

CHECK LIST OF MAMMALIAN FAUNA OF MANIPUR

LAI FRAKPAM ARUNKUMAR AND HIJAM TOMBI SINGH

*Department of Life Sciences,
Manipur University, Canchipur (Imphal)*

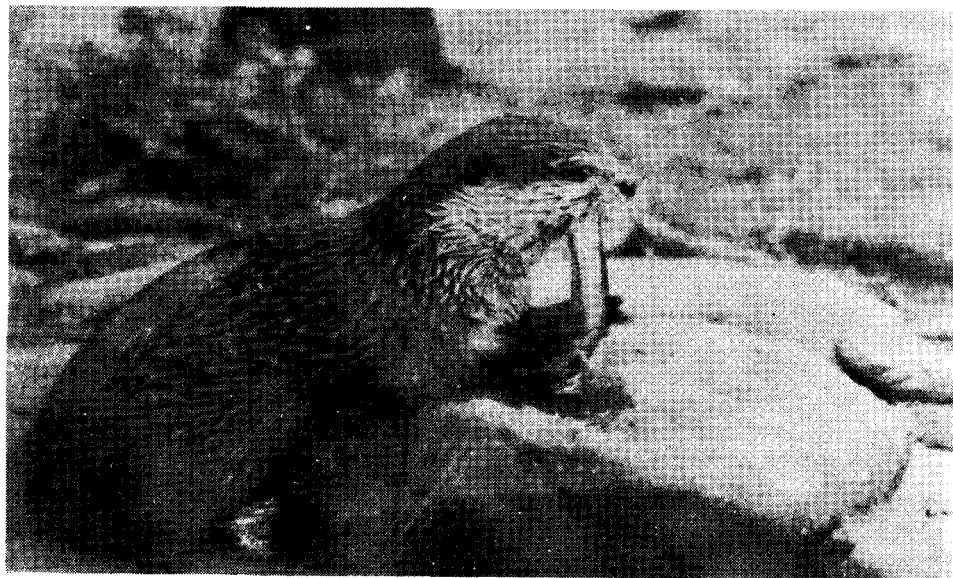
Introduction

The hill girt State of Manipur in the North-eastern India is a distinct geographical entity. It has an area of 22,356 km² of which the boundary hills form 92% with various altitude ranging from 2000-3000 m above msl and stretching between 23.83°N - 25.68°N to 93.03°E - 94.78°E. This magnificent land is bounded in the North by Nagaland, West by Assam, South and South-West by Mizoram and South-East by Myanmar. Physiographically, the land is divisible into a central valley and the surrounding mountains. The central valley

is oval shaped with a gentle slope towards the South measuring 798 m above msl at the extreme North and 746 m above msl at the southern end.

There are wet-temperate, pine, wet-hill, semi-evergreen, *Tectona grandis*-*Dipterocarpus turbinatus*, bamboo-brakes and grass-brakes forest. These varying agro-climatic and altitudinal conditions from tropical, montane sub-tropical, montane temperate and sub-alpine climate offer congenial conditions for growing wide range of flora thereby giving good shelter, fodder etc. to varieties of wildlife.

Fig. 1



Lutra lutra Linn.

The Javan Rhinoceros, *Rhinoceros sondaicus* (Desmarest) and the Wild Ox of Burma *Bos bosteng* Wagner have totally vanished from Manipur. There is no detailed record on the mammalian fauna of Manipur apart from fragmentary reports submitted by several workers: Higgins (1933-34), Roonwal and Mohnot (1977), Mukherjee

(1978), Mohnot (1980), Tombi Singh and Shyamananda Singh (1988), Choudhury (1991, 1992), Arunkumar and Tombi Singh (1992, 1999).

The systematic accounts and list of mammalian fauna of Manipur as checklist are given in Table 1.

Fig. 2



Felis bengalensis Kerr.

