Bearded Dragon Care Guide

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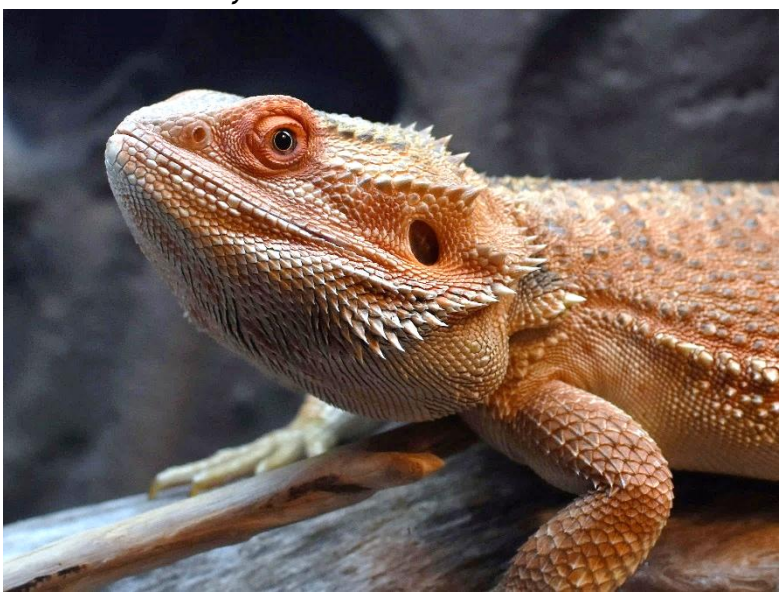
Rescue and Rehabilitation
Science-based Education
Advanced Husbandry Practices



Introduction
Shopping List
1.) Supplies
2.) Products to avoid
Quarantining
1.) Why Should You Quarantine?
2.) How to Safely Quarantine
Nutrition
1.) Diet
2.) Supplementation
3.) Feeding Frequency
UVB, Heating and Visible Light
1.) The Importance of UVB
2.) The Importance of Infrared Heating
3.) Bulb Power Density
4.) The Importance of Full Spectrum Lighting and LUX
5.) Proper Lighting Arrangement
6.) Light My Reptile
Temperature, Humidity and UV Index
1.) Temperature Ranges
2.) Humidity Ranges
3.) Safe UVB Exposure
Enrichment

1.) The Importance of Enrichment
2.) Ways to Provide Enrichment

Enclosure Examples

Common Bearded Dragon Illnesses

1.) Metabolic Bone Disease (MBD)
2.) Vitamin A Deficiency
3.) Parasitic Infection
4.) Gout
5.) Fatty Liver Disease
6.) Fungal Infection
7.) Atadenovirus (ADV)
8.) Muscular Dystrophy (MD)
9.) Respiratory Infection
10.) Tail Rot

Resources

Introduction

Bearded dragons are one of the most common species of pet reptiles in the trade. Their docile nature and seeming ability to bond with their owners makes them a favorite for families and hobbyists.

Shopping List

1.) **Supplies:**

- **FOR JUVENILES 0-6 MONTHS** 40 Gallon Front-Opening Terrarium (36x18x18" or larger)
    - Minimum recommended size for ONE juvenile bearded dragon
    - Please refrain from cohabitating multiple dragons. Bearded dragons are very territorial, and your pet will be at serious risk for injury or death from fighting with cage mates
- **FOR SUB-ADULTS TO ADULTS 6-12 MONTHS** 4x2x2 Front-Opening Terrarium (48x24x24" or larger)
    - Minimum recommended size for ONE adult bearded dragon
    - Please do not cohab adult bearded dragons. Serious injury or death of the animals can occur
    - **LLRR Inc. advocates for more-than-minimum recommendations. Larger enclosure spaces allow for an animal to have much more freedom of choice, more room for exercise, room to express natural behaviors, and provide more space for natural enrichment. Some alternative size ideas can include, but are not limited to:**
        - **150 Gallon Front-Opening Enclosure 60x24x24"**
        - **180 Gallon Front-Opening Terrarium 72x24x24x"**
        - **404 Gallon Front-Opening Terrarium 72x36x36"**
- Linear UVB (long tube, half the length of the enclosure, **do not use compact coils**)
    - Zoo Med ReptiSun T5HO 10.0 UVB Kit
    - Arcadia D3 Desert 14% UVB Kit
    - Arcadia ProT5 12% UVB Kit
    - Reptile Systems T5HO Zone 3 10.0 UVB Kit
    - Exo Terra VHO UVB 300
        - IMPORTANT! Please avoid knock-off Chinese brands of UVB you may find on Amazon! These are NOT safe and could harm your pet. Brands to avoid for UVB include ReptiZoo, Giangarden, OIIBO, Lucky Herp, Reptile King, etc. The brands listed above are SAFE and thoroughly tested by experts

        - Please note, each UVB listed above will have differing height requirements. The distance of the UVB lamp plays an important role in ensuring your animal is getting the correct exposure to UVB. If UVB fixtures are mounted above mesh, different mesh types can also affect how much UVB your animal will have access to, and will determine how low/high your basking area needs to be. Please refer to the group **Reptile Lighting** for in-depth information on UVB mounting
- Incandescent Basking Bulb
- **Wattage may vary based on power density of the bulbs, your house temperatures, enclosure height, and height of the basking area. Please refer to the guides in the Facebook group Reptile Lighting, and Light My Reptile for in-depth information on basking lamps**
    - Reptile Systems Eco Halogen
        - **CAUTION! REPTILE ECO SYSTEM HALOGENS HAVE VERY INTENSE BEAMS. THESE MAY NOT BE APPROPRIATE FOR EVERY SET UP**
    - ReptiZoo Intense Basking Spot Lamp
    - Exo Terra Intense Basking Spot Lamp
    - Arcadia Basking Spot Lamp
        - Wattage may vary based on your house temperatures, enclosure height, and height of the basking area. Please refer to the guides in the Facebook group **Reptile Lighting** for in-depth information on basking lamps
- Ceramic Heat Emitter
    - Use ONLY for extra ambient heat if needed. Do not use as the main heat source
- Laser thermometer gun
- LED 5000-7000k Light Bar
- Natural, safe substrate options
    - 70/30 Mix of Scott's Organic Topsoil (no fertilizers!) and Quikrete Play Sand
    - Josh's Frogs Desert BioBedding
    - BioDude Terra Sahara
    - Jurassic Natural Australian Desert Sand
    - Reptisoil
- Hygrometer/thermometer devices x 2
- Temperature probe
- Water dish
- Aquarium bubbler
- Flat stones for basking, stacking
- Driftwood and logs
- Multivitamin with preformed vitamin A (Important!)
    - Reptivite with D3
    - Repashy Calcium Plus with D3
    - Arcadia Revitalize D3
- Plain calcium WITHOUT D3
- Calcium WITH D3
- Outlet Timer/Power Strip
- Hides
    - Hides can be created by stacking stones, driftwood, or using pre-made hides (Zilla, Exo Terra and Fluker's have good options)

2.) **Products to Avoid:** (This is not a complete list, just a compilation of the most common unsafe items on the market)

