

# Fauna of Tiger Reserve

(SUNDERBANS, PALAMAU, SIMLIPAL & MANAS)



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1995



**FAUNA OF TIGER RESERVE**  
**(SUNDERBANS, MANAS, PALAMAU, SIMLIPAL)**

*Edited by :*  
The Director, Zoological Survey of India  
Calcutta.



सत्यमेव जयते

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## FOREWORD

A recent assessment of Project Tiger in India on the Completion of first 20 years, clearly indicates that the area under conservation for Project Tiger provided an unique habitat for a series of faunal elements down the food chain. Of these most significant being the records of other threatened or endangered species which could find niches within Tiger Reserve areas besides a host of other invertebrates. The profiles of faunal resources of four of the prime Tiger Reserve areas of India presented in this volume would once again provide evidences of species diversity in each of these conservation area.

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Calcutta  
July, 1995

Dr. A. K. Ghosh  
Director  
Zoological Survey of India

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## FAUNA OF SUNDERBANS TIGER RESERVE

### INTRODUCTION

Project Tiger was conceived in the seventies, out of concern for India's dwindling wildlife. The tiger not only stood for India's wilderness but is also at the apex of a large and complex food-chain. Hence, it was thought that the well-being of the tiger will, in turn, reflect the health of the Indian wilderness.

The objective of the Project Tiger was enunciated as 'to ensure maintenance of a viable population of tiger in India for scientific, economic, aesthetic, cultural and ecological values, and to preserve for all times, areas of biological importance as a national heritage for the benefit education and enjoyment of the people'.

The tiger is a multihabitat species, hence, widely distributed in India. It is at home from high altitude forests of the Himalayas to coastal mangroves, scrub-lands of Rajasthan to lush evergreens of the south and northeast. Hence, it was decided that the project Tiger must conform to an ecosystem approach.

The general scheme of the Project, therefore, involved in setting up of several tiger reserves, at least one in each biogeographical zone, and would include a core area free from human disturbance, and a buffer area in which conservation oriented land use was to be allowed. The other consideration was the amenability of the specific area to concerted conservation action.

The Tiger Reserves were established in phases, 9 in 1973-74, 2 in 1979, 4 in 1983, and one each in 1987, 1988, 1990 and 1992 covering 13 Political States and an area of 29716 sq. km., of which the core segment is 12636 sq. km.

The details of the Reserves are as follows :

Name of Reserve	State	Total area (sq. km.)	Core area (sq. km.)
Bandipur	Karnataka	866	523
Buxa	West Bengal	759	315
Corbett	Uttar Pradesh	521	338
Dudwa	Uttar Pradesh	811	648
Indravati	Madhya Pradesh	2799	1258

Name of Reserve	State	Total area (sq. km.)	Core area (sq. km.)
Agasthyamalai (Kalakkad-Mundantharai)	Tamil Nadu	800	571
Kanha	Madhya Pradesh	1945	940
Manas	Assam	2840	470
Melghat	Maharashtra	1618	448
Nagarjunasagar Srisaillam	Andhra Pradesh	3568	1200
Namdapha	Arunachal Pradesh	1985	1808
Palamau	Bihar	928	213
Periyar	Kerala	777	501
Ranthambhore	Rajasthan	825	392
Sariska	Rajasthan	800	498
Simlipal	Orissa	2750	845
Sunderbans	West Bengal	2585	1330
Valmiki	Bihar	840	335
Pench	Madhya Pradesh	758	293

The Zoological Survey of India was entrusted with the job of making a faunal inventory of the tiger reserves of the country in July 1982 by the Steering Committee of the Project Tiger. Since then practically all but two of the Reserves were surveyed by the department and inventories are under preparation. The highlights of the fauna of these Reserves have been dealt with in the following pages.

#### SUNDARBANS TIGER RESERVE

The Sunderbans Tiger Reserve (Fig. 1) has an approximate area of 2585 sq. km., with a core area of 1330 sq. km. The forests within the reserve experience high and low tides twice a day. Sometimes, in monsoon, particularly during full moon the water level may ascend up to 9 m. The plant associates in the tiger reserve may be observed as under :

1. In area where average soil salinity is highest, *Excoecaria aqallocha-Cereops decandra* association is most common.
2. In relatively less saline tract towards south, *Rhizophora mucronata-Briquiara gymnorhiza-*

*Heritiera minor* association in common.

3. Exclusively *Phoenix paludosa* forests are found on relatively high lands.
4. On newly formed landmass having low average salinity, *Avicennia marina*, *Avicennia alba* and *Avicennia officinalis* are common.
5. *Avicennia* sp. and *Exacaccaria* sp. association is common in land area of northern side.

## TOPOGRAPHY

### (i) *Physical features* :

Sundarbans is characterised by a group of islands facing the sea, and supports the largest mangrove belt of the world. It starts from the mouth of the river Hooghly on the west and extends upto the river Meghna in the east, covering 4 districts, North and South 24-Parganas in India and Khulna and Bakhergunge in Bangladesh. The total forest cover is about 9000 sq. km. of which 4264 sq. km. is within the Indian territory. Rest of the area has mostly been reclaimed for either agriculture or human settlement.

The major rivers in the area are Saptmukhi, Thakuran, Matlah, Gausaba and Raimangal. These rivers form a unique complex, with a network of tributaries, jointly known as Hooghly-Matla estuary. The interaction between the sea and freshwater, as well as silt brought down by the rivers Ganga and Brahmaputra and their tributaries from the Himalayas play an important role in the formation of this delta.

The Sundarbans deltaic alluvium is formed out of the silt brought down from the Himalayas. The soil is mainly of fine silty clay in the northernmost part, peaty deposits in the middle and swampy areas, and sandy clay towards the sea face. The new alluvium can be subdivided into the area which is annually renewed by the rivers, and that devoid of inundation. The loamy soil is the common adhesive black soil of the area. The salinity of the soil depends upon the freshwater flow. The torrential rain particularly during monsoon period diminishes the salinity of the soil surface and play a major role in making the soil free of salt.

### (ii) *Climate* :

In spite of close proximity to the Tropic of Cancer, the extreme climate does not prevail here because of its location nearer to the sea as well as due to tidal flushing of innumerable rivers and creeks inside.

The monsoon is active during July-October, with occasional rain throughout the year, brought about by the southwest wind. The postmonsoon period is characterised by cold weather from November to February. The premonsoon period (March-June) is predominantly dry and accompanied with occasional thunderstorms. The mean minimum temperature is 20°C in December-January and maximum 29°C during June-July. The average rainfall is about 180 cm.

(iii) *Vegetation* :

The mangrove-forests are salinity resistant and are known as halophytes. The extensive lateral root system which get submerged under water often throws pneumatophores to draw oxygen and moisture from the air, and the stems develop stilt roots specially in areas with high water current. The leaves become leathery, dark and thick, with embedded stomata and aqueous tissue. As many as 26 species of mangrove plants are found in the Sundarbans.

The dominating plant species along the banks of the river mouth are *Avicennia marina*, *Aegialitis rotundifolia*, *Bruguiera cylindrica*, *B. parvifolia*, *Ceriops tagal*, *Avicennia alba* and *Lumnitzera racemosa* (Appendix I). Middle zone of the rivers is dominated by *Rhizophora apiculata*, *Ceriops decandra*, *Kandelia candel*, *Xylocarpus granatum*, *Bruguiera gymnorrhiza* and *Aegiceras corniculatum*. Inland tidal flats, with elevated land and having more freshwater influx and low tidal action favour *Heritiera fomes* and *Nypa fruticans*. In the swampy areas with occasional inundation, *Exocoecaria aqallocha* combines with *Phoenix paludosa*. A remarkable species of the area is *Sonneratia apetala*, found along the large river banks.

## FAUNAL ANALYSIS

Being a very specialised environment, mangrove ecosystem supports a wide assemblage of animal communities. It is the abode of many groups of animals which live entirely within the mangrove, several others visit this area either to feed or breed but live elsewhere, still others use the mangrove for shelter and/or roosting.

Terrestrial, brackishwater and marine fauna constitute the major faunal components of this Tiger Reserve. In total, 35 species of mammals are reported from this area, comprising chiropterans (9 spp.), insectivores (1 sp.), primates (1 sp.), carnivores (12 spp.) rodents (7 spp.), artiodactyls (2 spp.), and cetaceans (3 spp.). Some of the important species are Rhesus Macaque, Leopard Cat, fishing Cat, Tiger, Chital, monogooses (2 spp.), Common and Smooth-coated otters, Gangetic and Irrawady dolphins, Little Porpoise etc. Out of 35 species of mammals, 6 species are enlisted in Schedule I, and 8 in Schedule II of the Wild Life (Protection) Act.

The avifauna of the Reserve is quite rich. About 260 species of birds are reported from the Reserve. Many species enjoy roosting in colonies on tall tress, some use tree-trunk of mangroves as observation post, many species occur on flowering and fruiting trees, some are ground dwellers, others found hopping on mud flats, and still others are aquatic. 17 species, namely, the Large Whistling Teal, hawks belonging to the family Accipitridae, Red-headed Merlin and Perigrine Falcon are rare and are enlisted in Schedule I of the Wild Life (Protection) Act.

The reptilian fauna is characterised by 7 species of turtles and tortoises, both freshwater and marine, 5 species of lizards, 5 species of snakes and a species of crocodile. Of these, 5 species of turtles, 2 species of *Varanus*, 1 species of snake and the Estuarine Crocodile are rare and enlisted in Schedule I of the Wild Life (protection) Act.

The amphibian fauna is represented by 4 species of *Rana*, and a species each of *Bufo*,

*Microhyla* and *Rhacophorus*. Being economically important, the species of *Rana* are protected in Schedule IV of the Wild Life (Protection) Act.

Most of the fishes found in this estuarine complex are from sea. The gobiids and clupeids are known to breed and complete their life cycle in the estuary. *Hilsa*, *Poma*, *Polynemus*, etc., are all marine but travel through estuaries upstream for breeding. Some of the freshwater fishes like *Anguilla* and *Pangasius* are catadromous and they enter the estuary for breeding. Several species of marine sharks and rays invade the estuary.

The lone representative of the hemichordate, namely, *Saccoglossus* sp. has been recorded from Gosaba and Raidighi.

The potentiality of fisheries inside the mangrove zone is quite evident by the presence of a large number of cat fishes. The fisheries of this area can not be completed if the huge amount of shrimps and prawns are not taken into account along with the edible crabs. Some of the common species of prawns and shrimps are *Penaeus monodon* and *Penaeus indicus*, *Macrobrachium rosenbergi*, *Metapenaeus monoceros*, etc. Most common edible crabs are *Scylla serrata* and *Varuna litterata*. The quantum of *S. serrata* at Budhakhali landing centre was 142.7 and 149.7 tonnes during 1984 and 1985 respectively (Nandi & Pramanik, 1986)\*. Genera like *Sesarma*, *Uca*, and *Metaprograpsus* are also predominant.

Out of 125 species of molluscs recorded from Hugly-Malta estuary, 67 species were collected from this Reserve. Some of these are arboreal, some dwell in crevices of dykes, jetties, brickwork and wooden pillars, and others are substratum dwellers. The gastropod species in order of relative abundance in their habitats are *Assiminea brevicola*, *Cerithidea cingulata*, *Assiminea beddomeana*, *Stenothera deltae*, *Littorina scraba*, *Haminea crocata*, *Telescopium telescopium*. The maximum population density amongst molluscs is of a bivalve species namely, *Meretrix meretrix* (2320-2800/m<sup>2</sup>). The shells of species *Telescopium telescopium*, *Cerithida cingulata*, etc., are used for the extraction of lime and also as poultry feed. The flesh of *Crassostrea gryphoides* is edible.

Among insects, several species have been recorded from the Reserve, for example, Collembola (3 spp.) Thysanura (3 spp.), Orthoptera (10 spp.), Dictyoptera (2 spp.), Isoptera (2 spp.), Hemiptera (11 spp.), Thysanoptera (2 spp.), Lepidoptera (8 spp.), Coleoptera (29 spp.), etc. The abundance of mosquitoes make the Reserve prone to malaria and mosquito-borne diseases. Flowers of some species of mangals attract honey bees and offer opportunity for the production of honey. The Rock Bee, *Apis dorsata* is an important species of commercial importance. The amount of production of honey per year is about 500 quintals and of bee-wax about 300 kg from the Tiger Reserve.

The echiurids and sipunculids are represented by two and one species respectively.

The sea anemones are represented by four genera. They are found adhering to the mud or any other substrata. in Namkhana, Pathar Pratima and Jharkhali. Sea anemones are found to

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\* Nandi, and Pramanik, 1986. *J. Indian Soc. Coastal Agric. Res.* 4(2) : 151-153

dominate the lower littoral mud flats.

