



Milwood Animal Clinic

5942 Lovers Lane · Portage, MI · 49002

Phone (269) 342-9865

Fax (269) 342-6830

www.MilwoodAnimalClinic.com

Water Dragon Care

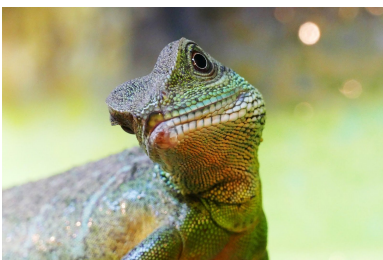
Minimum Requirements

- Enclosure at least 2-3 times their snout-to-tail length and 4-6 ft high with wire lid
- Metal screen cage top (plastic will melt)
- Light fixtures for high heat bulbs
- Mercury vapor UVB bulb
- Under-tank heating pad, nocturnal heat light, or ceramic heat element, as needed to maintain night time temperatures
- Automatic timers for lighting and heating elements
- Glass aquarium thermometers (2 to 3)
- Hygrometer
- Appropriate substrate (see below)
- Potted plants, which help maintain humidity and provide cover and shade from the UV and heat bulbs (Sansevierias are good, as are bromeliads, philodendrons, ivys, orchids and vines and groundcovers)
- Logs or branches for basking (essential for arboreal lizards!)
- Water container or aquarium for swimming and bathing
- High Calcium Gut Loading Diet for insects
- Reptile Calcium powder
- Reptile Vitamin powder
- Large plastic tub for bathing
- Insects and veggies for feeding (more on this below)



Housing

You will need a large enclosure, one larger than most people think will be needed by a lizard of this size. They need space at least 2 x their total length – **Minimum of 6 ft long (side to side), at least 2-3 feet deep and 4-6 feet high.** Water dragons can be kept together, but multiple males in the same enclosure will likely fight. Some females can be domineering and may not want any other females around; others can cohabit with 3-4 females. You must monitor them all the time to assure all are feeding and basking properly throughout the year. If any aren't, you are most likely seeing the results of intimidation and will need to increase the number of basking and feeding areas and/or increase enclosure size or separate them. Water dragons are semi-arboreal but also need enough water to submerge and swim comfortably in, as well as branches for climbing, and plenty of ground area for roosting and



feeding. If your cage is an aquarium, or has glass or plexi-glass doors, and is built in such a way that the dragon can see out of the glass at eye level, then you may find that he repeatedly bumps the glass with his snout either trying to get out, or fighting with his reflection. This bumping will cause very bad damage to his snout. A way to prevent this, if your dragon has a tendency to do this, is to plant some plants

around the edge of the enclosure or use some paper to create a visual barrier. This will also help to make your new dragon feel much more secure and give him some hiding places!

Substrate

Mixture of 2/3 sterile soil and 1/3 clean sand with areas of bark. You can also keep them on Ceramic tiles, Astroturf, or butcher's paper, but soil will help keep the humidity at an appropriate level. They have very active digestive systems and their enclosures must be cleaned frequently

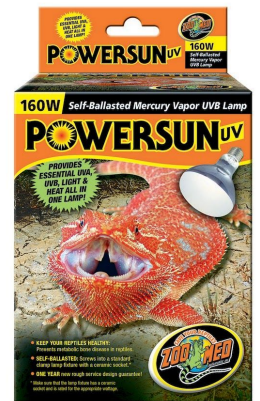
Plants

Plants should be repotted in a safe soil mix that does not contain any fertilizers before being used in the dragon's vivarium. It would also be a good idea to rinse the plant a few times in the shower to rinse off any powdered pesticides that could have been sprayed on the plant leaves. Suggestions for suitable live plants include dragon plants (*Dracaena*), pothos (*Scindapsus aureus*), *Ficus benjamina* trees, *Monstera deliciosa* (philodendron) and staghorn ferns. Plants will need to be replaced as they are shredded by claws or eaten.

Lighting

Ultraviolet light is important for most lizards. The UVB light that comes from the sun allows lizards (and many other animals) to produce Vitamin D in their skin. Vitamin D then travels to the lizard's intestinal tract and makes it possible to absorb calcium from the diet. Without Vitamin D, no calcium can be absorbed. Unfiltered sunlight (i.e. not through glass) is the best source of ultraviolet light and lizards should be exposed to sun whenever it is safely possible. Be careful when taking your beardie outdoors to prevent overheating and escape. Your pet should never be allowed outdoors unsupervised at any time.

