# MAMMALS OF THE MEHAO WILDLIFE SANCTUARY (DIBANG VALLEY DISTRICT, ARUNACHAL PRADESH) WITH REMARKS ON THEIR STATUS

#### S. CHAKRABORTY

Zoological Survey of India, Calcutta

and

#### A. K. SEN

Mehao Wildlife Division, Arunachal Pradesh.

#### INTRODUCTION

A composite party from the Zoological Survey of India, Botanical Survey of India and the Wildlife Division of Arunachal Pradesh conducted a faunal and floral survey of the Mehao Wildlife Sanctuary, Dibang Valley District, Arunachal Pradesh, under the leadership of the present authors. The survey was conducted during January-February, 1988 for the purpose of making an inventory of the mammalian fauna of the sanctuary with special reference to the Snow Leopard, *Panthera uncia* (Schreber). No detail account of the mammalian fauna of the sanctuary is known except for the reports of Sinha (1984) and Mehata (1987). In the present paper an attempt has been made to give an account of the mammalian fauna of the sanctuary, with remarks on their present status.

This account is based mainly on observations, collection, and information gathered from the local people. Skins and skulls of different species that are available with the local villagers have been examined for this purpose. However, this account is in no way considered to be complete, as many of the areas, particularly the northeastern hills, could not be surveyed due to inaccessibility and bad weather. Some of the smaller and noctural species, a number of Chiropteran species, which were observed in flying or moving condition either could not be collected or identified in the field. Thus these species also could not be included in the present account.

Attempts have been made to collect the local names of the species. It was noticed that different tribes called the same species by different names, whereas, at times different species were known by the same name. Many of the species have no local names. Only the names used by the 'Adi' tribe of Arunachal Pradesh have been included, wherever, available.

Mehao Wildlife Sanctuary is very thinly populated and most of the areas have not yet been named. There is only one fair weather jeepable road passing through the sanctuary from Roing to Hunli (Plate Ia). Base camps were set at three points, viz., Sally lake, Tewarigaon and Mayudia Pass on this road. From the base camps, sorties were made on the hills. As the names of some of the collection or observation stations are not available, the approximate distance from Roing or from some specific point of Roing-Hunli road have been given in the text.

In the systematic account, arrangement of Ellerman and Morrison-Scott (1951) has been followed. The type-locality of the species has been mentioned in parenthesis in the first reference.

Following abbreviations have been used in the text.

Apf. Anterior palatal foramen; Bul.Bullae; Cb. Condylobasal; C¹-C¹. Canine width; Cr. Cranial-rostrum; Crn. Cranial; Cw. Cranial width; Dia. Diastema; E. Ear; Eng. English; Ext. External; Hb. Head and Body; Hf. Hindfoot; Fa. Forearm; F& Cl. Foot and claw; Iow. Interorbital width; Km. Kilometre; m. Metre; Ml. Mandibular length; M¹-M¹. Molar width; Nas. Nasal length; Onl. Occipitonasal; P. Pollex; Pal. Palate; Pow. Post orbital width; Tl. Tail; tl. Total length of skull; Tr. Tragus; Utr. Upper tooth row; Zw. Zygomatic width.

#### **GAZETTEER**

Roing (c 406 m.) is a small town and subdivisional head quarter of Dibang Valley District, situated on the southern bank of Deopani river at about 20 Km. northeast of Assam-Dibang Valley border of Santipur. It lies just outside the boundary of the sanctuary.

Sally Lake (c 450 m.) is a small natural lake within the sanctuary, about 5 km. from Roing.

Tewarigaon (c 1400 m.) is a deserted military village on the Roing-Hunli road and 28 Km. from Roing.

Mayudia Pass (c 2656 m.) is the highest point of Roing-Hunli road, 56 Km. from Roing.

# PHYSIOGRAPHY AND ECOLOGICAL FEATURES OF THE SANCTUARY (Text-fig. I)

Mehao Wildlife Sanctuary lies between 95°45' and 96°3' E. longitudes and 28°5' and 28°15' N. latitudes. The sanctuary covers an area of about 281 sq. km. Topographically the terrain is entirely hilly, varying in altitude from 400 m. to 3560 m. (Sinha 1984). There are a number of perennial streams draining the sanctuary, viz., Iphipani, Eje, Eme, Aba, Difu, etc. Between the perennial streams, which are 5-6 Km. apart on an average, a large number of streamlets spring during rainy season but dry up after the Monsoon and the major blocks are almost bounded by perennial streams.

The southern and western boundaries of the sanctuary follow the foot hills and are continuous with the Korunu township in the east and Roing in the West. This also dilineates the boundary between the sanctuary and the habitation area. From the southern and western boundaries, hills rise with moderately steep to precipitous slopes except for flat to gently undulating terrain in the narrow river valleys. The skyline is marked by a number of peaks from 3003 m. to 3650 m. heights. The peaks above 2000 m. usually experience snowfall up to 2 m. in thickness at places during winter months. With the onset of summer, the process of thawning begins and by the end of April, the snow cap melts down.

The important perennial rivers viz. Iphipani, Eje, Eme, Jawe and Difu are tributaries to the mighty Brahmaputra of Assam while the sanctuary itself forms a part of the catchment of the Brahmaputra Valley. The streams draining the sanctuary are characterised by a number of rapids and falls. Gorges are a common sight. The sanctuary is also dotted with landslips and landslides.

No natural salt lick has yet been known. Wild animals generally quench their thirst from the perennial streams. There are, however, some wallows which are used by the pigs and bears.