Fig. 3



Cervus eldi eldi McClelland

Table 1
Checklist of the Mammalian Fauna of Manipur

Species	Common Name	Distribution	Remarks
1	2	3	4
Order - Pholidota			
Family - Manidae			
<i>Manis pentadactyla auritus</i> Hodgson	Chinese Pangolin	Karong, Tamenglong, Churachandpur, Mata, Serou Kasom Khullen.	Schedule-I (Indian Wildlife Protection Act = IWPA) Rare in Manipur. Indeterminate (Tikader, 1983).
Order - Insectivora			
Family - Talpidae			
Subfamily - Talpinae			
<i>Talpa micrura</i> Hodgson	Himalayan mole.	Valley and hill areas.	
Family - Soricidae			
Subfamily - Soricinae			
<i>Suncus murinus</i> Linn.	House shrew.	Hills as well as woodlands.	
<i>S. etruscus</i> Savi.	Savi's pygmy shrew	South-eastern regions where the adjoining hill areas of Manipur and Myanmar.	
Family - Erinaceidae			
<i>Hemiechinus auritus</i> (Gmelin)	Hedgehog	Hill and plain	Schedule - IV (IWPA). Arunkumar (1999) recorded as new record in Manipur.

(Contd...)

1	2	3	4
	Order - Scandentia Family - Tupaiidae		
<i>Tupaia belangeri assamensis</i> Wroughton	Northern tree shrew.	Adjoining areas of Manipur and Nagaland	It is originally recorded as Naga hills, Assam, India.
<i>T. glis</i> Diard	Tree shrew.		Mohnot (1980) reported that it is distributed in Manipur and put under the Order Primates. Its status is uncertain
	Order - Chiroptera Suborder - Megachiroptera Family - Pteropodidae Subfamily - Pteropodinae		
<i>Pteropus giganteus</i> Brunnich.	Indian flying fox.	Valley and hill areas.	Schedule - V (IWPA)
	Suborder - Microchiroptera Family - Emballonuridae		
<i>Taphozous longimanus</i> Hardwicke	Long winged bat.	Adjoining areas of Manipur and Nagaland.	
	Family - Vespertilionidae Subfamily - Vespertilioninae		
<i>Myotis annectans</i> Dobson	Hairy faced bat.	Hill areas near the adjoining areas of Manipur and Mynmar	Recognised as <i>Pipistrellus annectans</i> in Ellerman and Morrison - Scott (1951). Reviewed by Topal (1970) who included it in the genus <i>Myotis</i> .
<i>Pipistrellus pteroculus</i> Thomas		Border areas of Manipur near Myanmar.	

(Contd....)

1	2	3	4
<i>P. affinis</i> Dobson.	Chocolate bat	Border areas of Manipur near Myanmar, Molcham.	
Order - Primates Suborder - Prosimii Infraorder - Lorisiformes Family - Loridae/Lorisidae			
<i>Nycticebus coucang</i> Boddaert.	Slow loris.	Tamenglong District. Senapati District, Ukhrul District, Churachandpur District.	Schedule I (IWPA). Vulnerable (Tikader, 1983).
Suborder - Anthropoidea Family - Cercopithecidae Subfamily - Cercopithecinae			
<i>Macaca assamensis</i> McClelland.	Assamese macaque.	Mao, Tamenglong, Jiribam.	
<i>M. mulatta</i> Zimmermann.	Rhesus macaque.	Mahabali Temple areas of Imphal city. C.I. College of Bisenpur, Moreh.	Schedule - II (IWPA).
<i>M. arctoides</i> Geoffroy	Stump-tailed macaque	Manipur, Ukhrul, Kasom Khullen, Moreh, Molcham, Senapati, Tamenglong, Jiribam.	Indeterminate (Tikader, 1983).
Subfamily - Colobinae			
<i>Presbytis cristatus</i> Raffles.	Silvered leaf monkey.	Western side of Churachandpur District which the adjoining hill ranges of Mizoram and Manipur, Tamenglong District.	

(Contd...)

