SOME REMARKS ON THE MAMMALS OF SOMALIA

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Statements on the biogeografy of Somali Mammals are beset with more than usual pitfalls. Indeed reliable biogeographical assessments are based on sound knowledge of the systematics and natural distribution of the animals considered and reasonably good knowledge of the paleogeography, paleoecology and paleontology of the area. All these are sadly deficient for everything concerning the Somali Mammals. Systematic studies must be considered in their infancy, as the scanty and scattered material available has not yet been studied even with the more classic biometric methods, not to say of the more recent taxonomical tools of cytotaxonomy and biomolecular methods. The few instances of such studies have yelded higly interesting results, suggesting a hidden wealth of significant data awaiting investigations, but they are still so fragmentary that attempts to draw from them a coherent zoogeografical pattern must be taken as quite tentative.

Such a tentative evaluation we, nevertheless, attempt rather with the hope to stimulate a concentrated effort to build up a truly hard core of facts on which future and more sound assessments may be based.

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We assume here that all the taxa currently recognized as species or subspecies actually deserve this status (unless we have personal reasons to criticise it), and on this assumption we may consider the following table, where we have compared by order the number of taxa known to occur or to have occurred well in this century in Somalia, with the number of supposed endemisms.

The numbers given in the following tables must not only be considered to be indicative, definite numbers being out of the question at the present stage of investigations, but consider Somalia not only within its present *de facto* political boundaries, but rather in a more extensive context, that is: South to the Tana river and North-West to the foothills of the Ethiopian highlands. Within this region there are few, other than ecological, barriers to the diffusion of mammalian species. Moreover it must be noted that there is a certain number of taxa, particularly among the big game, which is debatable whether to consider as typical of the Somali paninsula or not, as they range well beyond its limits, although they may be considered to be typical of this area. Such are, just to quote a few instances, the Lesser Kudu or the Gerenuk, ranging also over most of Ethiopia, Kenya and parts of Tanzania, or the Wild Ass, extending North into Erithrea. Some amount of subjective judgement has therefore been incorporated in the preparation of all the following tables. In order to allow the reader to form his own judgement, we have listed in the appendix both the taxa assumed to be valid and how they have been considered here.

TABLE I

Order	Total species or supspecies	Total endemics	(%)
INSECTIVORA	12	4	33%
SCANDENTIA	3	2	66%
CHIROPTERA	37	8	8%
PRIMATES	7	5	71%
PHOLIDOTA	1	-	-
LAGOMORPHA	3	-	-
RODENTIA	40	14	35%
CARNIVORA	30	12	40%
TUBULIDENTATA	1	1	100%
HYRACOIDEA	2	2	100%
PROBOSCIDEA	2	1	50%
PERISSODACTYLA	5	2	50%
ARTIODACTYLA	32	26	81%
Total	175	72	41%

Some preliminary remarks are necessary at this point:

1) there is a great difference from one order to another in the percentage of endemics it contains and this is not easy to explain. The apparent low number of endemics among the Chiroptera may well be considered as natural as there are no geographic barriers to foster their geographical differenciation, just as ecological and geographical barriers may be claimed to explain the high number of endemic species or subspecies among the Artiodactyla, Hyraxes or, even, the differentiation of the isolated Elephant *Loxodonta africana orleansi* , now extinct in Somalia. But why the Carnivores, Rodents and Insectivores have a compartatively low number of true endemics require somewhat more complicated explanations. The fact that carnivores are much more opportunistic feeders than Ungulates may be one reason for

having evolved a more or less ubiquitous assemblage, which appears to be sufficiently differentiated at an East African level, but, at a Somali level, they are less differentiated than their preys.

Insectivores and Rodents, again appear rather poorly differentiated, and, as we shall see, almost all the endemics belong to the Northern half of Somalia, but this may be a heavily biased impression due to a still too fragmentary knowledge of the insectivore and rodent fauna.

We shall not consider the Chiroptera in our further discussion as, on one side, they are the field of other specialists, and on the other it may well be presumed that further investigations will change considerably our lists.

When we consider that over one half of the total surface of the Somali lands, at least during postpleistocene times, has aways been definitely arid, their natural vegetation being, at best, low bush and scrubs, with vast expanses of definitely subdesert conditions, an ecological situation wich should not be conducitive to rich faunal assemblages, the number of endemics (41%) is remarkable indeed.