Geographically, the sanctuary falls in the subtropics. Its effect is however, masked by altitudes which rises up to 3560 m. Though no temperature data are available, it may be concluded that the subtropical zone is marked by a short, but distinct winter from November to January when humidity in the air is minium. In the higher altitudes, snow fall lasts for 3-4 months and January is the coldest month.

Sanctuary is situated on the windward side of the Eastern Himalayas so it experiences heavy rainfall from south-west and north-east monsoons and here it rains nearly half the year.

The forests are of two types, subtropical wet and subtemperate wet. The subtropical type is represented by a large number of species with local variations depending on edaphic conditions. In this type, no single species is dominant or gregraious. The typical species are Cedreta toonga, Schima wallichi, Sapium baecatum, Duabarga grandiflora, Michelias sp., Ficus sp., Chukrassia valutina, Castanopsis sp., Magnolia sp., Lannea grandis, Albizzia sp., etc. Areas of earlier jhooming are covered with bamboos and other trees representing secondary succession. Palms and cycads dot the landscape. Musa occurs in sheltered situations while screpine is found in hill slopes. Canes are common in humid areas. Forest floor is covered up of Phyrinium imbricatum, Musand sp., Clerodendron sp., various aroids ferns, ground orchids, etc. Tree trunks are often covered with moss and lichen. Lycopodium is common in hill slopes. The subtemperate forest is represented by Quercus sp., Castanopsis sp., Betulas sp., Juniperus recurva, Taxus baccata, Cephalotaxas griffithi, etc. Bamboo and canes are common. The forest floor consists of Rasas Sp., Rubas sp., Hydrangia sp., etc. Ferns and orchids are of common occurrence.

#### SYSTEMATIC ACCOUNT

Order SCANDENTIA Family TUPAIIDAE

#### Tupaia glis assamensis Wroughton

1921. Tupaia belangeri assamensis Wroughton, J. Bombay nat. Hist. Soc., 27: 599. (Mocokchung, 1525 m., Nagaland).

Common name: Eng. Common Tree Shrew; Adi. Tei.

Material examined: 1 Male; c 700 m. downhill from Mayudia Pass.

Measurements: Ext. — Hb. 195\*, Tl. 170, Hf. 50, E. 10. Crn.-tl. 50.1, Cb. 46.6, Zw. 26.6, Iow. 14.6, Pow. 17.5, Cw. 20.1.

Remarks: Very common in the forested areas up to c 2000 m. Though arboreal, often moves in the forest floor in search of food.

Population from Mishmi Hills was regarded as a distinct subspecies T. g. versurae by Thomas (1922) and the same was maintained by Ellerman and Morrison-Scott (1951). However, Agrawal (1975) synonymised versurae with T g. assamensis.

Order INSECTIVORA Family TALPIDAE

## Talpa micrura micrura Hodgson

1841. Talpa micrurus Hodgson, Calcutta J. nat. Hist., 2: 221. (Nepal).

Common Name: Eng. Eastern Mole; Adi. Kurt, Pinchi.

Material examined: 1 Female; c 400 m. up hill from Tewarigaon.

Measurements: Ext. - Hb. 100, Tl. 11, Hf. 8. Cm. - tl. 27, Cb. 26, Cw. 11.5

Remarks: Fur slight spiny. Except the extremity of facial region, entire dorsum glossy black but tips of hairs pale. A brownish tinge can be marked on the undersurface particularly when noticed from a distance.

Common throughout the sanctuary particularly in the undisturbed forest floor. Burrows were located below decomposed leaf litter.

## Family SORICIDAE

## Soriculus nigrescens radulus Thomas

1922. Soriculus radulus Thomas, J. Bombay nat. Hist. Soc., 28: 429. (Dreyi, 1567 m., Mishmi Hills, Arunachal Pradesh).

Common name: Eng. Sikkim Large-clawed Shrew.

Remarks: Common in the cultivated areas within the sanctuary.

#### Suncus murinus (Linnaeus)

1766. Sorex murinus Linnaeus, Syst. Nat., 12th ed., 1:74 (Java).

Common name: Eng. House Shrew; Adi. Pea.

Remarks: Very common in villages within the sanctuary. It is interesting to note that specimens observed within the sanctuary appeared to be much smaller than those observed in the adjacent towns like Roing or Korunu.

<sup>\*</sup> Unless otherwise stated all measurements are in milimetre.

#### Crocidura attenuata rubricosa Anderson

1877. Crocidura rubricosa Anderson, J. Asiat. Soc. Beng., 46: 280. (Sibsagar, Assam).

Common name: Eng. Grey Shrew; Adi. Pea.

Material examined: 1 Male, c 560 m. down hill from Tewarigaon.

Measurements: Ext. - Hb. 90, Tl. 70, Hf. 9, E. 6. Crn.- tl. 21.5, Cb. 21.1, Iow. 4.7, Cw. 9.5.

**Remarks**: Fur short and soft; dorsum blakish from close view but greyish from distance; reddish on sides; tail poorly bicolor, dorsally black, ventrally paler; venter grey.

According to Hinton and Thomas (1926), Ellerman and Morrison-Scott (1951), this species is so far recorded from Punjab, Jammu and Kashmir, Uttar Pradesh, Sikkim, West Bengal and Assam in India. The present specimen from the sanctuary constitutes its first record from Arunachal Pradesh.

Common throughout the sanctuary.

