Preliminary List of the Specimens of *Panthera leo melanochaitus* Ch. H. Smith, 1842, Preserved in the Museums of the Whole World in 1963

By Vratislav Mazak

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At the beginning of the second half of the last century the famous Black-maned Cape Lion, *Panthera leo melanochaitus* (Ch. H. Smith, 1842), was included in the list of extinct big mammals. We shall evidently never more be able to obtain complete dates on the former geographical distribution of this lion subspecies. It is necessary to accept as the most probable that the Cape lion in the past inhabited the Cape Colony and Natal. According to Harper (1945, p. 297) the last Cape lion was killed in the Cape Colony in 1858, and in Natal in 1865.

Over a half century after the extinction of the Cape lion mammalogists had to their disposal but some old descriptions and figures of this lion race given by the old South African hunters and travellers as were Gordon Cumming, W. Cornwallis Harris and others, without having the only possibility to study but one documentary specimen. For this reason several doubts appeared about the differences of the so-called Black-maned Cape Lion from the other South African lions which lived more northwards, and whether the old descriptions as well as figures represented a documentary evidence. Only as late as in 1931 Pocock described the first preserved topotypic specimen of the Cape lion which had been in possession of the Junior Services Club, London (this specimen belongs now to the British Museum of Natural History in London). The description of this specimen proved that the Cape lion really represents a characteristic form different from the lions living in South Africa to-day and verified the former data on this lion race. Twenty years later a skull was described (Lundholm, 1952) which represents up to the present time the only known skull of the Cape lion. In the course of the following 10 years some other stuffed specimens were described. We have nowadays no more doubts that the extinct Cape lion represented a valid geographical subspecies and its systematic status grew clear. The preserved materials allow to get a better idea of this nice lion's race.

As there was some darkness concerning the Cape lion, the author deems advisable to publish this "preliminary list" of all known specimens of this lion's race (both the skins and the skulls) preserved in the museums of the whole world. Besides, this list may be useful for that very reason that the Cape lion represented a typical animal of the southernmost part of South Africa exterminated as well as the Quagga, *Equus (Hippotigris) quagga* Gmelin, 1788, and the Blue Bock, *Hippotragus leucophaeus* Pallas, 1766. This "list" brings out also a complete series of the photos of all known specimens of Cape lions.

The following preserved specimens of the Black-maned Cape lion, *Panthera leo melanochaitus* (Ch. H. Smith, 1842), are known to the author of this article[1].

[1] In spite of the fact that the measurements of mounted specimens are only of little importance for systematics, they are after all mentioned by the author if known to him.

1. Mounted skin of an adult male

British Museum (Natural History), London, England.

Origin: This specimen was "said to have been killed near the Orange River about 1830, probably on the Bontebok Flats near Colesberg in the Cape Colony, though possibly on the plains to the north of the river" (Pocock, 1931, p. 208).

The lion was shot by Captain (later General) Copland-Crawford.

Measurements: "... it is impossible to give measurements as the lion is at present housed in the original showcase ..." (J. E. Hill, in litt. 1956). "It is clear, however, that the lion was a large one" (J. E. Hill, in litt. 1957).

First description of the specimen: Pocock, 1931.

Main figures: Pocock, 1931; Stevenson-Hamilton, 1954; Mazak & Husson, 1960.

2. Mounted skin of an adult male

Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands.

Origin: "Mâle adulte monté. Cap. Du Cabinet d'Anatomie, 1860". (Jentink, 1892, p. 95). Other data unknown; the date 1860 mentioned by Jentink indicates probably the year in which the specimen was transferred to the Leiden Museum from "Cabinet d'Anatomie" and not the date when the lion was killed.

Measurements of mounted specimen: length of head & body (over curves), 1990 mm; length of tail, 1070 mm; total length, 3060 mm; length of right hind foot, 397 mm; length of left hind foot, 405 mm; height at shoulders (straight), 950 mm.