1	2	3	4
<i>P. pileatus</i> (Blyth.)	Capped langur	Western hill forest of Senapati District.	They are found above 1000 m. above the mean sea level. Schedule - I (IWAP). Vulnerable (Tikader, 1983).
		Family - Hylobatidae Subfamily - Hylobatinae	
<i>Hylobates hoolock</i> Bechstein	Hoolock gibbon.	Southern parts of Ukhrul Distt. Kwatha hill range of Chandel Distt., Tamenglong Distt.	Schedule-I (IWPA). Vulnerable (Tikader, 1983).
		Order - Carnivora Family - Canidae	
<i>Canis aureus</i> Linn.	Jackal.	Very rare in Valley area. Tamenglong, Chandel, Ukhrul, Jiri, Senapati.	Schedule - II (IWPA). Vulnerable (Tikader, 1983).
<i>C. lupus</i> Linn.	Wolf	Hill areas.	The occurrence and status of this animal in Manipur is uncertain. Endangered (Tikader, 1983).
<i>C. familiaris</i> Linn.	Domestic dog.	Hills and valley.	Commonly domestic.
<i>Vulpes vulpes</i> Linn.	Red fox/Himalayan fox.	Erroneously mentioned in many local lists possible occurrence in the foot hills of Manipur.	Schedule-II (IWPA). Vulnerable (Tikader, 1983).
<i>Coun alpinus</i> Pallas	Indian wild dog.	Restricted in hill areas near the adjoining area of Manipur and Myanmar.	Schedule-II (IWPA). Vulnerable (Tikader, 1983).

(Contd....)

1	2	3	4
		Family - Ursidae	
<i>Ursus thibetanus</i> Cuvier	Himalayan black bear	Hill areas of Manipur	Schedule-II (IWPA). It was included in the genus <i>Selenarctos</i> (Ellerman & Morrison - Scott, 1951, Heude, 1901, Corbett & Hill, 1992) put it in the genus <i>Ursus</i> . The species has been under pressure from poachers for its bile and gall bladder.
<i>U. malayanus</i> Raffles.	Malayan sun bear	Hill areas of Manipur, Chandel District, Moreh, Pallel, Kasom Khullen	Schedule-I (IWPA). It was included in the genus <i>Helarctos</i> (Ellerman & Morrison - Scott, 1951, Horse field, 1825). Rare (Tikader, 1983).
		Family - Mustelidae Subfamily - Mustelinae	
<i>Martes flavigula</i> Boddaert	Yellow throated marten	Tamenglong District, Jiribam	Schedule-II (IWPA)
		Subfamily - Melinae	
<i>Arctonyx collaris</i> F. Cuvier.	Hog badger	Hill areas of Manipur	Schedule-I (IWPA). Rare in Manipur. Indeterminate (Tikader, 1983).
<i>Melogale personata</i> Geoffroy	Burmese ferret badgers.	Chandel District, Churachandpur District.	Schedule-II (IWPA). Rare in Manipur.
<i>M. moschata</i> Gray	Chinese ferret badger.	Chandel, Churachandpur Senapati and Ukhrul Districts	Schedule-I (IWPA). Rare in Manipur.

(Contd...)

