Chinese Water Dragon (Physignathus cocincinus)

Difficulty: Hard

The Chinese water dragon is known by many names, including Asian water dragon, Thai water dragon, and green water dragon. Adult males can grow up to 36" long, with a large, crested head, prominent spines down the length of their spine, and jowls. Adult females are typically much smaller with fewer spines, minimal jowls, and generally less striking coloring. Although Chinese water dragons are known for their vibrant green color, their pattern can also include brown, white, yellow, and aqua blue.

Chinese water dragons are native to southeast Asia, where they inhabit tropical broadleaf forests on the banks of freshwater lakes and streams. As an arboreal species, they spend most of their time in the trees, although when alarmed they will drop to the water below, and they are proficient swimmers.

Chinese water dragons typically have a 10-15 year lifespan with good care. They can make docile pets, but due to their large size and arboreal nature, they require large enclosures and specialized equipment, making them a significant investment.

Shopping List

- 6' x 3' x 6' front-opening enclosure
- 8.5" heat lamp with ceramic socket, x3
- 90w PAR38 halogen flood heat bulb, x3
- 120w radiant heat panel
- Proportional thermostat
- 46" T5 HO desert UVB bulb
- 48" T5 HO fixture with reflector
- 48" 6500K fluorescent bulb or LED
- Power strip with programmable digital timer
- 2 gallon pressure sprayer

- 65 gallon Christmas tree storage bin
- Siphon
- Sphagnum moss
- Branches
- Sturdy live or artificial plants and foliage
- Temperature gun
- Digital thermometer/hygrometer, x2
- Calcium supplement w/o vitamin D3
- Multivitamin
- Live feeder insects
- Soft-tipped feeding tweezers

Housing

Chinese water dragons need an enclosure that is large enough to give them adequate opportunity to thermoregulate, explore, hunt, and generally exercise natural behaviors. They are also arboreal, which means that as a tree-dwelling species, they require a tall enclosure. The minimum recommended enclosure size for housing a single Chinese water dragon is 6'L x 3'W x 6'H. If possible, larger is highly recommended.

For the lizard's mental health and ease of access, it is best to use an enclosure that is front-opening and opaque on all sides but the front. Ideally there should also be ventilation on the top, sides, and front.

Can multiple Chinese water dragons be housed in the same enclosure?

Generally, no. It's true that Chinese water dragons have been successfully housed in small groups of one male and two or three females. However, this arrangement is for breeding and requires a much larger enclosure than

outlined above, making it impractical for most pet owners. Fortunately, Chinese water dragons are not considered a social species and are generally quite content to live alone.

Lighting & UVB

Chinese water dragons are diurnal, which means that they are most active during the day. This also means that they need exposure to bright light and UVB during the day for best mental and physical health. Light sources should be turned on for 12 hours/day.

UVB Lighting

UVB lighting can be tricky, because in order to get the right strength of UVB (measured by UV Index, or UVI), distance must be considered. To provide appropriate UVB to a Chinese water dragon, you will need one <u>Arcadia T5 HO Desert 12%</u> or <u>Zoo Med T5 HO ReptiSun 10.0</u>, half to 2/3 the length of the enclosure, mounted in a reflective T5 HO fixture such as the <u>Arcadia ProT5</u> or the <u>Vivarium Electronics T5 HO fixture</u>.

The basking branch should be placed as follows:

- UVB mounted over mesh: dragon's back is 12-15" / 30-38cm below UVB lamp when basking
- UVB mounted under mesh: dragon's back is 16-18" / 40-46cm below UVB lamp when basking

(These recommendations are approximations. It is strongly recommended to use a Solarmeter 6.5 to determine the best placement to achieve a UVI of around 3.0 - 4.0 in the basking area.)

Daylight Lighting

A UVB bulb isn't bright enough to meet a Chinese water dragon'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 dragon's general wellbeing. The <u>Arcadia Jungle Dawn LED Bar</u>, <u>Bio Dude Glow & Grow</u>, <u>Bio Dude Solar Grow</u>, and the <u>Vivosun T5 HO 6500K grow bulb</u> are all good choices.

Heating

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

Basking area temperature: 90-95°F (32-35°C)
Daytime air temperature: 77-86°F (25-30°C)

• Nighttime temperature: 75-77°F (24-25°C)

Because Chinese water dragons are fairly large lizards, you will need to create a fairly large basking are to facilitate even heating and optimal circulation during basking. For this you will need at least three <u>90w PAR38 halogen flood heat bulbs</u> housed in <u>8.5" dome lamps</u> with ceramic sockets. However, if you notice that the basking area is too warm, dial down the heat down with plug-in lamp dimmers. If your basking area is too cool, you will need higher wattage bulbs.

The basking area should be sturdy branch directly under the heat lamp, placed in a way that puts the dragon's back about 12-18" below the heat lamp, depending on your UVB placement. The warmest temperatures in the

enclosure will be at the top (near the heat lamp), and the coolest temperatures will be toward the bottom. You will need to place branches at all levels of the enclosure to allow for proper thermoregulation.

Because recommended nighttime temperatures for Chinese water dragons are higher than the average home temperature, you will need a lightless heat source to provide a little extra warmth. The <u>Vivarium Electronics</u> <u>120w radiant heat panel</u> connected to a <u>Herpstat 1 proportional thermostat</u> is a great solution to this problem. Secure the thermostat probe to the basking branch with a zip tie for best results.