If we now make the further step to break up these nunbers according habitat conditions, we get a further interesting picture:

(see first map for habitats considered and note that taxa ranging over different habitats have been counted for each one)

TABLE II

HABITAT	TOTAL SPECIES/SUBSPECIES	ENDEMICS
Riverine forests	52	21 (40%)
Northern mountain range forests	21	9 (43%)
Northen and coastal subdeserts and steppes	42	21 (50%)
Low bush and scrub	48	26 (54%)
Dense bush and savannas	74	34 (46%)

It is immediately apparent that, if we do not count those Somali endemics that are common both to the "dense bush-savanna" complex and to other habitats (18), the large majority of the endemic mammals (32 out of 72) from Somalia belong to three habitats: the riverine forests, the Northern steppes and the central-northern low bush, while the dense bush and savannas have comparatively fewer endemic taxa.

Before going further with our discussion, one must stress that the narrow, and now almost vanished, forest belt fringing the cliffs of the Northern mountains parallel with the coast has never been properly explored.

If we now try to consider the Somali peninsula as being liable to subdivision into subregions, we suggest that the following are sufficiently distinct:

A)Northern coastal,

B) Northern Boswellia-Dracaena-Juniperus forests

C) Central arid zone (including both steppes and low bushland)

D) Riverine and swamp formations

E) Central Somali dense scrub and bush

F) the Lacks area

Table III summarizes the differences between these areas.

TABLE III

	number of taxa	endemic
Northern Coastal	32	13 (41%)
Northerns mountain ranges	29	12 (41%)
Central arid zone (deserts, steppes and low bush)	60	35 (58%)
Riverine and swamp formations	58	20 (34%)
Central somali scrub and bush	68	28 (41%)
Lacks area	49	20 (41%)

Brief consideration of our table and of the appendix shows that the "dense scrub and savanna" area has basically a Kenyote impoverished fauna, the taxa which we have included among the endemics and which are found in this area belonging, almost all to those which are widespread in the Somali peninsula, and that the majority of the other taxa range through most of E.Africa.

The "Northern Forests" area is very poorly known, while the other three have all a high individuality and are markedly different from one another.

Can we suggest an interpretation of the apparent facts? Hypotheses are permissible and we thus submit the following ones: The Tana river-Lacks area has been comparatively isolated for

time enough to give it an East African fauna, which, however shows a limited individuality (*Damaliscus hunteri*, considered the most primitive of the Alcelaphine ,*Ourebia ourebi haggardi*, *Thallomys paedulcus somaliensis*, *Cercopithecus albogularis albotorquatus*, etc.)

The riverine forests of the Jubba and Shebelle must have been surrounded by very dry lands sufficiently long as to allow for the evolution of a reasonably distinct fauna *(Cercopithecus albogularis zammaranoi*, *Kobus ellipsiprymnus pallidus*, *Tragelaphus scriptus fasciatus*, *Funisciurus palliatus tanae*, etc.).

For the other two arid districts the most highly individualized is the central one (*Ammodorcas clarkei*, *Dorcatragus megalotis*, *Litocranius walleri sclateri*, *Madoqua saltiana lawrancei*, *Madoqua piacentinii*, *Gazella spekei*, different Gerbils, Ctenodactyls and *Acomys*), while the N.coastal strip has evolved as a unit with the Erithrean lowlands, as shown by taxa such as *Gazella dorcas pelzelni* which in Erithrea merges with *Gazella dorcas isabella*, Ruppell's fox, or the almost unknown Desert Hedgehog.

We also submit that the original core of the Somali arid fauna was limited to the North of the Shebelle up to the last pluvial times. With the inception of the present dry period some areas in between the two main rivers evolved into a low bush-savanna, an ecosystem which must have been cospiquously lacking during the rainy periods. As a consequence, and due to the fact that the Shebelle must have always been a lesser barrier than the Jubba, some species, such as *Gazella soemmeringi berberana* , from the

North crept into the available niches in central Somalia, although these animals were somewhat more adapted to arid conditions than their kenyote counterparts (*Gazella granti petersi*), which occupy the corresponding niches South of the Jubba.

It is high time that a systematic survey of the mammalian fauna of Somalia is undertaken, before the present dramatic crash of its major wildlife and the spread of degraded habitats will completely blur the picture.

This is not only for pure scientific curiosity. The preservation of the wild mammals has been proved many time to be an essential management tool for African ecosystems and it is urgent to implement a comprehensive and well planned policy of effective measures to preserve viable samples of the various mammalian taxa and than for their reestablishment as balancing factors where they have been or will be eradicated. Such a policy, however may succeed only is we have a really adequate knowledge of the animals themselves, including their genetics and ecology down to subspecies level.