## **Anourosorex squamipes Milne-Edwards**

1872. Anourosorex squamipes Milne-Edwards, Rech. Hist. Nat. Mann., 264 pl. 38. (probably Moupin, Szechuan, China).

Common name: Eng. Szechuan Burrowing Shrew.

Remarks: Very common throughout the sanctuary up to 1800 m. and often enters the kitchen of our camp in search of food.

Order CHIROPTERA
Family PTEROPODIDAE

## Rousettus leschenaulti (Desmarest)

1820. Pteropus leschenaulti Desmarest, Encyclo. Méth. Mamm., 1: 110. (Pondecherry, India).

Material examined: 1 Male,; Near Sally Lake, c 5 Km. from Roing.

Measurements: Ext. - Fa. 70, P. 26.7, E. 14, F &Cl. 18.2. Crn-tl.33.6, Cr. 11.7, Iow. 7, Pow. 8.9, Cw. 15, C¹-C¹. 7.5, M¹-M¹. 10.6, Ml. 25.7.

Remark s: As compared to other fruit-eating bat, Cynopterus brachyotis (Muller), this species is not so common in the sanctuary.

Rookmaaker and Bergmans (1981) were the first to record this species from Kameng of Arunachal Pradesh. Present specimen indicates its distribution in the Dibang Valley District of the State.

## Cynopterus brachyotis (Miiller)

1838. Pachysoma brachyotis Muller, Tijdschr. Natuur. Gesch., 5, 1: 146. (Borneo).

Material examined: 1 Male; Tewarigaon. 4 Males; near Sally Lake. 4 Males; Roing.

Measurements: Ext. - 9 Males. Fa. 61.3-73 (65.5); E. 14.5-19.2 (17.2). Crn. - 1 Male. tl. 29.8, Cr. 8, Iow. 5.4, Pow. 7.9, Cw. 13.5, Zw.18.8, C¹-C¹. 6.5, M¹-M¹. 9, Ml. 24.5.

Remarks: This is one of the most common species of bats found throughout the sanctuary at different ecological zones up to 1800 m.

## Family RHINOPOMATIDAE

## Rhinopoma? hardwickei Gray

1831. Rhinopoma hardwickii Gray, Zool. Misc., 37. (India).

Common name: Eng. Lesser Rat-tailed Bat.

Remarks: Common in the sanctuary but were not seen above 1700 m. No specimen was collected. So the specific identification was not made. They were noticed just before dusk and were common near water sources.

## Family MEGADERMATIDAE

## Megaderma lyra Geoffroy

1810. Megaderma lyra Geoffroy, Annu. Mus. natn. Hist. Nat., 15: 190. (India).

Common name: Eng. Indian False Vampire.

Remark: Common in the sanctuary.

## Family RHINOLOPHIDAE

## **Hipposideros? larvatus (Horsfield)**

1823. Rhinolophus larvatus Horsfield, Zool. Res. Java, No. 6 pl. 9. (Java).

*Remark*: Common in the sanctuary.

## Family VESPERTILIONIDAE

## Pipistrellus sp.

Remark: The species of bats of this genus were observed up to the height of 2200 m.

## Scotophilus heathi (Horsfield)

1831. Nycticejus heathi Horsfield, Proc. zool. Soc. Lond., 113. (Madras, India).

Common name: Eng. Greater Yellow Bat.

Material examined: 1Male; 37 Km. from Roing.

*Measurements*: Ext. - Fa. 58, F & Cl 9.8, E. 13.2, Tr. 7.3, Crn.-tl. 22, Cr. 5.8, C<sup>1</sup>-C<sup>1</sup>. 7.6, Cw. 10.3, Ml. 16.4.

Remark: Common in the lower elevation and in open areas of the sanctuary.

## Order PRIMATES Family LORISIDAE

#### Nycticebus coucang (Boddaert)

1758. Tardigradus coucang Boddaert, Elench Anim., 67. (Type locality unknown).

Common name: Eng. Slow Loris; Adi. Senni.

Material examined: An old and badly preserved skin in possession of a local hunter; down hill near 42 km. point from Roing.

Remark: According to the local people it is rare in the sanctuary.

#### Family CERCOPITHECIDAE

#### Macaca mulatta (Zimmermann)

1780. Cercopithecus mulatta Zimmermann, Geogr. Gesch. Mensch., 2: 195. (India)

Common name: Eng. Rhesus Macaque; Adi. Sibe.

Remarks: Common in the sanctuary. A troop of about 28 animals was observed on the Roing-Hunli road near 48 Km. point.

#### Macaca assamensis M'Clelland

1839. Macacus assamensis M'Clelland, Proc. zool. Soc. Lond., 148. (Assam, India).

Common name: Eng. Assamese Macaque; Adi. Sibe Berao.

Material examined: 1 subad. Male; Sally Lake.

Measurements: Ext.-Hb. 470, Tl. 195, E. 40.

Remarks: Fairly common throughout the sanctuary, at least up to 2500 m. The specimen examined was hunted by a tribal for food from a troop of 16 animals near Sally Lake on 24 January (Plate lb). On the next day the same troop was located on the same area. It indicates that the animals are not shy.

## Presbytis pileatus pileatus (Blyth)

1843. Semnopithecus pileatus Blyth, J. Asiat. Soc. Beng., 12: 174. (Type locality unknown).

Common name: Eng. Capped Langur.

Material examined: 4 skins, 1 skull in possession of local hunters; Mehao Wildlife Sanctuary.

Remarks: Vulnerable. No Capped Langur was observed in the sanctuary. All the skins examined were from the collection of local people who regard them as auspicious. They informed that Capped Langur is restricted in their distribution to higher altitudes of the sanctuary, and comes down up to 500 m. during winter months.

