

Care Cards

Leaf-Tailed Geckos



The family *Gekkonidae* contains some of the most bizarre lizards known to man. One of the most unique groups of this family is the leaf-tailed gecko. These unusual looking reptiles are rapidly increasing in popularity within the herp trade. While most people automatically think of the leaf-tailed geckos of Madagascar, another group of leaf-tailed geckos is native to eastern Australia. Although they are located in totally different regions of the world, both groups are very similar. In this article, I will give an overview of the care of leaf-tailed geckos while comparing and contrasting the two groups.

Leaf-tailed geckos of the genus *Uroplatus* are found in the humid forests of Madagascar and the surrounding coastal islands. The Australian leaf-tailed geckos are divided into two groups; the large species genus *Saltuarius*, and the small species genus *Phyllurus*. Leaf-tailed geckos have a distinct look to them. They have a large, triangular, flat head with relatively large eyes compared to the rest of the head. The eyes themselves are unusual having vertical pupils. Their specific tails are short and flat resembling a leaf or bark of a tree. The exception to this is the leaf-tailed gecko *Phyllurus caudiannulatus* that does not possess a wide leaf-like tail either in its original or regenerated state.

The larger, arboreal species of both groups also have dermal flaps along their lower jaw and limbs, this is thought to aid in the animal's camouflage.

Leaf-tailed geckos are nocturnal reptiles. They remain in a head down position attached to a tree trunk or branch while they await a prey item to venture within their reach. They are able to remain motionless for extended periods of time and use this as their primary defense against attackers. When frightened or under attack, the gecko will wave its tail back and forth to divert attention from the rest of its body. The *Phyllurus* species will even raise its head and open its mouth in an aggressive stance. Unlike other geckos, leaf-tailed gecko tails will only break off in one full piece. Although a replacement tail will regenerate, the new one will not be as colorful as the original tail. Most leaf-tailed geckos will also vocalize with a loud clicking sound when distressed.

Leaf-tailed geckos should be maintained in a tall enclosure. Materials for climbing and hiding should be provided. The larger varieties of the genus *Uroplatus* and all the *Saltuarius* species are more arboreal and will require additional vertical materials for normal behavior. The smaller varieties of the genus *Uroplatus* and all the *Phyllurus* species are more terrestrial and will require vertical as well as horizontal cage materials for normal behavior. *Phyllurus* species prefer rock crevices to tree trunks. Soft substrate items such as potting soil or peat moss are ideal for these reptiles. Artificial and live plants can be used in the enclosure. Be certain any live plants used can tolerate high humidity and activity. *Uroplatus* species are heat sensitive and should be maintained between 70 and 80 degrees Fahrenheit. *Saltuarius* and *Phyllurus* species can tolerate temperatures up to 90 degrees Fahrenheit.

Leaf-tailed geckos require a high humidity level, with 70-85% being ideal. Although it is unlikely the geckos will drink from a bowl of water, one should be provided at all times to help maintain adequate humidity levels. The humidity can also be maintained by frequently misting the enclosure with water. Too low humidity will result in either respiratory disease or shedding problems. Ventilation is also important; poor airflow combined with high humidity will lead to mold and fungal growth within the enclosure. Leaf-tailed geckos will readily drink water droplets off plants and other cage material following routine misting. Dehydration is easily observed as an unnatural curling of the gecko's tail. Leaf-tailed geckos are nocturnal and therefore should be provided softer, heat emitting bulbs than the standard full-spectrum ultraviolet lights. Red bulbs and black lights will help provide visibility to the owner if the gecko's daily behavior is to be observed. When housing *Uroplatus* species, avoid placing the enclosure directly in sunlight, the temperature will easily surpass the gecko's comfort zone. Avoid bright cage lights, which are unnatural and will cause stress.

Leaf-tailed geckos will readily consume a large variety of insects. Commonly fed food items include; crickets, mealworms, superworms, waxworms, moths and snails. The larger species will even consume pinky mice on occasion. *Saltuarius* species have strong jaws and can easily manage the exoskeleton of beetles, cockroaches, and snails. *Phyllurus* species will also consume arachnids. Leaf-tailed geckos strike unusually hard at prey items when feeding, this is another reason for using a soft substrate item to help prevent jaw damage during feeding. If using a dish for feeding make sure it is properly padded. Although they are mostly insectivorous, *Uroplatus* species will occasionally consume overripe fruits such as bananas or peaches. Juveniles should be fed daily, while adults may be fed every other day. *Uroplatus* species are very sensitive to vitamin D and should not be offered supplements containing vitamin D.

Although leaf-tailed geckos lack femoral and preanal pores, they are easily sexed by observing

the cloacal area. Males will have a noticeably larger cloacal area near the base of the tail where the hemipenes are housed. Additionally, the females are more robust and calmer within the enclosure than males. Leaf-tailed geckos will actively breed anytime of the year if kept under optimum conditions, although the breeding is more pronounced in the spring. To help reduce stress if breeding is desired, the geckos should be housed together continuously rather than introduced for breeding. For overly productive pairs, the female may need to be separated periodically to allow for rest prior to resuming the breeding cycle. Successful breeders will gradually shorten the photoperiod during the winter months to 10 hours of light and maintain their geckos at the lower end of the temperature scale. For *Uroplatus* species this should not pass below 68 degrees Fahrenheit while *Saltuarius* and *Phyllurus* species are comfortable at 60 degrees Fahrenheit. The photoperiod is gradually returned to 14 hours light and the temperature increased to the optimal zone dependent on species by March.

Mating will occur at night and is usually a quiet process. There is minimal courtship and the male does not bite the female during copulation. Female *Uroplatus* species can store viable sperm and will produce multiple fertile clutches from a single breeding. This has not been confirmed yet in *Saltuarius* or *Phyllurus* species. Female leaf-tailed geckos will usually lay two eggs per clutch. The eggs have a well-developed shell and are usually deposited under a leaf or log. *Saltuarius* species prefer a deep nesting box filled with moistened substrate to deposit their eggs in.

Leaf-tailed geckos do not produce any adhesive secretions on their eggs and they can be easily removed from the enclosure. Eggs should be incubated between 73 and 80 degrees Fahrenheit and will usually hatch between 65 to 90 days. Newborns should be kept at a higher humidity level to prevent dehydration. Newborn *Uroplatus* species will begin feeding within three days and if properly maintained will be fully mature by 1 year of age. Newborn *Saltuarius* and *Phyllurus*

species will shed their skin shortly after hatching. Following this activity they will begin feeding readily. These species mature more slowly and will be fully mature by 3 years of age.

Because of the limited exportation of reptiles from Madagascar, the future of *Uroplatus* species will likely depend on successful breeding in captivity. The availability of the *Saltuarius* and *Phyllurus* species is even more limited than the *Uroplatus* species. I personally do not think leaf-tail geckos make a good choice for a beginner and should be left for an experienced herper. As more and more people keep these reptiles we will be able to learn more about their husbandry and hopefully make them more accessible to the hobbyist.

References:

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