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GECKOS

Wahlberg's Velvet Gecko

Homopholis wahlbergii

Homopholis wahlbergii is a large, powerfully built, nocturnal gecko from southern Africa with velvety grey skin and strong toe pads. It reaches 14-21 cm and lives in bushveld and savanna, where it hides under bark, in rock crevices and on walls. Almost no husbandry experience exists, so this guide is based on the climate of its range and on a close relative.

Family: Gekkonidae Former name: *Homopholis walbergii; Platypholis walbergii*

KEY FACTS

THE ANIMAL

Adult size	**14-21 cm** total length incl. tail
Lifespan	**10-15 years**
Active	**At night**
Lifestyle	**Arboreal and rock-dwelling**
Habitat	**Savanna and dry forest**
Difficulty	**Intermediate**

CARE

Min. enclosure	**60 × 45 × 60 cm** L × W × H for 1 adult
Temperature, day	**24-28 °C**
Basking spot	**30-32 °C**
Temperature, night	**20-23 °C**
Humidity	**50-70%**
UVB	**Optional**
Diet	**Insects**
Kept	**Singly or in pairs**

BREEDING

Reproduction	**Egg-laying**
Clutch size	**2 eggs**
Incubation	**60-90 days** at 27-29 °C

PROTECTION AND PAPERWORK

CITES	**Not listed**
EU annex	**Not listed**
IUCN	**Least Concern (LC)**

About the species

Homopholis wahlbergii is a heavily built gecko with short limbs and a thick, round tail that is shorter than the body. Adults are 14-21 cm in total length, most 14-18 cm, and the body without the tail reaches 12 cm. The back is covered in small, smooth granules that give the skin a velvety look, hence the common name. The colour ranges from dark grey to soft grey-brown and may show paler chevron-shaped crossbands or marbled patches along the back. The eyes have a vertical pupil with a notched edge, and the toes are broad with distinct adhesive lamellae. The claws are small and can be retracted. Males and females look alike and are the same size.

The species is nocturnal but is occasionally seen by day. It moves far from its shelter only at night, and courtship also takes place then. Lifespan in captivity is not documented; the figure in the specifications is an estimate based on other large geckos.

Distribution and habitat

Homopholis wahlbergii occurs in south-eastern Africa: in eastern South Africa south of the Soutpansberg (Limpopo, Mpumalanga and KwaZulu-Natal), in Eswatini and in southern Mozambique south of the Limpopo River. The populations in Zimbabwe and eastern Botswana were assigned to the separate species *Homopholis arnoldi* in 2014, so older records of *H.*

wahlbergii from there refer to that species.

> **Native range:** South Africa, Eswatini and Mozambique.

HABITAT

Homopholis wahlbergii lives in open bushveld and savanna, on both arid and moister savannas, and in coastal bush. The animals hide under loose bark on dead trees, in hollow trees, in rock crevices and under rock overhangs, and in empty birds' nests. They are often found in baobab trees and are also seen on walls and in the roofs and walls of buildings, including traditional mud huts. The climate is subtropical, with warm, rainy summers and mild, dry winters. The eggs are hidden under bark overhangs or in rock crevices.

Care

THE ENCLOSURE

Little is known about keeping *Homopholis wahlbergii* in captivity. The recommendations are based on the climate of its range and on the close relative *Homopholis fasciata*, from which the temperatures and incubation temperature are borrowed. Watch the animal's behaviour and adjust accordingly.

A single animal or a pair needs an enclosure of at least 60 × 45 × 60 cm (length × width × height), preferably taller. The animal climbs on trunks and rocks, so furnish with branches, cork bark and cork tubes at different heights, cork panels on the back wall and plenty of hiding places where it can squeeze into a narrow crevice. The substrate is a mix of soil and coconut fibre, kept damp at one end and dry at the other.

Plants that tolerate drought and some shade, such as sansevieria, give extra cover. Always keep the lid tight, because the gecko is strong and climbs well.

