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An Annotated Catalogue of Malagasy Primates (Families Lemuridae, Indriidae, Daubentoniidae, Megaladapidae, Cheirogaleidae) in the Collections of The American Museum of Natural History

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ABSTRACT

The Department of Mammalogy of the American Museum of Natural History has one of the largest and best documented collections of preserved specimens representing the living primate species of Madagascar (families Lemuridae, Indriidae, Daubentoniidae, Megaladapidae, and Cheirogaleidae). For each specimen, the following information is given: taxon, catalogue number, date collected or catalogued (accessioned), sex (where known), age, nature of specimen, locality, and collector or source. Field numbers of specimens are given where collections have been divided between institutions, to allow the correlation of specimens between museums. Synonyms, range, and pelage characters are given for each species or subspecies, with discussion of taxonomy and/or external characters where appropriate. Approximately 800 specimens are catalogued.

The collection of Lemuriformes is now available for study in the Department of Mammalogy at the Museum. It is no longer available for loan.

INTRODUCTION

Although preserved specimens of Malagasy strepsirhines (lemurs) are scattered in perhaps two dozen institutions around the world, four collections of such materials are of outstanding importance and together represent the central resource for systematic studies of these primates. Certain others—among them the Abbott collection in the National Museum of Natural History, Washington, D.C.; the Wulsin collection in the Museum of Comparative Zoology, Cambridge, Massachusetts; the Kaudern and Ljungquist collections in the Naturhistoriska Riks-

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museet, Stockholm; and the collections in the Naturhistorisches Museum, Vienna and Humboldt Museum, Berlin—also represent significant resources, but are more restricted numerically, taxonomically, or geographically. The only published general account of the circumstances of collection of any of the smaller assemblages of specimens noted are those of Kaudern (1915; a particularly valuable contribution) and Wulsin (Agassiz, 1918; Allen, 1918).

Of the four core collections, the most longstanding and generally the best preserved, at least as far as skins are concerned, is that in the Rijksmuseum van Natuurlijke Historie, Leiden. It consists of the materials obtained in western Madagascar in the 1860s by Pollen and van Dam, and, primarily, in the northeast of the island by Audebert during the following decade. These specimens were catalogued by Schlegel in 1876 and by Jentink in 1887 and in 1892, although his numbering system is obsolete and infuriating and is now gradually being replaced, and Jentink's nomenclature, based on Schlegel's of 1866, has become in many respects superseded. Jentink's catalogue, however, still remains a valuable source of reference on this important collection. In addition, Schlegel and Pollen's review of 1868 provides some excellent observations and accounts of the natural history of these animals in their natural environment.

The sources of the lemur specimens in the remaining core collections are more diverse, but the centerpiece of all three is the material amassed by the Mission Zoologique Franco-Anglo-Américaine of 1929–1931, better known to anglophones, and referred to here, as the Archbold Expedition.

The Mission Zoologique Franco-Anglo-Américaine, the Archbold Expedition, produced a vast amount of information about the fauna of Madagascar. The success of this splendid pioneering foray into Madagascar was due to the devoted attention of A. L. Rand, who oversaw every detail of the work in the field. Upon return to New York, he saw that the avifauna was published as soon as possible (1935, 1936). Not only was the avifauna presented in his 1936 monograph, but he also included an immensely useful summary of the geography, climatology, and geology of the island. Those wishing to know the topographic and vegetational settings of localities where the Archbold Expedition lemur specimens were collected should consult this monograph.

The specimens collected by the Archbold Expedition were divided in an arbitrary and unfortunate way between the British Museum (Natural History), London; the Muséum National d'Histoire Naturelle, Paris; and the American Museum of Natural History, New York. In the most extreme cases the skin, skull, and postcranial skeleton of the same individual went to three different institutions. No catalogue of the Archbold Expedition's mammals has been published up to now, but an itinerary, with habitat descriptions, may be found in Rand (1936), and some notes on Malagasy mammals in Rand (1935).

Another large suite of lemur material that is split between the MNHN and AMNH, as well as certain other institutions, is that assembled by Bluntschli in 1931. Again, in some cases associated materials were dispersed when the Bluntschli collection was sold; copies of the documentation of the entire collection, however, remain in the hands of the Bluntschli family in Switzerland. Other valuable components of the core collections include those of Lantz and Grandidier in the MNHN, and the Forsyth Major and Webb materials in the BMNH. This last collection is of particular note for the excellence of its documentation; Webb's comprehensive field journal appears to have been lost, but the label information on his specimens is unusually exhaustive.

Up to now, with the exception of the Dutch ones, no catalogue of any of the core Malagasy primate collections has been published. This has been particularly regrettable because of the dispersal among three institutions of the Archbold collection, by far the largest and most comprehensive, and one of the best documented. However, an opportunity to reunite a great part of this collection, at least in the literature, has been presented by the establishment by Mrs. Prue Napier of the *Catalogue of Primates in the British Museum (Natural History) and Elsewhere in the British Isles*. Preparation of the part of this catalogue dealing with the

strepsirhine primates has now been begun by Ms. Paula Jenkins, and the present listing of holdings in the Department of Mammalogy, American Museum of Natural History, is intended as a companion to that work. Unfortunately, since the MNHN collections are split between the Laboratories of Comparative Anatomy and Zoology of Mammals and Birds, it seems unlikely that a comparable catalogue will be produced by that institution in the foreseeable future; however, a listing of lemur type specimens in the MNHN, some of which can no longer be located, is available in Rode's (1939) catalogue of mammal types.

Intentionally, then, the format of this catalogue of lemur specimens in the AMNH, like that of the primate specimens in the Carnegie Museum of Natural History (McLaren et al., 1984), corresponds as far as is practicable with that of the BMNH series, with similar headings and subdivisions. The nomenclature used reflects our most recent assessments, and taxonomic questions posed by particular individuals or groups of specimens in the AMNH collection are noted and discussed as they arise. We hope that this will make the catalogue a useful source of information on the current state of lemur systematics—in which many questions still remain to be answered.

All specimens in the AMNH as of April 1985 are included here. They consist of skulls, postcranial skeletons, partial skeletons, a few teeth, skins (flat, stuffed, and mounted), wet specimens, mummies, and partial remains. An asterisk (*) indicates that the specimen, or soft parts from it, are preserved in a solution of 70 percent ethanol. All of Bluntschli's wet specimens were first fixed in formalin before being transferred to buffered alcohol, and they are now in 70 percent ethanol.

It should be noted that the following lemuriform taxa are not represented in the AMNH collection: *Allocebus trichotis*, *Avahi laniger occidentalis*, *Hapalemur griseus alaotrensis*, *Hapalemur griseus occidentalis*, *Hapalemur simus*, *Lemur fulvus mayottensis*, *Lepilemur mustelinus mustelinus*, *Lepilemur mustelinus septentrionalis*, and *Propithecus diadema perrieri*. Full discussion of the synonymies and a description of the morphology of these may be found in Tattersall (1982).

FORMAT OF THE CATALOGUE

The lemur specimens in the AMNH are listed by family. Within families the genera are arranged in order of chronological priority, as are species within genera and subspecies within species. Specimens not documented by pelage characters to belong to a particular species or subspecies are not classified on osteological criteria, but are listed separately under genus or species, as appropriate. For each genus, species, or subspecies, information is provided in the following categories:

SYNONYMS: Following the senior synonym, junior synonyms are given with author and date. Full bibliographic references, if required, can be found in Tattersall (1982).

TAXONOMIC NOTES: Systematic uncertainties and questions relating to nomenclature are noted under this heading.

MORPHOLOGICAL NOTES: A brief description of the pelage and external morphology of each taxon considered is given in this section, together with discussion of variation, as appropriate.

RANGE: This section contains a brief notation of the geographic distribution for each species or subspecies. It should be borne in mind that precise distribution limits are unknown for most lemur taxa, and that population densities are far from uniform throughout the ranges outlined.

SPECIES LISTS

The lists classify all AMNH specimens in the lowest taxonomic category recognized, either species or subspecies. Where this is impossible because identification is uncertain or pelage evidence is not available, specimens are identified by genus or species and listed separately. Each list contains seven columns, as follows:

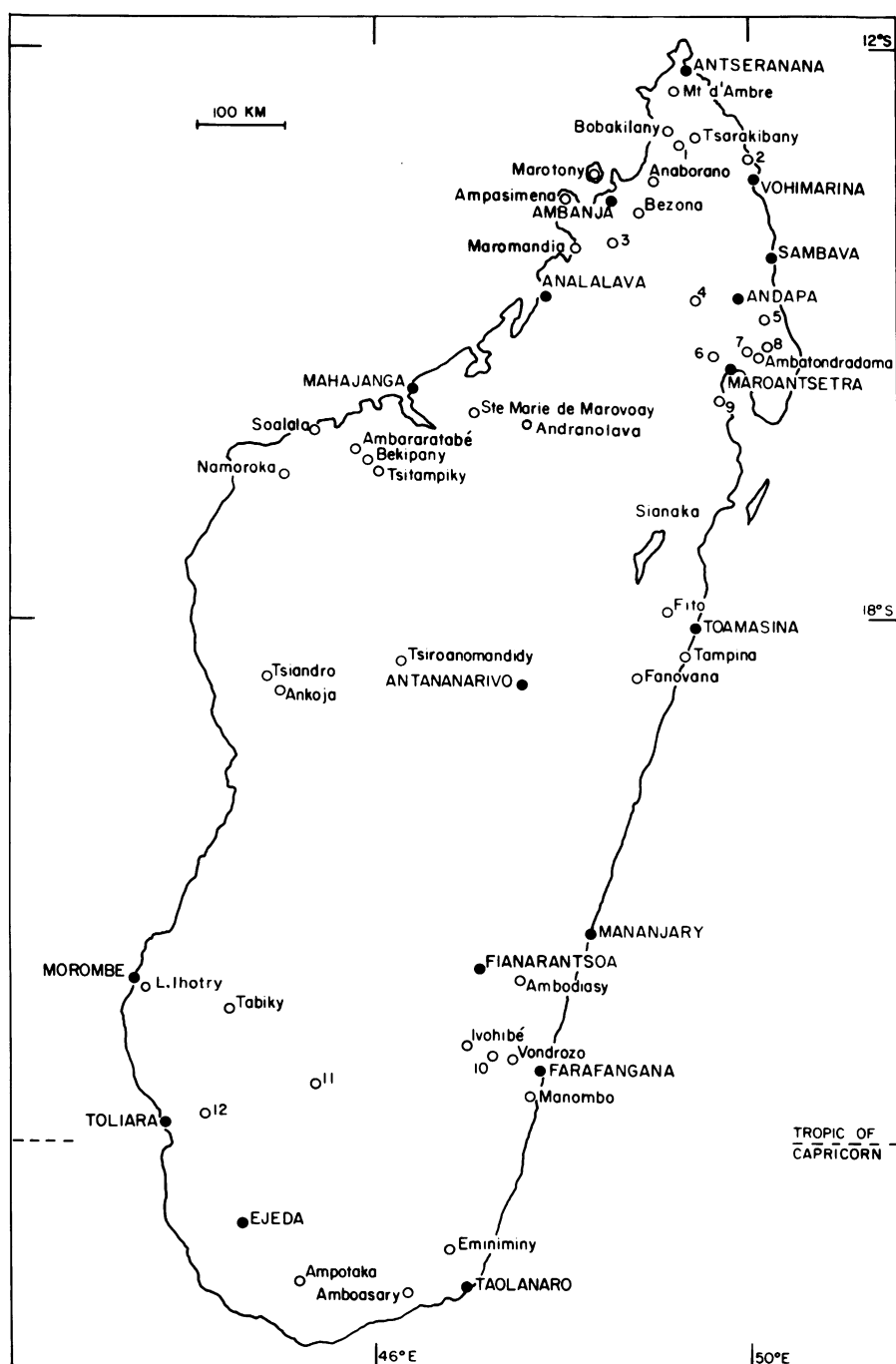


FIG. 1. Map of Madagascar to show localities of wild-shot lemur specimens in the AMNH collections. Names of major towns (solid circles) are given in capitals; localities are open circles and lower case. Numbered localities are those identified by collectors in reference to towns; 1, 15 mi SW of Tsarakibany; 2, one day N of Vohémar (Vohimarina); 3, one day E of Maromandia; 4, one day W of Andapa; 5, three days NW of Antalaha; 6, 40 km W of Maroantsetra; 7, two days E of Maroantsetra; 8, three days E of Maroantsetra; 9, 20 km SW of Maroantsetra; 10, 20 km W of Vondrozo; 11, 170 km E of Tuléar

CATALOGUE NUMBER: This is the sequential number assigned by the Department of Mammalogy, AMNH, to each specimen as it is recorded in the permanent catalogue. This catalogue retains a record of the field number of each specimen and we have included it, if available, in the Remarks column.

DATE: In the case of wild-shot specimens, this is the date of collection as recorded in the field catalogues. Where this information is not recorded, or when the specimen was furnished by a zoo or similar organization, this column gives the date on which the specimen was permanently catalogued into the collections of the AMNH. Nd (no data) is noted if no information is available.

SEX AND AGE: The symbols M (adult male), F (adult female), Inf (infant), Juv (juvenile), Ad (adult), and Nd (no data) are used. An infant is identified as such when field records indicate that it was being carried by the mother at the time of collection, or if the dentition is entirely deciduous. Juveniles show some replacement of the deciduous dentition without eruption of the complete adult dentition. Where verification of the dentition was impossible or impractical, the judgment of the collector has been followed. Individuals are recorded simply as "Nd" when positive identification of sex, either from field records or from preserved soft parts, is impossible.

DESCRIPTION: Skull denotes cranium and mandible, with most of the dentition; partial (part) skull means anything less. Postcranial (pc) skeleton (skel) means whole postcranial skeleton, with most bones present; partial skeletons are noted. Skin means whole skin, mounted, stuffed, or flat, with enough remaining to make identification to species or subspecies possible. An asterisk (*) indicates that the specimen is kept in 70% ethanol, and in most cases refers to all of the soft parts, in the list of materials. Occasionally skulls have been preserved as wet specimens.

LOCALITY: This information is taken from field notes, specimen labels, and the general records of the Department of Mammalogy. Figure 1 plots all of the localities in Madagascar from which wild-shot AMNH lemur specimens came and which can be identified today, together with major towns as points of reference. (Remarkably, almost all can be identified.) Nd is used where we have no specific information about provenance. Names of collecting localities are spelled mostly according to the original sources; town names, however, are given on the map in current orthography. Since new town names are unfamiliar, a corresponding list of current and old orthographies is given below.

Current	Old	Current	Old
Andasibé	Périnet	Nosy Borah	Isle Ste. Marie
Antananarivo	Tananarive	Taolanaro	Fort-Dauphin
Antseranana	Diego-Suarez	Toamasina	Tamatave
Fenoarivo Atsinanana	Fénérive	Toliara	Tuléar
Mahajanga	Majunga	Vohimarina	Vohémar

REMARKS: The source of each specimen (collector or donor) is listed here. Other miscellaneous information from the catalogue or the field labels that may be of interest is also included. The symbol NYZS means the New York Zoological Society (Bronx Zoo). Arch Exp refers to the Mission Zoologique Franco-Anglo-Américaine. The field number of each Archbold specimen, where recorded, is also listed in this column. The field numbers for the Archbold specimens were almost always given to all parts of the entire specimen. Further,

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(Toliara). "Sianaka" or "Sihanaka" Forest is a rather indeterminate designation that apparently often applies to forest areas to the north or west of Lake Alaotra; in Archbold records it refers to the area around the villages of Fito and Didy to the southeast of the lake.

the same number was often given to both a female and the infant she carried. And, where a different number was given to the infant, it was usually also placed on the field tag of the mother. Rand (1935) noted that the Archbold Expedition purchased a group of specimens from a native of Mauritius, a long time resident and collector of natural history specimens on Madagascar, M. Herschell-Chauvin. We have noted those specimens. Chauvin sold specimens to Bluntschli, and to others, and items from his years of residence on the island can be found in a number of natural history museums. We hope that publishing the Archbold field numbers will ultimately make it possible to reassemble, at least *in litt.*, the various skins, skulls, and postcranial skeletons of individuals collected by this remarkable expedition that have been scattered between institutions. The field measurements taken by the members of the Archbold Expedition are presented in Appendix I.

We have also recorded the field numbers of the specimens from Kaudern and those of Bluntschli. Kaudern's collection was published (1915) and Bluntschli's original notes still exist. The field records for Bluntschli's collection are idiosyncratic, because in most cases every bit and piece that he preserved received a separate field number. Hence, if he dissected a lemur, he gave the brain, the viscera, the skeleton, and the skin separate numbers, sometimes in sequence, sometimes not. Yet in other cases he gave one field number to an entire group of specimens (see #174501–174506 for an example). It is not possible to assume that each field number of Bluntschli is given to a unique animal. We suspect that many individual parts belong to one animal, but it is not possible to determine which animal from the notes and catalogue. The remarks column also contains any peculiarities we noted of individual specimens, and other observations of potential interest.

ABBREVIATIONS

Museums and institutions:

AMNH, American Museum of Natural History
BMNH, British Museum (Natural History)
MNHN, Muséum National d'Histoire Naturelle
NYZS, New York Zoological Society
RMNH, Rijksmuseum van Natuurlijke Historie
USNM, United States National Museum

Tabular data:

ad, adult
Arch Exp, Archbold Expedition
Blunt Coll, Bluntschli Collection
cad, cadaver
inf, infant
juv, juvenile
part, partial
pc, postcranial
skel, skeleton
vert, vertebra, vertebrae, vertebral

An asterisk (*) indicates that the specimen or its soft parts are preserved in 70 percent ethanol.

FAMILY LEMURIDAE GRAY 1821

Lemur

Lemur Linnaeus 1758; *Prosimia* Brisson 1762; *Procebus* Storr 1780; *Catta* Link 1806; *Maki* Muirhead 1819; *Eulemur* Haeckel 1895; *Odorlemur* Bolwig 1960.

TAXONOMIC NOTES: Despite the fact that the original specimen that Linnaeus based his concept of the genus upon was a *Loris*, the name *Lemur* has been the traditional one for the Malagasy forms, while *Loris* E. Geoffroy (1796) was adopted almost at once for the name of the slender *Loris*.

