THE AFRICAN SNAKE *BOTHROPHTHALMUS LINEATUS* (PETERS, 1863)

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THE sacredness of Calcutta cows is well known, but their public service function in scavenging rubbish from the streets is not so widely appreciated. The late Prof. J.B.S. Haldane was fond of comparing himself to one of these cows because, he said, in later life he spent much of his time scavenging and re-working the scientific results of others. Apart from the proximity of our names in an alphabetical sequence, scavaging is about all I can claim to have in common with Haldane. The work which has evoked this comparison is by Luiselli et al. (1999) on the '- - natural history of *Bothrophthalmus lineatus* (Colubridae) from the Port Harcourt region of Nigeria'.

The authors provide hard data derived from a total of 37 specimens from seven localities along the Orashi River (ne04.06d4 quarter degree square) in the eastern part of the Niger Delta, very near the main course of the Niger through its delta. They remark that the species is not recorded from further north at Nsukka or Lokoja or from further east in the well-studied Calabar area. The range of *B. lineatus* is correctly given as from Guinea in the west to Uganda in the east but no mention is made of the fact that in Cameroon this species is represented by a unicoloured form, *brunneus* (Günther 1869: 356), treated as a variety by Boulenger (1893: 324), as subspecies by eg. Schmidt (1923) whom Luiselli et al. cite, but often given species status by others (eg. Trape, 1985; Meirte, 1993). One might expect a Cameroonian form to extend westward into Nigeria as far as the Niger River, as happens with eg. *Cephalophis monticola* (Happold 1996). The form studied by Luiselli et al. 'is easily recognised by its splendid colouration: the dorsal livery is bright brown or black, with one to five yellow to red longitudinal lines, - -': therefore it is typical *lineatus*.

As the authors of this recent paper point out, there is little data on *B. lineatus* from anywhere and one of the few comparisons they are able to make is with the maximum size of their specimens from Nigeria with the maximum known from elsewhere. They give the latter as an unsexed specimen of 1280 mm (Pitman '1938', in fact 1974: 74) from Uganda. However, my own notes of 63 specimens of *lineatus* sensu stricto from throughout the range of the genus include 14 (22%) exceeding a total length of

1000 mm, and all are female! The overall sex ratio, however, is 2 females to each male, and the largest male (BMNH 1911.5.29.8) was collected in 'Gold Coast', now Ghana, by Dr. H.J. Spurrell. On the other hand, of 85 specimens of *brunneus*, all but two from Cameroon, only three exceed a total estimated (because of postmortem twisting) length of 1000 mm and these are female. The sex ratio is 1.58 females to each male. The smaller size of the *lineatus* described by Luiselli et al. (1999) resembles my data on *brunneus* rather than mine on *lineatus*.

Luiselli et al. (1999) claim that *lineatus* is unknown from northern and western areas of the Niger Delta but Boulenger's (1893) catalogue of the Natural History Museum (then British Museum, Natural History), collections listed three Nigerian specimens: from Lagos (BMNH 99.6.30.1), Akassa (BMNH 92.6.23.12) and 'Oil River' (BMNH 88.2.29.13), the last two being in the Niger Delta. The Ankassa (neO4.06a3) specimen was presented, **not** collected. by Dr J.W. Crosse, that from 'Oil River' similarly presented by Mr H.H. Johnston so that their precise sources must be in doubt. Other Nigerian specimens are in London (BMNH) from Nko (ne06.08a1) and Ibadan (ne07.03b4) and in Pittsburgh (CM) from Ibadan (Butler & Reid 1990:24).

The geographic reality is that typical, lined *lineatus* are known from Guinea to Nigeria and from Boukoko (ne03.17d4) in CAR (Loveridge 1937:271; Roux-Estève 1965:58) to Uganda but in between, in Cameroon, only *brunneus* is known. I've not been able to detect any differences between *lineatus* from the west - source of the type, and those of the east. If *brunneus* is a different species, it disrupts the geographic range of *lineatus*; if it is considered a subspecies - as might be because of its geographic restriction, we have the anomaly of the nominate subspecies occurring disjunctly!

For these reasons it would be useful to have access to specimens collected by Luiselli et al. (1999) but no mention is made of voucher specimens or of tissue samples kept for possible DNA analysis.

REFERENCES

Boulenger, G.A. (1893). *Catalogue of the snakes in the British Museum (Natural History)* **1,** xiii + 448.

Butler, J.A. & Reid, J. (1986). Habitat preferences of snakes in the Southern Cross River State, Nigeria. pp. 483-488 in Rocek, Z. (ed.) Studies in herpetology. *Proc. herpetol. Meet. (Prague).*

Butler, J.A. & Reid, J. (1990). Records of snakes from Nigeria. *Niger. Fld.* **55**, 19-40.

Günther, A. (1863). Third account of new species of snakes in the collection of the British Museum. *Ann. Mag. nat. Hist.* (3) **12**, 348-365.

Happold, (1996). Mammals of the Guinea-Congo rain forest. *Proc. roy. Soc. Edinburgh* **104B**, 243-284.

Loveridge, A. (1937). Zoological results of the George Vanderbilt African Expedition of 1934. Part VI. Reptiles and amphibians. *Proc. Acad. nat. Sci. Philad.* **89**, 265-296.

Luiselli, L., Akani, G.C., Otonye, L.D., Ekanem, J.S., Capizzi, D. (1999). Additions to the knowledge of the natural history of *Bothrophthalmus lineatus* (Colubridae) from the Port Harcourt region of Nigeria. *Amph.-Rept.* **20** (3), 318-326.

Meirte, D. (1992). Cles de determination des serpents d'Afrique. *Ann. Mus. r. Afr. centr. Sci. zool.* **267**, 1-161.

Pitman, C.R.S. (1938). *A guide to the snakes of Uganda*. Uganda Society, Kampala.

Pitman, C.R.S. (1974). *A guide to the snakes of Uganda*. 2nd ed. Codicote, UK: Wheldon & Wesley.

Roux-Estève, R. (1965). Les serpents de la région de La Maboké-Boukoko. *Cah. Maboké* **3**(1), 51-92.

Schmidt, K.P. (1923). Contributions to the herpetology of the Belgian Congo based on the collection of the American Museum Congo Expedition, 1909-1915, Part II: Snakes. *Bull. Am. Mus. nat. Hist.* **49**, 1-146.

Trape, J.-F. (1985). Les serpents de la region de Dimonika (Mayombe), Republique Populaire du Congo). *Rev. zool. Afr.* **99**(2), 135-140.