ANGOLOSAURUS SKOOGI (ANDERSSON) — A NEW RECORD FROM SOUTH WEST AFRICA (REPTILES)

By

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Editorial Note

The present paper, which we have been given permission to reprint from *Cimbebasia*, 1963, No. 6, deals with *Angolosaurus skoogi*, one of the most interesting lizards of the Namib Desert. It appears to be strictly endemic to the sandy dunes and is known so far only from the northern part of this desert.

The species was first described by Andersson in 1916, on a single specimen collected in Porto Alexandre (Southern Angola) by a Mr. H. Skoog in 1912. Andersson then included it in the Plated Lizards of the genus *Gerrhosaurus*, which is well represented in South Africa by a number of species, and named it *G. skoogi* in honour of its discoverer. As Loveridge (*Bull. Mus. Comp. Zool. Harv.* 1942) had not seen this unique specimen, he suggested that such characters as the "sharp cutting jaws and coloration" described by Andersson might be due to preservation, and thus placed this form as a subspecies of *Gerrhosaurus validus*.

For 40 years no further specimens were found until in 1952, Dr. C. Koch (of the Transvaal Museum staff) secured two more specimens from the subcoastal dunes near Porto Alexandre. These topotypical specimens were studied by Dr. V. F. FitzSimons and proved to differ so markedly from the other known species of *Gerrhosaurus* as to warrant their being placed in a separate new genus of their own called *Angolosaurus* FitzSimons, 1953. During another Transvaal Museum Expedition to south-western Angola in 1954 some more of these lizards were collected in Porto Alexandre and, for the first time, their habits briefly described by FitzSimons (*Afr. Wild Life*, 1955, *9*, 21-23, 3 photographs). Among other interesting observations, particular mention is made of the peculiar movements of this dune lizard as follows: — "When disturbed on the surface, they literally nose-dive into the softsand and, with an almost corkscrew wriggling of the body and violent trashing of the hindlegs, disappear within a second or so out of sight below the surface" (FitzSimons cit.).

Laurent in his recent paper on the reptiles and amphibia of Angola (*Diamang, Publ. Cult.*, 1964, *67*) does not list this species.

A further find of *Angolosaurus skoogi* in South West Africa was made by Mrs. S. Steyn, Dr. W. Steyn and P. Motonane of the State Museum Windhoek on March

31, 1964. They located several colonies in the dunes near the Unjab River mouth. A reliable technique for live capture was devised by N. K. Steyn (jr.), which yielded thirty live and intact specimens. Results of further field studies and of a slow motion film analysis of the sand diving are to be published in *Cimbebasia*.

Angolosaurus skoogi (Andersson)

Gerrhosaurus skoogi Andersson 1916, Medd. Göteborgs Mus. Zool. 9:10.
Angolosaurus skoogi FitzSimons 1953, Ann. Tvl. Mus. 22:215-217.

Angolosaurus skoogi is a rare gerrhosaurid known only from the type site so far, Port Alexander in Southern Angola. Mertens (1955, *Abh. Senckenb. Naturf. Ges.* 490:13) predicted the occurrence of this reptile for South West Africa. The State Museum kept this prediction in mind especially on its expeditions to the north-western sandy coastal areas south of the Kunene river. During May, 1963 the occurrence of a reptile answering to the description of A. *skoogi* in the coastal dunes of the Kaokoveld was confirmed by Mr. B. van Zyl of Ohopoho. This information aided Mr. P. Buys of the staff of this Museum to collect 14 specimens of *Angolosaurus skoogi* at two new sites.

MATERIAL. CR2226 A — I. "Narradam", 25 miles from Orupembe on the road leading to the wreck of the Dunedin Star, 40 miles from the latter. P. J. Buys, 5.5.1963.

CR2227 A — C. Thirty five miles inland, directly east of the wreck of the Dunedin Star. P. J. Buys, 11.5.1963.

DESCRIPTION. The new material makes it possible to add the following data to the existing descriptions.

In immature adults and in adults the headlength goes into bodylength from 5½ to just over 6 times. In the juveniles, specifically also CR2226 I, there is no contact between frontal and frontonasal as there is in TM222581 which has a comparable bodylength as described by FitzSimons (1953). A small occipital is present in 4 of the South West African specimens. The temporal scales are very variable (figs. 1 and 2). The condition of temporals $^1/_1$ as described for the topotypes was not encountered in the present material. In some adults the temporals are ½ as was described by FitzSimons (1953 for TM22581, a juvenile). The temporal area on each side is often covered by 5 scales. Only in CR2227B, an immature specimen, is there any contact between the fourth upper labial and a temporal scale. The tympanic shield covers the entire ear opening, except a small groove leading ventrally to the exterior. Tympanic shield elongated dorsoventrally. Dorsal scales distinctly carinated on posterior part of body, in 62 -65 regular transverse rows, 33 longitudinal. The two females studied have rudimentary femoral pores.

