

## ORDER ARTIODACTYLA

by Peter Grubb

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COMMENTS: Sequence of non-ruminant families follows Simpson (1945); sequence of ruminant families based on Janis and Scott (1987).

**Family Suidae** Gray, 1821. London Med. Repos., 15:306.

**Subfamily Babyrousinae** Gray, 1868. Proc. Zool. Soc. Lond., 1868:21, 41.

*Babyrousa* Perry, 1811. Arcana, Mus. Nat. Hist. (plate and 2 pages, unno.).

TYPE SPECIES: *Babyrousa quadricornua* Perry, 1811 (= *Sus babyrussa* Linnaeus, 1758).

COMMENTS: Revised by Groves (1980b).

*Babyrousa babyrussa* (Linnaeus, 1758). Syst. Nat., 10th ed., 1:50.

TYPE LOCALITY: "Borneo" (= Buru Isl, Indonesia).

DISTRIBUTION: N and C Sulawesi, Lembah Isl, Buru (N Molucca Isls), Sula Isls, Malengi Isl (Togean Isls).

STATUS: CITES - Appendix I; U.S. ESA - Endangered; IUCN - Vulnerable.

SYNONYMS: *alfurus*, *beruensis*, *bolabatuensis*, *celebensis*, *frosti*, *quadricornua*, *togeanensis*.

**Subfamily Phacochoerinae** Gray, 1868. Proc. Zool. Soc. Lond., 1868:21, 45.

*Phacochoerus* F. Cuvier, 1826. Dict. Sci. Nat., 39:383.

TYPE SPECIES: *Aper aethiopicus* Pallas, 1766.

SYNONYMS: *Aper*, *Dinochoerus*, *Eureodon*, *Macrocephalus*.

*Phacochoerus aethiopicus* (Pallas, 1766). Misc. Zool., p. 16.

TYPE LOCALITY: South Africa, between Kaffraria and Great Namaqualand, two hundred leagues from the Cape of Good Hope. See Vosmaer (1766).

DISTRIBUTION: Cape Province, South Africa (extinct); N Kenya and Somalia. See Grubb (in press).

SYNONYMS: *delamerei*, *edentatus*, *pallasii*, *typicus* (see Grubb, in press).

COMMENTS: For distinctions from *P. africanus*, see Ewer (1957).

*Phacochoerus africanus* (Gmelin, 1788). In Linnaeus, Syst. Nat., 13th ed., 1:220.

TYPE LOCALITY: Senegal, Cape Verde.

DISTRIBUTION: Outside forest zone of Africa from Senegal to Somalia, south to S Africa, Botswana and Namibia.

SYNONYMS: *aeliani*, *barkeri*, *bufo*, *centralis*, *fossor*, *haroia*, *incisivus*, *massaicus*, *sclateri*, *shortridgei*, *sundevallii*.

COMMENTS: Specifically distinct from *P. aethiopicus*, see Cooke and Wilkinson (1978), Ewer (1957), and Grubb (in press).

**Subfamily Suinae** Gray, 1821. London Med. Repos., 15:306.

*Hylochoerus* Thomas, 1904. Nature, 70:577.

TYPE SPECIES: *Hylochoerus meinertzhageni* Thomas, 1904.

*Hylochoerus meinertzhageni* Thomas, 1904. Nature, 70:577.

TYPE LOCALITY: Kenya, Nandi Forest, near Kaimosi, 7,000 ft. See Allen and Lawrence (1936).

DISTRIBUTION: Guinea to Ghana; E Nigeria to Kenya and N Tanzania; SW Ethiopia.

SYNONYMS: *gigliolii*, *ituriensis*, *ivorienensis*, *rimator*, *schulzi*.

COMMENTS: See Thomas (1904 [1905]) for designation of the type specimen.

*Potamochoerus* Gray, 1854. Proc. Zool. Soc. Lond., 1852:129 [1854].

TYPE SPECIES: *Choiropotamus pictus* Gray, 1852 (= *Sus porcus* Linnaeus, 1758).

SYNONYMS: *Choiropotamus*, *Koiropotamus*, *Nyctochoerus*.

COMMENTS: Revised by de Beaux (1924).

*Potamochoerus larvatus* (F. Cuvier, 1822). Mem. Mus. Hist. Nat. Paris, 8:447.

TYPE LOCALITY: Madagascar (no precise locality).

DISTRIBUTION: Ethiopia, S Sudan and E Zaire south to E and S South Africa, west to N Botswana and Angola; Madagascar and Comoro Isls (introduced?).

SYNONYMS: *africanus*, *arrhenii*, *choeropotamus*, *congicus*, *cottoni*, *daemonis*, *edwardsi*, *hassama*, *hova*, *intermedius*, *johnstoni*, *keniae*, *koiropotamus*, *madagascariensis*, *maschona*, *nyasae*, *somaliensis*.

COMMENTS: Specifically distinct from *P. porcus*, see de Beaux (1924) and Grubb (in press).

*Potamochoerus porcus* (Linnaeus, 1758). Syst. Nat., 10th ed., 1:50.

TYPE LOCALITY: "Guinea" (= West Africa).

DISTRIBUTION: Rainforest zone of Africa from Senegal to Zaire.

SYNONYMS: *albifrons*, *albinuchalis*, *mawambicus*, *penicillatus*, *pictus*, *ubangensis*.

*Sus* Linnaeus, 1758. Syst. Nat., 10th ed., 1:49.

TYPE SPECIES: *Sus scrofa* Linnaeus, 1758.

SYNONYMS: *Aulacochoerus*, *Centuriosus*, *Dasychoerus*, *Euhys*, *Microsus*, *Porcula*, *Scrofa*, *Sinismus*.

COMMENTS: Revised by Groves (1981a).

*Sus barbatus* Müller, 1838. Tijdschr. Nat. Gesch. Physiol., 5:149.

TYPE LOCALITY: Indonesia, Kalimantan, Banjarmasin.

DISTRIBUTION: Palawan, Balabac Isl, and Calamian Isls (Philippines); Sumatra, Banka Isl, Rhio Arch., Peninsular Malaysia, Borneo.

STATUS: IUCN - Vulnerable as *S. b. oi*.

SYNONYMS: *ahoenobarbus*, *balabacensis*, *branti*, *calamianensis*, *edmondi*, *gargantua*, *longirostris*, *oi*, *palavensis*, *sumatranus*.

*Sus bucculentus* Heude, 1892. Mem. Hist. Nat. Emp. Chin., 2:XXB, fig. 7.

TYPE LOCALITY: Viet Nam, Cochinchina, "les bords du Donnai" (Dong Nai River).

DISTRIBUTION: South Vietnam.

COMMENTS: Known only from two skulls; "closely related" to *S. verrucosus* but treated as a separate species (Groves, 1981a).

*Sus cebifrons* Heude, 1888. Mem. Hist. Nat. Emp. Chin., 2, pl. 17, fig. 5.

TYPE LOCALITY: Philippines, Cebu Isl.

DISTRIBUTION: Philippines: Cebu and Negros Isls.

STATUS: IUCN - Vulnerable.

SYNONYMS: *negrinus*.

COMMENTS: Specifically distinct from *S. barbatus* and *S. philippensis* (Groves and Grubb, in press; Sanborn, 1952a).

*Sus celebensis* Müller and Schlegel, 1843. In Temminck, Verh. Nat. Gesch. Nederland. Overz. Bezitt., Zool., p. 177[1845]; pl. 28[1843].

TYPE LOCALITY: Indonesia, Sulawesi, Manado.

DISTRIBUTION: Indonesia: Sulawesi and neighboring small islands; feral on Halmahera and Simaleue Isls.

SYNONYMS: *amboinensis*, *macassaricus*, *maritimus*, *mimus*, *nehringii*, *niadensis*, *weberi*.

COMMENTS: Although this species is commonly cited from "Müller, 1840. In Temminck, Verh. Nat. Gesch. Nederland. Overz. Bezitt., Zool., Zoogd. Indisch. Archipel, p. 42", it is not found on that page. A species distinct from *S. verrucosus* (Groves, 1981a).

*Sus heureni* Hardjasmita, 1987. Scripta Geol., 85:46.

TYPE LOCALITY: Indonesia, W Flores Isl, Manggarai Plain near Pota.

DISTRIBUTION: Flores Isl (Indonesia).

COMMENTS: A prior name for this species may be *Microsus floresianus* Heude, 1898; see Groves (1981a) who regarded warty pigs from Flores as a feral population of *S. celebensis*.

*Sus philippensis* Nehring, 1886. Sber. Ges. Naturf. Fr., Berlin, 1886:83.

TYPE LOCALITY: Philippines, Luzon Isl.

DISTRIBUTION: Philippines: Luzon, Mainit, Mindanao, Jolo, Mindoro, Catanduanis and Samar Isls.

SYNONYMS: *arietinus*, *crassidens*, *effrenus*, *frenatus*, *inconstans*, *joloensis*, *mainitensis*, *marchei*, *megalodontus*, *microtis*, *mindanensis*, *minutus*.

COMMENTS: Regarded as a species distinct from *S. barbatus* (Groves and Grubb, in press).

*Sus salvanius* (Hodgson, 1847). J. Asiat. Soc. Bengal, 16:423.

TYPE LOCALITY: India, Sikkim Terai.

DISTRIBUTION: Bhutan, S Nepal, N India (incl. Sikkim).

STATUS: CITES - Appendix I; U.S. ESA and IUCN - Endangered.

*Sus scrofa* Linnaeus, 1758. Syst. Nat., 10th ed., 1:49.

TYPE LOCALITY: Germany.

DISTRIBUTION: N Africa; Europe, S Russia and China south to Middle East, India, Sri Lanka, and Indonesia (Sumatra, Java east to Bali and Sumbawa Isls). Extinct in British Isles and Scandinavia. Populations of Corsica and Sardinia and formerly in Egypt and N Sudan are or were of old feral origin. Widespread as feral populations in Norway, Sweden, South Africa, Lesser Sunda Isls, Australia, USA, West Indies, Central and South America and numerous oceanic islands, including Andaman Isls and Mauritius (Indian Ocean); Hawaiian, Galapagos and Fiji Isls (Pacific Ocean). Feral and domestic populations of Molucca Isls, New Guinea and Solomon Isls thought to originate from *scrofa* X *celebensis* hybrids.

STATUS: IUCN - Vulnerable as *S. s. riukiuanus*.

SYNONYMS: *acrocranius*, *affinis*, *aipomus*, *algira*, *andamanensis*, *andersoni*, *aper*, *\*aruensis*, *attila*, *babi*, *baeticus*, *barbarus*, *bengalensis*, *canescens*, *castilianus*, *celtica*, *\*ceramensis*, *chirodontus*, *collinus*, *continentalis*, *coreanus*, *cristatus*, *curtidens*, *davidi*, *dicrurus*, *enganus*, *europaeus*, *falzfeini*, *ferus*, *flavescens*, *floresianus* Jentink, 1905; *frontosus*, *gigas*, *\*goramensis*, *indicus*, *isonotus*, *japonica*, *jubatulus*, *jubatus*, *laticeps*, *leucomystax*, *leucorhinus*, *libycus*, *majori*, *mandchuricus*, *mediterraneus*, *melas*, *meridionalis*, *microdontus*, *milleri*, *moupinensis*, *naturinensis*, *nicobaricus*, *\*niger*, *nigripes*, *nipponicus*, *oxyodontus*, *paludosus*, *palustris*, *\*papuensis*, *peninsularis*, *planiceps*, *raddeanus*, *reiseri*, *rhionis*, *riukiuanus*, *sahariensis*, *sardous*, *scrofoides*, *sennaarensis*, *setosus*, *sibiricus*, *songaricus*, *spatharius*, *taininensis*, *taivanus*, *\*ternatensis*, *tuancus*, *ussuricus*, *vittatus*, *zeylonensis* (\* may be based on descendants of *scrofa* X *celebensis* hybrids).

COMMENTS: For systematics, origin, and distribution of feral populations see Groves (1981a), Lever (1985), Uerpmann (1987), and Vigne (1988).

*Sus timoriensis* Müller, 1840. In Temminck, Verh. Nat. Gesch. Nederland. Overz. Bezitt., Zool., Zoogd. Indisch. Archipel, p. 42[1840].

TYPE LOCALITY: Indonesia, "Timor" Isl, Pritti near Kupang.

DISTRIBUTION: Timor Isl (Indonesia).

COMMENTS: This species was further described by Müller and Schlegel, 1845, in Temminck, Verh. Nat. Gesch. Nederland. Overz. Bezitt., Zool., Mammalia, p. 173. A feral population of *S. celebensis* according to Groves (1981a), but a valid species according to Hardjasmita (1987).

*Sus verrucosus* Müller, 1840. In Temminck, Verh. Nat. Gesch. Nederland. Overz. Bezitt., Zool., Zoogd. Indisch. Archipel, p. 42[1840].

TYPE LOCALITY: Indonesia, "Java".

DISTRIBUTION: Java, Madoera Isl, Bawean Isl.

STATUS: IUCN - Vulnerable.

SYNONYMS: *blouchi*, *borneensis*, *ceramica*, *mystaceus*, *olivieri*.

COMMENTS: This species was further described by Müller and Schlegel, in Temminck, Verh. Nat. Gesch. Nederland. Overz. Bezitt., Zool., Mammalia, p. 175[1845], pl. 28[1843]. Synonyms apparently from Borneo and Seram were based on wrongly located specimens (Groves, 1981a).

**Family Tayassuidae** Palmer, 1897. Proc. Biol. Soc. Washington, 11:174.

*Catagonus* Ameghino, 1904. An. Mus. Soc. Cient. Argent., 58:188.

TYPE SPECIES: *Catagonus metropolitanus* Ameghino, 1904 (extinct).

*Catagonus wagneri* (Rusconi, 1930). An. Mus. Nac. Hist. Nat. "Bernardino Rivadavia," 36:231.

TYPE LOCALITY: Argentina, Santiagodel Estero, Llajta Manca.

DISTRIBUTION: Gran Chaco of Paraguay, Argentina, and Bolivia.

STATUS: CITES - Appendix I; IUCN - Vulnerable.

COMMENTS: Originally described from pre-Hispanic and subfossil remains; subsequently discovered alive; see Wetzel et al. (1975), and Wetzel (1977, 1981). Reviewed by Mayer and Wetzel (1986, Mammalian Species, 259).

*Pecari Reichenbach*, 1835. Bildergalerie der Thierwelt, part 6, p. 1.

TYPE SPECIES: *Dicotyles torquatus* Cuvier, 1816 (= *Sus tajacu* Linnaeus, 1758).

SYNONYMS: *Notophorus*.

COMMENTS: The Collared Peccary should be assigned to a separate genus from the White-lipped species according to Woodburne (1968), Husson (1978:347-348), and Wright (1989). Use of appropriate generic names for these taxa is controversial. Genotypes of *Tayassu* and *Dicotyles* by subsequent designation are White-lipped Peccaries, see Miller and Rehn (1901:12), and Miller (1912b:384), so the correct generic name for Collared Peccaries appears to be *Pecari*, with type by monotypy *Dicotyles torquatus*.

*Pecari tajacu* (Linnaeus, 1758). Syst. Nat., 10th ed., 1:50.

TYPE LOCALITY: Mexico, designated by Thomas (1911a:140); however, Linnaeus's name *Sus tajacu* is evidently based on the *tajacu* of Marcgraf, from Pernambuco, Brazil; see Cabrera (1961:319) and Hershkovitz (1987b).

DISTRIBUTION: N Argentina and NW Peru to NC Texas, SW New Mexico and Arizona (USA). Introduced to Cuba.

STATUS: CITES - Appendix II as *Tayassu* spp.

SYNONYMS: *angulatus*, *bangsi*, *crassus*, *crusnigrum*, *humeralis*, *macrocephalus*, *minor*, *modestus*, *nanus*, *nelsoni*, *niger*, *nigrescens*, *patira*, *sonoriensis*, *torquatus*, *torvus*, *yucatanensis*.

*Tayassu* G. Fischer, 1814. Zoognosia, 3:284.

TYPE SPECIES: *Tayassu pecari* Fischer, 1814 (= *Sus pecari* Link, 1795).

SYNONYMS: *Adenonotus*, *Dicotyles*, *Olidosus*.

COMMENTS: By subsequent designation, the type of *Tayassu* is *T. pecari* Fischer, 1814 (= *Sus pecari* Link, 1795); see Miller and Rehn (1901:12). By subsequent designation, the type of *Dicotyles* is *D. labiatus* G. Cuvier; see Miller (1912b:384). *Sus pecari* and *Dicotyles labiatus* are synonyms of *Tayassu pecari*; see Hershkovitz (1963). Therefore, *Dicotyles* is a synonym of *Tayassu*, but see Husson (1978:347-348) and Woodburne (1968) for contrary views.

*Tayassu pecari* (Link, 1795). Beitr. Naturgesch., 2:104.

TYPE LOCALITY: French Guiana, Cayenne.

DISTRIBUTION: Oaxaca and Veracruz (Mexico) to W Ecuador, Brazil and NE Argentina. Introduced to Cuba.

STATUS: CITES - Appendix II.

SYNONYMS: *aequatoris*, *albirostris*, *beebei*, *labiatus*, *ringens*, *spiradens*.

COMMENTS: Includes *albirostris*; see Husson (1978:353). Reviewed by Mayer and Wetzel (1987, Mammalian Species, 293).

**Family Hippopotamidae** Gray, 1821. London Med. Repos., 15:306.

*Hexaprotodon* Falconer and Cautley, 1836. Asia. Res. Calcutta, 19:51.

TYPE SPECIES: *Hippopotamus sivalensis* Falconer and Cautley, 1836 (extinct fossil Asiatic species).

SYNONYMS: *Choerodes*, *Choeropsis*, *Diprotodon*.

COMMENTS: Includes *Choeropsis* Leidy, 1853, following Coryndon (1977).

*Hexaprotodon liberiensis* (Morton, 1849). J. Acad. Nat. Sci. Phila., (2)1:232.

TYPE LOCALITY: Liberia, St. Paul's River.

DISTRIBUTION: Sierra Leone to Ivory Coast; SC Nigeria (extinct?).

STATUS: CITES - Appendix II; IUCN - Vulnerable.

SYNONYMS: *heslopi*, *minor*

*Hexaprotodon madagascariensis* (Guldborg, 1883). Videnskabs-Selsk. Christiania. Forh., 6:1-24.

TYPE LOCALITY: Madagascar, near Antsirabé.



DISTRIBUTION: Known from subfossil material from the central highlands of Madagascar; apparently survived into present millenium (Stuenes, 1989).

COMMENTS: Transferred to *Hexaprotodon* from *Hippopotamus*; see J.M. Harris (1991).

*Hippopotamus* Linnaeus, 1758. Syst. Nat., 10th ed., 1:74.

TYPE SPECIES: *Hippopotamus amphibius* Linnaeus, 1758.

*Hippopotamus amphibius* Linnaeus, 1758. Syst. Nat., 10th ed., 1:74.

TYPE LOCALITY: Egypt, Nile River.

DISTRIBUTION: Rivers of savanna zone of Africa, and main rivers of forest zone in Zaire, south to rivers of S Cape Province (South Africa), and north along White Nile to Nile Delta (Egypt); now extinct along most of the White Nile and in most of South Africa, except in N and E Transvaal and N Natal.

STATUS: CITES - Appendix III (Ghana).

SYNONYMS: *abyssinicus*, *australis*, *capensis*, *constrictus*, *kiboko*, *senegalensis*, *tschadensis*, *typus*.

*Hippopotamus lemerlei* Grandidier, 1868. In Milne Edwards, C. R. Acad. Sci. (Paris), 67:1165.

TYPE LOCALITY: Madagascar, Ambolisatra.

DISTRIBUTION: Known from subfossil material from coastal S Madagascar; survived into present millenium, 9th-13th Century (Stuenes, 1989).

SYNONYMS: *leptorhynchus*, *standini*.

**Family Camelidae** Gray, 1821. London Med. Repos., 15:307.

*Camelus* Linnaeus, 1758. Syst. Nat., 10th ed., 1:65.

TYPE SPECIES: *Camelus bactrianus* Linnaeus, 1758.

*Camelus bactrianus* Linnaeus, 1758. Syst. Nat., 10th ed., 1:65.

TYPE LOCALITY: "Bactria" (= Uzbekistan, Bokhara) (domesticated stock).

DISTRIBUTION: Exists in the wild only in SW Mongolia, Kansu, Tsinghai, and Sinkiang (China); domesticated in Iran, Afghanistan, and Pakistan, north to Kazakhstan, Mongolia, and China.

STATUS: U.S. ESA - Endangered; IUCN - Vulnerable.

SYNONYMS: *ferus*.

COMMENTS: Includes *ferus* Przewalski, 1883, based on wild specimen; *bactrianus* Linnaeus, 1758, has priority. Produces fertile hybrids with *dromedarius*. Though their distributions merge, breeding is regulated (as all individuals are domesticated in the zone of contact). Corbet (1978c:197), citing A.P. Gray (1954), stated that male hybrids are sterile.

*Camelus dromedarius* Linnaeus, 1758. Syst. Nat., 10th ed., 1:65.

TYPE LOCALITY: "Africa," deserts of Libya and Arabia (domesticated stock).

DISTRIBUTION: Extinct in the wild; first domesticated about 4,000 yr BP from wild populations which had become restricted to the S Arabian Peninsula; domesticated from Senegal and Mauritania to Somalia and Kenya, throughout N Africa, the Middle East, Arabia, and Iran to NW India; feral populations in Australia.

COMMENTS: Produces fertile hybrids with *bactrianus* (see comments therein). Bohlken (1961) considered *dromedarius* a synonym of *bactrianus*. Reviewed by Köhler-Rollefson (1991, Mammalian Species, 375). Biology reviewed by Gauthier-Pilters and Innis Daggs (1981). For history of domestication, see R. T. Wilson (1984).

*Lama* G. Cuvier, 1800. Lecon Anat. Comp., I, tab. 1.

TYPE SPECIES: *Camelus glama* Linnaeus, 1758.

SYNONYMS: *Auchenia*, *Neoauchenia*, *Pacos*.

*Lama glama* (Linnaeus, 1758). Syst. Nat., 10th ed., 1:65.

TYPE LOCALITY: Peru, Andes (domesticated stock).

DISTRIBUTION: Domesticated in S Peru, W Bolivia, NW Argentina.