To measure the general temperature of different areas of your terrarium, use an infrared thermometer (a.k.a. temperature gun). To passively track basking temperature, use a digital probe thermometer, with the probe secured on the basking surface under the heat source. The <u>Etekcity 774</u> is a good infrared thermometer, and most reptile-brand digital probe thermometers function well.

Humidity

Chinese water dragons do best in a high-humidity environment, with a **daytime average humidity of 60-80%**, plus a large pool of water for swimming. Humidity should be measured by at least one <u>digital probe hygrometer</u> with the probe placed in the middle of the enclosure. It is natural for humidity to be lower in the warm area and higher in the cool area, and higher at night than during the day. Note that low humidity levels can cause health problems for your dragon, but so can insufficient ventilation.

Humidity Management

To raise the humidity in your Chinese water dragon's enclosure (and provide an extra source of drinking water), use a pump-style pressure sprayer to wet down the enclosure every morning and evening, preferably when it's dark. If needed, you may mist again (lightly) in the mid-afternoon. Installing an automatic misting system like <u>MistKing makes misting much less of an inconvenience</u>.

If you live in an area with a dry climate, it may be beneficial to install a cool mist humidifier or fogger to help with creating a high-humidity environment at night. Program it to turn on and off for a few hours prior to "sunrise". Humidifiers, foggers, and misters must be used with distilled water and periodically disinfected to prevent illness. Never use a humidifier or fogger during the day, as this also presents a health risk.

Creating a "Swimming Pool"

Chinese water dragons naturally live near bodies of water in the wild, and when startled will often drop into the water from the trees as a defense mechanism. They are proficient swimmers, can hold their breath for up to 25 minutes, and have been known to sleep in the water. For these reasons it's important to provide a large, deep basin of water (at least 65 gallons) on the floor of the enclosure. Alternatively you can create a sink-like basin as the floor of the enclosure and connect the pool to your home's plumbing to make routine cleaning easier.

Change out the water once weekly or whenever it gets soiled. Give the basin a good scrub with disinfectant before refilling. Using a <u>Python siphon</u> makes emptying the basin easier.

Substrate

Chinese water dragons spend most of their time in the upper levels of their enclosure, and when they're not climbing, they're swimming. So substrate isn't super important, but if the "pool" doesn't take up the entire floor of the enclosure, adding substrate can help with humidity maintenance. A thick, fluffy layer of moistened sphagnum moss will do the trick, and it also helps act as a cushion if your dragon takes a fall. Change the sphagnum moss at least once a month to prevent it from getting moldy.

Alternatively, you can go bioactive, which helps maintain humidity. <u>The Bio Dude's Terra Fauna kit</u> is a good way to get started if you're new to bioactive setups. However, note that bioactive enclosures have their own maintenance needs and require the inclusion of live plants to work properly.

Décor

Decorations play a vital role in your water dragon'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!

Sturdy branches, cork hollows, thick vines, ropes, shelves, and live or artificial plants work well as décor in a Chinese water dragon terrarium. Large potted and hanging plants are a great way to add foliage. Any live plants should be nontoxic, in case your dragon decides to have a snack. Dracaena, hibiscus, ficus, pothos, philodendron, spider plant, staghorn fern, bromeliad, and air plants are all safe options.

Branches, vines, and other climbing materials should be securely anchored to the sides of the enclosure.

Food

Chinese water dragons are primarily insectivorous, which means that they get most of their nutrients from eating a wide variety of insects. However, they are also known to eat vegetation, fruits, and small animals. They get bored of eating the same old thing every day, so you need to provide a large variety of foods.

How often Chinese water dragons need to eat depends on their life stage:

- Hatchlings (<3 months old) Insects daily
- Juveniles (<16" long) Insects and salad every other day
- Subadults and adults (>16" long) Insects every 3-5 days, salad daily

Offer as many insects as your dragon will eat via feeding tweezers in 5 minutes. Hard-bodied insects should be no longer than the dragon's head and no wider than the space between its eyes.

As your dragon nears adulthood, monitor its body condition and adjust the feeding schedule accordingly. If it's losing weight and looking too skinny, feed it more. If it's gaining weight and looking fat, feed it less. It helps to use photos of wild Chinese water dragons as a reference.

<u>Feeder insects:</u> crickets, discoid roaches, dubia roaches, earthworms, grasshoppers, hornworms, silkworms, superworms, snails (captive-bred only)

<u>Vegetables:</u> collard greens, cactus pads, spring mix, arugula, kale, alfalfa, bok choy, carrot greens, spinach, dandelion greens/flowers, hibiscus greens/flowers

Pinkies, fuzzies, live-bearing fish, and chopped fruit can be used as treats, but keep treats to a minimum (no more than 1x/week) or else your pet will become overweight.

Supplements

All feeder insects should be lightly dusted with a 50/50 mixture of calcium and multivitamin powders to correct the calcium-phosphorus ratio and provide extra nutrition at each feeding. <u>Arcadia Earthpro-A</u> and <u>Repashy</u> Calcium Plus LoD are both excellent all-in-one supplements you can use.

Feeder insects should also be gutloaded for at 24-48 hours prior to feeding.