Reference our Nutritional List for the recommended feeding frequency of most fruits, vegetables and protein sources. It is color-coded by frequency and comes in easy-to-download pdf format.

## **Insects**

It is very important to never, ever feed your dragon insects that are too big for them. The rule of thumb is to feed them nothing longer than the space between their eyes. I have found this works well. The exception I think are silk worms and horn worms, as they are softer and very gushy inside, but still watch the sizes.

## **Crickets**

I use crickets for all my hatchlings and juvenile dragons. Sizing in crickets is very important, so chose a supplier who sells them by size. It is also important to check out the supplier to be sure they employ good conditions for raising the crickets. I use crickets from Ghann.com. I have found them to be reliable and have good crickets.



If your enclosure is simple without many places for crickets to hide, shake 15 to 20 at a time in and watch to see if your dragon is chasing and eating them. If they seem to have eaten the first few, drop in a few more. I do this for 15 minutes which is the suggested time, or until they stop chasing them to eat. If your enclosure has places for the crickets to hide, either remove the extra items until after feeding or use a separate enclosure to feed in. A Rubbermaid or Sterilite tub works well. Some dragons will dive right in and eat in a tub, others get stressed by being moved from their home and will not eat. Don't allow your dragon to starve. If the separate feeding area is not working, find a way to feed them in their home. Be sure if you are feeding in the enclosure to check and remove any extra crickets before the lights go off. Crickets will bite on your dragon as it sleeps and can cause health problems. If you can't get them all, leave something in the enclosure for the crickets to nibble on besides your dragon. Leftover salad or a small wedge of potato works.

We gutload all of our crickets. What your feeders eat is in turn what your dragon is eating. The more nutritional the food your dragon eats the better. I have chosen gutload from Catawba Cricket Hatchery, also available on our Products for Sale page. I house my crickets in 56-quart tubs.

We do not use tops on our cricket tubs. As long as you do not stack the egg flats higher than 2/3's up the tub, the crickets can't get out. They really benefit from having the best ventilation possible.

Your crickets will come in a box full of egg cartons, without them the crickets will pile onto each other and suffocate themselves. I change these egg cartons often to keep down bacteria, so I order egg cartons. I place a Cricket / Roach Waterer in the corner of the tub or you may use thick-slices of potatoes. Crickets are dumb and will drown themselves in water.

Our Cricket / Roach Waterers use a sponge so that the crickets can drink and not drown. It's cheaper to purchase one from our Products for Sale page than to keep replacing the potato slices.

I change out the egg cartons regularly as I see the debris collecting on them. I watch as the Gutload is eaten and just add more. Keeping the crickets well fed and their home clean, are both important for the health of your dragon.

I have found that most of my dragons after becoming a year or so old, decide they just don't like crickets anymore. It may be that I spoil them hand feeding them worms, but I have had others tell me that their older dragons won't eat crickets either.

### **Roaches**

Some use roaches instead of or along with crickets. I thought they were icky and would not use them until a couple of years ago. They breed easily and are kept easily, in plastic tubs. They do require heat and humidity. The Cricket / Roach Waterers help with the humidity. I use ground-up, high protein dog food to feed the roaches.

### **Worms**

I feed a variety of worms. But, I choose not to use mealworms ever; they have hard, crunchy shells that make them hard for a dragon to digest. I use superworms, molted ones for the smaller dragons (superworms shed; when they do they are a white color and very soft). I get my superworms from Armstrong Crickets. I add in a mix of hornworms and Phoenix worms.

I purchase Phoenix worms from The Phoenix Worm Store and hornworms from Great Lakes Hornworm. They are listed on the Supplier Page. They provide good service and top quality worms. I feed a variety of these worms. If you have a dragon that is being picky and not eating well; offering these seems to spark their appetite. I have a couple of dragons that will refuse to eat anything but hornworms and salad; most large dragons love hornworms. They seem to have their likes and dislikes just as we do.

