



Green, or Plumed Basilisk (*Basiliscus plumifrons*)

Brown, or Striped Basilisk (*Basiliscus vittatus*)

“Walking” on Water

Basilisks are medium sized iguanid lizards which can be easily identified (especially males) by their tall casque like helmeted crests atop their heads, and raise sail along their dorsum and tail. The purposes and functions of these crests and sails is not fully known, although they are most likely used to assist in remaining cryptic by distorting the outline of the lizard to potential predators, as well as to aid in thermoregulation. Crests and sails are also likely utilized in social structure displays to signal dominance, territory, and/or mating and reproductive status. The brown basilisk ranges from brown to grayish brown with a pair of paler whitish to yellowish stripes along each side of the body. The green (plumed) basilisk ranges from light to moderate green in color with paler whitish to bluish and blackish flecks along each side of the body. Basilisks are often known the “Jesus Christ” lizards due to the increased surface area and pockets of air that are created by their hind feet and toes, allowing them to run bipedally over water for short distances when disturbed or threatened after dropping down from their overhanging basking areas and other vegetation. Basilisks are a well-known and personable genus of lizards to maintain in captivity with the correct level of knowledge, care, and setups, and can make for excellent display specimens with lots to discuss by any intermediate level or higher enthusiast willing and ready to take on these acrobatic lizards!

Taxonomy

Life: All living, physical, and animate entities

Domain: Eukaryota

Kingdom: Animalia

Phylum/Sub Phylum: Chordata/Vertebrata

Class: Reptilia

Order: Squamata

Suborder: Lacertilia

Infraorder: Iguania

Family: Corytophanidae

Genus: Basiliscus

Species: *Basiliscus plumifrons** and *Basiliscus vittatus**

*Taxonomy subject to change and revision.

Lifespan and Longevity

<http://www.madisonherps.org>

In captivity, if they are provided the proper care, basilisks can attain longevity of 10 to 15 years or more.

Distribution and Habitat

Basilisks are indigenous to the tropical rainforests, riverbanks, and surrounding wetlands of Mexico, Costa Rica, and other areas of Central America, as well as into northern South America.

Conservation Status

IUCN Red List Least Concern (LC).

Experience Level Required

Intermediate/Moderate.

Size

Basilisks range from 5 to 7 inches as hatchlings, and 24 to 36 inches as adults, or roughly 3 to 3 ½ feet depending on the sex and species.

Housing and Enclosure

Housing must be sealed and escape proof. Hatchling basilisks can be housed in a 20 gallon terrarium or enclosure. Depending on the size of adult specimens of each species, a minimum of a 50 gallon or larger enclosure that is at least three feet by five feet by four feet. Basilisks of all ages and sizes will do best on a particulate substrate that retains humidity well such as pesticide free potting soil, cypress mulch, coconut fiber, or peat/sphagnum moss, as well as mixtures thereof. Misting and/or soaking hatchlings, juveniles, and adults at least two to three times weekly for 15 to 20 minutes will also help raise their hydration and humidity. A large, shallow water bowl or dish should also be provided and be changed and cleaned regularly. Basilisks are highly arboreal lizards, and appreciate additional climbing, hiding, and basking opportunities. Provide sufficient and ample artificial foliage, driftwood, rocks, or logs or sturdy branches, and maintain humidity at about 80% overall.

Temperature, Lighting, and Humidity

For basking, create a thermal gradient (or a warm side) in the cage/enclosure. Ideal temperatures for basilisks range from 80 to 85 degrees F on the cool and ambient temperatures and around 90 to 95 degrees F on the warm, basking side. Providing the correct amounts of UVA/UVB overhead incandescent and florescent lighting, and calcium-to-phosphorus ratios is essential for ensuring the health and overall well-being of basilisks in captivity. Without UVA/UVB, or adequate amounts of it, they can be susceptible to the abnormal bone growth and development known as Metabolic Bone Disease (MBD), and other health and development maladies. Also be sure to spot clean the enclosure for urates, feces, or uneaten food at least twice per week. Be sure to periodically replace the substrate, clean, and disinfect the enclosure and its furnishings at minimum every 2 to 3 months. More specific lighting, heating, and humidity product suggestions and recommendations that can best suit one's needs, as well as those of one's animals can be given as well.

Feeding, Diet, and Nutrition

Insectivorous to Omnivorous; In the wild, basilisks are omnivorous, meaning they will eat both plant and animal matter. They will eat an assortment of insects and other invertebrates, fruit and vegetable material, and even other small vertebrates on occasion.

In captivity, feed basilisks a variety of appropriately sized feeder insects such as crickets, roaches, mealworms, superworms, and waxworms. Basilisks can eat other feeder items such as

<http://www.madisonherps.org>

small pre-killed rodents, but offer these sparingly. They can also be given a mixed assortment of chopped up vegetables including carrots, peas, collard, mustard, and dandelion greens, and beans. Several commercially available omnivore mix diets are also available. Feeder insects should be gut-loaded in order to increase their optimal nutritional value. They also require additional calcium and vitamin D3 supplementation 1 to 2 times weekly or as otherwise directed for optimal health and development. This is in order to prevent Metabolic Bone Disease (MBD) and other growth and nutritional deficiencies. Their feeding frequency will depend on the age, size, and overall health of your animal. Use care as to not overfeed them, as obesity and other health related issues can become an issue. More specific dietary and supplementary product suggestions and recommendations that can best suit one's needs, as well as those of one's animals can be given as well.

Handling

As with many reptiles, hatchling and juvenile basilisks often tend to be initially more nervous and defensive. Handle your basilisk gently and deliberately, but do not drop or injure the animal. Overall, many basilisks tend to be somewhat more skittish, fast moving, and flighty lizards than many other popular species in captivity when it comes to handling, but they can become accustomed to and tolerate some levels of handling by the more intermediate enthusiast or pet owner. Adult basilisks can become impressive and attractive medium sized display animals as well.

****Also be sure to practice basic cleanliness and hygiene associated with proper husbandry after touching or handling any animals or animal enclosures to prevent the possibility of contracting salmonellosis or any other zoonotic pathogens****

Contact

Authored by Eric Roscoe. For any additional questions, comments, and/or concerns regarding this animal, group of animals, or this care sheet, please email and contact the Madison Area Herpetological Society at info@madisonherps.org

Disclaimer: Note that the information provided in these, or any care sheets, are not intended to be all-exhaustive, and further research and care should always be sought and provided when it comes to any species one may prospectively be interested in. These care sheets are also not intended to serve as substitutes for professional veterinary medical care and husbandry should any animal require it. Always seek proper and professional veterinary care for any animal should the need arise, and be prepared ahead of time for any and all husbandry costs and expenses that may occur with any animal beyond the initial purchase. Any animal owned is ultimately a matter of personal/individual care and responsibility.

*Copyright Madison Area Herpetological Society, 2017