MORPHOLOGICAL NOTES: Mental, mystacial, superciliary, and genal vibrissae are present in all members of the genus; the interramal tuft is absent. Carpal vibrissae are always present. In all species, the face, apart from the rhinarium, is covered with short, flat hairs, except at the tip of the muzzle.

Lemur sp.

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
3769	11 Jan 1892	M	Ad	Skull, pc skel	Nd	Central Park Zoo
22886	Apr 1906	Nd	Ad	Skull, skel	Nd	NYZS
35396	11 Sept 1911	M	Ad	Skull (hemisected), skel	Nd	NYZS
35502	14 Nov 1912	Nd	Ad?	Part skull, part pc skel	Nd	NYZS
35578	04 Jan 1915	Nd	Ad	Skull	Nd	NY Park Commis- sion
77760	Nd	Nd	Ad	Skull	Nd	Brooklyn Museum
90437	Nd	Nd	Nd	Pc skel	Nd	
100826	Nd	Nd	Ad	Skull part	Nd	Arch Exp
100828	Nd	Nd	Ad	Skull	Nd	Arch Exp
170736	1931	M	Ad	Head*	Eminiminy	Blunt Coll 1750
170778	Nd	M	Ad	Testes*	Tampina	Blunt Coll 1060
170788	Nd	Nd	Inf	Cad*	Nd	Blunt Coll 326 Frankfurt Zoo
170789	Nd	Nd	Inf	Cad*	Nd	Blunt Coll 351 Frankfurt Zoo
201204	26 Apr 1929	Nd	Juv	Skull, pc skel	Nd	
202187	Nd	Nd	Nd	Cad*	Nd	Specimen missing
202541	Nd	Nd	Nd	Cad*	Nd	
245514	Nd	Nd	Nd	Left ramus, left man- dible, left maxilla, 1 molar tooth	Nd	
256790	Nd	Nd	Nd	Skull	Nd	

Lemur catta Ring-tailed lemur.

Lemur catta Linnaeus 1758; *M[aki] mococo* Muirhead 1819.

MORPHOLOGICAL NOTES: Back usually rose-brown, rump and limbs pale gray or gray-brown, crown and neck are a darker gray. Ventral surfaces white or cream, hair pale with dark skin showing beneath. Tail ringed black and white, with black tip; number close to invariant, 13–14 black rings, 12–13 white rings. Forehead, cheeks, ears, and throat white; a dark gray or black orbital ring but interocular area is white, the muzzle pale. Ears are prominent for the genus; hairy, but only slightly tufted if at all. Males have a large brachial cutaneous gland on the medial aspect of upper arm near shoulder; in females less well developed if present. Both sexes have a naked elliptical area, the carpal or antebrachial gland, on the palmar surface of wrist; in males overlaid with a horny “spur.” Gland development also in perianal region which is furred. Scrotum naked; most females have two pairs of mammae, only one pair functional.

RANGE: Restricted to southern and southwestern Madagascar, *Lemur catta* ranges into the interior highland farther than any other lemur. Its range lies south and west of a line from Belo-sur-Mer to Fianarantsoa to Fort-Dauphin, however its distribution is not continuous.

Lemur catta

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
270	Nd	M	Ad	Mounted skin	Nd	Ward's
2840	03 May 1887	Nd	Ad	Stuffed skin	Nd	F. J. Thompson
22912	05 Jul 1906	F	Ad	Skull, skel	Nd	NYZS
35577	04 Jan 1915	Nd	Ad	Skull	Nd	NYZS

Lemur catta—(Continued)

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
48192	12 Jul 1921	F	Juv	Skel, skin	Nd	NY Park Commission
100539	1948	Nd	Nd	Skel	Nd	Arch Exp 1281
100592	02 Nov 1929	Nd	Inf	Skin	Tabiky	Arch Exp 511
100593	22 Oct 1929	F	Ad	Skin	45 km E of Tuléar	Arch Exp, young put in alcohol
100594	02 Nov 1929	Nd	Inf	Skin	Tabiky	Arch Exp 523
100595	12 Aug 1929	M	Ad	Skin	Ivohibé	Arch Exp 300
100596	02 Nov 1929	M	Ad	Skin	Tabiky	Arch Exp 514
100597	17 Feb 1930	F	Ad	Skull, skin	Tsimanampetsotsa	Arch Exp 647
100598	02 Nov 1929	M	Ad	Skin	Tabiky	Arch Exp 551
100599	02 Nov 1929	M	Ad	Skull, skin	Tabiky	Arch Exp 515
100600	02 Nov 1929	F	Ad	Skull, skin	Tabiky	Arch Exp 516
100821	02 Nov 1929	M	Ad	Skull, skin	Tabiky	Arch Exp 508
100824	02 Nov 1929	F	Ad	Skin	Tabiky	Arch Exp 510
100825	22 Nov 1929	F	Ad	Skull	Tabiky	Arch Exp 521
150039	Nd	Nd	Ad	Mounted skin	Nd	On exhibit
170734	1931	Nd	Ad	Skin	Amboasary-Sud	Blunt Coll
170735	1931	Nd	Ad	Skin	Amboasary-Sud	Blunt Coll
170737	1931	F	Ad	Skull, vert	Amboasary-Sud	Blunt Coll 1852
170738	28 Oct 1931	M	Inf	Cad, brain dissected out*	Amboasary-Sud	Blunt Coll 1925
170739	28 Oct 1931	M	Ad	Skull, skel	Amboasary-Sud	Blunt Coll 1943
170740	28 Oct 1931	M	Ad	Skull, skel, skin	Amboasary-Sud	Blunt Coll 1944/45
170741	1931	M	Ad	Skull	Amboasary-Sud	Blunt Coll 1978
170742	1931	M	Inf	Skull	Amboasary-Sud	Blunt Coll 2060
170743	1931	M	Ad	Skull, vert	Amboasary-Sud	Blunt Coll 2190, pathological
170744	11 Nov 1931	M	Ad	Skull, skin	Amboasary-Sud	Blunt Coll 2192
170745	1931	Nd	Inf	Skull, skel	S Madagascar	Blunt Coll 2458
170774	1931	Nd	Inf	Cad*	Nd	Blunt Coll
170775	1931	M	Inf	Cad*	Amboasary-Sud	Blunt Coll 2179
170776	1931	M	Inf	Cad*	Amboasary-Sud	Blunt Coll 2261
170777	1931	M	Ad	Head*	Nd	Blunt Coll 2179
200881	14 May 1927	F	Ad	Skeleton	Nd	NYZS
201183	Nd	Nd	Nd	Cad*	Nd	Nd

Lemur macaco Black lemur.

Lemur macaco Linnaeus 1766; *Lemur macaco niger* Schreber 1775; *Lemur leucomystax* Bartlett 1862; *Varecia niger* Gray 1863; *Lemur flavifrons* Gray 1867; *Lemur nigerrimus* Slater 1880.

MORPHOLOGICAL NOTES: *Lemur macaco* is the most notably sexually dichromatic of the lemurs. Females are found in a wide range of colors from pale golden brown to a dark, almost chestnut, brown. Most individuals are found in the paler part of this spectrum. The larger proportion of the paler females are found in the southern end of the range of the species. Darker individuals have limbs that tend to be little paler than the dorsum and vice versa. The tail is yellow-gray to golden-brown to reddish; occasionally it will be darker toward the end. The crown of the head varies from russet red through gray to black. The ears are usually white and luxuriantly tufted. The face is reddish to black. Males are uniformly black, sometimes with a slight tint of dark brown, notably on the ventral surface; the ears are almost always lavishly tufted as in females. Occasionally individuals of either sex may be found which lack

the tufts—the source of enduring stories about a “*Lemur flavifrons*.” Poorly developed carpal glands are found occasionally; glandular development is present in scrotal and vulval regions. Scrotum is furred. Males have extensive circumanal area of naked, wrinkled glandular skin; absent in females. Females with one or two pairs of mammae, one of which is functional.

RANGE: *Lemur macaco* is found in the northwest part of the island, south from the region of Anivorano Nord to Befandriana Nord in the interior and south of Maromandia along the coast. The precise boundaries of the range are not known today, but it does include the western part of the Tsaratanana Massif, the islands of Nosy Bé and Nosy Komba, and the Ampasindava Peninsula.

Lemur macaco

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
69535	Nd	F	Ad	Skull	Nd	von Luschan Coll
70317	09 Dec 1921	Nd	Ad	Skull, skin	Nd	NYZS
100530	03 Jan 1931	F	Ad	Skull, skin	Marotony (Nossi-Bé)	Arch Exp 1177
100531	17 Nov 1931	F	Ad	Skull, skin	Anaborano	Arch Exp 1135
100605	06 Jan 1931	M	Ad	Skin	Marotony	Arch Exp 1179
100606	21 Jan 1931	M	Ad	Skull, skin	2 days E Maromandia	Arch Exp 1188
100638	16 Nov 1930	M	Juv	Skull, skin	Anaborano	Arch Exp 1128
201318	Nd	M	Ad	Mounted skel	Nd	NYZS

Lemur mongoz Mongoose lemur.

Lemur mongoz Linnaeus 1766; *Lemur nigrifrons* E. Geoffroy 1812; *Lemur albimanus* E. Geoffroy 1812; *Lemur anjuanensis* E. Geoffroy 1812; *M[aki] mongous* Muirhead 1819; *Prosimia micromongoz* Lesson 1840; *Prosimia macromongoz* Lesson 1840; *Prosimia bugi* Lesson 1840; *Prosimia brissonii* Lesson 1840; *Prosimia ocularis* Lesson 1840; *Lemur cuvieri* Fitzinger 1870.

MORPHOLOGICAL NOTES: This is a sexually dichromatic species: females are gray on the head, forelimbs, and shoulder region. This grades to brown on the back, flanks, rump, and hindlimbs; but the hindlimbs are gray and the tail is gray and darkens distally. The ears are gray and hairy but not tufted. The face and forehead are dark, but often there is a white patch on the muzzle. Cheeks and beard are bushy and white. The ventral surfaces are white to pale brown. Males are gray, often with some brownish elements in the shoulder region and on extremities. Cheeks and beard are bushy and reddish brown; this color often extends to the forehead. Ears are hairy but not tufted, sometimes they are reddish; the ventral surfaces are white to pale brown. Face somewhat paler than in female, normally with a white muzzle patch. All Comorian *L. mongoz* conform to this dichromatic pattern. However, a darker-faced, pale-bearded male variant has been reported on Madagascar (Tattersall and Sussman, 1975). Infants normally show female colors up to the age of several months. Gland development exists in perianal region, which is hairy, and in scrotal and vulval areas. Head rubbing is common among males, but no specialized glandular structure has been described. Most females have two pairs of mammae, only one of which is usually functional.

RANGE: The species is found on the Comorian islands of Mohéli (Moili) and Anjouan (Ndzouani), wherever there is suitable habitat. In Madagascar it is found in a relatively circumscribed area of the northwest. The southern and western limits of this range are not known precisely. Mongoose lemurs are found in the region of Lake Kinkony, just to the south of Mitsinjo and to the west of the River Mahavavy; but the species has not been reported in the Tsingy de Namoroka Reserve, 20 km due south of Soalala. It is found both to the east and to the west of the Betsiboka River in the region of Ambato-Boéni, at the same latitude as the Namoroka Reserve. In the north it is found as far as the Bay of Narinda.

Lemur mongoz

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
276	Nd	M	Ad	Mounted skin	Nd	Ward's
31254	03 Aug 1906	M	Ad	Skull, skel	Ste Marie de Maro-voay	Kaudern Coll 4472
35753	17 June 1918	F	Ad	Skull, skel, skin	Nd	NYZS
42696	07 Aug 1920	Nd	Juv	Skull, skel	Nd	NYZS
100516	01 Apr 1931	M	Ad	Skin	Ambararatabé	Arch Exp 1276
100539	02 Apr 1931	F	Ad	Skin	Ambararatabé	Arch Exp 1281
100608	29 Mar 1931	F	Ad	Skull, skin	Ambararatabé	Arch Exp 1261
200553	Nd	Nd	Nd	Cad*	Nd	

Lemur fulvus Brown lemurs.

TAXONOMIC NOTES: Despite the fact that a number of authors have followed Schwarz (1936) in lumping *Lemur fulvus* in synonymy with *Lemur macaco*, this is no longer a feasible or defensible synonymy. Discrete populations of the two species living in sympatry west of the Galoka Mountains in northern Madagascar have been described by Tattersall (1976). *Lemur fulvus* is extremely difficult to define as a systematic category or as a biological entity. It consists of a number of apparently closely related populations or subspecies. Some of these populations are distinguishable by dramatic and noticeable pelage colors. Others pose extremely difficult problems for the systematist. There is a depressing absence of reliable information about the locality in which many specimens were obtained. There is even less information about the distribution of the various populations on the island.

One example, cited by Tattersall (1982) will suffice to illustrate the problems. A group of female specimens that are virtually identical were collected by the Archbold Expedition from sites as far apart as Maroantsetra (15°30'S) and from Manombo and a site 20 km west of Vondrozo (both 23°S). One segment of this group is evidently the female of *L. fulvus albifrons*, the other the females of *L. fulvus albocollaris*. Confirmation of this difficulty is found in the experience of those who have bred these two subspecies.

MORPHOLOGICAL NOTES: All subspecies possess mystacial, submental, superciliary, carpal, and usually genal vibrissae; in all the face is clothed in short hair, rhinarium apart; and although females have a second pair of mammae, only the anterior pair is functional. In each sex the circumanal area is marked by naked, wrinkled, glandular skin; this is larger in males and more highly developed histologically; scrotal glands are found in males, although the scrotum is furred.

Lemur fulvus ssp.

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
170752	29 Sept 1931	Nd	Juv	Cad*	Eminiminy	Blunt Coll 1597
170757	05 Oct 1931	M	Juv	Cad*	Eminiminy	Blunt Coll 1656
170761	06 Oct 1931	M	Juv	Cad*	Eminiminy	Blunt Coll 1679
200755	Nd	M	Nd	Cad*		NYZS
200776	Nd	F	Nd	Cad*		NYZS
200777	Nd	F	Nd	Cad*	Nd	
200830	Nd	F	Nd	Cad*	Nd	
200855	Nd	M	Nd	Cad*		NYZS, specimen missing
201138	Nd	M	Nd	Cad*		NYZS, specimen missing
202614	Nd	M	Nd	Cad*		Staten Island Zoo

Lemur fulvus fulvus

L[emur] fulvus E. Geoffroy 1796; *Lemur bruneus* van der Hoeven 1844.

MORPHOLOGICAL NOTES: Sexual dichromatism is not pronounced in this subspecies. The females are usually paler than the males, and the pelage of cheek and beard is less luxuriant, which makes them appear to have sharper faces. The upper parts are gray brown to brown, with olive tints. The crown of the head is dark gray or black, cheeks and beard pale, muzzle black, color ascending up the forehead, with paler patches above each eye. The ears are hairy but not tufted. The ventral surfaces are pale—off-white to pale brown. There is a dark pygal patch, the tail darkens towards the end. Variation in pelage color is large within populations, but in general the specimens from the east seem to be darker with denser hair.

RANGE: This subspecies is found in at least three distinct regions of the island. In the northwest it is found to the north and east of the Betsiboka River from south of Ambato-Boéni to Analalava; in the north it is found in a small region east of the Galoka Mountains, south of Beramanja; and in the east south of Lake Alaotra and around Andasibé. The northern and southern limits of this subspecies are not known.

Lemur fulvus fulvus

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
273	Nd	M	Ad	Mounted skin	Nd	Ward's
283	Nd	Nd	Ad	Mounted skin	Nd	Ward's
4276	05 Oct 1920	M	Juv	Skel part, skin	Nd	NYZS
4821	14 June 1892	Nd	Nd	Skin	Nd	Central Park Zoo
6429/5049	21 Sept 1889	F	Juv	Skull, skin	Nd	F. Thompson donor
17963	03 Feb 1902	M	Ad	Skin, skull	Nd	NYZS
18696	20 May 1902	M	Ad	Skull, skin	Nd	NYZS
19159	30 Aug 1902	M	Juv	Skull, skin	Nd	NYZS
22841	Oct 1905	F	Ad	Skull, skin	Nd	NYZS
63980	25 Sept 1923	M	Ad	Skull, skin	Nd	NYZS
						" <i>L. fulvus nigri-frons</i> "
100527	25 Aug 1929	M	Ad	Skin	Nd	Arch Exp
100528	25 Aug 1929	M	Ad	Skull, skel, skin	Madagascar	Arch Exp 2
100529	25 Aug 1929	F	Ad	Skull, pc skel, skin	Madagascar	Arch Exp 5

Lemur fulvus albifrons White-fronted lemurs.

Lemur albifrons E. Geoffroy 1796; *Lemur frederici* Lesson 1840.

TAXONOMIC NOTES: There are two distinct male color phases in this subspecies. Most males are dark brown or gray brown on the dorsum, with black faces and luxuriant white or cream foreheads, crowns, ears, cheeks, and throats. The tail is dark, ventrum pale, often white. Other males lack the striking white color of the head, the fur being shorter, black, or dark gray. There is substantial variation among the females; the upper parts are usually gray brown, but may be a definite gray. Pale patches of hair may or may not be found over the eyes. The female *L. f. albifrons* seem to fall into two groups with respect to pelage color and markings, one that resembles *L. f. fulvus* and the other resembling *L. f. sanfordi*.

RANGE: Found in the humid forests of the east, but the exact limits of its distribution are not known. In the north it is found as far west as the Marojejy Massif north of Andapa, but not on the Tsaratanana Massif; along the coast it reaches to the Fanambana River near Vohémar. The southern boundary is not at all well established.