Small dragons love Phoenix worms. They have more protein and are smaller in size so easier for the little ones to digest.

Hornworms can be purchased in self-contained cups that come with the food in them.

Maintaining superworms is pretty easy. I use a rectangular Sterilite tub, I put about 2" of chicken feed in the bottom and place potato slices randomly across the top. Replace the potato slices as you see them get eaten with holes in them. I mix up the bedding every couple of weeks. As you see it become more powdery, then grainy, begin replacing it. Super worms keep forever. But if you find a few dead ones at times, just remove them.

Do NOT use worms sold for fishing. They are not raised the same way and can harm your dragon. Do NOT use any worms found outside as there is no telling what they are carrying that may harm your dragon.

### **Pinkie Mice**

I never feed these because of their very high fat content and there could be some risk of impaction from their bones.

### **Bearded Dragon Pellets**

I don't know much about these foods as I chose not to use processed food for my dragons. I think natural foods are better, but that is just my opinion. I suggest if you chose to use them, you do research to find the best ones.

A note: I wish someone had shared this information with me to begin with. It would have saved me some worry and panic.

Dragons will eat when they are hungry unless they are sick. Offer food each day but if your dragon does not eat for a day or two, it's okay. Some days they will eat a lot, then they may not eat for a couple of days. Young dragons eat more than older ones. Adults' systems slow down as they stop growing, so they eat less often. So just be sure

what they are eating is good for them. I do keep liquid calcium, I acquired it from my vet so if I feel a dragon is not eating well or gravid (pregnant) I will supplement with it. Talk to your vet about this if you feel your dragon is not getting what it needs with feeding. If you have a question, just email and I'll try to help. If I'm unable to, I will help you find a source for the answers you need.

## **Dietary Supplements**

I have covered which dietary supplements I use under the Feeding section, so this is just a short guideline for making your own selections. Choose a calcium supplement with a vitamin D-3 additive that is phosphorus-free and has only a low amount of vitamin A. Choose a multi-vitamin that contains vitamin D-3 and is phosphorus-free. What you chose is very important to your dragon's health. It is necessary to maintain the proper levels in your dragon's system. High levels of vitamin A will cause the calcium in your dragon to bind and not be used as needed for its health. Too little or too much of any supplement is bad. We use Rep-Cal Calcium with D-3 and Rep-Cal Herptivite Multivitamin.

## **Water and Hydration**

### **The Basics:**

Baths guarantee adequate hydration and help the shedding process; soak for 15 minutes in lukewarm water.

- Babies and juveniles get baths daily.
- Sub-adults and adults get baths twice a week.

Keeping your dragon hydrated is important. Baths are the most important, I give daily baths to babies and juveniles. My sub-adults and adults get baths twice a week. The baths assure that your dragon gets good hydration, helps the shedding process and keeping the dragons clean. Younger dragons' personalities benefit tremendously from daily human contact; bath time is quality time with your dragon. Also, misting their

salads with water every day (before sprinkling on the Rep-Cal Calcium with D3 or Herptivite Multivitamin), helps keep the salad fresher longer and adds to the water intake of your dragon.

Use lukewarm bath water, not hot or cold, about the temperature you would use on a baby. Only fill the tub or sink enough so the water brushes over the sides of your dragon. Please keep an eye on your dragon while it soaks. They could possibly relax, fall asleep and drown if your water level is too high. I use a soft tooth brush to clean stains of poop and food off my dragons. Just rub softly so you don't abrade their scales.

A dragon will often poop in its bath water. When this happens dump the water, clean the tub or sink and re-fill so your dragon can continue its bath. I suggest about 15 minutes of soaking each bath time. I have never had a dragon become impacted and I believe it is partly because of the baths allowing them to relax and release any build-up of feces.