SUMMARY

The authors give a brief analysis of the known mammalian fauna of Somalia, discussing the ecological and geographical distribution of the different endemisms: The evidence is interpreted as pointing to the more or less long isolation of at least three areas of speciation. The still unsatisfactory situation of our informations on the Somali Mammals is emphasized.

APPENDIX 1 : LIST OF TAXA REPORTED FROM SOMALIA

LEGENDA

ENDEMISM :
- A = Endemic of part only of the somali peninsula
- B = Somali peninsula as defined in the text
- C = East Africa from Port Sudan to Tanzania
- D = all Africa
- E = Africa and extra Africa

HABITAT :
- rf = riverine forest
- mf = nord mountain forest
- ds = nord desert and steppes (incl. coast)
- lb = low bush and scrub
- db = dense bush and savannas
- a = many or all

SUBREGION :
- NC = Northern Coastal
- NF = Northern Forest
- CA = Central Arid zone
- RS = Riverine and Swamp formations
- CB = Central somali dense scrub and Bush
- L = Laks area
- A = many or All

LIST

SPECIES OR SUBSPECIES	ENDEMISM	HABITAT	SUBREGION
** INSECTIVORA			
* Soricidae			
Crocidura butleri Thomas, 1911	D	rf	RS
Crocidura cyanea (Duvernoy, 1838)	D	rf	RS
Crocidura gracilipes gracilipes Peters, 1870	D	rf	RS
Crocidura nana Dobson, 1890	D	rf	RS
Crocidura somalica Thomas, 1895	C	rf	RS
Crocidura hirta velutina Thomas, 1904	C	rf	RS
Crocidura smithi Thomas,1895	B	rf	RS
Crocidura greenwoodi Heim de Balsac 1966	A	rf	RS,L

SPECIES OR SUBSPECIES	ENDE-MISM	HABI-TAT	SUB-REGION
* Chrysochloridae			
Amblysomus tytonis Simonetta, 1968	A	db	CA?, CB?
* Erinaceidae			
Paraechinus aethiopicus (Ehrenberg,1833) subsp.indet.?	D	ds	NC
Erinaceus frontalis albiventris Wagner,1841	D	lb,db	CB
Erinaceus frontalis sclateri Anderson, 1895	A	lb,db	CA
** SCANDENTIA			
* Macroscelididae			
Elephantulus revoili (Huet, 1881)	A	ds,lb	NC,CA
Elephantulus rufescens dundasi Dollman, 1910	D	db	CB,L
Elephantulus rufescens somalicus (Thomas, 1901)	A	lb	CA
** CHIROPTERA			
* Pteropodidae			
Epomophorus wahblergi (Sundevall, 1846)	D		
Epomophorus labiatus minor Dobson, 1880	D		
* Rhinopomatidae			
Rhinopoma hardwickei Gray, 1831	E		
* Emballonuridae			
Taphozous (Taphozous) mauritianus E.Geoffroy, 1818	D		
Taphozous (Taphozous) perforatus E.Geoffroy, 1818	E		
Taphozous (Liponycteris) nudiventris Cretzschmar,1826	E		
Coleura afra (Peters, 1852)	E		
* Nycteridae			
Nycteris hispida hispida (Schreber, 1775)	D		
Nycteris parisii parisii (de Beaux, 1924)	A		
Nycteris aethiopica aethiopica Dobson, 1878	D		

SPECIES OR SUBSPECIES	ENDEMISM
Nycteris thebaica E.Geoffroy, 1818	E
Nycteris arge Thomas, 1903	D
* Megadermatidae	
Cardioderma cor (Peters, 1872)	C
Lavia frons (E.Geoffroy, 1810)	D
* Rhinolophidae	
Rhinolophus hildebrandti Peters, 1878	D
Rhinolophus fumigatus Ruppell, 1842	D
Rhinolophus clivosus acrotis Heuglin, 1842	E
Rhinolophus landeri brockmani Thomas, 1910	B
* Hipposideridae	
Hipposideros commersoni marungensis (Noak, 1887)	D
Hipposideros caffer caffer (Sundevall, 1846)	D
Asellia tridens tridens (E.Geoffroy, 1818)	E
Asellia tridens italosomalica De Beaux 1931	B
Triaenops persicus afer Peters, 1877	D
* Vespertilionidae	
Nycticeius (Scoteinus) schlieffeni (Peters, 1859)	E
Nycticeius (Scotecus) hirundo artinii De Beaux, 1923	D
Pipistrellus nanus (Peters, 1852)	D
Pipistrellus eisentrauti (Hill) 1968	D
Eptesicus somalicus somalicus (Thomas, 1901)	D
Eptesicus capensis (A.Smith, 1829)	D
Eptesicus rendalli phasma G.M.Allen, 1911	C
Glauconycteris variegata variegata (Tomes, 1915)	D
Scotophilus nigrita colias ? Thomas, 1904	C