There are many UV (sometimes referred to as full spectrum light) bulbs on the market. Most claim that they duplicate the sun's light spectrum, however there is no bulb that can achieve the intensity of ultraviolet light emitted by the sun. Some bulbs provide so little UV light that they are completely useless, and some are so powerful that can burn the reptile. As mentioned in the heating section, good quality mercury vapor UVB bulbs make the best basking lights because they provide both heat and UVB spectrum of light. Lizards instinctively bask in areas that are both bright and hot. Fluorescent UV bulbs provide brightness without the heat so often the lizard will bask in the wrong area of the cage when the heating bulb is separated from the UV bulb. If you have a separate basking lamp and UV light, they should be placed as close as possible to each other and on the warm side of the cage. There are two brands of bulbs we currently recommend for our reptile patients are: **ReptileUV's MegaRay**, available at reptileuv.com, and **Zoo Med's Power Sun**, available at our clinic and most pet stores.



Most UV bulbs must be replaced after 6 months because the UV output deteriorates over time. Humans can't see the UVB wavelength so there is no way of knowing when that spectrum of the light has died off. We can test your bulb's UVB output with our UV Index meter to help you decide when it is time to replace the bulb. We recommend testing your bulb when you first purchase it to make sure the bulb is good to begin with and then every 2-3 months thereafter. Many bulbs have been found to be defective right out of the box.

The lighting cycle should be 12-14 hours of light and 10-12 hours of no light. Using an appliance timer to turn your lights off and on is very helpful in regulating your light cycles.

Never use a white light of any sort at night, for lighting or for heat. Just like humans, reptiles need darkness at night. If you need to provide supplemental heat at night, use an under-tank heating pad, a ceramic heating element, or a nocturnal reptile bulb.

Temperature:

Basking – 95°F **Cool spot – 84°F** **Nighttime – 75-80°F**

Day time temperature from 84-88 F and night time temperature from 75-80 F. They must have a basking area going up to 90 F during the day at one side of tank. Ceramic heaters are a great way to provide heat at night since they don't produce light. Be sure that the dragon can not contact the heat source or severe burns may occur. A thermostat or dimmer switch can be used to control the temperature of the heater. Do not use HOT ROCKS; they do not supply adequate heat and are common causes of burns in reptiles. You will also need one or two basking lamps to provide focal areas of increased heat. These can be either a specialized basking lamp or a regular bulb. Different wattages provide different amounts of heat. These lights get hot so make sure that your dragon can't contact them!



Humidity:

Humidity should be about **80%**. This can be measured with a hygrometer (pictured to the right). Even with a water container in the cage this can be difficult to maintain. Mist your plants helps to provide a humid atmosphere. There should be a gauge in the enclosure that measures humidity. Mist the enclosure twice a day. Automatic drippers and misters can be purchased at many pet stores. If you are having problems keeping the humidity above 50%, try covering part of the top of the enclosure if it has a screen cover. Use a piece of plexiglas, Saran wrap or foil over part of the opening, but never cover the whole top of the enclosure. There must always be air circulating in the cage!

Diet:

Dragons at different stages of maturity get fed differently. A hatchling or juvenile should be fed every day. An adult should be fed daily to every other day depending on its overall health and body condition. 85 to 90% of a water dragon's diet should be protein-based. Since these lizards consume a wide variety of prey in the wild, a variety of protein sources must be offered in captivity. Commercially available insects include crickets, dubia roaches, mealworms, superworms, hornworms, silkworms, bean beetles, fruit flies, springtails, wood lice (aka sow bugs, pill bugs or roly-polies), and wax worms. You can also catch your own insects to feed to your lizard - just make sure they are not from an area that has been treated with insecticides and the insect you are feeding is not poisonous. Examples of acceptable wild caught prey to feed include: moths, cicadas, flies, crickets, small grasshoppers, spiders (non-venomous), cockroaches, wood lice (aka sow bugs, pill bugs or roly-polies), earthworms, slugs, and aphids. Adult and larger juvenile dragons can be offered all of the above plus occasional pinkies (newborn hairless mice) and fuzzies (baby mice just starting to get hair) as well as feeder fish. It is generally better to feed more adult insects than larval forms overall.