- Coil Florescent UVB Bulbs
    - These bulbs are not inherently bad, but because of their compact size, they should be used in a horizontal position for a wider spread. For many medium and large-sized reptiles who openly bask during the day, they may not provide enough coverage on the animal's body for proper D3 synthesis
- Mercury Vapor Bulbs
    - These bulbs can lead to serious UVB and heat burns. They do provide UVB and heat all in one, but are dangerously inconsistent in their output and cannot be controlled with a dimming device. MVB's also produce an unnatural green light, which may affect an animal's color vision and inhibit natural behaviors
- Reptile Carpet
    - Snags nails and teeth, holds bacteria
- Walnut Shell Substrate
    - Serious risk of impaction, oral, nasal and eye blockages. If ingested, this material can cause internal damage
- Calcium Sand
    - Encourages reptiles to eat it to supplement calcium, but can cause serious and sometimes fatal impaction
- Freeze-dried or canned insects
    - These feeding options do not provide the necessary nutrition beardies need. They can be used as occasional snacks, but should never be a staple
- Pellet or dried/preserved foods
    - Fresh vegetation and live insects will always have superior nutrition, and pellet/dried foods may contain ingredients that are harmful to your dragon
- UVB "test" Cards
    - These items do not accurately detect UVB. They react to light emitted by heat lamps as well, and do not tell you exactly how much UVB is being emitted by a bulb
- UVB "test" Accessories and Décor
    - Just like "test" cards, these items do not accurately detect UVB, and will react to UVA as well
- Colored Heat Bulbs
    - Colored bulbs (red, blue, purple) wash out a reptile's color vision. This can interfere with their natural circadian rhythm and behavior. Heat bulbs should mimic the warm/white color of sunlight
- Heat Mats
    - Heat mats do not provide the correct Infrared heating reptiles need for proper warming, metabolism, digestion. Even with thermostat use, power failures can occur leading to severe, even fatal burns
- Heat Rocks
    - Heat rocks do not provide the correct Infrared heating reptiles need for proper warming, metabolism, digestion. These items have been known to cause serious, sometimes fatal burns
- Cloth and Hemp Hammocks
    - These items can tear out claws and teeth. They are easily soiled and will hold bacteria
- LED UVB Products
    - As of current research (2026), LED UVB products are not recommended for safe usage in reptile keeping. They do not produce vital UVA2 wavelengths, which signal an animal's body to stop producing pre-D3. This can potentially lead to **hypervitaminosis D3**, and **photoconjunctivitis**
- Liquid Calcium and Vitamin Products
    - Liquid vitamins degrade more rapidly compared to powder supplements. There is also less guarantee that the animal will consume enough of the liquids for any real benefits. Deficiency-related illnesses often

occur from using these products. Liquid vitamin and calcium products such as those from Zilla, Fluker's and Exo Terra should be avoided

Quarantining

1.) Why Should You Quarantine?

- Quarantining should be done when you first bring your new dragon home. This is to monitor behaviors, and to give you time to have fecal testing done to check for parasites before moving your dragon into their permanent setup
- Typically a quarantine period will last **2 to 3 months**
- Quarantine setups are simplified for the sake of maintenance and monitoring. Keeping accessories to a minimum as well as using paper towels will make clean-up and finding droppings for sampling easier.

2.) How to Safely Quarantine:

- New animals should be kept separately from your other pets, if other pets, especially other reptiles, are present in the home. If possible, keep them in a separate room
- Sanitize the new animal's equipment and accessories separately from other pets' items
- Use separate feeding tools for the new animal
- Use paper towel flooring for easier clean-up and sanitizing
- Schedule fecal and physical exams to check for parasites and possible underlying health issues
- For sick animals, wear gloves when handling, and thoroughly sanitize afterwards
- Once your dragon has passed their quarantine period and been given a clean bill of health, you can move them into a more advanced setup (see **Enclosure Examples**)

Nutrition

1.) Diet:

- Bearded dragons are omnivorous reptiles. They eat insects and vegetation. Please note, fruits should never be included in your beardie's diet. Dragons do not have the enzymes to process sugars, which can also lead to periodontal disease
- A variety of dark leafy greens should be offered for well-rounded nutrition
    - Staple greens:
        - Collard greens
        - Turnip greens
        - Mustard greens
        - Arugula
        - Escarole
        - Bok choy (green portions only)
        - Watercress
        - Chinese cabbage
    - Feed in moderation:
        - Kale
        - Dandelions
        - White clover (do not collect in winter, white clover produces cyanides with freezing temperatures)
        - Plantain
        - Purple nettle
        - Zucchini
        - Parsnip
        - Brussel sprouts

- Feed rarely:
  - Spinach
  - Bell pepper
  - Broccoli leaves
  - Cilantro
  - Parsley
- NEVER feed (toxic!):
  - Tomatoes
  - Garlic
  - Leek
  - Egg plant
  - Avocado
  - Onions

- Feeder insects should be no larger than the space between their eyes
  - Good staple insects:
    - Crickets
    - Silkworms
    - Locusts
  - Feed in moderation:
    - Black Soldier Fly Larvae
    - Mealworms
    - Captive-bred hornworms
    - Dubia roaches
      - **CAUTION! DUBIA ROACHES CAN RETAIN HIGH URIC ACID LEVELS. EXCESS URIC ACID CAN LEAD TO RENAL ISSUES AND/OR GOUT. WE RECOMMEND FEEDING ONLY VERY SMALL DUBIAS (1/4" OR SMALLER), AND ONLY 1-3 IN A FEEDING SESSION.**
  - Feed rarely:
    - Wax worms
    - Butter worms

2.) Supplementation:

- Plain calcium and calcium D3 should be rotated and dusted on insects and salads, except for multivitamin days
- A multivitamin with preformed vitamin A (also labeled as Retinol, Retinyl, Vitamin A Acetate) should be dusted on feeder insects and salads once a week





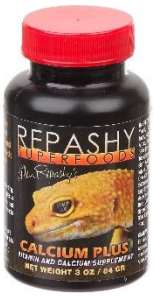
Arcadia RevitalizeD3, EarthPro-A, CalciumProMG







Zoo Med Reptivite with D3, Calcium without D3, Calcium with D3



Repashy Calcium Plus, can be paired with Zoo Med ReptiCalcium and Repticalcium D3

3.) Feeding Frequency:

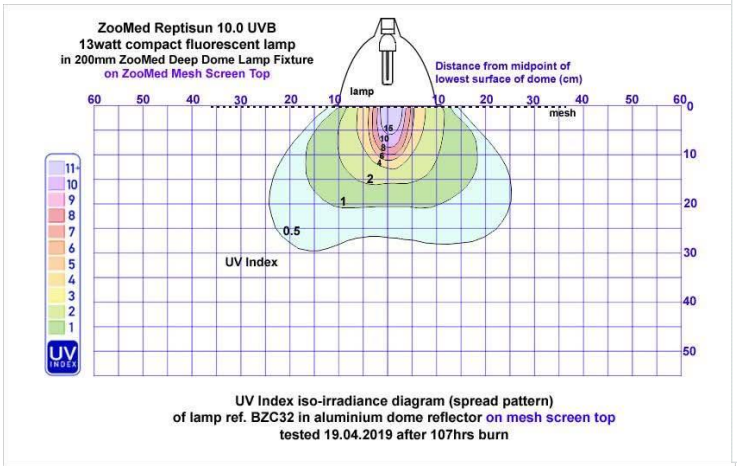
- Juveniles 0-6 months: 5-6 insects every day, with a salad
    - Monday: Calcium
    - Tuesday: Calcium D3
    - Wednesday: Multivitamin
    - Thursday: Calcium
    - Friday: Calcium D3
    - Saturday: Calcium
    - Sunday: Calcium
- Sub Adults 6-12 months: 3-6 insects every 3 days, with a salad
    - Sunday: Calcium
    - Monday: Calcium D3
    - Wednesday: Multivitamin
    - Thursday: Calcium
    - Saturday: Calcium D3
- 12+ months: 3-6 insects one time a week, with salad
    - Monday: Calcium
    - Wednesday: Multivitamin
    - Thursday: Calcium
    - Saturday: Calcium D3
- **If using the Arcadia supplement product line:**
    - Juveniles:
        - Monday: CalciumProMG
        - Tuesday: EarthPro-A
        - Wednesday: RevitalizeD3
        - Thursday: EarthPro-A
        - Friday: Calcium D3
        - Saturday: EarthPro-A
        - Sunday: EarthPro-A
    - Sub Adults:
        - Sunday: CalciumProMG