## Family PONGIDAE

## Hylobates hoolock (Harlan)

1834. Simia hoolock Harlan, Trans. Am. Phil. Soc., 4: 52. (Garo Hills, Meghalaya).

Common name: Eng. Hoolock Gibbon; Adi. Ulu Bandar.

Remarks: Common in the lower hills of the sanctuary. Its presence in the sanctuary can be detected by the loud calls made by this ape during the morning hours between 08.00 to 10.00, and in the afternoon between 15.00 to 17.00 hours. During the survey they were always observed in pairs. A total of 12 pairs were observed as follows: 1 Roing, 2 Sally Lake areas, 5 down hill regions of Tewarigaon, 2 down hill areas near 41 Km. point, and 2 down hill regions near 48 Km. point.

Order PHOLIDOTA
Family MANIDAE

## Manis pentadactyla aurita Hodgson

1836. Manis auritus Hodgson, J. Asiat. Soc. Beng., 5: 234. (Lower and Central Nepal).

Common name: Eng. Chinese Pangolin; Adi. Hochik.

Material examined: A badly preserved skin; 52 Km. point from Roing.

Remark: The presence of the burrows indicates that it is common in the sanctuary (Plate 2a).

## Order CARNIVORA Family CANIDAE

## Canis aureus indicus Hodgson

1833. Canis aureus indicus Hodgson, Asiatic Res., 18 (2): 237. (Nepal).

Common name: Eng. Asiatic Jackal; Adi. Manru.

Remark s: Common. This animal was commonly observed during night as well as in day time in the lower region near human habitation and in the open areas.

## Cuon alpinus (Pallas)

1811. Canis alpinus Pallas, Zoogr. Ross. Asiat., 1:34. (Near Udskoi Ostrog, Amurland).

Common name: Eng. Indian Wild Dog of Dhole; Adi. Sipyang.

*Remark*: Though local people reported its presence in the sanctuary but no proof of its occurrence could be established in the sanctuary.

### Family URSIDAE

#### Selenarctos thibetanus (Cuvier)

1823. Ursus thibetanus Cuvier, Ossements Foss., 4: 325. (Sylhet, Bangladesh).

Local name: Eng. Asiatic Black Bear; Adi. Situm.

Material examined: 4 skins in possession of local people; Mehao Wildlife Sanctuary.

Remarks: Vulnerable. Found throughout the sanctuary. Many local villagers posses damaged skins.

#### Family PROCYONIDAE

### Ailurus fulgens Cuvier

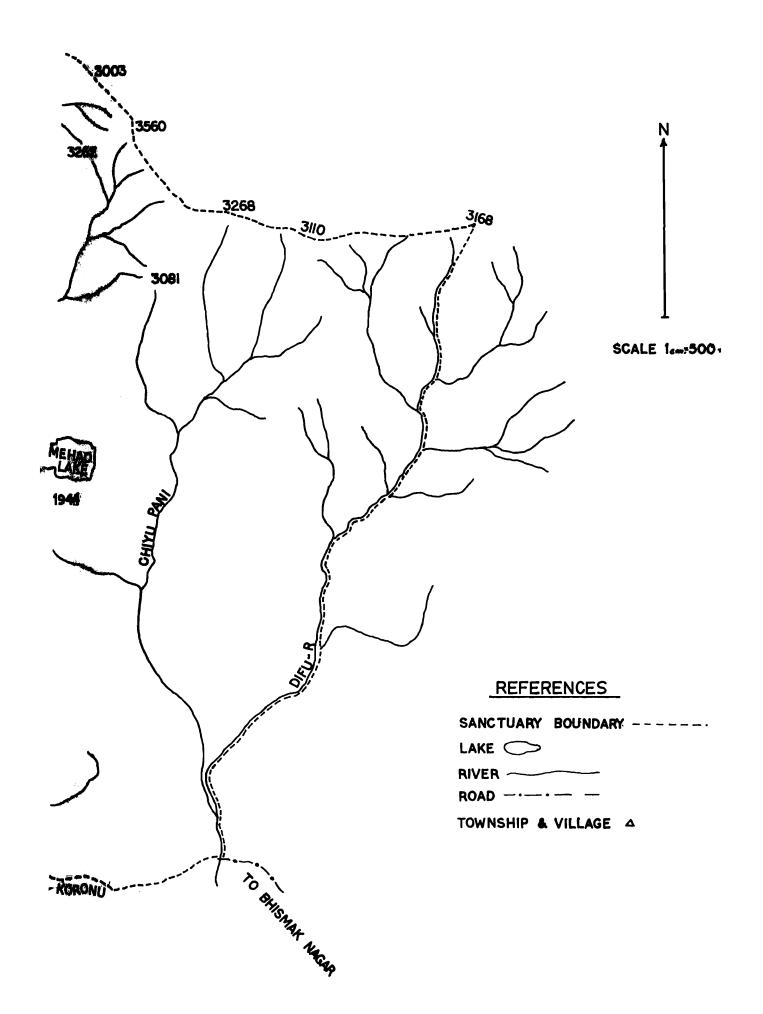
1825. Ailurus fulgens Cuvier, in Geoffroy and Cuvier, Hist. Nat. Mamm., 3(50): Panda, 3. (Type locality not known).

Common name: Eng. Red Panda.