SPECIES OR SUBSPECIES	ENDEMISM	HABITAT	SUBREGION
Miniopterus inflatus africanus Sanborn, 1936	C		
Miniopterus schreibersi arenarius (?) Heller, 1912	D		
Scotecus albigula Thomas, 1909	D		
* Molossidae			
Tadarida (Mops) condylura (A.Smith, 1833)	D		
Tadarida (Chaerephon) pumila (Cretzschmar,1830 or 31)	E		
** PRIMATES			
* Cercopithecidae			
Papio hamadryas Linnaeus, 1758	C	ds,mf	NC,NF
Papio cynocephalus ibeanus Thomas, 1893	B	lb,db, rf	CA,RS, CB,L
Cercopithecus (Cercopithecus) albogularis albotorquatus Pousargues, 1896	A	rf	L
Cercopithecus (Cercopithecus) albogularis zammaranoi De Beaux, 1924	A	rf	RS
Cercopithecus (Cercopithecus) pygerythrus arenarius (Heller, 1913)	B	rf,db	RS,CB, L
* Galagidae			
Galago crassicaudatus lasiotis Peters, 1876	C	rf	CB,L
Galago senegalensis gallarum Thomas, 1901	B	rf,db	CB,RS, L
** PHOLIDOTA			
* Manidae			
Manis (Smutsia) temminckii Smuts, 1832	D	rf	RS
** LAGOMORPHA			
* Leporidae			
Lepus capensis Linn., 1758	E	lb,ds	CA,CB
Lepus habessinicus Hempric & Ehrenberg, 1832	C	lb,ds	CA
Lepus crawshayi de Winton, 1899	D	lb,ds	CB

SPECIES OR SUBSPECIES	ENDEMISM	HABITAT	SUB-REGION
** RODENTIA			
* Ctenodactylidae			
Pectinator spekei Blyth, 1855	C	ds	CA,CB
* Dipodidae			
Jaculus jaculus Linnaeus,1758	D	ds	NC,CA
* Rhizomydae			
Tachyoryctes splendens somalicus Osgood, 1910	A	mf	NF
* Sciuridae			
Funisciurus (Paraxerus) palliatus tanae (Neumann,1902)	C	rf	RS
Funisciurus (Paraxerus) ochraceus ganana Rhoads,1896)	C	rf,db	RS,CB
Xerus rutilus (Cretzschmar, 1826)	C	a	<—A
* Hystricidae			
Hystrix cristata Linnaeus, 1758	D	lb,db	CA,RS, CB,L
* Cricetidae			
Saccostomus mearnsi Heller, 1910	D	rf	RS
Steatomys parvus parvus (?) Rhoads, 1896	C	rf	RS
* Lophiomidae			
Lophiomys imhausi Milne-Edwards, 1867	C	mf,db	NF,CA
* Gerbillidae			
Tatera nigricauda nyama (Dollman, 1911)	C	db	CB
Tatera robusta robusta Cretschmar, 1826	D	db	CB
Tatera phillipsi (de Winton, 1898)	B	db	CB
Taterillus emini zammarani de Beaux,1922	C	db,lb, ds	CA,CB
Ammodillus imbellis (De Winton, 1898)	A	ds	CA
Gerbillus pusillus (Peters,1878)	C	db,lb	CB,NA