It is fun to watch your dragon in the bath, the first bath they may be stressed and swim around a lot trying to get out. They'll adjust and begin to enjoy them with a little time, swimming gently around and lazing in the water. You'll also notice a lot of them drinking from the bath water, again helping with hydration. Remember that your dragon is a cold blooded animal, so making sure the water is lukewarm is important.

## **Dragon Behaviors**

The cute actions and behaviors are what make your bearded dragon such a wonderful pet. I have listed several of these behaviors, along with the reasons behind them, so you will be able to tell what your dragon is thinking.

### **Raised Tail**

Small dragons will do this when they are stalking prey. You may also see this during breeding season in your adult dragons.

## **Bearding Out**

I own some dragons that I have never seen beard out and others that do so regularly. Males seem to beard out more than females. The dragon will look like it's swallowing hard and will normally open its mouth, and then the area of their neck will suddenly begin to puff out and change color. Some males will head bob during this behavior as well, others will just tip and turn their head as if posing for you. Males will beard out during the breeding season to impress the females. They'll also do so to show dominance to other dragons or when startled as a defense against attack. Alpha females will also use this gesture to other females to show dominance.

## **Head Bobbing**

This is a display to show superiority over other dragons. Males will do this along with bearding out during the breeding season to get the female to show submission. They can sometimes bob so jerky and fast I think they are going to hurt themselves. I smile every time, though because I can almost hear the boy saying to the girl "who's your daddy". Females will sometimes do a slow motion head bob back to the males; this is showing they are bowing to the boys' dominance.

## **Arm Waving**

This is mostly a female behavior, but can sometimes be seen in small males when confronted with a large dragon. The females use this in response to the male bearding out and head bobbing during the breeding season. Also small females seem to do it for no apparent reason; I think they are practicing for later in life. The dragon will lift one arm and move it in a slow circle before putting it down and repeating the action with the other arm. I think it is adorable to watch. They look like beauty queens in a parade. Sometimes if more than one female is housed together one will head bob and the other will arm wave as if to be saying, "I'm friendly, let's all get along".

## **Brumation**

Brumation is a semi-hibernation state, entered during the winter months. Dragons know food is scarce during the cold months in nature. They naturally sleep to slow their systems down and use what nutrients they have stored internally through the spring and summer to get through the winter. Some dragons will go to sleep in November and not awake at all until February. But most will awake at some point during this time. Some will not sleep at all during the winter, especially young dragons. Adults will normally sleep from a few days to a couple weeks at a time, waking to sun themselves and eat before going back to sleep. You'll have to be careful during this time to ensure your dragon is not sleeping with feces left in its intestines, as bacteria can grow as your dragon sleeps. As their systems are slowed, they are not as able to fight off the bacteria's growth. Once you see your dragon is beginning to sleep more, give them a lukewarm bath to help them release any feces left. Do not feed your dragon while they are brumating. I do offer water every 2 weeks while they are sleeping. If you read the Heating and Lighting section of the care sheets, it explains how to adjust the heating and lighting during the brumation period.

Don't force your dragon to brumate. Ones under a year old will slow down a bit, but probably still eat everyday, however keep their lights on a normal schedule. They'll just lay around more, not being as active. Just keep your light and heat on the proper schedule and let the dragon decide what's best for it. If you are brumating adults, use the guidelines.

I always have my dragons tested every three months with a fecal test to be sure they have not gotten parasites or bacteria. I plan one in the beginning of November to be sure none of my brumating dragons are sleeping while the harmful things eat at their system; when they are not able to mount an adequate defense. No matter how careful you are, your dragon will get parasites or bacteria, so be careful during the winter to ensure they are not infested and can sleep in perfect health.

It is always an anxious time for me during brumation, I'm worried about them and if all is well. The first year I woke them everyday, just for a moment so they would look at me.

That way I would know they were okay. This is not a good thing to do and I learned that it was a natural state and to just leave them alone. But if you become worried, just email and we'll share concerns and get ourselves through it until spring time.

