

## MISCELLANEOUS REMARKS ON SOME CAPTIVE REPTILES

PIOTR SURA

Department of Biology, Medical Academy,  
Kopernika 7, 31-034 Krakow, Poland

The purpose of this article is to present some of my observations dealing with different species of reptiles kept for longer or shorter periods in my terraria. The list comprises one tortoise, three lizards and three snakes.

### *Geochelone carbonaria*

One juvenile specimen was brought from the Venezuelan Llanos at the end of 1975. The first measurement was made in February 1976 — it weighed 75 g and had plastron length of almost 8 cm. All tortoises seen in the vicinity of Turen (near Acarigua) had characteristic strong carapacial sculpturing where each central lamina had the appearance of a low pyramid (Pl. 1). However, young specimens do not show this feature, having a more smooth shell. Legler (1963) estimated the plastron length of hatchlings to be 50-58 mm (mean 52.6 mm). According to him the specimen measuring 63 mm was about 3 years old, based on the texture of the plastron and growth rings. Moll and Tucker (1976) calculated from this that the growth rate is about 4 mm/yr., so the tortoise reaches maturity after 32 years (180 mm). This would seem to be impossible. During their study of four *G. carbonaria*, Moll and Tucker indicated that the average plastral growth rate is 44.0 mm/yr. Thus, they determined that sexual maturity could have been reached after 2.8 years. The measurements of my tortoise made at the beginning of August 1981 are as follows:

weight	1900 g
length of carapace	240 mm
length of plastron	177 mm
width of shell	153 mm
height of shell	125 mm

The growth rates are presented on the Fig. 1 and are lower than those of Moll and Tucker (their measurements refer only to the plastron). Such difference may depend mainly on the diet. Moll and Tucker fed their tortoises at first on hamburger, earthworms, vegetables and fruits and then almost exclusively on moistened Purina Dog Chow. The greater quantity of meat the faster the growth. This species seems to be especially carnivorous and my specimen, when it was younger, after feeding on beef tried to eat the red scales on its forelegs! It is evident that its weight decreased very quickly after feeding on plants only. Now I complete its food with mice. Also, what is interesting, every kind of pill, e.g. Vit. A + D<sub>3</sub> or calcium, is eaten immediately from my hands.

### *Ablepharus kitaibelii*

All specimens kept by me originated from Bulgaria. The record of longevity in my terrarium is 6 years and 5 months. One female collected in the field laid 2 eggs on 8 June 1978 (their length 9 mm). The first juvenile hatched on 4 September (after 88 days) and a day later ate *Drosophila*. Its total length was about 35 mm. The second one hatched on 7 September, but unfortunately was dead when found. Its total length was 39 mm (17 mm SVL). The first specimen survived 1 year 3 months and 24 days (38 mm SVL) and the first symptom of its disease was not hiding before night. I did not hibernate it.

### *Chamaeleo chamaeleon*

These chameleons are difficult to maintain in captivity for longer than two years. My first specimen survived 2 years and 5 days. But the second one only 4.5 months. Both were bought in a Moroccan market and their precise origin was unknown. The second specimen was in very bad condition when it arrived in Kraków. People do not suspect that these animals are so delicate and that there are so many troubles with their husbandry. The third chameleon I have now was captured while studying the herpetofauna of Algeria in April and May 1981. This specimen was

also brought to Poland by my friend and after some time reached me, as I expected. The main problem is to provide enough food. A chameleon can eat a full jar of grasshoppers every day. So I decided to complement its food with weaned mice, which were readily swallowed. I keep it free on a tree branch indoors. The chameleon likes to climb the curtain and hunts every insect which appears nearby. I was successful with this manner of husbandry with my first specimen.

