

Asian Water Dragon Husbandry Guidelines Written by Danielle Inman

## Set-Up/Enclosure

Lighting/Heating - Captive habitat should always mimic an animal's natural environment as closely as possible. Asian water dragons are diurnal (day active), with this in mind there are several factors to take into consideration if one is to successfully keep these animals in captivity. Lighting is one of the most important aspects of the set-up as it enables basking lizards to properly synthesize and metabolize nutrients and encourages natural behavior. Asian water dragons should have an average 9-13 hour photo (daylight) period induced with synthetic UVB lights. There are three types of UVB lights available in pet stores. The first option is a compact fluorescent bulb that is available with 10% UVB output. This bulb needs to be used in conjunction with an incandescent, basking heat bulb as it does not give off heat of its own. Animals need to be able to bask within six inches of this bulb and it needs to be changed every six to eight months as the gases that produce the UVB dissipate. The second option is a fluorescent tube light which is available in varying percentages of UVB output from 2.0-10.0; only the high end of this rage will prove effective for a water dragon so go with a 5.0, 8.0 or 10.0. This bulb like the other fluorescent mentioned should be used in conjunction with a heat bulb, within six inches of the animals basking site and changed every six to eight months. The third is the mercury vapor bulb which produces around 30-35% UVB radiation which is ideal for most diurnal basking lizards however is overkill on any tank under 55 gallons or so and can actually cause negative effects in the Asian species of water dragon if it is used on a smaller enclosure. This bulb really shouldn't be used on any enclosure smaller that about 75 gallons. No matter which UVB bulb one chooses, make sure that there is no glass or plastic between the bulb and the animal as this will filter out all of the beneficial radiation (this is why setting an animal in front of a window is useless); not to mention a potential fire hazard. The regions of the world that Asian water dragons inhabit are tropical to neo-tropical, in the wild they experience a mild temperature gradient with daytime basking temperatures reaching upwards of 85 F degrees and night time lows sinking to about 65 F degrees. To recreate this in captivity one should use the aforementioned lights to create a basking spot at one extreme end of the enclosure with temperatures that reach at least 80-85 F degrees, while the cool side of the enclosure may fall into the 70's. Because water dragons are a diurnal (day active), basking lizard, they have a small organ located on top of it's head between it's eyes called the pineal organ, that tells the animal how warm its getting and allows it to thermoregulate (control it's body temperature) and adjust its position accordingly. If the dragon just needs to lower its body temperature by a few degrees, it may opt to gape (open it's mouth to allow excess heat to escape) rather than move to a cooler area. Avoid heat pads or heat rocks as they can potentially cause burns due to their inability to fully sense ventral (from underneath) heat. At night, all heat sources may be turned off allowing the enclosure to fall to your home's ambient room temperature.

**Substrate** - There are several options for appropriate substrate (bedding). Bedding that hold some moisture to increase the enclosure's ambient humidity is a good idea; moss, coconut, cypress and

unfertilized natural potting soil are all good choices. If one doesn't mind the unnatural look of newspaper or paper towel, these eliminate the potential for ingestion and are easy to change out frequently for a clean enclosure; this method is also economical!

**Furniture** – To begin, it is important that you remember that Asian water dragons are very mobile and active animals and as such they need a very large enclosure to avoid injury. A young animal should be kept in no less that a 40 gallon tank (36" x 24") and an adult needs an area at least 5-6 times its own body length. A good tip to help avoid the rostral abrasions that are nearly omnipresent in captive water dragons is in addition to a large enclosure, try covering any glass sides with material, paint or a solid background so that your dragon will better understand the boundaries that clear glass sometimes fails to establish. Cage décor is a welcome addition, keep in mind that water dragons are arboreal (tree dwelling) animals and appreciate climbing space. An elevated basking perch on the hot side of the enclosure is easily achieved with logs or rocks. Be sure not to use pine or cedar because of harmful phenols in softwoods. If you collect limbs from outdoors be sure to bake (200 degrees for an hour or two) or bleach them (soak in one part bleach to 10 parts water solution then let dry) to make them safe for use in a terrarium with an exotic animal.

If done properly, a water dragon terrarium can be conducive to a mentally and physically healthy animal as well as an aesthetically pleasing display for one's home.

## **Interaction/Handling**

**Human Interaction** - We should always bear in mind when keeping reptiles is that they are naturally cryptic (secretive) and typically solitary animals. Though as social creatures we generally thrive on social interaction and contact, water dragons are quite the opposite. Handling for the first six to nine months of a dragon's life should be as minimal as possible and for six to nine months following that handling may be difficult. Hatchlings are fragile and skittish and may run out of open hands or succumb to other accidental trauma. They may also become stressed by the interaction and quit eating or alter their natural behavior. Imagine from the animals perspective how it must feel to have a predator as large as us looming over them or restraining them. After your hatchlings are established and are at a size where they can be handled with less of a possibility of detrimental effects, the dragon may be starting to go through "lizard puberty" and encroaching on sexual maturity. During this time they may adopt a bit of an "attitude". An Asian water dragon is usually willing to endure some handling and though they do not "like it" they readily tolerate it.

**Interspecies Interaction** – I will reiterate here that reptiles in general are not social animals so they definitely do not *need* cage mates though they can usually cohabitate with no issues as long as size is similar and one does not house two males together. Housing two males together can result in injury due to territorial scuffs. Housing a male and female together could lead to egg production and with that comes a whole host of additional issues, though it is not atypical for females to produce eggs on their own without the aid of a male.

## <u>Diet</u>

**Feeding** - A varied diet is paramount to keeping your dragon healthy. A variety of insects (mealworms, wax worms, crickets, silkworms, etc), larger vertebrates like fish, pre-killed and frozen pinky rats and mice, and even crustaceans like crabs and crayfish are great food items.

**Supplementation** - A powdered Calcium/Vitamin D3 supplement should be applied to food every other meal and a multi-vitamin supplement should be given about once a week.