Lemur fulvus albifrons

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
100558	19 May 1930	M	Ad	Skin	40 km NW of Maroantsetra	Arch Exp 729
100559	10 Jul 1930	F	Ad	Skin	2 days NE Maroantsetra	Arch Exp 972
100560	19 May 1930	F	Ad	Skull, skin	40 km NW of Maroantsetra	Arch Exp 751
100563	Nd	Nd	Nd	Skin	Nd	Arch Exp 731
100566	22 Jul 1930	F	Ad	Skull, skin	2 days NE of Maroantsetra	Arch Exp 986
100572	14 May 1930	F	Ad	Skull, skin	40 km W of Maroantsetra	Arch Exp 696
100586	22 Jul 1930	M	Ad	Skull, skin	2 days NE of Maroantsetra	Arch Exp 985
100587	26 Aug 1930	M	Ad	Skull, skin	1 day W of Andapa	Arch Exp 1003
100588	25 June 1930	M	Ad	Skull, skin	2 days NE of Maroantsetra	Arch Exp 960
100589	18 May 1930	M	Ad	Skull, skin	40 km NW of Maroantsetra	Arch Exp 720
100590	14 May 1930	M	Ad	Skull, skin	40 km NW of Maroantsetra	Arch Exp 698
100591	11 June 1930	M	Juv	Skull part, skin	20 km NW of Maroantsetra	Arch Exp 938
100639	29 Aug 1930	Nd	Juv	Skull part, skin	1 day W of Andapa	Arch Exp 1024
100647	29 Aug 1930	M	Inf	Skull part, skin	1 day W of Andapa	Arch Exp 1021
100648	29 Aug 1930	M	Inf	Skull part, skin	1 day W of Andapa	Arch Exp 1022
170698	Aug 1931	M	Ad	Skin part	Ambatondradama	Blunt Coll
170699	1931	Nd	Ad	Skull, miscellaneous vert	Ambatondradama	Blunt Coll 1188
170700	1931	F	Ad	Skull	Ambatondradama	Blunt Coll 1189
170701	1931	F	Ad	Skull, urogenital organs*	Ambatondradama	Blunt Coll 1195/96
170702	23 Jul 1931	M	Ad	Organs*	Northern Madagascar	Blunt Coll 1203
170703	1931	F	Ad	Skull	Maroantsetra	Blunt Coll 1210
170704	1931	F	Ad	Hands and feet*	Ambatondradama	Blunt Coll 1211/12
170705	24 Jul 1931	F	Juv	Skull, skel, skin	Ambatondradama	Blunt Coll 1213/14
170706	27 Jul 1931	F	Ad	Skull	Ambatondradama	Blunt Coll 1226/27 Skin destroyed 18 Apr 1961
170707	1931	Nd	Ad	Skull	Nd	Blunt Coll 1266
170708	03 Aug 1931	F	Ad	Skull, skel, skin	Ambatondradama	Blunt Coll 1279
170709	1931	M	Ad	Hands and feet*	Ambatondradama	Blunt Coll 1300
170710	1931	M	Ad	Head*	Maroantsetra	Blunt Coll 1301
170711	05 Aug 1931	M	Ad	Limb bones	Ambatondradama	Blunt Coll 1302
170712	1931	F	Ad	Skull, 3 vert	Ambatondradama	Blunt Coll 1305
170713	02 Aug 1931	M	Ad	Organs*	Nd	Blunt Coll 1376
170714	23 Jul 1931	Nd	Nd	Organs*	Madagascar	Blunt Coll 1317
170715	10 Aug 1931	F	Ad	Skull, skel, skin	Ambatondradama	Blunt Coll 1354/55
170716	11 Aug 1931	F	Ad	Uterus*	Northern Madagascar	Blunt Coll
170717	10 Aug 1931	F	Ad	Skull, part skel, skin	Ambatondradama	Blunt Coll 1366/67
170718	1931	M	Juv	Skull, 3 vert	Ambatondradama	Blunt Coll 1374
170719	1931	F	Ad	Skull, skel, skin	Ambatondradama	Blunt Coll 1409/10
170720	18 Aug 1931	M	Ad	Skull, long bones, skin, organs*	Ambatondradama	Blunt Coll 1430/31
170721	18 Aug 1931	F	Ad	Skull, skin	Ambatondradama	Blunt Coll 1432/33

Lemur fulvus albifrons—(Continued)

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
170722	1931	F	Juv	Skull	Ambatondradama	Blunt Coll 1434/35
170723	20 Aug 1931	F	Ad	Skull, skel, skin	Ambatondradama	Blunt Coll 1449/50
170724	19 Aug 1931	F	Juv	Skull, pc skel, skin	Ambatondradama	Blunt Coll 1451/52
170725	21 Aug 1931	F	Ad	Skull, skel, skin	Ambatondradama	Blunt Coll 1467/68
170726	21 Aug 1931	F	Inf	Pc skel part, skin, eyes*	Ambatondradama	Blunt Coll 1469/70
170727	21 Aug 1931	M	Ad	Head and organs*	Maroantsetra	Blunt Coll 1471/73
170728	22 Aug 1931	F	Ad	Skull, skel, skin	Ambatondradama	Blunt Coll 1481/82
170729	22 Aug 1931	F	Juv	Head, neck, lower jaw, base of tail,* brain removed	NE Madagascar	Blunt Coll 1489
170730	22 Aug 1931	F	Ad	Skin	Ambatondradama	Blunt Coll 1484
170731	1931	M	Ad	Skull, 3 vert	Ambatondradama	Blunt Coll 1485/86
170732	1931	F	Ad	Organs*	NE Madagascar	Blunt Coll 1497
170733	1931	F	Ad	Stomach*	Northern Madagascar	Blunt Coll 1498
170754	1931	M	Ad	Urogenital organs*	Nd	Blunt Coll 1606
170779	13 June 1931	M	Ad	Neck organs*	Tampina	Blunt Coll 1061

Lemur fulvus rufus Rufous or red-fronted lemur.

Lemur rufus Audebert 1799; *Lemur rufifrons* Bennett 1833.

MORPHOLOGICAL NOTES: This subspecies is extremely dichromatic sexually, and is individually quite variable. Males: the upper parts are gray, the dark pygal patch is usual, the tail darkens toward the end. The bushy head cap is usually a bright rusty orange, but can be extremely variable as to shape and size; the muzzle is black and this color extends up between the eyes to reach the crown. Pale gray patches above each eye; ears, bushy cheeks and throat are also this color. Ventrally the animals are usually pale gray or gray brown. The scrotum is hairy and dark. Females: the upper parts are a reddish brown, medium to light, the tail is russet, darkens distally, often has a pygal patch. The crown of head is gray, the muzzle black, as is center of forehead and a narrower ring around the eyes. There is a pale gray or a white patch above each eye. The eastern males and females seem to be darker generally than the western ones and with a denser pelage. A small degree of development of the carpal glands has been noted.

RANGE: The western population occurs along the southwestern bank of the Betsiboka River, from Katsepy to Majunga, at least as far as Ambato-Boéni, and is found, if there is suitable forest, as far south as the Fiherenana River. In the east, specimens have been collected as far south as Ivohibé; the northern limit of its distribution may be around Mananjary.

Lemur fulvus rufus

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
271	Nd	F	Ad	Mounted skin	Nd	Ward's
272	Nd	F	Ad	Mounted skin	Nd	Ward's
277	Nd	M	Ad	Mounted skin	Nd	Ward's
17403	12 Dec 1901	M	Ad	Skull, skel, skin	Nd	NYZS
41262/3	Nd	M	Juv	Skull, mounted skin	Manorumber	E. Gerrard & Son
41264	Nd	F	Ad	Skull	Manorumber	E. Gerrard & Son
41265	Nd	M	Ad	Skull, skin	Manorumber	E. Gerrard & Son, skull on exhibit

Lemur fulvus rufus—(Continued)

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
100517	25 Feb 1931	M	Ad	Skull, skin	Soalala	Arch Exp 1205
100519	11 Nov 1929	M	Ad	Skin	Tabiky	Arch Exp 565
100522	10 Mar 1930	M	Ad	Skull, skin	Namoroka	Arch Exp 1252
100523	02 Mar 1931	M	Ad	Skull, skin	Namoroka	Arch Exp 1215
100524	11 Nov 1931	M	Ad	Skull, skin	Tabiky	Arch Exp 574
100525	25 Feb 1931	M	Ad	Skull part, skin	Soalala	Arch Exp 1206 Extremely pale specimen
100526	25 Aug 1929	F	Ad	Skin	Ivohibé	Arch Exp 363
100532	03 Apr 1931	F	Nd	Skull (missing), skin	Bekipany	Arch Exp 1282
100569	25 May 1930	M	Ad	Skull, skin	Tsitampiky	Arch Exp
100571	11 Nov 1929	F	Ad	Skull, skin	Tabiky	Arch Exp 571
100582	11 Nov 1929	F	Ad	Skin	Tabiky	Arch Exp 575
100584	Nd	F	Ad	Skin	Nd	Arch Exp
100607	27 June 1929	M	Ad	Skull, skin	Ankoja	Arch Exp 459/26
100614	26 June 1929	F	Ad	Skull, skin	Ankoja	Arch Exp 456/23
100819	13 Mar 1931	F	Ad	Skull	Namoroka	Arch Exp 1285

Lemur fulvus collaris Collared lemur.

Lemur collaris E. Geoffroy 1812.

MORPHOLOGICAL NOTES: There are two color varieties of collared lemur, here considered two subspecies. *Lemur fulvus collaris* is restricted to the red-bearded or collared variety. In this subspecies both sexes have pale orange cheeks which are quite bushy in males. The upper parts are dark brown or gray brown with an olive tint, and often a dark stripe runs down the back. The ventrum is pale and the tail is dark, more so at the base and tip. Face and top of head including ears and neck are black in males, gray in females. Pale patches are often found above the eyes of males. See taxonomic note for *Lemur fulvus*.

RANGE: This subspecies is found in southwestern Madagascar, from the south end of the humid forest strip, near Fort-Dauphin, north to the Mananara River. The northern and western limits are not established.

Lemur fulvus collaris

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
170736	1931	M	Ad	Head*	Eminiminy	Blunt Coll 1750
170746	1931	Nd	Ad	Skin part	Eminiminy	Blunt Coll
170747	1931	Nd	Ad	Skin	Eminiminy	Blunt Coll
170748	1931	Nd	Ad	Skin part	Eminiminy	Blunt Coll
170749	29 Sept 1931	F	Ad	Skull, part skel	Eminiminy	Blunt Coll 1592
170750	29 Sept 1931	F	Ad	Skull, skel, skin	Eminiminy	Blunt Coll 1595/96
170751	1931	M	Ad	Skin	Eminiminy	Blunt Coll
170752	29 Sept 1931	Nd	Inf	Cad*	Eminiminy	Blunt Coll 1599
170753	25 Sept 1931	F	Ad	Neck organs*	Nd	Blunt Coll 1605
170754	1931	M	Ad	Urogenital organs*	Nd	Blunt Coll 1606
170755	02 Oct 1931	F	Ad	Skull, pc skel, skin	Eminiminy	Blunt Coll 1641/42
170756	05 Oct 1931	M	Ad	Hind limbs mummified, organs*	Eminiminy	Blunt Coll 1657/60
170757	05 Oct 1931	M	Inf	Cad*	Eminiminy	Blunt Coll 1656
170758	05 Oct 1931	F	Ad	Head, torso, parts*	Eminiminy	Blunt Coll 1662/65
170759	05 Oct 1931	M	Ad	Skull, skel	Eminiminy	Blunt Coll 1673/74
170760	06 Oct 1931	M	Juv	Skull, pc skel, skin	Eminiminy	Blunt Coll 1675/76

Lemur fulvus collaris—(Continued)

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
170761	1931	M	Inf	Cad*	Eminiminy	Blunt Coll 1679 spec missing
170762	1931	M	Inf	Cad*	Eminiminy	Blunt Coll 1680 spec missing
170763	06 Oct 1931	F	Inf	Cad*	Eminiminy	Blunt Coll 1687
170764	07 Oct 1931	F	Ad	Skull, skel, skin, or- gans*	Eminiminy	Blunt Coll 1684/85
170765	07 Oct 1931	M	Juv	Skull, skel, skin	Eminiminy	Blunt Coll 1687/88
170766	1931	M	Ad	Skull, 1 vert, organs*	Eminiminy	Blunt Coll 1700/01
170767	07 Oct 1931	F	Inf	Cad*	Eminiminy	Blunt Coll 1706
170768	12 Oct 1931	M	Ad	Cad*	Eminiminy	Blunt Coll 1749, limbs 1758/61
170769	1931	F	Ad	Hands and feet*	Eminiminy	Blunt Coll 1751
170770	1931	F	Ad	Skull, 1 vert	Eminiminy	Blunt Coll 1754
170771	14 Oct 1931	F	Ad	Skull, vert column, skin	Eminiminy	Blunt Coll 1762/63
170772	1931	M	Ad	Skull, 5 vert	Eminiminy	Blunt Coll 1770
170773	1931	M	Juv	Skull, 8 vert	Eminiminy	Blunt Coll 2283

Lemur fulvus sanfordi Sanford's lemur.

Lemur fulvus sanfordi Archbold 1932.

MORPHOLOGICAL NOTES: Sexes are clearly distinguished. Males: upper parts are gray, washed with brown; the crown of the head and bushy cheeks are brown, but the ears are notably tufted in white; muzzle black, but forehead and areas beside and below both eyes white. Extremities sometimes reddish brown, tail darkest at tip. Dark pygal patch present. Females: upper parts gray, sometimes gray brown, muzzle black, but rest of head dark gray. Ears not tufted, cheeks relatively short-haired, tail darkens to tip, the pygal patch usually indistinct. Ventrums are pale gray or cream. The females of this subspecies also difficult to distinguish from those of *L. fulvus collaris*, *L. f. albocollaris*, and *L. f. albifrons*.

RANGE: Restricted to the immediate area of Mt. d'Ambre in north Madagascar, from the northern flanks of the mountain at least as far south as the Ankarana Massif between Anivorano Nord and Ambilobé, where specimens were collected by the Archbold Expedition.

Lemur fulvus sanfordi

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
100518	23 Oct 1930	F	Ad	Skull, skin	Mt d'Ambre	Arch Exp 1097
100521	07 Nov 1930	M	Ad	Skull, skin	Tsarakibany	Arch Exp 1120
100577	18 Oct 1930	F	Ad	Skull, skin	Mt d'Ambre	Arch Exp 1089
100578	29 Oct 1930	F	Ad	Skull, skin	Mt d'Ambre	Arch Exp 1105
100585	17 Oct 1930	M	Ad	Skull, skin	Mt d'Ambre	Type Specimen, Arch Exp 1083

Lemur fulvus albocollaris White-collared lemur.

Lemur fulvus albocollaris Rumpler 1975.

TAXONOMIC NOTES: Groves (1978) suggested that the valid name of the white-collared variety of this subspecies is *L. f. cinereiceps* Milne-Edwards and Grandidier 1875. This is based on plates published in their famous atlas. The plates, published without text, do not

bear much resemblance to these lemurs. Schwarz (1931) selected two specimens from the MNHN as types, believing that these were the individuals illustrated. However, these were both females and are not diagnostic of the population. Rumpler (1975) proposed the name *Lemur fulvus albocollaris* on the basis of an overenthusiastic and inappropriate use of the karyotypes. His work is not conclusive, for the karyotypes do not distinguish the two populations as he suggests (Hamilton et al., 1977; Hamilton and Buettner-Janusch, 1977; Buettner-Janusch and Hamilton, 1979). Nonetheless, the distinctive pelage differences between the males of the two populations are sufficient evidence to consider them two subspecies. However, some of the difficulties one confronts in distinguishing specimens of this subspecies from *Lemur fulvus fulvus* are illustrated by #100579 which by locality and association with other individuals is unequivocally *L. f. albocollaris*, yet it resembles *L. f. fulvus* in many ways.

MORPHOLOGICAL NOTES: *Lemur fulvus albocollaris*, the white-bearded or white-collared variety of the *L. f. collaris* group, has a beard or collar in the males that is white or cream colored, and there is often a completely white or cream ventrum. The male often has white or cream ear tufts. The female has a gray head and a gray dorsum that tapers into a brown-gray toward the tail. Females of this group have small tufts of reddish cheek hair, or pale gray cheeks tipped with orange.

RANGE: Eastern humid forests between Mananara and Faraony rivers. Range has not been adequately surveyed and there is no adequate documentation of many specimens.

Lemur fulvus albocollaris

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
100561	01 Oct 1929	F	Ad	Skull, skin	Manombo	Arch Exp 418
100562	26 Sept 1929	M	Ad	Skull, skin	Manombo	Arch Exp 409
100564	19 Jul 1929	F	Ad	Skin	20 km W of Vondrozo	Arch Exp 207
100565	15 June 1929	F	Ad	Skull part, skin	20 km W of Vondrozo	Arch Exp 120
100568	15 June 1929	F	Ad	Skin	20 km W of Vondrozo	Arch Exp 122
100570	01 Oct 1929	F	Ad	Skull, skin	Manombo	Arch Exp 416
100573	15 June 1929	M	Ad	Skin	20 km W of Vondrozo	Arch Exp 117
100575	06 Jul 1929	F	Ad	Skin	20 km W of Vondrozo	Arch Exp 157
100576	06 Jul 1929	F	Ad	Skin	20 km W of Vondrozo	Arch Exp 159
100579	30 Jul 1929	M	Ad	Skin	20 km W of Vondrozo	Arch Exp 241
100580	20 Jul 1929	F	Ad	Skin	20 km W of Vondrozo	Arch Exp 214
100581	08 Jul 1929	F	Ad	Skin	20 km W of Vondrozo	Arch Exp 168
100602	15 June 1929	M	Ad	Skin	20 km W of Vondrozo	Arch Exp 119
100649	01 Oct 1929	M	Inf	Skin	Manombo	Arch Exp 415
100818	25 June 1929	F	Ad	Skull	20 km W of Vondrozo	Arch Exp 135

Lemur coronatus Crowned lemur.

Lemur coronatus Gray 1842; *Lemur chrysampyx* Scheuermans 1846.

MORPHOLOGICAL NOTES: *Lemur coronatus* is another sexually dichromatic lemur. Females are pale gray with brownish tipped hair on the back, especially toward the tail. Underparts

and extremities are pale, the face and region above the eyes are pale gray, and the cheeks and throat are also pale. The head is capped with gray; there are orange patches bilaterally above the forehead which meet in the midline and diverge tailward. Ears are prominent and hairy but are not tufted. Males are generally a darker gray on the dorsum than females, but are quite variable in pelage color. Many of the dorsal hairs are dichromatic: gray at the base with cream to brown tips. Limbs are generally paler than the back, the tail darkens toward the end. The ventrum is cream to pale brown, the face is white, the cheeks and throat pale. A V-shaped patch of orange above the forehead occurs, filled with black in the males, gray in females. Ears are prominent and hairy but not tufted. The perianal and perineal regions are hairy, with some glandular development in both sexes. Two pairs of mammae normally present in females, one of which is functional.