First description of the specimen: Mazak & Husson, 1960.

Main figures: Mazak & Husson, 1960.

3. Mounted skin of an adult male

Staatliches Museum für Naturkunde in Stuttgart, Germany.

Origin: Originally labelled as "Löwe, Kapland, [lg.] Von Barth, 1854".

Measurements of mounted specimen: length of head & body (over curves), 1930 mm; length of tail, 970 mm; total length, 2900 mm; length of right hind foot, 460 mm; length of left hind foot, 420 mm; height at shoulders (straight), 1010 mm.

First description of the specimen: Guggisberg, 1961 (p. 46).

Figure published for the first time in this article.

4. Mounted skin of an adult male

Städtisches Museum, Wiesbaden, Germany.

Origin: „Über die Herkunft der beiden Löwen finden wir in unseren Unterlagen leider nur sehr mangelhafte Hinweise. In den Jahrbüchern des Nassauischen Vereins für Naturkunde, Heft 19/20 von 1864–1866, wird im Jahresbericht für 1864 gesagt, daß die Administration der Curetablissements 250 Holländische Gulden zur Anschaffung eines männlichen Löwen bewilligt habe und daß dieses große prachtvolle Exemplar vom Cap zur besonderen Zierde des Museums gereichen wird. Von dem weiblichen Tier ist an dieser Stelle nichts gesagt, doch enthält der Jahresbericht für 1866 eine Zusammenstellung der in den letzten sieben Jahren gekauften Gegenstände, und darin ist erwähnt „capischer Löwe und Löwin".