As regards parasites, isopod parasites have been recorded from fishes, protozoan parasites from mammals, haematozoans from estuarine fishes, coccidian and myxosporean parasites from the mud-skippers, helminth parasites from the tiger and monogenea from fishes.

*List of some important plants occurring in Sundarbans Tiger Reserve*

<i>Scientific Name</i>	<i>Common Name</i>	<i>Remarks</i>
	Family TAMARICACEA	
<i>Tamarix gallica</i> Linn.	Nona Jhao	Bush or small trees
	Family MALVACEAE	
<i>Thespesia populnea</i> Corr.	Parash	Small trees
	Family STERCULIACEAE	
<i>Heritiera fomes</i> Buch.	Sundari	Tree, more common outside mangroves
<i>Heritiera littoralis</i> Dryand	"	Tree
	Family TILIACEAE	
<i>Brownlowia tersa</i> (L) Benth (Syn = <i>Broenlowia lanceolata</i> )	Sundrilata	Shrub or small tree
<i>Bruguiera gymnorrhiza</i> Lamk.	Kankra	Large tree
<i>B. parviflora</i> W & A.	–	Shrub or small tree
<i>Ceriops tagal</i> Arn. (Syn = <i>Ceriops candolleana</i> )	Goran	Small shrub or small tree
<i>C. decandra</i> (Griff) Arn. (Syn = <i>C. roxburghiana</i> )	Goran	Shrub or small tree
<i>Kandelia candel</i> (L) W & A. (Syn = <i>Kandelia rheedii</i> )	Goria	Small evergreen tree
	Family RHIZOPHORACEAE	
<i>Rhizophora mucronata</i> Lamk.	Garjan	Large shrub or tree
	Family MELIACEAE	
<i>Amoora cucullata</i> Roxb.	Amur	Tree, more common outside mangrove

<i>Scientific Name</i>	<i>Common Name</i>	<i>Remarks</i>
<i>Xylocarpus granatum</i> Koenig (Syn = <i>Carapa obovata</i> Bl.)	Dhundal	Tree
<i>Xylocarpus moluccensis</i> (Lamk.) (Syn = <i>C. moluccensis</i> (Lamk.))	Passur	Tree
	Family	LEGUMINOSAE
<i>Cynometra ramiflora</i> Linn.	Singra	Tree
<i>Dalbergia spinosa</i> Roxb.	–	Scrambling shrub
<i>Derris heptaphylla</i> Benth. (Cyn = <i>Derris uliginosa</i> )	Kali-lata	Climber
	Family	COMBRETACEAE
<i>Lumnitzera racemosa</i> Willd	Kirpa	Small tree.
	Family	LYTHRACEAE
<i>Sonneratia acida</i> Linn.	Keora	Small tree (Acidic fruits eaten by man, monkeys & deer in Sundarban)
<i>S. apetala</i> ham	Keora	Tree
	Family	MYRSINACEAE
<i>Aegiceras corniculatum</i> Gaertn.	Khalshi	Shrub or small tree (major source for Honey bee)
	Family	APOCYNACEAE
<i>Cerbera odolluam</i> Gaertn.	Dakor	Shrub or small tree
	Family	ACANTHACEAE
<i>Acanthus ilicifolius</i> Linn.	Hargoza	Shrub
	Family	VERBENACEAE
<i>Clerodendron inerme</i> Gaestn.	–	–
	Family	AVICENACEAE
<i>Avicennia officinalis</i> Linn.	Baen	Tree
<i>A. marina</i>	Baen	Small tree.

	Family	EUPHORBIACEAE	
<i>Exacaecaria agallocha</i> Linn.		Gengwa	Small tree
	Family	PALMEAE	
<i>Nipa fruticans</i> Warneb.		Golpatta	Creeper shrub
<i>Phoenix paludosa</i> Roxb.		Hantal	Tree
	Family	GRAMINEAE	
<i>Oryza coarctata</i> Roxb.		Dhani Ghash	Tall grass
	Family	PLUMBAGINACEAE	
<i>Aegialitis rotundifolia</i> Roxb.		Sata-i-gach	Shrub
	Family	POLYPODIACEAE	
<i>Acrostichum aureum</i> Linn.		—	—

*List of fauna occurring in Sunderbans Tiger Reserve*

<i>Scientific name</i>		<i>Common name</i>	<i>Status</i>
	Class	MAMMALIA	
	Order	INSECTIVORA	
	Family	SORICIDAE	
<i>Suncus murinus</i> (Linnaeus)		House Shrew	—
	Order	PRIMATES	
	Family	CERCOPITHECIDAE	
<i>Macaca mulatta</i> (Zimmermann)		Rhesus Macaque	Sch II.
	Order	CHIROPTERA	
	Family	PTEROPODIDAE	
<i>Pteropus giganteus</i> (Brunnich)		Indian Flying Fox	Sch. V
<i>Cynopterus sphinx</i> (Vahl)		Short-nosed Fruit Bat	Sch. V
	Family	EMBALLONURIDAE	
<i>Taphozous longimanus</i> Hardwicke		Long-Winged Tomb Bat	—
	Family	MEGATERMATIDAE	
<i>Megaderma lyra</i> Geoffroy		Indian False Vampire	—

<i>Scientific name</i>		<i>Common name</i>	<i>Status</i>
	Family	RHINOPOMATIDAE	
<i>Rhinopoma hardwickei</i> Gray		Lesser Rat-tailed Bat	—
	Family	RHINOLOPHIDAE	
<i>Rhinolophus lepidus</i> Blyth		Blyth's Horseshoe Bat	—
	Family	HIPPOSIDERIDAE	
<i>Hipposideros bicolor</i> Temminck		Bicoloured Leaf-nosed Bat	—
	Family	VESPERTILIONIDAE	
<i>Scotophilus temmincki</i> (Horsefield)		Lesse Yellow Bat	
<i>Pipistrellus mimus</i> (Wroughton)		Indian Pigmy Pipistrelle	—
	Order	RODENTIA	
	Family	SCIURIDAE	
<i>Funambulus pennanti</i> Wroughton		Five-Striped Squirrel	Sch IV.
	Family	HYSTRICIDAE	
<i>Hystrix indica</i> Kerr		Indian Crested Porcupine	Sch IV.
	Family	MURIDAE	
<i>Rattus rattus</i> (Linnaeus)		House Rat	Sch V.
<i>Mus musculus</i> Linnaeus		House Mouse	Sch V.
<i>Mus booduga</i> (Gray)		Little Indian Field Mouse	—
<i>Bandicota indica</i> (Bechstein)		Large Bandicoot Rat	—
<i>Bandicota bengalensis</i> (Gray)		Lesser Bandicoot Rat	—
	Order	CARNIVORA	
	Family	CANIDAE	
<i>Canis aureus</i> Linnaeus		Asiatic Jackal	Sch II.
<i>Vulpes bengalensis</i> (Shaw)		Bengal Fox	Sch II.
	Family	FELIDAE	
<i>Felis viverrina</i> Bennett		Fishing Cat	Sch I.
<i>Felis Chaus</i> Gouldenstaedt		Jungle Cat	Sch II.

<i>Scientific name</i>	<i>Common name</i>	<i>Status</i>
<i>Felis bengalensis</i> Kerr	Leopard Cat	Sch I.
<i>Panthera tigris</i> Linnaeus	Tiger	Sch I.
Family	VIVERRIDAE	
<i>Viverricula indica</i> (Desmarest)	Small Indian Civet	Sch II.
<i>Paradoxurus hermaphroditus</i> Gray	Common Palm Civet	Sch II.
Family	MUSTELIDAE	
<i>Lutra lutra</i> (Linnaeus)	Common Otter	Sch II.
<i>Lutra perspicillata</i> (I. Geoffroy)	Smooth-coated Otter	Sch II.
Family	HERPESTIDAE	
<i>Herpestes palustris</i> Ghose	Marsh Mongoose	Sch IV.
<i>Herpestes auropunctatus</i> (Hodgson)	Small Indian Mongoose	Sch IV.
Order	ARTIODACTYLA	
Family	CERVIDAE	
<i>Axis axis</i> (Erxleben)	Chital	Sch III.
Family	SUIDAE	
<i>Sus scrofa</i> Linnaeus	Wild Boar	Sch III.
Order	CETACEA	
Family	PLATANISTIDAE	
<i>Platanista gangetica</i> (Roxburgh)	Gangetic Dolphin	Sch I.
Family	DELPHINIDAE	
<i>Neophocaena phocaenoides</i> (Cuvier)	Black Finless Porpoise	Sch I.
<i>Orcaella brevirostris</i> (Owen)	Irrawady Dolphin	Sch I.
Class	AVES	
Order	PODICIPEDIFORMES	
Family	PODICIPEDIDAE	
<i>Podiceps ruficollis</i> (Pallas)	Little Grebe	L.M./Obs.* Sch IV.
Order	PELECANIFORMES	
Family	PHALACROCORACIDAE	
<i>Phalacrocorax niger</i> (Vieillot)	Little Cormorant	R./Obs. Sch IV.

\*R—Resident and breeding birds; M—Migratory; L.M.—Local Migratory; R/L.M. Resident though subject to local movement; Obs. Observed; Coll. Collected; E.R.—Extension of Range; N.R. New Report from Sundarban; \*—Collection made after decade; Sch—Schedule of the wild Life (Protection) Act.

<i>Scientific name</i>	<i>Common name</i>	<i>Remarks</i>	<i>Status</i>
	Family ANHINGIDAE		
<i>Anhinga rufa</i> (Daudin)	Darter	R./Obs.	Sch IV.
	Family PELECANIDAE		
<i>Pelecanus philippensis</i> Gmelin	Spotbilled Pelican	M.	Sch IV.
	Order CICONIFORMES		
	Family ARDEIDAE		
<i>Ixobrychus sinensis</i> (Gmelin)	Yellow Bittern	R./Obs.	Sch IV.
<i>I. cinaamomeus</i> (Gmelin)	Chestnut Bittern	R./Obs.	Sch IV.
<i>Butoroides striatus</i> (Linnaeus)	Little Green Heron	R./Obs.	Sch IV.
<i>Dupetor flavicollis</i> (Latham)	Black Bittern	R./Obs.	Sch IV.
<i>Nycticorax nycticorax</i> (Linnaeus)	Night Heron	R./Obs.	Sch IV.
<i>Egretta garzetta</i> (Linnaeus)	Little Egret	R./Obs.	Sch IV.
<i>Egretta intermedia</i> (Wagler)	Smaller Egret	R.	Sch IV.
<i>Ardea alba modesta</i> Gray	Large Egret	R./Obs.	Sch IV.
<i>Bubulcus ibis coromandus</i> (Boddaert)	Cattle Egret	R./Obs.	Sch IV.
<i>Ardeola grayii</i> (Sykes)	Pond Heron	R./Obs.	Sch IV.
<i>Ardea cinerea rectirostris</i> Gould	Grey Heron	M./Obs.	Sch IV.
<i>Ardea insignis</i> Hume	Large Grey Heron	R.	Sch IV.
<i>Ardea goliath</i> Cretzschmar	Goliath Heron	R.	Sch IV.
	Family CICONIDAE		
<i>Anastomus oscitans</i> (Boddaert)	Openbilled Stork	L.M./Obs.	Sch IV.
<i>Xenorhynchus asiaticus</i> (Latham)	Blacknecked Stork	M./Obs.	Sch IV.
	Family THRESKIORNITHIDAE		
<i>Platalea leucorodia</i> Linnaeus	Spoonbill	M.	Sch I.
	Order ANSERIFORMES		
	Family ANATIDAE		
<i>Sarkidiornis melanotos</i> (Pennant)	Comb Duck	N.R.	Sch IV.
<i>Nettapus coromandelianus</i> (Gmelin)	Cotton Teal	R./Obs.	Sch IV.
<i>Aythya fuligula</i> (Linnaeus)	Tufted Pochard	M.	Sch IV.