SYNONYMS: *ameginiana*, *araucanus*, *castelnaudi*, *chilihueque*, *cordubensis*, *crequii*, *ensenadensis*, *intermedia*, *lama*, *moromoro*, *peruana*.

*Lama guanicoe* (Müller, 1776). Linné's Vollstand. Natursyst. Suppl., p. 50.

TYPE LOCALITY: Chile, Andes of Patagonia.

DISTRIBUTION: Cordilleras of the Andes: S Peru, Bolivia, Argentina, and Chile; Patagonia and Tierra del Fuego (Chile and Argentina); Navarino Isl (Chile).

STATUS: CITES - Appendix II.

SYNONYMS: *cacsilensis*, *huanacus*, *loennbergi*, *mesolithica*, *molinaei*, *voglii*.

COMMENTS: Has previously been included with the Llama, *L. glama*, of which it may be the wild ancestor, see Lydekker (1915). See also Hemmer (1990).

*Lama pacos* (Linnaeus, 1758). Syst. Nat., 10th ed., 1:65.

TYPE LOCALITY: Peru (domesticated stock).

DISTRIBUTION: Domesticated in S Peru, W Bolivia.

SYNONYMS: *lujanensis*.

COMMENTS: Often regarded as a synonym for *glama*; see Corbet and Hill (1991:126).

Probably originated from hybrids between *Lama glama* and *Vicugna vicugna*; see Hemmer (1990).

*Vicugna* Lesson, 1842. Nouv. Tabl. Regn. Anim. Mammifères, p. 167.

TYPE SPECIES: *Camelus vicugna* Molina, 1782.

*Vicugna vicugna* (Molina, 1782). Sagg. Stor. Nat. Chile, p. 313.

TYPE LOCALITY: Chile, cordilleras of Coquimbo and Copiapo.

DISTRIBUTION: S Peru, W Bolivia, NW Argentina, N Chile.

STATUS: CITES - Appendix I, some Chilean and Peruvian populations Appendix II; U.S. ESA - Endangered; IUCN - Vulnerable.

SYNONYMS: *elfridae* Krumbiegel?; *frontosa*, *gracilis*, *mensalis*, *minuta*, *pristina*, *provicugna*.

**Family Tragulidae** Milne-Edwards, 1864. Ann. Sci. Nat. Zool. Paris, ser. 5, 2:157.

*Hyemoschus* Gray, 1845. Ann. Mag. Nat. Hist., [ser. 1], 16:350.

TYPE SPECIES: *Moschus aquaticus* Ogilby, 1841.

*Hyemoschus aquaticus* (Ogilby, 1841). Proc. Zool. Soc. Lond., 1840:35 [1841].

TYPE LOCALITY: Sierra Leone, Bulham Creek.

DISTRIBUTION: Sierra Leone to Ghana; Nigeria to Zaire, marginally entering Uganda.

STATUS: CITES - Appendix III (Ghana).

SYNONYMS: *batesi*, *cottoni*.

*Moschiola* Hodgson, 1843. Calcutta J. Nat. Hist., 4:292.

TYPE SPECIES: *Tragulus mimenoides* Hodgson, 1842 (= *Moschus meminna* Erxleben, 1777).

COMMENTS: Treated as a full genus by Groves and Grubb (1987), following Flerov (1931).

*Moschiola meminna* (Erxleben, 1777). Syst. Regn. Anim., 1:322.

TYPE LOCALITY: Sri Lanka.

DISTRIBUTION: Sri Lanka, peninsular India, Nepal.

SYNONYMS: *indica*, *malaccensis*, *mimenoides*.

*Tragulus* Pallas, 1779. Spicil. Zool., 13:27.

TYPE SPECIES: *Cervus javanicus* Osbeck, 1765.

COMMENTS: Original citation, Brisson, 1762, Regn. Anim., 2nd ed., 12:65-68, is not available according to Hopwood (1947).

*Tragulus javanicus* (Osbeck, 1765). Reise nach Ostindien und China, p. 357.

TYPE LOCALITY: Indonesia, W Java, Udjon Kulon Peninsula.

DISTRIBUTION: Indochina, Thailand, Yunnan (China), Malaysia, Sumatra, Borneo, Java, many adjacent islands.

SYNONYMS: *affinis*, *angustiae*, *brevipes*, *carimatae*, *everetti*, *focalinus*, *fulvicollis*, *fulviventer*, *fuscatus*, *hosei*; *indicus* Brisson, 1765 (not available); *insularis*, *kanchil*, *klossi*, *lampensis*, *lancavensis*, *longipes*, *luteicollis*, *masae*, *mergatus*, *natunae*, *pallidus*, *pelandoc*, *penangensis*, *pidonis*, *pierrei*, *pinus*, *pumilus*, *ravulus*, *ravus*, *rubeus*, *russeus*, *russulus*, *subrufus*, *virgicollis*, *williamsoni*.

COMMENTS: In older literature, known as *T. kanchil*; see Van Bemmelen (1949b).

*Tragulus napu* (F. Cuvier, 1822). In E. Geoffroy and F. Cuvier, Hist. Nat. Mammifères, pt. 2, 4(37):4 pp. "Chevrotain napu".

TYPE LOCALITY: Indonesia, S Sumatra.

DISTRIBUTION: Indochina, Thailand, Malaysia, Borneo, Balabac Isl (Philippines), Sumatra, many adjacent islands.

SYNONYMS: *abjectus*, *abruptus*, *amoenus*, *anambensis*, *annae*, *bancanus*, *banguei*, *batuanus*, *billitonus*, *borneanus*, *bunguranensis*, *canescens*, *flavicollis*, *formosus*, *hendersoni*, *jugularis*, *lutescens*, *neubronneri*, *niasis*, *nigricans*, *nigricollis*, *nigrocinctus*, *parallelus*, *perflavus*, *pretiellus*, *pretiosus*, *rufulus*, *sebusus*, *siantanicus*, *stanleyanus*, *terutus*, *umbrinus*, *versicolor*.

COMMENTS: In older literature, mistakenly given the name *T. javanicus*; see Van Bemmelen (1949b).

**Family Giraffidae** Gray, 1821. London Med. Repos., 15:307.

COMMENTS: Placement of this family follows Janis and Scott (1987).

*Giraffa* Brännich, 1771. Zool. Fundamenta, p. 36.

TYPE SPECIES: *Cervus camelopardalis* Linnaeus, 1758.

SYNONYMS: *Camelopardalis*, *Orasius*, *Trachelotherium*.

*Giraffa camelopardalis* (Linnaeus, 1758). Syst. Nat., 10th ed., 1:66.

TYPE LOCALITY: "Æthiopia et Sennar", restricted to Sudan, Sennar, by Harper (1940:322).

DISTRIBUTION: Formerly, Gambia and Senegal to Ethiopia and Somalia, south to Central African Republic, NE Zaire, Uganda and Tanzania; E and SW Zambia; S Angola, Zimbabwe and S Mozambique to South Africa, mostly north of the Orange River. Distribution now much restricted; in W Africa still present at least until recently in Mali, Burkina Faso, Niger, NE Nigeria and N Cameroon; in southern Africa, now ranging no further south than N Namibia, Botswana and E Transvaal (South Africa).

SYNONYMS: *aethiopica*, *angolensis*, *antiquorum*, *australis*, *biturigum*, *capensis*, *congoensis*, *cottoni*, *giraffa*, *hagenbecki*, *infumata*, *maculata*, *nigrescens*, *peralta*, *renatae*, *reticulata*, *rothschildi*, *schillingsi*, *senaariensis*, *thornicrofti*, *tippelskirchi*, *wardi*.

COMMENTS: Reviewed by Dag (1971, Mammalian Species, 5).

*Okapia* Lankester, 1901. Nature, 64:24.

TYPE SPECIES: *Equus johnstoni* P. L. Sclater, 1901.

*Okapia johnstoni* (P. L. Sclater, 1901). Proc. Zool. Soc. Lond., 1901(1):50.

TYPE LOCALITY: Zaire, Semliki Forest, Mundala.

DISTRIBUTION: N and E Zaire; perhaps adjacent areas.

SYNONYMS: *eriksoni*, *kibalensis*, *liebrechtsi*, *tigrinum*.

**Family Moschidae** Gray, 1821 London Med. Repos., 15:307.

COMMENTS: A family separate from the Cervidae; see Flerov (1952), Webb and Taylor (1980), Groves and Grubb (1987), and Janis and Scott (1987).

*Moschus* Linnaeus, 1758. Syst. Nat., 10th ed., 1:66.

TYPE SPECIES: *Moschus moschiferus* Linnaeus, 1758.

SYNONYMS: *Odontodorcus*.

COMMENTS: Species limits in E Himalayas are still uncertain; see Cai and Feng (1981), Groves (1976, 1980a), Groves and Grubb (1987), and Grubb (1982a).

*Moschus berezovskii* Flerov, 1929. C. R. Acad. Sci. U.S.S.R., 1928A:519 [1929].

TYPE LOCALITY: China, Szechwan, near Lungan, Ho-tsi-how Pass.

DISTRIBUTION: S and C China including Anhwei, Tibet?; N Vietnam.

STATUS: CITES - Appendix II; U.S. ESA - Endangered in Tibet and Yunnan (China).

SYNONYMS: *anhuiensis*, *caobangis*.

COMMENTS: Includes *anhuiensis*; see Groves and Feng (1986). A well-defined species; see Gao (1963), Groves (1976), and Grubb (1982a).

*Moschus chrysogaster* (Hodgson, 1839). J. Asiat. Soc. Bengal, 8:203.

TYPE LOCALITY: "Nepal" (Probably Tibetan Plateau).

DISTRIBUTION: Himalayas of N Afghanistan, N Pakistan, N India (incl. Sikkim), and Nepal; C Tibet to C China.

STATUS: CITES - Appendix I in Afghanistan, Bhutan, India, Nepal, and Pakistan; otherwise Appendix II; U.S. ESA - Endangered in Afghanistan, Bhutan, China (Yunnan and Tibet), India, Nepal, Pakistan, and Sikkim.

SYNONYMS: *cupreus*, *leucogaster*, *sifanicus*.

COMMENTS: A well defined species; see both Groves (1976) and Gao (1963), under the name *sifanicus*. The name *sifanicus* should be included in *M. chrysogaster*, but "*chrysogaster*" of Cai and Feng (1981) is subspecifically or specifically distinct. Available name for this taxon may be *leucogaster* Hodgson, 1839; see Grubb (1982a). Groves and Grubb (1987) provisionally treated *leucogaster* as a species; Grubb (1990) listed it as a Himalayan subspecies-group of *M. chrysogaster*.

*Moschus fuscus* Li, 1981. Zool. Res., 2:159.

TYPE LOCALITY: China, Yunnan, Gongshan-Xian, Bapo, 3,500 m.

DISTRIBUTION: W Yunnan and SE Tibet (China); N Burma; Assam and Sikkim (India); Bhutan; Nepal.

STATUS: CITES - Appendix I in Bhutan, Burma, India, and Nepal; otherwise Appendix II; U.S. ESA - Endangered in Bhutan, Burma, China, Sikkim, India, and Nepal.

COMMENTS: Gao (1985) treated *fuscus* as a subspecies of *chrysogaster*.

*Moschus moschiferus* Linnaeus, 1758. Syst. Nat., 10th ed., 1:66.

TYPE LOCALITY: "Tataria versus Chinam"; restricted to Russia, SW Siberia, Altai Mtns by Heptner et al. (1961).

DISTRIBUTION: Forests of E Siberia, N Mongolia, N China west to Kansu, Korea, Sakhalin Isl.

STATUS: CITES - Appendix II.

SYNONYMS: *altaicus*, *arcticus*, *parvipes*, *sachalinensis*, *sibiricus*, *turowi*.

COMMENTS: Includes *sibiricus*; see Corbet (1978c:198).

### Family Cervidae Goldfuss, 1820. Handb. Zool., 2:xx, 374.

COMMENTS: Reviewed by Whitehead (1972) and by Groves and Grubb (1987). For introduced populations, see Lever (1985).

### Subfamily Cervinae Goldfuss, 1820. Handb. Zool., 2:xx, 374.

*Axis* H. Smith, 1827. In Griffith et al., Anim. Kingdom, 5:312.

TYPE SPECIES: *Cervus axis* Erxleben, 1777.

SYNONYMS: *Hyelaphus*.

COMMENTS: Treated as a full genus, not a subgenus of *Cervus*, by Groves and Grubb (1987).

*Axis axis* (Erxleben, 1777). Syst. Regn. Anim., 1:312.

TYPE LOCALITY: India, Bihar, "banks of the Ganges."

DISTRIBUTION: India (incl. Sikkim); Sri Lanka; Nepal; introduced to the former Yugoslavia, republics of the former W USSR (still extant?), Andaman Isls, Australia, Hawaiian Isls and Texas (USA), Brazil, Argentina and Uruguay.

SYNONYMS: *ceylonensis*, *indicus*, *maculatus*, *major*, *minor*, *nudipalpebra*.

*Axis calamianensis* (Heude, 1888). Mem. Hist. Nat. Emp. Chin., 2:49.

TYPE LOCALITY: Philippines, Calamian Isls, Culion Isl.

DISTRIBUTION: Philippines, Calamian Isls.

STATUS: CITES - Appendix I; U.S. ESA - Endangered; IUCN - Vulnerable.

SYNONYMS: *culionensis*.

COMMENTS: Included in *A. porcinus* by Haltenorth (1963), but treated as a full species by Groves and Grubb (1987).

*Axis kuhlii* (Müller, 1840). In Temminck, Verh. Nat. Gesch. Nederland. Bezitt., Zool., Zoogd. Indisch. Archipel., p. 45[1840].

TYPE LOCALITY: "Java en Borneo", but is found only on Bawean Isl, Indonesia.

DISTRIBUTION: Indonesia, Bawean Isl.

STATUS: CITES - Appendix I; U.S. ESA - Endangered; IUCN - Rare.

COMMENTS: This species was further described by Müller and Schlegel, in Temminck, Verh. Nat. Gesch. Nederland. Overz. Bezitt., Zool., Mammalia, p. 223[1845], pl. 44[1842].

Included in *A. porcinus* by Haltenorth (1963), but treated as a full species by Groves and Grubb (1987).

*Axis porcinus* (Zimmermann, 1780). Geogr. Gesch. Mensch. Vierf. Thiere, 2:131.

TYPE LOCALITY: India, Bengal.

DISTRIBUTION: Pakistan and N India to Vietnam; Yunnan (China); Sri Lanka (introduced?); introduced to S Australia.

STATUS: CITES - Appendix I as *Cervus* (= *Axis*) *porcinus annamiticus*; U.S. ESA - Endangered as *Axis* (= *Cervus*) *porcinus annamiticus*.

SYNONYMS: *annamiticus*, *hecki*, *oryzus*, *pumilio*.

COMMENTS: *Cervus porcinus* Zimmermann, 1777, is not an available name as it was published in an unavailable work (Spec. Zool. Geogr., p. 532): see Hemming (1950:547).

*Cervus* Linnaeus, 1758. Syst. Nat., 10th ed., 1:66.

TYPE SPECIES: *Cervus elaphus* Linnaeus, 1758.

SYNONYMS: *Elaphoceros*, *Elaphus*, *Harana*, *Hippelaphus*, *Melanaxis*, *Panolia*, *Przewalskium*, *Pseudaxis*, *Pseudocervus*, *Rucervus*, *Rusa*, *Sambur*, *Sika*, *Strongyloceros*, *Sikaillus*, *Thaocervus*, *Ussa*.

COMMENTS: Includes *Rusa*, *Rucervus*, and *Przewalskium* as subgenera, with *Panolia*, *Sika* and *Thaocervus* as synonyms of subgenera, see Groves and Grubb (1987). Van Gelder (1977b) also included *Elaphurus*, *Axis*, *Dama* and *Hyelaphus*.

*Cervus albirostris* Przewalski, 1883. Third Journey in Central Asia, p. 124.

TYPE LOCALITY: China, Kansu, 3 km above mouth of Kokusu River, Humboldt Mtns, Nan Shan.

DISTRIBUTION: Tibet, Tsinghai, Kansu, and Szechwan (China).

STATUS: IUCN - Vulnerable.

SYNONYMS: *dybowskii* Sclater, 1889; *sellatus*, *thoroldi*.

*Cervus alfredi* Sclater, 1876. Proc. Zool. Soc. Lond., 1876:381.

TYPE LOCALITY: Philippines.

DISTRIBUTION: Philippines: Panay and Negros Isls; formerly also Seguinjor, Guimares, Cebu, Bohol and perhaps other islands.

STATUS: U.S. ESA and IUCN - Endangered.

SYNONYMS: *breviceps*, *masbatensis*.

COMMENTS: Included in *C. mariannus* by Haltenorth (1963). Revised by Grubb and Groves (1983), where treated as a full species.

*Cervus duvaucelii* G. Cuvier, 1823. Rech. Oss. Foss., Nouv. ed., 4:505.

TYPE LOCALITY: N India.

DISTRIBUTION: N and C India, SW Nepal; extinct in Pakistan.

STATUS: CITES - Appendix I; U.S. ESA and IUCN - Endangered.

SYNONYMS: *bahrainja*, *branderi*, *dimorphe*, *elaphoides*, *euceros*, *eucladoceros*, *ranjitsinhi*, *smithii*.

COMMENTS: Revised by Groves (1982b).

*Cervus elaphus* Linnaeus, 1758. Syst. Nat., 10th ed., 1:67.

TYPE LOCALITY: S Sweden.

DISTRIBUTION: Tunisia; NE Algeria; Europe east to Crimea and Caucasus; Turkey; N Iran; C Asia from N Afghanistan, Kashmir (India) and Russian Turkestan east to Siberia, Mongolia, W and N China and Ussuri region (Russia); in Corsica and Sardinia only since Neolithic; North America, where now restricted to western areas and reserves. Red Deer (*C. e. elaphus* and related subspecies) introduced to Morocco, USA, Argentina, Chile, Australia, and New Zealand; Wapiti (*C. e. canadensis* and related subspecies) introduced to Ural Mtns and Volga Steppe (Russia) and New Zealand.

STATUS: CITES - Appendix I as *C. e. hanglu*; Appendix II as *C. e. bactrianus*; Appendix III (Tunisia) as *C. e. barbarus*. U.S. ESA - Endangered as *C. e. bactrianus*, *C. e. barbarus*, *C. e. corsicanus*, *C. e. hanglu*, *C. e. macneilli*, *C. e. wallichi*, and *C. e. yarkandensis*; IUCN - Endangered as *C. e. bactrianus*, *C. e. corsicanus*, *C. e. hanglu*, *C. e. wallichi*, and *C. e. yarkandensis*; Vulnerable as *C. e. barbarus*; Indeterminate as *C. e. macneilli*.

SYNONYMS: *affinis*, *alashanicus*, *albicus*, *albifrons*, *albus*, *asiaticus*, *atlanticus*, *bactrianus*, *baicalensis*, *bajovaricus*, *balticus*, *barbarus*, *bedfordianus*, *biedermanni*, *bolivari*, *brauneri*,



*campestris*, *canadensis*, *carpathicus*, *cashmeriensis*, *casperianus*, *caspius*, *caucasicus*, *corsicanus*, *debilis*, *eustephanus*, *germanicus*, *hanglu*, *hagenbecki*, *hippelaphus*, *hispanicus*, *isubra*, *kansuensis*, *luedorfi*, *macneilli*, *major*, *manitobensis*, *maral*, *mediterraneus*, *merriami*, *minor*, *montanus*, *nannodes*, *naryanus*, *neglectus*, *nelsoni*, *occidentalis*, *rhenanus*, *roosevelti*, *saxonicus*, *scoticus*, *sibiricus*, *songaricus*, *tauricus*, *tibetanus*, *ussuricus*, *varius*, *visurgensis*, *vulgaris*, *wachei*, *wallichi*, *wapiti*, *wardi*, *xanthopygus*, *yarkandensis*.

COMMENTS: For synonyms see Corbet (1978c:201), McCullough (1969), and Hall (1981:1084-1087). Reviewed by J.M. Dolan (1988).

*Cervus eldii* M'Clelland, 1842. *Calcutta J. Nat. Hist.*, 2:417.

TYPE LOCALITY: India, Assam, Manipur.

DISTRIBUTION: Manipur (N India), Burma, Thailand, Laos, Cambodia, Vietnam, Hainan Isl (China); now much reduced in numbers or extinct in several of these countries.

STATUS: CITES - Appendix I; U.S. ESA - Endangered; IUCN - Endangered as *C. e. eldii* and *C. e. siamensis*, otherwise Vulnerable.

SYNONYMS: *acuticauda*, *acuticornis*, *brucei*, *cornipes*, *frontalis*, *hainanus*, *lyratus*, *platyceros*, *siamensis*, *thamin*.

*Cervus mariannus* Desmarest, 1822. *Mammalogie, in Encycl. Meth.*, 2:436.

TYPE LOCALITY: Mariana Isls, Guam (introduced).

DISTRIBUTION: Philippines: Luzon, Mindoro, Mindanao and Basilan Isls. Introduced to Mariana, Caroline and Bonin Isls (W Pacific Ocean).

SYNONYMS: *ambrosianus*, *apoensis*, *atheneensis*, *barandanus*, *baryceros*, *basilanensis*, *boninensis*, *brachyceros*, *chrysotrichos*, *cinereus*, *corteanus*, *crassicornis*, *dailiardianus*, *elegans*, *elorzanus*, *francianus*, *garcianus*, *gonzalinus*, *gorrichanus*, *guevaranus*, *guidoteanus*, *hippopolitanus*, *longicuspis*, *macarianus*, *maraisianus*, *marzaninus*, *michaelinus*, *microdontus*, *nigellus*, *nigricans*, *nublanus*, *philippinus*, *ramosianus*, *rosarianus*, *roxasianus*, *rubiginosa*, *spatharius*, *steerii*, *telesforianus*, *tuasoninus*, *verzosianus*, *vidalinus*, *villemarianus*.

COMMENTS: Treated as a separate species from *C. unicolor* by Haltenorth (1963), and by Grubb and Groves (1983), who revised this taxon.

*Cervus nippon* Temminck, 1838. *Coup d'oeil sur la faune des îles de la Sonde et de l'empire du Japon*, p. xxii.

TYPE LOCALITY: Japan, probably Kyushu; see Groves and Smeenk (1978).

