

## Green Iguana

Difficulty: Advanced

Green iguanas are giant, semiarboreal, herbivorous lizards with an impressive appearance. They have a large head, round pupils, jowls, large semi-serrated dewlap, strong limbs, long toes, a long muscular tail, and a row of short to long dorsal spines extending from the back of the head to the first third of the tail. Color and pattern are highly variable by population. This species is best known for its bright green juvenile coloration, but adults can be gray-green, brown-green, bright green, orange, red, yellow, blue, or a combination of the above. For pattern they may have thin brown banding on the body and/or brown or black bands around the tail.

Green iguanas have a wide distribution from Mexico in Central America extending as far south as Paraguay in South America, including many islands in the Gulf of Mexico and Caribbean. They have also been introduced to Florida and Hawaii of the USA, as well as Taiwan, Singapore, and Thailand. They do best in hot, humid tropical forest environments. Male green iguanas are known to reach 6 and even 7' long (1.8-2.1m). Females are smaller and rarely surpass 5'/1.5m long. Aside from being impressively sized, green iguanas are also capable of living 15-20+ years, so expect this pet to become a major part of your life!

### Shopping List

Although many green iguanas are purchased as juveniles, if you want a pet iguana, it's best practice to adopt one from a reputable reptile rescue. This shopping list will give you an idea of what to expect in setting up a suitable long-term green iguana enclosure, complete with recommendations of products that I know and trust.

- 10'L x 5'W x 6'H walk-in enclosure, or larger
- Philips 100 Watt, 120 Volt PAR38 Clear Infrared Halogen Heat Lamp Bulb, x6
- Arcadia Lamp Holder Pro, x6
- Vivarium Electronics 120w Radiant Heat Panel, x2
- Herpstat 4 Proportional Thermostat, x2
- Arcadia ProT5 UVB Kit 36" With Arcadia T5 12% Bulb, x2
- Durolux 6500K T5 4-Foot 2 Fluorescent Lamps Grow Lighting System, x2
- Zilla 24/7 Digital Power Center, x2
- 2-gallon pressure sprayer
- Reptichip COARSE coconut husk substrate (5-pack) OR cypress mulch
- Thick, sturdy climbing branches, several\*
- Climbing ledges, several\*
- Etekcity 774 Infrared Thermometer
- ThermoPro TP60S Indoor/Outdoor Wireless Digital Thermometer/Hygrometer
- 3qt food bowl
- Under-bed plastic storage bin, large
- Python siphon

Repashy Superveggie herbivore supplement powder  
F10SC veterinary disinfectant

## **Housing**

Green iguanas need an enclosure that is large enough to give them adequate opportunity to thermoregulate, explore, and generally express natural behaviors. They are also arboreal, which means that as a tree-dwelling species, they need height in addition to length.

The minimum acceptable enclosure size for housing a single green iguana is 10'L x 5'W x 6'H, or 3 x 1.5 x 1.8m. If possible, however, larger is strongly recommended.

It's almost impossible to buy a ready-made enclosure that is large enough to appropriately house an adult iguana. In other words, if you want a pet iguana, you will need to build its enclosure yourself or hire someone else to do the job. The DIY Reptile & Amphibian Enclosures group on Facebook is a good place to get help.

Temporary housing for juveniles: If you need something temporary for a juvenile while you build the permanent enclosure, a 4'x2'x4' (1.2 x 0.6 x 1.2m) will give you some time, but not much — iguanas grow fast! Once your iguana reaches about 3' long, it will be too large to be comfortable in these dimensions.

Can multiple iguanas be housed together?

Green iguanas have been known to be housed singly or in groups successfully, but keep in mind that if you wish to house multiple individuals together, you will need to use a proportionally larger enclosure. There is also the risk of cagemate aggression, which can result in severe injuries. Males should NEVER be housed together.

Bottom line: It's best practice not to keep more than one green iguana per enclosure.

## **Lighting & UVB**

Green iguanas are diurnal, which means that they are most active during the day. This also means that they need exposure to both bright light and UVB wavelengths during the day for best mental and physical health. Light sources should be kept on for 12-13 hours/day.

Alternatively, you can use a smart timer (I've been happy with Kasa) to sync your lights with local sunrise and sunset times.