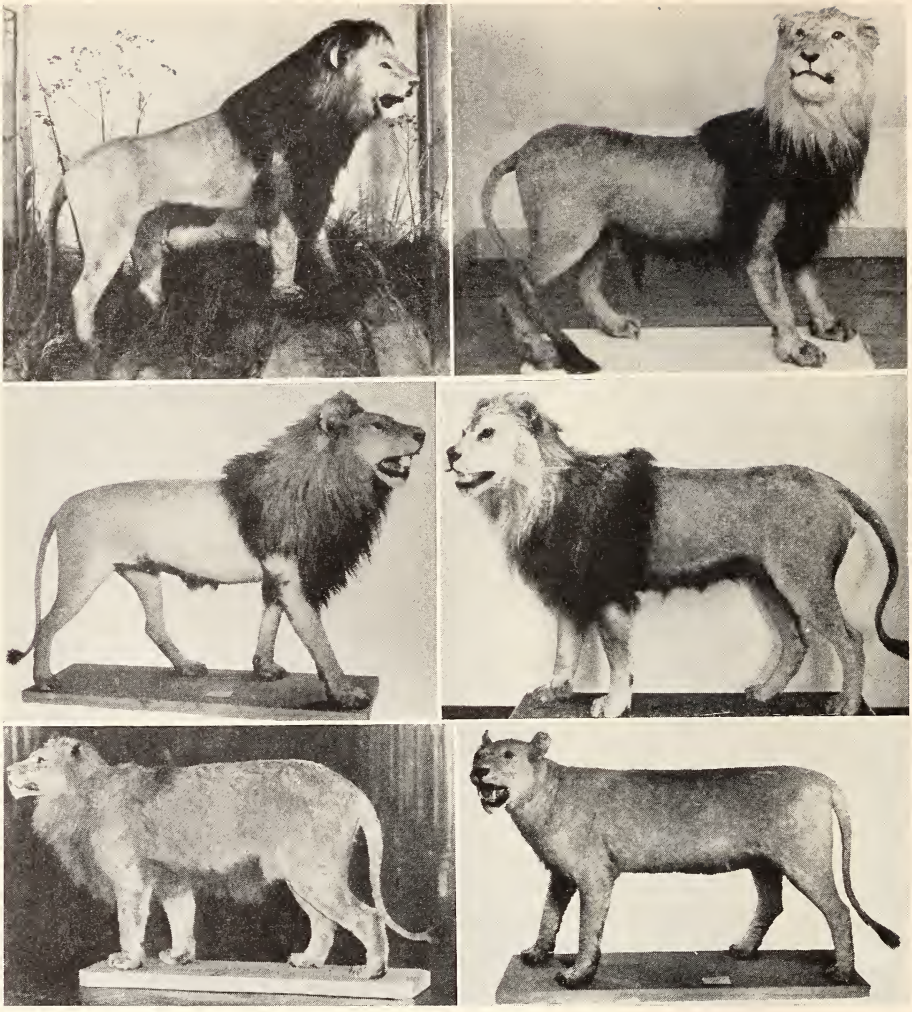

Fig. 1. Male (1). British Museum (Natural History). Photo: British Museum (Nat. Hist.). After Mazak & Husson (1960, pl. ix). — *Fig. 2.* Male (2). Rijksmuseum van Natuurlijke Historie, Leiden. Photo: H. F. Roman. After Mazak & Husson (1960, pl. ix.). — *Fig. 3* Male (3). Staatliches Museum für Naturkunde in Stuttgart. Photo: Dr. A. Kleinschmidt. By permission of Staatl. Mus. f. Naturkunde at Stuttgart. — *Fig. 4.* Male (4). Städtisches Museum Wiesbaden. Photo: Dr. F.-J. Gross. By permission of Städtisches Museum at Wiesbaden. — *Fig. 5.* Male (5). Musée Nationale d'Histoire Naturelle, Paris. Photo: Dr. F. Petter. By permission of Mus. Nat. d'Hist. Nat. in Paris. — *Fig. 6.* Female (6). Staatliches Museum für Naturkunde in Stuttgart. Photo: Dr. A. Kleinschmidt. By permission of Staatl. Mus. f. Naturkunde at Stuttgart

Die Bezugsquelle für das Männchen geht aus den Jahrbüchern nicht hervor; doch findet sich im Jahresbericht 1865 der Hinweis, daß ein Löwenweibchen von dem Naturalienhändler Frank in Amsterdam gekauft wurde. Es ist anzunehmen, daß auch der männliche Löwe aus derselben Quelle stammt." (Dr. Fill, Wiesbaden, in litt. 1963).

Measurements of mounted specimen: length of head & body (over curves), 1950 mm; length of tail, 855 mm; total length, 2805 mm; length of right hind foot,

435 mm; length of left hind foot, 440 mm; height at shoulders (straight), 1000 mm.

First description of the specimen: No exact description is known, only a short note is given by GUGGISBERG, 1961 (p. 46).

Figure published for the first time in this article.

5. Mounted skin of a not full grown male

Musée Nationale d'Histoire Naturelle, Paris, France.

Origin: Originally labelled as "Lion du Cap de Bonne-Espérance. Mort à la Ménagerie, en 1834".

Measurements of mounted specimen: height at shoulders (straight), 860 mm.

First description of the specimen: MAZAK & HUSSON, 1960.

Main figures: MAZAK & HUSSON, 1960.

6. Mounted skin of an adult female

Staatliches Museum für Naturkunde in Stuttgart, Germany.

Origin: Originally labelled as "Löwe, Kapland, [lg.] Von Barth, 1854".

Measurements of mounted specimen: length of head & body (over curves), 1700 mm; length of tail, 880 mm; total length, 2580 mm; length of right hind foot, 380 mm; length of left hind foot, 420 mm; height at shoulders (straight), 890 mm.

First description of the specimen: GUGGISBERG, 1961 (p. 46).

Figure: published for the first time in this article.

7. Mounted skin of an adult female

Städtisches Museum, Wiesbaden, Germany.

Origin: as sub (4).