Colour: As described by FitzSimons (1953) but the adults show delicate rectangular orange-pink scattered markings dorsally on back and tail.

FIELD NOTES. The lizards live on dunes. They bask in the sun in groups. When alarmed they will try to take cover under *Acanthosicyos horrida* (Narras). This spiny shrub is almost impenetrable to any but the smaller animals. Over and above

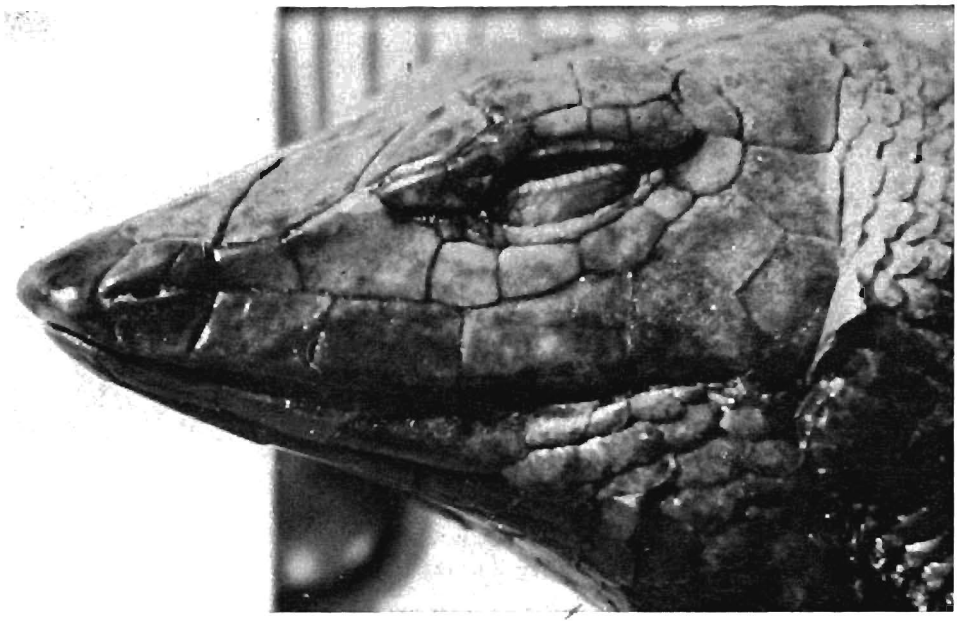

Fig. 1. *Angolosaurus skoogi*, CR2226A. Lateral view of head.

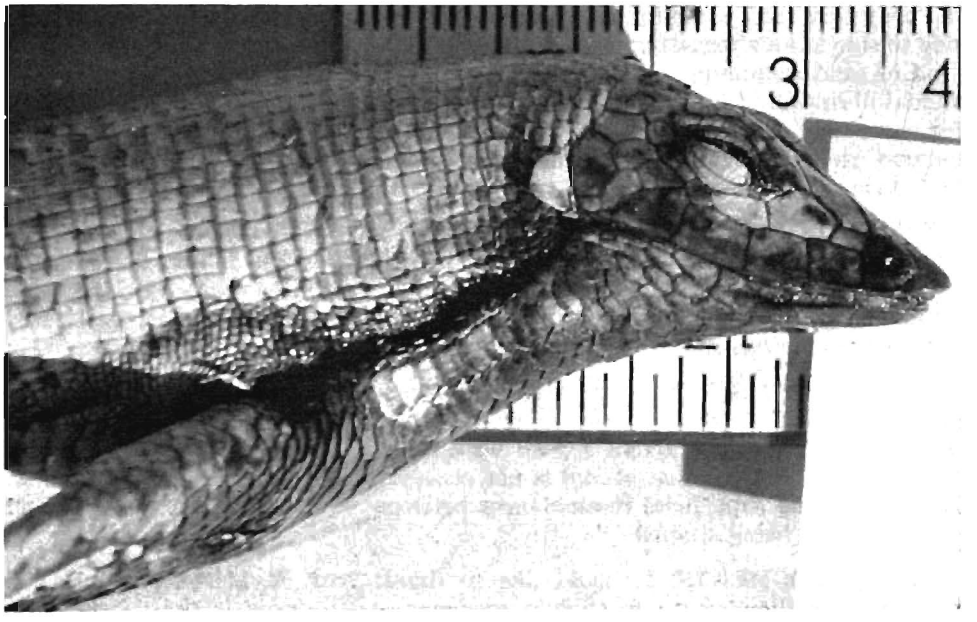

Fig. 2. *Angolosaurus skoogi*. CR2226B. Compare temporal scales with those in fig. 1.