1	2	3	4
<i>Mustela erminea</i> Linn.	Ermine	Loktak lake, Toubul, Ngaikhong-Khullen.	Good fishing in behaviour Schedule-I (IWPA)
		Subfamily - Lutrinae	
<i>Lutra lutra</i> Linn	Common otter.	Hill streams of Manipur in all Districts.	Schedule-II (IWPA)
<i>Lutrogale perspicillata</i> Geoffroy	Smooth Indian otter	Hill stream of Manipur. Tamenglong District.	Schedule-II (IWPA). It was included in the genus <i>Lutra</i> (Ellerman & Morrison-Scott, 1951). The genus <i>Lutrogale</i> was described by Gray (1865) and Corbet and Hill (1992).
<i>Aonyx cinerea</i> Illiger	Oriental small-clawed Otter	Hill streams of Manipur. Widely distributed.	Schedule-I (IWPA)
		Family - Viverridae Subfamily - Viverrinae	
<i>Viverra zibetha</i> Linn.	Large Indian civet	Jiribam, Tamenglong, Akahui.	Schedule-II (IWPA).
<i>Viverricula indica</i> Desmarest.	Small Indian civet	Hill and valley, hill ranges of Manipur at None and Nungba	A well known lifter of domestic fowl. Rare in Manipur. Schedule-I (IWPA).
<i>Prionodon pardicolor</i> Hodgson.	Spotted linsang	Jiribam, Tamenglong, Kwatha, Yangoutubi hills at the adjoining area near Manipur, India & Myanmar.	Schedule-I (IWPA). Vulnerable (Tikader, 1983).
		Subfamily - Paradoxurinae	
<i>Paradoxurus hermaphroditus</i> Pallas.	Common palm civet.	Senapati, Chandel, Churachandpur Moreh	Schedule-I (IWPA). Rare in Manipur.

(Contd...)

1	2	3	4
<i>Paguma larvata</i> Hamilton - Smith.	Himalayan plam civet	Tamenglong, Bagaijang, Akhui, Churachandpur, Senapati.	Schedule-II (IWPA). Rare in Manipur.
		Family - Felidae	
<i>Felis chaus</i> Guldienstaedt.	Jungle cat	Churachandpur, Chandel, Ukhrul	Schedule-II (IWPA). Rare in Manipur. Vulnerable (Tikader, 1983).
<i>F. bengalensis</i> Kerr.	Leopard cat	Chandel, Churachandpur, Imphal East and West Senapati, Ukhrul, Thoubal, Tunnel of the Loktak Hydro Electric Project.	Captive breeding is success in Manipur Zoological Garden, Iroisemba, Manipur. Schedule-II (IWPA). Rare in Manipur. Vulnerable (Tikader, 1983).
<i>F. temminckii</i> Vigors & Horsfield.	Golden cat	Molcham, Moreh, Chandel District, Churachandpur District, Tamenglong, Jiribam.	Distribution in India not correctly shown in Corbet & Hill (1992). Schedule-I (IWPA). One black colour was collected from Churachandpur and kept in the Manipur Zoological Garden, Iroisemba. Rare (Tikader, 1983).
<i>F. marmorata</i> Martin.	Marbled cat	Senapati District.	Schedule-I. It may be also occurred in the Dzuko valley. Pug marks are observed by the Forest Department, Govt. of Manipur.
<i>Neofelis nebulosa</i> <i>marcosceloides</i> Hodgson.	Clouded leopard	Churachandpur District.	Schedule-I. Paws are adapted for arboreal habit. Rosy colour in the tip of nose is the distinctive character. Vulnerable in Manipur.

(Contd...)

1	2	3	4
<i>Panthera pardus</i> Linn.	Leopard.	Molcham, Kwatha of Chandel District.	Schedule-I (IWPA). Captive breeding is success in Manipur Zoological Garden, Iroisem, Manipur. Vulnerable (Tikader, 1983).
<i>P. tigris</i> Linn.	Tiger/Indian tiger.	Tamenglong, Churachandpur, Ukhrul. Hill areas of Manipur.	Schedule-I (IWPA). Recently one killed from Tamenglong District. Vulnerable (Tikader, 1983).
Order - Artiodactyla Family - Suidae			
<i>Sus cristatus</i> Wagner	Wild pig	Kwatha, Chandel District.	Schedule-III (IWAP)
<i>S. scrofa</i> Linn.	Wild boar.	Hills and plain areas of this State.	Schedule-III (IWPA).
Order - Proboscidea Family - Elephantidae			
<i>Elephas maximus</i> Linn.	Indian elephant	Tamenglong District, Jiribam, Kwatha and Yangoutubi of Chandel District.	Corbett and Hill (1992) and Sukumar (1989) did not correctly show on the distribution maps in North-Eastern India. Schedule-I (IWPA). They were very common in the hills of Manipur and the Maharajas (Kings) used to operate "Kheddas; the last in 1872 in which 21 elephants were captured along the Leimatak river valley.