DISTRIBUTION: Taiwan, E China, Manchuria, Korea (incl. Cheju Isl), adjacent E Siberia, Japan (incl. Tsushima Isls), Vietnam. Introduced to British Isles, mainland Europe (incl. Lithuania and Ukraine), Caucasus region, New Zealand, USA, Solo Isl (Philippines, still extant?), Kerama Isls (Ryukyu Isls) and small islands off Japan.

STATUS: U.S. ESA - Endangered as *C. n. grassianus*, *C. n. keramae*, *C. n. kopschi*, *C. n. mandarinus*, and *C. n. taiouanus*; IUCN - Extinct? as *C. n. grassianus*, Extinct as *C. n. mandarinus*, Endangered as *C. n. keramae*, *C. n. pseudaxis*, and *C. n. taiouanus*, Indeterminate as *C. n. sichuanicus*.

SYNONYMS: *aceros*, *andreas*, *aplodonticus*, *aplodontus*, *arietinus*, *blakistoninus*, *brachypus*, *brachyrhinus*, *centralis*, *consobrinus*, *cycloceros*, *cyclorhinus*, *daimius*, *deyardinus*, *devilleanus*, *dolichorhinus*, *dominicanus*, *dugennianus*; *dybowskii* Taczanowski, 1876; *elegans*, *ellipticus*, *euopsis*, *frinianus*, *fuscus*, *gracilis*, *granulosus*, *grassianus*, *grilloanus*, *hollandianus*, *hortulorum*, *hyemalis*, *ignotus*, *imperialis*, *infelix*, *japonicus*, *joretianus*, *kematoceros*, *keramae*, *kopschi*, *lacrymosus*, *latidens*, *legrandianus*, *mageshimae*, *mandarinus*, *mantchuricus*, *marmandianus*, *matsumotet*, *microdontus*, *microspilus*, *minoensis*, *minor*, *minutus*, *mitratus*, *modestus*, *morrisianus*, *novioninus*, *orthopodicus*, *orthopus*, *oxycephalus*, *paschalis*, *pouvrelanus*, *pseudaxis*, *pulchellus*, *regulus*, *rex*, *riverianus*, *rutilus*, *schizodonticus*, *schlegeli*, *schulzianus*, *sendaiensis*, *sica*, *sicarius*, *sichuanicus*, *sika*, *soloensis*, *surdescens*; *swinhoei* Glover, 1956; *sylvanus*, *tai-oranus*, *taiouanus*, *taivanus*, *typicus*, *xendaiensis*, *yakushimae*, *yesoensis*, *yuanus*.

COMMENTS: Includes *hortulorum*, *taiouanus* and *pulchellus*, which were considered species by Imaizumi (1970a). Includes *soloensis*, see Grubb and Groves (1983). Reviewed by Feldhamer (1980, *Mammalian Species*, 128). Revised in part by Groves and Smeenk (1978).

*Cervus schomburgki* Blyth, 1863. *Proc. Zool. Soc. Lond.*, 1863:155.

TYPE LOCALITY: Thailand.

DISTRIBUTION: Thailand.

COMMENTS: Included in *duvaucelii* by Haltenorth (1963:58) and Groves (1982b); but treated as a full species by Lekagul and McNeely (1977). Extinct; last specimen killed in 1932; see Harper (1945).

*Cervus timorensis* Blainville, 1822. J. Phys. Chim. Hist. Nat. Arts Paris, 94:267.

TYPE LOCALITY: Indonesia, Lesser Sunda Isls, Timor Isl.

DISTRIBUTION: Java; Bali and probably introduced in antiquity to Lesser Sunda Isls, Molucca Isls (including Buru and Seram), Sulawesi and Timor (Indonesia). Since 17th century, introduced to Kalimantan (Borneo, extinct?), New Guinea, New Britain, Aru Isls (Indonesia), Mauritius, Comoro Isls, Madagascar (extinct?), Australia, New Zealand, New Caledonia and small islands in Indonesia and off the coast of Australia.

SYNONYMS: *buruensis*, *djonga*, *floresiensis*, *hippelaphus*, *hoevellianus*, *javanicus*, *laronesiotes*, *lepidus*, *macassaricus*, *menadensis*, *moluccensis*, *peronii*, *renschii*, *rusa*, *sumbavanus*, *tavistockii*, *tunjuc*.

COMMENTS: Revised by Van Bemmelen (1949a). Includes *tavistockii*; see Grubb and Groves (1983).

*Cervus unicolor* Kerr, 1792. In Linnaeus, Anim. Kingdom, p. 300.

TYPE LOCALITY: Sri Lanka.

DISTRIBUTION: India and Sri Lanka east to S China, Hainan Isl and Taiwan; south to Peninsular Malaysia, Sumatra, Borneo, Siberut, Sipora, and Pagi and Nias Isls; introduced to Australia and New Zealand.

SYNONYMS: *albicornis*, *aristotelis*, *brachyrhinus*, *brookei*, *cambojensis*, *colombertinus*, *combalbertinus*, *curvicornis*, *dejeani*, *equinus*, *errardianus*, *hainana*, *hamiltonianus*, *heterocerus*, *jarai*, *joubertianus*, *latidens*, *lemeanus*, *leschenaulti*, *lignarius*, *longicornis*, *major*, *malaccensis*, *nepalensis*, *niger*, *oceanus*, *officialis*, *outreanus*, *pennantii*, *planiceps*, *placidens*, *simoninus*; *swinhoii* Sclater, 1862; *verutus*.

*Dama* Frisch, 1775. Das Natur-System der Vierfüssigen Thiere, 3.

TYPE SPECIES: *Cervus dama* Linnaeus, 1758.

COMMENTS: *Dama* as generic name for the Fallow Deer was validated by Opinion 581, International Commission on Zoological Nomenclature (1960). Treated as a full genus, not a subgenus of *Cervus* by Groves and Grubb (1987).

*Dama dama* (Linnaeus, 1758). Syst. Nat., 10th ed., 1:67.

TYPE LOCALITY: Sweden (introduced).

DISTRIBUTION: S Turkey; introduced to Europe (incl. Lithuania and Ukraine), South Africa, Australia, New Zealand, USA, Argentina, Chile, Peru, Uruguay and islands in Fijian group, Lesser Antilles and off W Canadian Coast. For present distribution, see Chapman and Chapman (1980); for natural recent distribution see Uerpmann (1987).

SYNONYMS: *albus*, *leucaethiops*, *maura*, *mauricus*, *niger*, *platyceros*, *plinii*, *varius*, *vulgaris*.

COMMENTS: Reviewed by Feldhamer et al. (1988, Mammalian Species, 317).

*Dama mesopotamica* (Brooke, 1875). Proc. Zool. Soc. Lond., 1875:264.

TYPE LOCALITY: Iran, Luristan Province.

DISTRIBUTION: Formerly Lebanon, Syria, Jordan, Israel and Iraq; survives in W Iran.

STATUS: CITES - Appendix I; U.S. ESA and IUCN - Endangered.

COMMENTS: Regarded as a separate species from *D. dama* by Haltenorth (1959), Ferguson et al. (1985), Uerpmann (1987), and Harrison and Bates (1991).

*Elaphurus* Milne-Edwards, 1866. Ann. Sci. Nat. Zool. (Paris), 5:382.

TYPE SPECIES: *Elaphurus davidianus* Milne-Edwards, 1866.

*Elaphurus davidianus* Milne-Edwards, 1866. Ann. Sci. Nat. Zool., 5:382.

TYPE LOCALITY: China, Chihli, Peking, Imperial Hunting Park.

DISTRIBUTION: Formerly NE China; extinct in wild since 3rd or 4th Century; now reintroduced to its former range, near Peking and near Shanghai.

STATUS: IUCN - Endangered.

SYNONYMS: *menziesianus*, *tarandoides*.

COMMENTS: Included in *Elaphurus* by Corbet (1978c:201); but see Van Gelder (1977b).

**Subfamily Hydropotinae** Trouessart, 1898. Cat. Mamm. Viv. Foss., new ed., fasc. 4:865.

*Hydropotes* Swinhoe, 1870. Athenaeum, 2208:264.

TYPE SPECIES: *Hydropotes inermis* Swinhoe, 1870.

SYNONYMS: *Hydrelaphus*.

COMMENTS: Original description usually given as Proc. Zool. Soc. Lond., 1870:90 [publ. June, 1870], but McAllan and Bruce (1989) have shown that publication in The Athenaeum was earlier (19 Feb. 1870).

*Hydropotes inermis* Swinhoe, 1870. Athenaeum, 2208:264.

TYPE LOCALITY: China, Kiangsu, Chingkiang, Yangtze River, Deer Isl.

DISTRIBUTION: Lower Yangtze Basin, south to Guangxi (China); Korea; introduced in England and France.

STATUS: IUCN - Rare.

SYNONYMS: *affinis*, *argyropus*, *kreyenbergi*.

COMMENTS: Original description usually given as Proc. Zool. Soc. Lond., 1870:89 [publ. June, 1870], but McAllan and Bruce (1989) have shown that publication in The Athenaeum was earlier (19 Feb. 1870).

**Subfamily Muntiacinae** Pocock, 1923. Proc. Zool. Soc. Lond., 1923:207.

COMMENTS: Relegated to tribal status, in Cervinae, by Groves and Grubb (1987); then treated as a full family by Groves and Grubb (1990). Assignment to Cervinae now supported by evidence in Kraus and Miyamoto (1991); yet generally regarded as a subfamily (Haltcnorth, 1963).

*Elaphodus* Milne-Edwards, 1872. Nouv. Arch. Mus. Hist. Nat. Paris, Bull., 7:93.

TYPE SPECIES: *Elaphodus cephalophus* Milne-Edwards, 1872.

SYNONYMS: *Lophotragus*.

COMMENTS: For year of publication, see Ellerman and Morrison-Scott (1953).

*Elaphodus cephalophus* Milne-Edwards, 1872. Nouv. Arch. Mus. Hist. Nat. Paris, Bull., 7:93.

TYPE LOCALITY: China, Sichuan, Baoxing (= Szechwan, Moupin).

DISTRIBUTION: S and C China; N Burma.

SYNONYMS: *fociensis*, *ichangensis*, *michianus*.

*Muntiacus* Rafinesque, 1815. Analyse de la Nature, p. 56.

TYPE SPECIES: *Cervus muntjak* Zimmerman, 1780.

SYNONYMS: *Cervulus*, *Procops*, *Prox*, *Stylocerus*.

COMMENTS: *Muntiacus* Rafinesque is a *nomen nudum*, but was conserved by Opinion 460 of the International Commission on Zoological Nomenclature (1957b). Revised by Groves and Grubb (1990).

*Muntiacus atherodes* Groves and Grubb, 1982. Zool. Meded. Leiden, 56:210.

TYPE LOCALITY: Malaysia, Sabah, Tawau, Coconut Research Station, Forest Camp 1.

DISTRIBUTION: Borneo.

COMMENTS: Formerly included in *M. muntjak*, or in a separate species, *M. pleiharicus*; see Chasen (1940:203); however *pleiharicus* is a synonym of *muntjak*; see Groves and Grubb (1982).

*Muntiacus crinifrons* (Sclater, 1885). Proc. Zool. Soc. Lond., 1885:1, pl. 1.

TYPE LOCALITY: China, Chekiang (= Zhejiang), near Ningpo.

DISTRIBUTION: E China: Zhejiang, N Fujian and S Anhui; formerly from Yunnan and Guangdong to Jaingsu (China) according to Shou (1962:454).

STATUS: CITES - Appendix I; IUCN - Vulnerable.

COMMENTS: Included in *muntjak* by Haltcnorth (1963:42).

*Muntiacus feae* (Thomas and Doria, 1889). Ann. Mus. Civ. Stor. Nat. Genova, 7:92.

TYPE LOCALITY: Burma, Tenasserim, Thagata Juva, southeast of Mt. Mulaiyit.

DISTRIBUTION: Thailand; peninsular Burma; SE Yunnan (China).

STATUS: U.S. ESA and IUCN - Endangered.

SYNONYMS: *rooseveltorum*.

COMMENTS: Included in *muntjak* by Haltenorth (1963:42). Includes *rooseveltorum*; see Groves and Grubb (1990). For spelling of the species name as *feai*, see Grubb (1977); but see International Code of Zoological Nomenclature (International Commission on Zoological Nomenclature, 1985) for retention of original spelling *feae*.

*Muntiacus gongshanensis* Ma, 1990. In Ma et al., Zool. Res. Kunming, 11:47.

TYPE LOCALITY: China, Yunnan, Gongshan county, E slope of N section of Gaoligong Mtns, Puladi, Mijiao.

DISTRIBUTION: N Burma; SE Tibet and W Yunnan (China).

*Muntiacus muntjak* (Zimmermann, 1780). Geogr. Gesch. Mensch. Vierf. Thiere, 2:131.

TYPE LOCALITY: Indonesia, Java.

DISTRIBUTION: Sri Lanka; India; NE Pakistan; Nepal; Bhutan; Bangladesh; S China (Yunnan, Guangxi, Hainan Isl) south through Indochina to Peninsular Malaysia, Sumatra, Borneo, Java, Bali, Lombok and many smaller Indonesian islands.

SYNONYMS: *albipes*, *annamensis*, *aureus*, *bancanus*, *curvostylis*, *grandicornis*, *malabaricus*, *melas*, *menglalis*, *montanus*, *moschatus*, *nainggolani*, *nigripes*, *peninsulae*, *pleiharicus*, *ratwa*, *robinsoni*, *rubidus*, *styloceros*, *subcornutus*, *tamulicus*, *vaginalis*, *yunnanensis*.

COMMENTS: Includes *pleiharicus*, listed as a distinct species by Chasen (1940:203), and *vaginalis*. Made to include *reevesi*, *feae*, *rooseveltorum* and *crinifrons* by Haltenorth (1963:42).

*Muntiacus reevesi* (Ogilby, 1839). Proc. Zool. Soc. Lond., 1838:105 [1839].

TYPE LOCALITY: China, Kwangtung (= Guangdong), near Canton.

DISTRIBUTION: Shensi, Kansu and S China; Taiwan; introduced to England and France.

SYNONYMS: *bridgmani*, *lachrymans*, *micrurus*, *pingshiangicus*, *sclateri*, *sinensis*, *teesdalei*.

COMMENTS: Included in *muntjak* by Haltenorth (1963:42); but see Corbet (1978c:199).

#### Subfamily Odocoileinae Pocock, 1923. Proc. Zool. Soc. Lond., 1923:206.

*Alces* Gray, 1821. London Med. Repos., 15:307.

TYPE SPECIES: *Cervus alces* Linnaeus, 1758.

SYNONYMS: *Alcelaphus*, *Paralces*.

*Alces alces* (Linnaeus, 1758). Syst. Nat., 10th ed., 1:66.

TYPE LOCALITY: Sweden.

DISTRIBUTION: N Eurasia from Scandinavia and Poland, east to Anadyr region (E Siberia); south to Ukraine and S Siberia, N Mongolia and N China (Xingjiang, Inner Mongolia, Heilongjiang); Alaska (USA); Canada; N USA; extinct in Caucasus region since last century; introduced to New Zealand.

SYNONYMS: *americanus*, *andersoni*, *angusticephalus*, *antiquorum*, *bedfordiae*, *buturlini*, *cameloides*, *caucasicus*, *columbae*, *coronatus*, *europaeus*, *gigas*, *jubata*, *machlis*, *meridionalis*, *palmatius*, *pfizenmayeri*, *shirasi*, *tymensis*, *uralensis*, *yakutskensis*.

COMMENTS: Revised by R.L. Peterson (1952); reviewed by Franzmann (1981, Mammalian Species, 154).

*Blastocerus* Gray, 1850. Gleanings, Knowsley Menagerie, p. 68.

TYPE SPECIES: *Cervus paludosus* Desmarest, 1822 (= *Cervus dichotomus* Illiger, 1815).

SYNONYMS: *Elaphalces*.

COMMENTS: Included in *Odocoileus* by Haltenorth (1963:44-45); but see Groves and Grubb (1987). For first valid use of generic name see Hershkovitz (1958) who argued that it was Gray, 1850.

*Blastocerus dichotomus* (Illiger, 1815). Abh. Phys. Klasse K.-Preuss. Akad. Wiss., 1804-1811:117 [1815].

TYPE LOCALITY: Paraguay, Lake Ypoa, south of Asuncion.

DISTRIBUTION: C Brazil to Paraguay and N Argentina.

STATUS: CITES - Appendix I; U.S. ESA - Endangered; IUCN - Vulnerable.

SYNONYMS: *furcata*, *paludosus*, *palustris*.

COMMENTS: Reviewed by Pinder and Grosse (1991, Mammalian Species, 380).



*Capreolus* Gray, 1821. London Med. Repos., 15:307.

TYPE SPECIES: *Cervus capreolus* Linnaeus, 1758.

*Capreolus capreolus* (Linnaeus, 1758). Syst. Nat., 10th ed., 1:68.

TYPE LOCALITY: Sweden.

DISTRIBUTION: Europe to W Russia; Turkey; Caucasus region; NW Syria; N Iraq; N Iran; extinct in Lebanon and Israel.

SYNONYMS: *albus*, *albicus*, *armenius*, *baleni*, *balticus*, *canus*, *capraea*, *cistaunicus*, *coxi*, *decorus*, *dorcas*, *europaeus*, *grandis*, *italicus*, *joffrei*, *niger*, *plumbeus*, *rhenanus*, *thotti*, *transsylvanicus*, *transvosagicus*, *varius*, *vulgaris*, *warthae*, *whittalli*, *zedlitzii*.

*Capreolus pygargus* (Pallas, 1771). Reise Prov. Russ. Reichs, 1:453.

TYPE LOCALITY: Russia, Volga, Samara district, River Sok. Given by Rossolimo (in litt.) as Orenburgskaia Obl., Bulgulma-Belebei uplands, upper flow of River Sok.

DISTRIBUTION: S Ural and N Caucasus Mtns (Russia), SE and E Kazakhstan, Tien Shan and S Siberia (Russia) eastward to Pacific coast, south into N and C China, N Mongolia and Korea.

SYNONYMS: *bedfordi*, *caucasica*, *ferghanicus*, *mantschuricus*, *melanotis*, *ochracea*, *tianschanicus*.

COMMENTS: Now regarded by most Russian authors as a species distinct from *C. capreolus*; see Sokolov and Gromov (1990). Rossolimo (in litt.) gave the original year of publication as 1773.

*Hippocamelus* Leuckart, 1816. Diss. Inaug. de *Equo bisulco* Molinae, p. 24.

TYPE SPECIES: *Hippocamelus dubius* Leuckart, 1816 (= *Equus bisulcus* Molina, 1792).

SYNONYMS: *Anomalocera*, *Cervequus*, *Craegoceros*, *Furcifer*, *Huamela*, *Xenelaphus*.

COMMENTS: Included in *Odocoileus* by Haltenorth (1963:44, 46).

*Hippocamelus antisensis* (d'Orbigny, 1834). Ann. Mus. Hist. Nat. Paris, 3:91.

TYPE LOCALITY: Bolivian Andes, near La Paz.

DISTRIBUTION: Andes from Ecuador to NW Argentina.

STATUS: CITES - Appendix I; U.S. ESA - Endangered; IUCN - Vulnerable.

SYNONYMS: *anomalocera*.

*Hippocamelus bisulcus* (Molina, 1782). Sagg. Stor. Nat. Chile, p. 320.

TYPE LOCALITY: Chilean Andes, Colchagua Prov.

DISTRIBUTION: Andes of S Chile and S Argentina.

STATUS: CITES - Appendix I; U.S. ESA and IUCN - Endangered.

SYNONYMS: *andicus*, *cerasina*, *chilensis*, *dubius*, *equinus*, *huemel*, *leucotis*.

*Mazama* Rafinesque, 1817. Am. Mon. Mag., 1(5):363.

TYPE SPECIES: *Mazama pita* Rafinesque, 1817 (= *Moschus americanus* Erxleben, 1777).

SYNONYMS: *Coassus*, *Doratoceros*, *Homelaphus*, *Nanelaphus*, *Passalites*, *Subulo*.

COMMENTS: Revised by Czerney (1987).

*Mazama americana* (Erxleben, 1777). Syst. Regni Anim., 1:324.

TYPE LOCALITY: French Guiana, Cayenne.

DISTRIBUTION: S Tamaulipas and Yucatan (Mexico) to S Brazil, N Argentina, S Bolivia, and Paraguay; Trinidad and Tobago.

STATUS: CITES - Appendix III (Guatemala) as *M. a. cerasina*.

SYNONYMS: *carrikeri*, *cerasina*, *dolichurus*, *fuscata*, *gualea*, *inornatus*, *jucunda*, *juruana*, *pandora*, *pita*, *reperticia*, *rosii*, *rufa*, *sarae*, *sartorii*, *sheila*, *tema*, *temama*, *toba*, *trinitatis*, *tumatumari*, *whitelyi*, *zamora*, *zetta*.

*Mazama bricenii* Thomas, 1908. Ann. Mag. Nat. Hist., ser. 8, 1:349.

TYPE LOCALITY: Venezuela, Merida, Paramo de la Culata.

DISTRIBUTION: W Venezuela.

COMMENTS: A species distinct from *M. rufina* according to Czerney (1987).

*Mazama chunyi* Hershkovitz, 1959. Proc. Biol. Soc. Washington, 72:45.

TYPE LOCALITY: Bolivia, La Paz, Copacabana, 3200 m.

DISTRIBUTION: Bolivian Andes, S Peru.

COMMENTS: Prior to 1959 this species was confused with *Pudu mephistophiles*; see comment under that species.



*Mazama gouazoubira* (G. Fischer, 1814). *Zoognosia*, 3:465.

TYPE LOCALITY: Paraguay, Asuncion region.

DISTRIBUTION: San Jose Isl (Panama); Peru, Ecuador and Columbia east to Brazil and south to Bolivia, Paraguay, N Argentina and Uruguay.

SYNONYMS: *argentina*, *bira*, *cita*, *fusca*, *gouazoubira*, *kozeritzi*, *mexianae*, *murelia*, *namby*, *memorivaga*, *permira*, *rondoni*, *sanctaemartae*, *simplicicornis*, *superciliaris*, *tschudii*.

COMMENTS: Although the specific name is based on the *gouazoubira* of Azara, the original spelling was "*gouazoupira*" not "*gouazoubira*".

*Mazama nana* (Hensel, 1872). *Abhandl. Pruess. Akad. Wiss.*, 1872:99.

TYPE LOCALITY: Brazil, Rio Grande do Sul.

DISTRIBUTION: C and SE Brazil, E Paraguay, N Argentina.