MAYU HILL 2438 MEHAO 604 ROING 1880 ABANGO

Text fig. 1. A MAP OF MEHAO WILDLIFE SANCTUARY

## AREA - 281.5 Sq. Km.



Remarks: Rare, found at higher elevations only. A pair was observed on the Roing-Hunli Road Just before dusk near Mayudia, c 2560 m.

## Family MUSTELIDAE

## Melogale personata Geoffroy

1831. Melogale personata Geoffroy, in Belanger, Voy. Zool. Indes Orient., 137 pl. 5. (Near Rangoon, Burma).

Common name: Eng.Burmese Ferret-Badger.

Material examined: 1 skin in possession of a local hunter; Bank of Deopani river, near Roing.

Remarks: No specimen could be noticed during the survey. Status could not be ascertained.

## Arctonyx collaris collaris Cuvier

1825. Arctonyx collaris Cuvier, Hist. Nat. Mamm., 3 pl. 51. (Bhutan Duars, Eastern Himalayas).

Common name: Eng. The Hog-badger.

Remark s: A single specimen was observed on the stones of the bank of river Iphipani about 4 Km. north of Sally Lake. Appears not to be common.

## Lutra lutra monticola Hodgson

1839. Lutra monticolus Hodgson, J. Asiat. Soc. Beng., 8: 320. (Nepal).

Common name: Eng. Common Otter; Adi. Horam.

Remark: Parties of 2-10 commonly observed during the day time along the banks of all the rivers in the sanctuary.

## Lutrogale perspicillata perspicillata (Geoffroy)

1826. Lutra perspicillata perspicillata Geoffroy Dict. Class Hist. Nat., 9: 519. (Sumatra).

Common name: Eng. Smooth-coated Indian Otter.

Remark: A party of 4 adult and two young animals were regular visitor to Sally Lake.

## Aonyx cinerea concolor (Rafinesque)

1832. Amblonyx concolor Rafinesque, Atlant. J., 1:62. (Garo Hills, Meghalaya).

Common name: Eng. Oriential Small-clawed Otter.

Remarks: Not common. None was observed during the survey. Local people confirmed its occurrence in the sanctuary when photograph was shown to them.

## Family VIVERRIDAE

#### Viverra zibetha zibetha Linnaeus

1758. Viverra zibetha Linnaeus, Syst. Nat. 10th ed., 1:44. (Bengal).

Common name: Eng. Large Indian Civet.

Remark: Common in occurrence and lives in the forest but often comes out to human habitation for food.

### Viverricula indica (Desmarest)

1817. Viverra indica Desmarest, Nouv. Dict. Nat. Hist., 7: 170. (India).

Common name: Eng. Small Indian Civet.

*Remark*: Common in the sanctuary as well as to Roing town.

#### **Prionodon pardicolor Hodgson**

1842. Prionodon pardicator (Sic) Hodgson, Calcutta J. Nat. Hist., 2: 57. (Nepal).

Common name: Eng. Spotted Linsang.

*Remark*: Altogether two specimens were observed, one at the down hill near 37 Km. point, other at the up hill near 48 Km. point from Roing.

## Paradoxurus hermaphroditus pallasi Gray

1832. Paradoxurus pallasi Gray, 1832. Proc. zool. Soc. Lond., 67. (India).

Common name: Eng. Toddy Cat or Common Palm Civet; Adi. Siran.

Remarks: None was observed in the sanctuary proper during survey. However, a specimen was noticed at Roing while it was passing from the roof of one house to another through an overhead electric wire. People of Roing reported it to be common in the town living particularly in the false ceiling of the houses.

## **Arctictis binturong (Raffles)**

1821. Viverra? binturong Raffles, Trans. Linn. Soc. Lond., 13: 253. (Malacca).

Common name: Eng. Binturong.

Material examined: 1 skin in possession of a local hunter; down hill near 32 Km. point from Roing.

Remarks: Not common. Neither any specimen was seen nor any call was heard during the survey.

## Herpestes edwardsi (Geoffroy)

1818. Ichneumon edwardsi Geoffroy, Descr. Egypte, 2: 139. (Madras, Tamil Nadu).

Common name: Eng. Indian Grey Mongoose.

Remarks: Quite common. Found in bushes bordering the open areas near human habitation. Packs of 2 to 11 animals were observed in different areas of the sanctuary up to 1950 m.

## Family FELIDAE

## Felis chaus affinis Gray

1830. Felis affinis Gray, Ind. zool., 1, pl. 3. (Gangootri, Tehri Garhwal, Uttar Pradesh).

Common name: Eng. Jungle Cat; Adi. Tasse.

*Remarks*: Not common. None was seen during the survey. However, it is reported to be present in the reed jungles on the southern bank of Deopani river.

#### Felis marmota charltoni Gray

1846. Felis charltonii Gray, Ann. Mag. nat. Hist., 18: 211. (Darjeeling, West Bengal).

Common name: Eng. Marbled Cat; Adi. Simnyo-Nyeling.

Material examined: 1 damaged skin in possession of a local hunter; Mehao Wildlife Sanctuary.

Remarks: None could be observed. Reported to be very very rare in the sanctuary.

## Felis bengalensis horsfieldi (Gray)

1842. Leopardus horsfieldi Gray, Ann. Mag. nat. Hist., 10: 260. (Bhutan).

Common name: Eng. Leopard Cat; Adi. Hole.

**Remark**: Quite common in the sanctuary, particularly in the forested areas.

## Neofelis nebulosa (Griffith)

1821. Felis nebulosa Griffith, Descr. Anim. (Carn.), 37. (Canton, Southern China).

Common name: Eng. Clouded Leopard.