(Contd...)

1	2	3	4
<i>Equus caballus</i> Linn.	Horse/Manipur Pony	Valley (Mainly in Imphal).	People of Manipur (Maiba/Pandit, the local astrologers) assumed that this animal (Sagol) was originated from the Sagol Pakpa area of Thoubal District of this State. Schedule-I (IWPA).
Family - Cervidae			
<i>Cervus unicolor</i> Kerr.	Sambar	Tamenglong, Senapati, Kharsom Kkullen, Molcham, Churachandpur.	Schedule-II (IWPA). Lyddekere mentioned it as <i>Equinus</i> for subspecies. Captive breeding success in the Zoological Garden of Manipur, Iroisemba. It is one of the biggest cervids in Manipur.
<i>Axis porcinus</i> Zimmermann.	Hog deer.	Keibul Lamjao Wildlife National Park (KLNP).	Schedule-III only found in KLNP. Capture breeding success in the Zoological Garden of Manipur, Iroisemba.
<i>Muntiacus muntjak</i> Zimmermann	Barking deer	Hills of Manipur	Schedule-III (IWPA). Seriously threatened and rare in Manipur.
<i>Cervus eldi eldi</i> McClelland.	Manipur Brow- Antlered deer.	Keibul Lamjao Wild Life National Park, Manipur.	Schedule-I (IWPA). Captive breeding is success in the Manipur Zoological Garden, Iroisem, Manipur. More than 200 heads were observed in the natural habitat that is Keibul Lamjao National Park, Manipur, the only floating National Park in the world.

(Contd...)

1	2	3	4
	Family - Bovidae		
<i>Bos guarus</i> Smith, H.	Indian bison	Molcham, Ukhrul, Senapati.	Schedule-I (IWPA). Captive breeding is success in Manipur Zoological Garden, Iroisemba, Manipur. Vulnerable (Tikader, 1983).
<i>Bubalus arnee</i> Kerr.	Wild water buffalo.	Whole State of Manipur.	Domesticated. Schedule-I (IWPA). So long described as <i>Bubalus bubalis</i> Linn. based upon a domestic specimen from Rome, Italy.
<i>Naemorhedus goral</i> Hardwicke.	Goral	Tamenglong District, Jiribam, Tipaimukh. North-West of Manipur adjoining Nagaland territory.	Strictly confined in the stiff hilly areas of Manipur.
<i>Capricornis sumatraensis</i> Bechstein	Serow	Ukhrul, Tamenglong, Churachandpur, Chandel.	Schedule-I (IWPA). They are high altitude animals. Very rare.
Order - Rodentia Family - Sciuridae Subfamily - Ratufinae			
<i>Ratufa bicolor</i> Sparrman	Malayan giant squirrel	Yairipok, Ukhrul District, Senapati District, Karong, Tamenglong, Akhui.	Schedule-II (IWPA).
<i>Funambulus pennati</i> Wroughton	Five striped squirrel.	Yairipok, Thoubal, Heirok, Kasom Khullen, Ukhrul, Senapati.	Schedule-II (IWPA).

(Contd...)

