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*Photo Credit: Northampton Reptile Center

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 bipedially 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!

Lifespan and Longevity

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 a genus of unique, medium sized to large, semi-arboreal and semi-aquatic iguanid lizards which are indigenous to a wide range of Central and South America, depending upon the species. Species of basilisks can range from southern Mexico, Costa Rica, and throughout Central America through Nicaragua, and Panama, and into northwestern and northern South America including Colombia and Venezuela. Within their ranges, these large lizards occupy the coastal Pacific lowland dry to moist forests and woodlands, often adjacent to riverways, streams, and their banks, canals, and other waterways, where they will bask, forage, and escape predation on overhanging or adjacent vegetation.

Experience Level Required

Intermediate/Moderate.

Size

Basilisks range from 5.0 to 7.0 inches in total snout-to-tail length as hatchlings, and 24.0 to 36.0 inches as adults in total snout-to-tail length, or roughly 3 to 3 ½ feet depending on the sex and species. Both *Basiliscus plumifrons* and *Basiliscus vittatus* are similar in adult snout-to-tail lengths, although *Basiliscus plumifrons* reaches the larger sizes. Average snout-to-vent length for *Basiliscus plumifrons* ranges from about 9.8 to 10 inches in SVL. *Basiliscus vittatus* averages about 8.8 inches in snout-to-vent length (SVL).

Housing and Enclosure

Enclosure System: Semi-Arboreal to Arboreal. 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. Basilisk lizards require moderate to high levels of humidity in order to thrive, which can range from 55 to 75% depending somewhat on the seasonality and exact species being maintained.

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 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:

Eric.S.Roscoe@gmail.com

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