Remarks: Sinha (1984) reported its occurrence in the sanctuary, however, no specimen could be seen during the survey. Local people could not authenticate its occurrence in the sanctuary.

## Panthera pardus (Linnaeus)

1758. Felis pardus Linnaeus, Syst. Nat. 10th ed., 1:41. (Egypt).

Common name: Eng. Leopard; Adi. Thakkar.

Remarks: Endangered. Pug marks were observed near a streamlet about 370 m. down the 42 Km. point from Roing. In this region, leopards are being hunted for meat and most of the local people posses pieces of skin. According to them this species was fairly common a decade ago, but now its number is greatly reduced.

#### Panthera tigris (Linnaeus)

1758. Felis tigris Linnaeus, Syst. Nat. 10th ed., 1:41. (Bengal).

Common name: Eng. Tiger; Adi. Simyo.

Remarks: Endangered. Pug marks were observed along the banks of Eme and lphipani rivers. An adult male was noticed near "Dangori Baba" temple at Mayudia. It is said to be a permanent resident of the neighbouring forest and never attacks human beings.

## Panthera unica (Schreber)

1776. Felis uncia Schreber, Saugeth, 3 pl. 100 (1776) and text 386, 586 (1777). (Type locality not known).

Common name: Eng. Ounce or Snow Leopard; Adi. Yuodi Simyo.

Remarks: Pug marks were noticed in the snow at Mayu hills at an elevation of 2560-2880 m. (plate 2b). No specimen was observed during the survey. Local people, hunters and officials opined that Snow Leopard is not a permanent resident of this sanctuary but only a visitor during winter. However, two hunters claimed that Snow Leopard is a permanent resident of the northeastern high hills of the sanctuary.

## Order PROBOSCIDEA Family ELEPHANTIDAE

## Elephas maximus Linnaeus

1758. Elephas maximus Linnaeus, Syst. Nat. 10th ed., 1:33. (Sri Lanka).

Common name: Eng. Indian Elephant; Adi. Sot.

Remark: Elephant is not a permanent inhabitant of the sanctuary but is only a casual visitor.

## Order ARTIODACTYLA Family SUIDAE

## Sus scrofa cristatus Wagner

1839. Sus cristatus Wagner, Munch. Gelehrt. Anz., 9: 435. (Probably Malabar Coast, India).

Common name: Eng. Indian Wild boar; Adi. Shira.

Remarks: Found almost through out the sanctuary at different elevations. This animal is hunted for meat and this makes it vulnerable.

## Family CERVIDAE

#### Moschus moschiferus Linnaeus

1758. Moschus moschiferus Linnaeus, Syst. Nat. 10th ed., 1:66. (Tartary, approaching China).

Common name: Eng. Musk Deer, Kastura; Adi. Hodung, Sibuei.

Material examined: 2 skins in possession of local hunters: Mehao Wild Life Sanctuary.

Remark s: No animals was seen during the survey. It is a permanent resident of northeastern hills. Skins and musk glands were found in the possession of local people. Local people are specially interested for meat and musk gland of this animal. Previously, they used the musk gland for medicinal and aesthetical purposes but now they realised its commercial value through illegal trade. So this species is threatened in the sanctuary.

## Muntiacus muntjak vaginalis (Boddaert)

1785. Cervus vaginalis Boddaert, Elench. Anim., 1:136. (Bengal).

Common name: Eng. Barking Deer; Adi. Sidumg.

Remarks: Endangered. Found throughout the sanctuary. It is killed for meat and skin.

#### Axis porcinus (Zimmermann)

1777. Cervus porcinus Zimmermann, Spec. 2001. Geogr., 532 (Bengal).

Common name: Eng. Hog Deer; Adi. Dumsang.

*Remarks*: No animal could be seen. Local people reported its occurrence in the lower regions of the sanctuary.

#### Cervus unicolor Kerr

1792. Cervus axis unicolor Kerr, Anim. Kingd., 300. (Sri Lanka).

Common name: Eng. Sambar; Adi. Shiben.

Material examined: 3 skins in possession of local hunters; Mehao Wild Life Sanctuary.

Remarks: Endangered. Its call was heard in different parts of the sanctuary, but only a single specimen could be seen at about 670 m. down hill from 49 Km. point from Roing. The three skins examined were different form each other in respect of dorsal coloration. One grey, the other grey with brown and the third uniform dark. They are hunted for meat.

## Family BOVIDAE

#### **Budorcas taxicolor taxicolor Hodgson**

1850. Budorcas taxicolor Hodgson, J. Asiat. Soc. Beng., 19: 65. (Mishmi Hills, Arunachal Pradesh).

Common name: Eng. Mishmi Takin; Adi. Takin.

Remarks: Reported to be once common in the northeastern high hills of the sanctuary in the past, but now it is hardly seen. A number of skulls available with the local people were examined.

## Capricornis sumatraensis thar (Hodgson)

1831. Antilope thar Hodgson, Glean. Sci., 3: 324. (Nepal).

Common name: Eng. Serow; Adi. Bibe.

Material examined: 1 Male; 100 m. down from Mayudia Pass.

Measurements: Ext. - Height at Shoulder 1100, Hb. 1340, Tl. 132, E. 236.

Remarks: The specimen was found dead on the snow (Plate 2C). Entire dorsum blackish; no separate black dorsal stripe could be seen. Hairs on the sides long and shaggy.

Common. Observed singly as well as in pairs particularly above 1400 m. Much wary of human beings.