### *Ophisaurus ventralis*

Three specimens were sent to me by a dealer in the USA on 21 September 1976. I decided to include this species in this list mainly because of a case of its longevity in my terrarium. Two specimens have survived so far (1 August 1981) 4 years 10 months 9 days and are in excellent condition. According to Bowler (1977) the maximum record for this species in the USA (Philadelphia Zoo Collection) was 3 years 9 months and 5 days. The glass lizards are fed mainly on newborn mice and insects and they remain on the best of terms with 2 *Ophisaurus apodus* and 1 *Anguis fragilis*. On 18-19 June 1980 the female laid 12 eggs of average size 17 x 10 mm. Though I suspected that I had also a male (Pl. 2), none of the eggs were fertile. Also, I never witnessed a copulation. They have not hibernated.

### *Elaphe rufodorsata* and *Rhabdophis tigrinus*

Some observations on a young specimen of *E. rufodorsata* which may be added to my previous article (Sura, 1981) are presented below:

29 September 1980	birth and shedding
17 October	the first frog eaten
21 October	the second frog eaten
10 November	shedding
20 November	put into the refrigerator for hibernation
10 January 1981	removed from the refrigerator
14 February	two fish eaten

As can be seen the snake refused food for 116 days (including stay in the refrigerator). And, after I had given up hope of saving it I put into the water dish a dead fish. The snake ate it quickly and then a second one. Until the beginning of April it fed regularly. Then I went away for 1½ months and it refused food for this period, while in a friend's institute. The subsequent progress of the snake is shown below:

8 June 1981	attempted to swallow a <i>Lacerta vivipara</i> , but it was too big
9 June	a frog was eaten
14 June	the leg of a <i>R. temporaria</i> was eaten
2 July	two new-born mice were eaten
5 July	a frog was eaten

Since then the snake has been in fine condition and has started to grow at last. On 27 July it ate a lizard (Plate 3).

*Rhabdophis tigrinus*. All three snakes which were hatched a year ago now eat adult *Rana lessonae* and medium-sized *R. temporaria*, always hind legs first (Plate 4). They were not hibernated, and in winter were fed mainly on fishes. None of them attempt to bite when handled. Also, I have observed attempts at copulation by two of them.

### *Vipera lebetina mauritanica*

This specimen, measuring about 40 cm, was collected at the same time in Algeria as the *Chamaeleo chamaeleon*. It was placed in a terrarium with three other species of snakes (Pl. 5). During the first days the viper hissed loudly whenever I approached, but after some time it got used to the new situation and started to eat weaned mice offered to it from tweezers. The first time, I assume the viper used its full quantity of venom to kill the mouse, as it died immediately. But now the viper eats such mice without killing them first, but fully grown mice die 2-4 mins. after being bitten. The viper is growing quickly and, though is very calm, it may become a problem in the future.