COMMENTS: A species distinct form *M. rufina* according to Czernay (1987).

*Mazama rufina* (Bourcier and Pucheran, 1852). *Rev. Zool. Paris*, p. 561.

TYPE LOCALITY: Ecuador, Pichincha, Pichincha Mtns, Lloa valley.

DISTRIBUTION: Ecuador, S Columbia.

*Odocoileus* Rafinesque, 1832. *Atlantic Journal and Friend of Knowledge*, 1:109.

TYPE SPECIES: *Odocoileus spelaeus* Rafinesque, 1832 (= *Dama virginianus* Zimmermann, 1780).

SYNONYMS: *Aplacerus*, *Cariacus*, *Dorcelaphus*, *Eucervus*, *Gymnotis*, *Macrotis*, *Oplacerus*, *Otelaphus*, *Palaeodocoileus*, *Protomazama*, *Reduncina*.

COMMENTS: Hall (1981:1087) employed *Dama* Zimmermann, 1780, of which *Dama virginiana* (= *Odocoileus virginianus*) is the type, for this genus, but *Dama* Frisch, 1775, with *Cervus dama* (= *Dama dama*) as type has priority and thus preoccupies *Dama* Zimmerman, 1780 (International Commission on Zoological Nomenclature, 1960).

*Odocoileus hemionus* (Rafinesque, 1817). *Am. Mon. Mag.*, 1:436.

TYPE LOCALITY: USA, South Dakota, mouth of Big Sioux River.

DISTRIBUTION: Baja California and Sonora to N Tamaulipas (Mexico); W USA (to Minnesota); W Canada; Alaskan Panhandle (USA). Introduced to Kauai (Hawaiian Isls) and Argentina.

STATUS: U.S. ESA and IUCN - Endangered as *O. h. cerrosensis*.

SYNONYMS: *auritus*, *californicus*, *canus*, *cerrosensis*, *columbianus*, *crooki*, *eremicus*, *fuliginatus*, *inyoensis*, *lewisii*, *macrotis*, *montanus*, *peninsulae*, *punctulatus*, *pusilla*, *richardsoni*, *scaphiotus*, *sheldoni*, *sitkensis*, *virgultus*.

COMMENTS: Revised by Cowan (1936); reviewed by A.E. Anderson and Wallmo (1984, *Mammalian Species*, 219).

*Odocoileus virginianus* (Zimmermann, 1780). *Geogr. Gesch. Mensch. Vierf. Thiere*, 2:129.

TYPE LOCALITY: "Bewohnt in grossen Heerben Carolina v), Virginien, Louisiana w), und geht vielleicht bis Panama x) hinunter"; restricted by Hershkovitz (1948c:43) to USA, Virginia.

DISTRIBUTION: W and S Canada; NW, SW, C and E USA to Bolivia, Guianas and N Brazil.

Introduced to Czechoslovakia, Finland, New Zealand and West Indies, where these deer may survive on Cuba, Curacao, St. Croix and St. Thomas Isls.

STATUS: CITES - Appendix III (Guatemala) as *O. v. mayensis* [listing in the process of being withdrawn]; U.S. ESA - Endangered as *O. v. clavium* and *O. v. leucurus*; IUCN - Rare as *O. v. clavium*.

SYNONYMS: *abeli*, *acapulcensis*, *aequatorialis*, *antonii*, *battyi*, *borealis*, *brachyceros*, *campestris*, *cariacou*, *carminis*, *chiriquensis*, *clavatus*, *clavium*, *columbicus*, *consul*, *costaricensis*, *couesi*, *curassavicus*, *dacotensis*, *fraterculus*, *goudotii*, *gracilis*, *gymnotis*, *hiltonensis*, *lasiotis*, *leucurus*, *lichtensteini*, *louisianae*, *macrourus*, *margaritae*, *mcilhennyi*, *mexicanus*, *miquihuanensis*, *nelsoni*, *nemoralis*, *nigribarbis*, *oaxacensis*, *ochrourus*, *osceola*, *peruvianus*, *philippii*, *rothschildi*, *savannarum*, *seminolus*, *sinaloae*, *spelaeus*, *spinosus*, *suacuapara*, *sylvaticus*, *taurinsulae*, *texanus*, *thomasi*, *toltecus*, *tropicalis*, *truei*, *ustus*, *venatorius*, *veraecrucis*, *wiegmanni*, *wisconsinensis*, *yucatanensis*.

COMMENTS: Reviewed by W.P. Smith (1991, *Mammalian Species*, 388).

*Ozotoceros* Ameghino, 1891. *Rev. Argent. Hist. Nat.*, 1:243.

TYPE SPECIES: *Cervus campestris* F. Cuvier, 1817 (= *Cervus bezoarticus* Linnaeus, 1758).

SYNONYMS: *Blastoceros*, *Ozelaphus*.

COMMENTS: *Ozotoceros* is the name to be used for *Blastoceros*, Fitzinger, 1860, if *Blastoceros* is regarded as an invalid emendation of *Blastocerus*; see Hershkovitz (1958). Included in *Odocoileus* by Haltenorth (1963:46) and Bianchini and Delupi (1979); but see Groves and Grubb (1987).

*Ozotoceros bezoarticus* (Linnaeus, 1758). Syst. Nat., 10th ed., 1:67.

TYPE LOCALITY: Brazil, Pernambuco; identified by Thomas (1911a:151).

DISTRIBUTION: Brazil, N Argentina, Paraguay, Uruguay, S Bolivia.

STATUS: CITES - Appendix I; U.S. ESA - Endangered; IUCN - Endangered as *O. b. celer*.

SYNONYMS: *albus*, *azarae*, *campestris*, *caenosus*, *celer*, *comosus*, *cuguapara*, *dickii*, *leucogaster*, *pampaeus*, *sylvestris*.

COMMENTS: Reviewed by Jackson (1987, Mammalian Species, 295).

*Pudu* Gray, 1852. Proc. Zool. Soc. Lond., 1850:242 [1852].

TYPE SPECIES: *Capra puda* Molina, 1782.

SYNONYMS: *Pudella*.

COMMENTS: Included in *Mazama* by Haltenorth (1963:48). Includes *Pudella*; revised by Hershkovitz (1982).

*Pudu mephistophiles* (de Winton, 1896). Proc. Zool. Soc. Lond., 1896:508.

TYPE LOCALITY: Ecuador, Napo-Pastaza Prov., Paramo de Papallacta.

DISTRIBUTION: Andes of Colombia, Ecuador, and Peru.

STATUS: CITES - Appendix II; IUCN - Indeterminate.

SYNONYMS: *fusca*, *wetmorei*.

COMMENTS: *P. mephistophiles* of Matschie and Sanborn (not de Winton) is *Mazama chunyi*.

*Pudu puda* (Molina, 1782). Sagg. Stor. Nat. Chile, p. 310

TYPE LOCALITY: Chile, Chiloe Prov.

DISTRIBUTION: S Chile, SW Argentina.

STATUS: CITES - Appendix I; U.S. ESA - Endangered.

SYNONYMS: *chilensis*, *humilis*.

COMMENTS: For original spelling of specific name, see Hershkovitz (1982).

*Rangifer* H. Smith, 1827. In Griffith et al., Anim. Kingdom, 5:304.

TYPE SPECIES: *Cervus tarandus* Linnaeus, 1758.

SYNONYMS: *Achlis*, *Tarandus*.

COMMENTS: Revised by Banfield (1961).

*Rangifer tarandus* (Linnaeus, 1758). Syst. Nat., 10th ed., 1:67.

TYPE LOCALITY: Sweden, Alpine Lapland (domesticated stock).

DISTRIBUTION: Circumboreal in tundra and taiga from Svalbard, Norway, Finland, Russia, Alaska (USA) and Canada including most arctic islands, and Greenland, south to N Mongolia; Inner Mongolia and Heilungkiang, China (now feral?); Sakhalin Isl; N Idaho and Great Lakes region (USA). Introduced to, and feral in, Iceland, Kerguelen Isls, South Georgia Isl, Pribilof Isls, St. Matthew Isl. Extinct in Sweden.

STATUS: U.S. ESA - Endangered as *R. t. caribou* in Canada (SE British Columbia at the Canadian-USA border, Columbia R., Kootenay, R. Kootenay Lake, and Kootenai R.) and USA (Idaho, Washington).

SYNONYMS: *angustirostris*, *arcticus*, *asiaticus*, *borealis*, *buskensis*, *caboti*, *caribou*, *chukchensis*, *cilindricornis*, *dawsoni*, *dichotomus*, *eogroenlandicus*, *excelsifrons*, *fennicus*, *fortidens*, *furcifer*, *granti*, *groenlandicus*, *keewatinensis*, *labradorensis*, *lapponum*, *lenensis*, *montanus*, *mcguirei*, *ogilvyensis*, *osborni*, *pearsoni*, *pearyi*, *phylarchus*, *platyrhynchus*, *rangifer*, *selousi*, *setoni*, *sibiricus*, *silvicola*, *spetsbergensis*, *stonei*, *sylvestris*, *taimyrensis*, *terraenovae*, *transuralensis*, *valentinae*, *yakutskensis*.

**Family Antilocapridae** Gray, 1866. Ann. Mag. Nat. Hist., ser 3, 18:325-326, 468.

*Antilocapra* Ord, 1818. J. Phys. Chim. Hist. Nat. Arts Paris, 87:149.

TYPE SPECIES: *Antilope americana* Ord, 1815.

COMMENTS: Included in Bovidae by O'Gara and Matson (1975); but restored to separate family status by Janis and Scott (1987) and Soulounias (1988).

*Antilocapra americana* (Ord, 1815). In Guthrie, New Geogr., Hist. Coml. Grammar., Philadelphia, 2nd ed., 2:292.

TYPE LOCALITY: USA, Plains and Highlands of the Missouri River.

DISTRIBUTION: S Alberta and S Saskatchewan (Canada) south through W USA to Hidalgo, Baja California, W Sonora (Mexico). Introduced to Lanai Isl (Hawaiian Isls).

STATUS: CITES - Appendix I (Mexican populations); U.S. ESA and IUCN - Endangered as *A. a. peninsularis* and *A. a. sonoriensis*.

SYNONYMS: *anteflexa*, *mexicana*, *oregona*, *peninsularis*, *sonoriensis*.

COMMENTS: Reviewed by O'Gara (1978, Mammalian Species, 90).

### Family Bovidae Gray, 1821. London Med. Repos., 15:308.

COMMENTS: Distribution and status of introduced populations reviewed by Lever (1985).

Distribution and status of African species reviewed by East (1988, 1989, 1990).

Systematics of African species reviewed by Ansell (1972) and Gentry (1972).

### Subfamily Aepycerotinae Gray, 1872. Cat. Ruminant Mamm. Brit. Mus., p. 4, 42.

*Aepyceros* Sundevall, 1847. Kongl. Svenska Vet.-Akad. Handl. Stockholm, 1845:271 [1847].

TYPE SPECIES: *Antilope melampus* Lichtenstein, 1812.

*Aepyceros melampus* (Lichtenstein, 1812). Reisen Sudl. Africa, 2, pl. 4 opp. p. 544.

TYPE LOCALITY: South Africa, Cape Prov., Kuruman, Khosis.

DISTRIBUTION: NE South Africa to Angola, S Zaire, Rwanda, Uganda, and Kenya.

STATUS: U.S. ESA and IUCN - Endangered as *A. m. petersi*.

SYNONYMS: *holubi*, *johnstoni*, *katangae*, *pallah*, *petersi*, *rendilis*, *suara*.

COMMENTS: Includes *petersi*; see Ansell (1972:57).

### Subfamily Alcelaphinae Rochebrune, 1883. Faune Sénégalie, Suppl. Vert., Mamm., 1:132, 156.

*Alcelaphus* de Blainville, 1816. Bull. Sci. Soc. Philom. Paris, 1816:75.

TYPE SPECIES: *Antilope bubalis* Pallas, 1767 (= *Antilope buselaphus* Pallas, 1766).

SYNONYMS: *Acronotus*, *Bubalis*, *Damalis*.

COMMENTS: Van Gelder (1977b) included *Sigmoceros* and *Damaliscus* in this genus, but has not been followed by recent authors; see Swanepoel et al. (1980:187). Formerly included *Sigmoceros lichtensteinii*, see comment under *Sigmoceros*.

*Alcelaphus buselaphus* (Pallas, 1766). Misc. Zool., p. 7.

TYPE LOCALITY: Morocco.

DISTRIBUTION: Senegal to Ethiopia, south to E Zaire, Uganda, Kenya and N Tanzania; S Angola, W Zimbabwe, Botswana, Namibia and South Africa. Formerly N Morocco, N Algeria, and, up to Dynastic times, east to Egypt. Extinct in N Africa, Somalia, and much of its former South African range.

STATUS: U.S. ESA and IUCN - Endangered as *A. b. swaynei* and *A. b. tora*.

SYNONYMS: *bubalis*, *bubastis*, *caama*, *cokii*, *deckenii*, *digglei*, *evalensis*, *heuglini*, *insignis*, *invadens*, *jacksoni*, *keniae*, *kongoni*, *lelwel*, *luzarchei*, *major*, *matschiei*, *mauretanicus*, *modestus*, *nakurae*, *neumanni*, *niediecki*, *noacki*, *obscurus*, *oscari*, *rahatensis*, *ritchiei*, *roosevelti*, *rothschildi*, *sabakiensis*, *schillingsi*, *schulzi*, *selbornei*, *senegalensis*, *swaynei*, *tanae*, *tora*, *tschadensis*, *tunisianus*, *wembaerensis*.

COMMENTS: Includes *caama*; see Ellerman et al. (1953:202).

*Connochaetes* Lichtenstein, 1812. Mag. Ges. Naturf. Fr. Berlin, 6:152.

TYPE SPECIES: *Antilope gnou* Gmelin, 1788.

SYNONYMS: *Butragus*, *Catablepas*, *Cemas*, *Gorgon*.

*Connochaetes gnou* (Zimmermann, 1780). Geogr. Gesch. Mensch. Vierf. Thiere, 2:102.

TYPE LOCALITY: South Africa, Cape Prov., Colesberg (Harper, 1940:329).

DISTRIBUTION: Originally from Transvaal and Natal south to Cape Prov. (South Africa); now only in captivity, or as reintroduced populations in Lesotho; Swaziland; Orange Free State, Cape Prov., Transvaal and Natal (South Africa).

SYNONYMS: *capensis*, *connochaetes*, *operculatus*.

COMMENTS: Reviewed by Von Richter (1974, Mammalian Species, 50).

*Connochaetes taurinus* (Burchell, 1823). Travels in Interior of Southern Africa, 2:278(footnote) [1824].

TYPE LOCALITY: South Africa, Cape Prov., Kuruman, Khosis.

DISTRIBUTION: S Kenya, Tanzania and Zambia south to Angola, Namibia, Botswana and NE South Africa. Extinct in Malawi.

SYNONYMS: *albojubatus*, *borlei*, *cooksoni*, *corniculatus*, *fasciatus*, *gorgon*, *hecki*, *henrici*, *johnstoni*, *lorenzi*, *mattosi*, *mearnsi*, *reichei*, *rufijianus*, *schulzi*.

COMMENTS: For date of publication, see Ellerman et al. (1953:205).

*Damaliscus* P.L. Sclater and Thomas, 1894. Book of Antelopes, 1(part 1):3, 51.

TYPE SPECIES: *Antilope pygargus* Pallas, 1767.

SYNONYMS: *Beatragus*, *Damalis*.

COMMENTS: Includes *Beatragus*; see Ansell (1972:54). Placed in *Alcelaphus* by Van Gelder (1977b:18); but see also Vrba (1979) and Gentry (1990).

*Damaliscus hunteri* (Sclater, 1889). Proc. Zool. Soc. Lond., 1889:58.

TYPE LOCALITY: Kenya, E bank of Tana River.

DISTRIBUTION: S Somalia to N Kenya.

STATUS: IUCN - Vulnerable.

COMMENTS: Included in *D. lunatus* by Haltenorth (1963:100). Formerly in *Beatragus*; see Ansell (1972:54); retained in *Beatragus* by Gentry and Gentry (1978) and Gentry (1990).

*Damaliscus lunatus* (Burchell, 1823). Travels in Interior of Southern Africa, 2:334 [1824].

TYPE LOCALITY: South Africa, Cape Prov., Matlhawareng River, NE of Kuruman.

DISTRIBUTION: Formerly Mauritania and Senegal east to W Ethiopia and S Somalia, and south to Tanzania; also Zambia to South Africa. Now extinct in Mauritania, Mali, Senegal, Gambia, Guinea, Ghana, Mozambique and most of South African Range; survives in Niger, Chad, Burkina Faso, Benin, Togo, N Nigeria, Cameroon, Central African Republic, Sudan, W Ethiopia, S Somalia, Uganda, Kenya, Tanzania, Rwanda, E and S Zaire, NE Namibia, N Botswana, E Angola, W and C Zambia, Zimbabwe and Transvaal (South Africa).

STATUS: CITES - Appendix III (Ghana); IUCN - Vulnerable as *D. l. korrigum*.

SYNONYMS: *eurus*, *floweri*, *jimela*, *jonesi*, *korrigum*, *lyra*, *phalius*, *purpurescens*, *reclinis*, *selousi*, *senegalensis*, *tiang*, *topi*, *ugandae*.

COMMENTS: Includes *korrigum*; see Ansell (1972:56). For date of publication, see Ellerman et al. (1953:201).

*Damaliscus pygargus* (Pallas, 1767). Spicil. Zool., 1:10.

TYPE LOCALITY: South Africa, Cape Prov., Swart River.

DISTRIBUTION: Formerly from SW Cape Prov. to E Transvaal (South Africa); now only in captivity, or as reintroduced populations in Lesotho, Swaziland, and South Africa.

STATUS: CITES - Appendix II and U.S. ESA - Endangered, as *D. dorcas dorcas*; IUCN - Vulnerable as *D. d. dorcas*, otherwise Rare as *D. dorcas*.

SYNONYMS: *albifrons*, *dorcas*, *grisea*, *maculata*, *personata*, *phillipsi*, *scripta*.

COMMENTS: Includes *phillipsi* and *albifrons*; see Ansell (1972:55). Includes *dorcas*, *pygargus* being the valid name; see Rookmaaker (1991). The type locality of *Damaliscus dorcas* was restricted to South Africa, Cape Prov., Riversdale District, Kafferkiuls River by Harper (1940). But Bigalke (1948), in making an alternative restriction of the type locality to Swart River, used the name *Damaliscus pygargus*. Since this is now the valid name for the species, Bigalke's restriction must be accepted.

*Sigmoceros* Heller, 1912. Smithson. Misc. Coll., 60(8):4.

TYPE SPECIES: *Bubalis lichtensteinii* Peters, 1852 (= *Antilope lichtensteinii* Peters, 1849).

COMMENTS: Formerly included in *Alcelaphus*; see Vrba (1979:223).

*Sigmoceros lichtensteinii* (Peters, 1849). Spenerschen Zeitung, 23 December, 1849, p. unknown; reprinted in 1912 in Gesellschaft Naturforschender Freunde zu Berlin for 1839-59.

TYPE LOCALITY: Mozambique, Tette.

DISTRIBUTION: Tanzania, SE Zaire and NE Angola to NE Zimbabwe and C Mozambique.

SYNONYMS: *bangae*, *basengae*, *dieseneri*, *frommi*, *gendagendae*, *godonga*, *godowiusi*, *gombensis*, *gorongozae*, *grotei*, *hennigi*, *heuferi*, *inkulanondo*, *janenschi*, *kangosa*, *konzi*, *lacrymalis*, *lademanni*, *leucoprymnus*, *leupolti*, *lindicus*, *munzneri*, *niediecki*, *petersi*, *prittwitzii*, *rendalli*, *rowumae*, *rukwai*, *saadanicus*, *schmitti*, *schusteri*, *senganus*, *shirensis*, *stierlingi*, *tendagurucus*, *ufipae*, *ugalae*, *ulanagae*, *ungonicus*, *ungoniensis*, *uwendensis*, *wiesei*, *wintgensis*.

COMMENTS: Included in *Alcelaphus buselaphus* by Haltenorth (1963:102), but placed in separate genus, *Sigmoceros* by Vrba (1979). Included in *Alcelaphus* by Gentry (1990).

### Subfamily Antilopinae Gray, 1821. London Med. Repos., 15:307.

*Ammodorcas* Thomas, 1891. Proc. Zool. Soc. Lond., 1891:207, pl. 21,22.

TYPE SPECIES: *Cervicapra clarkei* Thomas, 1891.

*Ammodorcas clarkei* (Thomas, 1891). Ann. Mag. Nat. Hist., ser. 6, 7:304.

TYPE LOCALITY: Somalia, Habegerhagi's Country, Buroa Wells.

DISTRIBUTION: E Ethiopia, N Somalia.

STATUS: U.S. ESA - Endangered; IUCN - Vulnerable.

COMMENTS: Reviewed by Schomber (1964).

*Antidorcas* Sundevall, 1847. Kongl. Svenska Vet.-Akad. Handl. Stockholm, 1845:271 [1847].

TYPE SPECIES: *Antilope euchore* Forster, 1790 (= *Antilope marsupialis* Zimmermann, 1780).

*Antidorcas marsupialis* (Zimmermann, 1780). Geogr. Gesch. Mensch. Vierf. Thiere, 2:427.

TYPE LOCALITY: South Africa, Cape of Good Hope.

DISTRIBUTION: Namibia, SW Angola, Botswana; South Africa (range here now much reduced).

SYNONYMS: *angolensis*, *centralis*, *dorsata*, *euchore*, *hofmeyri*, *pygargus*, *saccata*, *saliens*, *saltans*.

COMMENTS: Revised by Groves (1981b).

*Antilope* Pallas, 1766. Misc. Zool., p. 1.

TYPE SPECIES: *Capra cervicapra* Linnaeus, 1758.

SYNONYMS: *Cervicapra*.

*Antilope cervicapra* (Linnaeus, 1758). Syst. Nat., 10th ed., 1:69.

TYPE LOCALITY: India, Travancore, inland of Trivandrum.

DISTRIBUTION: E Pakistan (extinct but reintroduced); India from Punjab south to Madras and east to Bihar (formerly up to Assam); extinct in Bangladesh and now localized in India; introduced to Nepal, Texas (USA), and Argentina.

STATUS: CITES - Appendix III (Nepal).

SYNONYMS: *bezoartica*, *bilineata*, *centralis*, *hagenbecki*, *rajputanae*, *rupicapra*, *strepsiceros*.