## **Dragons' Diseases and Disorders**

I'm not a vet and don't claim to be an expert. The following information is here to help you identify problems and should not be used to replace a visit to the vet for treatment options. Bearded dragons are hardy animals and if you follow the instructions in these Care Sheets, you should be able to avoid most health issues. Be sure if you acquire more than one dragon, that you house any new ones separately for at least 30 days. Then take the new pet to the vet for a fecal check before you house it with others.

### **Calcium and Vitamin deficiencies**

Not enough calcium and vitamin D-3 will cause a slow growth rate in your dragon at a minimum. It can also cause metabolic bone disease. One of the first signs of this will be seeing your dragon's hind legs twitch. This disease is fatal if not treated immediately. Caught early, enough extra supplements and natural sunlight can help. This condition is seen mostly in older dragons or young ones not receiving the supplements they need.

### **Vitamin A Toxicity**

This is a common problem in dragons that are over supplemented. Many multi vitamins contain vitamin A, so watch the amounts carefully. Some veggies contain vitamin A, so check the chart and be careful about feeding with these too often. Symptoms start with the swelling of the throat and eyes, then continue with the bloating of the body and lethargy. Read and learn about supplements so you are certain your dragon is getting the right amounts. Be aware of your dragon's behavior as this will let you know if things are not right, so that you can correct them quickly before causing irreversible harm.

### **Mites**



Mites are not very common in captive-bred bearded dragons. Some pet stores don't have the best sanitary conditions, so be careful if you purchase there. Mites are small bugs you'll normally find around the eyes first, then the mouth. There are commercial products to treat them with, but I suggest checking with your vet before using any of them.

### **Parasites and Bacteria**

Your dragon can get parasites from several sources. Unclean enclosures, dirty insect and worm tubs and un-washed greens will create ways for your dragon to get parasites. So carefully follow the cleaning instructions. Low levels of bacteria and parasites are normal in your dragon; the key is keeping the levels low and acceptable. Some of the things that increase the levels in your dragon include: change of habitat, breeding, brumation and adding another dragon to the enclosure. Anything that stresses your dragon will possibly raise the natural levels.

I suggest not using over the counter remedies without consulting your vet first. I'm one who believes in preventive measures and take fecal samples for each dragon to the vet every three months for testing. This way if levels are high I can treat them immediately, to prevent my dragons from becoming ill.

Some signs of high levels include: weight loss, lack of appetite, runny feces and feces with a fouler than normal smell. If you notice any of these signs, take your dragon to the vet for testing and treatment. Some feel the medications can be as damaging as the parasites or bacteria. I don't treat for low levels, but I do if high levels are detected. I try my best to keep my dragons as stress free as possible to avoid having to treat them. Remedies are simple and work well. You'll need to decide for yourself what is best for you and your dragon.

### **Impaction**

Feeding dragons food too large or feeding too many hard-shelled worms at a time can contribute to impaction. The food lodges in their digestive track and does not pass as it

should. This can cause death if not corrected quickly. Signs are tight, hard-bloated stomachs and can lead to hind legs extending straight back as though in extreme pain. They'll look paralyzed and not move. They normally will not take food often either. Watch to be sure you are seeing regular bowel movements in the enclosure. Some dragons will leave a "present" every day, others every other day. If it has been more than two days and your dragon is not brumating, then you might have a beginning problem. If your dragon changes its eating habits, or stops eating, this is also a sign. I suggest soaking the dragon in lukewarm water, this makes them relax and can help them pass large bowel movements easier. One dragon, I had to soak three times one day. My vet suggested every two hours seeing if he would have a movement without medication. The third time was the charm. Things could have been much worse if I had not been watching daily to notice he had not left feces in his home, as he had no other signs at that time. Maybe I was being overly careful, but I would prefer to be safe than sorry. If soaking does not work, contact your vet. They have medication that can help your dragon.