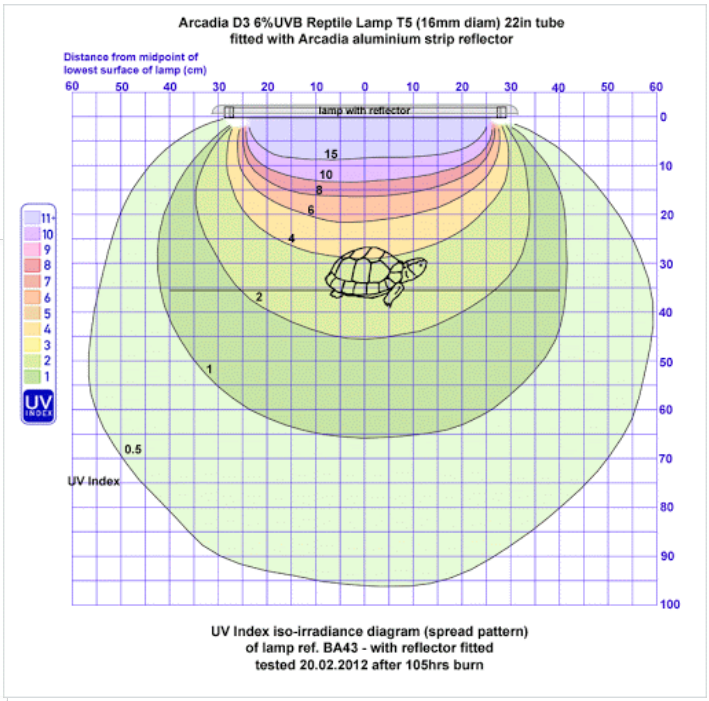
        - Monday: EarthPro-A
        - Wednesday: RevitalizeD3
        - Thursday: Calcium
        - Saturday: CalciumD3
    - Adults:
        - Monday: CalciumProMG
        - Wednesday: RevitalizeD3
        - Thursday: EarthPro-A
        - Saturday: Calcium D3
- **Do not use a multivitamin on every feeding. This can lead to Hypervitaminosis A, E and/or D3**
- Water dishes will not be large enough to cause a significant increase in humidity levels, and your dragon should always have access to fresh water. An aquarium bubbler may stimulate your dragon to drink by mimicking moving water.

UVB, Heating and Visible Light

1.) The Importance of UVB

- UVB lighting is superior to D3 powder supplementation for the following benefits:
    - Creates beta-endorphin "feel-good" hormones in the skin
    - Promotes better organ health
    - Stimulates white blood cells and promotes better immune health
    - Facilitates natural D3 synthesis for calcium absorption
    - Simulates natural UVB that would be provided by the sun in the wild and promotes more natural behaviors
    - **Full-body coverage of UVB wavelengths is important for proper D3 synthesis for diurnal reptiles**



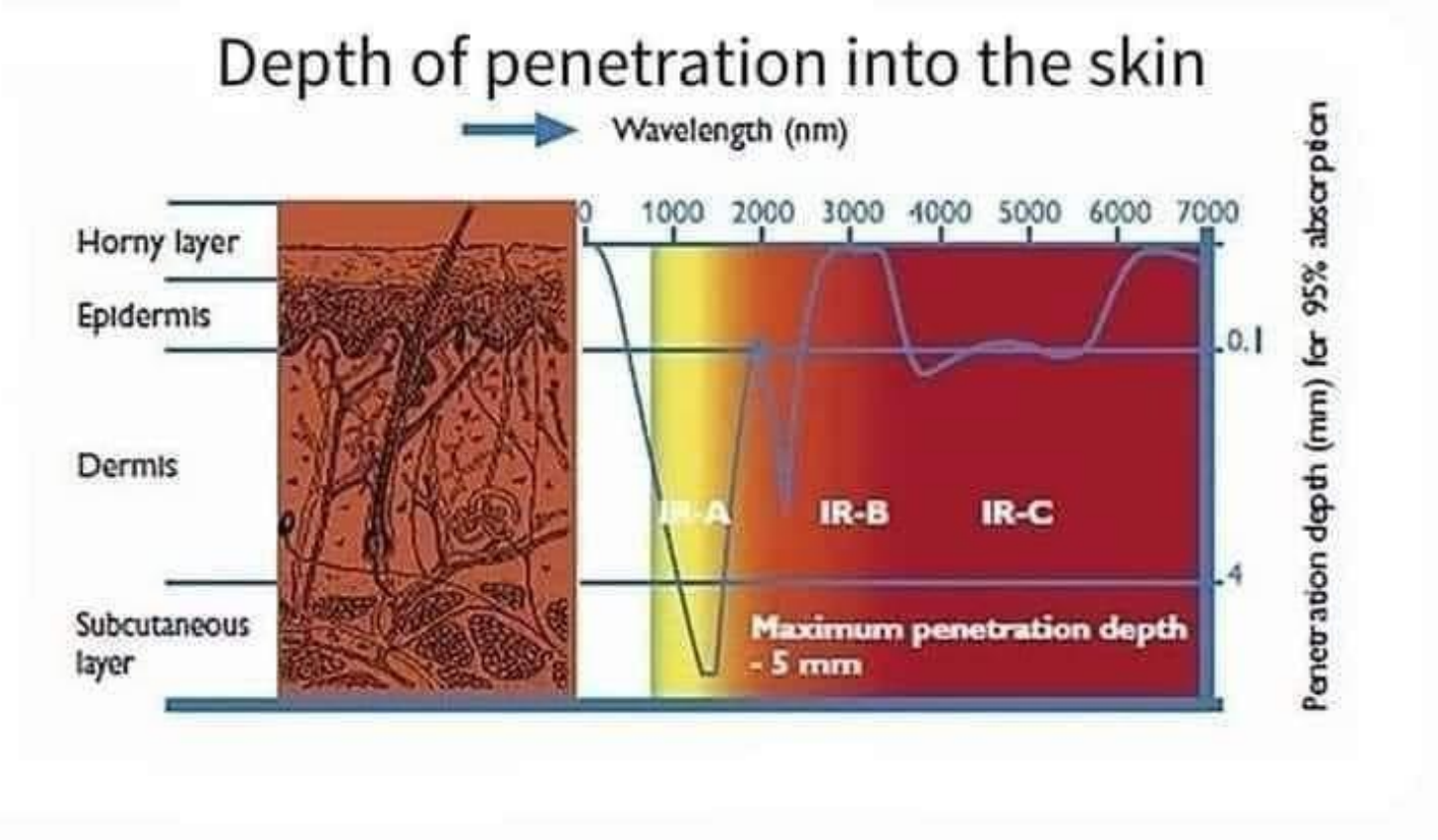


Difference between Coil/Compact UVB coverage, versus Linear T5HO tubes

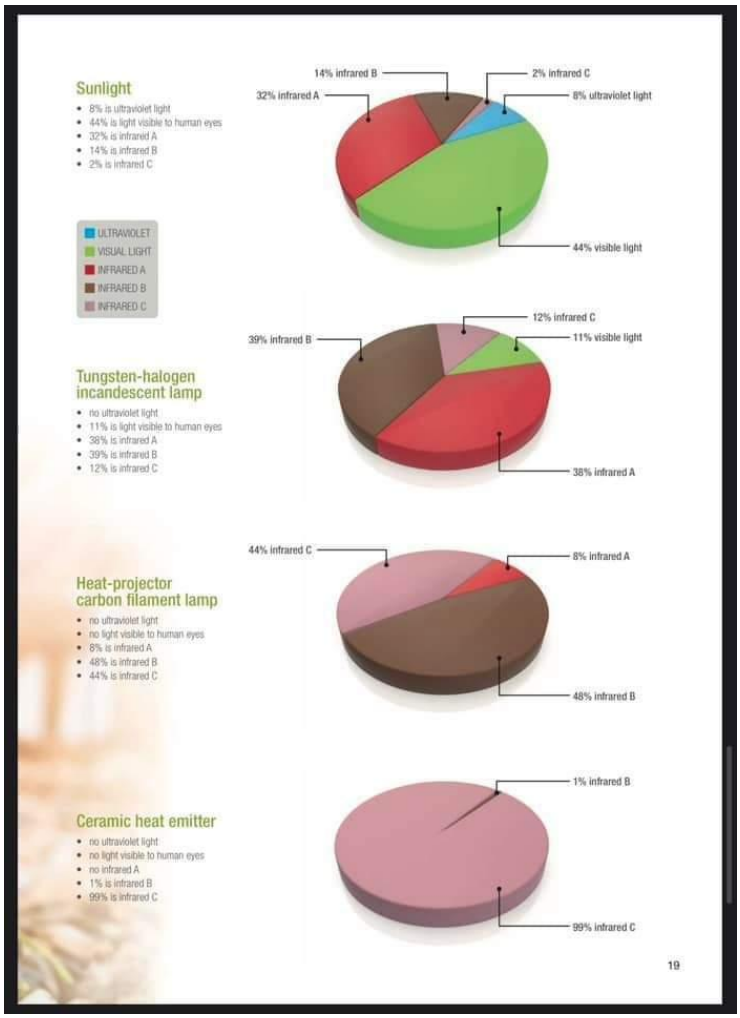
2.) The Importance of Infrared Heating

- Heat sources that provide Infrared A and B are important for:
    - Deep tissue-penetrating heat
    - Faster warming of the animal's body