COMMENTS: Revised by Groves (1982c).

*Dorcatragus* Noack, 1894. Zool. Anz., 17:202.

TYPE SPECIES: *Oreotragus megalotis* Menges, 1894.

*Dorcatragus megalotis* (Menges, 1894). Zool. Anz., 17:130.

TYPE LOCALITY: Somalia, Hekebo Plateau, 35 mi (56 km) SW of Berbera.

DISTRIBUTION: N Somalia, Djibouti, and marginally in adjacent parts of Ethiopia.

STATUS: IUCN - Insufficiently known.

*Gazella* de Blainville, 1816. Bull. Sci. Soc. Philom. Paris, 1816:75.

TYPE SPECIES: *Capra dorcas* Linnaeus, 1758.

SYNONYMS: *Dorcas*, *Eudorcas*, *Korin*, *Leptoceros*, *Matscheia*, *Nanger*, *Trachelocele*, *Tragops*, *Tragopsis*.

COMMENTS: Revised in part by Groves (1969a).

*Gazella arabica* (Lichenstein, 1827). Darst. Säugeth., pl. 6.

TYPE LOCALITY: Saudi Arabia, Farasan Isls.

DISTRIBUTION: Not certainly known.



COMMENTS: Treated as a separate species from *G. gazella* by Groves (1985a). Only known from two specimens; see Groves (1983). Even if formerly present on Farasan Isls, now replaced there by *G. gazella farasani*; see Thouless and Al Bassri (1991).

*Gazella bennettii* (Sykes, 1831). Proc. Zool. Soc. Lond., 1830-1831:104 [1831].

TYPE LOCALITY: India, "Deccan".

DISTRIBUTION: Iran to NW India.

SYNONYMS: *christii*, *fuscifrons*, *hayi*, *hazenna*, *kennioni*.

COMMENTS: A species distinct from *G. gazella* according to Furley et al. (1988) and Groves (1985a, 1988).

*Gazella bilkis* Groves and Lay, 1985. Mammalia, 49:29.

TYPE LOCALITY: Yemen, Wadi Maleh 5 mi E. of Ta'izz, El Hauban.

DISTRIBUTION: N Yemen.

*Gazella cuvieri* (Ogilby, 1841). Proc. Zool. Soc. Lond., 1840:35 [1841].

TYPE LOCALITY: Morocco, Mogador.

DISTRIBUTION: Morocco, N Algeria, C Tunisia.

STATUS: CITES - Appendix III (Tunisia); U.S. ESA and IUCN - Endangered.

SYNONYMS: *cinerascens*, *corinna*, *vera*.

COMMENTS: Assigned to *G. gazella* by Haltenorth (1963:111); but a distinct species according to Groves (1969a).

*Gazella dama* (Pallas, 1766). Misc. Zool., p. 5.

TYPE LOCALITY: Africa, near Lake Chad.

DISTRIBUTION: Formerly from Morocco, Western Sahara, Mauritania and Senegal east to Egypt and Sudan. Now extinct in Mauritania, Senegal, Morocco, Algeria and Egypt; survives at least in Mali, Niger, Chad, Burkina Faso and Sudan.

STATUS: CITES - Appendix I; U.S. ESA - Endangered as *G. d. lozanoi* and *G. d. mhorri*; IUCN - Endangered.

SYNONYMS: *addra*, *damergouensis*, *doria*, *lozanoi*, *mhorri*, *nanguer*, *occidentalis*, *orientalis*, *permista*, *reducta*, *ruficollis*, *weidholzi*.

*Gazella dorcas* (Linnaeus, 1758). Syst. Nat., 10th ed., 1:69.

TYPE LOCALITY: Lower Egypt.

DISTRIBUTION: Morocco south to Mauritania (and formerly to Senegal) east to S Israel and Egypt and from there south to Sudan, NE Ethiopia and N Somalia.

STATUS: CITES - Appendix III (Tunisia); U.S. ESA - Endangered as *G. d. massaesyla* and *G. d. pelzelni* (sic); IUCN - Vulnerable.

SYNONYMS: *beccarii*, *cabrerai*, *corinna*, *isabella*, *isidis*, *kevella*, *littoralis*, *maculata*, *massaesyla*, *neglecta*, *osiris*, *pelzelni*, *rueppelli*, *sundevalli*.

COMMENTS: Includes *pelzelni*; see Gentry (1972:89); but also see Haltenorth (1963:112). Reviewed by Ferguson (1981) and Groves (1981c).

*Gazella gazella* (Pallas, 1766). Misc. Zool., p. 7.

TYPE LOCALITY: Syria.

DISTRIBUTION: Syria, Israel, Lebanon, Arabian Peninsula.

STATUS: U.S. ESA - Endangered; IUCN - Vulnerable.

SYNONYMS: *cora*, *erlangeri*, *farasani*, *hanishi*, *merilli*, *muscatensis*.

*Gazella granti* Brooke, 1872. Proc. Zool. Soc. Lond., 1872:602.

TYPE LOCALITY: Tanzania, W Kinyenye, Ugogo.

DISTRIBUTION: SE Sudan, NE Uganda and S Ethiopia south to S Somalia, Kenya, and N Tanzania.

SYNONYMS: *brighiti*, *gelidjensis*, *lacuum*, *notata*, *petersii*, *raineyi*, *robertsi*, *roosevelti*, *serengetae*.

*Gazella leptoceros* (F. Cuvier, 1842). In E. Geoffroy and F. Cuvier, Hist. Nat. Mammifères, pt. 4, 7(72):1-2, "Antilope aux longues cornes".

TYPE LOCALITY: Sudan, Sennar, but probably Egypt, between Giza and Wadi Natron.

DISTRIBUTION: Algeria, Tunisia, Libya, W Egypt, Niger, N Chad and apparently Mali and Sudan.

STATUS: CITES - Appendix III (Tunisia); U.S. ESA and IUCN - Endangered.

SYNONYMS: *abuharab*, *cuvieri*, *loderi*.

*Gazella rufifrons* Gray, 1846. Ann. Mag. Nat. Hist., [ser. 1], 18:214.

TYPE LOCALITY: Senegal.

DISTRIBUTION: Senegal to NE Ethiopia, with southern limits of distribution extending from N Togo to N Central African Republic; extinct in N Ghana.

STATUS: IUCN - Vulnerable.

SYNONYMS: *centralis*, *hasleri*, *kanuri*, *laevipes*, *salmi*, *senegalensis*, *tilonura*.

COMMENTS: Includes *tilonura*; see Gentry (1972:90); but also see Haltenorth (1963:112).

Groves (1969a) included *rufifrons* in *cuvieri*, but subsequently (1975a) separated them.

*Gazella rufina* Thomas, 1894. Proc. Zool. Soc. Lond., 1894:467.

TYPE LOCALITY: Interior of Algeria.

DISTRIBUTION: Algeria.

SYNONYMS: *pallaryi*.

COMMENTS: Thought to be extinct; see Corbet (1978c:210).

*Gazella saudiya* Carruthers and Schwarz, 1935. Proc. Zool. Soc. Lond., 1935:155.

TYPE LOCALITY: Saudi Arabia, 150 mi NE of Mecca, Dhalm.

DISTRIBUTION: Formerly Saudi Arabia, Kuwait, S Iraq. Extinct in the wild.

STATUS: U.S. ESA - Endangered.

COMMENTS: A species distinct from *G. dorcas* according to Groves (1988).

*Gazella soemmerringii* (Cretzschmar, 1826). In Rüppell, Atlas Reise Nordl. Afr., Zool.

Säugeth., p. 49, pl. 19.

TYPE LOCALITY: E Ethiopia.

DISTRIBUTION: N Somalia, Ethiopia, EC Sudan.

STATUS: IUCN - Vulnerable.

SYNONYMS: *berberana*, *butteri*, *casanovae*, *erlangeri*, *sibyllae*.

*Gazella spekei* Blyth, 1863. Cat. Mamm. Mus. Asiat. Soc. Calcutta, p. 172.

TYPE LOCALITY: N Somalia.

DISTRIBUTION: Somalia, E Ethiopia.

STATUS: IUCN - Vulnerable.

*Gazella subgutturosa* (Guldenstaedt, 1780). Acta Acad. Sci. Petropoli, for 1778, 1:251 [1780].

TYPE LOCALITY: Azerbaijan, Steppes of E Transcaucasia.

DISTRIBUTION: Israel; Jordan, C Arabia and E Caucasus through Iran; Afghanistan; WC

Pakistan; Kazakhstan; Turmenistan; Uzbekistan; Mongolia; W China.

STATUS: U.S. ESA and IUCN - Endangered as *G. s. marica*.

SYNONYMS: *gracilicornis*, *hilleriana*, *marica*, *mongolica*, *persica*, *reginae*, *sairensis*, *seistanica*, *yarkandensis*.

*Gazella thomsonii* Günther, 1884. Ann. Mag. Nat. Hist., ser. 5, 14:427.

TYPE LOCALITY: Kenya, Kilimanjaro Dist.

DISTRIBUTION: SE Sudan, SW Ethiopia, S and C Kenya, N Tanzania.

SYNONYMS: *albonotatus*, *baringoensis*, *behni*, *bergeri*, *bergerinae*, *biedermanni*, *dieseneri*, *dongilanensis*, *langheldi*, *macrocephala*, *manharae*, *marwitzi*, *mundorosica*, *nakuroensis*, *nasalis*, *ndjiriensis*, *ruwanae*, *sabakiensis*, *schillingsi*, *seringetica*, *wembaerensis*.

COMMENTS: Groves (1969a) included *thomsonii* in *G. cuvieri*; but see also Gentry (1972:88, 90-91). Groves (1985a, 1988) included *thomsonii* in *G. rufifrons*.

*Litocranius* Kohl, 1886. Ann. K. K. Naturhist. Hofmus. Wien, 1:79.

TYPE SPECIES: *Gazella walleri* Brooke, 1879.

SYNONYMS: *Lithocranius*.

COMMENTS: Revised by Schomber (1963).

*Litocranius walleri* (Brooke, 1879). Proc. Zool. Soc. Lond., 1878:929, pl. 56 [1879].

TYPE LOCALITY: "mainland of Africa, north of the island of Zanzibar, about lat. 30°S and long. 38°E" and therefore apparently in Kenya, but shown to be correctly "Somalia, coast near Juba River" by Sclater and Thomas (1898) and Moreau et al. (1946).

DISTRIBUTION: E Ethiopia, Somalia, Kenya, NE Tanzania.

SYNONYMS: *sclateri*.

*Madoqua Ogilby*, 1837. Proc. Zool. Soc. Lond., 1836:137 [1837].

TYPE SPECIES: *Antilope saltiana* Desmarest, 1816.

SYNONYMS: *Rhynchotragus*.

COMMENTS: Includes *Rhynchotragus*; see Ansell (1972:61). Revised in part by Yalden (1978).

*Madoqua guentheri* Thomas, 1894. Proc. Zool. Soc. Lond., 1894:324.

TYPE LOCALITY: Ethiopia, Ogaden (6°30'N, 42°30'E), 3,000 ft. (914 m).

DISTRIBUTION: S and C Somalia, S Ethiopia, SE Sudan, NE Uganda, N Kenya.

SYNONYMS: *hodsoni*, *nasoguttata*, *smithii*, *wroughtoni*.

*Madoqua kirkii* (Günther, 1880). Proc. Zool. Soc. Lond., 1880:17.

TYPE LOCALITY: Somalia, Brava.

DISTRIBUTION: Kenya, N and C Tanzania, S Somalia, SW Angola, Namibia.

SYNONYMS: *cavendishi*, *damarensis*, *hindei*, *langi*, *minor*, *nyikae*, *thomasi*, *variani*.

COMMENTS: Includes *cavendishi*, *damarensis* and *thomasi*; see Ansell (1972:64). May really constitute two species; see Ryder et al. (1989).

*Madoqua piacentinii* Drake-Brockman, 1911. Proc. Zool. Soc. Lond., 1911:981.

TYPE LOCALITY: Somalia, Gharabwein, near Obbia (5°25'N, 48°25'E).

DISTRIBUTION: E Somalia.

COMMENTS: Included in *swaynei* by Ansell (1972:62); but see Yalden (1978:262). See also comment under *saltiana*.

*Madoqua saltiana* (Desmarest, 1816). Nouv. Dict. Hist. Nat., Nouv. ed., 2:192.

TYPE LOCALITY: Ethiopia (= Abyssinia).

DISTRIBUTION: NE Sudan, N Ethiopia, Somalia, Djibouti.

SYNONYMS: *citernii*, *cordeauxi*, *erlangeri*, *gubanensis*, *hararensis*, *hemprichiana*, *lawrancei*, *madoka*, *phillipsi*, *swaynei*.

COMMENTS: Includes *cordeauxi*; see Ansell (1972:63). Includes *erlangeri*, *phillipsi*, and *swaynei*; see Yalden (1978:262); but see also Ansell (1972:62).

*Neotragus* H. Smith, 1827. In Griffith et al., Anim. Kingdom, 5:349.

TYPE SPECIES: *Capra pygmaea* Linnaeus, 1758.

SYNONYMS: *Hylarnus*, *Nesotragus*.

COMMENTS: Includes *Nesotragus*; see Ansell (1972:68).

*Neotragus batesi* de Winton, 1903. Proc. Zool. Soc. Lond., 1903(1):192.

TYPE LOCALITY: Cameroon, Bulu Country, Efulen.

DISTRIBUTION: SE Nigeria, SE Cameroon, NE Gabon, N Congo Republic, E Zaire, W Uganda.

SYNONYMS: *harrisoni*.

*Neotragus moschatus* (Von Dueben, 1846). In Sundevall, Ofv. K. Svenska Vet.-Akad. Forhandl., Stockholm, 3(7):221.

TYPE LOCALITY: Tanzania, Chapani Isl., 2 mi. (3 km) from Zanzibar.

DISTRIBUTION: SE Kenya south to Malawi, Mozambique, and Natal and E Transvaal (South Africa); Zanzibar and Mafia Isls (Tanzania).

STATUS: U.S. ESA - Endangered as *N. m. moschatus*.

SYNONYMS: *akeleyi*, *deserticola*, *kirchenpaueri*, *livingstonianus*, *zanzibaricus*, *zuluensis*.

COMMENTS: Includes *livingstonianus*; see Ellerman et al. (1953).

*Neotragus pygmaeus* (Linnaeus, 1758). Syst. Nat., 10th ed., 1:69.

TYPE LOCALITY: "Guinea, India" (= west coast of Africa).

DISTRIBUTION: Sierra Leone to Ghana.

SYNONYMS: *perpusillus*, *regia*, *spinigera*.

*Oreotragus* A. Smith, 1834. S. Afr. Quart. J., 2:212.

TYPE SPECIES: *Antilope oreotragus* Zimmermann, 1783.

*Oreotragus oreotragus* (Zimmermann, 1783). Geogr. Gesch. Mensch. Vierf. Thiere, 3:269.

TYPE LOCALITY: South Africa, Cape of Good Hope.

DISTRIBUTION: C Nigeria, N Central African Republic, E Sudan and Ethiopia south to South Africa and west to S Zaire, Zambia and E Botswana; Namibia.

STATUS: IUCN - Endangered as *O. o. porteousi*.

SYNONYMS: *aceratos*, *aureus*, *centralis*, *cunenensis*, *hyatti*, *klippspringer*, *porteusi*, *saltator*, *saltatrixoides*, *schillingsi*, *somalicus*, *steinhardtii*, *stevensoni*, *transvaalensis*, *tyleri*.

*Ourebia* Laurillard, 1842. In d'Orbigny, Dict. Univ. D'Hist. Nat., 1:622.

TYPE SPECIES: *Antilope scoparia* Schreber, 1799 (= *Antilope ourebi* Zimmermann, 1783).

SYNONYMS: *Quadriscopa*, *Scopophorus*

*Ourebia ourebi* (Zimmermann, 1783). Geogr. Gesch. Mensch. Vierf. Thiere, 3:268.

TYPE LOCALITY: South Africa, Cape of Good Hope (= Uitenhage Dist., see Roberts, 1951).

DISTRIBUTION: Senegal to W and C Ethiopia and S Somalia, south and southwest to E South Africa, N Botswana, N Namibia, Angola, and S Zaire.

SYNONYMS: *aequatoria*, *brevicaudata*, *cottoni*, *dorcas*, *gallarum*, *goslingi*, *grayi*, *haggardi*, *hastata*, *kenyae*, *leucopus*, *masakensis*, *melanura*, *microdon*, *montana*, *nigricaudata*, *pitmani*, *quadriscopa*, *rutula*, *scoparia*, *smithii*, *splendida*, *ugandae*.

COMMENTS: For synonyms see Ansell (1972:66).

*Pantholops* Hodgson, 1834. Proc. Zool. Soc. Lond., 1834:81.

TYPE SPECIES: *Antilope hodgsonii* Aber, 1826.

*Pantholops hodgsonii* (Abel, 1826). Calcutta Gov't Gazette., see Phil. Mag., 1826, 68:234.

TYPE LOCALITY: China, Tibet, Kooti Pass in Arrun Valley, Tingri Maiden.

DISTRIBUTION: Tibet, Tsinghai, Szechwan (China); Ladak (N India).

STATUS: CITES - Appendix I.

SYNONYMS: *chiru*, *kemas*.

*Procapra* Hodgson, 1846. J. Asiat. Soc. Bengal, 15:334.

TYPE SPECIES: *Procapra picticaudata* Hodgson, 1846.

SYNONYMS: *Prodorcas*.

COMMENTS: Revised by Groves (1967a). Gromov and Baranova (1981:393) considered *Procapra* a subgenus of *Gazella*; but Groves (1985a) maintained its status as a genus.

*Procapra gutturosa* (Pallas, 1777). Spicil. Zool., 12:46.

TYPE LOCALITY: Russia, SE Transbaikalia, Chitinsk. Obl., upper Onon River.

DISTRIBUTION: Formerly, Mongolia except mountains and SW desert, N China, and Transbaikalia (Russia); now restricted to E Mongolia and Inner Mongolia (China); see Sokolov and Orlov (1980:280).

SYNONYMS: *altaica*, *orientalis*.

*Procapra picticaudata* Hodgson, 1846. J. Asiat. Soc. Bengal, 15:334, pl. 2.

TYPE LOCALITY: China, Tibet, Hundes Dist; but according to Groves (1967a), the locality is more likely the district N of Sikkim.

DISTRIBUTION: Szechwan, Tsinghai, Tibet (China); adjacent Indian Himalayas; possibly Sinkiang (China).

*Procapra przewalskii* (Büchner, 1891). Melanges Biol. Soc. St. Petersb., 13:161.

TYPE LOCALITY: Mongolia, Chagrin-Gol (= Steppe); erroneously given as China, S Ordos Desert by Ellerman and Morrison-Scott (1951), which was followed by Gromov and Baranova (1981).

DISTRIBUTION: Tsinghai to Inner Mongolia (NC China).

SYNONYMS: *diversicornis*.

COMMENTS: Considered a subspecies of *picticaudata* by Ellerman and Morrison-Scott (1951:388).

*Raphicerus* H. Smith, 1827. In Griffith et al., Animal Kingdom, 5:342.

TYPE SPECIES: *Cerophorus acuticornis* Blainville, 1816 (= *Antilope campestris* Thunberg, 1811).

SYNONYMS: *Calotragus*, *Grysbock*, *Nototragus*, *Pediotragus*.

*Raphicerus campestris* (Thunberg, 1811). Mem. Acad. Imp. Sci. St. Petersbourg, 3:313.

TYPE LOCALITY: South Africa, Cape of Good Hope.

DISTRIBUTION: N and C Tanzania; S Kenya; Angola, W Zambia, Zimbabwe, and S Mozambique south to South Africa.

SYNONYMS: *acuticornis*, *bourquii*, *capensis*, *capricornis*, *cunenensis*, *fulvorubescens*, *grayi*, *hoamibensis*, *horstockii*, *ibex*, *kelleni*, *natalensis*, *neumanni*, *pallida*, *pediotragus*, *rupestris*,

*steinhardti, stigmatus, subulata, tragulus, ugabensis, zukowskyi, zuluensis.*

*Raphicerus melanotis* (Thunberg, 1811). Mem. Acad. Imp. Sci. St. Petersburg, 3:312.

TYPE LOCALITY: South Africa, Cape of Good Hope.

DISTRIBUTION: S Cape Prov. (South Africa).

SYNONYMS: *grisea, rubroalbescens, rufescens.*

*Raphicerus sharpei* Thomas, 1897. Proc. Zool. Soc. Lond., 1896:796, pl. 9 [1867].

TYPE LOCALITY: Malawi (= Nyasaland), S Angoniland.

DISTRIBUTION: Tanzania, SE Zaire, Zambia, Malawi, Mozambique, Zimbabwe, N Botswana, Swaziland, NE Transvaal (South Africa).

SYNONYMS: *colonicus.*

COMMENTS: Included in *melanotis* by Haltenorth (1963:78) but see Ansell (1972:67).

*Saiga* Gray, 1843. List Specimens Mamm. Coll. Brit. Mus., p. xxvi.

TYPE SPECIES: *Capra tatarica* Linnaeus, 1766.

SYNONYMS: *Colus.*

COMMENTS: This generic name is spelt "*Saiga*" on p. xxvi and "*Siaga*" on p. 160 of the original citation.

*Saiga tatarica* (Linnaeus, 1766). Syst. Nat., 12th ed., 1:97.

TYPE LOCALITY: W Kazakhstan, "Ural Steppes."

DISTRIBUTION: N Caucasus (Kalmyk Steppe, Russia), Kazakhstan, N Uzbekistan, SW Mongolia, Sinkiang (China). Formerly west to Poland.

STATUS: U.S. ESA - Endangered as *S. t. mongolica*.

SYNONYMS: *colus, mongolica, saiga, scythica.*

COMMENTS: Reviewed by Sokolov (1974, Mammalian Species, 38).

**Subfamily Bovinae** Gray, 1821. London Med. Repos., 15:308.

COMMENTS: Tribe Bovini. Reviewed by Groves (1981d).

*Bison* H. Smith, 1827. In Griffith et al., Animal Kingdom, 5:373.

TYPE SPECIES: *Bos bison* Linnaeus, 1758.

COMMENTS: Revised by Bohlken (1967), McDonald (1981), and Van Zyll de Jong (1986). A synonym of *Bos* according to Groves (1981d).