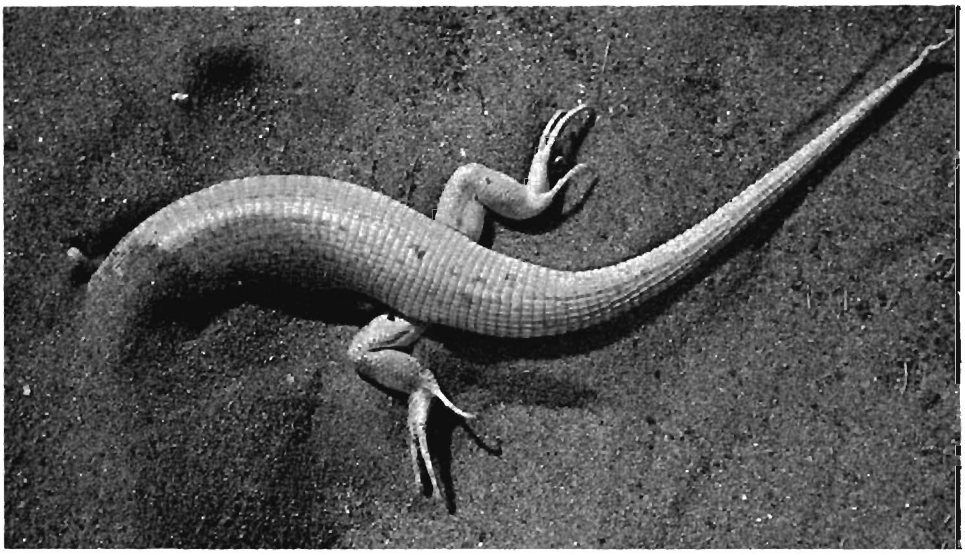

Fig. 3. *Angolosaurus skoogi* disappearing into the sand.

sheltering under these plants, they swiftly disappear into the sand when disturbed. They even do this when already under the shrubs. The depressed snout is pressed into the sand while digging with the forelimbs. The hindlimbs are used to push the body forwards, while the trunk and tail are swung rapidly and markedly from side to side in an alternating motion (fig. 3). *Angolosaurus skoogi* thus practices a kind of sand swimming, which leaves practically no trace on the spot where the animal disappeared into the sand. Two live specimens were kept in the laboratory for some time. These could remain submerged for 24 hours at a time. When they became used to their new surroundings after a few days, they could not easily be induced to submerge.

STOMACH CONTENTS. In the juveniles the stomach contained mostly vegetable matter with slight signs of tenebrionid beetle remains. In adults, the stomach contained a mixture of partly digested remains of *Acanthosicyos horrida* stems, grass and tenebrionid beetles. The stomachs of all the specimens investigated contained numerous small nematode parasites.

CONCLUSION. The South West African specimens have to be placed as *Angolosaurus skoogi*. They differ in certain characters from the existing descriptions of this species. These characters are all very variable, however. It is agreed with FitzSimons (1953) that *A. skoogi* is not closely related to *Gerrhosaurus validus*. There are some superficial resemblances between *A. skoogi* and *G. auritus*, and these are now being studied.

ACKNOWLEDGMENTS. I should like to thank Prof. R. Mertens and Dr. K. Klemmer for allowing me to study a specimen of *A. skoogi* in the Senckenberg Institute study collection.

Angolosaurus skoogi: Dimensions in mm

Cat. No.	Head & Body	Tail	Forelimb	Hindlimb	Head-length	Head-breath
CR2226						
A ♂	140	125	40	61	24	17
B ♂	140	129	42	65	25	17
C ♂	139	134	41.5	60	21	14.5
D ♂	139	—	40	60	22	15
E ♂	138	140	37.5	58	23	17
F ♀	45	61	16	27.5	10	6
G ♂	56	-	18	26	13	6
H ♀	75.5	79	23	37	16	10.5
I ♂	70	—	20.5	33.5	15	10
CR2227						
A ♂	112	116.5	32	53	20	14
B ♀	114	100	29	44	19.5	12.5
C ♀		—	31	50	20	14