RANGE: *Lemur coronatus* is the only lemur found in the dry forests of Cap d'Ambre, at the northernmost tip of the island. South of the cape it is found in the west as far as the Ankarana Massif, between Ambilobé and Anivorano Nord; it is found in the east as far south as the Fanambana River. The range includes Mt. d'Ambre, where it is now found in the more humid forests at higher altitudes from which Rand (1935) reported it absent.

Lemur coronatus

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
280	Nd	F	Ad	Mounted skin	Nd	Ward's
18039	03 Apr 1902	F	Ad	Skull, pc skel, skin	Nd	NYZS
19007	24 June 1902	F	Ad	Skull, skin	Nd	NYZS
19136	30 Aug 1902	F	Ad	Skull, skin	Nd	NYZS
100520	18 Sept 1930	F	Ad	Skull, skin	Vohémar	Arch Exp 1052
100538	08 Nov 1930	M	Ad	Skull, skin	15 mi SW of Tsarakibany	Arch Exp 1122
100609	27 Sept 1930	F	Ad	Skull, part skin	1 day N of Vohémar	Arch Exp 1068
100610	22 Sept 1930	M	Ad	Skull, skin	1 day N of Vohémar	Arch Exp 1054
100611	26 Sept 1930	M	Ad	Skull, skin	1 day N of Vohémar	Arch Exp 1064
100613	27 Sept 1930	M	Ad	Skull part, skin	1 day N of Vohémar	Arch Exp 1071
100615	27 Sept 1930	M	Ad	Skull, skin	1 day N of Vohémar	Arch Exp 1072
100617	27 Sept 1930	M	Ad	Skull part, skin	1 day N of Vohémar	Arch Exp 1070
100618	27 Sept 1930	M	Ad	Skull, skin	1 day N of Vohémar	Arch Exp 1066
100621	07 Nov 1930	M	Ad	Skin	15 mi SW of Tsarakibany	Arch Exp 1117
100659	25 Sept 1930	M	Ad	Skin	Tsitampiky	Arch Exp 389

Lemur rubriventer Red-bellied lemur.

Lemur rubriventer I. Geoffroy 1850; *Lemur flaviventer* I. Geoffroy 1850; *Lemur rufiventer* Gray 1870; *Lemur rufipes* Gray 1871.

MORPHOLOGICAL NOTES: The coat is silky, dense, and relatively long. The upperparts of most individuals are dark, lustrous chestnut brown tinged in some with paler olive tones. Tail is black, underparts dark reddish brown in most males; pale, even white in most females. The throat is dark in some, in others white, and in yet others a pale intermediate color. Cheeks of some individuals are pale, face dark, brown or black, thin coat of hair under the eyes shows pale skin beneath which is often taken as white eye patches of fur. Ears are largely concealed in surrounding hair; they are not tufted but are hairy. The scrotum is black and hairy, the perianal region naked, wrinkled, presumably glandular.

RANGE: Appears to occur rather sparsely throughout the interior forested regions of eastern Madagascar, from the Tsaratanana Massif in the north as far south as Ivohibé, at the southern end of the Andringitra Massif. Appears to be confined to forests at medium to high altitudes.

Lemur rubriventer

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
1488	Nd	Nd	Ad	Mounted skin	Nd	On exhibit
32278	Nd	Nd	Ad	Mounted skel, skull	Nd	
100567	24 Aug 1930	M	Ad	Skull, skin	1 day W of Andapa	Arch Exp 1000
100574	09 Sept 1929	M	Ad	Skin	Ivohibé	Arch Exp 385
100603	01 Sept 1930	F	Ad	Skull, skin	1 day W of Andapa	Arch Exp 1035
100604	29 Aug 1930	M	Ad	Skull, skin	1 day W of Andapa	Arch Exp 1018

Hapalemur

Hapalemur I. Geoffroy 1851; *Hapalolemur* Giebel 1859; *Myoxicebus* Elliot 1913.

Hapalemur griseus Gentle lemurs.

Hapalemur griseus griseus Gray, gentle lemur.

L[emur] griseus Link 1795; *Lemur cinereus* Desmarest 1820; *Hapalemur olivaceus* I. Geoffroy 1851.

MORPHOLOGICAL NOTES: Gentle lemurs have relatively short faces. The dense pelage is gray with olive-brown elements on the dorsum; many hairs are banded. The tail is variably dark gray; underparts are pale brown to pale gray. Ears are round, hairy, and hidden in surrounding hair. Cheeks, face, and sometimes forehead gray; darkest between the eyes. The males, particularly, have a highly developed gland area on the inside of the upper arm, and a spiny brush that covers another glandular structure on the inside of the lower arm just above the wrist. The upper arm gland is sometimes misinterpreted, in females, as an additional pair of nipples. One pair of mammae in females. Carpal vibrissae are present, a full set of facial vibrissae, but no interramal tuft; mystacial vibrissae are especially well developed.

RANGE: Found throughout humid forests of the east from the Massif of Tsaratanana to Fort-Dauphin. Sparsely distributed throughout its range, particularly in the northwest.

Hapalemur griseus griseus

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
279	Nd	F	Ad	Mounted skin	Nd	Ward's
284	Nd	Nd	Ad	Mounted skin	Nd	On exhibit
5515	Nd	F	Ad	Mounted skin	Nd	Ward's
61589	03 Jan 1923	M	Ad	Skel, skin	Nd	"Myoxicebus olivaceus," gift of H. Wilcox
100533	Nd	Nd	Ad	Skin	Forêt de Sianaka	Arch Exp (Chauvin)
100534	13 Jul 1930	F	Ad	Skull, skin	2 days E Maroantsetra	Arch Exp 973
100535	17 Aug 1930	F	Ad	Skull, skin	Andapa	Arch Exp 994
100536	25 Sept 1929	F	Ad	Skull, skin	Manombo	Arch Exp 406
100628	09 Aug 1930	F	Ad	Skull, skin	3 days NW Antalaha	Arch Exp 991
100629	17 Nov 1930	M	Ad	Skull, skin	Anaborano	Arch Exp 1131
100630	04 June 1930	M	Juv	Skull, skin	20 km SW Maroantsetra	Arch Exp 912
100631	07 June 1930	M	Juv	Skull, skin	20 km SW Maroantsetra	Arch Exp 919
100823	18 Jul 1929	F	Ad	Skull	Tsiandro	Arch Exp 479/46
170665	23 Jul 1931	Nd	Nd	Neck organs*	NE Madagascar	Blunt Coll 1198

Hapalemur griseus griseus—(Continued)

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
170666	25 Jul 1931	Nd	Nd	Tongue, accessory organs*	NE Madagascar	Blunt Coll 1208
170667	28 Jul 1931	M	Juv	Skull, pc skel	Ambatondradama	Blunt Coll
170668	28 Aug 1931	F	Ad	Skull, part pc skel, hands and feet*	Ambatondradama	Blunt Coll 1328/29
170669	08 Aug 1931	F	Ad	Skull	Ambatondradama	Blunt Coll 1330
170670	1931	F	Ad	Hands and feet*	Ambatondradama	Blunt Coll 1331
170671	1931	F	Ad	Neck organs*	Nd	Blunt Coll 1338
170672	10 Aug 1931	F	Ad	Skull, part pc skel	Ambatondradama	Blunt Coll 1350/51
170673	1931	M	Ad	Mummy, glands*	Ambatondradama	Blunt Coll 1393
170674	1931	M	Ad	Mummy	NE Madagascar	Blunt Coll 1417
170675	25 Aug 1931	M	Ad	Skull, skel, organs*	Ambatondradama	Blunt Coll 1524
170676	28 Aug 1931	F	Ad	Hands, feet, genitalia*	NE Madagascar	Blunt Coll 1552/54
170677	25 Aug 1931	M	Ad	Genitalia*	Nd	Blunt Coll 1533
170678	1931	M	Ad	Neck organs*	Nd	Blunt Coll 1624
170679	1931	Nd	Ad	Mummy	Madagascar	Blunt Coll 1638
170680	04 Oct 1931	F	Ad	Pc skel, skin	Eminiminy	Blunt Coll 1650/51
170681	1931	F	Ad	Mummy	Eminiminy	Blunt Coll 1655
170682	05 Oct 1931	F	Ad	Skull, segment of vert column	Eminiminy	Blunt Coll 1661
170683	1931	M	Juv	Feet and organs*	Eminiminy	Blunt Coll 1668/70
170684	05 Oct 1931	Nd	Nd	Glands and skin from arm*	Eminiminy	Blunt Coll 1671
100685	1931	Nd	Nd	Gland from forearm*	Eminiminy	Blunt Coll 1677
170686	07 Oct 1931	Nd	Nd	Organs*	Eminiminy	Blunt Coll 1689
170687	07 Oct 1931	M	Juv	Skel	Eminiminy	Blunt Coll 1694
170688	07 Oct 1931	M	Juv	Pc skel, skin, feet*	Eminiminy	Blunt Coll 1696
170689	07 Oct 1931	F	Ad	Skull	Eminiminy	Blunt Coll 1708/10
170690	08 Oct 1931	Nd	Nd	Eyes*	Eminiminy	Blunt Coll 1714
170691	08 Oct 1931	M	Juv	Organs, hand*	Eminiminy	Blunt Coll 1716/18
170692	09 Oct 1931	M	Juv	Head and feet*	Eminiminy	Blunt Coll 1727/28
170694	1931	M	Juv	Head, neck organs*	Nd	Blunt Coll 2299
170695	1931	Nd	Ad	Skin	Eminiminy	Blunt Coll
170696	1931	Nd	Ad	Skin	Eminiminy	Blunt Coll
170697	1931	Nd	Ad	Skin	Ambatondradama	Blunt Coll

Varecia

Varecia Gray 1863.

MORPHOLOGICAL NOTES: There is considerable variation in pelage pattern and color, but the status of populations comprising these is not clear at present. Currently we recognize two subspecies, one which occurs in the north with red and black coat colors; and one that occurs in the south with black and white coat colors. This is the largest species of the family Lemuridae.

Varecia sp.

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
200578	1925	M	Ad	Cad*	Nd	NYZS
200593	1925	M	Ad	Cad*	Nd	Ellis S. Joseph
200822	Nd	Nd	Nd	Cad*	Nd	
201395	1931	F	Ad	Cad*	Nd	NYZS

Varecia variegata Ruffed lemurs.*Varecia variegata* ssp.

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
6404	Nd	Nd	Ad	Mounted skel, skull	Nd	
35561	18 Aug 1914	M	Ad	Skull, pc skel	Nd	NYZS
77828	Nd	Nd	Ad	Skull	Nd	Brooklyn Museum
77792	10 Aug 1903	Nd	Ad	Skull	Nd	Brooklyn Museum
83955	Nd	Nd	Nd	Pc skel	Nd	C. A. Deyo
201834	Nd	F	Ad	Mandible, pc skel	Nd	NYZS
245092	Nd	Nd	Ad	Hemisected cranium	Nd	NYZS
256788	Nd	Nd	Ad	Mounted skel and skull	Nd	

Varecia variegata variegata Black and white ruffed lemur.

Lemur macaco variegatus Kerr 1792; *Maki vari* Muirhead 1819; *Prosimia subcincta* A. Smith 1833; *Lemur varius* I. Geoffroy 1851; *Varecia varia* Gray 1863; *Lemur melanoleucus* Gray 1870; *Lemur variegatus editorum* Hill 1953.

MORPHOLOGICAL NOTES: Individuals have a dense, long, silky coat that is especially luxuriant around the throat, cheeks, and ears. The muzzle is long, and the facial hair is thin, also bearing superciliary, mystacial, genal, and mental vibrissae. Carpal vibrissae are normally present and males have a single medium gular cutaneous gland. Females have three pairs of mammae. There are four major patterns of black and white hair on the individuals, which may well correspond to consistent population differences, but which are, unfortunately, not well correlated with known distributions. The patterns are described in Tattersall (1982). In all patterns, the black hairs may be replaced by dark brown, or show brown or gray tints. The white fur may be flecked with gold or orange.

RANGE: This subspecies is found throughout most of the remaining humid forest of the eastern strip, although rarely in great density, from a bit north and west of Maroantsetra, where the River Antainambalana seems to separate it from its red and black relative, to a point south of Farafangana but north of the Mananara River, which flows southeast to join the sea at Vangaindrano. We know little about the distribution within this larger region of the various pattern varieties.

Varecia variegata variegata

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
268	Nd	Nd	Ad	Mounted skin	Nd	Ward's
7989/6348	26 Jul 1889	M	Ad	Skull (missing), skin	Nd	F. Thompson
17112	21 Sept 1901	M	Ad	Skin	Nd	NYZS
17338	15 Oct 1901	F	Ad	Skull, pc skel, skin	Nd	NYZS
18040	11 Apr 1902	F	Ad	Skull, pc skel, skin	Nd	NYZS
18041	22 Apr 1922	M	Ad	Partial pc skel, skin	Nd	
19389	19 Nov 1902	M	Juv	Partial pc skel, skin	Nd	NYZS
22897	02 June 1902	F	Ad	Skull, skin, pc skel	Nd	NYZS
35090	Nd	F	Juv	Skull, skin	Nd	NYZS
35109	25 June 1907	F	Juv	Skull, skin	Nd	NYZS
70220	02 Jan 1924	F	Ad	Skull, skin	Nd	NYZS
100511	12 May 1930	F	Ad	Skull, skin	40 km NW Maroantsetra	Arch Exp 695
100512	Nd	F	Ad	Skull, skin, pc skel	Forêt de Sianaka	Arch Exp (Chauvin)

Varecia variegata variegata—(Continued)

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
170780	1931	F	Ad	Stomach contents*	Nd	Blunt Coll 1291
170781	13 June 1931	F	Ad	Neck organs*	Nd	Blunt Coll 1293
170782	13 June 1931	F	Ad	Neck organs*	Nd	Blunt Coll 1298
170783	1931	F	Ad	Stomach*	Northeastern Madagascar	Blunt Coll 1299
170784	18 Aug 1931	F	Ad	Skull, part pc skel	Ambatondradama	Blunt Coll 1420
170785	1931	F	Ad	Skin	Ambatondradama	Blunt Coll 1421
170786	1931	F	Ad	Genitalia*	Nd	Blunt Coll 1464
170787	1931	F	Ad	Hands and feet*	Ambatondradama	Blunt Coll 1465/66

Varecia variegata rubra Red-ruffed lemurs.

Lemur rubra E. Geoffroy 1812; *Prosimia rubra* Smith 1833; *Prosimia erythromela* Lesson 1840; *Varecia rubra* Gray 1863.

MORPHOLOGICAL NOTES: The color pattern of this subspecies seems to be much more uniform than in *V. v. variegata*. The ventrum, extremities, tail, inner aspects of the limbs, forehead, and crown are black, but the ears are not. A patch of white fur appears on the neck, and occasionally at the base of the tail. The pygal region is merely a bit paler in most specimens than is the rest of the back. Small patches of white hair may be found on heels or digits and on the tip of the muzzle, although the face is usually a uniform black. The rest of the animal is a deep, lustrous, rusty red. Carpal vibrissae are found, as is a full facial set, but there is no interramal tuft. Median gular gland is present in males. Three pairs of mammae in females. Specimen #100510 is exactly like the animals produced by the cross *Varecia variegata variegata* × *Varecia variegata rubra* at the Duke Primate Center. Since the specimen here is well documented as to locality, it suggests that the red and black and the black and white populations are contiguous, and that there is a zone in which they exchange genes.

RANGE: Confined to the Masoala Peninsula, to the east of the River Antainambalana, and rare throughout this range. Several museum specimens of a pale variety resemble the hybrid of the two subspecies found in captivity (see above), but only one specimen has a documented locality, 40 km to the northwest of Maroantsetra.

Varecia variegata rubra

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
267	Nd	Nd	Ad	Mounted skin	Nd	On exhibit, hybrid
269	Nd	M	Ad	Mounted skin	Nd	Ward's, on exhibit
18041	22 Apr 1902	Nd	Juv	Skull, skin not found	Nd	NYZS
100510	19 May 1930	F	Ad	Skull, skin	40 km NW Maroantsetra	Arch Exp 733 hybrid
100513	17 June 1930	M	Ad	Skull, skin	2 days NE Maroantsetra	Arch Exp 944
100514	14 Jul 1930	M	Ad	Skull, skin	2 days NE Maroantsetra	Arch Exp 975
100515	15 Jul 1930	F	Ad	Skull, skin	2 days NE Maroantsetra	Arch Exp 977

FAMILY INDRIIDAE BURNETT 1828

Indri

Indri E. Geoffroy 1796; *Indris* G. Cuvier 1805; *Lichanotus* Illiger 1811; *Indrium* Rafinesque 1895; *Lichanotes* Temminck 1827; *Pithelemur* Lesson 1840.

Indri indri Indris.

Indri indri Gmelin 1788; *Indri brevicaudatus* E. Geoffroy 1796; *Indri niger* Lacépède 1799; *Indris ater* I. Geoffroy 1825; *Pithelemur indri* Lesson 1848; *Lichanotus mitratus* W. Peters 1872; *Indris variegatus* Gray 1872.

MORPHOLOGICAL NOTES: *Indri* is the only lemur with a vestigial tail, and is the largest of the surviving Malagasy primates. The color and pattern of the pelage is highly variable, but there appears to be no consistency in this variation except that pelage colors seem to be paler in the southern part of its range. The fur is largely black, supplemented in the darkest specimens by small white patches on the crown, flanks, or forelimbs and thighs, or any combination of these. There is always a white triangular pygal patch, which may be tiny or which may extend up the back. Some individuals have pale gray patches on the limbs, dorsum, or flanks. Golden fur is sometimes found in the pygal and tarsal regions. The ventrum is often dark brown, but it may range to pale gray. Face is pale brown or black; pale patches are found in some specimens over the eyes and on the cheeks. Ears are prominent, tufted, and black. Facial vibrissae are sparse, though all groups are present, except for the interrimal. No specialized glands of the sort found in other indriids have been found in *Indri*. Females have a single pair of pectoral mammae.

RANGE: At one time populations of *Indri* were found in the interior of the island, as far west as the Itasy Massif (evidence from subfossil remains), and within living memory they were found as far south as Mananjary. The species is now restricted to the rain forest of the east, and according to Petter et al. (1977) the northern part of the range has contracted considerably in the past two decades.