<i>Scientific name</i>	<i>Common name</i>	<i>Remarks</i>	<i>Status</i>
<i>Aythya baeri</i> (Radde)	Baer's Pochard	M./Obs.	Sch IV.
<i>Netta rufina</i> (Pallas)	Redcrested Pochard	M.	Sch IV.
<i>Anas querquedula</i> Linnaeus	Garganey Teal	M.	Sch IV.
<i>Anas strepera</i> Linnaeus	Gadwall	M.	Sch IV.
<i>Anas crecca</i> Linnaeus	Common Teal	M.	Sch IV.
<i>Anas acuta</i> Linnaeus	Pintail	M.	Sch IV.
<i>Tadorna tadorna</i> (Linnaeus)	Shelduck	M.	Sch IV.
<i>Tadorna ferruginea</i> (Pallas)	Rudy Shelduck	M.	Sch IV.
<i>Dendrocygna javanica</i> (Horsfield)	Lesser Whistling Teal	R./Obs.	Sch IV.
<i>Dendrocygna bicolor</i> (Vieillot)	Large Whistling Teal	R.	Sch I.
<i>Anser indicus</i> (Latham)	Barheaded Goose	M.	Sch IV.
<i>Anser anser</i> (Linnaeus)	Greylag Goose	M.	Sch IV.
	Order	FALCONIFORMES	
	Family	ACCIPITRIDAE	
<i>Elanus caeruleus</i> (Desfontaines)	Black-winged Kite	R./Obs.	—
<i>Aviceda leuphotes</i> (Dumont)	Black crested Baza	R.	Sch I.
<i>Pernis ptilorhynchus</i> (Temminck)	Honey Buzzard	R.	Sch I.
<i>Gyps bengalensis</i> (Gmelin)	Whitebacked Vulture	R./Obs.	Sch IV.
<i>Gyps indicus</i> (Scopoli)	Longbilled Vulture	R.	Sch IV.
<i>Torgos calvus</i> (Scopoli)	King Vulture	R.	Sch IV.
<i>Circus aeruginosus</i> (Linnaeus)	Marsh Harrier	M./Obs.	Sch I.
<i>Circus cyaneus</i> (Linnaeus)	Hen Harrier	M.	Sch I.
<i>Circus melanoleucos</i> (Pennant)	Pied Harrier	M./Obs.	Sch I.
<i>Spilornis cheela</i> (Latham)	Crested Serpent Eagle	R./Obs.	Sch I.
<i>Aquila pomarina</i> C.L. Brehm	Lesser Spotted Eagle	M.	Sch I.
<i>Aquila clanga pallas</i>	Greater Spotted Eagle	M.	Sch I.
<i>Haliaeetus leucoryphus</i> (Pallas)	Pallas's Fishing Eagle	R.	Sch I.

<i>Scientific name</i>	<i>Common name</i>	<i>Remarks</i>	<i>Status</i>
<i>Haliaeetus leucogaster</i> (Gmelin)	Whitebelliced Sea Eagle	R./Obs.	Sch I.
<i>Ichthyophaga ichthyaetus</i> (Horsfield)	Grey-headed Fishing Eagle	R.	Sch I.
<i>Ictinaetus malayensis</i> (Temminck)	Black Eagle	R.	Sch I.
<i>Haliastur indus</i> (Boddaert)	Brahminy Kite	R./Obs.	—
<i>Milvus migrans</i> (Boddaert)	Kite	R./Obs.	—
<i>Accipiter badius</i> (Gmelin)	Shikra	R./Obs.	Sch I.
<i>Pandion haliaetus</i> (Linnaeus)	Osprey	R.	Sch I.
	Family	FALCONIDAE	
<i>Falco chiquera</i> Daudin	Redheaded Merlin	R.	Sch I.
<i>Falco subbuteo</i> Linnaeus	Hobby	M./Obs.	—
<i>Falco tinnunculus</i> Linnaeus	Kestrel	M./Obs.	—
<i>Falco peregrinus peregrinator</i> Sundevall	Perigrine Falcon	M.	Sch I.
	Order	GALLIFORMES	
	Family	PHASIANIDAE	
<i>Coturnix chinensis</i> (Linnaeus)	Blue-breasted Quail	M.	Sch IV.
<i>Coturnix coromandelica</i> (Gmelin)	Rain Quail	M.	Sch IV.
<i>Coturnix coturnix</i> (Linnaeus)	Common Quail	M.	Sch IV.
<i>Francolinus gularis</i> (Temminck)	Swamp Partridge	R.	Sch IV.
	Order	GRUIFORMES	
	Family	TURNICIDAE	
<i>Turnix suscitator</i> (Gmelin)	Bustard Quail	R./Obs.	Sch IV.
<i>Turnix tanki</i> Blyth	Button Quail	M.	Sch IV
	Family	RALLIDAE	
<i>Rallus striatus</i> Linnaeus	Banded Rail	M.	Sch IV.
<i>Rallus aquaticus</i> Linnaeus	Water Rail	M.	Sch IV.

<i>Scientific name</i>	<i>Common name</i>	<i>Remarks</i>	<i>Status</i>
<i>Porzana fusca</i> Linnaeus	Ruddy Crake	R./Obs.	—
<i>Amaurornis phoenicurus</i> (Pennant)	White-breasted Waterhen	R./Obs.	—
<i>Amaurornis akool</i> (Sykes)	Brown Crake	R.	—
<i>Porzana pusilla</i> (Pallas)	Baillon's Crake	R.	—
<i>Porzana porzana</i> (Linnaeus)	Spotted Crake	M.	—
<i>Porzana parva</i> (Scopoli)	Little Crake	M.	—
<i>Rallina eurizonoides</i> (Lafresnaye)	Banded Crake	M.	Sch IV.
<i>Fulica atra</i> Linnaeus	Coot	R.	Sch IV.
<i>Porphyrio porphyrio</i> (Linnaeus)	Purple Moorhen	M./Obs.	Sch IV.
<i>Gallinula chloropus</i> (Linnaeus)	Indian Moorhen	R./Obs.	Sch IV.
<i>Gallicrex cinerea</i> (Gmelin)	Water Cock	R.	Sch IV.
	Order	CHARADRIIFORMES	
	Family	CHARADRIIDAE	
<i>Vanellus cinereus</i> (Blyth)	Greyheaded Lapwing	M.	—
<i>Vanellus malabaricus</i> (Boddaert)	Yellow Wattled Lapwing	M.	—
<i>Vanellus indicus</i> (Boddaert)	Red Wattled Lapwing	R./Obs.	—
<i>Pluvialis squatarola</i> (Linnaeus)	Grey plover	M.	Sch IV.
<i>Pluvialis dominica fulva</i> (Gmelin)	Eastern Golden Plover	M./Obs.	Sch IV.
<i>Charadrius mongolus</i> Pallas	Lesser Sand Plover	M./Obs.	Sch IV.
<i>Charadrius dubius</i> Scopoli	Little Ringed Plover	M./Obs.	Sch IV.
<i>Charadrius asiaticus</i> Pallas	Sand Plover	M.	Sch IV.
<i>Numenius arquata</i> (Linnaeus)	Curlew	R./Obs.	—
<i>Numenius phaeopus</i> (Linnaeus)	Whimbrel	M./Obs.	—
<i>Tringa erythropus</i> (Pallas)	Spotted Redshank	M./Obs.	—
<i>Tringa nebularia</i> (Gunner)	Greenshank	M./Obs.	—
<i>Tringa stagnatilis</i> (Bechstein)	Marsh Sandpiper	M.	Sch IV.
<i>Tringa ochropus</i> Linnaeus	Green Sandpiper	M.	Sch IV.

<i>Scientific name</i>	<i>Common name</i>	<i>Remarks</i>	<i>Status</i>
<i>Tringa hypoleucos</i> Linnaeus	Common Sandpiper	M./Obs.	Sch IV.
<i>Tringa totanus</i> (Linnaeus)	Common Redshank	M.	Sch IV.
<i>Limnodromus semipalmata</i>	Snipebilled Godwit	M.	Sch IV.
<i>Gallinago stenura</i> (Bonaparte)	Pintail Snipe	M.	Sch IV.
<i>Gallinago gallinago</i> (Linnaeus)	Fantail Snipe	M./Obs.	Sch IV.
<i>Gallinago minima</i> (Brinnich)	Jack Snipe	M.	Sch IV.
<i>Calidris temminckii</i> (Leisler)	Temminck's Stint	M./Obs.	—
<i>Calidris minutus</i> (Leisler)	Little Stint	M./Obs.	—
<i>Calidris subminutus</i> (Middendorff)	Longtoes Stint	M.	—
	Family RECURVIROSTRIDAE		
<i>Himantopus himantopus</i> (Linnaeus)	Black-winged Stilt	M./Obs.	Sch IV.
<i>Recurvirostra avocetta</i> Linnaeus	Avocet	M.	Sch IV.
	Family ROSTRATULIDAE		
<i>Rostratula benghalensis</i> Linnaeus	Painted Snipe	R./Obs.	Sch IV.
	Family GLAREOLIDAE		
<i>Glareola pratincola</i> (Linnaeus)	Collard Pratincole	R.	—
	Family BURHINIDAE		
<i>Burhinus oedicephalus</i> (Linnaeus)	Stone Curlew	R.	—
<i>Esacus magnirostris</i> (Vieillot)	Great Stone Plover	R.	Sch IV.
	Family LARIDAE		
<i>Larus brunnicephalus</i> Jerdon	Brownheaded Gull	M./Obs.	Sch IV.
<i>Larus ridibundus</i> Linnaeus	Blackheaded Gull	M.	—
<i>Larus ichthyaetus</i> Pallas	Great Blackheaded Gull	M./Obs.	—
<i>Chlidonias hybrida indicus</i> (Stephens)	Whiskered Tern	M./Obs.	—
<i>Chlidonias leucopterus</i> (Temminck)	Whitewinged Black Tern	M./Collected	—
<i>Sterna aurantia</i> J.E. Gray	River Tern	R./Obs.	—
<i>Sterna albifrons</i> Pallas	Little Tern	M./Coll.	—

<i>Scientific name</i>	<i>Common name</i>	<i>Remarks</i>	<i>Status</i>
<i>Sterna bergii</i> Lichtenstein	Large Crested Tern	R./Coll	—
	Order COLUMBIFORMES		
	Family COLUMBIDAE		
<i>Streptopelia orientalis</i> (Latham)	Rufous Turtle Dove	R./Obs.	Sch IV.
<i>S. decaocto</i> (Frivaldszky)	Ring Dove	R./Obs.	Sch IV.
<i>S. chinensis</i> (Scopoli)	Spotted Dove	R./Obs.	Sch IV.
<i>S. senegalensis</i> (Linnaeus)	Little Brown Dove	R.	Sch IV.
<i>Treron bicincta</i> (Jerdon)	Orangebreasted Green Pigeon	R./Obs. & Coll	Sch IV.
<i>T. phoenicoptera</i> (Latham)	Green Pigeon	R/Obs.	Sch IV.
<i>Chalcophaps indica</i> (Linnaeus)	Emerald Dove	R./Obs.	Sch IV.
	Order PSITTACIFORMES		
	Family PSITTACIDAE		
<i>Psittacula krameri</i> (Scopoli)	Roseringed Parakeet	R/Obs.	Sch IV.
<i>P. cyanocephala</i> (Linnaeus)	Blossomheaded Parakeet	R/Obs.	Sch IV.
<i>P. eupatria</i> (Linnaeus)	Large Indian Parakeet	R.	—
	Order SIRIGIFORMES		
	Family STRIGIDAE		
<i>Tyto alba</i> (Scopoli)	Barn Owl	R.	Sch IV.
<i>Bubo bubo</i> (Linnaeus)	Great Horned Owl	R.	Sch IV.
<i>Bubo zeylonensis</i> (Gmelin)	Brown Fish Owl	R.	Sch IV.
<i>Ninox scutulata</i> (Raffles)	Brown Hawk Owl	R.	Sch IV.
<i>Athene brama</i> (Temminck)	Spotted Owl	R./Obs.	Sch IV.
<i>Otus bakkamoena</i> Pennant	Collared Scops Owl	R./Obs.	Sch IV.
<i>Otus scops</i> (Linnaeus)	Scops Owl	R.	Sch IV.

<i>Scientific name</i>	<i>Common name</i>	<i>Remarks</i>	<i>Status</i>
	Order	CAPRIMULGIFORMES	
	Family	CAPRIMULGIDAE	
<i>Caprimulgus asiaticus</i> Latham	Indian Nightjar	R.	Sch IV.
<i>Caprimulgus macrurus</i> Horsfield	Longtailed Nightjar	R./Obs.	Sch IV.
<i>Caprimulgus affinis</i> Horsfield	Franklin's Nightjar	M.	Sch IV.
	Order	APODIFORMES	
	Family	APODIDAE	
<i>Apus pacificus</i> (Latham)	Large Whiterumped Swift	M.	—
<i>Apus affinis</i> (J. E. Gray)	House Swift	R./Obs.	—
<i>Cypsiurus parvus</i> (Lichtenstein)	Palm Swift	R./Obs.	—
<i>Hemiprocne longipennis coronata</i> (Tickell)	Crested Swift	R.	—
	Family	CUCULIIFORMES	
	Family	CUCULIDAE	
<i>Clamator jacobinus</i> (Boddaert)	Pied Crested Cuckoo	M.	Sch IV.
<i>Eudynamis scolopacea</i> (Linnaeus)	Koel	R./Obs	Sch IV.
<i>Cuculus micropterus</i> Gould	Indian Cuckoo	L.M./Obs.	Sch IV.
<i>Cuculus varius</i> Vahl	Hawk Cuckoo	R/Obs	Sch IV.
<i>Cuculus canorus</i> Linnaeus	Himalayan Cuckoo	M.	Sch IV.
<i>Cuculus merulinus</i> (Scopoli)	Plaintive Cuckoo	R/L.M./Obs.	Sch IV.
<i>Cocomantis sonneratii</i> (Latham)	Banded Bay Cuckoo	L.M.	Sch IV.
<i>Centropus sinensis</i> (Stephens)	Crow Pheasant	R/Obs.	—
<i>Rhopodytis tristis</i> (Lesson)	Large Greenbilled Malkoha	Obs. & N. Rep.	—
	Order	CORACIIFORMES	
	Family	ALCEDINIDAE	
<i>Alcedo atthis</i> (Linnaeus)	Common Kingfisher	R/Obs.	Sch IV.