Order LAGOMORPHA Family LEPORIDAE

## Lepus nigricollis Cuvier

1823. Lepus nigricollis Cuvier, Dict. Sci. Nat., 26: 207. (Madras, Tamil Nadu).

Common name: Eng. Indian Hare, Black-napped hare.

Remarks: In spite of hunting pressure, it is common throughout the sanctuary. Harvested fields and grassy areas are its favourite foraging ground.

#### Family OCHOTONIDAE

#### Ochotona roylei (Ogibly)

1829. Lagomys roylei Ogilby, Royle's JII. Botany Himalaya, 69 pl. 4. (Choor Mountain, Himachal Pradesh).

Common name: Eng. Royle's Pika.

Remarks: Common at higher altitudes, but during the period of survey specimens were seen at the height of 1890 m.

## Order RODENTIA Family SCIURIDAE

#### Petaurista petaurista (Pallas)

1766. Sciurus petaurista Pallas, Misc. Zool., 54. (Western Java).

Common name: Eng. Common Giant Flying Squirrel; Adi. Hojo.

Material examined: 4 damaged skins in possession of local people; Mehao Wildlife Sanctuary.

Remarks: Very common throughout the sanctuary. At night its call can frequently be heard.

Sinha (1984) mentioned the occurrence of Hodgson's Flying Squirrel, *Petaurista magnificus* (Hodgson) in the sanctuary. The skins examined during the survey belong to *P. petaurista*.

## Callosciurus erythreaus erythrogaster (Blyth)

1842. Sciurus erythrogaster Blyth, J. Asiat. Soc. Beng., 11: 970. (Manipur).

Common name: Eng. Pallas's Squirrel.

Remark: Common in the sanctuary and lives in groups on the trees of relatively open areas.

## Callosciurus pygerythrus (Geoffroy)

1831. Sciurus pygerythrus Geoffroy, in Belanger, Voy. Indes Orient., 1: 145. (Pegu, Burma).

Common name: Eng. Irrawaddy Squirrel.

Remarks: Common in distribution and occurs singly or in group at an altitudes of 400 to 1700 m. Often comes to the ground in search of food.

#### Tamiops macclellandi macclellandi (Horsfield)

1839. Sciurus macclellandi Horsfield, Proc. zool. Soc. Lond., 152. (Assam).

Common name: Eng. Himalayan Striped Squirrel.

**Remark**: Reported to be common, but only a pair could be observed on a "Rudrakha" tree near 25 Km. point from Roing.

#### **Dremomys lokriah lokriah (Hodgson)**

1836. Sciurus lokriah Hodgson, J. Asiat. Soc. Beng., 5: 232 (Nepal).

Common name: Eng. Orange-bellied Himalayan Squirrel.

*Remarks*: Common in occurrence and arboreal, but moves in the forest floor in search of food. Observed in groups of 4-7.

## Ratufa bicolor gigantea (M'Clelland)

1839. Sciurus giganteus M'Clelland, Proc. zool. Soc. Lond., 150 (Assam).

Common name: Eng. Malayan Giant Squirrel; Adi. Chikkat, Lippo.

Remarks: Common throughout the sanctuary up to an altitude of 2400 m. Lives in high trees and never comes down below 10 m. It can easily be located in the forest by its frequent call and dropping of their rejected fruits, leaves, twigs, etc., during feeding.

## Family HYSTRICIDAE

## Hystrix hodgsonii (Gray)

1847. Acanthion hodgsoni Gray, Proc. zool. Soc. Lond., 101. (Nepal).

Common name: Eng. Crestless Himalayan Porcupine; Adi. Bobbi.

Remarks: Common. No animal could be seen due to its nocturnal habit, but its quills were found at several places of the sanctuary up to an altitude of 1950 m. Local people kill them for meat.

## Family RHIZOMYIDAE

## Cannomys badius (Hodgson)

1842. Rhizomys badius Hodgson, Calcutta J. Nat. Hist., 2:60. (Nepal).

Common name: Eng. Bay Bamboo Rat.

Remarks: No specimen or burrow could be observed. However, when the photo of the specimen was shown to the local people, they confirmed its occurrence in the sanctuary, particularly in the bamboo forests and grassy areas.

## Family MURIDAE

## Rattus rattus rufescens (Gray)

1837. Mus rufescens Gray, Ann. Mag. nat. Hist., 1:585. (Dharwar, Karnataka).

Common name: Eng. Dark-bellied House Rat; Adi. Kobu.

Remark: Observed in the shops of Roing and in the Sally Lake bungalow.

#### Rattus rattus? brunneusculus

Remarks: A white bellied specimen of Rattus rattus was observed in a Peach tree near Tewarigaon. Local people reported that similar type of rats are common in the forest and they make nest in the tree.

## Rattus nitidus (Hodgson)

1845. Mus nitidus Hodgson, Ann. Mag. nat. Hist., 15: 267. (Nepal).

Common name: Eng. Himalayan Rat; Adi. Kobu.

Material examined: 1 Male; 1 Km. from Sally Lake towards Roing. 1 Female; 36 Km. point on Roing-Hunli Road.

Measurements: Ext. - 1 Male, 1 Female; Hb. 152, 147, Tl. 164,180, Hf. 32,32. E. 21, 22. Crn: 1 Male, 1 Female; Onl. 42, 42.8, Pal. 23, 23.3, Nas. 18.2, 18.6, Apf. 7.9, 8.2 Bul. 6.3, 6.4, Utr. 6.6, 6.7.

