

FIRST REPORT OF OVOVIVIPARITY IN A SOUTHERN AFRICAN AMPHISBAENID, *MONOPELTIS C. CAPENSIS*

JOHN VISSER

c/o Department of Zoology, Stellenbosch

Very little is known about the breeding habits of amphisbaenids generally (Gans, 1960; Schmidt and Inger, 1957). Oviviviparity in an African amphisbaenid was reported first for *Trogonophis wiegmanni* Kaup by Hediger (1935). This mode of reproduction has since been described for *Amphisbaena (Loveridgea) ionidesi*, and is suspected for *Amphisbaena (Chirindia) ewerbecki* (Loveridge, 1955 and 1941). This present report, besides being the first of ovoviviparity for the genus *Monopeltis* (as currently defined), is apparently the fifth only to deal with the life-history of an African species. It also corrects an earlier account (FitzSimons, 1943) which claimed oviparity for all the southern African species. Oviparity is known for one African species only ("*Dalophia pistillum*" of Loveridge, 1941, "*Monopeltis g. granti*" of FitzSimons, 1943), now placed in *Tomuropeltis*. If the life-histories of the species in this genus and those in *Monopeltis* show constancy, further support for the retention of *Tomuropeltis* would be at hand.

Embryos found in material from three localities are recorded in Table 1. The disproportionate amount of yolk relative to the size of the embryo, first described for *T. wiegmanni* (Hediger 1935) and subsequently for the South American *Amphisbaena manni* by Gans and Alexander (1962), is a feature also of the development of *Monopeltis c. capensis* (Fig. 1). TM. 32023 was seen to be expelled on January 31, 1966, when its mother was unearthed after being damaged by a ploughshare. TM. 32024 is of near-term stage and was removed after killing the female in alcohol on February 3, 1966. Both these embryos were unpigmented except for their eyes. All the Maquassi embryos were found during stomach analysis of a large series of adults collected by Dr. C. C. Kritzingner while the Vaal River was in flood in December, 1942.

TABLE 1.

| Museum number, Localities, and Lengths of Females | | | Month | Brood size | Length of uncoiled* Embryos |
|--|--------------|------------|---------|----------------------------------|-----------------------------------|
| SU. 2040 | Maquassi | 237 + 17.5 | Dec. | 1 | 45 mm. |
| SU. 2041 | " | 252 + 19 | Dec. | 3 | 45 mm. |
| SU. 2042 | " | 222 + 16 | Dec. | 1 | 10 mm. |
| SU. 2043 | " | 235 + 17 | Dec. | 1 | Damaged |
| SU. 2044 | " | 230 + 18 | Dec. | 1 | 35 mm. |
| SU. 2047 | " | 225 + 17 | Dec. | 2 (+2 coagulated yolk masses) | 22 mm. |
| SU. 2053 | " | 212 + 14 | Dec. | 1 | 26 mm. |
| SU. 2070 | " | 190 + 13 | Dec. | 1 | 7.5 mm. |
| TM. 32023 | Brandfort | 230 + 14 | Jan. 31 | 1 | 92 + 7 mm. |
| TM. 32024 | Odendaalsrus | 235 + 14 | Feb. 3 | 1 | 86 + 5 mm. |

*Coiled half-grown embryos occupy approx. $\frac{1}{3}$ of the yolk mass length.

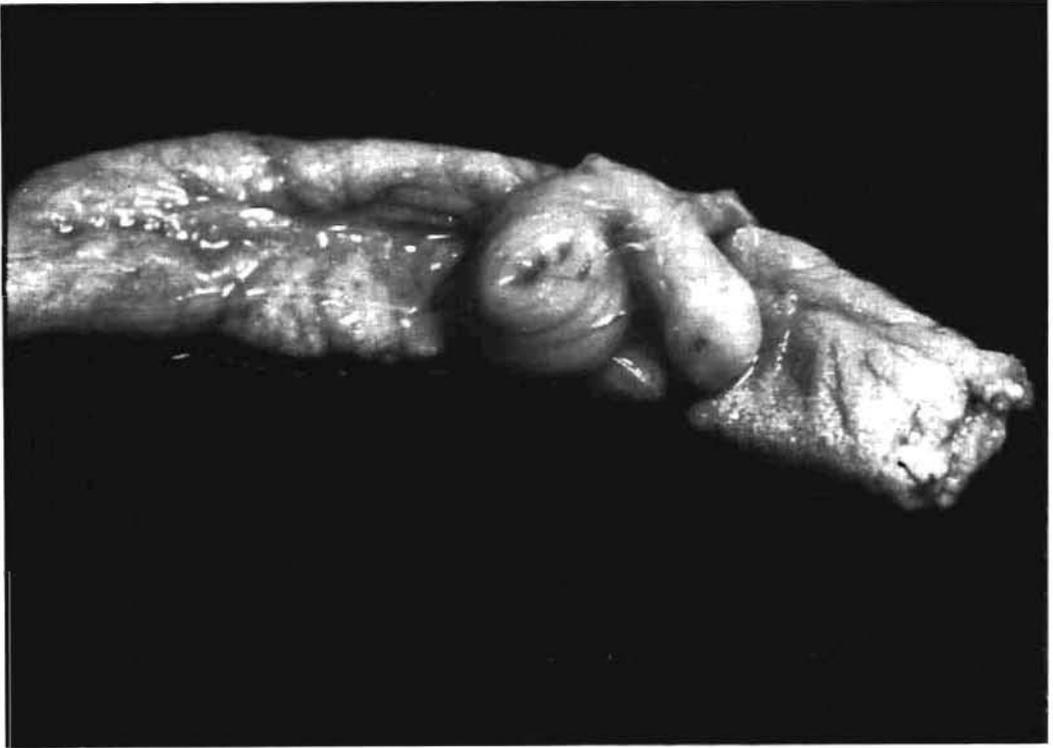


Figure 1. To show the disproportionate amount of yolk relative to the size of the embryo. Yolk mass = 40 mm; uncoiled, or stretched, embryo = 22 mm.

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