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Szczegółowy wykaz skór i szkieletów *Equus quagga quagga* (GM.) zachowanych w muzeach całego świata w 1939 roku.

Complete list of the specimens of skeletons and skins of *Equus quagga quagga* (GM.) preserved in the museums of the whole world in 1939.

[With four tables].

The distributions of the true Quagga — *E. quagga quagga* (GM.) 1788 extended till about 1870 over the Central and South Orange Free State and the Karroo Plains of the Cape Province and was limited in the West by a line running from the mouth of the Vaal River to the environments of Swellendam, in the South by the seashore, in the East by the Kei River and in the North by the Vaal River.

It is highly improbable that this animal should be found still in its native country, as no reliable confirmation could be obtained as to its occurring in South-West Africa near the Kunene River (STEINHARDT quoted by ZUKOWSKY) and in Angola (MONARD). Therefore, we should take rather that the true Quagga belongs to the number of large mammals totally extinct and that there is nothing left of this form except some skeletons and skins preserved with care in museums.

The last survivor of the true Quagga, an old mare, died in 1883 in the Zoological Garden at Amsterdam.

The war destructions of 1939—1945 having not spared zoological collections, as they did not spare so many others, and in the case of the Quagga there being no possibility of renewing them, I found it advisable to publish without further delay a complete

list of skeletons and skins of *E. qu. quagga* (GM.) which were to be found in all the museums of the world in 1939.

The true, or Cape Colony Quagga must be considered as the southernmost link in the chain of the colour stages of the Quaggas, the first link of which is the East African form (*E. qu. böhmi* MRSCH.) with the limbs strongly banded down to the hoofs. The Cape Quagga on its way to reach an uniform brown tint has gradually lost its contrast colouring. Its characteristic feature was a striping strongly reduced so as to be left only on the head and neck, after having almost totally disappeared from the fore-quarters and totally from the other parts of the body.

On the ground of the differences of the skins Pocock 1904, and after him CAMERANO 1908, distinguished several subspecific forms of the true Quagga in accordance with the degree of reduction of the striping.

POCOCK distinguishes four subspecific forms: *E. qu. danielli* POC., *E. qu. quagga* POC., *E. qu. greyi* LYD. and *E. qu. lorenzi* LYD. while CAMERANO mentions only three of them — *E. qu. greyi* LYD., *E. qu. lorenzi* LYD., and *E. qu. trouessarti* CAM. (the latter established by himself). These subdivisions, founded merely on phaenotypes, and by no means on topotypes, do not seem acceptable (the exact origin of three skins only is known).

I do not see any sufficient reason for the establishing of new subspecific forms. All true Quaggas ought to be considered as belonging to one subspecies, with an aspect possibly less uniform than that of other subspecific forms related to it, such as the „black and white“ Quaggas (*bonte quagga*) distributed in areas north of the former territory of the true Quagga.

Without entering into the establishing of any more subspecific forms, we may arrange the whole museum material concerning the true Quagga into three groups, corresponding more or less to three phaenotypes of this subspecies.

It is to be supposed that had not the true Quagga been exterminated, we should be able to clear up the geographical distribution of these phaenotypic forms. Then we should probably recognise that the different phaenotypes occurred in mixt herds as it is to a certain degree the case with the southern subspecies of the strongly striped Quaggas (*E. qu. burchelli* GRAY, *wahlbergi* POC. and *E. qu. chapmani* LAYARD).

Phaenotype I: striped head and neck with stripes extending occasionally as far as the shoulder-blades.

Phaenotype II: striped head, neck and forequarters.

Phaenotype III: stripes extending from head and neck to the lumbar region (nearest to the subs. *burchelli* GRAY.).

I give below a list of all the skins, as they were preserved in 1939, arranged in tables according to the above phaenotypes.

Table I. Phaenotype I.

Museum	Sex, age	Year	Description, photographs
Bamberg	?	1858	ANTONIUS 1931
Berlin	♀ ad.	† 1875	RIDGEWAY 1909
Cape Town	foal	1860	{RIDGEWAY 1909 SHORTRIDGE 1934
Darmstadt	♀ ad.	1862	HILZHEIMER 1912
Leyden	♂ ad.	1827	RIDGEWAY 1909

Table II. Phaenotype II.