- Less time needed to bask
- Better metabolism and digestion
- Promotion of more natural behaviors
- Surfaces below the basking area that absorb IR-A wavelengths will radiate that heat back out as IR-C, so your animal gets the full spectrum of Infrared heating



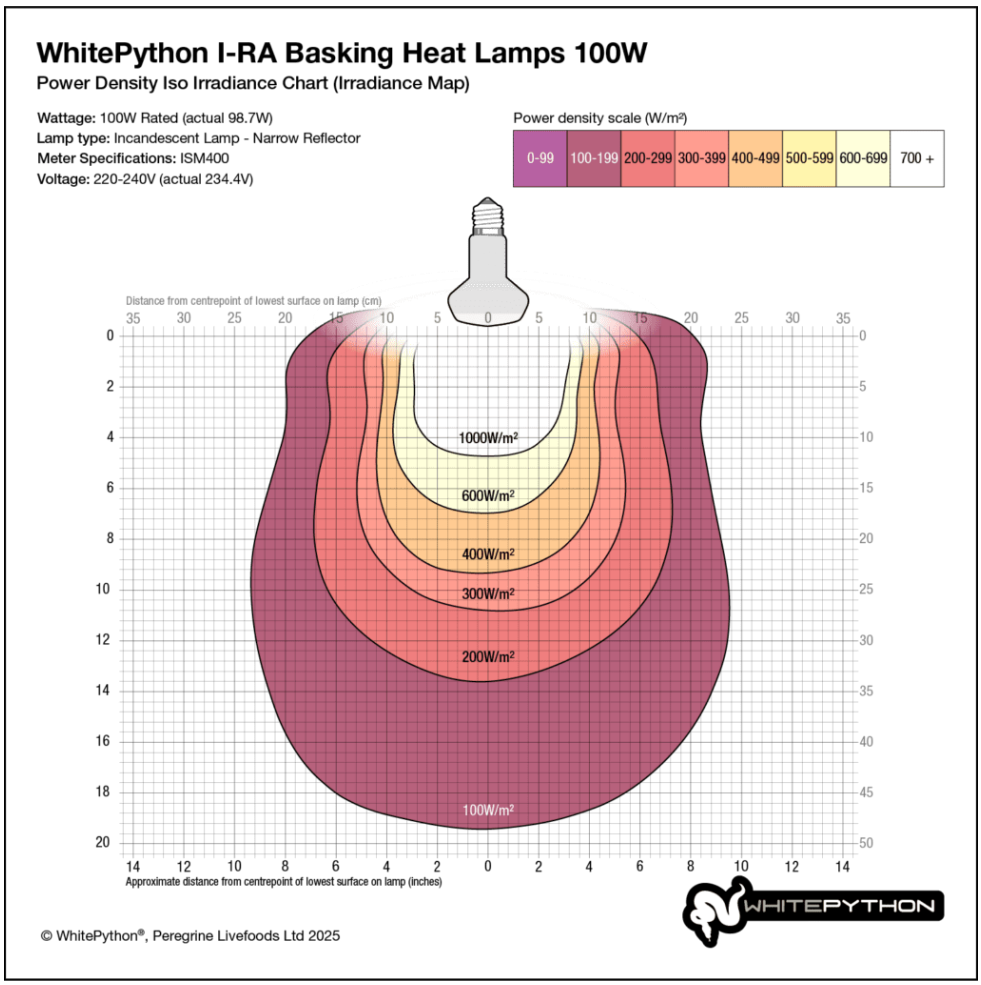
Example illustrating the depth of penetration between IR-A, IR-B and IR-C wavelengths. IR-A penetrates into the subcutaneous layer, where IR-C is relatively surface-level on the epidermis



The difference between various heating elements. Incandescent lights provide the most natural array of IR

3.) Bulb Power Density

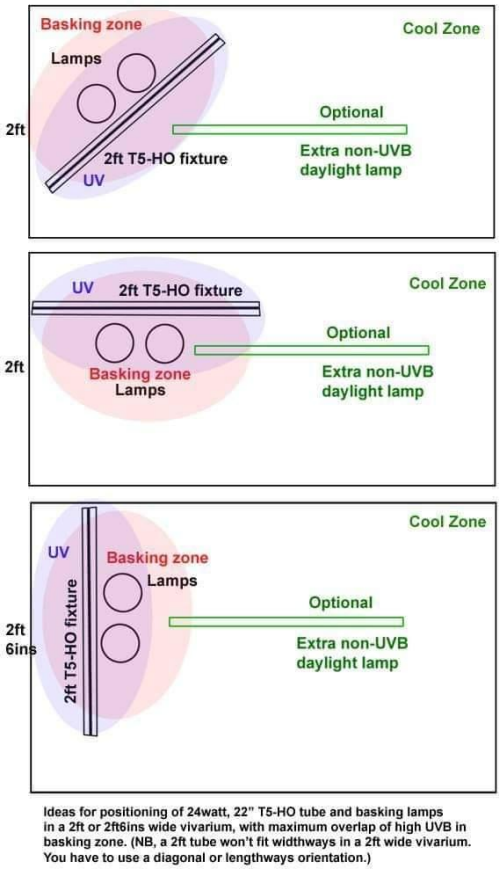
- Power density is the intensity and spread of infrared radiation from an incandescent/halogen heat lamp. This is measured by **wattage-per-meter squared (W/m²)**.
- Power densities vary between bulb styles and brands, and providing infrared is not one-size-fits all.
- It's important to note that basking surface temperatures don't tell us much about the power density of a bulb. This is because different basking surface materials don't absorb and radiate infrared the same (i.e., a slate basking surface and a faux resin rock may give different temperature readings, even when under the same heat lamp and at the same distance).
- Ultimately, we want to aim to provide irradiance between **200-350W/m²**. The distance for this range is different between bulb styles and brands, but there is an easy "test" to measure this distance for the bulb you have. This will help you determine how high or low your basking area should be.
    - **The Hand Test:** Human skin is just as sensitive to infrared radiation as that of reptiles. The tingly sensation of sunlight on your bare skin is the effect of infrared penetrating the epidermis and down into muscles. For this test, think of your hand as your pet reptile's back.
        - Let your basking bulb warm up for a few hours
        - Place your hand on the bottom of the enclosure and raise it until you feel tingly warmth
        - If you can comfortably keep your hand under the lamp at this distance for 60 seconds, **you are within the 200-350W/m² range**
        - **Different reptile species need different levels of irradiance exposure. Refer to part 6.) Light My Reptile for assistance determining what exposure level your bearded dragon needs**



Power Density Irradiance Chart, © WhitePython. Note the range for 200-350W/m² is between 14-10cm (5.5-3.9in) for this particular bulb, but may be closer or farther away based on bulb wattage and make. Refer to the Tomaskas LTD for irradiance charts for a variety of bulbs

4.) Proper Lighting Arrangement

- Heating and UVB lighting should be provided in a "light-to-dark", "hot-to-cool" gradient, with the highest concentration of light over the basking area
- Basking bulbs should be centered with the middle of the UVB tube, where the strongest UVB wavelengths are. This effectively creates a "patch of sun" where the animal can get UVB and heat all in one area
- LED lighting should overlap with the UVB and basking bulb