### **UVB LIGHTING:**

UVB lighting can be tricky, because in order to get the right strength of UVB, distance must be considered. Here's how to provide appropriate UVB for a green iguana, depending on the size of the enclosure and the distance between your iguana when it's sitting on the basking platform/branch and the lamp:

Mesh obstruction:

Arcadia T5 HO Dragon 14% — 13-16" / 33-41cm

Arcadia T5 HO Desert 12% — 12-15" / 31-38cm

Zoo Med T5 HO Reptisun 10.0 — 12-15" / 31-38cm

No mesh obstruction:

Arcadia T5 HO Dragon 14% — 20-24" / 50-60cm

Arcadia T5 HO Desert 12% — 17-18" / 43-45cm

Zoo Med T5 HO Reptisun 10.0 — 17-18" / 43-45cm

Choose a bulb that is approximately half the total length of the enclosure. Be mindful of the bulb fixture that you use, too, since fixture affects output. Having a mirror-polish reflector is a must! For best results I recommend using an Arcadia ProT5 or the Vivarium Electronics T5 HO fixture.

(These recommendations are approximations. I strongly recommend using a Solarmeter 6.5 to determine the best placement to achieve a UVI of 3.0 – 4.0 in the basking area, especially if you are using multiple UVB bulbs!)

## **GENERAL ILLUMINATIONS**

A UVB bulb alone isn't bright enough to meet a green iguana's light needs! So you will need to supplement with a bright, ~6500K T5 HO fluorescent or LED lamp, long enough to span most of the enclosure. This is particularly important if you have live plants in the enclosure, but it is also valuable for providing additional illumination and supporting your pet's general wellbeing as a diurnal lizard.

My preferred lamps for providing general illumination in your iguana's enclosure are the Arcadia Jungle Dawn LED Bar, Bio Dude Glow & Grow, and Durolux 6500K T5 4-Foot 2 Fluorescent Lamps Grow Lighting System.

## **Heating**

Humans are warm-blooded, which means that our body temperature is regulated automatically. Iguanas, however, are cold-blooded, which means that they have to move between areas of different temperatures to regulate their body temperature. In the wild, iguanas warm up by basking in a patch of sunlight. In captivity, the warmth of sunlight can be replicated with heat lamps.

Basking surface temperature: ~120°F (50°C)

General air temperature: 75-88°F (24-31°C)

Nighttime temperature: 73-84°F (23-28°C)

## **BASKING HEAT**

You will need to use a group of heat lamps clustered together in order to create a basking area large enough to evenly heat your iguana's body. You will need at least 2 bulbs for a juvenile, and 4+ for an adult. For best results, use halogen flood heat bulbs housed in dome lamps with a ceramic sockets. My picks for iguana-appropriate halogen flood bulbs are "hardware store" PAR38 90w equivalent halogen floods or the 100w Arcadia Halogen Heat Lamp. The basking area should be a sturdy branch or platform directly under the heat lamps.

## **AMBIENT HEAT**

If your general air temperature and/or nighttime temperature is too cool, you will need a radiant heat panel or few to bump things up. This is a large, lightless heat source that mounts to the ceiling of the enclosure. Radiant heat panels must be connected to a dimming thermostat so they don't make the enclosure too warm.

## **TEMPERATURE MANAGEMENT**

To track the temperatures in your terrarium, use an industrial-grade temp gun such as the Etekcity 774. This will enable you to reliably check basking surface temperature from a distance, as well as check ambient temperature everywhere else in the enclosure. If you notice that the basking area is too warm, dial down the heat down with a rheostat or connect your heat lamps to a multi-device dimming thermostat for more control. If your basking area is too cool, you will need higher wattage bulbs.

## **Humidity**

Green iguanas do best in a high-humidity environment, with a daytime average humidity between 60-80%, and nighttime humidity levels spiking up to 100%. Humidity should be measured by at least one digital hygrometer mounted on the wall in the middle of the enclosure, away from the heat lamps. Note that low humidity levels can cause health problems for your pet, but so can insufficient ventilation.

To raise the humidity in your green iguana's enclosure, use a large pump-style pressure sprayer to wet down the enclosure every morning and evening. If needed, you may mist again (lightly) in the mid-afternoon. Installing an automatic misting system like MistKing is strongly recommended, as it makes misting such a large enclosure much less of an inconvenience. Alternatively, install a hose with a multi-option spray attachment. If you live in an area with a dry climate, it's a good idea to install a cool mist humidifier to help with creating a high-humidity environment at night. Program it to turn on and off for a few hours prior to "sunrise". Secure the humidifier in a way that will prevent the iguana from tipping it over or damaging it.

NOTE: Humidifiers, foggers, and automatic misters must be used with distilled or reverse-osmosis water and periodically disinfected to prevent illness.

## **Substrate**

Green iguanas spend most of their time in the upper levels of their enclosure, so substrate functions primarily as a cushion against falls, makes spot-cleaning easier, and contributes to humidity maintenance.

