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Achim-R. Börner
Zülpicher Str. 83
D-50937 Cologne

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Achim-R. Börner

A short note on the longlivity of an African Fat-tailed Gecko

Hemitheconyx caudicinctus

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Achim-Rüdiger Börner*

A short note on the longevity of a male African Fat-Tailed Gecko *Hemitheconyx caudicinctus* (Duméril, 1851)

Introduction

Lid geckos (subfamily Eublepharinae) have become quite popular pets, and keepers exchange information in chat rooms like www.geckosunlimited.com, but many web-sites with photos and caresheets have been discontinued in the last 15 years. Moreover, first hand observations in the wild and long-term studies are still scarce. This is the report on a longevity record for the African fat-tailed gecko *Hemitheconyx caudicinctus*.

The African lid-gecko genus *Hemitheconyx* Stejneger 1893 has been erected to accommodate two species, the type species *H. caudicinctus* (Duméril, 1851) and the later discovered species *H. taylori* Parker 1930. Their life histories are mainly known from captive animals.

The type locality of *H. caudicinctus* is Senegal, and it can be found in the West African flatlands (0-520 or 640 m a.s.l.) in the dry savannah where it lives a crepuscular life in rocky outcrops as well as flat areas where it cooccupies self-made burrows. It is exported for pet shops mainly from Senegal, Gambia, Benin, but is also found in suitable habitats in Mauretania, Mali, Nigeria, Togo, Ivory Coast, Burkina Faso, Niger, Ghana, Guinea (Conakry), north Cameroon, and eventually Ghana, Liberia and Sierra Leone. It is a monotypic species considered due to its wide range as species of least concern, although the collecting for the pet trade has certainly had adverse local effects. However, nowadays it is successfully kept in captivity (see e.g. caresheet by Nezhko et al.) and bred in numbers so that exports have dwindled. In natural colouration, the animals show two dark brown dorsal crossbands leaving no space for a sacral band; they are regularly without, but sometimes with a white vertebral stripe. As the species is regularly kept in captivity, good photos are available (Hunziker; see also discontinued sites).

The African fat-tailed gecko *Hemitheconyx caudicinctus* is morphologically quite close to the genus *Eublepharis*, though it has retained some primitive traits like e.g. the small subdigital lamellae, the brown rather than yellow basic colour, and the white borderlines or rows of elongated spots along the dark dorsal bands. It seems to be closest to the *Eublepharis macularius* species group (comprising of *E. turcomenicus*, *E. gracilis*, *E. macularius* and its subspecies), while its pattern (posterior position of the dark bands allowing no space for a sacral cross band) bears resemblance to the *E. afghanicus* species group (*E. afghanicus*, *E. fuscus* and *E. satpuraensis*); *E. hardwickii* has another head shape, and *E. angramainyu* has another type of subdigital lamellae (smooth lamellae).

* Dr. Achim-Rüdiger Börner, Zülpicher Str. 83, 50937 Köln, Deutschland, info@boernerlaw.de

The Somali fat-tailed gecko *Hemitheconyx taylori* Parker, 1930 has its type locality in the Hegligab District (elevation 1500 feet) in former British Somaliland and a spotty distribution in the dry hilly areas (640-1230 m a.s.l.) of Somalia and Eastern Ethiopia. It is easily distinguished from *H. caudicinctus* by its rounded head with coarse temporal scalation, lower number of labials, and a lack of enlarged postmentals (see e.g. photos by Kuijpers; for a key to the species see Loveridge). These characters put it close to *E. hardwickii*. *H. taylori* is a rare pet animal, as the remote and war-torn areas hinder collection and export, obviously a reason why they are in the least concern category. Nevertheless, some photos are available (Barts & Boone; Kuijpers; see also discontinued websites).

The life of a male specimen of *Hemitheconyx caudicinctus*

I saw a male specimen of *Hemitheconyx caudicinctus* for the first time in summer 1997 on display at a pet shop in Aachen, Germany. It was an adult male purportedly collected in Senegal. It was already fully grown to adult size. The colouration was unfaded, viz. it had a light brown ground colour, a rich dark brown upper side of the head, a dark nape band and dark dorsal crossbands with some small white spots along the border of those bands. The tail had been shed close to the base and was regenerated into the typical short bulbous form. I estimated the age of the male at a minimum of 2 years, thus born in late summer 1995 at the earliest.

In late fall 1997 the specimen was sold to a boy, who returned the animal to the pet shop after nearly two years. Upon a visit to the pet shop, I saw this animal again in the summer of 1999 and was informed about its return. As it was not sold about 4 months later, I acquired the hand-tame animal in 1999.

It lived on the window sill in a desert terrarium (90 x 30 x 50 cm) with electric surface heating, an electric 75 watt light bulb (for desert lizards) outside the terrarium and daily sunshine. I did not turn down the heating in winter, but because of the lower temperature near the window, the average temperature was about 4-5 centigrade less than in summer.

The male had female company from 2001-2019. I got a succession of females for him from various sources. In the beginning there were two of them (BSRC 124, 127 MC, no. 127 reaching a length of 12.5 cm SVL with main growth after the death of no. 124); they quarrelled until each had its own box for retreat, the male alternating between the boxes. Later on, the male had just one female for company at a time (BSRC 135, 144 MC, both with a white vertebral stripe). Obviously, I had made good choices, as there was never a quarrel of the male with any female companion and each one shared the night box with him.

All animals took every other day *ad libitum* crickets, mealworms, freshly shed *Zoophorba* larvae and pupae, other insects, all usually dusted with vitamins and calcium, and sometimes by hand-feeding small stripes of beef meat or a spoonful of yoghurt, but never fruit like e.g. crushed banana.

The male grew rapidly up to 13.5 cm SVL and put on some weight, in the maximum plus some 50 % to ca. 35-40 gr., obviously to outdo the large female, which grew simultaneously. With age, the colouration changed a little. The brown colour on the upper side of the head started to fade from the snout to the occiput. In its last years, the throat and the breast got a brownish tinge. While the basic pattern of the body remained unchanged, the following modifications came with age, maybe also in part due to the light sand used as a substrate in the terrarium: The white spots along the dark-brown dorsal crossband elongated slightly, and the dark colour of these crossbands faded, mainly in the middle of each band. Small new white spots appeared at random in the light-brown dorsal crossbands.

In 2015, the male started to reduce its activity in winter. It hardly fed during the cold spells, but came regularly out of its box in the evening.

In 2020, regular shedding difficulties started, first at the fingers and toes and later extending to the tail, then the underside and finally the head. Shedding was helped with a warm bath, gentle rubbing and a final wrapping with a cloth to prevent it from catching a cold.

In late 2020, I got the impression that the male got quite lonely for lack of companionship and time-reduced human contact. In summer 2021, it stopped feeding; it refused to take food from the forceps or the hand as before and started to emaciate, reducing weight to less than 20 gr. and size to 11.5 cm SVL. It died obviously of old age in mid-November 2021.

For the African fat-tailed gecko, the literature reports a life span of 10-15 years in the wild and a maximum of „15 or perhaps up to 20 years“ in captivity. My male had lived for more than 27 years, and I suspect that in general longevity of the lid-geckos may be underestimated.

Summary

A male *Hemitheconyx caudicinctus*, probably caught in the wild at an age of approximately two years, was maintained in captivity for 25 years (22+ years with the author), thus reaching an age of 27+ years.



The male *Hemitheconyx caudicinctus* in 2007, today BSRC 142 MC

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