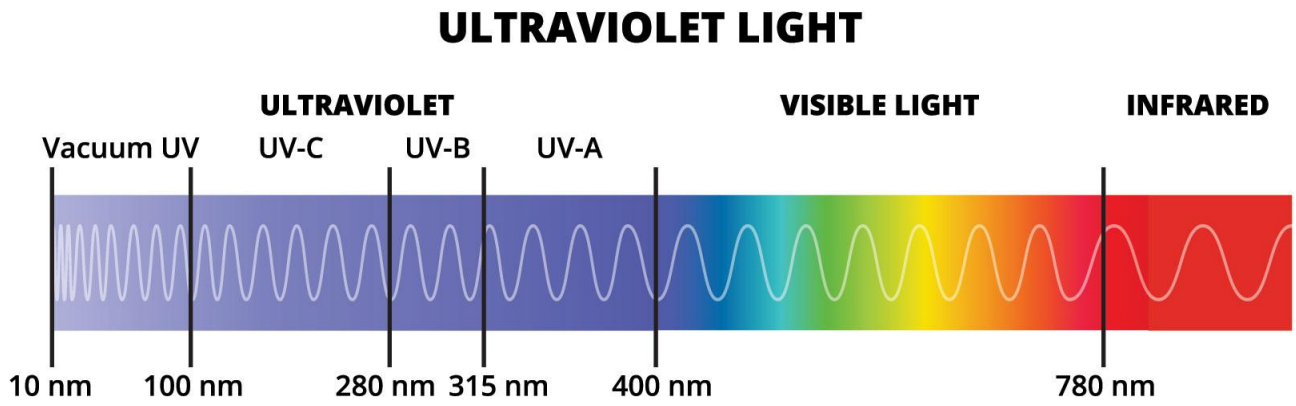


Ideas for positioning of 24watt, 22" T5-HO tube and basking lamps in a 2ft or 2ft6ins wide vivarium, with maximum overlap of high UVB in basking zone. (NB, a 2ft tube won't fit widthways in a 2ft wide vivarium. You have to use a diagonal or lengthways orientation.)

Examples of proper lighting arrangements

5.) The Importance of Full Spectrum Lighting and LUX

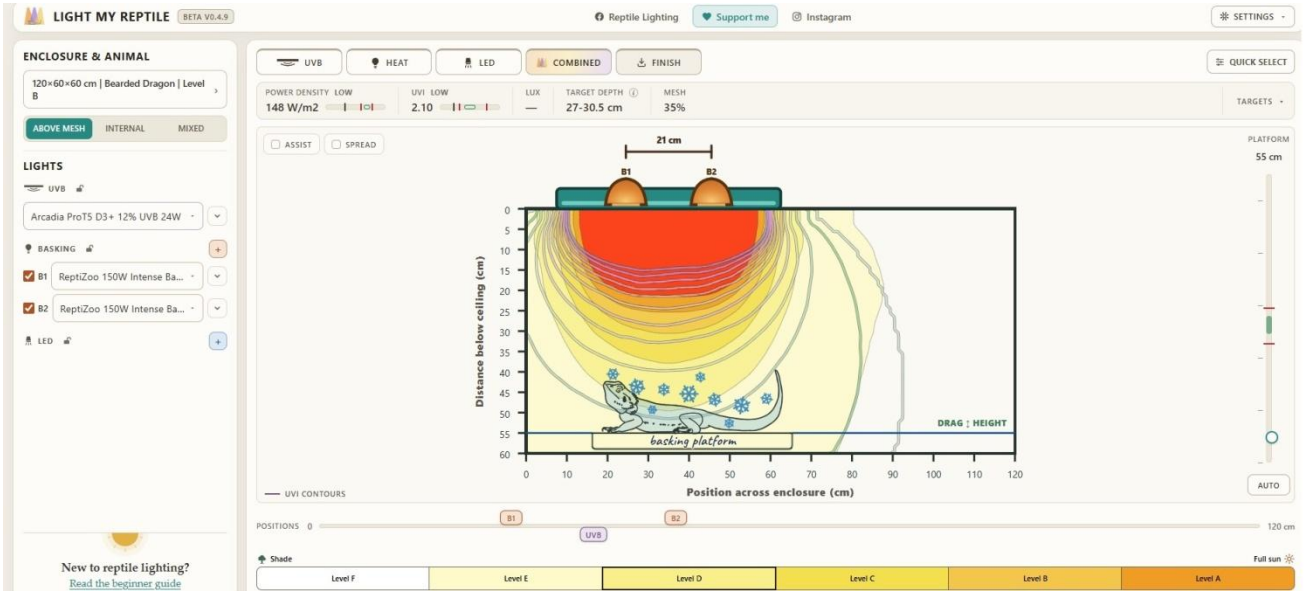
- Many reptiles have **tetrachromatic vision**, meaning they have four rods in their eyes for color detection and can see much more of the visible light spectrum than we can. Providing additional full spectrum lighting helps with:
    - More visible colors for your animal to see
    - Promotion of natural behaviors
    - Closer visible replication of what they would experience under sunlight
- Currently, there are very few products available that cover more of the visible spectrum (as of 2026). Companies working on true LED full spectrum products are:
    - Fauna-Lux
    - Reptile Systems
- **LUX** refers to the amount of light that illuminates surfaces. Consideration should be taken that the sun's brightness is far greater than the UVB, heat lamps and LED's we offer in captivity (the sun offers 32,000 – 100,000 LUX!) Providing more **LUX** over the **basking area** in the form of bright, white light can promote:
    - More natural basking behaviors
    - Mental and physical wellbeing



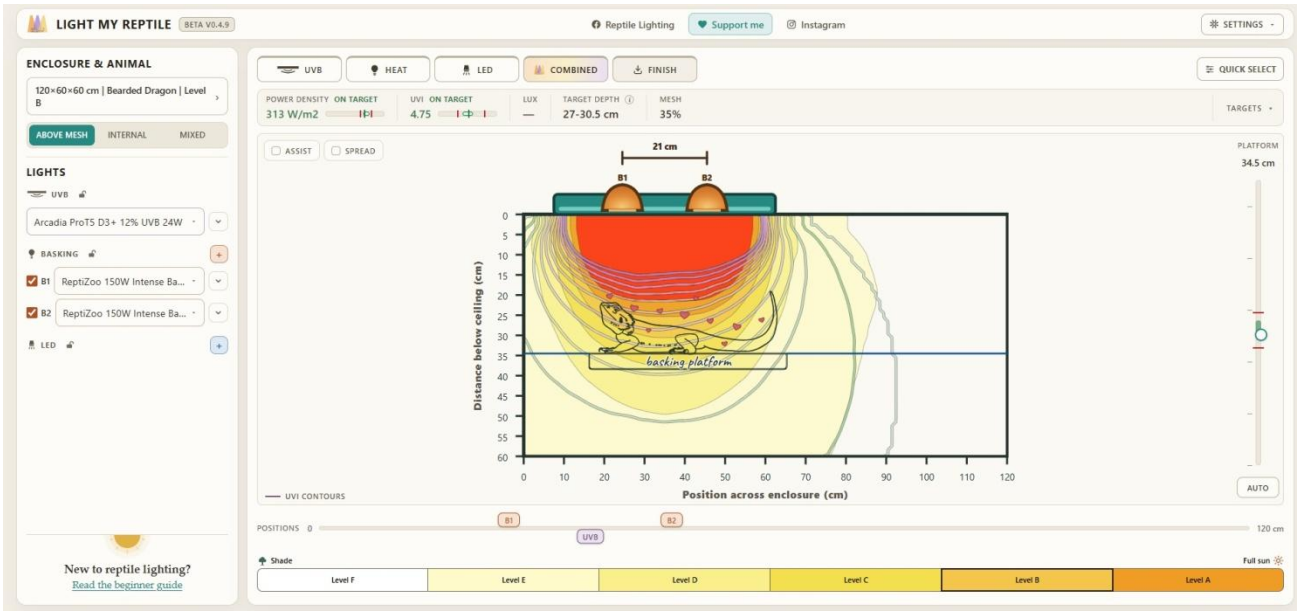
Quality lighting will cover some of the visible light spectrum (here shown between 400nm to 780nm); however, the purple, or Ultraviolet spectra will be covered in part by UVB lighting. Note that UV-C wavelengths are excluded from UVB and full spectrum equipment and are dangerous