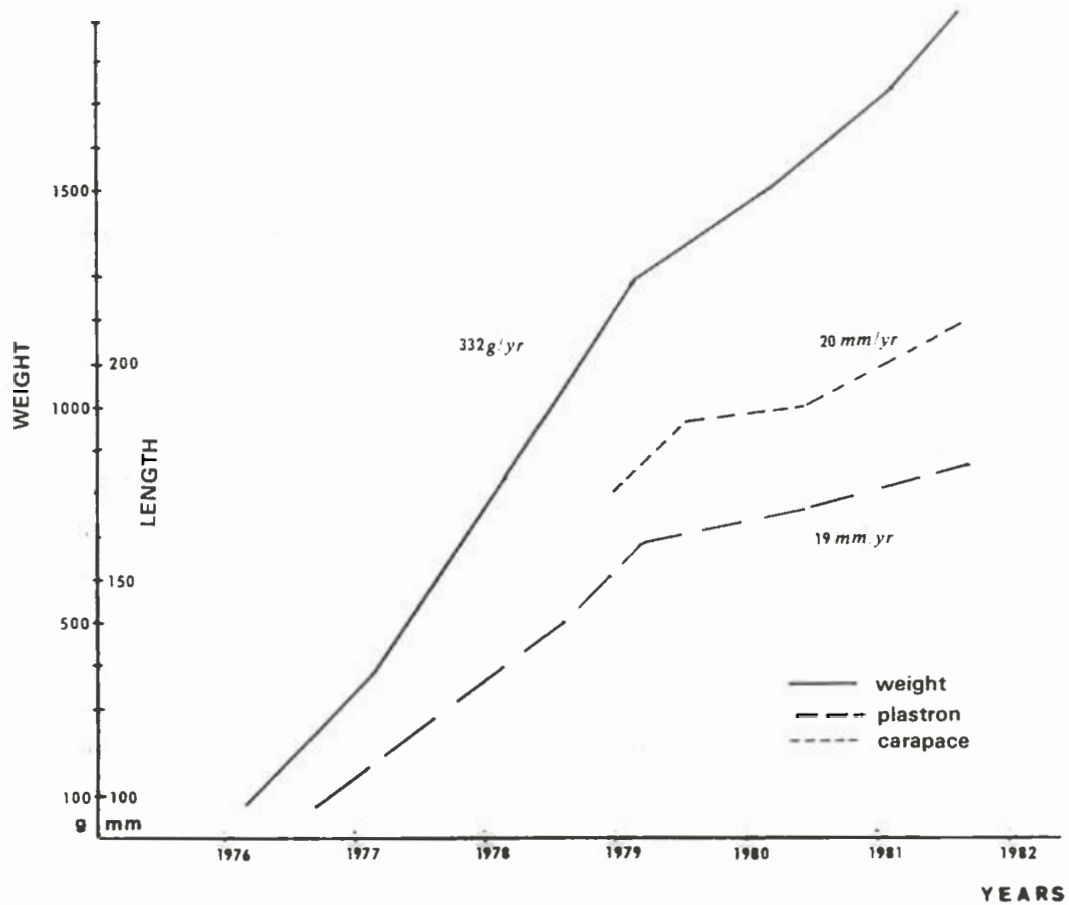


Fig. 1. Growth rate of *Geochelone carbonaria*.

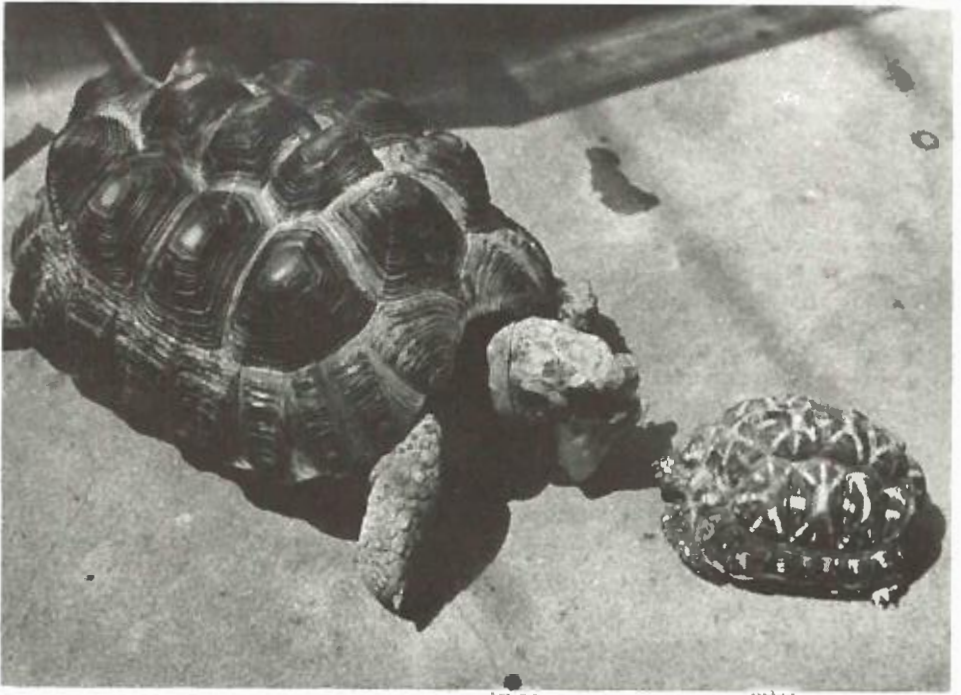


Plate 1. *Geochelone carbonaria* eating a piece of tomato. Its size at the end of 1975 was similar to that of *G. elegans* nearby.