*Bison bison* (Linnaeus, 1758). Syst. Nat., 10th ed., 1:72.

TYPE LOCALITY: "Mexico" (= C Kansas, "Quivira"), see Hershkovitz (1957b); redesignated as Canadian River valley, E New Mexico (USA), see McDonald (1981:62).

DISTRIBUTION: Formerly NW and C Canada, south through USA, to Chihuahua, Coahuila (Mexico). Exterminated in the wild except in Yellowstone Park, Wyoming (USA) and Wood Buffalo Park, Northwest Territory (Canada). Reintroduced widely within native range and in C Alaska.

STATUS: CITES - Appendix I and U.S. ESA - Endangered as *B. b. athabasca*.

SYNONYMS: *americanus, athabasca, haningtoni, montanae, oregonus, pennsylvanicus, septemtrionalis* (sic).

COMMENTS: Reviewed by Meagher (1986, Mammalian Species, 266).

*Bison bonasus* (Linnaeus, 1758). Syst. Nat., 10th ed., 1:71.

TYPE LOCALITY: Bialowieza Forest, Poland.

DISTRIBUTION: Europe, originally from S Sweden south to the Pyrenees Mtns and Balkans east to R. Don and W Caucasus Mtns (Russia), surviving in France until about 6th century, in Germany, Rumania and W Russia into 18th century and in Caucasus Mtns and Poland until early part of present century; extinct except where now reintroduced to E Poland, W Russia, and Caucasus Mtns.

STATUS: IUCN - Vulnerable.

SYNONYMS: *arbustotundrarum, caucasicus, europaeus, hungarorum, nostras, urus.*

COMMENTS: Considered conspecific with *bison* by Bohlken (1967) and Van Zyll de Jong (1986); but not included in *B. bison* by Meagher (1986). Reviewed by Flerov (1979).

*Bos* Linnaeus, 1758. Syst. Nat., 10th ed., 1:71.

TYPE SPECIES: *Bos taurus* Linnaeus, 1758.



SYNONYMS: *Bibos*, *Bubalibos*, *Gauribos*, *Gaveus*, *Novibos*, *Poephagus*, *Taurus*, *Uribos*, *Urus*.  
COMMENTS: Includes *Bibos*, *Novibos*, and *Poephagus*; see Ellerman and Morrison-Scott (1951:380).

*Bos frontalis* Lambert, 1804. Trans. Linn. Soc. London, 7:57.

TYPE LOCALITY: Bangladesh, NE Chittagong (domesticated stock).

DISTRIBUTION: India, Nepal, Burma, Thailand, S Tibet and Yunnan (China), S Vietnam, Cambodia, Peninsular Malaysia.

STATUS: CITES - Appendix I, U.S. ESA - Endangered, and IUCN - Vulnerable as *Bos gaurus*.

SYNONYMS: *annamiticus*, *asseel*, *brachyrhinus*, *cavifrons*, *fuscicornis*, *gaurus*, *guavera*, *hubbacki*, *laosensis*, *platyceros*, *readei*, *subhemachalus*, *sylhetanus*, *sylvanus*.

COMMENTS: Includes *gaurus*; but see Corbet and Hill (1991:130). Formerly placed in *Bibos*.

*Bos grunniens* Linnaeus, 1766. Syst. Nat., 12th ed., 1:99.

TYPE LOCALITY: Boreal Asia (domesticated stock).

DISTRIBUTION: Sinkiang, Tibet, Tsinghai, Szechwan (China); Ladak (N India); Nepal; domesticated in C Asia.

STATUS: CITES - Appendix I as *B. (= [sic] grunniens) mutus*; U.S. ESA - Endangered as *B. g. mutus*; IUCN - Endangered.

SYNONYMS: *mutus*.

COMMENTS: Includes *mutus*; but see Corbet (1978c:206). Formerly placed in *Poephagus*.

Reviewed by Olsen (1990).

*Bos javanicus* d'Alton, 1823. Die Skelete der Wiederkauer, abgebildet und verglichen, p. 7.

TYPE LOCALITY: Indonesia, Java.

DISTRIBUTION: Burma, Thailand, and Indochina south to N Peninsular Malaysia; Java; Borneo; introduced to Australia, Bali Isl, Sangehe and Enggano Isls; domesticated in SE Asia.

STATUS: U.S. ESA - Endangered; IUCN - Vulnerable.

SYNONYMS: *banteng*, *birmanicus*, *butleri*, *discolor*, *domesticus*, *leucoprymnus*, *longicornis*, *lowi*, *porteri*, *sondaicus*.

COMMENTS: For use of *javanicus* instead of *banteng*, see Hooijer (1956). Formerly placed in *Bibos*.

*Bos sauveli* Urbain, 1937. Bull. Soc. Zool. Fr., 62:307.

TYPE LOCALITY: Cambodia, near Tchap Village.

DISTRIBUTION: Cambodia, SE Thailand, S Laos, W Vietnam.

STATUS: CITES - Appendix I; U.S. ESA and IUCN - Endangered.

COMMENTS: Included in *Novibos* by Coolidge (1940); but see Ellerman and Morrison-Scott (1951:380). Reviewed by MacKinnon and Stuart (1989).

*Bos taurus* Linnaeus, 1758. Syst. Nat., 10th ed., 1:71.

TYPE LOCALITY: Sweden, Upsala according to Thomas (1911a); but Linnaeus (1758) cited "Habitat in Poloniae", possibly referring to the Aurochs, which he recognized as conspecific with domestic cattle.

DISTRIBUTION: Europe and W Russia to the Middle East, surviving at least into the Iron Age in the Middle East; extinct in the wild, except in Poland, by commencement of 15th century; last wild individual died in 1627. Distributed worldwide under domestication; feral populations in Spain, France, Australia, New Guinea, USA, Colombia, Argentina and many islands, including Hawaiian, Galapagos, Dominican Republic/Haiti, Tristan da Cunha, New Amsterdam and Juan Fernandez Isls.

SYNONYMS: *bunnelli*, *indicus*, *primigenius*.

COMMENTS: Includes *primigenius* (extinct wild ancestor) and *indicus*; but see Corbet (1978c:206).

*Boselaphus* de Blainville, 1816. Bull. Sci. Soc. Philom. Paris, 1816:75.

TYPE SPECIES: *Antilope tragocamelus* Pallas, 1766.

SYNONYMS: *Portax*.

*Boselaphus tragocamelus* (Pallas, 1766). Misc. Zool., p. 5.

TYPE LOCALITY: India, no exact locality ("Plains of Peninsular India").

DISTRIBUTION: E Pakistan and N India south to Bombay and Mysore; introduced into Texas (USA).

SYNONYMS: *albipes*, *hippelaphus*, *picta*, *risia*.

*Bubalus* H. Smith, 1827. In Griffith et al., Animal Kingdom, 5:371.

TYPE SPECIES: *Bos bubalis* Linnaeus, 1758.

SYNONYMS: *Anoa*.

COMMENTS: Includes *Anoa*; see Groves (1969b).

*Bubalus bubalis* (Linnaeus, 1758). Syst. Nat., 10th ed., 1:72.

TYPE LOCALITY: "Asia"?; restricted by Thomas (1911a) to Italy, Rome, but Linnaeus (1758) stated "Habitat in Asia, cultus in Italia".

DISTRIBUTION: Formerly India to Indochina; true wild populations survive in Assam and Orissa (India), Nepal, N Thailand, and possibly in Bangladesh, Cambodia and Vietnam; domesticated in N Africa and S Europe east to Indonesia and in E South America; feral populations in Sri Lanka, Borneo and other parts of SE Asia, New Britain and New Ireland (Bismarck Arch., Papua New Guinea), and Australia.

STATUS: CITES - Appendix III (Nepal) as *B. arnee* "formerly listed as *B. bubalis*, a nonprotected, domesticated form" - but see comments below; IUCN - Endangered.

SYNONYMS: *arnee*, *fulvus*, *hosei*, *indicus*, *kerabau*, *macroceros*, *mainitensis*, *moellendorffii*, *septentrionalis*.

COMMENTS: Includes *arnee*, the name used for the species by those workers who do not employ specific names based on domestic animals: *bubalis* is the senior synonym; see Ellerman and Morrison-Scott (1951:383); but see also Corbet and Hill (1991:130).

*Bubalus depressicornis* (H. Smith, 1827). In Griffith et al., Animal Kingdom, 4:293.

TYPE LOCALITY: Indonesia, Sulawesi (= Celebes).

DISTRIBUTION: Sulawesi.

STATUS: CITES - Appendix I; U.S. ESA and IUCN - Endangered.

SYNONYMS: *anoa*, *celebensis*, *fergusoni*, *platycerus*.

COMMENTS: Includes *anoa*; see Groves (1982e). Formerly included in *Anoa* but placed in genus *Bubalus*, subgenus *Anoa* by Groves (1969b:3).

*Bubalus mephistopheles* Hopwood, 1925. Ann. Mag. Nat. Hist., ser. 9, 16:238.

TYPE LOCALITY: China, Honan, Chang-Te-Ho on the Yellow River near Chang-Te-Fu.

DISTRIBUTION: Extinct; formerly in NE China, survived until the Shang Dynasty, 18-12th Century BC; see Teilhard de Chardin and Young (1936).

*Bubalus mindorensis* (Heude, 1888). Mem. Hist. Nat. Emp. Chin., 2:4.

TYPE LOCALITY: Philippines, Mindoro.

DISTRIBUTION: Mindoro (Philippines).

STATUS: CITES - Appendix I; U.S. ESA and IUCN - Endangered.

COMMENTS: A subspecies of *B. bubalis* according to Bohlken (1958), but restored to specific status, in subgenus *Bubalus*, by Groves (1969b:10).

*Bubalus quarlesi* (Ouwens, 1910). Bull. Dépt. Agric. Indes Néerl., 38:7.

TYPE LOCALITY: Indonesia, Sulawesi, mountains of C Toradja Dist.

DISTRIBUTION: Mountains of Sulawesi.

STATUS: CITES - Appendix I; U.S. ESA and IUCN - Endangered.

COMMENTS: Subgenus *Anoa*; see Groves (1969b). Formerly included in *A. depressicornis*; see Haltenorth (1963:131).

*Syncerus* Hodgson, 1847. J. Asiat. Soc. Bengal, ser. 2, 16:709.

TYPE SPECIES: *Bos brachyceros* Gray, 1837 (= *Bos caffer* Sparrman, 1779).

SYNONYMS: *Planiceros*.

COMMENTS: Considered a subgenus of *Bubalus* by Haltenorth (1963:133). Reviewed by Grubb (1972).

*Syncerus caffer* (Sparrman, 1779). K. Svenska Vet.-Akad. Handl. Stockholm, 40:79.

TYPE LOCALITY: South Africa, Cape of Good Hope, Sunday River, Algoa Bay.

DISTRIBUTION: Senegal to S Ethiopia to S Africa.

SYNONYMS: *adamauae*, *adametzi*, *adolfifriederici*, *aequinotialis*, *athiensis*, *azrakensis*, *beddingtoni*, *bornouensis*, *brachyceros*, *bubuensis*, *centralis*, *corniculatus*, *cottoni*, *cubangensis*, *cunenensis*, *diehli*, *gariepensis*, *gazae*, *geoffroyi*, *houyi*, *hunti*, *hylaesus*, *lomamiensis*, *limpopoensis*, *massaicus*, *matthewsi*, *mayi*, *nanus*, *neumanni*, *niediecki*, *nuni*,

*pegasus, planiceros, pumilus, pungwensis, radcliffei, reclinis, ruahaensis, rufuensis, sankurrensis, schillingsi, simpsoni, solvayi, tanae, thierryi, urundicus, ussanguensis, wembarensis, wiesei, wintgensii.*

COMMENTS: For synonyms see Ansell (1972:18).

*Taurotragus* Wagner, 1855. In Schreber Die Säugethiere, Suppl., 5:438.

TYPE SPECIES: *Antilope oreas* Pallas, 1777 (= *Antilope oryx* Pallas, 1766).

SYNONYMS: *Doratoceros, Oreas*.

COMMENTS: This genus has been included in *Tragelaphus*; see Van Gelder (1977a, b) and Ansell (1978:53). Generic rank was restored by Smithers (1983:679), Meester et al. (1986:216), and Ansell and Dowsett (1988:87).

*Taurotragus derbianus* (Gray, 1847). Ann. Mag. Nat. Hist., [ser. 1], 20:286.

TYPE LOCALITY: Gambia.

DISTRIBUTION: Formerly, Gambia to S Sudan and NW Uganda; now in Senegal to Guinea and Cameroon to S Sudan; may survive in S Mali and NE Nigeria.

STATUS: U.S. ESA and IUCN - Endangered as *T. d. derbianus*; IUCN - Vulnerable as *Tragelaphus derbianus gigas*.

SYNONYMS: *cameroonensis, colini, congolanus, gigas*.

COMMENTS: Regarded as conspecific with *T. oryx* by Haltenorth (1963:86), but usually treated as a full species; see Ansell (1972:26).

*Taurotragus oryx* (Pallas, 1766). Misc. Zool., p. 9.

TYPE LOCALITY: South Africa, Cape of Good Hope.

DISTRIBUTION: Angola to S Africa; thence north through Botswana, S Zaire, Malawi, Zambia, and Tanzania to SE Sudan and SW Ethiopia.

SYNONYMS: *alces, canna, barbatus, billingae, kaufmanni, livingstonii, niediecki, oreas, pattersonianus, selousi, triangularis*.

*Tetracerus* Leach, 1825. Trans. Linn. Soc. London, 14:524.

TYPE SPECIES: *Antilope chickara* Hardwicke, 1825 (= *Cerophorus quadricornis* Blainville, 1816).

*Tetracerus quadricornis* (de Blainville, 1816). Bull. Sci. Soc. Philom. Paris, 1816:75.

TYPE LOCALITY: India, no exact locality ("Plains of Peninsular India").

DISTRIBUTION: Peninsular India, north to Nepal.

STATUS: CITES - Appendix III (Nepal).

SYNONYMS: *chickara, iodes, paccerois, striatocornis, subquadricornis, tetracornis*.

*Tragelaphus* de Blainville, 1816. Bull. Sci. Soc. Philom. Paris, 1816:75.

TYPE SPECIES: *Antilope sylvatica* Sparrman, 1780 (= *Antilope scripta* Pallas, 1766).

SYNONYMS: *Ammelaphus, Boocercus, Calliope, Euryceros, Limnotragus, Nyala, Strepsicerastes, Strepsicerella, Strepsiceros*.

COMMENTS: Includes *Boocercus, Limnotragus, Nyala* and *Strepsiceros*; see Ansell (1972:20) and Van Gelder (1977a, b).

*Tragelaphus angasii* Gray, 1849. In Angas, Proc. Zool. Soc. Lond., 1848:89 [1849].

TYPE LOCALITY: South Africa, Natal, Zululand, St. Lucia Bay.

DISTRIBUTION: S Malawi; Mozambique; N and S Zimbabwe; Swaziland; Natal and E Transvaal (South Africa).

*Tragelaphus buxtoni* (Lydekker, 1910). Nature (London), 84:397.

TYPE LOCALITY: Ethiopia, Bak Prov., Sahatu Mtns, southeast of Lake Zwai, 9,000 ft. (2,743 m).

DISTRIBUTION: Ethiopia, east of Rift Valley.

STATUS: IUCN - Endangered.

*Tragelaphus eurycerus* (Ogilby, 1837). Proc. Zool. Soc. Lond., 1836:120 [1837].

TYPE LOCALITY: West Africa.

DISTRIBUTION: Sierra Leone to Benin; S Cameroon and N Gabon to Central African Republic, S Sudan and Zaire; S Kenya.

STATUS: CITES - Appendix III (Ghana).

SYNONYMS: *albovirgatus, cooperi, isaaci, katanganus*.

COMMENTS: *T. euryceros* is a later spelling; see Haltenorth (1963:86). Formerly placed in *Boocercus*. Reviewed by Ralls (1978, Mammalian Species, 111).

*Tragelaphus imberbis* (Blyth, 1869). Proc. Zool. Soc. Lond., 1869:55.

TYPE LOCALITY: "Abyssinia" (= Ethiopia).

DISTRIBUTION: Kenya, E Tanzania, NE Uganda, Somalia, SE Ethiopia, SE Sudan, Yemen, SW Saudi Arabia.

SYNONYMS: *australis*.

COMMENTS: Arabian records are based on only two specimens (Harrison and Bates, 1991:192).

*Tragelaphus scriptus* (Pallas, 1766). Misc. Zool., p. 8.

TYPE LOCALITY: Senegal.

DISTRIBUTION: S Mauritania to Ethiopia and S Somalia, and south to N Namibia and South Africa.

SYNONYMS: *bor*, *barkeri*, *brunneus*; *cottoni* Matschie, 1912; *dama*, *decula*, *delamerei*, *dianae*, *dodingae*, *eldomae*, *fasciatus*, *fulvoochraceus*, *haywoodi*, *heterochrous*, *insularis*, *johannae*, *knutsoni*, *laticeps*, *locorinae*, *makalae*, *massaicus*, *meneliki*, *meridionalis*, *meruensis*, *multicolor*, *nigrinotatus*, *obscurus*, *olivaceus*, *ornatus*, *phaleratus*, *pictus*, *powelli*, *punctatus*, *roualeyni*, *reidae*, *sassae*, *signatus*, *simplex*, *sylvaticus*, *tjaderi*, *uellensis*.

*Tragelaphus spekii* Sclater, 1863. In Speke, Journal of the Discovery of the Source of the Nile, p. 223.

TYPE LOCALITY: Tanzania, Karagwe, W of Lake Victoria, restricted to Bukoba district, Lake Lwelo, 2°S, 30°57'E by Moreau et al. (1946:441).

DISTRIBUTION: Gambia and Senegal; Togo to S Sudan, south to Angola, Caprivi Strip (NE Namibia), N Botswana and extreme NW of Zimbabwe, and east to W Kenya, W Tanzania, Zambia and W Mozambique.

STATUS: CITES - Appendix III (Ghana).

SYNONYMS: *albonotatus*, *gratus*, *inornatus*, *larkenii*, *selousi*, *sylvestris*, *ugallae*, *wilhelmi*.

*Tragelaphus strepsiceros* (Pallas, 1766). Misc. Zool., p. 9.

TYPE LOCALITY: South Africa, Cape of Good Hope; or Namibia, Gammafluss (= Lowen River). See Meester et al. (1986:217).

DISTRIBUTION: S Chad, N Central African Republic, W and E Sudan, NE Uganda, Ethiopia and Somalia south and southwest to South Africa, Namibia, Angola and SE Zaire.

SYNONYMS: *abyssinicus*, *bea*, *burlacei*, *capensis*, *chora*; *cottoni* Dollman and Burlace, 1928; *excelsus*, *frommi*, *hamiltoni*, *koodoo*, *torticornis*, *zambesiensis*.

### Subfamily Caprinae Gray, 1821. London Med. Repos., 15:307.

*Ammotragus* Blyth, 1840. Proc. Zool. Soc. Lond., 1840:13.

TYPE SPECIES: *Antilope lervia* Pallas, 1777.

COMMENTS: Ansell (1972:70) included *Ammotragus* in *Capra*; but see comment under *Capra*.

*Ammotragus lervia* (Pallas, 1777). Spicil. Zool., 12:12.

TYPE LOCALITY: Algeria, Department of Oran.

DISTRIBUTION: Western Sahara to W Egypt; Mali to Sudan; introduced to USA, N Mexico and Spain.

STATUS: CITES - Appendix II; IUCN - Vulnerable.

SYNONYMS: *angusi*, *blainei*, *fassini*, *ornata*, *sahariensis*, *tragelaphus*.

COMMENTS: Reviewed by G.G. Gray and Simpson (1980, Mammalian Species, 144).

*Budorcas* Hodgson, 1850. J. Asiat. Soc. Bengal, 19:65.

TYPE SPECIES: *Budorcas taxicolor* Hodgson, 1850.

*Budorcas taxicolor* Hodgson, 1850. J. Asiat. Soc. Bengal, 19:65.

TYPE LOCALITY: India, Assam, Mishmi Hills.

DISTRIBUTION: Sikkim and Mishmi Hills (NE India); Bhutan; N Burma; SE Tibet, Sichuan, Gansu, Shaanxi and Yunnan (China).

STATUS: CITES - Appendix II; IUCN - Rare as *B. t. bedfordi*, Indeterminate as *B. t. tibetana*.

SYNONYMS: *bedfordi*, *mittchelli*, *sinensis*, *tibetana*, *whitei*.

COMMENTS: Reviewed by Neas and Hoffmann (1987, *Mammalian Species*, 277).

*Capra* Linnaeus, 1758. *Syst. Nat.*, 10th ed., 1:68.

TYPE SPECIES: *Capra hircus* Linnaeus, 1758.

SYNONYMS: *Aegoceros*, *Aries*, *Eucapra*, *Euibex*, *Hircus*, *Ibex*, *Orthaegoceros*, *Tragus*, *Turocapra*, *Turus*.

COMMENTS: Includes *Orthaegoceros*; see Heptner et al. (1961:593). Various authors have included *Ammotragus* and *Ovis*; see Ansell (1972:70) and Van Gelder (1977b); probably should also include *Pseudois*. However, most authors have not followed this arrangement; see G.G. Gray and Simpson (1980), Gromov and Baranova (1981), Hall (1981), and Corbet and Hill (1991). There is no consensus concerning the number of species to be recognized in this genus; some would recognize only two (*hircus* and *falconeri*); see Haltenorth (1963), while others would recognize up to nine. Heptner et al. (1961) are followed here.

*Capra caucasica* Gldenstaedt and Pallas, 1783. *Acta Acad. Sci. Petropoli*, for 1779, 2:273 [1783].

TYPE LOCALITY: Russia, Caucasus Mtns, between Malka and Baksan Rivers, east of Mt. Elbrus.

DISTRIBUTION: W Caucasus Mtns (Russia).

SYNONYMS: *dinniki*, *raddei*, *severtzovi*.

COMMENTS: Possibly *caucasica* is the prior name for *cylindricornis*, in which case this species should be termed *severtzovi*; see Ellerman and Morrison-Scott (1951:407). See also comment under *cylindricornis*.

*Capra cylindricornis* (Blyth, 1841). *Proc. Zool. Soc. Lond.*, 1840:68 [1841].

TYPE LOCALITY: Georgia, E Caucasus Mtns, Mt. Kasbek.

DISTRIBUTION: E Caucasus Mtns (Azerbaijan, E Georgia, Russia).

