



# Lighting the way

**Q** Please could you give me some advice on keeping basilisks, and lighting in their vivarium?

**A** Basilisks are extremely active and large lizards, with the two most common species being the brown basilisk (*Basiliscus vittatus*) and the green basilisk (*Basiliscus plumifrons*). Both these particular basilisks are found in central America, typically from southern Mexico right down to Panama and they require very similar care. They are not too difficult to keep, provided that you can give them sufficient space.

The basilisk is a true omnivore and will eat anything from flowers right the way through to insects, small mammals and even other reptiles. These lizards are also excellent swimmers, and have the ability to run across the water very fast, which explains how they acquired their alternative of Jesus lizards, as it can appear that they can walk on water. This ability helps them to escape predators and avoid danger. They have the typical elongated toes associated with tree-dwellers and can switch from a life rummaging on the ground to life in the trees very easily.

In terms of housing, you will therefore need a spacious vivarium that is both long and tall

as well as being able to cope with water and high humidity. I would suggest an enclosure measuring 1.2m (4ft) high and 0.6m (2ft) deep. Lighting such an environment is always tricky. I always recommend that people who ask my advice on this topic should study the wild habitat of the reptile in question. In the case of basilisks, they are forest-dwelling arboreal and diurnal animals, living near water.

The lighting of any 'wet' enclosure is full of potential dangers though, because obviously, water and electricity do not mix. This fact, combined with the sheer size of the enclosure required creates a challenge in terms of lighting. Diurnal, forest-dwelling reptiles not only need heat but will also have a large ultraviolet light (UV) requirement. It is simply not true that UV does not penetrate through the forest canopy, because light is reflected off trees and broad leaves, with good UVB readings being obtained in lower levels in this type of environment. Basilisks must have access to UV lighting, to prevent them suffering metabolic bone disease.

The law requires that any electrical fitting attached in a wet environment must be designated IP67 or waterproof. Arcadia make two types of waterproof controller, one of which has fixed waterproof lamp leads, with the other having plug and socket waterproof

lamp leads. Both of these fittings have fully legal and waterproof end caps which protect the electrical supply.

As a result of the height of the vivarium required, so you will need a powerful lamp. I would suggest a self-ballasted mercury vapour lamp, but unfortunately, these are almost impossible to waterproof safely and so would need mounting outside the enclosure, away from any water. Even contact with a drop of water could cause the lamp to explode.

Arcadia's 12% or D3+ range is a very high quality lighting option, offering the world's only 12% UVB emitting lamp. I would recommend the use of two of these lamps in such a big enclosure, along with a reflector. Polished metal reflectors push 100% more light down on to the animal and therefore significantly increase the available UV, whereas light emitted from the top of an unreflected lamp is practically all wasted.

As far as heating is concerned, halogen heat lamps are great as you can run them safely through a good quality thermostatic controller and they are splash-proof also. This heat will maintain not only the temperature, which should be around 31°C (88°F) as a guide, but also serves to keep the humidity level up within the vivarium. *John Courtney-Smith.*

**Do you need a helping hand or advice?**



Email your queries to [prk.ed@kelsey.co.uk](mailto:prk.ed@kelsey.co.uk) or write to the address on page 74. A selection of submitted questions will appear here every month, and a prize of Vetark products will be awarded to the writer of the Star Question. Regrettably, replies can only be given through this column, and if you are worried about the health of your animal, seek veterinary advice without delay.

**Nutrobal, Arkvits & Calci-Dust**  
- essential support for reptiles




**VETARK PROFESSIONAL**



+44-(0)1962-844316, or email: [info@vetark.co.uk](mailto:info@vetark.co.uk). Visit the website: [www.vetark.co.uk](http://www.vetark.co.uk) and our eshop at [www.noahs-cupboard.co.uk](http://www.noahs-cupboard.co.uk)