SPECIES OR SUBSPECIES	ENDEMISM	HABITAT	SUB-REGION
Gerbillus watersi De Winton, 1901	D	ds	NC
Gerbillus nanus brockmani Thomas, 1910	A	ds,lb	CA,NC
Gerbillus campestris somalicus (Thomas, 1910)	A	ds	NC?,CA
Gerbillus pyramidum acticola Thomas, 1918	A	ds	
Gerbillus dunni Thomas, 1904	B	lb,ds	CA
Gerbillus rosalinda St.Leger, 1929	D	lb	CA
Microdillus peeli (de Winton,1910)	B	lb	CA,L
Parameriones ? sp.		db	CB
* Muridae			
Rattus rattus alexandrinus Geoffroy & Audouin, 1829	(E)	--	--
Praomys (Myomiscus) fumatus (Peters, 1878)	D	db,mf, rf	NF,RS, L
Mastomys huberti subsp (Wrougton,1908)	D	rf	RS
Mus musculus subsp. Linnaeus, 1758	(E)	--	--
Mus (Leggada) minutoides bellus (Thomas, 1910)	D	db	RS,CB
Mus (Leggada) tenellus mahomet (Rhoads,1896)	C	db	RS,CB
Lemniscomys barbarus convictus Osgood, 1910	C	db	RS
Arvicanthis niloticus abyssinicus Ruppel, 1842	C	rf	RS,L?
Arvicanthis somalicus Thomas,1903	B	rf	RS,L?
Thallomys paedulcus somalensis Roche, 1964	A	db	L
Acomys wilsoni Thomas, 1892	C	rf,db, mf	NF,CB, L,RS
Acomys louisae Thomas, 1896	A	ds,lb	NC,CA
Acomys ignitus Dollman, 1910	C	rf,db	CB,RS, L
Acomys brockmani Dollman, 1911	A	ds,lb	CA
Thamnomys (Grammomys) dolichurus (Smuts, 1832)	A?	db	CB
Aethomys kaiseri (Noack,1887)	D	db	L

SPECIES OR SUBSPECIES	ENDE-MISM	HABI-TAT	SUB-REGION
* Bathyergidae			
Heterocephalus glaber Ruppell, 1842	C	a	A
* Gliridae			
Graphiurus murinus brockmani (Dollman, 1910)	B	rf,db	CB,RS
** CARNIVORA			
* Mustelidae			
Ictonyx striatus (Perry, 1810)	D	db	CB,CA?
Mellivora capensis brockmani Wroughton & Cheesman, 1920	B	db	CA,NF?
Mellivora capensis maxwelli Thomas,1923	B	db	CB,L, RS
* Canidae			
Lycaon pictus lupinus Thomas, 1902	D	db,lb	CA,CB, L
Otocyon megalotis canescens Cabrera, 1910	C	a	A?
Canis aureus riparius Hemprich & Ehrenberg, 1832	C	a	A
Canis mesomelas schmidti Noak, 1897	C	db	CB,L
Vulpes rueppelli somaliae Thomas,1918	B	ds	NC
* Viverridae			
Viverra civetta schwarzi (Cabrera, 1929)	C	db	L
Genetta genetta neumanni Matschie, 1902	C	db	CB,RS?
Genetta tigrina erlangeri Matschie,1902	C	db	CB,RS?
Genetta rubiginosa deorum Funaioli & Simonetta, 1960	A	db	CB,RS?
Genetta (Pseudogenetta) abyssinica (Ruppell, 1836)	C	ds,lb	NC?, CA?
Helogale hirtula hirtula Thomas, 1904	B	db	CB
Helogale hirtula powelli Drake-Brockman, 1912	A	db,lb	CA
Helogale parvula atkinsoni Thomas, 1897	B	mf,db	CB,NF?
Herpestes (Galerella) sanguineus ibeae Wrougton, 1907	B	db	CB,CA?

SPECIES OR SUBSPECIES	ENDE-MISM	HABI-TAT	SUB-REGION
Herpestes (Galerella) ratlamuchi ochraceus Gray,1849	B	db,lb	CB,CA
Herpestes ichneumon funestus (Osgood,1910)	D	rf	RS,CB, L
Ichneumia albicauda dialeucos (Hollister, 1916)	C	db	CB,CA, NF,RS, L
Mungos mungo somalicus (Thomas, 1895)	B	db,rf, mf	A
* Protelidae			
Proteles cristatus septentrionalis W.Rotschild, 1902	D	lb	A
* Hyenidae			
Hyaena hyaena dubbah Meyer, 1791	D	lb,ds	NC,CA
Crocuta crocuta (Erxleben, 1777)	D	a	A
* Felidae			
Acinonyx jubatus raineyi Heller, 1913	C	a	A
Felis (Felis) silvestris ocreata Gmelin, 1791	B	a	A
Felis (Leptailurus) serval lipositcta Pocock, 1907	D	db,rf	A
Felis (Lynx) caracal nubicus J.B.Fischer, 1829	D	a	A
Panthera leo somaliensis (Hollister, 1918)	B	a	A
Panthera pardus nanopardus (Thomas, 1904)	C	a	A
** TUBULIDENTATA			
* Orycteropodidae			
Orycteropus afer somalicus Lydekker, 1908	A/B	a	A
** PROBOSCIDEA			
* Elephantidae			
Loxodonta africana orleansi Lydekker, 1907	A	rf,db	CA
Loxodonta africana knochenhaueri (Matschie, 1900)	D	rf,db	L,RS, CB