Measurements of mounted specimen: length of head & body (over curves), 1980 mm; length of tail, 905 mm; total length, 2885 mm; length of right hind foot, 417 mm; length of left hind foot, 450 mm; height at shoulders (straight), 990 mm.

First description of the specimen: No exact description is known; only a short note is given by GUGGISBERG, 1961 (p. 46).

Figure published for the first time in this article.

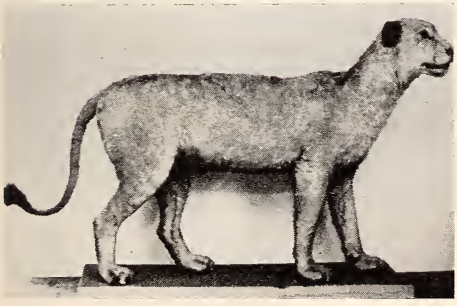

Fig. 7. Female (7). Städtisches Museum, Wiesbaden. Photo: Dr. F.-J. GROSS. By permission of Städtisches Museum at Wiesbaden

8. Skull of an adult female

Museum and Snake Park, Port Elizabeth, South Africa.

Origin: "... skull ... was dug out of a river bank near Murraysburg, in the Karroo area." (LUNDHOLM, 1952, p. 21).

Measurements: see LUNDHOLM, 1952, and (for mandible) MAZAK & HUSSON, 1960.

First description: LUNDHOLM, 1952.

Main figures: LUNDHOLM, 1952.

The documentary material of the Cape lions hitherto known consists of seven mounted skins (5 males and 2 females), and of one good preserved skull of a female.[2] The systematic definition of this lion subspecies was given already by many modern authors, as were Roberts (1929), Roberts (1951), Lundholm (1952) and Mazak & Husson (1960). Although none of these authors had a possibility to study all specimens of Cape lions known at the present time, all these preserved specimens are on principle in great accordance with the diagnosis given by the above mentioned authors, as well as with the original description of *Felis (Leo) melanochaitus* by Ch. H Smith (1842, p. 177).

Among the preserved specimens there are four full-grown males and it must be said that all these males are relatively very uniform, though there exists, of course, a certain individual variability. But these differences are, however, at any rate much smaller than in males of the northernmore lion's populations, namely among the lions of East Africa. Especially, the London and the Leiden specimens are very similar as far as the colouring and extension of mane are concerned. The mane in these two specimens is remarkably two-coloured: the tawny hair fringe round the face contrasts sharply with the other very dark till black mane-hairs. The Stuttgart and Wiesbaden specimens differ from the two previous only as far as their tawny mane surrounding the face runs in a certain degree by and by into the dark till black colouring. It must however be noted that the specimens in question are very old and that during the long years some colour-changes due to the light action, probably have taken place.

In all these preserved specimens of adult males a fringe of black hairs under the belly is present, and it is in *regio mesogastrica* longer and thicker than in *regio sternalis*. This feature is characteristic for the Cape lion, as even previously shown

Fig. 8. Skull of a female (8). Museum and Snake Park in Port Elizabeth. Photo: J. T. Robinson. After Lundholm (1952, pl. iii.)

[2] It is interesting to add that there is a possibility of studying more skulls of Cape lions: that is to say that the Wiesbaden specimes (both the male and the female) possess their original skulls and perhaps the specimens at Stuttgart contain the original skulls too.

(Mazak & Husson, 1960). The importance of these four adult male specimens as well as of two adult female ones is all the greater as all of them had been killed in the open.

The specimen of the Paris Natural History Museum is rather apart, this animal having been kept in captivity for some time. Besides it was not a fully grown male, as it is demonstrated by somewhat smaller dimensions, by the not yet fully developed mane generally not so dark as in other specimens, and also by the fact that on the hind legs as well as on the flanks there are relatively very well visible dark spots. This specimen is in a great degree decoloured by light-action. This Paris specimen is as far interesting as it documents that also in the Cape lion the blackness of the mane arose as late as in the course of the physical and sexual maturity-process, this being a rule in all other lions (Mazak, 1964). In this connection also the Harris' (1840, p. 168) statement is of a great importance: "Among the Dutch Colonists it is a fashionable belief that there are two distinct species of the African Lion, which they designate the *vaal* and the *zwart,* or the yellow and the black variety . . . But I need scarcely inform the well instructed reader that both the colour and the size depend chiefly upon the animal's age . . ."