If you are careful about the size of your dragon's food and watch how many worms you feed at once, this should not happen often or at all. I feel giving my dragons weekly baths helps to keep them from becoming impacted or obstructed. Remember that your dragon will bask under the lights with its hind legs stretched out behind them. This does not mean they are impacted, if your dragon can move freely then it is fine.

### **Respiratory Infections**

Bearded dragons are hardy animals and resistant to respiratory infections, however improper living conditions can cause them. Temperatures too low for long periods of time, improper humidity or poor enclosure conditions will all contribute to respiratory infections. Make sure you are checking the enclosure regularly for correct temperatures. Be sure the enclosure is well ventilated so the humidity does not climb too high. Signs of the infection include gaping mouths (don't confuse this with your dragon gaping its mouth open as it basks to release heat), forced exhaling of air, lack of appetite, puffed up or bloated body and throat. If the infection progresses, mucus will

show around the nostrils and mouth. This means you need to get your dragon to the vet immediately. Antibiotics are normally used to treat this infection successfully, however you'll need to determine what caused the infection and correct it.

### **Thermal Burns**

This comes from your dragon coming into direct contact with a hot lamp or heat source. Read the Lighting and Heating section for directions on how to prevent this from happening. If it happens, most likely your dragon will get blisters. If these break open, a bigger threat than the blister itself occurs. Bacteria in the open sore will cause an infection. This will make treatment harder to accomplish and can be fatal to your dragon. If your dragon gets burns, please take it to the vet as soon as you possibly can. They'll give you the proper medications for treatment. During the time your dragon is healing, you must take extra care to keep the enclosure very clean to prevent additional bacteria from infecting the wounds.

### **Egg Binding**

This condition is attributed to several different things. It can be biological; a malformity which does not allow enough room for the eggs to pass through. Sometimes it can be caused by eggs that are overly large or malformed making them unable to pass through the oviduct.

Improper care of your dragon will also cause egg binding. Not having a properly prepared spot with the right temperatures contributes to egg binding. Your dragon will not lay if they're not happy with the conditions. Malnutrition or dehydration can also cause egg binding. Gravid females will stop eating very well as their eggs grow. The eggs compress their stomachs so that the dragon does not feel hungry. Ask your vet about supplementing with liquid calcium to ensure your dragon is remaining healthy during this time. Also be sure you are misting your dragon daily and giving weekly soaks to help with hydration. If your dragon struggles and cannot lay its eggs, contact your vet.

## Sexing

Sexing young dragons is very hard, if not impossible. A dragon that appears to be one sex at two months may very well appear to be the other at five months. I have purchased several dragons that later turned out to be the opposite of what the breeder I purchased them from thought they were. An example is Puffette; purchased at five months as a boy and named Puff. Puff looked like a boy to me also. However a couple of months later; boom, I have a Puffette. Not that I loved her any less, but it happens. So, I will not guarantee a sex, but I will promise to do my best to guess at the sex correctly.

Boys tend to have larger heads in portion to their bodies than girls. Beyond that tendency, to sex your dragon, gently hold it in one hand supporting all its legs. Lift its tail gently up. Not too far or you'll harm your dragon. Under the tail is a slit at the base, above this is where you'll look. Boys will show two humps with a small dent in the center, these are their tentacles. Girls will have one hump in the center or it will appear to be flat. Pictured are examples of a boy and a girl to help you determine the sex of your dragon more easily.



boy

girl

## **Finding the Best Vet for Your Bearded Dragon**

We strongly recommend that you find an exotic vet for your bearded dragon. Your typical dog and cat vet will not have the knowledge level or experience level with reptiles. We suggest consulting the online directory of the Association of Reptilian and Amphibian Veterinarians for an exotic vet closest to you.

<http://www.arav.org/>

Although we cannot guarantee each and every member of this organization, they at least care enough to join a professional organization of their peers and stay exposed to current research and issues affecting reptiles and amphibians.