6.) Light My Reptile Tool

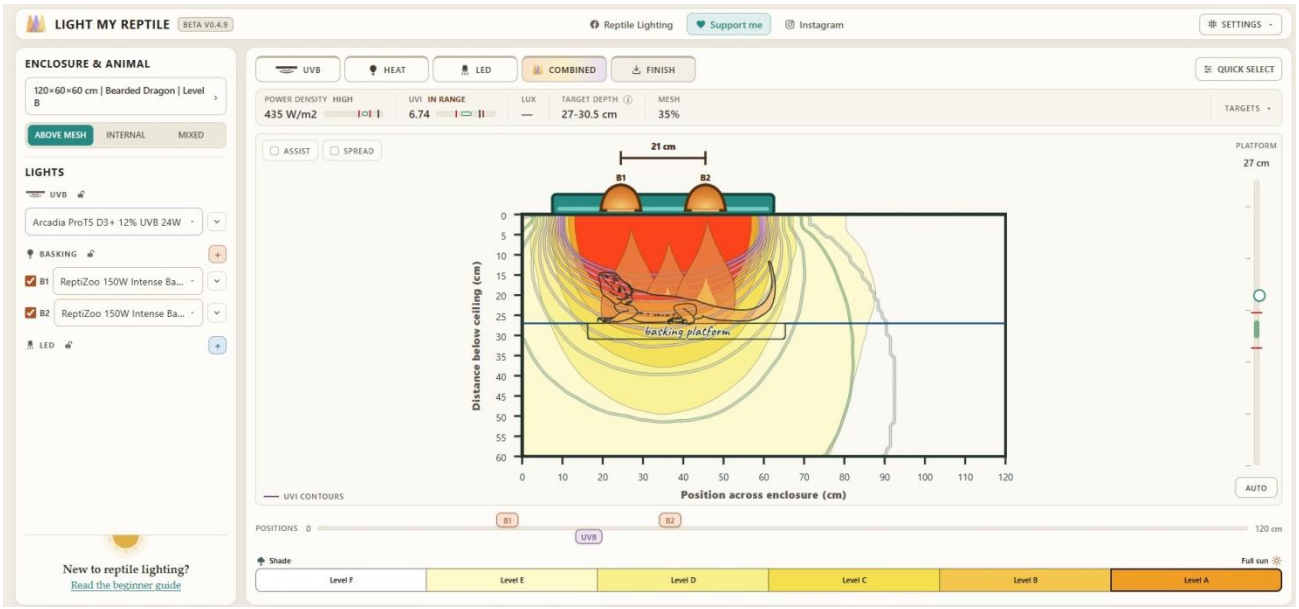
- Light My Reptile is a fantastic tool designed to help keepers take much of the guesswork out of proper lighting and heating provisions. It is an application that was created by Nathan Burton, using data collected by the experts who moderate the group Reptile Lighting.
- This tool allows you to choose lighting, heating and LED equipment that have all been thoroughly tested and are trusted in the herpetoculture hobby. It also lets you choose different mesh densities, you can choose different species, input custom enclosure sizes, and you can mix and match various equipment to see what would be the best combination for UVB, heating and lighting for your pet.



Reference image courtesy of Light My Reptiles. Note the bearded dragon is "cold", being too far away from the specified UVB and heat. The equipment is mounted above a mesh type that blocks 35% of wavelengths



Adjusting the height of the bearded dragon shows the optimal distance it should be from the specified UVB and heat



Raising the bearded dragon's basking platform too high risks overexposure to heat and UVB, which will lead to severe burns

Temperature, Humidity and UV Index

1.) Temperature

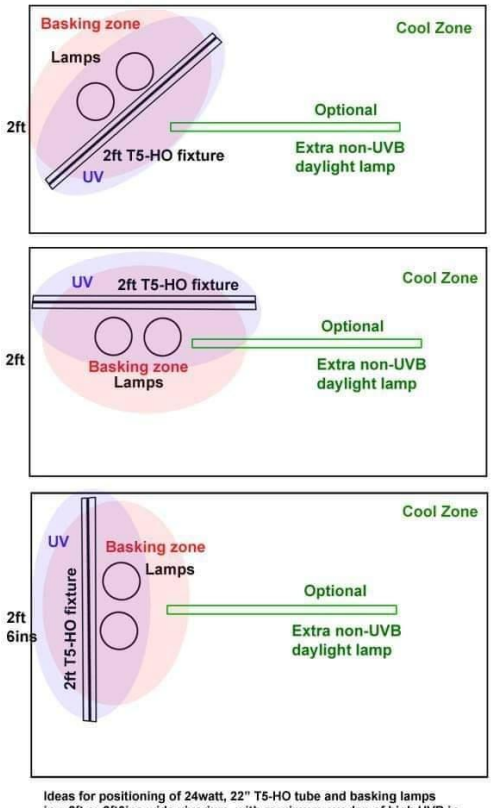
- Temperatures should be provided in a "hot-to-cool" gradient across the tank, with your basking bulb placed on one side of the enclosure
- Temperatures can be monitored by placing a hygrometer/thermometer device on the hot side, and one on the cool side. A thermometer temperature probe can be placed just outside of the beam of light beneath the incandescent heat bulb.
    - Hot side temperatures: 80-85f
    - Refer to **Light My Reptile** for guidance on the basking area, but aim for 100-105f surface temperature
    - Cool side temperatures: 75-80f
- Surface temperatures can be measured with a laser thermometer gun

2.) Humidity

- Bearded dragons live in arid desert locations, but they do experience annual rainy seasons.
- Be burrows often have higher humidity levels than the outside environment.
- In captivity, we can provide humidity spikes, but should aim for:
    - 30-40% humidity ranges
    - Occasional spikes of 50-70% with adequate dry-out periods can be implemented
    - Ensure your enclosure has good ventilation before attempting to create humidity spikes. If air is allowed to stagnate, bacterial growth can occur and your dragon may develop a respiratory or fungal infection

3.) Safe UVB Exposure

- UVB should be provided through a linear tube that spans halfway across the enclosure. It should be aligned with your basking bulb to one side of the tank, with the basking bulb centered with the middle of the tube
- Not all UVB bulbs are created equally! Certain strengths, bulb styles and brands are not safe or effective for bearded dragons (refer to the shopping list for safe UVB products)
- Bearded dragons are **diurnal** animals, meaning they openly bask during the day and sleep at night
- Because dragons are full-sun baskers their UVB requirements are higher than they would be for a leopard gecko, for example
- On the Ferguson Zone (the UV requirement scale for various reptile species), bearded dragons are in Zone 3. This means they need a UVB index between 3.0-3.5. A leopard gecko, for example, needs a lower UV index between 0.7-1.0. This level of UVB would not allow a dragon to properly synthesize D3 in their bodies
- The height of your enclosure, whether your UVB is mounted above mesh or inside the enclosure, what brand of tank you have all affect how much UVB your dragon will be exposed to. To figure out how to safely provide UVB for dragon, refer to the following sources:
    - Reptile Lighting on Facebook
    - Northampton Reptile Center – Ferguson Zone
    - Thomas Griffiths, Tomaskas LTD
    - Reptiles: Advancing Husbandry Practices on Facebook



Ideas for positioning of 24watt, 22" T5-HO tube and basking lamps in a 2ft or 2ft6ins wide vivarium, with maximum overlap of high UVB in basking zone. (NB, a 2ft tube won't fit widthways in a 2ft wide vivarium. You have to use a diagonal or lengthways orientation.)