Indri indri

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
260	Nd	Nd	Ad	Mounted skin	Nd	On exhibit
1480	Nd	Nd	Nd	Mounted skin	Nd	On exhibit
100503	19 Aug 1930	F	Ad	Skull, skin	1 day W of Andapa	Arch Exp 997
100504	Nd	Nd	Ad	Skull, pc skel, skin	Nd	Arch Exp 2102
100505	05 May 1930	F	Ad	Skin, skull missing	40 km NW of Maroantsetra	Arch Exp 702
100506	27 Aug 1930	F	Ad	Skull, skin	1 day W of Andapa	Arch Exp 1009
100507	13 May 1930	M	Ad	Skull, skin	40 km NW Maroantsetra	Arch Exp 667
100508	Nd	F	Ad	Skull, pc skel, skin	Forêt de Sianaka	Arch Exp (Chauvin)
100509	01 Sept 1930	F	Inf	Skull part, skin	Andapa	Arch Exp 1041
100816	19 Aug 1930	F	Ad	Skull	Andapa	Arch Exp 996
100842	19 Aug 1930	Nd	Inf	Cad*	1 day W of Andapa	Arch Exp 4283 (995)
185638	Nd	M	Ad	Skull	Madagascar	Blunt Coll (Chauvin)
185639	1931	F	Ad	Mummy	Tampina	Blunt Coll 1155
208992	27 Oct 1965	Nd	Ad	Skel, skin	Nd	San Diego Zoo

Avahi Jourdan, 1834.

Avahi Jourdan 1834; *Microrhynchus* Jourdan 1834; *Avahis* I. Geoffroy 1835; *Habrocebus* Wagner 1839; *Semnocebus* Lesson 1840; *Iropocus* Gloger 1841.

TAXONOMIC NOTES: There are two subspecies defined for the single species of the genus *Avahi laniger*. One appears confined to the forests of the northwestern part of the island, the other to the eastern forest.

Avahi laniger Woolly lemurs.

Avahi laniger laniger Eastern woolly lemur.

Lemur laniger Gmelin 1788; *Lemur brunneus* Link 1795; *Indri longicaudatus* 1796; *Haplorhina lanatus* Wagner 1840; *Lichanctus avahi* van der Hoeven 1844; *A[vahis] laniger orientalis* Lorenz 1898.

MORPHOLOGICAL NOTES: This animal has a short face, round head, and large eyes. The coat is dense, the hairs quite short and tightly curled, except on the ventrum. Many hairs on the back are dichromatic, which gives the coat the appearance of being flecked. The front end varies from a gray brown to an olive red brown, the coat becoming paler toward the tail, and more hair is tipped with cream or yellow. The tail is a rusty red. There is always a small, pale pygal patch; the insides of the thighs and the perianal region are white. The ears are small, usually hidden in the reddish hair, but not tufted distinctly. There is a pale transverse band across the forehead; the face is short haired, usually brown; some individuals have pale supraorbital patches; the throat is pale and often so are the cheeks. Paired gular glands are present beneath the mandibular angle in both sexes; the female gland is white, the male brown. Petter could find no secretions in those glands, and also noted that there is cutaneous glandular development on the back of the scrotum. The facial vibrissae are reduced.

RANGE: This animal is reported throughout the eastern strip of humid forest, although it is infrequently at high density. *Avahi laniger laniger* is extremely rare in the northern end of its range which is around the Tsaratanana Massif. Subfossils indicate that it was found in the center of Madagascar as far west as Analavory.

Avahi laniger laniger

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
1024	Nd	Nd	Ad	Mounted skin	Nd	On exhibit
41266	Nd	Nd	Nd	Skull, skin	Betsako	
41267	Nd	Nd	Nd	Skull, skin	Nd	E. Gerrard & Sons
100634	19 Jul 1929	F	Ad	Skin	20 km W of Vondrozo	Arch Exp 205
100635	03 May 1931	M	Ad	Skull, skin	Fanovana (Fanofana)	Arch Exp 1292
100636	Nd	M	Ad	Skin	30 km W of Vondrozo	Arch Exp
100637	Nd	Nd	Ad	Pc skel, skin	Forêt de Sianaka	Arch Exp 2000/316 (Chauvin)
170451	02 June 1931	M	Ad	Mummy*	Tampina	Blunt Coll 1813 Specimens 170451–170458 found mummified 28 Feb 1961, soaked in water, returned to buffered alcohol.
170452	10 June 1931	M	Ad	Mummy*	Tampina	Blunt Coll 1053
170453	01 Jul 1931	F	Ad	Mummy*	Tampina	Blunt Coll 1165
170454	02 Jul 1931	M	Ad	Mummy*	Tampina	Blunt Coll 1166
170455	10 Oct 1931	F	Ad	Mummy*	Tampina	Blunt Coll 1686
170456	08 Oct 1931	M	Ad	Mummy*	Eminiminy	Blunt Coll 1713
170457	09 Oct 1931	F	Ad	Mummy*	Eminiminy	Blunt Coll 1726
170458	11 Oct 1931	M	Ad	Mummy*	Eminiminy	Blunt Coll 1742
170459	07 Jul 1931	F	Ad	Skin	Tampina	Blunt Coll 1187
170460	09 June 1931	M	Ad	Skin	Tampina	Blunt Coll 1052
170461	04 Oct 1931	M	Ad	Skull, skin, pc skel, penis*	Eminiminy	Blunt Coll 1652/53

Avahi laniger laniger—(Continued)

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
170494	10 June 1931	F	Ad	Skull, pc skel	Tampina	Blunt Coll 1050/51
170495	08 June 1931	F	Ad	Various organs*	Tampina	Blunt Coll 1028
170496	06 June 1931	M	Ad	Neck organs*	Tampina	Blunt Coll 1030
170497	01 Jul 1931	Nd	Nd	Eyes*	Tampina	Blunt Coll 1158/60
170498	01 Jul 1931	F	Ad	Organs*	Tampina	Blunt Coll 1165
170499	1931	M	Nd	Neck organs*	Nd	Blunt Coll 1637
170500	1931	F	Juv	Cad, organs*	Eminiminy	Blunt Coll 1729
170501	1931	Nd	Nd	Head*	Eminiminy	Blunt Coll 2298

Propithecus

Propithecus Bennett 1832; *Macromerus* A. Smith 1833.

Propithecus sp.

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
31253	Nd	Nd	Ad	Skull	Nd	Kaudern Coll 1781, on exhibit
41263	Nd	Nd	Nd	Skull	Manorumber	E. Gerrard & Sons
100817	07 June 1929	Nd	Ad	Skull	Tsiroanomandidy	Arch Exp 447/14
100827	Nd	Nd	Ad	Skull	Nd	Arch Exp

Propithecus diadema Diademed sifaka.

Propithecus diadema Bennett 1833.

TAXONOMIC NOTES: Five subspecies are provisionally recognized in this the larger of the two species of *Propithecus*. It is not certain that *P. d. edwardsi* and *P. d. holomelas* are sufficiently distinct to warrant separation. Individuals of all subspecies have short, sparse superciliary, genal, buccal, and interramal vibrissae. Females have a single pair of mammae, pectoral, but close to the axilla.

Propithecus diadema

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
17356	Nd	Nd	Ad	Skull	Nd	Kny Scheerer Co.
31253	Nd	Nd	Nd	Skull	Nd	On exhibit

Propithecus diadema diadema Diademed sifaka.

Propithecus diadema diadema Bennett 1832.

MORPHOLOGICAL NOTES: The pelage is long, dense, and silky. Hairless face is black; forehead, cheeks, and throat are white; ears naked, hidden in bushy white head hair. Crown black extending to head and shoulders in some specimens. Pygal region is a deep gold color. The hindlimbs and hindquarters are a pale gold. Tail often white, sometimes a pale gold. Extremities are black. Ventrums have thick fur of a pale silver or pale gold which shows the pale skin beneath. Muzzle is short and the eyes have the typical spectacled appearance of the species. This is probably the most beautiful mammal in the world.

RANGE: It is found throughout the primary forest of the eastern humid zone between the Mangoro River and the latitude of Maroantsetra. It does not appear to occur in the vicinity of Maroantsetra. It is sparsely distributed in its range.

Propithecus diadema diadema

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
100633	27 Dec 1933	F	Ad	Skull, pc skel, skin	Fito	Arch Exp 3 (Chauvin)

Propithecus diadema candidus Silky sifaka.

Propithecus diadema candidus A. Grandidier 1871; *Propithecus sericeus* Milne-Edwards and Grandidier 1872.

MORPHOLOGICAL NOTES: The face is black and hairless, ears hidden in fur. The pelage is dense, silky, and uniformly white; but some individuals have pale to dark silvery gray hair on the crown, back, and limbs. Indistinct pygal color; pale gold or brown is usually present. Gular gland is present in males.

RANGE: Found throughout the humid forest belt north of Maroantsetra to the Andapa Basin and the Marojejy Massif. Records of collections indicate that it was once found as far north as Sambava, and a rather atypical population has been reported from Daraina in the far north. See discussion in Tattersall (1982). It is extremely rare throughout its range.

Propithecus diadema candidus

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
100556	29 Aug 1930	M	Ad	Skull, skin	1 day W of Andapa	Arch Exp 1012
100557	29 Aug 1930	F	Ad	Skull (missing), skin	1 day W of Andapa	Arch Exp 1013
256786	Nd	M	Ad	Mounted skin	Nd	Ward's

Propithecus diadema edwardsi Milne-Edwards' sifaka.

Propithecus diadema edwardsi A. Grandidier 1871; *Propithecus bicolor* Gray 1872.

TAXONOMIC NOTES: It is unclear at present whether *P. d. edwardsi* and *P. d. holomelas* are in fact distinct subspecies rather than variants within a chromatically highly variable single population. Unfortunately, the locality data and number of specimens and the field observations necessary to determine this are not currently available. Provisionally, we regard the two as separate subspecies.

MORPHOLOGICAL NOTES: Face and ears as usual in the species. Pelage is dense and almost entirely black or a dark chocolate brown. Patches of whitish hair of variable extent are often found on the flanks and dorsum. Sometimes the white patches meet in the back; other specimens have a dark anteroposterior stripe in the midline of the back. Tail is black, ventrum brown grading to whitish posteriorly. Gular gland present.

RANGE: This subspecies appears to occur in an area of the eastern humid forest south of the Mangoro River to about the latitude of Manakara.

Propithecus diadema edwardsi

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
265	Nd	Nd	Ad	Mounted skin	Nd	On exhibit
100957	10 June 1895	M	Ad	Skull (missing), skin	Ambodiasy	W. L. Abbott, USNM 63354
256784	Nd	Nd	Ad	Mounted skin	Nd	Ward's, in bad condition

Propithecus diadema holomelas Black sifaka.

Propithecus diadema holomelas Gunther 1875.

MORPHOLOGICAL NOTES: The pelage is dense and almost uniformly black except for a slightly lighter brown ventrum, occasionally pale. Face is black and hairless, the head hair bushy, obscuring the ears. It may not be distinct from *P. d. edwardsi* (see above).

RANGE: The only documented locality from which *P. d. holomelas* was collected is near Fianarantsoa. Although it has been said that the subspecies occurs in a strip of the western part of the eastern rain forest between the latitudes of Fandriana and Vondrozo, this is a region in which the Archbold Expedition collected, and they obtained no specimens.

Propithecus diadema holomelas

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
1479	Nd	Nd	Ad	Mounted skin	Nd	Ward's

Propithecus verreauxi

Propithecus verreauxi A. Grandidier 1875.

MORPHOLOGICAL NOTES: Individuals are smaller than those of *P. diadema*, the hair is not as silky and dense, although individuals from higher altitudes show a thicker pelage than do those from the lowland. The histological structure of the gular gland differs from that of *P. diadema*. All subspecies possess short and sparse sets of superciliary, genal, buccal, and interramal vibrissae. No carpal vibrissae. Females have a single pair of pectoral mammae.

Propithecus verreauxi verreauxi Verreaux's sifaka.

Propithecus verreauxi verreauxi A. Grandidier 1867; *Propithecus majori* Rothschild 1894.

MORPHOLOGICAL NOTES: The face is typical of genus. The pelage is shorter than that of *P. diadema* and is white, sometimes with silvery tints, except for a black or terracotta cap on the head between ears and behind the white forehead. Exceptionally, this dark patch is absent. Sometimes there is a pale gold pygal patch. The variant referred to as "*P. v. majori*" must clearly be regarded as fully within this subspecies, as mixed groups are not uncommonly observed; individuals of this type are also primarily white, but have dark brown head caps and brownish backs and internal and anterior aspects of the limbs. Tails may also be partly brown.

RANGE: This subspecies is found throughout the forests of south and southwest Madagascar from west of Fort-Dauphin to the Tsiribihina River. It seems to flourish in all types of forest, from the arid *Didiera* through riverine gallery forests.

Propithecus verreauxi verreauxi

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
31256	1906	Nd	Juv	Cad*	Ste Marie de Marovoay	Kaudern Coll 4256
100541	10 Nov 1929	F	Ad	Skin	Tabiky	Arch Exp 560
100542	14 Oct 1929	M	Ad	Skull, skin	45 km E of Tuléar	Arch Exp 489
100543	Nd	Nd	Ad	Skin	45 km E of Tuléar	Arch Exp
100546	21 Dec 1929	M	Ad	Skin	Lac Ihotry	Arch Exp 639
100547	18 Nov 1929	F	Juv	Skin	Tabiky	Arch Exp 642
100551	20 Mar 1930	F	Ad	Skull, skin	Ampotaka	Arch Exp 653
100553	03 Nov 1929	M	Ad	Skull, skin	Tabiky	Arch Exp 533
170462	23 Oct 1931	F	Ad	Mandible, skin	Amboasary-Sud	Blunt Coll 1835

Propithecus verreauxi verreauxi—(Continued)

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
170463	27 Oct 1931	M	Ad	Skull, pc skel, skin	Amboasary-Sud	Blunt Coll 1917
170464	4/5 Nov 1931	F	Ad	Skin	Amboasary-Sud	Blunt Coll 2086
170465	06 Nov 1931	M	Ad	Skin	Amboasary-Sud	Blunt Coll 2107
170466	06 Nov 1931	F	Ad	Skin	Amboasary-Sud	Blunt Coll 2109
170467	06 Nov 1931	M	Ad	Skull, skin	Amboasary-Sud	Blunt Coll 2159
170468	Nov 1931	M	Ad	Skin	Amboasary-Sud	Blunt Coll 1931
170469	1931	Nd	Ad	Skin	Amboasary-Sud	Blunt Coll
170471	27 Oct 1931	M	Ad	Pc skel part	Amboasary-Sud	Blunt Coll 1782
170472	21 Oct 1931	F	Juv	Cad*	Amboasary-Sud	Blunt Coll 1789
170473	22 Oct 1931	F	Ad	Skull	Amboasary-Sud	Blunt Coll 1811
170474	22 Oct 1931	F	Ad	Skull, pc skel	Amboasary-Sud	Blunt Coll 1819/29
170475	23 Oct 1931	F	Ad	Uterus*	Amboasary-Sud	Blunt Coll 1832
170476	Oct 1931	Nd	Juv	Organs*	Amboasary-Sud	Blunt Coll 1839
170477	Oct 1931	M	Ad	Mummy	Amboasary-Sud	Blunt Coll 1887
170478	1931	Nd	Nd	Skel with muscles*	Amboasary-Sud	Blunt Coll 1908
170479	Oct 1931	M	Juv	Torso*	Amboasary-Sud	Blunt Coll 1909
170480	1931	M	Ad	Hands and feet*	Amboasary-Sud	Blunt Coll 1910
170481	1931	M	Juv	Brain*	Amboasary-Sud	Blunt Coll 1911
170482	28 Oct 1931	M	Juv	Cad*	Amboasary-Sud	Blunt Coll 1937
170483	1931	F	Juv	Limbs and torso*	Amboasary-Sud	Blunt Coll 1955/56
170484	31 Oct 1931	M	Juv	Skull, pc skel	Amboasary-Sud	Blunt Coll 2039
170485	05 Nov 1931	F	Ad	Skull	Amboasary-Sud	Blunt Coll 2092
170486	09 Nov 1931	F	Juv	Skull, pc skel	Amboasary-Sud	Blunt Coll 2149
170487	10 Nov 1931	M	Juv	Skull, brain*	Amboasary-Sud	Blunt Coll 2151
170488	1931	Nd	Nd	Head*	Amboasary-Sud	Blunt Coll 2152
170489	10 Nov 1931	M	Ad	Skull, pc skel	Amboasary-Sud	Blunt Coll 2157
170490	1931	Nd	Juv	Cad.*	Amboasary-Sud	Blunt. Coll. 2178
170491	11 Nov 1931	F	Ad	Skull part, pc skel	Amboasary-Sud	Blunt Coll 2189
170492	12 Nov 1931	M	Juv	Cad*	Amboasary-Sud	Blunt Coll 2205
170493	14 Nov 1931	M	Juv	Skull, pc skel	Amboasary-Sud	Blunt Coll 2231
256785	Nd	M	Ad	Mounted skin	Nd	Ward's
256787	Nd	Nd	Nd	Mounted skin	Nd	Ward's
256789	Nd	F	Juv	Mounted skel with skull	Nd	

Propithecus verreauxi coquereli Coquerel's sifaka.

Propithecus verreauxi coquereli Milne-Edwards 1867; *Propithecus damonis* Gray 1878.

MORPHOLOGICAL NOTES: The face is black, but with patch of short white hairs on muzzle. Ears naked and small but visible. Pelage is dense and predominantly white. Maroon patches occur on the anterior part of the ventrum and on anterior and internal aspects of the thighs and forelimbs. Extremities are white; the back is often a pale silvery gray or brown, the tail white. The gular gland and perianal skin of males is dark red-brown.

RANGE: Northwest Madagascar, north and east of Betsiboka River. Its southern boundary is in the vicinity of Ambato-Boéni, and in the north its range extends to around Antsohihy. Eastern limit is probably near Antetemazy, a short distance west of Befandriana Nord.