<i>Scientific name</i>	<i>Common name</i>	<i>Remarks</i>	<i>Status</i>
<i>Halcyon smyrnensis</i> (Linnaeus)	Whitebreasted Kingfisher	R/Obs.	Sch IV.
<i>Ceryle rudis</i> (Linnaeus)	Lesser Pied Kingfisher	R/Obs.	Sch IV.
<i>Pelargopsis amauroptera</i> (Pearson)	Brownwinged Kingfisher	R/Obs.	Sch IV.
<i>P. capensis</i> (Linnaeus)	Storkbilled Kingfisher	R/Obs.	Sch IV.
<i>Halcyon pileata</i> (Boddaert)	Blackcapped Kingfisher	R/Obs.	Sch IV.
<i>H. chloris</i> (Boddaert)	Whitecollared Kingfisher	R/Obs.	Sch IV.
	Family	MEROPIDAE	
<i>Merops orientalis</i> Latham	Green Bee-eater	R/Obs.	—
<i>Merops philippinus</i> Linnaeus	Blue-tailed Bee-eater	R/L.M.	—
	Family	CORACIDAE	
<i>Coracias benghalensis</i> (Linnaeus)	Indian Roller	R/Obs.	Sch IV.
	Family	UPUPIDAE	
<i>Upupa epops</i> Linnaeus	Hoopoe	L.M./M.-Obs.	—
	Order	PICIFORMES	
	Family	CAPITONIDAE	
<i>Megalaima zeylanica caniceps</i> Franklin	Green Barbet	R.M./Obs.	Sch IV.
<i>M. asiatica</i> (Latham)	Blue-throated Barbet	R/Obs.	Sch IV.
<i>M. haemacephala</i> (P.L.S. Muller)	Coppersmith	R/Obs.	Sch IV.
	Family	PICIDAE	
<i>Micropternus brachyurus</i> (Vieillot)	Rufous Woodpecker	R/Obs.	Sch IV.
<i>Dinopium benghalense</i> (Linnaeus)	Lesser Golden-backed Woodpecker	R/Obs.	Sch IV.
<i>Picoides macei</i> (Vieillot)	Fulvous-breasted Woodpecker	R.	Sch IV.
<i>P. mahrattensis</i> (Latham)	Yellow-fronted Pied Woodpecker.	R.	Sch IV.

<i>Scientific name</i>	<i>Common name</i>	<i>Remarks</i>	<i>Status</i>
<i>P. nanus</i> (Vigors)	Pygmy Woodpecker	R/Coll. & E.R.	Sch IV.
<i>Picus chlorolophus</i> Vieillot	Small Yellow-naped Woodpecker	R/Coll.	Sch IV.
	Order	PASSERIFORMES	
	Family	ALAUDIDAE	
<i>Mirafra assamica</i> Horsfield	Bush Lark	R./Obs.	Sch IV.
<i>Mirafra javanica</i> Horsfield	Singing Bush Lark	L/M.Obs.	Sch IV.
<i>Alauda gulgula</i> Franklin	Eastern Sky Lark	R./Obs.	Sch IV.
	Family	HIRUNDINIDAE	
<i>Riparia riparia</i> (Linnaeus)	Collared sand Martin	M.	—
<i>Riparia paludicola</i> (Vieillot)	Plain Sand Martin	M.	—
<i>Hirundo rustica</i> Linnaeus	Common Swallow	M/Obs.	—
<i>Hirundo daurica</i> Linnaeus	Striated Swallow	M.	—
	Family	PYCNONOTIDAE	
<i>Pycnonotus cafer</i> (Linnaeus)	Redvented Bulbul	R/Obs.	Sch IV.
<i>Pycnonotus jocosus</i> (Linnaeus)	Redwhiskered Bulbul	R/Obs.	Sch IV.
	Family	IRENIDAE	
<i>Aegithina tiphia</i> (Linnaeus)	Common Iora	R/Obs.	Sch IV.
<i>Chloropsis aurifrons</i> (Temminck)	Goldfronted Chloropsis	R/Obs.	Sch IV.
	Family	LANIIDAE	
<i>Lanius cristatus</i> Linnaeus	Brown Shrike	M/Obs.	—
<i>Lanius schach tricolor</i> (Hodgson)	Blackheaded Shrike	R/Obs.	—
	Family	MUSCICAPIDAE	
<i>Timalia pileata</i> Horsfield	Redcapped Babbler	R/Obs.	Sch IV.
<i>Turdoides striatus</i> (Dumont)	Jungle Babbler	R/Obs.	Sch IV.
<i>Turdoides caudatus</i> (Dumont)	Common Babbler	R/Obs.	Sch IV.
<i>Turdoides earlei</i> (Blyth)	Striated Babbler	R	Sch IV.

<i>Scientific name</i>	<i>Common name</i>	<i>Remarks</i>	<i>Status</i>
<i>Muscicapa thalassina</i> Swainson	Verditer Flycatcher	M/Obs.	Sch IV.
<i>Muscicapa parva</i> Bechstein	Redbreasted Flycatcher	M/Obs.	Sch IV.
<i>Rhipidura albicollis</i> (Vieillot)	Whitethroated Fantail Flycatcher	R/Obs.	Sch IV.
<i>Terpsiphone paradisi</i> (Linnaeus)	Paradise Flycatcher	IM/Obs.	Sch IV.
<i>Hypothymis azurea</i> (Boddaert)	Blacknaped Flycatcher	R/Obs.	Sch IV.
<i>Pachycephala grisola</i> (Blyth)	Grey Thickhead	R.	Sch IV.
<i>Megalurus palustris</i> Horsfield	Striated Marsh Warbler	R/Obs.	—
<i>Locustella certhiola</i> Pallas	Pallas's Grasshopper Warbler	M.	—
<i>Acrocephalus orientalis</i> (Temminck & Schlegel)	Eastern Great Reed Warbler	M/Obs.	—
<i>Acrocephalus stentoreus</i> (Hemprich & Ehrenberg)	Indian Great Reed Warbler	M/Obs.	—
<i>Acrocephalus bistrigiceps</i> Swinhoe	Black-browed Reed Warbler	M.	—
<i>Acrocephalus dumetorum</i> Blyth	Blyth's Reed Warbler	M.	—
<i>Acrocephalus agricola</i> (Jerdon)	Paddyfield Warbler	M/Obs.	—
<i>Phylloscopus collybita</i> (Vieillot)	Chiffchaff	M/Obs.	—
<i>Phylloscopus fulgiventis</i> (Hodgson)	Smoky Willow Warbler	M.	—
<i>Phylloscopus fuscatus</i> (Blyth)	Dusky Leaf Warbler	M/Obs.	—
<i>Phylloscopus inornatus</i> (Blyth)	Yellowbrowed Leaf Warbler	M/Obs.	—
<i>Phylloscopus magnirostris</i> Blyth	Large billed Leaf Warbler	M.	—
<i>Phylloscopus trochiloides</i> (Sundevall)	Dull Green Warbler	M/Obs.	—
<i>Orthotomus sutorius</i> (Pennant)	Tailor Bird	R/Obs.	—
<i>Prinia flaviventris</i> (Delessert)	Yellowbellied Wren Warbler	R.	—

<i>Scientific name</i>	<i>Common name</i>	<i>Remarks</i>	<i>Status</i>
<i>Prinia subflava inornata</i> Sykes	Plain Longtailed Warbler	R/Obs.	—
<i>Cisticola juncidis</i> (Rafinesque)	Streaked Fantail Warbler	R/Obs.	—
<i>Bradypterus thoracicus</i> (Blyth)	Spotted Bush Warbler	M.	—
<i>Erithacus calliope</i> (Pallas)	Ruby Throat	M./Obs.	—
<i>Erithacus svecicus</i> (Linnaeus)	Blue Throat	M./Obs.	—
<i>Copsychus saularis</i> (Linnaeus)	Magpie Robin	R/Obs.	—
<i>Copsychus malabaricus</i> (Scopoli)	Shama	R.	—
<i>Saxicola torquata</i> (Linnaeus)	Collared Bush Chat	M/Obs.	—
<i>Saxicola caprata</i> (Linnaeus)	Pied Bush Chat		
<i>Zoothera citrina</i> (Latham)	Orangeheaded Ground Thrush	R/Obs.	Sch IV.
<i>Zoothera dauma</i> (Latham)	Shortbilled Mountain Thrush	M/Obs.	Sch IV.
<i>Turdus unicolor</i> Tickell	Tickel's Thrush	M/Obs.	Sch IV.
	Family PARIDAE		
<i>Parus major</i> Linnaeus	Grey Tit	R/Obs.	Sch IV.
	Family SITTIDAE		
<i>Sitta castanea</i> Lesson	Chestnutbilled Nuthatch	R.	—
<i>Sitta frontalis</i> Swainson	Velvetfronted Nuthatch	R.	—
	Family MOTTACILLIDAE		
<i>Anthus hodgsoni</i> Richmond	Indian Treepipit	M/Obs.	Sch IV.
<i>Anthus trivialis</i> (Linnaeus)	Tree Pipit	M.	Sch IV.
<i>Anthus novaeseelandiae</i> Gmelin	Indian Paddy field Pipit	R/Obs.	Sch IV.
<i>Motacilla indica</i> Gmelin	Forest Wagtail	M/Obs & Coll.	—
<i>Motacilla flava</i> Linnaeus	Yellow-Wagtail	M/Obs.	—
<i>Motacilla alba</i> Linnaeus	Pied Wagtail	M/Obs.	—
<i>Motacilla cinereu</i> Tunstall	Grey Wagtail	M/Obs.	—

<i>Scientific name</i>	<i>Common name</i>	<i>Remarks</i>	<i>Status</i>
<i>Motacilla madraspatensis</i> Gmelin	Large Pied Wagtail	R/Obs.	
	Family NECTARINIDAE		
<i>Nectarinia asiatica</i>	Purple Sunbird	R/Obs.	Sch IV.
	Family DICAEDAE		
<i>Dicaeum erythrorhynchos</i> (Latham)	Tickell's Flowerpecker	R/Obs.	Sch IV.
<i>Dicaeum ignipectus</i> (Blyth)	Firebreasted Flower-pecker	R/Obs.	Sch IV.
<i>Dicaeum agile</i> (Tickell)	Thickbilled Flower-pecker	R/Obs.	Sch IV.
	Family ZOSTEROPIDAE		
<i>Zosterops palpebrosa</i> (Temminck)	White-eye	R.	Sch IV.
	Family PLOCEIDAE		
<i>Ploceus philippinus</i> (Linnaeus)	Baya	R/Obs & Coll.	Sch IV.
<i>Ploceus manyar</i> (Horsfield)	Streaked Weaver Bird	R/Obs.	Sch IV.
<i>Ploceus benghalensis</i> (Linnaeus)	Black throated Weaver Bird	R.	Sch IV.
<i>Passer domesticus</i> (Linnaeus)	House Sparrow	R/Obs.	—
<i>Estrilda amandava</i> (Linnaeus)	Red Munia	R.	Sch IV.
<i>Lonchura malacca</i> (Linnaeus)	Blackheaded Munia	R.	Sch IV.
<i>Lonchura malabarica</i> (Linnaeus)	White throated Munia	R.	Sch IV.
	Family EMBERIZIDAE		
<i>Emberiza aureola</i> Pallas	Yellowbreasted Bunting	M.	Sch IV.
	Family FRINZILLIDAE		
<i>Carpodacus erythrinus</i> (Pallas)	Rosefinch	M.	Sch IV.
	Family STURNIDAE		
<i>Sturnus malabaricus</i> (Gmelin)	Greyheaded Myna	R./Obs.	Sch IV.
<i>Sturnus contra</i> (Linnaeus)	Pied Myna	R./Obs.	Sch IV.

