

# A NEW SUBSPECIES OF WATER-SNAKE FROM KRUGER NATIONAL PARK

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Early in 1959 Dr. U. de V. Pienaar, biologist to Kruger National Park, brought to the author's notice a water-snake which he had collected at Ngirivane Windmill, near Satara rest camp. This specimen was compared with a long series of the Common Water-Snake (*Lycondonomorphus rufulus rufulus*) in the Transvaal Museum collection and was found to differ markedly therefrom. However, as there was the possibility that it might prove to be an aberrant specimen, it was put aside pending the finding of further similar specimens. Subsequently two further specimens came to light, namely two juveniles, the one from Leeupan and the other from Mazite Dam, both localities just a little south of where the original specimen was taken. As these two juveniles proved identical to the Ngirivane specimen, it was apparent that we now had a form unrelated to *L. r. rufulus*, but coming very close to a northern species *L. whytii*, originally described on a single female specimen from Nyasaland by G. A. Boulenger (1897, P.Z.S. Lond., pp. 800 and 802, pl.xlvi.f.2), and since then known by only four further specimens (all females) from Nyasaland and northern Mozambique.\* Although, as already mentioned, coming very close to *L. whytii*, the Kruger National Park specimens can be readily distinguished by their darkened under surface, as compared with the uniformly immaculate white of *L. whytii*, and thus appear to warrant recognition as a new subspecies, a description of which is as follows:

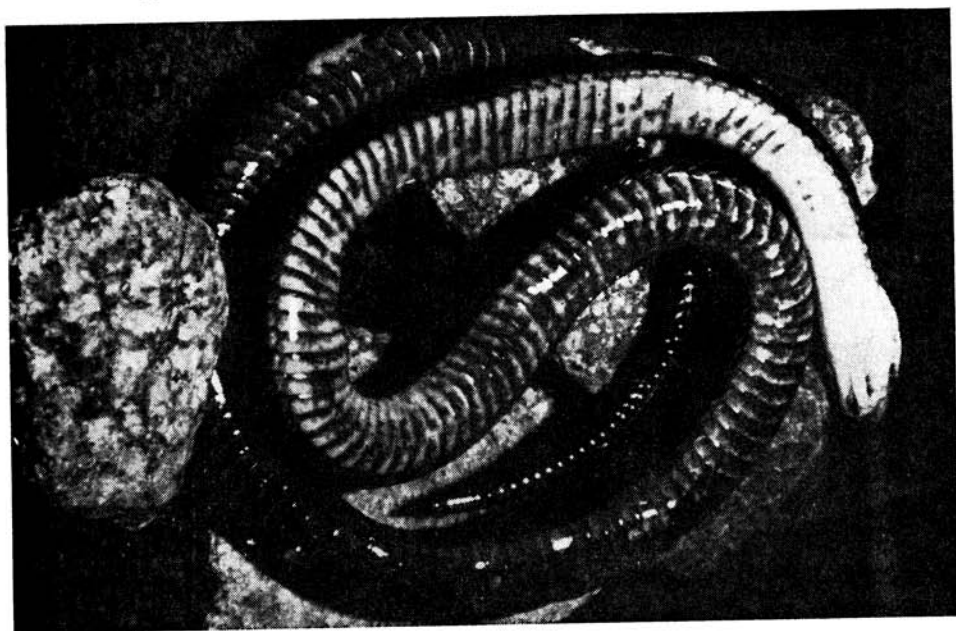
*Lycondonomorphus whytii obscuriventris* n. subsp.

Type: A subadult female (T.M. No. 26665) from Ngirivane Windmill — approximately 24° 20' S. Lat. and 31° 40' E. Long. — Kruger National Park, E. Transvaal, South Africa, collected by Dr. U. de V. Pienaar, on 26th February, 1959.

Diagnosis: Immediately distinguished from *L. r. rufulus* by the much shorter tail and correspondingly lower number of subcaudals, and the darkened under surface. Close to *L. whytii*, but differing therefrom on its generally stouter build and dark under surface.

\*Mr. D. G. Broadley, of the Umtali Museum, Southern Rhodesia, has just recently recorded (in litt.) the finding of a juvenile specimen on the Pungwe Flats, some 50 miles N.E. of Beira.

Description: Head more flattened than in typical *whytii*, moderately distinct from neck (in *whytii* barely distinct from neck) and snout more obtuse. Upper head shields similar to those in *whytii* and typical *rufulus*;



*Lycodonomorphus whytii obscuriventris* n.subsp. Ventral aspect of Type ♀ (T.M. 26665), showing characteristic darkening.

Photo: Dr. U. de V. Pienaar.

preocular single and separated above from frontal by suture between prefrontal and supraocular; 2 postoculars; temporals 1 + 2, anterior one in contact with lower postocular but separated from upper by suture of latter and parietal; 8 upper labials, 4th and 5th entering orbit; 8 lower labials, 1st in contact with its fellow behind mental, last small and scale-like, first four in contact with anterior chin shields, which are a little larger than the posterior pair.

Scales in 19 rows at midbody; ventrals 175; anal undivided; subcaudals 39.

A uniformly shiny dark olive brown to blackish above; upper lip pale, but lower margin of upper labials with a sooty infuscation. Below, chin and throat pale, but with a varying degree of dusky infuscation, mainly aggregated along edges of lower labials, chin shields etc.; over belly, ventrals all distinctly infuscated along their anterior margins, with infuscation increasing progressively distally, until about midway under surface completely darkened (except perhaps for a narrow pale edging to ventrals); anal shield dark, with anterior edge only pale; underside tail uniformly dark.

Total length 483 (417 + 66) mm.

Remarks: Two additional juvenile specimens viz. a ♀ (KNP. No. 103), from Leeupan, and a ♂ (KNP. No. 196) from Mazite Dam, collected by Dr. Pienaar on 11/2/60 and 5/1/63 respectively, conform closely to the type description in all essentials.

A table giving details of scale counts and dimensions of the three above-mentioned specimens (together with scale counts of *L. r. rufulus* and *L. whytii* for comparison) is as follows:

	Sex	Scales at midbody	Ventrals	Subcaudals	Total length	Tail/T.L.
<i>L. whytii obscuriventris</i>						
Type (TM. No. 26665) ... ..	♀	19	175	39	483 (417+66) mm.	7.3
KNP. No. 103	♀	19	168	42	265 (225+40) mm.	6.6
KNP. No. 196	♂	19	164	50	260 (213+47) mm.	5.5
<i>L. whytii whytii</i>	5 ♀ ♀'s	19	159-172	37-47	—	—
<i>L. rufulus rufulus</i>	♀ ♀'s	19	166-179	54-69	—	4.3-5.5
	♂ ♂'s	19	158-176	68-86	—	3.3-4.2

Field notes: Dr. Pienaar records as follows: The Type, from Ngrivane Windmill, was taken at night in grass along the edge of a water-hole after having captured a *Kassina senegalensis*; the Leeupan specimen was taken during the day among rushes at edge of pan; the Mazite Dam specimen was captured late in the afternoon, while hunting young *Pyxicephalus adspersus* in grass along water's edge at dam wall.