Propithecus verreauxi coquereli

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
973	Nd	F	Ad	Mounted skin	Nd	Ward's
16699	Nd	Nd	Ad	Partial skull	Nd	Maximilian Coll
31255	1906	Nd	Ad	Skull, pc skel	N of Majunga	Kaudern Coll 4491

Propithecus verreauxi coquereli—(Continued)

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
208989	Nd	M	Ad	Pc skel, skin	Nd	San Diego Zoo
208990	Nd	M	Ad	Skull, pc skel, skin	Nd	San Diego Zoo
208991	Nd	M	Ad	Skull, pc skel, skin	Nd	San Diego Zoo

Propithecus verreauxi deckeni von der Decken's sifaka.

Propithecus verreauxi deckeni Peters 1870.

TAXONOMIC NOTES: It is not certain that the subspecies *P. v. coronatus* and *P. v. deckeni* are distinct, and current locality data tend to dispute complete allopatry. Chromatic intermediates are not convincingly known, however, except possibly from the Bongalava, and we feel it most useful to continue making the distinction pending further information. See Tattersall (1982).

MORPHOLOGICAL NOTES: Face and ears as typical. Fur of many individuals completely white; in others the back, limbs, and the shoulder are touched with pale yellow gold or silvery tints.

RANGE: West coast of Madagascar, south of Antsalova north to Betsiboka River. Present range does not extend south as far as the Tsiribihina River, which marks the northern limit of *P. v. verreauxi*. An isolate described by Petter et al. (1977) is found on the Bongalava northwest of Tsiroanomandidy, and the AMNH Archbold specimen #100817 (see *Propithecus* sp. above), unfortunately represented only by a skull from Tsiroanomandidy, may well represent this subspecies.

Propithecus verreauxi deckeni

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
264	Nd	Nd	Ad	Mounted skin	Nd	On exhibit
100540	17 Jul 1929	M	Ad	Skull, skin	Tsiandro	Arch Exp 476/43
100544	02 Mar 1931	M	Ad	Skull, skin	Namoroka	Arch Exp 1211
100545	13 Jul 1929	M	Ad	Skull, skin	Tsiandro	Arch Exp 471/38
100548	26 Feb 1931	F	Ad	Skull, skin	Soalala	Arch Exp 1207
100552	06 Jul 1929	F	Ad	Skull, skin	Tsiandro	Arch Exp 464/31
100555	26 Feb 1931	M	Juv	Skull, skin	Soalala	Arch Exp 1208

Propithecus verreauxi coronatus Crowned sifaka.

Propithecus verreauxi coronatus Milne-Edwards 1871; *Propithecus damanus* Schlegel 1876.

TAXONOMIC NOTES: It is not clear that this subspecies is distinct from *P. v. deckeni*. Pending further information it seems useful to maintain the distinction. See discussion above.

MORPHOLOGICAL NOTES: The face is naked, black, often with some short whitish hairs on the muzzle. A single central gular gland of males is dark brown. Fur on the head is thick, dark chocolate brown or black, with occasional white tufts on ears. The back and shoulders are tinted variably, ranging from gold to silver brown, growing pale toward the tail. The tail and hindlimbs are white, the external surface of the forelimbs are dark, with some variation. The ventrum is darkest on the breast. Ambararatabé specimens are atypical.

RANGE: West of the lower reaches of the Betsiboka River. See discussion under *P. v. deckeni* above and in Tattersall (1982).

Propithecus verreauxi coronatus

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
100550	30 Mar 1931	F	Ad	Skull, skin	Ambararatabé	Arch Exp 1263
100554	30 Nov 1931	F	Ad	Skull, skin	Ambararatabé	Arch Exp 1266

FAMILY DAUBENTONIIDAE GRAY 1870

Daubentonia

Daubentonia E. Geoffroy 1795; *Scolecophagus* E. Geoffroy 1795; *Aye-aye* Lacépède 1799; *Cheyromis* E. Geoffroy 1803; *Chiromys* Illiger 1811; *Psilodactylus* Oken 1816; *Cheyromys* G. Cuvier 1817; *Myspithacus* Blainville 1839; *Myslemur* Blainville 1846.

Daubentonia madagascariensis Aye-aye.

Daubentonia madagascariensis Gmelin 1788; *Sciurus madagascariensis* Gmelin 1788; *Lemur psilodactylus* Shaw 1800; *Cheyromys madagascariensis* var. *laniger* G. Grandidier 1929.

MORPHOLOGICAL NOTES: This animal is, in many ways, unlike any of the other lemurs of Madagascar. The quality of its fur is unique. On the upperparts there is a rather dense layer of relatively short, soft off-white hair overlaid by a layer of extremely long, coarse guard hairs that are black or blackish brown for most of their length, but white on the distal ends. The pelage impresses one as very dark brown flecked and in places suffused with white. The hair on the limbs is coarse and the bushy tail is the same blackish brown color, covered with very coarse, very long monochromatic hairs.

The extremely short face is almost naked; there is short white hair on the cheeks and above the eyes, which have dark rings around them. The ears are naked and mobile, elongated, and very large. Superciliary vibrissae are highly developed; buccal, genal, and interramal vibrissae are present. The nails of all digits except the hallux are laterally compressed and clawlike. The third manual digit is elongated and thin; the fourth is longer but more robust. Scrotum naked with glandular skin, single pair of mammae is inguinal.

RANGE: If we believe historical accounts and museum records, the aye-aye was once extensively distributed on the island of Madagascar. It is certain that it was found throughout the eastern forests, and apparently was widespread over the western part of the island as well. It appears to be an adaptable animal, found in primary rain forest, deciduous forest, secondary growth, in cultivated areas, especially coconut groves, in dry scrub forest, and in mangrove swamps. It is rare today for several reasons, primary among which are the hostility to it of most Malagasy people and the disappearance of much of its habitat. However, it may never have existed in very high density.

Daubentonia madagascariensis

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
296	Nd	M	Ad	Mounted skin, skull inside	Nd	Ward's
9305	Nd	Nd	Ad	Skull missing	Nd	Purchase
41344	Nd	Nd	Ad	Skull, skin missing	Nd	W. F. H. Rosenberg
100632	27 Dec 1930	M	Ad	Skull, skin	Ampasimena	Arch Exp 1176
185640	1931	Nd	Ad	Cad*	Tampina	Blunt Coll
185643	1931	F	Ad	Skull	Nd	Blunt Coll 2454/55
243850	Nd	Nd	Nd	Skel, mounted	Nd	Ward's

FAMILY MEGALADAPIDAE MAJOR, 1894

TAXONOMIC NOTES: *Lepilemur* is the only living member of this family, which is best recognized and defined on the basis of its dentition. By priority the correct name for the family is Megaladapidae, which includes the extinct subfossil *Megaladapis* (Schwartz and Tattersall, 1985).

Lepilemur Weasel or sportive lemurs.

Lepilemur I. Geoffroy 1851; *Galeocebus* Wagner 1855; *Lepidilemur* Giebel 1859; *Mixocebus* Peters 1875; *Lepidolemur* Peters 1875.

TAXONOMIC NOTES: The confusion that has been created in the systematic organization of this group of lemurs is remarkable, and it is a difficult and vexing problem to make systematic sense out of the varieties of data that exist about this beast. Many different local populations exist; the problem is whether they are distinct or not. Since sportive lemurs are nocturnal, color variations among populations are generally subtle and this exacerbates the problem. The animals are nocturnal, arboreal, and not particularly active at any time. In fact they may be said to lead some of the most inactive and boring lives among primates, and field observations of systematic relevance are sparse. There are a number of excellent collections of skins and skeletons, such as that in this museum, but these are usually not documented well enough to provide definitive data for resolving the taxonomic problems.

As many as seven species, one with four subspecies, have been proposed; even close examination makes it clear that no compelling argument has been made to create species for many of the groups described. Petter et al. (1977) used karyotypic differences as the basis for their remarkable split classification. Since many local populations exhibit marked chromosomal polymorphism, it is unlikely that karyotypic differences of this sort will prove useful in defining species or subspecies of sportive lemurs. Provisionally, we recognize one species with six subspecies, of which four are represented in the AMNH collection. We have made no attempt at systematic revision for this catalogue.

Lepilemur mustelinus Weasel lemur.

Lepilemur mustelinus I. Geoffroy 1851.

Lepilemur mustelinus ssp.

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
281	Nd	Nd	Ad	Mounted skin	Nd	Ward's
282	Nd	Nd	Ad	Mounted skin	Nd	Ward's
100834	May 1929	M	Ad	Skull, skel	Forêt de Sianaka	Arch Exp (Chauvin)
170751	Nd	Nd	Nd	Mounted skel, skull	Nd	On exhibit

Lepilemur mustelinus ruficaudatus Red-tailed sportive lemur.

Lepilemur ruficaudatus A. Grandidier 1867; *Lepilemur pallicauda* Gray 1872; *Lepidolemur globiceps* Forsyth Major 1894.

MORPHOLOGICAL NOTES: Red-tailed sportive lemurs are pale brown, paler toward the tail. The hair of the upperparts is gray at the base, but dichromatic, with pale brown at the tips. Tail is reddish, ears large, face pale gray to pale brown. The underparts are pale gray flecked with cream, the throat is pale.

RANGE: Found in western Madagascar, but the limits are not well defined. It is found southeast at least as far as the Onilahy River, and possibly as far as Ejeda. There is a northern boundary with *L. m. edwardsi* at the Tsiribihina River, if one accepts that the two are different.

Lepilemur mustelinus ruficaudatus

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
100537	25 Aug 1929	F	Nd	Skin	170 km E of Tuléar	Arch Exp 398
100612	14 Nov 1929	M	Ad	Skull, skin	Tabiky	Arch Exp 592
100616	11 Nov 1929	M	Ad	Skull, skin	Tabiky	Arch Exp 570
100620	13 Nov 1929	M	Ad	Skull part, skin	Tabiky	Arch Exp 588

Lepilemur mustelinus ruficaudatus—(Continued)

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
100622	18 Nov 1929	M	Ad	Skull (missing), skin	Tabiky	Arch Exp 625
100625	18 Nov 1929	M	Ad	Skin	Tabiky	Arch Exp
100644	25 Aug 1929	F	Ad	Skin	170 km E of Tuléar	Arch Exp 396
100820	01 Nov 1929	F	Ad	Skull, skin	Tabiky	Arch Exp 506

Lepilemur mustelinus dorsalis Gray-backed sportive lemur.

Lepilemur dorsalis Gray 1870; *Lepidolemur grandidieri* Forsyth Major 1894.

MORPHOLOGICAL NOTES: Small member of the species. Upperparts are medium to dark brown, occasionally flecked with yellow, although in some individuals the basal dark gray of the dichromatic hair makes the animal appear darker toward the tail. The tail is the color of the dorsum, the underparts are brown; ears are round and short, the face relatively blunt and somber, gray to brown.

RANGE: Found only in the region of the Sambirano and Nosy-Bé.

Lepilemur mustelinus dorsalis

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
100643	17 Nov 1930	M	Ad	Skull, skin	Anaborano	Arch Exp 1138

Lepilemur mustelinus leucopus White-footed sportive lemur.

Lepidolemur leucopus Forsyth Major 1894.

MORPHOLOGICAL NOTES: Another small sportive lemur. The upperparts, including the crown and the limbs are pale gray, paler toward the tail. There are hints of pale brown in the fur. The tail is a very pale brown. The underparts are very pale gray or white.

RANGE: Found in the dry south of the island, from Fort-Dauphin west to Ejeda and perhaps to the Onilahy River.

Lepilemur mustelinus leucopus

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
170552	23 Oct 1931	F	Ad	Skull, part pc skel	Amboasary-Sud	Blunt Coll 1828/29
170553	24 Oct 1931	M	Ad	Skull, pc skel	Amboasary-Sud	Blunt Coll 1864
170554	25 Oct 1931	F	Ad	Skull, part pc skel	Amboasary-Sud	Blunt Coll 1877/78
170555	27 Oct 1931	F	Ad	Skull, part pc skel	Amboasary-Sud	Blunt Coll 1907
170556	27 Oct 1931	F	Ad	Skel	Amboasary-Sud	Blunt Coll 1921
170557	28 Oct 1931	F	Ad	Skull, pc skel	Amboasary-Sud	Blunt Coll 1934
150558	28 Oct 1931	F	Ad	Skull, pc skel	Amboasary-Sud	Blunt Coll 1942
170559	1931	M	Ad	Skull, pc skel	Amboasary-Sud	Blunt Coll 1948
170560	30 Oct 1931	F	Ad	Skull, pc skel	Amboasary-Sud	Blunt Coll 2004
170561	31 Oct 1931	M	Ad	Skull, pc skel	Amboasary-Sud	Blunt Coll 2034
170562	31 Oct 1931	F	Ad	Skel	Amboasary-Sud	Blunt Coll 2036
170563	02 Nov 1931	F	Ad	Skull, pc skel	Amboasary-Sud	Blunt Coll 2058
170564	02 Nov 1931	M	Ad	Pc skel	Amboasary-Sud	Blunt Coll 2063
170565	04 Nov 1931	F	Ad	Skull, pc skel	Amboasary-Sud	Blunt Coll 2091
170566	06 Nov 1931	F	Ad	Skull, pc skel	Amboasary-Sud	Blunt Coll 2110
170567	07 Nov 1931	F	Ad	Skull, pc skel	Amboasary-Sud	Blunt Coll 2115/16
170568	15 Nov 1931	F	Ad	Skull, pc skel	Amboasary-Sud	Blunt Coll 2243
170569	1931	M	Ad	Skull, skel	Amboasary-Sud	Blunt Coll 2244
170570	1931	M	Ad	Skull, pc skel	Amboasary-Sud	Blunt Coll 2297

Lepilemur mustelinus leucopus—(Continued)

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
170571	Nov 1931	F	Ad	Skull (on exhibit)	Amboasary-Sud	Blunt Coll 1883
170572	Nov 1931	F	Ad	Skull, vert	Amboasary-Sud	Blunt Coll 1947
170573	Nov 1931	F	Ad	Skull	Amboasary-Sud	Blunt Coll 1977
170574	Nov 1931	F	Ad	Skull, vert	Amboasary-Sud	Blunt Coll 2062
170575	Nov 1931	F	Ad	Skull, vert	Amboasary-Sud	Blunt Coll 2452
170576	Nov 1931	M	Ad	Skull, vert	Amboasary-Sud	Blunt Coll 2457
170577	18 Nov 1931	M	Ad	Skull, vert	Amboasary-Sud	Blunt Coll 2263
170578	Nov 1931	F	Ad	Skull, vert	Amboasary-Sud	Blunt Coll 2451
170790	22 Oct 1931	M	Ad	Cad*	Amboasary-Sud	Blunt Coll 1800
170791	22 Oct 1931	M	Ad	Cad*	Amboasary-Sud	Blunt Coll 1830
170792	1931	F	Ad	Uterus*	Amboasary-Sud	Blunt Coll 1830
170793	28 Oct 1931	F	Ad	Brain, eyes, organs*	Amboasary-Sud	Blunt Coll 1845
170794	24 Oct 1931	F	Ad	Organs*	Amboasary-Sud	Blunt Coll 1855
170795	26 Oct 1931	F	Ad	Cad*	Amboasary-Sud	Blunt Coll 1885
170796	26 Oct 1931	Nd	Nd	Cad*	Amboasary-Sud	Blunt Coll 1886
170797	1931	M	Inf	Cad*	Amboasary-Sud	Blunt Coll 1924
170798	1931	F	Inf	Cad*	Amboasary-Sud	Blunt Coll 1939
170799	1931	Nd	Inf	Cad*	Amboasary-Sud	Blunt Coll 2144
170800	1931	Nd	Inf	Skel	Amboasary-Sud	Blunt Coll 2181
174351	1931	Nd	Inf	Cad*	Amboasary-Sud	Blunt Coll 2182
174352	1931	Nd	Inf	Skel	Amboasary-Sud	Blunt Coll 2230
174353	1931	M	Inf	Cad*	Amboasary-Sud	Blunt Coll 2279
174354	28 Oct 1931	F	Ad	Brain*	Amboasary-Sud	Blunt Coll 2280
174355	1931	Nd	Inf	Cad*	Amboasary-Sud	Blunt Coll
174356	24 Oct 1931	Nd	Ad	Mandible, neck or- gans*	Amboasary-Sud	Blunt Coll
174357	24 Nov 1931	Nd	Inf	Head*	Amboasary-Sud	Blunt Coll

Lepilemur mustelinus edwardsi Milne-Edward's sportive lemur.

Lepidolemur edwardsi Forsyth Major 1894; *Lepilemur mustelinus rufescens* Lorenz 1898.

MORPHOLOGICAL NOTES: This animal is quite similar to *L. m. ruficaudatus* and there is question whether it is actually a distinct subspecies. It appears to be a little darker in color than *L. m. ruficaudatus* and there is often a darker median stripe along the back.

RANGE: Western Madagascar from the Bay of Mahajamba south at least to Antsalova, and perhaps to the Tsiribihina River.

Lepilemur mustelinus edwardsi

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
31251	13 Oct 1910	Nd	Nd	Mandible, pc skel	Ste Marie de Maro- voay	Kaudern Coll
100623	08 Mar 1931	F	Ad	Skull part, skin	Namoroka	Arch Exp 1238
100642	10 Jul 1929	F	Ad	Skull, skin	Tsiandro	Arch Exp 467/34

FAMILY CHEIROGALEIDAE GREGORY 1915

Cheirogaleus Dwarf lemurs.

Cheirogaleus E. Geoffroy 1812; *Cebugale* Lesson 1840; *Mioxicebus* Lesson 1840; *Chirogale* Gloger 1841; *Myspithacus* F. Cuvier 1842; *Myoxicebus* L. Agassiz 1846; *Myoxocebus* L. Agassiz 1846; *Opolemur* Gray 1872; *Altililemur* Elliot 1913; *Altilemur* Weber 1928.

TAXONOMIC NOTES: Several recent authors, Petter et al. (1977) in particular, recognize two subspecies at least of the greater dwarf lemur. One is said to exist primarily north of the Masoala Peninsula with reddish fur as its distinguishing character. The other is said to be browner and found to the south. It is far from clear that this is the case, since the brown and the reddish variants are not discrete geographically. The two groups are further united by the presence of individuals who are intermediate in color between them.

Cheirogaleus major Greater dwarf lemur.