1	2	3	4
		Subfamily - Callosciurinae	
<i>Dremomys pernyi pernyi</i> (Milne-Edwards)	Perny's long-nosed squirrel	Mao	Reported by Khajuria (1983).
<i>D. rufigenis</i> (Blandford)	Red checked squirrel.	Kharsom Khullen, Sanalok, Chatrik, Southern parts of Ukhrul District, Mao.	Reported by Tombi Singh (1991).
		Family - Pteromyidae	
<i>Petaurista alborufus</i> <i>candidulus</i> Wroughton	Flying squirrel.	Senapati District and Tamenglong District of Manipur.	Schedule-II (IWPA). Reported by Khajuria (1983).
<i>P. petaurista</i> Pallas	Common giant flying squirrel	Ukhrul District, Chandel District. Kwatha	Schedule-II (IWPA). Khajuria (1983). Skin is used for making hats
<i>Hylomys alboboginer</i> <i>alboboginer</i> Hodgson	Particoloured flying squirrel	Senapati, Mao, Tamenglong.	Schedule-II (IWPA). Khajuria (1983) reported it from this State
		Family - Muridae	
		Subfamily - Murinae	
<i>Mus musculus</i> Linn. <i>M. booduga</i> Gray	House mouse Indian field rat	Whole State. i.e Manipur Whole State of Manipur mainly in the paddy fields and swampy areas of river banks.	Schedule-V (IWPA) Schedule-V (IWPA).
<i>Rattus rattus</i> Linn.	House rat.	Whole State.	Schedule-V (IWPA)
<i>Bandicota indica</i> Bechstein	Large bandicoot-rat	Whole State.	Schedule-V (IWPA). Found in paddy field.
<i>Hadromys humei</i> Thomas	Hume's rat.	Whole State.	Schedule V (IWPA). Choudhury (1997) listed that it is found in Moirang.

(Contd...)

1	2	3	4
<i>Diomys crumpi</i> Thomas	Crump's mouse.	Hills and plains.	Reported by TombiSingh (1991). Status unclear.
<i>Berylmys manipulus</i> Thomas.	Manipur rat	Kampat, Kabaw valley.	Schedule-V (IWPA). Considered as a separate genus by Musser and Newcomb (1983). Earlier included in <i>Rattus</i> (Ellerman and Morison - Scott, 1951).
<i>Rattus nitidus</i> Hodgson	Himalayan rat.	Widely distributed.	Schedule V (IWPA)
<i>Golunda ellioti</i> Gray	Indian bush rat	Widely distributed	Schedule V (IWPA)
<i>R. manipulus kekrinus</i> Roonwal	Rat	Widely distributed	Schedule V (IWPA). Roonwal (1948) reported it from this State.
<i>Cannomys badius</i> Hodgson	Hoary bamboo rat	Hill and valleys of Manipur.	Killed for the protection of bamboo plants and eaten as a favourite curry.
<i>Hystrix brachyura</i> Linn.	Crestless Himalayan porcupine	Chingarel and Kangla hills, Kwatha of Chandel District.	Schedule II (IWPA). Ellerman and Morrison -Scott (1951) treated it as <i>Hystrix hodgsoni</i> . Stomach of this animal was dried and preserved, and used as a medicine for the cure of diabetes in the Kwthha village of Chandel District. Threatened in Manipur. Rare. Tikader, (1983).

Fig. 4

*Muntiacus muntjak* Zimmermann

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SUMMARY

78 species belonging to 66 genera, 16 subfamilies, 23 families and 10 orders along with their names, distributions and status of the mammalian fauna of Manipur are recorded and framed as a checklist. It shows that Manipur has great potential for the study of biodiversity of mammalian fauna, due to the occurrence of Indian, Indo-Chinese and Malayan elements of

मणिपुर के स्तनि प्राणियों की पड़ताल-सूची
 लैफरकपम अरूणकुमार व हिजाम टोम्बि सिंह
 सारांश

10 गणों, 23 वंशों, 16 उपवंशों, 66 प्रजातियों की 78 जातियों को, मणिपुर क्षेत्र में उनके नाम, विवरण, स्तनिप्राणियों में उनकी स्थिति बताते हुए अभिलिखित और पड़ताल-सूची में सम्मिलित किया गया है। इससे पता चलता है कि भारतीय, इन्डोचीनी और मलय अंश वाली जातियाँ मिलने के कारण मणिपुर में स्तनिप्राणियों की जैवविविधता का अध्ययन करने की दृष्टि से बहुत अधिक सम्भावनाएँ मणिपुर में उपलब्ध हैं।

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