<i>Scientific name</i>	<i>Common name</i>	<i>Remarks</i>	<i>Status</i>
<i>Sturnus pagodarum</i> (Gmelin)	Brahminy Myna	R./Obs.	Sch IV.
<i>Acridotheres tristis</i> (Linnaeus)	Common Myna	R./Obs.	Sch IV.
<i>Acridotheres fuscus</i> (Wagler)	Jungle Myna	R./Obs.	Sch IV.
<i>Acridotheres ginginianus</i> (Latham)	Bank Myna	R./Obs.	Sch IV.
	Family	ORIOLIDAE	
<i>Oriolus oriolus</i> (Linnaeus)	Golden Oriole	M./Obs.	Sch IV.
<i>Oriolus xanthornus</i> (Linnaeus)	Blackheaded Oriole	R./Obs.	Sch IV.
	Family	DICRURIDAE	
<i>Dicrurus paradiseus</i> (Linnaeus)	Greater Racket-tail Drongo	R.	Sch IV.
<i>Dicrurus remifer</i> (Temminck)	Lesser Racket tail Drongo	R.	Sch IV.
<i>Dicrurus hottentottus</i> (Linnaeus)	Haircrested Drongo	R./Obs.	Sch IV.
<i>Dicrurus aeneus</i> Vieillot	Bronze Drongo	R. Obs & Coll.	Sch IV.
<i>Dicrurus leucophaeus</i> Vieillot	Ashy Drongo	M./Obs.	Sch IV.
<i>Dicrurus adsimilis</i> (Bechstein)	Black Drongo	R./Obs.	Sch IV.
	Family	ARTAMIDAE	
<i>Artamus fuscus</i> Vieillot	Ashy Swallow Shrike	R./Obs.	—
	Family	CORVIDAE	
<i>Dendrocitta vagabunda</i> (Latham)	Indian Tree Pie	R./Obs.	Sch IV.
<i>Corvus splendens</i> Vieillot	House Crow	R./Obs.	Sch V.
<i>Corvus macrorhynchos</i> Wagler	Jungle Crow	R. Obs.	—
	Class	REPTILIA	
	Order	SQUAMATA	
	Suborder	LACERTILIA	

	Family	GEKKONIDAE	
<i>Scientific name</i>			<i>Status</i>
<i>Hemidactylus brooki</i> Gray			—
<i>Hemidactylus leschenaulti</i> Dumeril & Bibron			—
	Family	SCINCIDAE	
<i>Mabuya macularia</i> (Blyth)			—
<i>Mabuya multifasciata</i> (Kuhl)			—
	Family	VARANIDAE	
<i>Varanus salvator</i> (Laurenti)			Sch I.
<i>Varanus bengalensis</i> (Daudin)			Sch I.
	Suborder	OPHIDEA	
	Family	COLUBRIDAE	
<i>Ahaetulla nasutus</i> (Lacepede)			—
<i>Cerberus rhynchops</i> Schneider			Sch II.
	Family	HYDROPHIIDAE	
<i>Enhydrina schistosa</i> Daudin			
<i>Hydrophis nigrocinctus</i> Daudin			
	Order	CHELONIA	
	Family	EMYDIDAE	
<i>Batgur baska</i> Gravy			—
<i>Kachuga tecta</i> Tent bridge			Sch I.
	Family	CHELONIDAE	
<i>Lepidochelys olivacea</i> (Eschscholtz)			Sch I.
	Family	TRIONYCHIDAE	
<i>Trionyx gangeticus</i> Cuvier			Sch I.

<i>Trionyx hurum</i> Gray		Sch I.
<i>Lissemys punctata</i> (Bonnaterre)		Sch I.
	Order	CROCODILIA
<i>Crocodylus porosus</i> Schneider		Sch I.
	Class	AMPHIBIA
	Order	ANURA
	Family	BUFONIDAE
<i>Bufo melanostictus</i> Schneider		
	Family	RANIDAE
<i>Rana tigerina</i> Daudin		Sch IV.
<i>Rana limnocharis</i> Wiegmann		Sch IV.
<i>Rana cyanophlyctis</i> Schneider		Sch IV.
<i>Rana hexadactyla</i> Lesson		Sch IV.
	Family	RHACOPHORIDAE
<i>Rhacophorus maculatus</i> (Gray)		—
	Family	MICROHYLIDAE
<i>Microhyla ornata</i> Dumeril & Bibron		—
		PISCES
	Class	TELEOSTEI
	Order	LAMNIFORMES
	Family	CARCHARHINIDAE
<i>Lamiopsis temmincki</i> (Muller & Henle)		
<i>Scoliodon laticaudus</i> (Muller & Henle)		
	Family	SPHIRNIDAE
<i>Sphyrna blochii</i> (Cuvier)		
	Order	RAJIFORMES
	Family	RHINOBATIDAE
<i>Rhinobatos obtusus</i> (Muller & Henle)		

Family DASYATIDAE

*Dasyatis walga* (Muller & Henle)

Order CLUPEIFORMES

Family CLUPEIDAE

*Anodontostoma chacunda* (Hamilton-Buchanan)

*Hilsa (Tenuالosa) ilisha* (Hamilton-Buchanan)

*Hilsa (Tenuالosa) toli* (Valenciennes)

*Opisthopterus tardoore* (Cuvier)

*Pellona ditchela* Valenciennes

*Ilisha elongata* (Bennett)

Family ENGRAULIDAE

*Coilia dussumieri* Valenciennes

*Coilia ramcarati* (Hamilton)

*Coilia borneensis* (Hamilton)

*Setipinna phasa* (Hamilton)

*Setipinna taty* (Valenciennes)

*Thryssa malabarica* (Bloch)

*Stolephorus indicus* (Van Hasselt)

Family CHIROCENRIDAE

*Chirocentrus* sp.

Family PRISTIGASTERIDAE

*Raconda russeliana* Gray

Order ANGUILLIFORMES

Family MURAENIDAE

*Siderea picta* (Ahi)

*Thyrsoidea macrura* (Bleeker)

Family MURAENESOCIDAE

*Muraenesex cinereus* (Forsskal)

	Family	ANGUILLIDAE
<i>Anguilla bengalensis</i> (Gray)		
	Order	SILURIFORMES
	Family	BAGRIDAE
<i>Mystus qulio</i> (Hamilton - Buchanan)		
	Family	ARIIDAE
<i>Arius caelatus</i> Valenciennes		
<i>Arius jella</i> Day		
<i>Arius sona</i> (Hamilton Buchanan)		
<i>Osteogeneiosus militaris</i> (Linnaeus)		
	Family	PANGASIIDAE
<i>Pangasius pangasius</i> (Hamilton Buchanan)		
	Order	MYCTOPHIFORMES
	Family	HARPADONTIDAE
<i>Harpadon nehereus</i> (Hamilton)		
	Order	ATHERIFORMES
	Family	HEMIRAMPHIDAE
<i>Zenarchopterus ectuntio</i> (Hamilton),		
<i>Zenarchopterus dispar</i> (Valenciennes)		
	Family	BELONIDAE
<i>Strongylura strongylura</i> (Van Hasselt)		
	Order	SCORPAENIFORMES
	Family	PLATYCEPHALIDAE
<i>Platycephalus indicus</i> (Linnaeus)		
	Order	PERCIFORMES
	Family	SILLAGINIDAE
<i>Sillaginopsis panijus</i> (Hamilton)		

	Family	TRICHIURIDAE
<i>Lepturacanthus savala</i> (Cuvier)		
<i>Trichikurus lepturus</i> Linnaeus		
	Family	STROMATIDAE
<i>Pompus chinensis</i> (Euphrasen)		
	Family	POMADASYIDAE
<i>Pomadasys argenteus</i> (Forsskal)		
	Family	APOLECTIDAE
<i>Apolectus niger</i> (Bloch)		
	Family	KURTIDAE
<i>Kurtus indicus</i> Bloch		
	Family	SCOMBRIDAE
<i>Scomberomorus guttatus</i> (Bloch & Schneider)		
	Family	AMBASSIDAE
<i>Ambassis nalus</i> (Hamilton)		
<i>Chanda nama</i> (Hamilton)		
	Family	CENTROPOMIDAE
<i>Lates calcarifer</i> (Bloch)		
	Family	SERRANIDAE
<i>Epinephelus tauvina</i> (Forsskal)		
	Family	TERAPONIDAE
<i>Terapon jarbura</i> (Forsskal)		
	Family	LEIOGNATHIDAE
<i>Leiognathus brevisrostris</i> (Valenciennes)		
	Family	LUTJANIDAE
<i>Lutjanus johni</i> (Bloch)		

*Lutjanus malabaricus* (Bloch & Schneider)

*Lutjanus viagiensis* (Qasy & Gaimard)

Family GERREIDAE

*Gerreomorpha setifer* (Hamilton)

Family POMADASYIDAE

*Pomadasys nasta* (Bloch)

Family SPARIDAE

*Acanthopagrus latus* (Heuttuyn)

Family SCIAENIDAE

*Macrospinosa cuja* (Hamilton)

*Nibea soldado* (Lacepede)

*Otolithoides biauritus* (Cantor)

*Pama pama* (Hamilton)

*Protomibea discanthus* (Lacepede)

Family TOXOTIDAE

*Toxotes chatareus* (Hamilton)

Family SCATOPHAGIDAE

*Scatophagus argus* (Linnaeus)

Family MUGILIDAE

*Liza parsia* (Hamilton)

*Liza vaigiensis* (Quoy & Gaimard)

*Liza tade* (Forsskal)

*Rhinomugil corsula* (Hamilton)

*Valamugil seheli* (Forsskal)

Family SPHYRAENIDAE

*Sphyraena jello* Cuvier

Family POLYNEMIDAE

*Eleutheronema tetradactylum* (Shaw)

*Polydactylus indicus* (Swaw)

*Polynemus paradiseus* (Linnaeus)

Family GOBIIDAE

*Acentrogobius caninus* (Valenciennes)

*Acentrogobius viridipunctatus* (Valenciennes)

*Boleophthalmus boddarti* (Valenciennes)

*Butis melanostigma* (Bleeker)

*Glossogobius giuris* (Hamilton)

*Ophiocara aporos* (Bleeker)

*Scartelaos histophorus* (Valenciennes)

Order PLEURONECTIFORMES

Family BOTHIDAE

*Pseudorhombus arsius* (Hamilton)

Family CYNOGLOSSIDAE

*Cynoglossus lingua* Hamilton

*Cynoglossus macrostomus* Norman

Order TETRAODONTIFORMES

Family TETRAODONTIDAE

*Tetraodon nigropunctatus* Bloch

*Chelonodon patoca* (Hamilton)

*Sphooroides sceleratus* (Gmelin)

Phylum HEMICHORDATA

Class ENTEROPNEUSTA

Family HARRIMANIIDAE

*Saccoglossus* sp.

Phylum CHAETOGNATHA  
 Class SAGITTOIDEA  
 Order APHRAGMOPHORA  
 Family SAGITTIDAE

*Sagitta pulchra*

*Sagitta bipunctata*

*Sagitta* sp.

Phylum MOLLUSCA  
 Class GASTROPODA  
 Family NERITIDAE

*Nerita articulata* Gould

*Neritina (Dostia) violacea* Gmelin

*N. smithii* Wood

*Pseudonerita sulculosa* Martens

Family LITTORINIDAE

*Littorina (Littorinopsis) melanostoma* Gray

*L. (Littorinopsis) scarba scarba* Linnaeus

*L. (Littoraria) undulata* Gray

Family ASSIMINEIDAE

*Assiminea beddomeana* Nevill

*A. brevicula* (Pfeiffer)

*A. francosiae* (Wood)

Family STENOTHYRIDAE

*Stenothyra deltae* Benson

Family PILIDAE

*Pila globosa* (Swinson)

Family POTAMIDIDAE

*Corithidea obtusa* Lamarck

*C. (Corithidopsis) cingulata* (Gmelin)

*Telescopium (Telescopium) telescopium* Linnaeus

Family ATYIDAE

*Haminea crocata* Pease

Family ELLOBIIDAE

*Auricula gangetica* Benson

*Auricularia translucens* Annandale & Prashad

*Ellobium auris-judae* (Linnaeus)

*E. gangetica* Benson

*Pythia plicata* Ferrussac

Family ONCHIDIIDAE

*Onchidium tigrinum* Stoliczka

*O. tenerum* Stoliczka

Family EPITONIDAE

*Acrilla acuminata* (Sowerby)

Family NATICIDAE

*Natica trigrina* (Roding)

*N. marochlensis* (Gmelin)

Family CYNATIDAE

*Cyrineum natator* (Roding)

Family THAISIDAE

*Cyrria cornifera* (Lam.)