Cheirogaleus major E. Geoffroy 1812; *Lemur commersonii* Wolff 1822; *Cheirogaleus milii* E. Geoffroy 1828; *Cebugale commersonii* Lesson 1833; *Mioxicebus griseus* Lesson 1840; *Cheirogaleus adipicaudatus* A. Grandidier 1848; *Cheirogaleus major crossleyi* A. Grandidier 1870; *Chirogale melanotis* Forsyth Major 1894; *Chirogale sibreei* Forsyth Major 1895.

MORPHOLOGICAL NOTES: The hair is dichromatic, gray at base, pale at tips. The face is covered with short flat-lying hair, naked only at distal end of the muzzle. The eyes are large; ears are moderate in size, naked, but concealed by the surrounding fur. Dorsal pelage is dense but not of great length; varies from dull gray brown to slight reddish color. Top of head and tail are uniform with dorsum. The underparts are pale, base of hairs are gray, tips cream. Dark rings are found around the eyes; the face is pale and the throat dark. There are usually one pair of pectoral and one pair of inguinal mammae. There is a full set of facial vibrissae, but no carpal vibrissae. The tail swells seasonally and probably accounts for most of the remarkable variation in weight with the seasons, which is from around 340 to 600 g.

RANGE: The species is found throughout the forested areas of eastern Madagascar from Fort-Dauphin to Mt. d'Ambre, and west to the Tsaratanana Massif and the Sambirano region. A population of *C. major* is found on the Bongalava Massif, an isolated remnant population of a species that was once in this century to be found well onto the Central Plateau.

Cheirogaleus major

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
286	Nd	Nd	Ad	Mounted skin	Nd	On exhibit
31265	Nd	Nd	Nd	Cad*	Andranolava	Kaudern Coll 4205
80072	02 Aug 1926	M	Ad	Skull part, pc skel, skin	Nd	NYZS
100640	Nd	Nd	Ad	Skull, pc skel, skin	Forêt de Sianaka	Arch Exp 3002 (Chauvin)
100641	10 Aug 1929	M	Juv	Skin	Ivohibé	Arch Exp 381
100650	07 Nov 1930	F	Juv	Skull, skin	Tsarakibany	Arch Exp 1119
100830	Nd	Nd	Juv	Skel, part	Nd	Arch Exp
174358	17 June 1931	Nd	Nd	Organs*	Tampina	Blunt Coll 1071

Cheirogaleus medius Fat-tailed dwarf lemur.

Cheirogaleus minor E. Geoffroy 1812; *Chirogaleus samati* A. Grandidier 1868; *Opolemur milii* Gray 1872; *Opolemur thomasi* Forsyth Major 1894; *Cheirogaleus medius samati* Schwarz 1931.

MORPHOLOGICAL NOTES: The fur is dense and short, and the body hairs are darker at base than at tip. The upperparts are silvery gray with reddish tints. Underparts are paler from light brown to cream, with the gray base of the hairs showing through. Ears are naked, of moderate length, but concealed in the fur. Superciliary, genal, and buccal vibrissae are found; interramal vibrissae are rare. The tail swells seasonally.

RANGE: This small animal is found in most of the forested regions of the west, south, and southwest of the island. It is known from the Bay of Narinda to Fort-Dauphin. It may also

occur in parts of eastern and northern Madagascar and in the Sambirano (see discussion in Tattersall, 1982).

Cheirogaleus medius

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
100601	Nd	F	Ad	Skin	Tabiky	Arch Exp 617
100651	22 Nov 1931	F	Ad	Skin	1 day S of Anaborano	Arch Exp 1144
100652	16 Nov 1929	M	Ad	Skull, part skin	Tabiky	Arch Exp 603
100653	Aug 1929	Nd	Ad	Skin	170 km E of Tuléar	Arch Exp 403
100654	17 Nov 1930	F	Ad	Skull part, skin	Anaborano	Arch Exp 1133
100655	29 Apr 1931	M	Ad	Skin	Fanovana	Arch Exp 1289
100843	Nd	Nd	Ad	Cad*	Nd	Arch Exp
196619	Nd	Nd	Ad	Skull	Nd	G. Heinrich

Microcebus Mouse lemurs.

Microcebus E. Geoffroy 1828; *Scartes* Swainson 1835; *Myscebus* Lesson 1840; *Gliscebus* Lesson 1840; *Myocebus* Wagner 1841; *Murilemur* Gray 1870; *Azema* Gray 1870.

TAXONOMIC NOTES: The nomenclature of *Microcebus* is confused and tangled. We follow Tattersall (1982) and will not repeat his clarification here. There are two forms of *Microcebus*, for we now exclude Coquerel's dwarf lemur from the genus. The one is a gray, long-eared animal from the west, the other a brown-rufous, short-eared animal from the east. There are consistent morphological differences between the two animals, as R. D. Martin has shown, as well as the differences in pelage color and ear length. We also now know that in certain areas the rufous colored animals exist sympatrically with the gray western animals. This evidence supports the view that the gray and the red forms are separate species, and we treat them as such.

MORPHOLOGICAL NOTES: Mouse lemurs are the smallest of the Malagasy primates, and indeed are among the smallest of all living primates.

Microcebus murinus Gray mouse lemur.

Lemur murinus J. F. Miller 1777; *Prosimia minima* Boddaert 1785; *Lemur prehensilis* Kerr 1792; *Galago madagascariensis* E. Geoffroy 1812; *S[cartes] murinus* Swainson 1835; *Myscebus palmarum* Lesson 1840; *Gliscebus murinus* Lesson 1840; *Microcebus rufus* Wagner 1840; *Galago minor* Gray 1842; *Microcebus myoxinus* Peters 1852; *Chirogaleus gliroides* A. Grandidier 1868; *Murilemur murinus* Gray 1870; *M[icrocebus] minor griseorufus* Kollman 1910.

MORPHOLOGICAL NOTES: The fur is dense and long; the hairs are dichromatic, dark gray at base, paler at tips. The upperparts are silver, or rosy brown, the head is the darkest part. Ventrally the hairs are white at the tips and thus make the ventrum pale, although in some specimens the basal gray shows. A median dorsal stripe is often found. The tail is brown, sometimes darker at the tip. A white stripe runs from forehead to tip of muzzle, some show evidence of a circumorbital ring. The ears are long, naked, and visible. Superciliary, buccal, and genal vibrissae occur; no interramal or carpal vibrissae are found. There are two pectoral and two abdominal mammae. The weight varies seasonally, averaging about 60 g.

RANGE: Found in the forested areas of western, southern, and southwestern Madagascar, from Fort-Dauphin to the Sambirano region. In the region of Fort-Dauphin, Martin (1972) noted that there is a sharp environmental boundary between the brown and the gray mouse lemurs. The gray mouse lemur's range includes the littoral forest to the north and east of the town; the brown mouse lemur is found in the rain forest that extends south and west of the town, almost to the coast. The precise northern boundary of the range of the gray mouse

lemur is not precisely known, but it does not appear to occur north of the Sambirano River. It flourishes in secondary vegetation.

Microcebus murinus

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
271	Nd	M	Ad	Skull, pc skel	Madagascar	Verreaux Coll
100657	04 Nov 1929	F	Ad	Skull, skin, 3 embryos*	Tabiky	Arch Exp 540
100659	Aug 1929	Nd	Ad	Skin	170 km E of Tuléar	Arch Exp 389
100660	04 Nov 1929	F	Ad	Skull, skin	Tabiky	Arch Exp 537
100661	16 Nov 1931	F	Ad	Skull, skin	Tabiky	Arch Exp 607
100662	30 Mar 1931	M	Juv	Skin	Ambararatabé	Arch Exp 1261
100663	25 Nov 1930	F	Ad	Skull part, skin	Bezona	Arch Exp 1162
100664	05 Nov 1929	F	Ad	Skin	Tabiky	Arch Exp 548
100665	08 Mar 1931	M	Inf	Skull part, skin	Namoroka	Arch Exp 1243
100666	15 Nov 1929	F	Ad	Skull part	Tabiky	Arch Exp 602
100667	16 Nov 1929	F	Ad	Skull part, skin	Tabiky	Arch Exp 606
100668	Aug 1929	F	Ad	Skin	170 km E of Tuléar	Arch Exp 393
100801	11 Nov 1929	F	Ad	Skull, skin	Tabiky	Arch Exp 564
100803	31 Mar 1931	F	Ad	Skull, part, skin	Ambararatabé	Arch Exp 1271
100804	11 Nov 1929	F	Ad	Skull, part, skin	Tabiky	Arch Exp 564
100805	02 Mar 1929	M	Ad	Skull, part, skin	Tabiky	Arch Exp 525
100833	Nd	Nd	Ad	Skull and skel	Nd	Arch Exp
100844	1929	Nd	Ad	Cad*	Tabiky	Arch Exp
100846	04 Nov 1929	F	Ad	Cad*	Tabiky	Arch Exp 545
174048	Oct/Nov 1931	M	Ad	Penis, testes*	Amboasary-Sud	Blunt Coll spec missing
174382	1931	F	Ad	Cad*	Amboasary-Sud	Blunt Coll 1893
174383	Oct/Nov 1931	F	Ad	Skull, pc skel	Amboasary-Sud	Blunt Coll 1895
174384	26 Oct 1931	F	Ad	Skin	Amboasary-Sud	Blunt Coll 1896
174385	Oct/Nov 1931	F	Ad	Skull, pc skel	Amboasary-Sud	Blunt Coll 1898
174386	26 Oct 1931	F	Ad	Skin	Amboasary-Sud	Blunt Coll 1899
174387	27 Oct 1931	Nd	Ad	Eviscerated, skinned cad*	Amboasary-Sud	Blunt Coll 1912
174388	27 Oct 1931	F	Ad	Skin	Amboasary-Sud	Blunt Coll 1913
174389	27 Oct 1931	F	Ad	Skin	Amboasary-Sud	Blunt Coll 1915
174390	Nov 1931	F	Ad	Skull	Amboasary-Sud	Blunt Coll 1926
174391	28 Oct 1931	F	Ad	Skin	Amboasary-Sud	Blunt Coll 1922
174392	28 Oct 1931	M	Ad	Urogenital organs, tongue, palate*	Amboasary-Sud	Blunt Coll 1928
174393	1931	Nd	Nd	Tail in celloidin block*	Amboasary-Sud	Blunt Coll 1931
174394	1931	Nd	Ad	Cad*	Amboasary-Sud	Blunt Coll 1868
174395	1931	Nd	Ad	Cad*	Amboasary-Sud	Blunt Coll 1894
174396	1931	Nd	Ad	Cad*	Amboasary-Sud	Blunt Coll 1897
174397	1931	Nd	Ad	Cad, skinned*	Amboasary-Sud	Blunt Coll 1914
174398	Oct/Nov 1931	F	Ad	Skull, skel	Amboasary-Sud	Blunt Coll 1932
174399	1931	F	Ad	Skin	Amboasary-Sud	Blunt Coll 1936
174400	Nov 1931	F	Ad	Skull	Amboasary-Sud	Blunt Coll 1938
174401	28 Oct 1931	F	Ad	Skin	Amboasary-Sud	Blunt Coll 1941
174402	Nov 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 1959
174403	20 Oct 1931	F	Ad	Skin	Amboasary-Sud	Blunt Coll 1960
174404	Nov 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 1961
174405	03 Nov 1931	Nd	Ad	Head*	Amboasary-Sud	Blunt Coll 1963

Microcebus murinus—(Continued)

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
174406	1931	Nd	Nd	Head*	Amboasary-Sud	Blunt Coll 1964
174407	1931	Nd	Nd	Head*	Amboasary-Sud	Blunt Coll 1967
174408	Oct/Nov 1931	M	Ad	Skull, skel	Amboasary-Sud	Blunt Coll 1968
174409	1931	Nd	Nd	Limbs*	Amboasary-Sud	Blunt Coll 1970
174410	29 Oct 1931	F	Ad	Skin	Amboasary-Sud	Blunt Coll 1971
174411	1931	Nd	Nd	Head*	Amboasary-Sud	Blunt Coll 1972
174412	1931	Nd	Nd	Head*	Amboasary-Sud	Blunt Coll 1973
174413	1931	Nd	Nd	Head*	Amboasary-Sud	Blunt Coll 1974
174414	1931	Nd	Nd	Head*	Amboasary-Sud	Blunt Coll
174415	1931	F	Ad	Skull, pc skel	Amboasary-Sud	Blunt Coll 1982
174416	29 Oct 1931	F	Ad	Skin	Amboasary-Sud	Blunt Coll 1983
174417	29 Oct 1931	F	Ad	Skin	Amboasary-Sud	Blunt Coll 1979
174418	Oct 1931	F	Ad	Skin	Amboasary-Sud	Blunt Coll
174419	Oct 1931	F	Ad	Skin	Amboasary-Sud	Blunt Coll
174420	Oct 1931	F	Ad	Skin	Amboasary-Sud	Blunt Coll
174421	Oct/Nov 1931	F	Ad	Skull, pc skel, skin	Amboasary-Sud	Blunt Coll 1984
174422	1931	Nd	Ad	Cad*	Amboasary-Sud	Blunt Coll 1985
174423	Oct/Nov 1931	F	Ad	Skull, part skel	Amboasary-Sud	Blunt Coll 2000
174424	Oct/Nov 1931	F	Ad	Skull, pc skel	Amboasary-Sud	Blunt Coll 2008
174425	30 Oct 1931	Nd	Ad	Skin	Amboasary-Sud	Blunt Coll 2009
174426	30 Oct 1931	M	Ad	Organs, head, sternum, hands, foot*	Amboasary-Sud	Blunt Coll 2010
174427	Nov 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2014
174428	Oct/Nov 1931	F	Ad	Skull, skel	Amboasary-Sud	Blunt Coll 2016
174429	30 Oct 1931	Nd	Ad	Skin	Amboasary-Sud	Blunt Coll 2017
174430	Oct/Nov 1931	F	Ad	Skull, pc skel	Amboasary-Sud	Blunt Coll 2024
174431	Oct/Nov 1931	F	Ad	Head, stomach,* pc skel	Amboasary-Sud	Blunt Coll 2028
174432	30 Oct 1931	Nd	Ad	Skin	Amboasary-Sud	Blunt Coll 2029
174433	31 Oct 1931	M	Ad	Testes*	Amboasary-Sud	Blunt Coll 2030
174434	Nov 1931	F	Ad	Skull	Amboasary-Sud	Blunt Coll
174435	Nov 1931	F	Ad	Skull, 1 vert	Amboasary-Sud	Blunt Coll 2031
174436	Nov 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2031
174437	Nov 1931	F	Ad	Skull	Amboasary-Sud	Blunt Coll 2031
174438	Nov 1931	F	Ad	Skull and vert	Amboasary-Sud	Blunt Coll 2031
174439	Nd	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2031
174440	Nov 1931	F	Ad	Skull	Amboasary-Sud	Blunt Coll 2031
174441	Nov 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2031
174442	Nov 1931	F	Ad	Skull	Amboasary-Sud	Blunt Coll 2037
174443	Nov 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2037
174444	Nov 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2037
174445	Nov 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2037
174446	Nov 1931	F	Ad	Skull, 1 vert	Amboasary-Sud	Blunt Coll 2037
174447	May 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2037
174448	Nov 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2037

Microcebus murinus—(Continued)

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
174449	Nov 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2037
174450	Nov 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2041
174451	Nov 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2065
174452	Nov 1931	F	Ad	Skull	Amboasary-Sud	Blunt Coll 2065
174453	Nov 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2065
174454	Nov 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2065
174455	Nov 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2065
174456	Nov 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2065
174457	Nov 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2065
174458	Nov 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2065
174459	Nov 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2065
174460	Nov 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2065
174461	Nov 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2065
174462	Nov 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2065
174463	Nov 1931	M	Ad	Skull	Amboasary-Sud	Blunt Coll 2066
174464	Nov 1931	M	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2066
174465	Nov 1931	M	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2066
174466	Nov 1931	M	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2066
174467	Nov 1931	M	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2066
174468	Nov 1931	F	Ad	Skull, 1 vert	Amboasary-Sud	Blunt Coll 2081
174469	Nov 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2081
174470	Oct 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2081
174471	Oct/Nov 1931	F	Ad	Skull, part skel	Amboasary-Sud	Blunt Coll 2102
174472	Nov 1931	M	Ad	Skel	Amboasary-Sud	Blunt Coll 2111
174473	Nov 1931	M	Ad	Skull	Amboasary-Sud	Blunt Coll 2213
174474	Nov 1931	M	Ad	Skull	Amboasary-Sud	Blunt Coll 2213
174475	Nov 1931	M	Ad	Skull	Amboasary-Sud	Blunt Coll 2213
174476	Nov 1931	M	Ad	Skull	Amboasary-Sud	Blunt Coll 2213
174477	Nov 1931	M	Ad	Skull	Amboasary-Sud	Blunt Coll 2213
174478	Nov 1931	M	Ad	Skull	Amboasary-Sud	Blunt Coll 2213
174479	Nov 1931	M	Ad	Skull, 1 vert	Amboasary-Sud	Blunt Coll 2122
174480	Nov 1931	M	Ad	Skull, vert column	Amboasary-Sud	Blunt Coll 2122
174481	Nov 1931	M	Ad	Skull, vert column	Amboasary-Sud	Blunt Coll 2122
174482	Nov 1931	M	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2122

Microcebus murinus—(Continued)