Remark: Commonly found in the forest as well as in the open areas.

#### Rattus bowersi bowersi (Anderson)

1879. Mus bowersii Anderson, Zool. Res. Yunnan, 304. (Hotha, Kakhyen Hills, Western Yunnan, 1372 m. China).

Common name: Eng. Bower's Rat; Adi. Kobu.

Material examined: 1 Male; c 200 m. up hill from Tewarigaon.

Measurements: Ext. - Hb. 264, Tl. -, Hf. -, E. 24. Crn. - Onl. 54.2, Pal. 28, Nas. 21.5, Apf. 10, Utr. 8.1, Dia. 16.6, Zw 16.6.

Remark: Though the species is mainly restricted to the Jungle, but it visits to the Jhoom areas after the harvesting is over.

Honacki et al. (1982) treated bowersi under the genus Berylmys.

#### Rattus niviventer (Hodgson)

1836. Mus (Rattus) niviventer Hodgson, J. Asiat. Soc. Beng., 5: 234. (Katmandu, Nepal).

Common name: Eng. White-bellied Rat; Adi. Kobu.

Remark: Common in the forest.

Honacki et al. (1982) treated this species as Niviventer niviventer.

#### Rattus fulvescens brahma (Thomas)

1914. Epimys brahma Thomas, J. Bombay nat. Hist. Soc., 23: 232. (Anzong Valley, Mishmi Hills, 1829 m, Arunachal Pradesh).

Common name: Eng. Chestnut Rat.

Remarks: Common in the bamboo forests of the sanctuary. Nests are made at the base of bamboo thickets. These are round in shape and made up of dry bamboo leaves. These animals, though small in size, can easily be seen in the forest by their bright reddish dorsal coloration.

Honacki et al. (1982) kept brahma as distinct species under the genus Niviventer.

## Mus musculus Linnaeus

1758. Mus musculus Linnaeus, Syst. Nat. 10th ed., 1:62. (Upsala, Sweden).

Common name: Eng. House Mouse.

Remark: Common in the huts and jhoom fields within the sanctuary.

#### RECOMMENDATION

Mehao Reserve Forest was declared as 'Sanctuary' in the year 1980. However, from time immemorial people living in and around the sanctuary are mainly dependant on the forest produce. They hunt the animals for skins, meat and other products. In recent years they came in close contact with the people of the plains and realised the commercial value of the forest products. This further encouraged them to the killing of animals. During the survey, we met people with the guns in the sanctuary. It appears from their talk that they have no idea about 'Sanctuary' or Wild life Acts. This makes the task difficult for the forest staff to guard the entire sanctuary and enforce the Wild life Act strictly. So it is suggested that the local people should be educated about the need of the protection of the fauna and flora and they should be involved in the scheme of ecological management of the sanctuary.

#### **SUMMARY**

An account of the mammalian fauna of the Mehao Wild Life Sanctuary was given along with their status. Altogether, 66 Mammalian species have been reported form the sanctuary, of which *Crocidura attenuata rubricosa* is recorded for the forst time form Arunachal Pradesh.

#### ACKNOWLEDGEMENT

Authors are thankful to the Director, Zoological Survey of India, and the Chief Wildlife Warden, Arunachal Pradesh for providing all facilities and permission of the survey work. We are grateful to Shri J. L. Singh, D.F.O., Forest Department (Roing) for providing transport facilities and for many valuable suggestions. Thanks are due to Dr. V.C. Agarwal, Scientist 'SE', and Dr. R.P. Mukherjee, scientist 'SE', for critically going through the manuscript and for their valuable suggestions. We express our sincere gratitude to Shri P. K. Das, Scientist 'SE', Shri T. K. Chakraborty, Asstt. Zoologist and Shri M. K. Ghosh,

Jr. Zool. Asstt. for their comments. We are grateful to other party members who helped in the survey work. We are indebted to the local people of the Dibang Valley district who provided us many important information about the Wildlife of Mehao Wildlife Sanctuary.

#### REFERENCE

- Agarwal, V. C. 1975. Taxonomic study of the Indo-Burmese subspecies of the Common Tree-Shrew, *Tupaia glis* Diard. Dr. B. S. Chauhan Comm. Vol., pp. 385-394.
- Ellerman, J. R. & Morrison-Scott, T. C. S. 1951. Checklist of Palaearctic and India. mammals. *Brit. Mus.*, London.
- Hinton, M. A. C. & Thomas, O. 1926. Bombay Natural History Society's Mammal Survey of India, Burma and Ceylon. Report No. 42. Kashmir and Punjab areas. *J. Bombay nat. Hist. Soc.*, 31: 403-407.
- Honacki, J. H., Kinman, K.E. & Koeppl, J.W. 1982. Mammal species of the world. Allen Press Inc. and Associations of Systematics Collections, Lawrence, Kansas, U.S.A.
- Mehata, J. K. 1987. Status of wildlife in Arunachal Pradesh. Arunachal Forest News, 5: 8-12.
- Rookmaaker, L. C. & Bergmans, W. 1981. Taxonomy and geography of *Rousettus amplexicaudatus* (Geoffroy, 1810) with comparative notes on sympatric congenera (Mammalia: Chiroptera). *Beaufortia*, 31: 1-29.
- Sinha, B. C. 1984. A write up on Mehao Wildlife Sanctuary. (Unpublished).
- Thomas, O. 1922. Scientific results from the Mammal Survey. No. XXXII(A). New and interesting mammals from Mishmi Hills. J. Bombay nat. Hist. Soc., 28: 428-431.