DO NOT FEED fireflies, venomous spiders, large (lubber) grasshoppers, stinging insects, monarch and other toxic caterpillars, fire ants, or scorpions.

The remaining 10%-15% of the diet should be finely shredded veggies (see Nutritious Leafy Greens list at the end of this handout). Very small pieces of fruit may be given as a treat.

Regardless of the age of the dragon, the size of the food item should be no longer than the length of the head, and no wider than half the width of the head, and preferably about one third the width of the head. Do not feed your dragon dog food, cat food, or monkey chow. Feeding these items can lead to over supplementation with calcium and vitamin D and may cause early kidney disease and soft tissue calcification, which can be fatal.

Gut-Loading

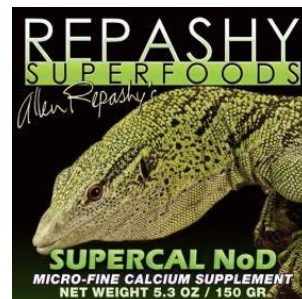
Gut loading refers to feeding your insects a high-calcium, high-vitamin diet 12 to 24 hours prior to feeding them to your pet. Most insects are nutritionally deficient with the exception of their stomach contents so gut-loading improves their nutritional content. We recommend and sell Mazuri High Calcium Gut Loading Diet for crickets, mealworms, superworms, Dubia roaches.

In addition to providing essential vitamins, this diet is formulated to contain a high level of calcium for crickets and other feeder insects which are intended to be used in the diets of other animals. It helps balance the calcium to phosphorus ratio of the crickets and other feeder insects when they are consumed by other animals. Provide water with a damp paper towel or cotton ball. Do not use cricket cubes or vegetables as a water source because the insects will preferentially eat these items and will not be as nutritious when fed to your pet.

Supplements

Sprinkle or dust prey with a calcium supplement just before each feeding. We recommend and carry Repashy SuperCal. An easy way to coat your insects with the powder is to use a small tupperware container with a layer of the calcium powder on the bottom. Drop your insect in the container, cover, and shake gently until the insect is coated with powder.

We recommend Repashy SuperVit for multivitamin supplementation. Insects should be dusted with the multi-vitamin supplement once or twice monthly as long as the Mazuri Gut Loading Diet is being fed to the insects.



Water

Water dragons love water! You should provide a fairly large area of water by either using a large plastic container (kitty litter pan) or make a nice water area using an aquarium with a water filter and waterfall, for example. It can be as simple or as complex as you like. The container must be large enough for the dragon to enter and exit easily, and it must be filled with enough water that he can *immerse up to 50% of his body height*. You should be able to remove the water container easily for cleaning and disinfecting, as well as refreshing the water supply. *The water container should be changed daily*. You will probably find that your dragon defecates in the water. The water doesn't have to be heated; room temperature is warm enough.

When changing the water in the container, be sure to clean the dish with soap and water, rinse well, then disinfect the container with a 5-10% bleach solution. Rinse the dish thoroughly afterwards before replacing the water container in the dragons enclosure. *Soap and bleach may produce toxic fumes when used together. Use them separately and rinse the container well between the soap or bleach solution*

Nutritious Dark Leafy Greens

These vegetables are excellent food sources for many small animals including herbivorous and omnivorous reptiles, birds, rabbits, guinea pigs, and other herbivorous mammals.

Feed the following greens in abundance:

Arugula
Basil
Cilantro
Clover (no pesticides or herbicides)
Dill leaves
Endive*
Escarole
Mint
Peppermint leaves
Radicchio
Raspberry leaves
Red or Green Leaf Lettuce
Romaine lettuce (no iceberg or light colored leaf lettuce)*
Dandelion greens and flowers (no pesticides or herbicides)*
Watercress*
Wheat grass

The following greens should be fed less often and in smaller amounts:

Alfalfa, radish & clover sprouts^
Beet greens (tops)^*
Bok Choy†
Brussels sprouts^†
Carrot tops^*
Collard greens†^*
Kale†*
Mustard greens†^*
Parsley^*
Radish tops^
Swiss Chard^
Spinach †^*
Turnip Greens†^

* Contains high amounts of Vitamin A, which is good for skin health

^ Contains high amounts of oxalates & may cause health problems if fed often. Use sparingly.

† Contains high amounts of goitrogens & may cause health problems if fed often. Use sparingly.