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
174484	Nov 1931	M	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2122
174485	Nov 1931	M	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2122
174486	Nov 1931	Nd	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2122
174487	1931	M	Ad	Cad*	Amboasary-Sud	Blunt Coll 2134
174488	Nov 1931	M	Ad	Skull	Amboasary-Sud	Blunt Coll 2142
174489	Nov 1931	M	Ad	Skull	Amboasary-Sud	Blunt Coll 2142
174490	Nov 1931	M	Ad	Skull	Amboasary-Sud	Blunt Coll 2142
174491	Nov 1931	M	Ad	Skull, 1 vert	Amboasary-Sud	Blunt Coll 2142
174492	Nov 1931	M	Ad	Skull, 1 vert	Amboasary-Sud	Blunt Coll 2142
174493	Nov 1931	M	Ad	Skull, 1 vert	Amboasary-Sud	Blunt Coll 2142
174494	Nov 1931	M	Ad	Skull	Amboasary-Sud	Blunt Coll 2143
174495	Nov 1931	M	Ad	Skull, 1 vert	Amboasary-Sud	Blunt Coll 2143
174496	Nov 1931	M	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2143
174497	Nov 1931	M	Ad	Skull, 1 vert	Amboasary-Sud	Blunt Coll 2143
174498	Nov 1931	M	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2143
174499	Oct/Nov 1931	M	Ad	Skull, pc skel	Amboasary-Sud	Blunt Coll 2168
174500	Oct/Nov 1931	M	Ad	Skull, pc skel	Amboasary-Sud	Blunt Coll 2172
174501-506	Oct/Nov 1931	M	Ad	6 skulls*	Amboasary-Sud	Blunt Coll 2144 Group of catalogue numbers on one bottle
174507-512	Oct/Nov 1931	M	Ad	6 skulls*	Amboasary-Sud	Blunt Coll 2145 Group of catalogue numbers on one bottle
174513	Oct/Nov 1931	M	Ad	2 skulls*	Amboasary-Sud	Blunt Coll 2146
174514	Oct/Nov 1931	M	Ad	Skull*	Amboasary-Sud	Blunt Coll 2146
174515	Nov 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2165
174516	Nov 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2165
174517	Nov 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2165
174518	Oct/Nov 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2165
174519	Nov 1931	F	Ad	Skull	Amboasary-Sud	Blunt Coll 2165
174520	Nov 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2165
174521	Nov 1931	F	Ad	Skull, 1 vert	Amboasary-Sud	Blunt Coll 2166
174522	Nov 1931	M	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2166
174523	Nov 1931	M	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2166
174524	Nov 1931	M	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2166
174525	Nov 1931	M	Ad	Skull, 1 vert	Amboasary-Sud	Blunt Coll 2166
174526	Nov 1931	M	Ad	Skull	Amboasary-Sud	Blunt Coll 2206
174527	Nov 1931	M	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2206

Microcebus murinus—(Continued)

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
174528	Nov 1931	M	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2206
174529	Nov 1931	M	Ad	Skull, 1 vert	Amboasary-Sud	Blunt Coll 2206
174530	Nov 1931	M	Ad	Skull, vert column	Amboasary-Sud	Blunt Coll 2206
174531	Nov 1931	M	Ad	Skull	Amboasary-Sud	Blunt Coll 2207
174532	Nov 1931	M	Ad	Skull	Amboasary-Sud	Blunt Coll 2207
174533	Nov 1931	M	Ad	Mandible, part vert column	Amboasary-Sud	Blunt Coll 2207
174534	Nov 1931	M	Ad	Mandible, part vert column	Amboasary-Sud	Blunt Coll 2207
174535	Nov 1931	M	Ad	Skull	Amboasary-Sud	Blunt Coll 2207
174536	Nov 1931	M	Ad	Skull	Amboasary-Sud	Blunt Coll 2207
174537	Nov 1931	M	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2207
174538	Nov 1931	M	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2222
174539	Nov 1931	M	Ad	Skull, 1 vert	Amboasary-Sud	Blunt Coll 2222
174540	Nov 1931	M	Ad	Skull	Amboasary-Sud	Blunt Coll 2222
174541	Nov 1931	M	Ad	Skull	Amboasary-Sud	Blunt Coll 2222
174542	Nov 1931	M	Ad	Skull	Amboasary-Sud	Blunt Coll 2222
174543	Nov 1931	M	Ad	Skull	Amboasary-Sud	Blunt Coll 2222
174544	Nov 1931	M	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2232
174545	Nov 1931	M	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2232
174546	Nov 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2164
174547	Nov 1931	F	Ad	Skull, 1 vert	Amboasary-Sud	Blunt Coll 2164
174548	Nov 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2164
174549	Nov 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2164
174550	Nov 1931	F	Ad	Skull, 1 vert	Amboasary-Sud	Blunt Coll 2164
185621	Nov 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2199
185622	Nov 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2199
185623	Nov 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2199
185624	Nov 1931	F	Ad	Skull	Amboasary-Sud	Blunt Coll 2199
185625	Nov 1931	F	Ad	Skull, part vert column	Amboasary-Sud	Blunt Coll 2199
185626	Nov 1931	F	Ad	Skull, skel	Amboasary-Sud	Blunt Coll 2237
185627	Oct/Nov 1931	M	Ad	Skull, pc skel	Amboasary-Sud	Blunt Coll 2243
185628	Oct/Nov 1931	M	Ad	Skull, pc skel	Amboasary-Sud	Blunt Coll 2250
185629	Oct/Nov 1931	M	Ad	Skull, pc skel	Amboasary-Sud	Blunt Coll 2215
185630	Oct/Nov 1931	M	Ad	Skull, pc skel	Amboasary-Sud	Blunt Coll 2216
185631	1931	Nd	Ad	10 heads,* 2 vert columns*	Amboasary-Sud	Blunt Coll
185632	1931	Nd	Nd	10 heads*	Amboasary-Sud	Blunt Coll
185633	1931	Nd	Nd	10 vials various organs*	Amboasary-Sud	Blunt Coll
185634	1931	Nd	Nd	6 hands, many eyeballs*	Amboasary-Sud	Blunt Coll

Microcebus murinus—(Continued)

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
185635	1931	Nd	Nd	8 heads*	Amboasary-Sud	Blunt Coll
185636	07 Nov 1931	F	Ad	1 face, brain & vert column, 1 brain & spinal column	Amboasary-Sud	Blunt Coll
185637	Nov 1931	F	Ad	2 sets genitalia*	Amboasary-Sud	Blunt Coll
215191	Nd	M	Juv	Skull, pc skel part	Nd	From ASPCA ?

Microcebus rufus Brown or rufous mouse lemur.

Gliscebun rufus Lesson 1840; *Cheirogaleus smithii* Gray 1842.

MORPHOLOGICAL NOTES: The dense pelage has dichromatic hairs, gray at the base, brown or rufous at the tips. The animals are brown to reddish brown dorsally, with the reddish cast most obvious on the head. The gray base shows through on the ventrum under the white or off-white tips of the hairs. The tail has same color as upperparts, may darken toward the tip. Short facial hairs, white or off-white median strip down muzzle between eyes, dark hairs medial and rostral to eyes. Cheeks are reddish, although paler than the crown. Buccal, genal, and superciliary vibrissae are found, but no interramal or carpal vibrissae. Ears are naked and short compared to those of *M. murinus*, and there are pairs of pectoral and inguinal mammae. The body weight is subject to fluctuations as noted for *M. murinus*. The range estimated by Petter et al. (1977) is from 45 to 80 g.

RANGE: *Microcebus rufus* is found throughout the humid forests of the eastern region of Madagascar, in secondary as well as primary forests. It is found from Fort-Dauphin to the Mt. d'Ambre, and the Sambirano region. A brown mouse lemur is also recorded in the forests south of the Sambirano and others have been found near Morondava and in the Ankarafantsika.

Microcebus rufus

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
290	Nd	Nd	Ad	Mounted skin	Nd	On exhibit
31259	1893	Nd	Ad	Cad*	Tananarive	Sikora Coll
100669	Aug 1929	Nd	Juv	Skull, part skel, skin	Nd	Arch Exp (Chauvin)
174359	1931	F	Ad	Uterus and ovaries*	Tampina	Blunt Coll 1026
174360	1931	M	Juv	Cad*	Tampina	Blunt Coll 1038
174361	June/Jul 1931	M	Ad	Cad, skinned, no eyes*	Tampina	Blunt Coll 1056
174362	11 June 1931	M	Ad	Brain, hands, feet, eyelids*	Tampina	Blunt Coll 1058
174363	23 June 1931	M	Ad	Liver, genitalia*	Tampina	Blunt Coll 1111
174364	1931	M	Ad	Cad, no testes*	Tampina	Blunt Coll 1123
174365	1931	Nd	Nd	Tail in celloidin block*	Tampina	Blunt Coll 1133
174366	1931	M	Ad	Cad*	Tampina	Blunt Coll 1134
174367	26 June 1931	F	Ad	Cad, skinned, genitalia separate*	Tampina	Blunt Coll 1135
174368	1931	Nd	Nd	Head*	Tampina	Blunt Coll 1145
174369	1931	F	Ad	Cad, skinned*	Tampina	Blunt Coll 1147
174370	1931	M	Ad	Cad, skinned*	Tampina	Blunt Coll 1151
174371	02 Jul 1931	Nd	Ad	Caecum*	Tampina	Blunt Coll 1167
174372	1931	Nd	Ad	Cad*	Tampina	Blunt Coll 1169

Microcebus rufus—(Continued)

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
174373	1931	F	Ad	Cad*	Tampina	Blunt Coll 1170
174374	1931	Nd	Ad?	Cad*	Tampina	Blunt Coll 1171
174375	1931	F	Ad	Cad*	Tampina	Blunt Coll 1172
174376	1931	Nd	Nd	Cad, skinned*	Tampina	Blunt Coll 1174
174377	1931	Nd	Ad	Cad, skinned*	Tampina	Blunt Coll 1176
174378	1931	Nd	Ad	Cad, skinned*	Tampina	Blunt Coll 1180
174379	1931	Nd	Ad	Cad, skinned*	Tampina	Blunt Coll 1182
174380	03 Jul 1931	F	Ad	Skin	Tampina	Blunt Coll 1183
174381	1931	M	Ad	Genitalia, tongue*	Tampina	Blunt Coll 1184
174384	Nd	Nd	Ad	Mounted skin	Nd	On exhibit

Mirza Gray, 1870.

Mirza coquereli Coquerel's dwarf lemur.

Cheirogaleus coquereli A. Grandidier 1867; *Microcebus coquereli* Schlegel and Pollen 1868; *Mirza coquereli* Gray 1870.

MORPHOLOGICAL NOTES: The hair is dense, relatively short, and dichromatic, dark gray at the base, pale at tips. Dorsally a warm brown gray-brown occasionally with yellow or rose. The ventrum appears gray because the base color of the downy hair is visible through the russet or yellow tips. The tail darkens toward the tip and the hairs are long. The face is covered with short hairs, pale brown in color. There is no dark ring around the eyes as there is in *Cheirogaleus*. The ears are long, hairless, and highly visible. There are well-developed superciliary, buccal, genal, and interramal vibrissae. There is one pair of pectoral and one pair of abdominal mammae.

RANGE: Appears to be found only in western Madagascar in a group of isolated habitats which currently have no continuous forest connections. Reported from the region of Anka-zoabo north to Belo-sur-Tsiribihina or a bit beyond. Also found on the Ampasindava Peninsula and in the adjacent region of Ambanja.

Mirza coquereli

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
100619	11 Nov 1929	F	Juv	Skin	Tabiky	Arch Exp 578
100646	11 Nov 1929	F	Juv	Skin	Tabiky	Arch Exp 576
100656	03 Nov 1930	M	Ad	Skull, skin	Bobakilany	Arch Exp 1115
100658	Aug 1929	M	Ad	Skin	170 km E of Tuléar	Arch Exp 399
100832	15 Nov 1929	M	Ad	Skull	Tabiky	Arch Exp 596

Phaner Fork-marked lemur.

Phaner Gray 1878.

Phaner furcifer

L[emur] furcifer Blainville 1839.

MORPHOLOGICAL NOTES: The color at the base of the dichromatic hairs is gray, the upperparts of most specimens are pale brown. Some specimens show reddish and gray elements. The dorsal pelage is dense, relatively short; the underparts are more downy, and are cream, white, or pale brown through which the gray at the base of the hairs shows. The face is covered with pale brown short hair. There are dark brown rings around the eyes; often this coloration runs

down the muzzle and it always extends back in stripes that meet between the large naked ears. A distinct median dorsal stripe of the same color runs to the rump. The tail is long and bushy, the same color as the dorsum, for the first half of its length, and dark at the end. There is a single median gular gland which is well developed in males. The nails are strongly keeled and pointed. Superciliary buccal and genal vibrissae are always found, interramal and carpal occasionally.

RANGE: *Phaner* is found in a variety of locales in western Madagascar, indicating that perhaps at one time it was found throughout the western forests. It appears to be found from about the latitude of Tuléar north to the region of Antsalova. Populations have been found in the Ampasindava Peninsula and the regions adjoining. One exists on Mt. d'Ambre, and in the east the species has been found on the Masoala Peninsula. There are many reports of it in other regions, but no documented specimens. It is probable that it was once distributed almost continuously in the forests of the west, and perhaps connected with the east via the Sambirano.

Phaner furcifer

Catalogue #	Date	Sex	Age	Description	Locality	Remarks
285	Nd	Nd	Nd	Skull	Nd	Nd
100624	11 Nov 1929	M	Ad	Skull, skin	Tabiky	Arch Exp 562
100627	30 Oct 1930	F	Ad	Skull, skin	Mt d'Ambre	Arch Exp 1108
100645	18 Nov 1929	F	Ad	Skin	Tabiky	Arch Exp 576
100831	14 Nov 1929	F	Juv	Skull part, skin	Tabiky	Arch Exp 598

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APPENDIX I
Field Measurements of Specimens Collected by the Archbold Expedition

Species	Length, mm ^a				Species	Length, mm ^a			
	Total	Tail	Foot	Ear		Total	Tail	Foot	Ear
<i>Lemur catta</i>					<i>Lemur fulvus sanfordi</i>				
100592	442	264	57	31	100518	930	510	102	32
100594	440	255	61	34	100521	950	525	107	38
100595	1050	608	111	48	100577	885	490	102	35
100596	1045	638	106	43	100578	840	465	105	34
100597	1010	600	104	43	<i>Lemur fulvus albocollaris</i>				
100598	975	600	110	42	100562	950	530	99	37
100599	940	557	102	42	100573	930	540	99	34
100600	888	545	101	42	100579	965	565	103	38
100824	1058	603	116	44	100581	1010	580	105	36
<i>Lemur macaco</i>					100602	935	530	97	35
100530	935	525	108	39	<i>Lemur coronatus</i>				
100531	915	535	107	38	100520	805	460	94	40
100583	1035	585	120	37	100538	780	425	93	34
100605	910	525	102	37	100609	773	425	86	35
100638	540	315	75	29	100610	795	470	95	35
<i>Lemur mongoz</i>					100611	790	465	92	36
100516	800	450	89	36	100613	750	425	85	35
100539	815	472	83	34	100615	780	450	89	35
100608	860	491	81	39	100617	775	430	88	36
<i>Lemur fulvus albifrons</i>					100618	780	440	92	36
100558	920	520	104	36	100621	820	475	92	36
100559	945	530	108	37	<i>Lemur rubriventer</i>				
100560	950	550	106	36	100567	900	535	116	41
100566	920	520	109	43	100574	875	490	105	38
100572	935	510	110	29	100603	900	480	118	41
100586	900	510	107	37	100604	880	500	112	36
100587	900	495	106	35	<i>Hapalemur griseus griseus</i>				
100588	890	495	102	34	100534	670	390	86	30
100589	910	515	107	34	100535	675	400	92	32
100590	875	495	107	32	100536	665	377	90	39
100591	725	400	88	30	100628	630	350	85	30
100639	510	295	80	32	100631	463	265	70	28
100647	265	135	38	19	<i>Varecia variegata variegata</i>				
100648	250	125	36	19	100511	1135	580	130	39
<i>Lemur fulvus rufus</i>					<i>Varecia variegata rubra</i>				
100517	930	550	102	35	100510	1140	645	120	42
100519	895	519	101	36	100513	1110	560	130	42
100522	935	515	103	39	100514	1135	625	124	42
100523	975	550	105	38	100515	1155	610	133	43
100524	907	490	99	37	<i>Indri indri</i>				
100525	870	485	97	36	100503	615	47	198	49
100526	950	530	106	39	100505	745	95	203	55
100532	975	570	105	35	100506	655	60	194	55
100571	965	550	103	39	100507	670	75	203	51
100582	1015	600	106	42	100509	260	15	79	32
100607	970	535	104	36	100816	610	45	196	50
100614	1000	570	100	33					

^a Total = tip of muzzle to tip of tail; Tail = base of tail to tip; Foot = back of heel to end of longest claw, sometimes to end of fleshy tip of longest digit; Ear = base of tragal notch to furthest point on external ear; Body = total - tail.

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Field Measurements of Specimens Collected by the Archbold Expedition

Species	Length, mm ^a				Species	Length, mm ^a			
	Total	Tail	Foot	Ear		Total	Tail	Foot	Ear
<i>Avahi laniger</i>					<i>Cheirogaleus major</i>				
100634	605	340	95	26	100641	474	255	55	27.5
100635	605	325	107	34	100650	382	180	38	21
<i>Propithecus diadema candidus</i>					<i>Cheirogaleus medius</i>				
100556	960	440	180	46	100651	450	230	46	21
100557	1055	510	183	49	100652	362	180	38	21
<i>Propithecus verreauxi verreauxi</i>					100654	375	195	42	20
100541	870	490	115	36	100655	420	215	50	18
100542	940	530	126	43	<i>Microcebus murinus</i>				
100546	915	515	128	39	100657	295	157	34	28
100547	620	335	101	34	100660	276	143	32	27
100550	850	500	124	42	100661	275	142	32	27
100551	770	410	112	39	100662	190	105	30	19
100553	900	485	135	40	100663	290	160	33	19
<i>Propithecus verreauxi coronatus</i>					100664	275	141	—	—
100554	925	600	155	44	100665	172	93	25	17
<i>Propithecus verreauxi deckeni</i>					100666	285	153	32	26
100540	960	535	99	41	100667	272	144	32	28
100544	980	527	143	43	100801	285	150	34	25
100545	974	530	134	43	100803	237	130	34	23
100548	980	555	143	42	100805	238	127	32	23
100552	960	540	133	40	<i>Mirza coquereli</i>				
100555	850	484	120	39	100619	475	280	65	34
<i>Daubentonia madagascariensis</i>					100646	453	260	61	30
100632	805	410	117	97	100656	485	275	63	30
<i>Lepilemur mustelinus dorsalis</i>					<i>Phaner furcifer</i>				
100643	510	260	80	28	100624	590	365	71	37
<i>Lepilemur mustelinus ruficaudatus</i>					100627	613	365	75	34
100612	510	240	80	35	100645	605	370	65	37
100616	503	240	81	40	100831	440	274	38	35
100620	560	283	83	37					
100622	540	258	80	38					
100623	570	290	78	35					
100625	525	264	81	37					
100642	555	260	83	35					
100820	575	287	84	41					

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