Family NASSARIDAE

*Nassarius stolatus* (Gmelin)

*N. foveolatus* Dunker

*N. nodifera* Powis

Family OLIVIDAE

*Ancilla amola* Gmelin

	Family	TEREBRIDAE
<i>Terebra duplicata</i> Linnaeus		
	Family	AMBHIBOLIDAE
<i>Salinator</i> sp.		
	Family	CASSIDIDAE
<i>Phalium</i> sp.		
	Family	COLLUMBOLLIDAE
<i>Pyrene</i> sp.		
	Family	MOLONGINIDAE
<i>Semifusus (Semifusus) pugilina</i> (Born)		
	Class	BIVALVIA
	Family	MYTILIDAE
<i>Modiolus undulata</i> (Dunker)		
	Family	SOLENIIDAE
<i>Solen kemp</i> Preston		
	Family	CULTELLIDAE
<i>Siliqua albida</i> Dunker		
<i>Tanysiphon rivaes</i> Benson		
	Family	TELLINIDAE
<i>Tellina (Pharaonella) iridescens</i> (Benson)		
<i>Nacoma birmnica</i> (philippi)		
<i>Strigilla (Aeretica) splendida</i> (Anton.)		
	Family	SEMELIDAE
<i>Thoro opalina</i> (Hinds.)		
	Family	VENERIDAE
<i>Dosinia excisa</i> Schroter		
<i>Meretrix meretrix</i> (Linnaeus)		

*Pophia malabarica* Schrita

Family ARCIDAE

*Anadara granosa* (Linnaeus)

Family OSTREIDAE

*Crossostrea gryphoides* (Schlothiens)

Family MACTRIDAE

*Mactra (Coclomactra) turgida* Gmelin

*M. luzonica* Deshayes

*M. mera* Deshayes

*M. violacea* Chemnitz

Family GARIIDAE

*Gari acuminata* (Phillippi)

Family GLAUCOMYIDAE

*Glaucomeaculpta* (Sowerby)

Family DONACIDAE

*Dona incarimatus* Gmelin

Family PHOLADIDAE

*Barnea candida* (Linnaeus)

Family THREDINIDAE

*Bankia rochil* Moll.

Family PSAMMOBIIDAE

*Sanguinolaria (Soletellina) diplos* (Linnaeus)

Family TRAPEZIIDAE

*Trapezium vellicatum* Reeve

*Geloina erosa* Solander

Family TEREDINIDAE

*Kuphus mannii* Wright

Class SCAPHOPODA

	Family	DENTALIIDAE
<i>Dentalium octangulatum</i> Donovan		
	Class	INSECTA
	Order	COLLEMBOLA
<i>Entomobrya</i> sp.		
<i>Cyphodorus</i> sp.		
<i>Lepidocyrtus</i> sp.		
	Order	THYSANURA
<i>Ctenolepisma longicordata</i>		
<i>Ctenolepisma</i> sp.		
	Order	ODONATA
	Family	COENAGRIONIDAE
<i>Ischnura senegalensis</i> (Rambur)		
	Order	ORTHOPTERA
	Family	ACRIDIDAE
<i>Acrida exaltata</i> (Walker)		
<i>Aiolopus thalassinus tamulus</i> (Fabricius)		
<i>Leva indica</i> (Boliver)		
<i>Oxya hyla hyla</i> (Serville)		
<i>Spathosternum prasiniferum prasiniferum</i> (Walker)		
	Family	PYRGOMORPHIDAE
<i>Atractomorpha crenulata</i> (Fabricius)		
<i>Teleogryllus</i> sp.		
	Family	TETTIGONIIDAE
<i>Elimaea securigera</i> Brun.		
<i>Holochlora indica</i> Kirby		
<i>Sathrophyllia rugosa</i> Linn.		
	Order	DICTYOPTERA

	Family	BLATTELLIDAE
<i>Blattella humbertiana</i> (Sauss.)		
<i>Blattella germanica</i> (L.)		
	Order	ISOPTERA
	Family	RHINOTERMITIDAE
<i>Coptotermes heimi</i> (Wasmann)		
	Family	TERMITIDAE
<i>Microcerotermes cameroni</i> Snyder		
	Order	HEMIPTERA
	Family	PENTATOMIDAE
<i>Nezara viridula</i> Linnaeus		
<i>Zangis dorsalis</i> Dohrn		
	Family	LYGAEIDAE
<i>Pachygrontha bipunctata</i> Stal		
<i>Pachygrontha lewisi</i> Distant		
<i>Pachygrontha</i> sp.		
	Family	CAPSIDAE
<i>Gerastratus</i> sp.		
<i>Halobates</i> sp.		
<i>Metrocoris</i> sp.		
	Family	MEMBRACIDAE
<i>Gargara mixta</i> (Buckton)		
<i>Leptocentrus taurus</i> (Fabricius)		
<i>Otinotus oneratus</i> (Walk.)		
	Order	THYSANOPTERA
	Family	THRIPIDAE

*Retithrips syriacus* (Mayet)

*Selenothrips rubrocinetus* (Giard)

Order LEPIDOPTERA

Family PAPILIONIDÆ

*Pachliopta hector* (Linn.)

Family PIERIDAE

*Catopsilia crocale* (Cram.)

*Eurema brigitta* (Cram.)

Family DANAIDAE

*Danaus melanippus* (Cram.)

Family NOCTUIDAE

*Ophiusa coronata* (Fabr.)

*Polydesma inangulata* (Gwen.)

Family SPHINGIDAE

*Hippotion celerio* (Linn.)

Family LYMANTRIIDAE

*Euproctis* sp.

Order DIPTERA

Family STRATIOMYIDAE

*Oplodontha minuta* (Fabricius)

Family TABANIDAE

*Tabanus (Tabanus) striatus* (Fabricius)

Family ASILIDAE

*Philodicus javanus* (Wiedmann)

*Astochia* sp.

*P. femoralis* Ricardo

Family SYRPHIDAE

*Eristalis polychromata* Brunetti

	Family	CALLIPHORIDAE
<i>Chrysomya megacaphala</i> (Fabricius)		
	Family	SARCOPHAGIDAE
<i>Sarcophaga</i> sp.		
	Order	COLEOPTERA
	Family	CARABIDAE
<i>Harpalus</i> sp.		
<i>Pheropsophus cetorei</i> Diy		
<i>Slenolophus</i> sp.		
<i>Zuphium</i> sp.		
	Family	HALIPLIDAE
<i>Haliphus</i> sp.		
	Family	CICINDELIDAE
<i>Cicindela erudata</i> Wiedmann		
<i>C. biromasa</i> Fabricius		
<i>C. quadrilineata</i> Fabricius		
	Family	SILVANIDAE
<i>Oryzaephilus mercator</i> (Fauvel)		
	Family	BRUCHIDAE
<i>Callosobruchus</i> sp.		
	Family	INOPEPLIDAE
<i>Inopeplus</i> sp.		
	Family	CERAMBYCIDAE
<i>Xystrocera globosa</i> Olivier		
	Family	HYDROPHILIDAE
<i>Berosus</i> sp.		
<i>Enochrus</i> sp.		
<i>Sternolophus rufipes</i> (Fabricius)		

Family SCARABAEIDAE

*Adoretus lacustris* Arrow

*Adoretus* sp.

*Heliocopris gigas* (Linnaeus)

*Heterorychus lioderes* Retd.

*Onthophagus quadridentatus* (Fabricius)

Family HETEROCERIDAE

*Heterocerus* sp.

Family BOSTRYCHIDAE

*Dinoderus* sp.

*Heterobostrichus aequalis* Wat.

*Rhizopertha dominica* (Fabricius)

Family TENEBRIONIDAE

*Alphitobius diaperinus* (Panz.)

*Ceropria* sp.

Family CHRYSOMELIDAE

*Dicladispa armigera* (Olivier)

Family STAPHYLINIDAE

*Charichirus* sp.

Family CURCULIONIDAE

*Sitophilus* sp.

*Tanymecus albomarginatus* Gyl.

Class CRUSTACEA

Order DECAPODA

Family PENAEIDAE

*Metapenaeus lysianasa* (de-Man)

*Metapenaeus monoceros* (Fabricius)

*Penaeus monodon* Fabricius

*P. merguiensis* de-Man

*P. indicus* Milne-Edwards

Family PALAEMONIDAE

*Macrobrachium equidens* (Dana)

*M. rosenbergi* (de Man)

*Palaemon styliferus* Milne-Edwards

Family DIOGENIDAE

*Clibanarius padavensis* de-Man

Family COANOBITIDAE

*Coenobita cavipes* Stimpson

Family OCYPODIDAE

*Ocypoda macrocera* Milne-Edwards

*Scopimera globosa* de Man

*Uca acuta* (Stimpson)

*Uca annulipes* Milne-Edwards

*Uca dussumieri* Milne-Edwards

*Uca triangularis* Nobili

Family GRAPSIDAE

*Metaplex crenulata* (Grestaecker)

*M. distincta* Edwards

*M. intermedia* de-Man

*M. dentipes* (Heller)

*Metopograpsus messor* (Forsk.)

*M. maculatus* Edwards

*Sesarma bidens* (de Man)

*S. impressa* Milne-Edwards

*S. taeniolatum* White

*Varuna litterata* (Fabricius)

	Family	PORTUNIDAE
<i>Charybdis merguensis</i> de Man		
<i>C. rostrata</i> Milne-Edwards		
<i>Portunus granulatus</i> (Edwards)		
<i>Scylla serrata</i> (Forsk.)		
<i>Thalamita integra</i> Dana		
	Family	LEUCOSIDAE
<i>Leucosia</i> sp.		
	Family	XANTHIDAE
<i>Eurycarcinus grandidieri</i> Milne-Edwards		
<i>Leptodius sanguineus</i> (Edwards)		
<i>Minippe hardwickii</i> (Gray)		
	Family	HYMENOSOMIDAE
<i>Elamina (Trigonoplax) unguiformis</i> De Man		
	Order	ISOPODA
	Family	ARMADILLIDAE
<i>Cubaris robusta</i> Collinge		
	Family	ONISCIDAE
<i>Alloniscus pigmentatus</i> Budde-Lund		
<i>Hypergnathus</i> sp.		
<i>Porcellio rathkei</i> Brandt		
	Family	LIGYDIDAE
<i>Ligia exotica</i> Roux		
	Class	ARACHNIDA
	Order	ARANEAE
	Family	ARANEIDAE
<i>Araneas</i> sp.		
<i>Neoscona mukerjei</i> Tikader		

*Neoscoma* sp.

*Gastracantha unquifera* Simon

*Argiope catonulata* (Dol.)

*Neoscoma rumpfi* (Thorell)

Family CLUBIONIDAE

*Cheiracanthium trivialis* (Thorell)

*Castianeria albopicta* (Grarely)

*Chiracanthium melanostoma* (Thorell)

*Clubiona filicata* Cambridge

Family HERSILIDAE

*Hersilia stevensi* Sinha

Family HETEROPODIDAE

*Olios punctipos* Simon

Family LYCOSIDAE

*Pardosa* sp.

*Lycosa poonaensis* Tikader & Malhotra

Family OXYOPIDAE

*Oxyopis* sp.

Family THOMISIDAE

*Thanatus lanceolatus* Tikader

*Tharpina* sp.

*Philodromas* sp.

*Thomisua* sp.

Family TETRAGNATHIDAE

*Tetragnatha andamanensis* Tikader

*Tetragnatha* sp.

Family SATRICIDAE

*Zygeballus* sp.

*Marpisca* sp.

*Phidippus pateli* Tikader

*Rhene decoratus* Tikader

*Phidippus* sp.

Family GNAPHASIDAE

*Gnaphosa* sp.

Family ULOBORIIDAE

*Uloborus* sp.

Family SPARASSIDAE

*Sparassus* sp.

Family AGELENIDAE

*Agelena* sp.

Family ERISIDAE

*Stegodyphus sarasinorum* Karsch

Phylum SIPUNCULIDA

Family PHASCOLOSOMATIDAE

*Phascolosoma arcuatum* (Gray)

Phylum ANNELIDA

Class OLIGOCHAETA

Family ACANTHODRILIDAE

*Pontodrilus bormudensis* Beddard

*Metaphire posthuma* (Vaillant)

Class POLYCHAETA

Family PHYLLODOCIDAE

*Phyllodoce castanea*

Family NEREIDAE

*Dendronereis aestuarina* Southern

*Namalycastis merankensis*

*Lycastonereis indica* Rao

*Perinereis nigropunctata* Horst

Family PILARGIDAE

*Talehsapia annandalei* Fauvel

Family EUNICIDAE

*Marphysa mossambica* (Peters)

Family LUMBRINERIDAE

*Lumbrineris polydesma* (Southern)

*Lumbrineris* sp.

