

Notes about the "Glasgow" skull by Dr. Erna Mohr in 1967

The most important preserved bone material of the blue buck is also the least known: a skull without horn sheaths, but with the lower jaw and nearly all teeth in the Hunterian museum (Zoology Section) of the University of Glasgow.

The eminent palaeontologist Dr. ROBERT BROOM of the Transvaal Museum wrote on 4 July 1921 to Mej. McEWAN: "When I was in Glasgow University, I made an important discovery. In the Zool. Dept I saw an antelope skull and immediately noticed that it is the skull of the Extinct Blue Buck of South Africa. The skull has no history but it was part of the WILLIAM HUNTER Collection and perhaps collected about 1760. The Buck which lived at the South West part of what is now Cape Colony became extinct about 1799 and is only known by 5 rather bad skins. No skull was known to exist till this one was discovered in Glasgow. I have had photographs made and there is no doubt my identification is correct. It is amazing what discoveries can be made by just keeping one's eyes open. This skull has been in Glasgow for 150 years. Why did no one spot it before?"

This letter from 1921 was published only in 1928 in Ann. S. Afr. Mus., 427-428 and only in 1949 Broom published in Nature (Nr 4182, 24 December 1949) a preliminary description of the skull, where he writes: "Only two large mammals of South Africa have become extinct in the historical period, namely the quagga and the blue buck. The blue buck (*Hippotragus leucophaeus*) lived in the southwest part of the Cape Colony, and is believed to have been exterminated about 1799. About half a dozen mounted specimens have been preserved, mostly rather bad, and perhaps about three more pairs of horns exist, the determination of which is doubtful. No specimen of this skull is known to exist, except perhaps in some of the mounted specimens.

On recently visiting the Hunterian Museum (Zoological Section) at the University of Glasgow, I saw a specimen that at once struck me as probably the skull of the extinct blue buck. There is no history attached to the specimen; but it is believed to have belonged to the Hunterian Collection. As WILLIAM HUNTER died in 1783, the specimen could date back to about the middle of the eighteenth century. Of course, if we could be quite sure that the skull was in the Hunterian Collection before 1783, we could be quite certain that it is that of the blue buck, as the roan antelope was first seen by the white man in 1804, and the sable only discovered in 1836 by HARRIS. It is most

unlikely that a beautiful skull with horn cores but without horns of either the sable or the roan was added to the Hunterian Collection during the nineteenth century and without any record remaining; so we may regard it as practically certain that this is the skull of the extinct blue buck.

Mr. C.W.PARSONS prepared for me numerous photographs of the skull, and I compared them with all the skulls of the allied species in the British Museum (Natural History), and there seems to be no reasonable doubt that this Hunterian specimen is a good skull of the extinct blue buck.

Having only one skull, one cannot tell how the species may vary; but in this skull there are a number of important characters which distinguish it from the skull of the living roan antelope (*Hippotragus equinus*) and the sable antelope (*Hippotragus niger*). The length of the base of the skull is 14 1/4 in. (360mm). I have seen one specimen of a sable as small, but none of the roan.

As will be seen from the photograph, a striking feature not seen in the roan or sable is the depression of the snout below the general line of the maxillary teeth, and with it the bending down of the front of the lower jaw. The premaxilla is more slender than in the other species, and the angle made by the nasal with the front of the supra-orbital part of the frontal is less obtuse. The horn cores are slender and less curved than in most of roan or sable. There are one or two important dental characters which seem to confirm this being the extinct *Hippotragus leucophaeus*. These and other features of the skull, will be described in a full account of it which will be published elsewhere."

Unfortunately, the ever busy BROOM never managed a more detailed description of the skull, especially the very important description of the dentition. Broom died 1952. So far the search in his notes, initiated by Prof. Dr. G. ELOFF, Bloemfontein, has not yielded yet the notes on the blue buck. Now Dr. LINDLAY, Pretoria, prepares a biography of BROOM and maybe some of the missing notes appear there.

Note the large time intervals between BROOM's publications. His letter on the discovery of the skull was dated 1921, but only published in 1928. Despite that it took another 21 years before he published the short note on the discovery of the skull in *Nature*, he wrote 'on recently visiting the Hunterian Museum'. Important is the photo of the entire skull taken from the left side that is shown in the *Nature* publication.

Miss E. MACARTNEY, the museum assistant of the Department of Zoology, University of Glasgow, from whom I obtained seven photos taken by J.S. GALLOWAY (Figures 25-28, 31) wrote to me: "History in Zoological Museum: Very unsatisfactory. No mention of this specimen in any of our catalogues. These are incomplete and do not go back beyond 1807. There is a massive gap from 1820 to 1904. There does not exist a complete list of the original Hunterian zoological specimens. I have learned from a former devoted worker in the museum that the skull was in the old zoological museum in Glasgow University before our department was built in 1923 and came from us thence. It was thus definitely acquired before 1923, and in addition he is quite certain it was already in the possession of the university in 1901 or 1902".

A close comparison between the Glasgow skull with those of *H. niger* and *H. equinus* (p. 50,51) shows that BROOM was correct – it is *Hippotragus leucophaeus*. Unfortunately, this is the only skull available at this time. It seems that some of the mounted blue bucks may still contain a skull. However, so far only one of the four custodians looking after blue bucks agreed to remove the skull when the mount was cleaned. This has not happened yet.

More information on the Glasgow skull can be found in the section 'Der *Hippotragus* Schädel' (p. 49) and on the dentition in the section 'Fossile Hippotraginae' (p. 63 and following).

Source: Der Blaubock, *Hippotragus Leucopaheus* (Pallas 1766) Eine Dokumentation. 1967. Paul Parey: Hamburg and Berlin. Pages 46-48.

Translation: German to English kindly provided by Ruedi Nager. Quotes in English as per original.