

# Keeping of northern flat-tailed gecko (*Uroplatus alluaudi* Mocquard, 1894) at BION Terrarium Center

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Northern flat-tailed gecko (*Uroplatus alluaudi* Mocquard, 1894) is one of the smaller species of the genus. Snout-to-vent length of adult individuals (SVL) is 65–80 mm (2.56-3.15 in), tail length (TL) is 35–40 mm (1.38-1.57 in) (total length 100–120 mm (3.94-4.72 in)). Total length of juveniles is 40–60 mm (1.57-2.36 in). The head is large, moderately flattened and ends in a short, rounded snout. 13–16 supralabials are present and the rostral scale is undivided (Angel, 1942). The body is slightly cylindrical and a bit flattened. Coloring varies from beige to hazel brown with diffuse dark brown to black patterns and sometimes pale (cream to white) cross-bands. The tail is comparatively short and moderately serrated, its distal part tapers towards the tip (Bauer, 2013; Bohme, 2014). Males can be identified with certainty by means of their hemipenial bulges (Svatek, van Duin, 2001; Gehring, 2020) (Fig. 2). The earliest age for sexing is 4-5 months. The elder your animal is the bigger is the chance of correct sexing. This species is endemic to Madagascar as well as other species from *Uroplatus* genus. They inhabit tropical rainforests of the northeastern part of Madagascar, national park The Montagne d'Ambre (D'Cruze N. et al., 2008) (Fig. 1). They can be usually found on the lower parts of the trees to a height of 2 m, mainly on branches, trunks and vines (Bauer, 2013; Bohme, 2014).



**Figure 1.** *U. alluaudi* demonstrating phytomimicry on a tree trunk and *U. alluaudi* registration points (Glaw, Vences, 2007).

When working with these animals one should keep in mind that they are nervous and very fast. You should always keep an eye on them as they can often escape from the terrarium. They also autotomize their tails if handled in the wrong way or being irritated. New tail will grow in a couple of months.

Due to mass deforestation and destroying of their natural habitat they have IUCN Status indicated as “Near Threatened” (<https://www.iucnredlist.org/species/172759/6912597>). The species is also listed in CITES Ap. II. Therefore development of breeding methods and creation of ex situ populations is extremely important (Dubyna et al., 2019).



**Figure 2.** *Uroplatus alluaudi* male and female.

### **Keeping and breeding requirements**

**Keeping.** We keep adults at 45\*45\*60 cm (17,7\*17,7\*23,6 in) terrariums, babies – at terrariums of not less than 30\*30\*30 cm (11,8\*11,8\*11,8 in). The decoration of the terrarium includes horizontal and vertical branches of medium thickness, lianas, layers

of bark for climbing, hollows, living plants and shards as shelters (Fig. 3). Substrate — crushed bark, covered with dry oak leaves. Water dish is obligatory.



**Figure 3.** Interior decoration of a terrarium for *Ur. alluaudi*.

**Lighting.** Zoo Med 5 UVB lamp is used during breeding season for 10-14 hours per day; during resting period (December – Feb) for 4 hours per day.

**Temperature.** Daytime temperature is +21 - +24 °C (69.8 - 75.2 F), at night +19 - +21 °C (66.2 - 69.8 F); at the time of winter dormancy +17 - +20 °C (62.6 - 68.0 F). 40W incandescent lamp is used as both lighting and heating source.

**Humidity.** Humidity level is maintained at 60–80% with double spraying (morning and evening) per day.

**Diet.** The diet for adults consists of Turkestan cockroaches (*Shelfordella tartara*), snout moths and crickets with the size of insects not more than 15 mm. We offer 1–2 insects to each lizard 1–2 times a week. It is strictly recommended not to use wild caught insects for feeding. If the animal shows signs of obesity, the frequency of feeding is reduced to 1 time per 2 weeks. There is always a bowl with fresh drinking water in the terrarium. Sometimes if an animal is still hungry we can offer one or two additional feeding items. For females during ovogenesis we offer soft-shelled snails. All insects should be gut loaded and dusted with vitamin-mineral supplementation every other feeding. Sepia or cuttlefish “bone” powder works well as a source of calcium. We gutload the insects with fruit, greens and vegetables and sometimes bee pollen as an additional source of vitamins and bioactive elements.

Diet of juveniles is the same as for adults, but the insects should be of appropriate size. Frequency of feeding: 2-3 insects per 1 young gecko 3 times a week.

We add mineral supplements "Repashy" with D3 with every second feeding. Babies usually eat the shed skin. We believe that it is essential for appropriate functioning of digestive system.

## References

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