Family GLYCERIDAE

*Glyvera tesellata*

Family SABELLIDAE

*Laonome indica* Southern

Phylum ASCHELMINTHES

Class NEMATODA

Order ASCARIDIDA

Family CUCULLANIDAE

*Cucullanus pangasius*

*Cucullanus* sp.

Order SPIRURIDA

Family GNATHOSTOMATIDAE

*Echinucephalus uncinatus*

Family PHYSALOPTERIDAE

*Heliconema heliconema*

Phylum CNIDARIA

class ANTHOZOA

Order ACTINIARIA

Family HALIACTIDAE

*Pelocoetes exul* (Annandale)

*Phytocoetes gangeticus* (Annandale)

*Phytocoeteopsis ramunnii* (Panikkar)

Family EDWARDSIIDAE

*Edwardsia jonesii* Sheshiya & Cuttress

Phylum SIPUNCULA

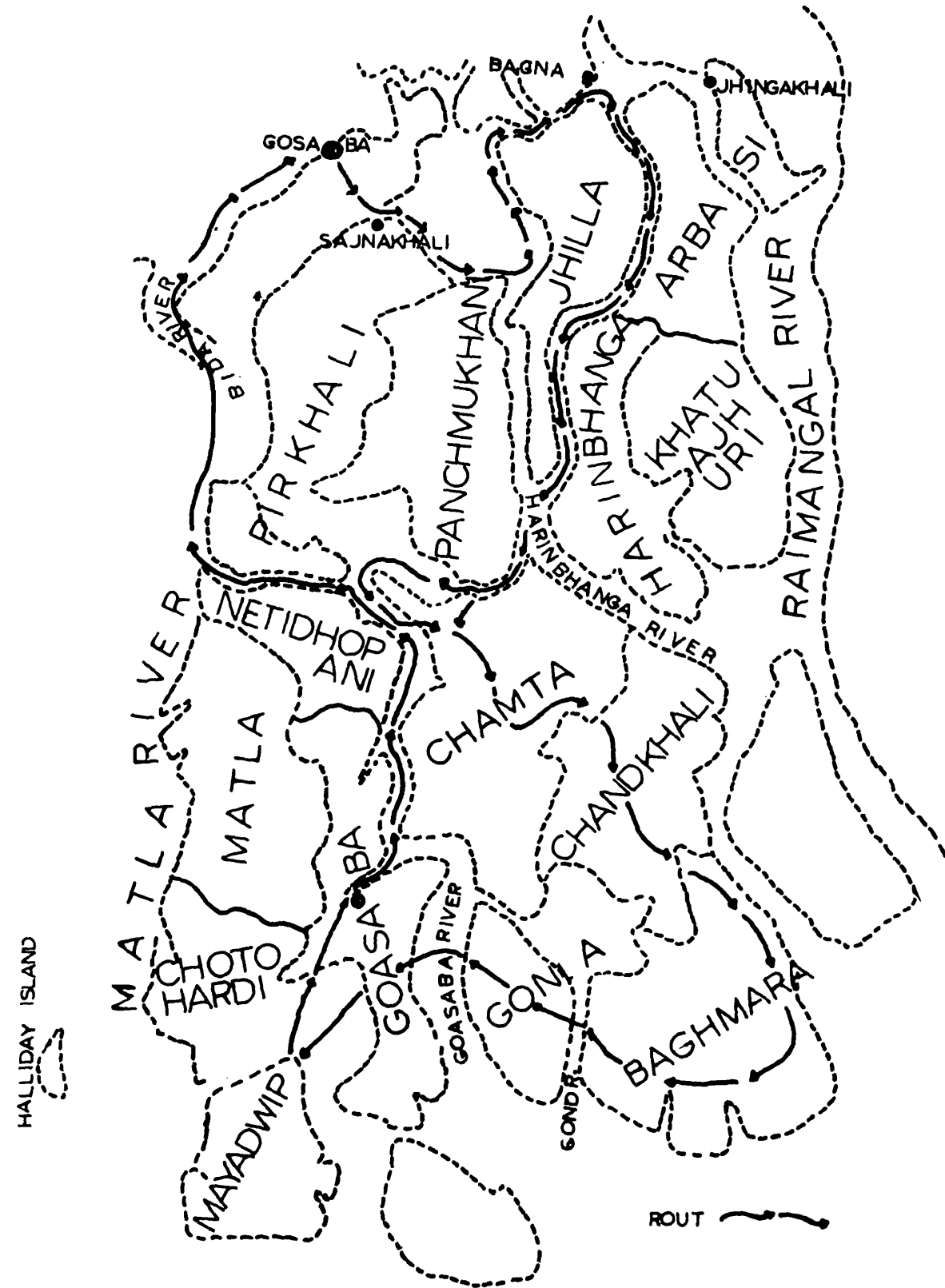
*Phascolosoma arcuatum* (Gray)

Phylum ECHIURIDA

*Anelassorhynchus branchiorhynchus* (Annandale & Kemp)

*A. dendrorhynchus* (Annandale & Kemp)

CANNING



SUNDARBANS

TIGER

RESERVE

## FAUNA OF MANAS TIGER RESERVE

Manas Tiger Reserve is located in the lap of the Bhutan Himalayas between the river Sankosh on the west and the river Pagladia towards the east, covering an area of 2840 sq. km. and a core area of 470 sq. km. This is a continuous belt of forests on the north of Brahmaputra valley, about 50 km wide at the broadest portion in the west and gradually narrowing in the east. It has a vast expanse of swamps and terai grasslands coupled with moist deciduous sal forest and wet semi-evergreen forest.

### PHYSIOGRAPHY

The Manas sanctuary may be divided into the hilly Bhabar tract of the north and the flat terai at the south.

The Bhabar tract has the undulating hillocks that merge into the Bhutan Himalayas. The soil in this tract is rocky comprising of sandstone, lime stone and shale.

The flat terai tract gradually slopes down from the Bhabar towards the south to merge with the Brahmaputra valley. The soil here mainly consists of alluvium.

Many rivers and riverulets, originating in the Bhabar, flow down the area. The river Manas roughly bisects the Tiger Reserve east-west and forms the principal drainage system. All the rivers and streams cause erosion in the Bhutan Himalayas particularly during the monsoon. In the process debris of enormous amount comprising boulders, gravels and other material are also carried down and deposited along the river courses. Sometimes the debris create obstacle to the flow of water thereby compelling the river to take a changed course causing massive floods in the area.

### CLIMATE

The climate is moist tropical, with mean summer temperature of 29° C and mean winter temperature nearly 15° C. Monsoon spreads from May to September and the mean annual rainfall is about 400 cm.

### FAUNAL ANALYSIS

#### (a) *Habitat-wise*

Around Bhuiyanpura, Bhatgali and Giati, extensive swamps offer excellent habitat for Great one-horned Rhinoceros, Buffalo, Swamp Deer, Wild Boar, etc, that are fond of wallowing.

In the grassland of Bansbari, Narayanguri, Badri Bill, Uchila, Rupabi, Makhi Baha and other such places, grazing animals prefer to forage from time to time. Most important of them are

the Pigmy Hog, Hispid Hare, Fishing Cat, Bengal Florican, etc.

In the semi-evergreen and sal forests in and around Sukanjani, Mothanguri, Garuchara, Doimari, Alabari, Bhalaguri and other such places forest dwelling species abound. Of them the Golden Langur, Capped Langur, Golden Cat, Clouded Leopard, Binturong, etc., are worth-mentioning.

In the deciduous forests and savannah woodlands that form the traditional zone between the grassland and the forests, a score of species find their abode. Of them the Leopard, Leopard Cat, Wild Dog, Gaur, etc., are important.

However, all the above-mentioned species except the pigmy Hog and the Hispid Hare, not necessarily confine themselves in those forest types alone but occupy other types of forests also. The tiger may occur in any of these habitats.

(b) *Group-wise*

Among 76 species of mammals recorded so far from this Reserve, 19 are placed in Schedule I of the Wildlife (Protection) Act. These are Capped Langur, Golden Langur, Slow Loris, Tiger, Leopard, Leopard Cat, Golden Cat, Fishing Cat, Clouded Leopard, Binturong, Elephant, Indian Pangolin, Gaur, Wild Buffalo, Swamp Deer, One-horned Rhinoceros, Hispid Hare, Pigmy Hog, and the Gangetic Dolphin.

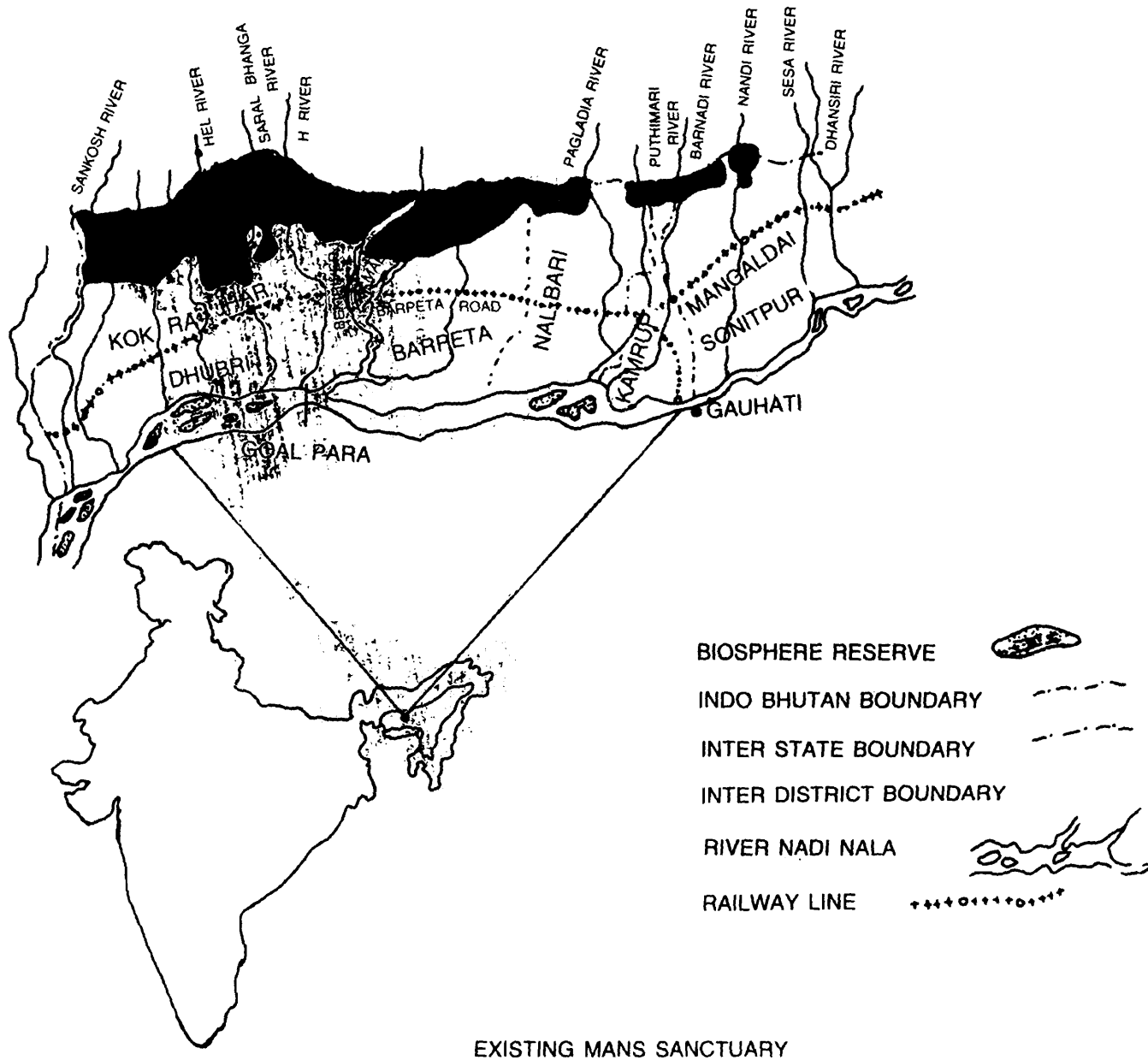
Some of the other species of mammals which occur in the Reserve are the Black Bear, Sloth Bear, Jackal, Himalayan Palm Civet, Large and Small Indian Civets, Crab-eating Mongoose, Smooth-coated Indian Otter, Rhesus Macaque, Assamese Macaque, Sambar, Hog Deer, Barking Deer, Wild Boar, Malayan Giant Squirrel, etc., and a number of species of rats, bats and shrews.