SPECIES OR SUBSPECIES	ENDE-MISM	HABI-TAT	SUB-REGION
** HYRACOIDEA			
* Procaviidae			
Procavia syriaca pallida Thomas, 1891	A	lb,db	NF
Heterohyrax brucei somalicus (Thomas, 1892)	B	lb	CA,CB, NF
** PERISSODACTYLA			
* Rhinocerontidae			
Diceros bicornis minor (Drummond,1876)	D	a(esc. mf)	A (escl. NF)
Diceros bicornis brucii (Lesson,1842)	D	db	NC,CA
* Equidae			
Equus africanus somaliensis Noak,1884	B	ds	CA,NC
Equus grevyi Oustalet, 1882	B	db	CB
Equus burchelli boehmi Matschie, 1892	D	db	CB,L
** ARTIODACTYLA			
* Suidae			
Potamochoerus porcus somaliensis de Beaux, 1924	A	rf	RS
Phacochoerus aethiopicus delamerei Lonnberg, 1909	B	a	A
* Hippopotamidae			
Hippopotamus amphibius kiboko Heller, 1914	C	rf	RS
* Giraffidae			
Giraffa camelopardalis reticulata de Winton 1899	B	db	L,CB, CA?
* Bovidae			
Syncerus caffer caffer (Sparrman, 1779)	D	rf	RS
Tragelaphus scriptus fasciatus Pocock, 1900	A	rf	RS
Tragelaphus strepsiceros chora (Cretzschmar, 1826)	D	db	CB,NF
Tragelaphus imberbis imberbis (Blyth, 1869)	C	db	CB,CA, RS,NF

SPECIES OR SUBSPECIES	ENDE-MISM	HABI-TAT	SUB-REGION
Cephalophus natalensis bottegoi de Beaux 1924	A	rf	RS
Sylvicapra grimmia deserti Heller, 1913	B	db	CB,L
Kobus ellipsiprymnus pallidus Matschie, 1910	B	rf	L,RS
Oryx gazella beisa (Ruppell, 1835)	C	lb,ds	CA,NC, CB,L
Alcelaphus buselaphus swaynei Schlater, 1892	B	db	CA
Damaliscus hunteri (P.L.Sclater, 1889)	A	db	L
Damaliscus lunatus topi Blaine, 1914	B	rf	RS
Litocranius walleri walleri (Brooke,1878)	B	db,lb	L,CB?
Litocranius walleri sclateri Neumann, 1899	B	db,lb	CA,CB?
Ammodorcas clarkei (Thomas,1891)	B	lb	CA
Oreotragus oreotragus somalicus Neumann, 1902	A	mf	NF
Madoqua (Madoqua) saltiana phillipsi Thomas, 1894	A	ds,lb	CA
Madoqua (Madoqua) saltiana hararensis Neumann, 1905	A/B	ds,lb	CA
Madoqua (Madoqua) saltiana lawrancei Drake Brockman, 1926	A	ds,lb	CA
Madoqua (Madoqua) saltiana swaynei Thomas, 1894	B	lb	CB
Madoqua (Madoqua) piacentinii Drake Brockman, 1911	A	ds	CA
Madoqua (Rhynchotragus) guentheri guentheri Thomas, 1894	A/B	db	CA
Madoqua (Rhynchotragus) kirki kirki (Gunther, 1880)	B	db	CB,L
Dorcatragus megalotis (Menges, 1894)	A	mf	NF
Ourebia ourebi haggardi (Thomas, 1895)	B	rf	CB,L
Gazella soemmeringi berberana Matschie, 1893	A/B	ds,lb, db	CA,CB, NC
Gazella granti petersi Gunther, 1884	C	lb,db	L
Gazella dorcas pelzelni Kohl, 1886	A	ds	NC
Gazella spekei Blyth, 1863	B	ds,lb	CA