### **TRADITIONAL SUBSTRATE**

A 2-4" / 10-15 cm layer of moistened coconut husk or cypress mulch will do the trick. In a 10'x5' enclosure, that will take about 62-124 US gallons of substrate. You will need to change out the substrate every month to maintain good hygiene.

Note that you will need to use a substrate with a large enough particle size to discourage accidental ingestion! Iguanas are natural substrate eaters (it helps them build a healthy gut fauna and get extra minerals in the wild), but this can cause problems in captivity. If your iguana accidentally swallows enough of its substrate, it can cause intestinal blockage and injury! Reptichip Coarse, ReptiChunk, and XL grade cypress mulch for gardening are all examples of appropriately large substrates for iguanas.

### **BIOACTIVE SUBSTRATE**

Alternatively, you may want to go bioactive, which is safe in case of accidental ingestion. It also helps maintain humidity, supports live plants, and reduces substrate waste. The most cost-effective way to do this is by mixing your own bioactive-ready substrate, measured by volume: 40% plain topsoil + 40% coconut fiber + 20% play sand + chemical-free leaf litter + sphagnum moss + soil inoculant. These ingredients can be sourced from your local garden center. Mix evenly before applying. Lay down 4" of drainage material such as lava rock first, then add the soil mixture on top until 6-12" deep. The deeper the soil, the better your plants are likely to do!

NOTE: Although attractively convenient, bioactive enclosures require a much thicker substrate layer, are very heavy, and require the inclusion of both edible live plants and detritivorous invertebrates to work properly. See the Reptile and Amphibian Bioactive Setups USA forum on Facebook for more information.

Enclosure Décor Decorations play a vital role in your iguana's enclosure as environmental enrichment. These items provide climbing opportunities, hiding places, encourage exercise, stimulate your pet's natural instincts, and help promote overall wellbeing. And, of course, they make the enclosure look nicer!

Your main priorities for decor in an iguana enclosure are going to be sturdy branches and wood platforms for basking, climbing, and rest, as well as live, nontoxic tropical plants for cover and possibly snacking.

Dracaena, hibiscus, ficus, pothos, philodendron, spider plant, staghorn fern, bromeliad, and air plants are all safe options for live plants and will help maintain high humidity levels. Don't let yourself be tempted to use artificial foliage — while it may be more durable, the green color is likely to trick your iguana into chewing on it, and ingesting artificial leaves can very well make your pet sick!

## **Food**

Iguanas are herbivores, which means that they eat plants. It's pretty difficult to end up with a fat iguana as long as you limit the fruit portion of their diet and they have sufficient opportunity to exercise (e.g. via supervised roam time), so it's safe to offer both juveniles and adults as much as they can eat every day.

One of the keys to good green iguana care is providing balanced nutrition through VARIETY! So provide as many different kinds of foods to your pet as possible. About 60% of your iguana's diet should be dark leafy greens, 30% other vegetables, and about 10% fruit. Flowers make a nutritious treat! Vegetables and hard fruits must be chopped or grated into bite-sized pieces, as green iguanas don't chew their food.

Leafy green options: alfalfa, arugula, beet greens, bok choy, carrot greens, celery greens, chicory, cilantro, clover, collard greens, daisy, dandelion, endive, escarole, geranium leaves, grape leaves, green/red leaf lettuce, hibiscus leaves, kale, mulberry leaves, mustard greens, nasturtium, opuntia cactus, parsley, plantain leaves, romaine lettuce, spinach, spring mix, squash leaves, swiss chard, thistle, turnip greens, watercress

Vegetable options: bell peppers, broccoli, carrot, green beans, okra, snap peas, squash, sweet potato, zucchini

Fruit options: apple, banana, berries, grapes, kiwi, mango, melon, papaya

Flower options: dandelions, geraniums, hibiscus, honeysuckle, mallow, petunias, and violets.

## **SUPPLEMENTS**

To make sure your iguana is getting the right nutrients in its diet, it's a good idea to sprinkle its food with Repashy Superveggie herbivore supplement powder at each meal. This acts as both calcium and a multivitamin!

## **DRINKING WATER**

Your iguana must have access to clean drinking water at all times. It's generally best practice to provide a plastic tub large and shallow enough to fit the iguana's whole body for standing soaking, such as an under-bed storage tub.

Iguanas tend to foul their water quickly, so expect to replace the water daily and give it a good scrub with animal-safe disinfectant such as F10SC or Rescue at least weekly. It's helpful to use a Python-brand siphon to facilitate easier emptying.