Examples of proper lighting arrangements

Enrichment

1.) The Importance of Enrichment

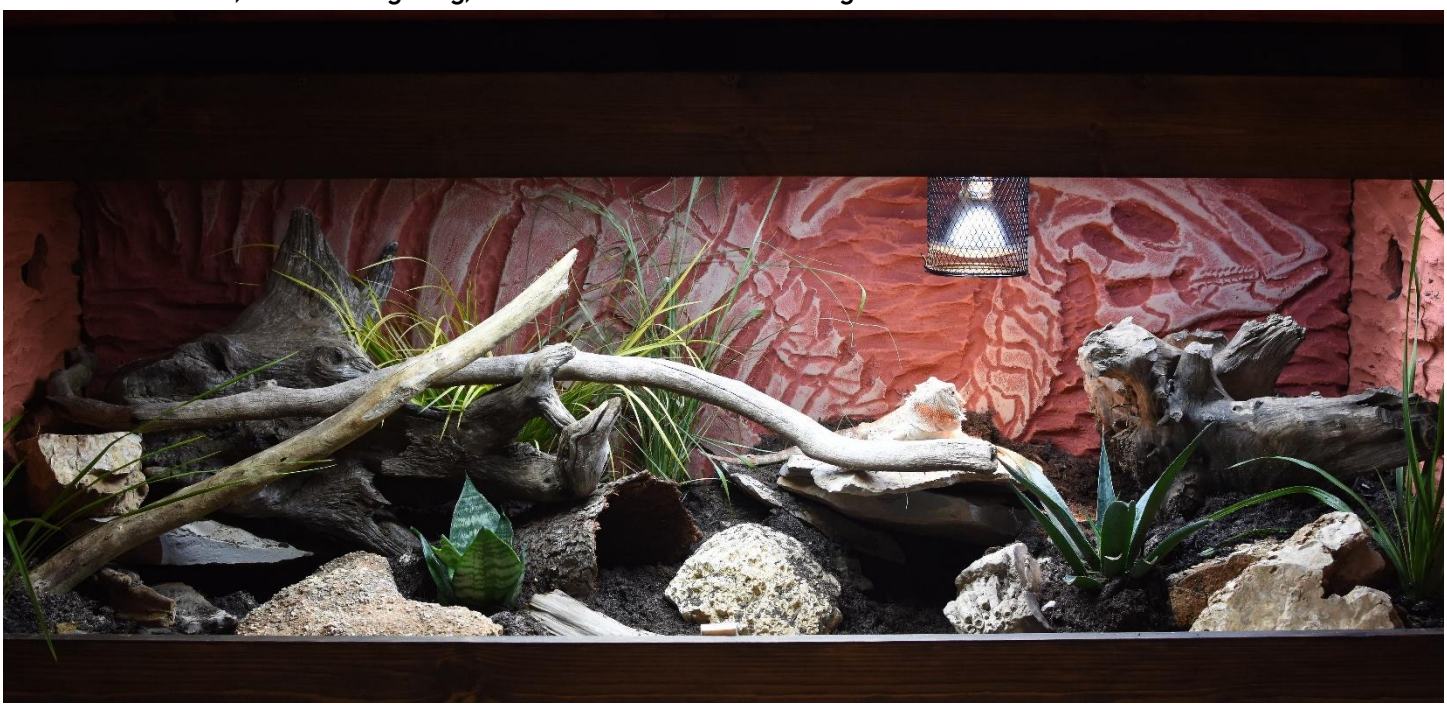
- Many reptile species, including bearded dragons, are highly curious, active animals. They enjoy living in a stimulating environment where they can climb, dig, bask, sleep, hunt and explore
- When these animals are housed in small, bare enclosures, they often exhibit "stereotypy" behaviors, which may include glass surfing, frequent hiding, pacing, pushing at enclosure doors or corners, and listlessness. These are all indicators of boredom, stress, frustration, anxiety, and eventually sensory-atrophy
- Giving our animals more space and more things to investigate, climb, etc, allows them to exhibit natural behaviors and stimulates their senses. These provisions also decrease fear and stress, and enhance the animal's sense of security

2.) Ways to Provide Enrichment

- Enrichment can be provided by "cluttering up" your dragon's home. Add in lots of flat, stacked stones (just make sure they are securely placed so the dragon can't harm themselves by burrowing beneath the rocks), use natural substrates, bury cork bark rounds in the substrate to create tunnels, stack lots of driftwood to create climbing opportunities, give the dragon a new item on occasion to investigate, and let them free-hunt insects every once in a while

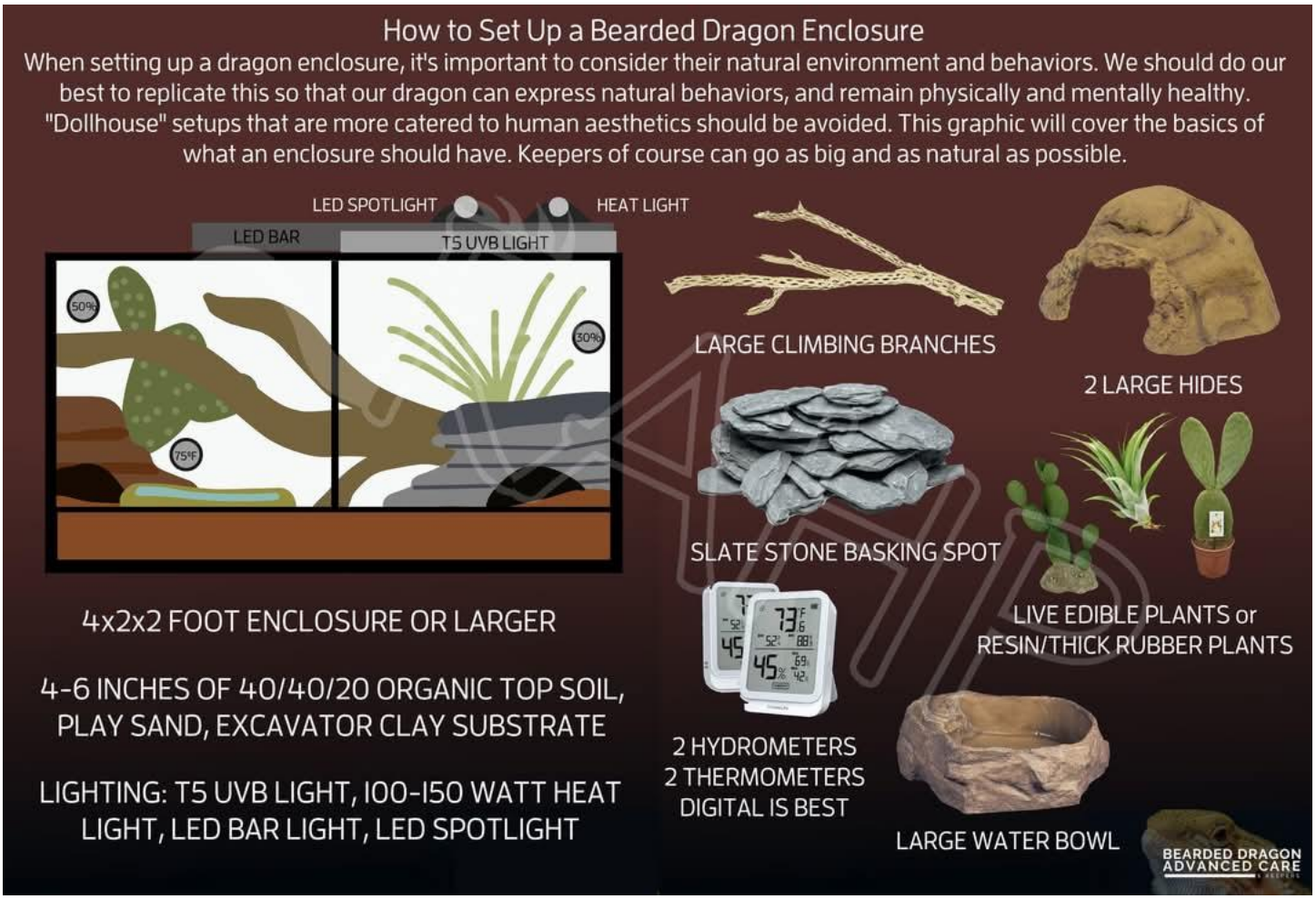
Enclosure Examples

- These enclosures belong to Loving Leos Reptile Rescue. They are 5x2x2', 4x2x2' and 5x2x2' front-opening terrariums, have LED lighting, UVB and incandescent heating









Basic bearded dragon setup guide, graph courtesy of Bearded Dragon Advanced Care, Facebook

Common Bearded Dragon Illnesses

1.) **Metabolic Bone Disease (MBD)**

- Metabolic bone disease (MBD) is a broad-spectrum term for a variety of illnesses affecting reptiles' skeletal structures. Most commonly in captivity, it is caused by a lack of D3 in the animal's body, which prevents calcium absorption. This leads to softening bones, permanent physical deformities, disability, and death if the condition is allowed to progress
- MBD is one of the most easily preventable diseases in captive reptiles, but it is the most common ailment seen from poor keeper knowledge
- MBD can be prevented by providing species-appropriate UVB, changing out UVB bulbs according to the brand's specifications, and proper supplementation