The author intends finally to make the statement that it seems very likely that the above list of preserved Cape lion's specimens will in the future come to be extended. May be that there are in the collections of several museums some skins or skulls of the Cape lion, awaiting their discovery. It is equally possible that there could be detected in private possession documentary exemplars — skins and skulls of lions beeing at any time high appreciated as trophies and left by the elder generation to the younger one.

The author will be greatly obliged for any information referring to this nice extinct lion's race.

Acknowledgements

The author considers it a pleasant duty to express his warmest gratitude to all Gentlemen who kindly gave at his disposal data, measurements and photographic materials of the preserved Cape lion's specimens. The author offers his particular sincere thanks to Prof. J. Berlioz (Paris), Dr. Fill (Wiesbaden), Dr. F.-J. Gross (Wiesbaden), Dr. J. E. Hill (London), Dr. L. B. Holthuis (Leiden), Dr. A. M. Husson (Leiden), Dr. A. Kleinschmidt (Stuttgart), Dr. F. Petter (Paris) and Dr. J.-J. Petter (Paris).

Only their kind assistence and readiness to render help enabled the author to publish the present list in the form given above.

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A new subspecies of Natterer's Bat, *Myotis nattereri* Kuhl, 1818 (Mammalia: Chiroptera) from Israel

By David L. Harrison

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Myotis nattereri is known from several localities in northern Israel. Bodenheimer (1958) reviewed the existing records and considered that the populations found there were referable to the nominate race *M. n. nattereri*. Examination of a large series from Aqua Bella, near Jerusalem in the author's collection, as well as other material in the collections of the Tel Aviv University and the Hebrew University of Jerusalem, shows that this is not the case. This material is certainly quite distinct from the nominate form and also from the races found in southern Russia, which are *M. n. araxenus* Dahl, 1947 and *M. n. tschuliensis* Kuzyakin, 1935. It is clearly a new subspecies to science, which I propose to name

Myotis nattereri hoveli **ssp. nov.**

in honour of Mr. Haim Hovel of Haifa, who has given the author so much kind assistance with studies of the local mammal fauna.

Type Specimen

Harrison collection, No. 11.3393. ♀ adult, obtained on 30th April, 1961 at Aqua Bella, near Jerusalem.

Diagnosis

Similar in essential characteristics to *M. n. nattereri:* the foot is small, less than half as long as the tibia; the ear is tall and narrow and the tragus very attenuated; the interfemoral membrane has a definite fringe of hairs; the crown area I^2 is much greater than that of I^1. This form differs from *M. n. nattereri* by being much paler in colour on the back; the frontal region of the skull is distinctly more elevated in dorsal profile and the dentition is heavier. It is much smaller than *M. n. araxenus* Dahl, 1947 (Type locality, the village of Amagu, Azizbekovsky District, Araxes Rr. basin, Armenia) and smaller than *M. n. tschuliensis* Kuzyakin, 1935 (Type locality Tschuli, N. W. Kopet Dag, Turkmenia). The forearm in *M. n. hoveli* ranges from 38.2 — 40.3 mms (24 specimens) and the condylobasal length of the skull varies from 14.2 — 14.9 mms. Kuzyakin (1950) states that in *M. n. araxenus* the forearm ranges from 42.3 — 47.8 mms, the condylobasal length of the skull 16.2 — 16.8 mms., while in the race *M. n. tschuliensis* the forearm measures 41.7 — 42 mms. and the condylobasal length of the skull 15 — 15.1 mms.