SYNONYMS: *pallasii*.

COMMENTS: Possibly a junior synonym of *caucasica*; see Gromov and Baranova (1981:404). See also comment under *caucasica*.

*Capra falconeri* (Wagner, 1839). *Gelehrt. Anz. I. K. Bayer Akad. Wiss., Mnchen*, 9:430.

TYPE LOCALITY: India, Kashmir, Astor.

DISTRIBUTION: Afghanistan; N and C Pakistan; N India; Kashmir; S Uzbekistan and Tadzhikistan.

STATUS: CITES - Appendix I *C. f. chialtanensis*, *C. f. falconeri*, *C. f. heptneri*, *C. f. jerdoni*, and *C. f. megaceros*; otherwise Appendix II; U.S. ESA - Endangered as *C. f. jerdoni*, *C. f. megaceros*, and in Chiltan Range of WC Pakistan as *C. aegagrus* (= *C. f. chialtanensis* [sic]); IUCN - Endangered as *C. f. megaceros*, otherwise Vulnerable.

SYNONYMS: *cashmiriensis*, *chialtanensis*, *chitralensis*, *gilgitensis*, *heptneri*, *jerdoni*, *megaceros*, *ognevi*.

*Capra hircus* Linnaeus, 1758. *Syst. Nat.*, 10th ed., 1:68.

TYPE LOCALITY: Sweden (domesticated stock).

DISTRIBUTION: Turkey, Caucasus region, Turkmenistan, Iraq, Iran, SW Afghanistan, S Pakistan, Oman (feral?), extinct in Lebanon and Syria; domesticated worldwide; feral populations in British Isles, islands in the Mediterranean, USA, Canada, Chile, Argentina, Venezuela, Australia, New Zealand and many oceanic islands including Bonin, Hawaiian, Galapagos, Seychelles, and Juan Fernandez Isls.

SYNONYMS: *aegagrus*, *blythi*, *cilicica*, *cretica*, *dorcas*, *florstedi*, *gazella*, *jourensis*, *neglecta*, *persica*, *picta*, *turcmenica*.

COMMENTS: Includes *aegagrus*, but see Corbet (1978c:214).

*Capra ibex* Linnaeus, 1758. *Syst. Nat.*, 10th ed., 1:68.

TYPE LOCALITY: Switzerland, Valais.

DISTRIBUTION: Formerly the mountains of France, Switzerland, Austria, Germany, and N Italy; extinct except in Italy but now reintroduced into much of its former range.

SYNONYMS: *alpina*, *europa*, *gracius*.

*Capra nubiana* F. Cuvier, 1825. In É. Geoffroy and F. Cuvier, *Hist. Nat. Mammifères*, pt. 3, 6(50):2 pp. "Bouc sauvage de la Haute-Egypte".

TYPE LOCALITY: Egypt, "Upper Egypt".



DISTRIBUTION: Egypt east of the Nile, NE Sudan, and Syria south to Yemen and east to Oman.

SYNONYMS: *arabica*, *beden*, *mengesi*, *sinaitica*.

COMMENTS: Treated as a species distinct from *C. ibex* by Uerpmann (1987).

*Capra pyrenaica* Schinz, 1838. N. Denkschr. Schweiz. Ges. Natur. Wiss., 2:9.

TYPE LOCALITY: Spain, Pyrenees Mtns, Huesca, near Maladetta Pass.

DISTRIBUTION: Iberian Peninsula.

STATUS: U.S. ESA and IUCN - Endangered as *C. p. pyrenaica*.

SYNONYMS: *cameranoi*, *hispanica*, *lusitanica*, *victoriae*.

*Capra sibirica* (Pallas, 1776). Spicil. Zool., 11:52.

TYPE LOCALITY: Russia, Siberia, Sayan Mtns, near Munku Sardyx.

DISTRIBUTION: Mountain ranges of N Afghanistan, N Pakistan, and N India through Tadzhikistan, Kirgizia, E Kazakhstan and S Siberia (Russia) to Sinkiang (China) and S and W Mongolia.

SYNONYMS: *alaiana*, *almasyi*, *altaica*, *dauvergnii*, *dementievi*, *fasciata*, *filippii*, *formosovi*, *hagenbecki*, *hemalayanus*, *lorenzi*, *lydekkeri*, *merzbacheri*, *pallasii*, *pedri*, *sakeen*, *transalaiana*, *wardi*.

COMMENTS: Treated as a species distinct from *C. ibex* by Heptner et al. (1961).

*Capra walie* Rüppell, 1835. Neue Wirbelt. Fauna Abyssin. Gehörig, Säugeth., 1:16.

TYPE LOCALITY: Ethiopia, mountains of Simien.

DISTRIBUTION: N Ethiopia.

STATUS: U.S. ESA and IUCN - Endangered.

COMMENTS: Treated as a species distinct from *C. ibex* by Ansell (1972:70) and Yalden et al. (1984).

*Hemitragus hodgsoni* Hodgson, 1841. Calcutta J. Nat. Hist., 2:218.

TYPE SPECIES: *Capra jharal* Hodgson, 1833 (= *Capra jemlahica* H. Smith, 1826).

*Hemitragus hylocrius* (Ogilby, 1838). Proc. Zool. Soc. Lond., 1837:81 [1838].

TYPE LOCALITY: India, Nilgiri Hills.

DISTRIBUTION: SW and S India.

STATUS: IUCN - Vulnerable.

SYNONYMS: *warryato*.

COMMENTS: Included in *jemlahicus* by Haltenorth (1963:125) but generally regarded as a full species, for example by Corbet and Hill (1991).

*Hemitragus jayakari* Thomas, 1894. Ann. Mag. Nat. Hist., ser. 6, 13:365.

TYPE LOCALITY: Oman, Jebel Akhdar Range, Jebel Taw.

DISTRIBUTION: Oman, United Arab Emirates.

STATUS: U.S. ESA and IUCN - Endangered.

COMMENTS: Included in *jemlahicus* by Haltenorth (1963:125) but see Harrison (1968:324).

*Hemitragus jemlahicus* (H. Smith, 1826). In Griffith et al., Animal Kingdom, Vol. 4, plate [1826] opp. p. 308 [1827].

TYPE LOCALITY: Nepal, Jemla Hills.

DISTRIBUTION: Himalayas, from Kashmir through N India to Nepal and Sikkim; S Tibet (China). Introduced in New Zealand and SW Cape Prov. (South Africa).

SYNONYMS: *jharal*, *quadrimammis*, *schaeferi*, *tubericornis*.

COMMENTS: Specific name is spelt "*jemlanica*" on p. 308 and "*jemlahica*" in legend to the plate on the opposite unnumbered page, dated 1826, in the original description which was published in 1827.

*Naemorhedus* H. Smith, 1827. In Griffith et al., Animal Kingdom, 5:352.

TYPE SPECIES: *Antelope goral* Hardwicke, 1825.

SYNONYMS: *Austritragus*, *Capricornis*, *Capricornulus*, *Caprina*, *Kemas*, *Lithotragus*, *Urotragus*.

COMMENTS: The original spelling is "*Naemorhedus*". *Nemorhaedus*, *Naemorhaedus*, *Nemorhedus*, and *Nemorrhodus* are later spellings. Reviewed by J.M. Dolan (1963); and also by Groves and Grubb (1985) who included *Capricornis* in this genus.

*Naemorhedus baileyi* Pocock, 1914. J. Bombay Nat. Hist. Soc., 23:32.

TYPE LOCALITY: China, Tibet, Bomi, Dre on banks of Yigron Tso.

DISTRIBUTION: SE Tibet and Yunnan (China); N Burma; Assam (NE India).

STATUS: IUCN - Vulnerable.

SYNONYMS: *cranbrookii*.

COMMENTS: Regarded as a valid species by Groves and Grubb (1985); and by Zhang Cizu (1987, under the name *cranbrookii*).

*Naemorhedus caudatus* (Milne-Edwards, 1867). Ann. Sci. Nat. Zool. (Paris), 7:377.

TYPE LOCALITY: Russia, Amurland, Bureja Mtns.

DISTRIBUTION: Soviet Far East (Russia), E China, E Burma, W Thailand.

SYNONYMS: *aldridgeanus*, *arnouxianus*, *cinerea*, *curvicornis*, *evansi*, *fantozatianus*; *fargesianus* Heude, 1894; *galeanus*, *griseus*, *henryanus*, *initialis*, *iodinus*, *niger*, *pinchonianus*, *raddeanus*, *versicolor*; *vidianus* Heude, 1894; *xanthodeiros*.

COMMENTS: Regarded as a species distinct from *N. goral* by Groves and Grubb (1985).

*Naemorhedus crispus* (Temminck, 1845). Fauna Japonica, 1(Mamm.), p. 55, pl. 18,19.

TYPE LOCALITY: Japan, Honshu.

DISTRIBUTION: Honshu, Shikoku and Kyushu (Japan).

SYNONYMS: *pryerianus*, *saxicola*.

COMMENTS: Included in *sumatraensis* by Haltenorth (1963:119); but a valid species according to Dolan (1963).

*Naemorhedus goral* (Hardwicke, 1825). Trans. Linn. Soc. London, 14:518.

TYPE LOCALITY: Nepal, in the Himalayas.

DISTRIBUTION: N Pakistan, N India, Nepal, Bhutan, Sikkim (NE India).

STATUS: CITES - Appendix I; U.S. ESA - Endangered.

SYNONYMS: *bedfordi*, *duvaucelii*, *hodgsoni*.

COMMENTS: Reviewed by J.I. Mead (1989, Mammalian Species, 335, as *Nemorhaedus goral*).

*Naemorhedus sumatraensis* (Bechstein, 1799). In Pennant, Allgemeine, Ueber. Vierfuss. Thiere, 1:98.

TYPE LOCALITY: Indonesia, Sumatra.

DISTRIBUTION: N India; Nepal; Sikkim (NE India); Burma; China north to Gansu and Anhui; Thailand; Indochina; Malay Peninsula; Sumatra.

STATUS: CITES - Appendix I; U.S. ESA - Endangered; IUCN - Endangered as *Capricornis sumatraensis sumatraensis*.

SYNONYMS: *annectens*, *argyrochaetes*, *benetianus*, *brachyrhinus*, *bubalina*, *chrysochaetes*, *collasinus*, *cornutus*, *edwardsii*, *erythropygius*; *fargesianus* Heude, 1894; *gendrelianus*, *humei*, *jamrachi*, *longicornis*, *marcolinus*, *maritimus*, *maxillaris*, *microdontus*, *milneedwardsii*, *montinus*, *nasutus*, *osborni*, *platyrhinus*, *pugnax*, *robinsoni*, *rocherianus*, *rodoni*, *rubidus*, *swettenhami*, *thar*, *ungulosus*; *vidianus* Heude, 1894.

*Naemorhedus swinhoei* (Gray, 1862). Ann. Mag. Nat. Hist., ser. 3, 10:320.

TYPE LOCALITY: Taiwan.

DISTRIBUTION: Taiwan.

STATUS: IUCN - Vulnerable.

COMMENTS: Regarded as a species distinct from *N. crispus* by Groves and Grubb (1985).

*Oreamnos Rafinesque*, 1817. Am. Mon. Mag., 2:44.

TYPE SPECIES: *Mazama dorsata* Rafinesque, 1817 (= *R[upicapra] americanus* Blainville, 1816).

*Oreamnos americanus* (de Blainville, 1816). Bull. Sci. Soc. Philom. Paris, 1816:80.

TYPE LOCALITY: USA, Washington, Mt. Adams.

DISTRIBUTION: SE Alaska (USA), S Yukon and SW Mackenzie (Canada) to NC Oregon, C Idaho, and Montana (USA). Introduced to Kodiak, Chichagof, and Baranof Isls (Alaska), Olympic Peninsula (Washington), C Montana, Black Hills (South Dakota), and Colorado (USA).

SYNONYMS: *columbiae*, *columbiana*, *dorsata*, *kennedyi*, *lanigera*, *missoulae*, *montanus*, *sericea*.

COMMENTS: Reviewed by Rideout and Hoffmann (1975, Mammalian Species, 63).

*Ovibos* de Blainville, 1816. Bull. Sci. Soc. Philom. Paris, 1816:76.

TYPE SPECIES: *Bos moschatus* Zimmerman, 1780.

*Ovibos moschatus* (Zimmermann, 1780). Geogr. Gesch. Mensch. Vierf. Thiere, 2:86.

TYPE LOCALITY: Canada, Manitoba, between Seal and Churchill Rs.

DISTRIBUTION: Formerly Point Barrow, Alaska (USA) east to NE Greenland, south to NE Manitoba (Canada). Range now much reduced. Introduced to Seward Peninsula and Nunivak Isl, Alaska (USA); Taimyr Peninsula and Wrangel Isl (Russia); Svalbard (Norway).

SYNONYMS: *mackenzianus*, *melvillensis*, *niphoecus*, *pearyi*, *wardi*.

COMMENTS: Reviewed by Lent (1988, Mammalian Species, 302).

*Ovis* Linnaeus, 1758. Syst. Nat., 10th ed., 1:70.

TYPE SPECIES: *Ovis aries* Linnaeus, 1758.

SYNONYMS: *Ammon*, *Argali*, *Caprovis*, *Musimon*, *Pachyceros*.

COMMENTS: Placed in *Capra* by Van Gelder (1977b); see comments under *Capra*. There is no consensus concerning the number of species to be recognized in this genus; some would recognize only one (*ammon*; see Haltenorth, 1963:126-128); others two (*ammon*, *canadensis*; see Corbet, 1978c:218); while others recognize up to seven, as do the most recent reviews (Korobitsyna et al., 1974; Nadler et al., 1973). Six species are listed here.

*Ovis ammon* (Linnaeus, 1758). Syst. Nat., 10th ed., 1:70.

TYPE LOCALITY: Kazakhstan, Vostochno-Kazakhstansk. Obl., Altai Mtns, Bukhtarma; near Ust-Kamenogorsk.

DISTRIBUTION: S Siberia, E Kazakhstan, Kirgizia, and Tadzhikistan, south to Pamir Range in NE Afghanistan and N Pakistan; Ladak (N India); Nepal; Sikkim (NE India); Sinkiang and Tibet to Inner Mongolia (China); Mongolia.

STATUS: CITES - Appendix I *O. a. hodgsoni*, otherwise Appendix II; U.S. ESA - Endangered as *O. a. hodgsoni*.

SYNONYMS: *adametzi*, *altaica*, *ammonoides*, *argali*, *asiaticus*, *bambhera*, *blythi*, *brookei*, *collium*, *comosa*, *dalailamae*, *darwini*, *dauricus*, *heinsii*, *henrii*, *hodgsonii*, *humel*, *intermedia*; *jubata* Peters, 1876; *karelini*, *kozlovi*, *littledalei*; *mongolica* Severtzov, 1873; *nigrimontana*, *polii*, *przevalskii*, *sairensis*.

COMMENTS: Haltenorth (1963:121) and Corbet (1978c:218) included *orientalis* (= *aries*), *musimon* and *vignei*; but see review by Nadler et al. (1973) and Corbet and Hill (1991:136). Subspecies reviewed by Sopin (1982).

*Ovis aries* Linnaeus, 1758. Syst. Nat., 10th ed., 1:70.

TYPE LOCALITY: Sweden (domesticated stock).

DISTRIBUTION: S and E Turkey, Armenia, S Azerbaijan, N Iraq, W Iran. Domesticated worldwide; primitive domestic populations (*mouflon*) feral on Corsica and Sardinia, introduced from there to Europe, Crimea (USSR), USA (incl. Hawaiian Isls), Chile, Kerguelen Isls, Tenerife (Canary Isls); on Cyprus; and on St. Kilda and other small islands off the British Isles; improved domestic stock feral in Norway, Sweden, USA, islands off coasts of British Isles and New Zealand, Kerguelen Isls, and probably other oceanic islands.

STATUS: CITES - Appendix I as *O. orientalis ophion*; U.S. ESA - Endangered as *O. musimon ophion*; IUCN - Vulnerable as *O. orientalis musimon* and *O. orientalis ophion*.

SYNONYMS: *anatolica*, *armeniana*, *corsicosardinensis*, *cyprius*, *erskinei*, *gmellini*, *laristanica*, *isphaganica*; *jubata* Kerr, 1792; *matschiei*; *mongolica* Fitzinger, 1860; *musimon*, *occidentalis*, *occidentosardinensis*, *ophion*, *orientalis*, *sinesella*, *urmiana*.

COMMENTS: Includes *orientalis*; see Nadler et al. (1973). Also includes *musimon* and *ophion*, primitive domestic sheep, now feral; see S. Payne (1968), Vigne (1988), and Hemmer (1990). Hybridizes with *vignei* in C Iran; see Nadler et al. (1971b) and Valdez et al. (1978).

*Ovis canadensis* Shaw, 1804. Nat. Misc., 51, text to pl. 610.

TYPE LOCALITY: Canada, Alberta, Mountains on Bow River, near Exshaw.

DISTRIBUTION: S British Columbia and SW Alberta (Canada) to Coahuila, Chihuahua, Sonora and Baja California (Mexico).

STATUS: CITES - Appendix II for Mexican population.

SYNONYMS: *auduboni*, *californiana*, *cervina*, *cremnobates*, *gaillardi*, *mexicana*, *montana*, *nelsoni*, *palmeri*, *pygargus*, *samilkameenensis*, *sheldoni*, *sierrae*, *texianus*, *weemsi*.

COMMENTS: Corbet (1978c:218) included *nivicola*; but see also Korobitsyna et al. (1974) and Corbet and Hill (1991:135). Revised by Cowan (1940). Reviewed by Shackleton (1985, Mammalian Species, 230).

*Ovis dalli* Nelson, 1884. Proc. U.S. Natl. Mus., 7:13.

TYPE LOCALITY: Alaska, west bank of Yukon River, Tanana Hills.

DISTRIBUTION: Alaska to N British Columbia and W Mackenzie (Canada).

SYNONYMS: *cowani*, *fannini*, *kenaiensis*, *liardensis*, *niger*, *stonei*.

COMMENTS: Revised by Cowan (1940). Reviewed by Bowyer and Leslie (1992, Mammalian Species, 393).

*Ovis nivicola* Eschscholtz, 1829. Zool. Atlas, Part 1, p. 1, pl. 1.

TYPE LOCALITY: Russia, E Kamchatka.

DISTRIBUTION: Putorana Mtns, NC Siberia; NE Siberia from Lena River east to Chukotka and Kamchatka (Russia).

SYNONYMS: *alleni*, *borealis*, *koriakorum*, *lydekkeri*, *middendorfi*, *potanini*, *storcki*.

COMMENTS: Corbet (1978c:218) and others included *nivicola* in *canadensis*; but see Korobitsyna et al. (1974) and Gromov and Baranova (1981:407).

*Ovis vignei* Blyth, 1841. Proc. Zool. Soc. Lond., 1840:70 [1841].

TYPE LOCALITY: India, Kashmir, Astor.

DISTRIBUTION: Uzbekistan, Tadzhikistan, and NE Iran to Afghanistan, Pakistan, and NW India; Oman (introduced?).

STATUS: CITES - Appendix I; U.S. ESA - Endangered as *O. v. vignei*.

SYNONYMS: *arabica*, *arkal*, *blanfordi*, *bochariensis*, *cycloceros*, *dolgopolovi*, *punjabiensis*, *severtzovi*, *varentsowi*.

COMMENTS: Hybridizes with *orientalis* (= *aries*) in C Iran; see Nadler et al. (1971b) and Valdez et al. (1978).

*Pseudois* Hodgson, 1846. J. Asiat. Soc. Bengal, 15:343.

TYPE SPECIES: *Ovis nayaur* Hodgson, 1833.

COMMENTS: Revised by Groves (1978c). Reviewed by Wang Xiao-ming and Hoffmann (1987).

*Pseudois nayaur* (Hodgson, 1833). Asiat. Res., 18(2):135.

TYPE LOCALITY: Nepal, Tibetan frontier.

DISTRIBUTION: Pamir Range in Tadzhikistan, N Pakistan, Ladak (N India) and Tibet (China) east to Yunnan, Sichuan, Gansu and Shaanxi (China).

SYNONYMS: *burrhel*, *caesia*, *nahoor*, *szechuanensis*.

COMMENTS: See Wang Xiao-ming and Hoffmann (1987, Mammalian Species, 278).

*Pseudois schaeferi* Haltenorth, 1963. Handb. Zool., 8(32):126.

TYPE LOCALITY: China, upper Yangtze Gorge, Drupalong, south of Batang.

DISTRIBUTION: Upper Yangtze Gorge (W China).

COMMENTS: A separate species according to Groves (1978c:183). See Wang Xiao-ming and Hoffmann (1987, Mammalian Species, 278).

*Rupicapra* de Blainville, 1816. Bull. Sci. Soc. Philom. Paris, 1816:75.

TYPE SPECIES: *Capra rupicapra* Linnaeus, 1768.

SYNONYMS: *Capella*.

COMMENTS: Revised by Lovari and Scala (1980, 1984), Scala and Lovari (1984), and Nascetti et al. (1985).

*Rupicapra pyrenaica* Bonaparte, 1845. Cat. Meth. Mamm. Europe, p. 17.

TYPE LOCALITY: Spain, Pyrenees.

DISTRIBUTION: N Spain; Appenine Mtns (Italy).

STATUS: CITES - Appendix I and U.S. ESA - Endangered as *R. rupicapra ornata*; IUCN - Vulnerable as *R. p. ornata*.

SYNONYMS: *ornata*, *parva*.

COMMENTS: Regarded as a species distinct from *R. rupicapra* by Lovari (1985, 1987).

*Rupicapra rupicapra* (Linnaeus, 1758). Syst. Nat., 10th ed., 1:68.

TYPE LOCALITY: Switzerland.

DISTRIBUTION: Alps of France and Switzerland east to Carpathians (Romania), Tatra Mtns (Czechoslovakia), Caucasus Mtns, and Turkey; introduced to New Zealand.

STATUS: IUCN - Endangered as *R. r. cartusiana*, Rare as *R. r. tatraica*.

SYNONYMS: *alpina*, *asiatica*, *balcanica*, *capella*, *carpatica*, *cartusiana*, *caucasica*, *dorcas*, *europaea*, *faesula*, *hamulicornis*, *olympica*, *sylvatica*, *tatraica*, *tragus*.

**Subfamily Cephalophinae** Gray, 1871. Proc. Zool. Soc. Lond., 1871:588.

*Cephalophus* H. Smith, 1827. In Griffith et al., Animal Kingdom, 5:344.

