

\*Photo Credit: Wytze Hart

# **Viper Geckos** (Teratolepis/Hemidactylus imbricatus) (Teratolepis/Hemidactylus fasciata) and (Teratolepis/Hemidactylus albofasciatus)

# **Intriguing Geckos Lost in Popularity**

Viper geckos are a genus of small, terrestrial (or ground dwelling) geckos. They are nocturnal to crepuscular, seeking refuge during the day in burrows or rock crevices, and actively hunting or performing other behaviors during the dawn, dusk, and/or nighttime hours. Two of the recognized species include the Carrot Tailed Viper Gecko (*H. fasciata*), the more commonly seen and kept of the species, and the White Striped Viper Gecko (*H. albofasciatus*). Viper geckos are relatively small, terrestrial geckos with relatively large, thickened carrot or turnip shaped tails. They may range in ground color from grayish, light brown, or tan with five (5) rows of longitudinal bands or stripes broken up at intervals by white or lighter colored spots, blotches, or crossbands. The eyes are also relatively large as well. Formerly commonly seen and available in the herpetocultural hobby and industry, viper geckos have unfortunately seen a decline in prevalence due to lessened interest, importation restrictions, and other factors.

#### **Taxonomy**

Life: All living, physical, and animate entities

**Domain:** Eukaryota **Kingdom:** Animalia

Phylum/Sub Phylum: Chordata/Vertebrata

Class: Reptilia Order: Squamata Suborder: Lacertilia Infraorder: Gekkota Family: Gekkonidae

Genus: Teratolepis/Hemidactylus

**Species:** Teratolepis/Hemidactylus imbricatus, Teratolepis/Hemidactylus fasciata and

Teratolepis/Hemidactylus albofasciatus\*
\*Taxonomy subject to change and revision.

# **Lifespan and Longevity**

If provided the proper care, viper geckos have the potential to attain longevity of 5 to 10 years or more.

#### **Distribution and Habitat**

Viper geckos are relatively small, arboreal to semi-arboreal species of geckos with fairly small

and limited ranges within southern to southeastern Asia. More specifically, the Carrot Tailed Viper Gecko (*H. imbricatus*) is indigenous to portions of southern India and southern to western Pakistan, while the White Striped Viper Gecko (*H. albofasciatus*) is indigenous only to a few known localities within India, although its distribution elsewhere is currently poorly known and understood. Within this range, viper geckos occupy primarily arboreal to semi-arboreal environments, including semi-arid deserts, to scrublands, savannahs, and open, dry forests and scrub forests, where they occupy the rocky crevices and other ground or surface debris, as well as in burrows.

# Origin/History

Hemidactylus imbricatus (Bauer, Giri, Greenbaum, Jackman, Dharne, and Schouche, 2008); Hemidactylus albofasciatus Grandison and Soman, 1963.

Viper geckos, namely H. imbricatus and H. albofasciatus were formerly very common geckos in the pet trade and in herpetoculture in decades prior to the 2000's. They were formerly wild collected and imported in very high numbers. However, they would be another group of geckos which would virtually disappear from the hobby entirely. Whether due to lack interest, these gecko's tendency to fail to thrive in captivity, changes in import/export regulations and availability in their native countries of origin, or for other reasons, would not fully be understood.

# **Experience Level Required**

Novice/Beginner to Intermediate/Moderate.

#### Size

Viper geckos are fairly small geckos which range from 1.5 to 3.5 inches in total snout-to-tail length as adults. Snout-to-vent length in *Teratolepis albofasciatus* is up to about 1.4 inches (SVL). *Teratolepis fasciata* snout-to-vent length is up to 2.2 inches (SVL).

# **Housing and Enclosure**

Enclosure System: Primarily Terrestrial. Housing must be sealed and escape proof. Hatchling viper geckos can be housed in a 5 to 10 gallon or similar sized terrarium or enclosure, while adults will require at least a 10 to 20 gallon long enclosure. These active, nocturnal to crepuscular geckos are primarily terrestrial, and floor space is more important than height. Provide a substrate that holds humidity reasonably well but is not readily ingestible such as play sand mixtures, crushed walnut shells, or natural bark substrates. Provide a hide box and artificial foliage, driftwood, rocks, or logs for ample basking and hiding opportunities. A humid hide can also be created for additional humidity. For moisture, provide a small bowl or dish of fresh water two to three times per week and mist once to twice weekly.

# **Temperature, Lighting, and Humidity**

Create a thermal gradient, or a warm side, in the cage/enclosure and consider that the ideal temperatures for viper geckos range from 75 to 80 degrees F on the cool side and 85 to 90 degrees F on the warm, basking side. Nighttime temperatures can be allowed to drop to around 70 to 75 degrees F. These geckos are primarily crepuscular to nocturnal and typically do not require overhead UVA/UVB or additional lighting, although providing it in moderated amounts can be greatly beneficial for their health, immune system, and overall wellness. For any supplemental heating that may be needed, use a low wattage incandescent or UVA/UVB bulb, radiant or ceramic heat emitter, or UTH (under tank heating element). 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. Viper geckos require low to moderate

levels of relative humidity, and should be maintained at, or within about 40 to 50%.

### Feeding, Diet, and Nutrition

*Insectivorous*; In the wild, viper geckos are primarily insectivorous, meaning they eat insects and other invertebrates. In captivity, feed viper geckos a variety of appropriately sized, active and lively feeder insects such as crickets, roaches, mealworms, superworms, and waxworms. Feeder insects should be gut-loaded in order to increase their optimal nutritional value. Viper geckos 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

Viper geckos are relatively small, fragile geckos, and handling them in excess should be avoided whenever not necessary. If they are handled, be sure to handle your gecko gently and deliberately, but do not drop or injure the animal. They may drop their tails if overly stressed or threatened. Do not grab your gecko by its tail or it may detach if they perceive you as a predator or threat. Many gecko species may also "bark" or emit other vocalizations when agitated or threatened as well. Allow them to walk in between or from hand to hand as a way of best handling them.

\*\*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: <a href="mailto:Eric.S.Roscoe@gmail.com">Eric.S.Roscoe@gmail.com</a>

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