Museum	Sex, age	Year	Description, photographs
Edinburgh	? ad.	1818	RIDGEWAY 1909
London	♂ ad.	1858—64	RIDGEWAY 1909
München	♀ juv.	1835	{RIDGEWAY 1909 HILZHEIMER 1912
Paris	♂ ad.	1793	{TROUËSSART 1906 RIDGEWAY 1909

Table III. Phaenotype III.

Museum	Sex, age	Year	Description, photographs
Amsterdam	♀ ad.	1867—83	{RIDGEWAY 1909 GRIFFINI 1913
Basel	♀ ad.	1864	{ROUX 1910 GRIFFINI 1913
Frankfurt/M.	♂ ad.	1831	HILZHEIMER 1912
Königsberg	? ad.	1836	HILZHEIMER 1930
Mainz	♂ ad.	1850 ?	HILZHEIMER 1912
„	♀ ad.	1850 ?	HILZHEIMER 1912
„	foal	1850 ?	HILZHEIMER 1912
Milano	♀ ad.	?	{SORDELLI 1909 GRIFFINI 1913
Stockholm	foetus	1775	LÖNBERG (RIDGEWAY 1909)
Torino	♀ ad.	1827	CAMERANO 1908
Tring	? ad.	1899	{SCLATER 1901, POCOCK (RIDGEWAY 1909), GRIFFINI 1913
Wien	♀ ad.	1836	{LORENZ 1902, RIDGEWAY 1909, GRIFFINI 1913
Wiesbaden	♂ ad.	1865	HILZHEIMER 1912

In addition to the skins listed in the above tables there is in Elgin a stuffed head of a true Quagga from the neighbourhood of King William's Town (RIDGEWAY 1909). The information given by SHORTRIDGE after FITZSIMONS about the Bloemfontein Museum possessing a skin of the true Quagga has proved not to be exact. According to what I heard from Dir. Dr. VAN HOEPEN — whom I heartily thank here for his graceful letter — the Bloemfontein Museum never possessed any skin of the true Quagga. The one mentioned by FITZSIMONS belongs to the Burchell form, namely subsp. *chapmani* LAYARD as is easily recognisable by means of the photograph sent me by Dir. VAN HOEPEN.

By lucky chance there exist still three photographs of a living true Quagga, a mare having lived from 1851 to 1872 in the menagerie of the London Zoological Society. They are: two photographs made by F. YORK, published by BREHM, GREGORY, GRIFFINI, LYDEKKER and RZAŚNICKI; and one photograph made by HAES, published by ANTONIUS. The abovementioned mare belongs to phaenotype II. (according to my arrangement).

The bone remnants of the true Quagga are still more scarce than the skins.

Table IV. List of the bone remnants of *E. qu. quagga* (GM.)

Museum	Specification
Albany	One skull.
Berlin	a) Total skeleton of true Quagga 1½ year old, b) skull of mare 20 years old, c) skull of mare 6 or 7 years old from the Berlin Zoo (not stuffed).
Frankfurt/M	Skull of stallion (skin stuffed).
Leyden	Total skeleton of stallion (skin stuffed).
London	Total skeleton of stallion, skin of which is stuffed.
München	Skull of mare (not stuffed).
Philadelphia	Total skeleton.
Stuttgart	Skull of stallion 3½ years old and one foot-bone.

Under two dozens of skins, 3 photographs, 4 total skeletons and some separate skulls are all that is left of an interesting but very scantily known animal.

It is to be feared that a post war inventory of those remnants will prove to be scantier still.

If we now consider that the nearest relative of the true Quagga, i. e. *E. quagga burchelli* GRAY, not long ago often seen in zoological gardens, is practically extinct, we have to state that an

exact study of the evolution of the southernmost forms of the species *Equus quagga* (GM.) has become exceedingly difficult if not quite impossible.

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STRESZCZENIE.

Autor podaje wykaz materiałów muzealnych dotyczących wymarłej kwaggi przylądkowej, będącej pod względem ubarwienia najdalej posuniętą formą szeregu rozwojowego *Equus quagga* (GM.).