Read more: Incubating eggs

TEMPERATURE

By day the temperature should be 24-28 °C, and 30-32 °C under a heat lamp or on a basking spot. At night it falls to 20-23 °C. The temperature should drop every night. Avoid heat above 32 °C.

Read more: Heat and temperature

HUMIDITY AND WATER

Humidity should be 50-70 %, with a damper end by the water bowl and a drier one at the other end. Mist the enclosure every evening so the animal has a little dew, and let the substrate dry out again during the day. Ventilation is important to prevent mould.

Read more: Humidity, misting and ventilation

LIGHTING AND UVB

The species is nocturnal and does not need strong light, but 12 hours of light and 12 hours of darkness mimic its range. UVB is not documented as necessary, but a weak UVB lamp over part of the enclosure is a safe addition, as long as the animal can retreat into shade. To watch the animal at night, use only dim light.

Read more: Lighting and UVB

FEEDING

The species eats insects. In the wild these are mainly beetles and moths, but also termites, grasshoppers, caterpillars and millipedes, and large animals take large prey. In captivity, crickets, dubia roaches and other feeder insects work, and mealworms and waxworms in smaller amounts. Feeder insects should be no larger than the distance between the animal's eyes. Dust them regularly with calcium and vitamins, and let the feeders eat well before feeding.

Young animals are fed daily, adults two to three times a week. A shallow bowl of fresh water should always be available.

Read more: Feeder animals: keeping and breeding Read more: Calcium, vitamins and supplements

BEHAVIOUR AND HANDLING

The animals hide by day and are strong enough to bite if they feel threatened. They should not be handled unless necessary. A pair can be kept together in a large enclosure, but how the species gets along in captivity is not documented.

Breeding

SEXUAL MATURITY AND SEXING

Females are sexually mature from a body length of about 6 cm without the tail, but only carry fully developed eggs from about 9 cm. Males are sexually mature from about 7 cm. Age at sexual maturity is not documented. The sexes look alike; in the close relative *Homopholis fasciata* the male has bulges at the base of the tail and pores in front of the cloaca, which the female lacks.

MATING

Courtship takes place at night, when the animals move far from their shelters. There are no detailed descriptions of mating in captivity. Sexually mature females lay eggs every year. In the wild they carry eggs from November to June, throughout the warm part of the year, and the males' reproductive organs are less active only in midwinter (June-August).

EGG-LAYING AND CLUTCHES

The female lays two hard-shelled eggs at a time. The eggs are 17-19 mm long, sticky and soft when laid, and then harden. In the wild they are laid under bark or in rock crevices. In the enclosure, provide a laying site, for example a damp shelter with vermiculite or sphagnum where the female can dig. The number of clutches per season is not documented, but several clutches are likely.

INCUBATION

The eggs are removed and incubated at 27-29 °C (borrowed from *Homopholis fasciata*). The incubation time is not documented; 60-90 days in the specifications is an estimate based on large geckos at the same temperature. Incubate in a small container with damp vermiculite or perlite, and do not turn the eggs.

REARING THE YOUNG

The size of hatchlings is not documented. Keep them separately in a small hatchling box with hiding places and a surface they can climb, and offer tiny feeders such as springtails and newly hatched crickets. Feeding and temperature follow those of the adults.

Health and common mistakes

No information exists on diseases of *Homopholis wahlbergii* in captivity. The typical risks in large, nocturnal geckos are:

- Heat above 32 °C, which causes stress and dehydration.
- A lack of calcium and D3, especially in juveniles and egg-laying females. Dust the feeders and provide a weak UVB lamp.
- A constantly wet substrate and poor ventilation, which cause fungus and skin problems.
- Difficult shedding if humidity is too low. A damp hide helps.

See a vet with reptile experience if the animal stops eating, loses weight, has skin problems or behaves unusually.

Always ask someone who knows

This guide is a good place to start, but it cannot replace experience. Animals differ, and much of what matters most is learned from people who have kept the species for years. Talk to a breeder, an experienced keeper or a vet who knows reptiles and amphibians before you get the animal - and again if anything looks wrong.