Severe MBD in a bearded dragon. Note the deformed jaw, disfigured limbs, spine, and hips. These deformities are permanent and painful

2.) Vitamin A Deficiency

- Vitamin A deficiencies occur when a multivitamin is not used in a dragon's supplement rotation. Vitamin A (Retinol, Retinyl, Vitamin A Acetate) is essential for immune health. Without this critical vitamin, the dragon's immunity will break down, leading to a vulnerability to bacterial infections
- Vitamin A deficiencies often present as difficulty shedding, eye and mouth infections, and in males, hemipene impactions may occur
- **DO NOT** provide a multivitamin too frequently! Vitamin A is fat-soluble, which means it stores in the body for longer periods of time than water-soluble vitamins. This can lead to Hypervitaminosis A/Vitamin A Toxicity, and can be fatal



Infected mucosal debris has formed over the eyes in this juvenile bearded dragon

3.) Parasitic Infection

- Parasites are a common occurrence in captive reptiles, especially for those who are wild-caught, or who need animal or insect protein in their diets
- Parasites are normally kept in check by the reptile's immune system, but stress and incorrect care can cause parasite populations to bloom in the animal's gut
- Symptoms can include runny stools, blood in stools, lethargy, weight loss, belly bloating, regurgitation



Bearded dragon abnormal stool chart

4.) Gout

- Gout can be caused by over-feeding your bearded dragon, especially high-protein insects such as superworms, or insects with naturally high uric acid levels like dubia roaches. Providing too much vitamin A can also lead to renal issues and gout. Dehydration can contribute to lowered kidney function and renal failure as well
- When gout occurs, white nodules of uric acid crystals (tophi) will appear on the joints, or on the organs (visceral gout). Shedding issues and skin tearing may occur in late stages of renal failure
- In the early stages, gout may be treatable with aggressive fluid treatment, strict dietary changes, and lowered doses of vitamin A. Symptoms may be managed long term with medicinal treatment, but are usually progressive. Gout buildup on the joints and organs is painful, so a full quality of life assessment should be considered, and symptoms monitored with your veterinarian


Bearded dragon with advanced gout tophi in limbs

5.) Fatty Liver Disease

- Fatty Liver Disease, or Hepatic Lipidosis, is generally caused by over-feeding and lack of exercise
- Providing adequate enclosure space and time outside of the enclosure to exercise will help to keep your dragon fit
- Symptoms may include jaundice, lethargy, weight loss, lack of appetite, changes in stool consistency, regurgitation



Morbidly obese bearded dragon. If steps are not taken to reduce weight, Hepatic Lipidosis is a high risk

6.) **Fungal Infection**

- Fungal infections can occur when the bearded dragon is exposed to unclean living conditions and/or consistently high humidity levels
- Bathing your dragon too frequently can create an optimal environment on their skin for fungus proliferation
- Some fungal infections such as Yellow Fungus Disease are aggressive, contagious and often fatal



Yellow fungus disease affects the organs, later presenting externally around the mouth, vent, nose and eyes

7.) **Atadenovirus (ADV)**

- Atadenovirus (ADV) is a viral infection that can cause liver and gastrointestinal disease
- In advanced cases, neurological issues, such as star-gazing (staring straight upwards for extended periods of time), uncoordination, siezures, limb weakness and abnormally-colored stools may present
- ADV is often fatal for young bearded dragons. Dragons who survive will be carriers for the rest of their lives and can potentially transmit the virus to other dragons. Some dragons may also be asymptomatic carriers



A juvenile bearded dragon with Atadenovirus (ADV) "star-gazing"

8.) Muscular Dystrophy (MD)

- The cause for Muscular Dystrophy (MD) in bearded dragons is not directly known, but it is suspected to be a genetic issue. More cases have been noted from poor breeding practices
- MD is a neuromuscular disorder. Symptoms can include weak limbs, inability to chase insects, muscle spasms and inability to control muscles, flipping over and inability to right themselves



A bearded dragon displaying poor limb control from Muscular Dystrophy (MD)

9.) Respiratory Infection

- Respiratory infections can be caused by a variety, or combination, of husbandry issues such as:
    - Improper, low basking temperatures:
        - Little to no access to proper basking temperatures can impact immune health by compromising metabolism, digestion, and D3 synthesis from UVB
    - Unclean housing:
        - Unclean housing can lead to bacterial buildup
    - Improper UVB:
        - Using the incorrect UVB (coils, unregulated equipment, improper bulb strengths and/or improper distances to UVB) can lead to immune system failure. D3 synthesis from proper UVB usage helps the body fight germs and keeps inflammation responses down

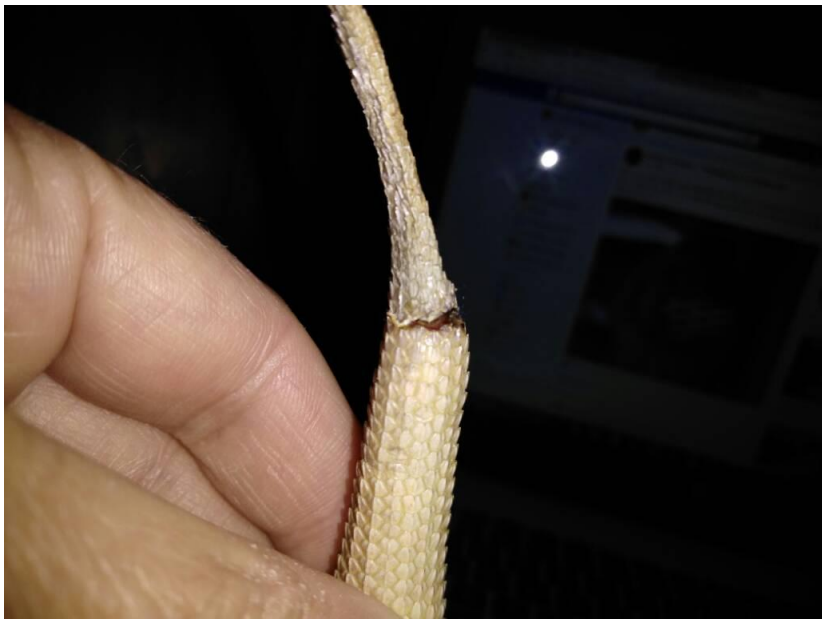
- Consistently high humidity levels with little to no ventilation
    - High, consistent humidity with little to no ventilation and proper dry-out periods can lead to a bloom in bacterial growth
- Secondary infections from vitamin deficiency
    - Using a proper multivitamin helps support a healthy immune system. Even with proper diet, if we are not supplementing with an appropriate multivitamin, the immune system will be weakened



Excess mucous in the mouth, stemming from a respiratory infection

10.) Tail Rot

- Tail rot can occur from several causes, such as injury, stuck shed, bacterial, or fungal infections
- Symptoms can include shriveling, brittle tissue at the tail tip, discoloration and breakage
- Tissue necrosis can spread, so it's important to monitor the area, keep it as sterile as possible, and consult with your veterinarian to prevent extensive damage



Tail rot on a bearded dragon. The dead area is breaking away from the healthier tissue

Resources

- **Facebook**
  - Reptile Lighting
  - Behavior Education
  - Bearded Dragons: Advancing Husbandry
  - Reptiles: Advancing Husbandry Practices
  - Loving Leos Reptile Rescue Inc.
- **YouTube**
  - Elle's Reptiles
  - Animals at Home
  - Reptiles and Research
  - Herp Talk
  - Jessica's Animal Friends
- **Supplies**
  - Pangea Reptile
  - Bean Farm
  - Light Your Reptiles
  - Reptile Basics
  - Dubia Roaches
  - PetCo
  - PetSmart
- **Experts to reference for science-based research**
  - Thomas Griffiths, Tomaskas LTD, Zoo Husbandry Consultant
  - Dr. Frances Baines, Veterinary Surgeon
  - Dr. Sarina Wunderlich, light physicist
  - Lori Torrini, Behavior Education, Animal Behaviorist
  - The British Herpetological Society
  - Nathan Burton, Light My Reptile