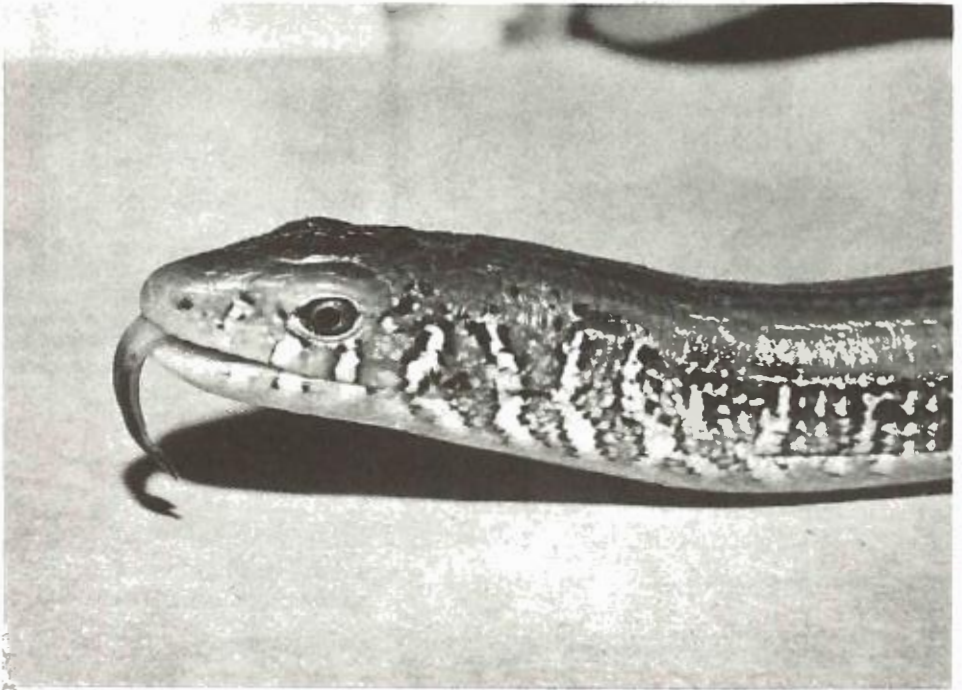


Plate 2. *Ophisaurus ventralis*.



Plate 3. Juvenile *Elaphe rufodorsata* swallowing a lizard.

