KEEPING AND BREEDING OF COPHOTIS DUMBARA IN CAPTIVITY

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Introduction

Cophotis dumbara is a small species of agamid lizard originating from the Knuckles Mountain rainforests of Sri Lanka. They are sometimes referred to by the common name of Knuckles Mountain Pygmy lizard but here we will refer to them by their species name. They are one of only two species in the Cophotis genus, ceylanica being the other. Dumbara are found at elevations of 1000-1550 meters above sea level. Anatomically, dumbara and ceylanica are very similar with dumbara having subtly different scalation and being slightly smaller. Much of the scalation of both dumbara and ceylanica are large and overlapping giving a very distinct and striking appearance. Males tend to have more vibrant coloration with various shades of green, white, and even black. Females tend to be less colorful with mostly tan shades but will also often sport pastel greens and pinks. Males also have dorsal spiked scales which can be used to distinguish the sexes even from a young age. Males also have a larger and more pointed head. They are a small species with a snout to vent length of approximately 6 cm (~2.5 in). The total length including the tail is around 12 cm (~5 in).

Dumbara and ceylanica exist in slightly different climate zones with dumbara being more heat tolerant, making them a more ideal candidate for herpetoculture. Depending on the time of year temperatures can range from 6-35 C (42-95 F). Rainfall is seasonal with September-November having the most frequent rainfall (daily), December-February having moderate rainfall, March-May a lower amount, and June-September being the dry season with limited rainfall. Humidity ranges between 57-90%.

Dumbara are an arboreal species and rarely venture to the forest floor. They typically move in a slow and methodical fashion, gripping the branches of plants with their feet and prehensile tail while holding their body above the perch. When at rest they will lay their body against their perch fully. Both vertical and horizontal perches are utilized.

While this species is incredibly rare in both herpetoculture and in the wild, they are also quite tolerant of varied conditions and breed readily in captivity. What is more, they are also extremely bold, rarely hide, and therefore make excellent displays in beautifully planted vivaria. The author is committing a great deal of resources to propagating and preserving this species in USA herpetoculture as he believes they represent an ideal terrarium reptile and worthy of wide attention.

Keeping

The author recommends a minimum enclosure size of 45x45x45 cm (18x18x18 in) for one adult or one pair of adult dumbara. If you are able to provide a larger enclosure, do so. These are active little lizards and they will utilize larger spaces. The author also only uses naturalistic or bioactive vivaria for housing this species. A well draining soil mixture, such as ABG (Atlanta Botanical Gardens) mix is used and at least one bushy plant, such as *Ficus benjamina*, is planted directly within. The enclosure should also be furnished with many branches of varying diameters running at different angles throughout the enclosure. The enclosure should be structured so that the lizards are able to choose areas within the enclosure of varying temperature, light, and humidity conditions.

Lighting is provided with two fixtures. First, a high output LED fixture for visible light and plant growth in the 6500K spectrum. Second, a T5HO UVB linear bulb with a 5.0 or 6.0. The author uses Leap, Reptisun, and Arcadia bulbs and fixtures with equal success. A heat light is generally not needed although one can be provided if the room is very cool.

This species experiences seasonal variation in their natural habitat and the author tries to replicate that at least partially. During the Summer season the lights are on for fourteen hours a day, during the Spring and Autumn twelve hours a day, and ten hours in the Winter. Each season is simulated for approximately three months. In the author's reptile room the temperatures vary naturally with the seasons. In the Summer temperatures range from 21-30 C (70-85 F), in the Spring and Autumn 18-24 C (65-75 F), and in Winter 15-21 C (60-70 F). Cooler and warmer temperatures can be tolerated but are not seemingly necessary.

Being arboreal, dumbara would likely not naturally drink from standing pools of water. Instead, they drink from rain droplets and dew that accumulate on leaves and branches. Therefore, a water bowl is not provided and hydration and humidity are achieved by misting in the mornings and evenings. Duration of the misting cycle will depend on a variety of local factors. A good place to start would be approximately one minute per misting session. Longer and more frequent misting is provided in the Spring and Summer seasons. It is important that good airflow be present in the enclosure to prevent stagnation. The enclosure surfaces should completely dry between misting sessions.

Dumbara are insectivores and are ravenous feeders. The author primarily feeds crickets of appropriate sizes. However, variety should be provided and various species of fruit fly, mealworm, roach, and worms can all be provided. The author feeds his adult animals three times a week approximately six feeder insects per animal. Each feeding is supplemented with either Repashy Calcium Plus or a pure calcium powder. Babies and juveniles are fed five times a week as much as they can consume.

Breeding

Breeding of Cophotis dumbara is straight-forward and requires little to no interference from the keeper as long as the previously described conditions are met. A male and female are kept together year round. The author has not observed any sign of intraspecific aggression among this species. When initiating courtship the male will approach the female with rapid jerking movements. If the female is not receptive then she will often wave her tail for a few seconds and the male will cease courtship. If the female is receptive she will lay flat and still on her perch and allow the male to copulate. Dumbara are ovoviviparous (giving live birth). After a gestation of three to four months the babies are born. Litters of two up to eleven have been recorded in captivity. Both parents do not seem to exhibit any aggression or predatory behavior toward the newborns. When found, the babies are removed to a smaller enclosure and raised in small groups of two to five. What is most amazing is that females will produce multiple litters in a year, sometimes three or four! It is not known at this time if sperm is retained but the author suspects this is the case.

Babies can be kept exactly like adults except with smaller food items and more frequent feedings. Small crickets, bean beetles, and a variety of flightless fruit fly species are fed five or six times a week.

Conclusion

The author is extremely passionate about working with and establishing this species in herpetoculture. There currently exists a great opportunity to preserve this species in captivity as the future of this critically endangered species is not certain. Cophotis dumbara is now listed as CITES Appendix 1 so it is likely that no more of these animals will enter herpetoculture or be transferred between international boundaries.

Cophotis dumbara represent an ideal species for captive collections due to their hardy nature, striking appearance, ease of reproduction, and small size. Due to their small size and delicate movements they are perfect for keeping in modestly sized and beautifully planted vivaria. All of these positive attributes make this species extremely rewarding to keep and the author hopes that they attain the popularity they deserve.

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Images

Adult male


Scalation


Adult female


Juveniles

Terraria

Sources

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