TYPE SPECIES: *Antilope silvicultrix* Afzelius, 1815.

SYNONYMS: *Cephalophella*, *Cephalophia*, *Cephalophidium*, *Cephalophops*, *Cephalophorus*, *Cephalophula*, *Guevei*, *Philantomba*, *Potamotragus*, *Terpone*.

COMMENTS: Van Gelder (1977b) included *Sylvicapra*. However, recent authors have not followed this arrangement; see Swanepoel et al. (1980:188) and Meester et al. (1986).

*Cephalophus adersi* Thomas, 1918. Ann. Mag. Nat. Hist., ser. 9, 2:151.

TYPE LOCALITY: Tanzania, Zanzibar.

DISTRIBUTION: Zanzibar (Tanzania), Sokoike Forest (Kenya).

STATUS: IUCN - Vulnerable.

COMMENTS: Possibly conspecific with *natalensis* and/or *callipygus*; see Ansell (1972:33).

*Cephalophus callipygus* Peters, 1876. Monatsb. K. Preuss. Akad. Wiss. Berlin, 1876:483.

TYPE LOCALITY: Gabon, Gabon River.

DISTRIBUTION: West of Congo and Ubangi Rivers in Congo Republic; S Central African Republic; Gabon and S Cameroon.

COMMENTS: Possibly conspecific with *natalensis* and/or *adersi*; see Ansell (1972:33).

According to Groves and Grubb (1974), *callipygus* is not related to *natalensis*.

*Cephalophus dorsalis* Gray, 1846. Ann. Mag. Nat. Hist., [ser. 1], 18:165.

TYPE LOCALITY: Sierra Leone.

DISTRIBUTION: Sierra Leone to Togo; SE Nigeria to Central African Republic and Zaire, south to N Angola.

STATUS: CITES - Appendix II.

SYNONYMS: *arrhenii*, *badius*, *breviceps*, *castaneus*, *kuha*, *leucochilus*, *orientalis*.

*Cephalophus harveyi* (Thomas, 1893). Ann. Mag. Nat. Hist., ser. 6, 11:48.

TYPE LOCALITY: Tanzania, Kilimanjaro Dist., Kahe Forest west of Taveta.

DISTRIBUTION: S Somalia, E Kenya, E and S Tanzania, N Malawi, E. Zambia, sight records from E Ethiopia.

SYNONYMS: *bottegoi*, *kenniae*.

COMMENTS: Treated as a species separate from *C. natalensis* by Kingdon (1982:297).

*Cephalophus jentinki* Thomas, 1892. Proc. Zool. Soc. Lond., 1892:417.

TYPE LOCALITY: Liberia.

DISTRIBUTION: Sierra Leone, Liberia, W Ivory Coast.

STATUS: CITES - Appendix I; U.S. ESA and IUCN - Endangered.

COMMENTS: Reviewed by Kuhn (1968).

*Cephalophus leucogaster* Gray, 1873. Ann. Mag. Nat. Hist., ser. 4, 12:43.

TYPE LOCALITY: Gabon.

DISTRIBUTION: Cameroon, Gabon, Congo Republic, SW and E Zaire.

SYNONYMS: *seke*.

*Cephalophus maxwellii* (H. Smith, 1827). In Griffith et al., Animal Kingdom, 4:267.

TYPE LOCALITY: Sierra Leone.

DISTRIBUTION: Senegal and Gambia to SW Nigeria.

SYNONYMS: *danei*, *frederici*, *liberiensis*, *lowei*, *philantomba*, *whitfieldi*.

COMMENTS: Included in *monticola* by Haltenorth and Diller (1977:43). Reviewed by Ralls (1973, Mammalian Species, 31).

*Cephalophus monticola* (Thunberg, 1789). Resa uti Europa, Africa, Asia..., 2:66.

TYPE LOCALITY: South Africa, Cape Province, Knysna District, Langkloof (= "Lange Kloof"), 33°40'S, 23°40'E; see Meester et al. (1986:196).



DISTRIBUTION: E Nigeria to Kenya and Tanzania, south to Angola, Zambia, Malawi, E Zimbabwe and Mozambique; Natal and E Cape Province (South Africa); Zanzibar; Bioko; Pemba Isl.

STATUS: CITES - Appendix II.

SYNONYMS: *aequatorialis*, *anchietae*, *bakeri*, *bicolor*, *caerula*, *caffer*, *congicus*, *defriesi*, *fuscicolor*, *hecki*, *ludlami*, *lugens*, *melanorheus*, *musculoides*, *minuta*, *nyasae*, *pembae*, *perpusilla*, *ruddi*, *schultzei*, *schusteri*, *simpsoni*, *sundevalli*.

COMMENTS: May include *maxwellii*; see Haltenorth and Diller (1977:43).

*Cephalophus natalensis* A. Smith, 1834. S. Afr. Quart. J., 2:217.

TYPE LOCALITY: South Africa, Natal, Durban ("Port Natal").

DISTRIBUTION: S Tanzania, S Malawi, Mozambique, Natal (South Africa).

SYNONYMS: *amoenus*, *bradshcwi*, *lebombo*, *robertsi*, *vassei*.

COMMENTS: Possibly includes *adersi* and/or *callipygus*; see Ansell (1972:34), who also included *weynsi*.

*Cephalophus niger* Gray, 1846. Ann. Mag. Nat. Hist., [ser. 1], 18:165.

TYPE LOCALITY: "Guinea Coast" = Ghana.

DISTRIBUTION: Guinea to Nigeria, west of lower Niger River.

SYNONYMS: *pluto*.

*Cephalophus nigrifrons* Gray, 1871. Proc. Zool. Soc. Lond., 1871:598.

TYPE LOCALITY: Gabon.

DISTRIBUTION: Cameroon to Zaire, Rwanda and W Uganda, south to N Angola; Mt. Elgon (Uganda/Kenya); Aberdare Range and Mt. Kenya (Kenya).

SYNONYMS: *apanbanga*, *aureus*, *claudi*, *emini*, *fosteri*, *hooki*, *kivuensis*, *lusumbi*, *mixtus*.

*Cephalophus ogilbyi* (Waterhouse, 1838). Proc. Zool. Soc. Lond., 1838:60.

TYPE LOCALITY: Equatorial Guinea, Fernando Po (= Bioko).

DISTRIBUTION: Sierra Leone, Liberia, W Ivory Coast, W Ghana, SE Nigeria, S Cameroon, Bioko, S Gabon.

STATUS: CITES - Appendix II; IUCN - Vulnerable.

SYNONYMS: *brookei*, *crusalbum*.

*Cephalophus rubidus* Thomas, 1901. Proc. Zool. Soc. Lond., 1901(2):89.

TYPE LOCALITY: Uganda, Ruwenzori District.

DISTRIBUTION: Ruwenzori Mtns in E Zaire and W Uganda.

STATUS: IUCN - Endangered.

COMMENTS: Regarded as a species separate from *C. nigrifrons* by Kingdon (1982:292).

*Cephalophus rufilatus* Gray, 1846. Ann. Mag. Nat. Hist., [ser. 1], 18:166.

TYPE LOCALITY: Sierra Leone, Waterloo Village.

DISTRIBUTION: Senegal to SW Sudan and NE Uganda south to Cameroon and N Zaire.

SYNONYMS: *cuvieri*, *rubidior*.

*Cephalophus silvicultor* (Afzelius, 1815). Nova Acta Reg. Soc. Sci. Upsala, 7:265, pl. 8, fig. 1.

TYPE LOCALITY: "Sierra Leone and region of Pongas and Quia Rivers [Guinea]."

DISTRIBUTION: Senegal to SW Sudan, W Uganda and Rwanda, south to Angola and Zambia; W Kenya.

STATUS: CITES - Appendix II.

SYNONYMS: *coxi*, *ituriensis*, *longiceps*, *melanoprymnus*, *punctulatus*, *ruficrista*, *sclateri*, *thomasi*.

COMMENTS: Reviewed by Lumpkin and Kranz (1984, Mammalian Species, 225, as *Cephalophus silvicultor*).

*Cephalophus spadix* True, 1890. Proc. U.S. Natl. Mus., 13:227.

TYPE LOCALITY: Tanzania, Mt. Kilimanjaro.

DISTRIBUTION: Highlands of NE and C Tanzania.

STATUS: IUCN - Vulnerable.

COMMENTS: Possibly a subspecies of *silvicultor* (Haltenorth, 1963:71).

*Cephalophus weynsi* Thomas, 1901. Ann. Mus. Congo Zool., 2(1):15.

TYPE LOCALITY: Zaire, near Stanley Falls.

DISTRIBUTION: Zaire, Uganda, Rwanda, W Kenya.

SYNONYMS: *barbertoni*, *centralis*, *ignifer*, *johnstoni*, *leopoldi*, *lestradei*, *rutshuricus*.

COMMENTS: Formerly included in *callipygus*, but separate according to Groves and Grubb (1974).

*Cephalophus zebra* Gray, 1838. Ann. Nat. Hist., 1:27.

TYPE LOCALITY: Sierra Leone.

DISTRIBUTION: E Sierra Leone, Liberia, W Ivory Coast.

STATUS: CITES - Appendix II; IUCN - Vulnerable.

SYNONYMS: *doria*, *zebrata*.

COMMENTS: For synonyms see Ansell (1980) and the International Commission on Zoological Nomenclature (1985a). Reviewed by Kuhn (1966).

*Sylvicapra Ogilby*, 1837. Proc. Zool. Soc. Lond., 1836:138 [1837].

TYPE SPECIES: *Antilope mergens* Desmarest, 1816 (= *Capra grimmia* Linnaeus, 1758).

SYNONYMS: *Cephalophora*, *Grimmia*.

COMMENTS: Included in *Cephalophus* by Haltenorth (1963:71) and Van Gelder (1977b:18); but see Ansell (1978:57), Swanepool et al. (1980:188), and Meester et al. (1986).

*Sylvicapra grimmia* (Linnaeus, 1758). Syst. Nat., 10th ed., 1:70.

TYPE LOCALITY: South Africa, Cape Prov., Capetown.

DISTRIBUTION: Senegal to Ethiopia and S Somalia, south to N and E Zaire, Rwanda and Tanzania; S Gabon, S Congo Republic and S Zaire south to South Africa.

SYNONYMS: *abyssinica*, *altifrons*, *altivallis*, *bradfieldi*, *burchellii*, *caffra*, *campbelliae*, *cana*, *coronata*, *cuneneensis*, *deserti*, *flavescens*, *hindei*, *irrorata*, *leucoprosopus*, *lobeliarum*, *lutea*, *madoqua*, *mergens*, *nititans*, *noomei*, *nyansae*, *ocularis*, *omurambae*, *pallidior*, *platous*, *ptoox*, *roosevelti*, *shirensis*, *splendidula*, *steinhardti*, *transvaalensis*, *ugabensis*, *uvirensis*, *vernayi*, *walkeri*.

**Subfamily Hippotraginae** Retzius and Lovén, 1845. Archiv Skand. Bietr. Naturgesch., Greifswald, I, p. 445.

*Addax* Rafinesque, 1815. Analyse de la Nature, p. 56.

TYPE SPECIES: *Cerophorus nasomaculata* Blainville, 1816.

*Addax nasomaculatus* (de Blainville, 1816). Bull. Sci. Soc. Philom. Paris, 1816:75.

TYPE LOCALITY: Probably Senegambia.

DISTRIBUTION: Mauritania to Sudan; formerly Egypt to Tunisia.

STATUS: CITES - Appendix I; IUCN - Endangered.

SYNONYMS: *addax*, *gibbosa*, *mytilopes*, *suturosa*.

COMMENTS: Nearly extinct in wild (East, 1990).

*Hippotragus* Sundevall, 1846. K. Svenska Vet.-Akad. Handl. Stockholm, for 1844, p. 196 [1846].

TYPE SPECIES: *Antilope leucophaea* Pallas, 1766.

SYNONYMS: *Aigererus*, *Aigocerus*, *Egocerus*, *Ozanna*.

*Hippotragus equinus* (Desmarest, 1804). Dict. Class. Hist. Nat. Paris, p. 24.

TYPE LOCALITY: N South Africa, Lataku (= Kuruman); see Harper (1940).

DISTRIBUTION: Senegal to W Ethiopia; south to N South Africa, N Botswana and Namibia.

SYNONYMS: *aethiopica*, *aurita*, *bakeri*, *barbata*, *cottoni*, *doci*, *dogetti*, *gambianus*, *jubata*, *koba*, *langheldi*, *rufopallidus*, *scharicus*, *truteri*.

*Hippotragus leucophaeus* (Pallas, 1766). Misc. Zool., p. 4.

TYPE LOCALITY: South Africa, Cape of Good Hope, Swellendam Dist.

DISTRIBUTION: S Cape Province (South Africa); extirpated about 1799.

STATUS: IUCN - Extinct.

SYNONYMS: *capensis*, *glauca*.

COMMENTS: Reviewed by Mohr (1967).

*Hippotragus niger* (Harris, 1838). Athenaeum, 535:71.

TYPE LOCALITY: South Africa, Transvaal, Cashan Range (= Magaliesberge), near Pretoria.

DISTRIBUTION: SE Kenya to N South Africa, west to N Botswana; Angola, between Cuanza and Loando Rs.

STATUS: CITES - Appendix I, and U.S. ESA and IUCN - Endangered, as *H. n. variani*.

SYNONYMS: *anselli*, *harrisi*, *kaufmanni*, *kirkii*, *roosevelti*, *variani*.

COMMENTS: Includes *variani*; see Ansell (1972:47). Original publication usually assumed to be Proc. Zool. Soc. Lond., 1838:2 (publ. July, 1838), but McAllan and Bruce (1989) have shown that an earlier publication is The Athenaeum (publ. 27 Jan., 1838).

*Oryx de Blainville*, 1816. Bull. Sci. Soc. Philom. Paris, 1816:75.

TYPE SPECIES: *Antelope oryx* Pallas, 1777 (= *Capra gazella* Linnaeus, 1758).

SYNONYMS: *Aegoryx*.

*Oryx dammah* (Cretzschmar, 1826). In Rüppell, Atlas Reise Nordl. Afr., Zool. Säugth., 1:22.

TYPE LOCALITY: Sudan, Haraza, "probably Kordofan."

DISTRIBUTION: Formerly Western Sahara and Tunisia to Egypt; Mauritania to Sudan; survives only in Chad.

STATUS: CITES - Appendix I; IUCN - Endangered.

SYNONYMS: *algazel*, *ensicornis*, *nubica*, *senegalensis*, *tao*.

COMMENTS: Includes *tao*; see Ansell (1972:48). The name *algazel* Oken, 1816, was declared invalid by Opinion 417 of the International Commission on Zoological Nomenclature (1956b).

*Oryx gazella* (Linnaeus, 1758). Syst. Nat., 10th ed., 1:69.

TYPE LOCALITY: South Africa.

DISTRIBUTION: NE Ethiopia and SE Sudan to Somalia, NE Uganda and N Tanzania; SW Angola, Botswana and W Zimbabwe to N South Africa.

SYNONYMS: *annectens*, *aschenborni*, *beisa*, *bezoartica*, *blainei*, *callotis*, *capensis*, *gallarum*, *pasan*, *reticornis*, *subcallotis*.

COMMENTS: Includes *beisa*; see Ansell (1972:49).

*Oryx leucoryx* (Pallas, 1777). Spicil. Zool., 12:17.

TYPE LOCALITY: Arabia.

DISTRIBUTION: SE Arabian Peninsula; formerly Iraq. Probably became extinct in the wild, but maintained in captivity, and recently reintroduced into Arabia.

STATUS: CITES - Appendix I; U.S. ESA and IUCN - Endangered.

SYNONYMS: *asiatica*, *beatrix*, *latipes*, *pallasii*.

COMMENTS: Included in *O. gazella* by Haltenorth (1963:88).

### Subfamily *Peleinae* Gray, 1872. Cat. Ruminant Mamm. Brit. Mus., p. 3, 29.

*Pelea* Gray, 1851. Proc. Zool. Soc. Lond., 1850:126 [1851].

TYPE SPECIES: *Antelope* (sic) *capreolus* Forster, 1790.

*Pelea capreolus* (Forster, 1790). In Levaillant, Erste Reise Afrika, p. 71.

TYPE LOCALITY: South Africa, Cape Prov., Caledon, Houhoek (= "Ouwe-hoeck"); see Skead (1973:79).

DISTRIBUTION: Cape Prov. to Natal and Transvaal (South Africa); Lesotho and Swaziland.

SYNONYMS: *lanata*, *villosa*.

### Subfamily *Reduncinae* Lydekker and Blain, 1914. Cat. Ungulate Mamm. Brit. Mus., 2:197.

*Kobus* A. Smith, 1840. Illustr. Zool. S. Afr. Mamm., Part 12, pl. 28 plus text.

TYPE SPECIES: *Antelope ellipsiprymnus* Ogilby, 1833.

SYNONYMS: *Adenota*, *Hydrotragus*, *Onotragus*, *Pseudokobus*.

COMMENTS: Includes *Adenota* and *Onotragus*; see Ansell (1972:40).

*Kobus ellipsiprymnus* (Ogilby, 1833). Proc. Zool. Soc. Lond., 1833:47.

TYPE LOCALITY: South Africa, between Lataku (near Kuruman) and W coast of Africa, N of Orange River, on Molopo River.

DISTRIBUTION: Senegal to Somalia, Kenya and Tanzania; S Gabon, S Congo Republic and S Zaire, south to Caprivi Strip (Namibia), N and E Botswana and NE South Africa.

SYNONYMS: *abyssinica*; *adolfriderici* Matschie, 1910; *albertensis*, *angusticeps*, *annectens*, *avellanifrons*, *breviceps*, *canescens*, *cottoni*, *crawshayi*, *defassa*, *dianae*, *frommi*, *fulvifrons*, *griseotinctus*, *harnieri*, *hawashensi*, *kondensis*, *kulu*, *kuru*, *ladoensis*, *lipuwa*, *matschiei*,

*muenzneri*, *nzoiae*, *pallidus*, *penricei*, *powelli*, *raineyi*, *schubotzi*, *senegalensis*, *singsing*, *thikae*, *tjaederi*, *togoensis*, *tschadensis*, *ugandae*, *unctuosus*, *uwendensis*.

COMMENTS: Includes *defassa*; see Ansell (1972:42).

*Kobus kob* (Erxleben, 1777). Syst. Regni Anim., 1:293.

TYPE LOCALITY: Upper Guinea, towards Senegal.

DISTRIBUTION: Senegal to W Ethiopia and Sudan; south to N Zaire, Uganda, W Kenya and NW Tanzania. Now extinct in Tanzania.

SYNONYMS: *adansoni*, *adenota*, *adolphi*; *adolfifriderici* Schwarz, 1913; *alurae*, *annulipes*, *bahrkeetae*, *buffonii*, *forfex*, *fraseri*, *kul*, *leucotis*, *loderi*, *neumanni*, *nigricans*, *nigroscapulatus*; *notatus* Rothschild, 1913; *pousarguesi*, *riparia*, *thomasi*, *ubangiensis*, *vaughani*.

*Kobus leche* Gray, 1850. Gleanings, Knowsley Menagerie, 2:23.

TYPE LOCALITY: Botswana (= Bechuanaland), Botletle (= Zoaga) River, near Lake Ngami.

DISTRIBUTION: N Botswana, NE Namibia, SE Angola, SE Zaire and Zambia.

STATUS: CITES - Appendix II; U.S. ESA - Threatened; IUCN - Vulnerable.

SYNONYMS: *amboellensis*, *grandicornis*, *kafuensis*; *notatus* Matschie, 1912; *robertsi*, *smithemani*.

*Kobus megaceros* (Fitzinger, 1855). Sitzb. K. Akad. Wiss. Wien, 17:247.

TYPE LOCALITY: Sudan, Bahr-el-Ghazal, Sobat River.

DISTRIBUTION: S Sudan, W Ethiopia.

SYNONYMS: *maria*.

*Kobus vardonii* (Livingstone, 1857). Missionary Travels and Researches in South Africa, p. 256.

TYPE LOCALITY: Zambia, Barotseland, Chobe Valley, near Libonta (40°30'S, 23°15'E).

DISTRIBUTION: S Zaire, Zambia, Malawi and S Tanzania south to N Angola, NE Namibia, N Botswana; vagrant in N Zimbabwe.

SYNONYMS: *senganus*.

COMMENTS: Included in *kob* by Haltenorth (1963:92) but see Ansell (1972:44).

*Redunca* H. Smith, 1827. In Griffith et al., Animal Kingdom, 5:337.

TYPE SPECIES: *Antilope redunca* Pallas, 1767.

SYNONYMS: *Cervicapra*, *Eleotragus*, *Nagor*, *Oreodorcas*.

*Redunca arundinum* (Boddaert, 1785). Elench. Anim., 1:141.

TYPE LOCALITY: South Africa, Cape of Good Hope, Bathurst Division. See A. Roberts (1951:292).

DISTRIBUTION: S Gabon, S Congo Republic, S Zaire and Tanzania, south to N Namibia, N and E Botswana, Zimbabwe, Mozambique and E South Africa.

SYNONYMS: *algoensis*, *caffra*, *cinerea*, *eleotragus*, *isabellina*, *multiannulata*, *occidentalis*, *penricei*, *thomasinae*.

*Redunca fulvorufula* (Afzelius, 1815). Nova Acta Reg. Soc. Sci. Upsala, 7:250.

TYPE LOCALITY: South Africa, E Cape Prov.

DISTRIBUTION: E Nigeria and W Cameroon; SE Sudan; NE Uganda; C Ethiopia; Kenya; N Tanzania; Lesotho, E South Africa, and Swaziland marginally extending into S Mozambique and SE Botswana.

STATUS: IUCN - Endangered as *R. f. adamauae*.

SYNONYMS: *adamauae*, *chanleri*, *lalandia*, *schoana*, *subalpina*.

*Redunca redunca* (Pallas, 1767). Spicil. Zool., 1:8.

TYPE LOCALITY: Senegal, Goree (= Gori) Isl.

DISTRIBUTION: Senegal to C Ethiopia; south to N Zaire, Rwanda, Burundi and Tanzania.

SYNONYMS: *bayoni*, *bohor*, *cottoni*, *dianae*, *donaldsoni*, *nagor*, *nigeriensis*, *odrob*, *reversa*, *rufa*, *tohi*, *ugandae*, *wardi*.