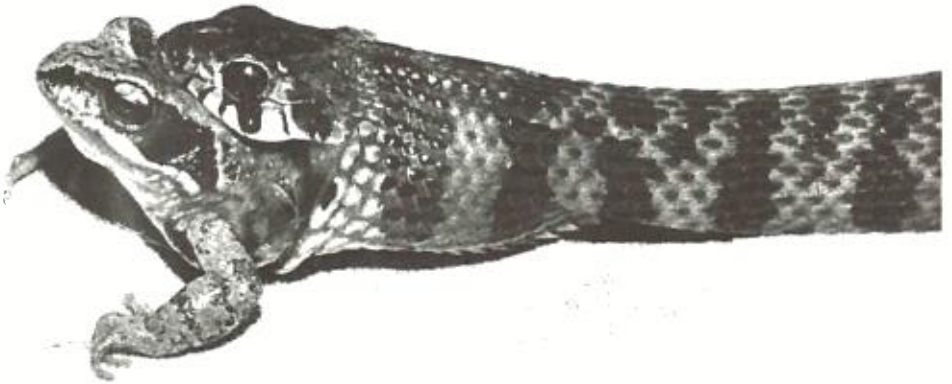
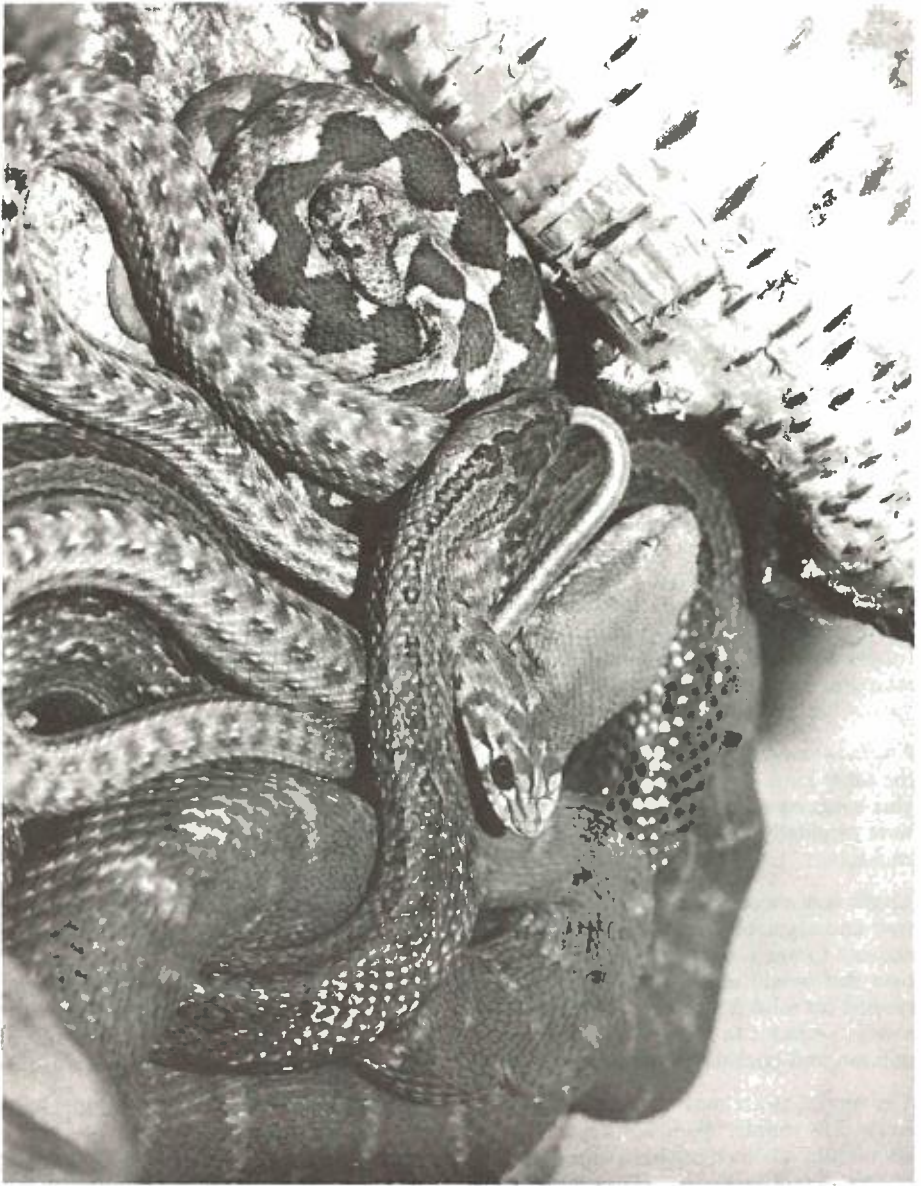


Plate 4. *Rhabdophis tigrinus* one year old, swallowing a frog.



Plate 5. *Vipera lebetina mauritanica* basking under the lamp in the company of *V. ammodytes*, *E. rufodorsata* and *Malpolon monspessulanus*.



#### REFERENCES

- Bowler, J.K. 1977. Longevity of reptiles and amphibians in North American collections. SSAR Pub., Misc.Pub., *Herpetol. Circular* 6: 1-32.
- Legler, J.M. 1963. Tortoises (*Geochelone carbonaria*) in Panama: Distribution and variation. *Amer.Midl.Natur.*, 70: 490-503.
- Moll, D., Tucker, J.K. 1976. Growth and sexual maturity of the Red-footed tortoise, *Geochelone carbonaria*. *Bull.Md.Herpetol.Soc.*, 12: 96-98.
- Sura, P. 1981. Captive breeding of *Elaphe rufodorsata* and *Rhabdophis tigrinus* from the Korean People's Democratic Republic. *Brit.Herpetol.Soc.Bull.*, 3: 20-24.