Of a total of about 300 species of birds recorded so far, 36 species are endangered, hence, placed in Schedule I. These are the Black-crested Baza, Lesser Falcon, Peregrine Falcon, Bengal Florican, Great Pied Hornbill, Indian Hornbill, Rufous-necked Hornbill, Wreathed Hornbill, Indian Peafowl, the Large Whistling Teal and hawks belonging to the family Accipitridae.

Some of the other species are Shag, Darter, Pelican, Adjutant Stork, Black Eagle, Fishing Eagle, Osprey, Shahi Falcon, Kalij Pheasant, Jungle Fowl, Swamp Partridge, Imperial Pigeon, Green Pigeon, Cuckoo Dove, barbets, kingfishers, woodpeckers and a host of passerine and non-passerine birds.

There are 42 species of reptiles distributed in 11 families reported from Manas. Of these, 30 species are of snakes, 9 of lizards, 2 of turtles and tortoises and one of Gharial. Three species, namely, *Python molurus*, *Varanus salvator* and *Gavialis gangeticus* belong to endangered category.

Six species of amphibians distributed into 5 families are recorded from this Reserve. In total, 54 species of fishes are recorded. Of these 12 species namely, *Barillius shacra*, *Barillius vagra*, *Chagunius chagunio*, *Crossocheilus latius*, *Garra gotyla*, *Labio pangusia*, *Puntius gelius*, *Puntius guganio*, *Semiplotus semiplotus*, *Olyra horae*, *Somileptis gongota* and *Psilorrhynchus sucatio* are considered to be rare.



Map of Manas Tiger Reserve

Among invertebrates, insect fauna is quite rich. It consists of 5 species of Odonata, 7 of Dermaptera, 5 of Isoptera, 23 of Hemiptera, 9 of Coleoptera, 6 of Diptera, 31 of Lepidoptera and 3 species of Hymenoptera.

*List of fauna occurring in Manas Tiger Reserve*

CLASS MAMMALIA

<i>Scientific Name</i>	<i>Common Name</i>	<i>Status</i>
Order	INSECTIVORA	
Family	SORICIDAE	
<i>Suncus murinus</i> (Linnaeus)	House Shrew	—
<i>Crocidura attenuata</i> Milne-Edwards	Grey Shrew	—
Order	SCANDENTIA	
Family	TUPAIIDAE	
<i>Tupaia glis</i> (Diard)	Malayan Tree Shrew	—
Order	CHIROPTERA	
Family	PTEROPODIDAE	
<i>Pteropus giganteus</i> (Brunnich)	Indian Flying Fox	Sch. V
<i>Rousettus leschenaulti</i> (Desmarest)	Fulvous Fruit Bat	Sch. V
<i>Cynopterus sphinx</i> (Vahl)	Short-nosed Fruit Bat	Sch.V
Family	MAGADERMATIDAE	
<i>Megaderma lyra</i> Geoffroy	Indian False Vampire	—
Family	RHINOLOPHIDAE	
<i>Rhinolophus affinis</i> Horsfield	Horsehoe Bat	—
<i>Rhinolophus pearsoni</i> Horsfield	Pearson's Horseshoe Bat	—
<i>Hipposideros lankadiva</i> Kelaart	Large Leaf-nosed Bat	—
<i>Hipposideros bicolor</i> (Temminck)	Bicoloured Leaf-nosed Bat	—
<i>Hipposideros armiger</i> (Hodgson)	Great Himalayan Leaf-nosed Bat	—
Family	VESPERTILIONIDAE	
<i>Pipistrellus coromandra</i> (Gray)	Indian Pipistrelle	—
<i>Pipistrellus mimus</i> Wroughton	Indian Pygmy Pipistrelle	—

<i>Scientific Name</i>	<i>Common Name</i>	<i>Status</i>
<i>Pipistrellus babu</i> Thomas	Babu's Pipistrelle	—
<i>Myotis mystacinus</i> (Kuhl)	Whiskered Bat	—
<i>Myotis siligorensis</i> (Horsfield)	Siliguri Bat	—
<i>Hesperoptenus tickelli</i> Blyth	Tickell's Bat	—
<i>Scotophilus kuhli</i> Leach	Lesser Yellow Bat	—
<i>Scotophilus heathi</i> (Horsfield)	Greater Yellow Bat	—
<i>Barbastella leucomelas</i> (Cretzschmar)	Eastern Barastella	—
<i>Harpiocephalus harpia</i> (Temminck)	Hairy-winged Bat	—
Order	PRIMATES	
Family	CERCOPITHECIDAE	
<i>Macaca mulatta</i> (Zimmermann)	Rhesus Macaque	Sch II
<i>Macaca assamensis</i> M'Clelland	Assamese Macaque	Sch II
<i>Presbytis pileatus</i> (Blyth)	Capped Langur	Sch I
<i>Presbytis geei</i> Khajuria	Golden Langur	Sch I
Order	PHOLIDOTA	
Family	MANIDAE	
<i>Manis pentadactyla</i> Linnaeus	Chinese Pangolin	Sch I
Order	CARNIVORA	
Family	CANIDAE	
<i>Canis aureus</i> Linnaeus	Jackal	Sch II
<i>Vulpes bengalensis</i> (Shaw)	Bengal Fox	Sch II
<i>Cuon alpinus</i> (Pallas)	Dhole	Sch II
Family	URSIDAE	
<i>Selenarctos thibetanus</i> (Cuvier)	Black Bear	Sch II
<i>Melursus ursinus</i> (Shaw)	Sloth Bear	Sch II
Family	MUSTELIDAE	
<i>Martes flavigula</i> (Boddaert)	Yellow-throated Marten	Sch II
<i>Melogale personata</i> Geoffroy	Burmese Ferret Badger	Sch II
<i>Arctonyx collaris</i> Cuvier	Hog-Badger	Sch I

<i>Scientific Name</i>	<i>Common Name</i>	<i>Status</i>
Family VIVERRIDAE		
<i>Viverra zibetha</i> Linnaeus	Large Indian Civet	Sch II
<i>Viverricula indica</i> (Desmarest)	Small Indian Civet	Sch II
<i>Paradoxurus hermaphorditus</i> (Pallas)	Common Plam Civet	Sch II
<i>Arctictis binturong</i> (Raffles)	Binturong	Sch I
<i>Herpestes auropunctatus</i> (Hodgson)	Small Indian Mongoose	Sch IV
<i>Herpestes edwardsi</i> (Geoffroy)	Indian Grey Mongoose	Sch IV
Family FELIDAE		
<i>Felis chaus</i> Guldenstaedt	Jungle Cat	Sch II
<i>Felis marmorata</i> Martin	Marbled Cat	Sch I
<i>Felis temmincki</i> Vigors & Horsfield	Golden Cat	Sch I
<i>Felis bengalensis</i> Kerr	Leopard Cat	Sch I
<i>Felis viverrina</i> Bennett	Fishing Cat	Sch I
<i>Neofelis nebulosa</i> (Griffith)	Clouded Leopard	Sch I
<i>Panthera pardus</i> (Linnaeus)	Leopard	Sch I
<i>Panthera tigris</i> (Linnaeus)	Tiger	Sch I
Order PROBOSCIDEA		
Family ELEPHANTIDAE		
<i>Elaphas maximus</i> Linnaeus	Indian Elephant	Sch I
Order PERISSODACTYLA		
Family RHINOCEROTIDAE		
<i>Rhinoceros unicolor</i> Linnaeus	Great One-hroned Rhinoceros	Sch I
Order ARTIODACTYLA		
Family SUIDAE		
<i>Sus scrofa</i> Linnaeus	Wild Boar	Sch III
<i>Sus salvanius</i> (Hodgson)	Pygmy Hog	Sch I
Family CERVIDAE		
<i>Muntiacus muntjak</i> (Zimmermann)	Barking Deer	Sch III

<i>Scientific Name</i>	<i>Common Name</i>	<i>Status</i>
<i>Axis procinus</i> (Zimmermann)	Hog Deer	Sch III
<i>Cervus unicolor</i> Kerr	Sambar	Sch III
<i>Cervus duvauceli</i> Cuvier	Swamp Deer	Sch I
Family	BOVIDAE	
<i>Bos gaurus</i> Smith	Gaur	Sch I
<i>Bubalus bubalis</i> (Linnaeus)	Water Buffalo	Sch I
Order	LAGOMORPHA	
Family	LEPORIDAE	
<i>Lepus nigricollis</i> Cuvier	Indian Hare	Sch IV
<i>Caprolagus hispidus</i> Pearson	Hispid Hare	Sch I
Order	RODENTIA	
Family	SCIURIDAE	
<i>Hylopetes alboniger</i> (Hodgson)	Particoloured Flying Squirrel	Sch II
<i>Funambulus pennanti</i> (Wroughton)	Five-striped Squirrel	Sch IV
<i>Callosciurus erythraeus</i> (Pallas)	Pallas' Squirrel	—
<i>Callosciurus pygerythrus</i> (Geoffroy)	Irrawaddy Squirrel	—
<i>Callosciurus macclellandi</i> (Horsfield)	Himalayan Striped Squirrel	—
<i>Ratufa bicolor</i> (Sparrmann)	Malayan Giant Squirrel	Sch II
Family	HYSTRICIDAE	
<i>Hystrix indica</i> Kerr	Indian Crested Porcupine	Sch IV
Family	RHIZOMYIDAE	
<i>Cannomys badius</i> (Hodgson)	Bay Bamboo Rat	—
Family	MURIDAE	
<i>Vandeleuria oleracea</i> (Bennett)	Indian Long-tailed Tree Mouse	—
<i>Rattus rattus</i> (Linnaeus)	House Rat	Sch.V
<i>Mus musculus</i> Linnaeus	House Mouse	Sch.V
<i>Bandicota bengalensis</i> (Gray)	Lesser Bandicoot Rat	—
<i>Bandicota indica</i> (Bechstein)	Large Bandicoot Rat	—
Order	CETACEA	
Family	PLATANISTIDAE	
<i>Platanista gangetica</i> (Roxburg)	Gangetic Dolphin	Sch I

<i>Scientific Name</i>	<i>Common Name</i>	<i>Status</i>
Class	AVES	
Order	PODICIPEDIFORMES	
Family	PODICIPEDIADE	
<i>Podiceps ruficollis</i> (Pallas)	Little Grebe	Sch IV
Order	PELICANIFORMES	
Family	PELECANIDAE	
<i>Pelecanus philippensis</i> Gmelin	Grey Pelican	Sch IV
Family	PHALACROCORACIDAE	
<i>Phalacrocorax carbo</i> (Linnaeus)	Large Cormorant	Sch IV
<i>Phalacrocorax fuscicollis</i> Stephens	Indian Shag	Sch IV
<i>Phalacrocorax niger</i> (Vieillot)	Little Cormorant	Sch IV
<i>Anhinga rufa</i> Daudin	Darter	Sch IV
Order	CICONIIFORMES	
Family	ARDEIDAE	
<i>Ardea insignis</i> Hume	Great Whitebellied Heron	Sch IV
<i>Ardea goliath</i> Cretzchmar	Giant Heron	Sch IV
<i>Ardea cinerea</i> Linnaeus	Grey Heron	Sch IV
<i>Ardea purpurea</i> Linnaeus	Purple Heron	Sch IV
<i>Ardea alba</i> Linnaeus	Little Green Heron	Sch IV
<i>Ardeola grayii</i> (Sykes)	Pond Heron	Sch IV
<i>Bubulcus ibis</i> (Linnaeus)	Cattle Egret	Sch IV
<i>Egretta intermedia</i> (Wagler)	Smaller Egret	Sch IV
<i>Egretta garzetta</i> (Linnaeus)	Night Heron	Sch IV
<i>Gorsachius melanolophus</i> (Raffles)	Tiger Bittern	Sch IV
<i>Ixobrychus cinnamomeus</i> (Gmelin)	Chestnut Bittern	Sch IV
<i>Ixobrychus sinensis</i> (Gmelin)	Yellow Bittern	Sch IV
<i>Ixobrychus flavicollis</i> (Latham)	Black Bittern	Sch IV

<i>Scientific Name</i>	<i>Common Name</i>	<i>Status</i>
Family CICONIIDAE		
<i>Mycteria leucocephala</i> (Pennant)	Painted Stork	Sch IV
<i>Anastomus oscitans</i> (Boddaert)	Openbilled Stork	Sch IV
<i>Ciconia episcopus</i> (Boddaert)	Whitenecked Stork	Sch IV
<i>Ciconia ciconia</i> (Linnaeus)	White Stork	Sch IV
<i>Ephippiorhynchus asiaticus</i> Latham	Blacknecked Stork	Sch IV
<i>Leptoptilos dubius</i> (Gmelin)	Adjutant	Sch IV
<i>Leptoptilos javanicus</i> (Horsfield)	Lesser Adjutant	Sch IV
Family THRESKIORNITHIDAE		
<i>Threskiornis melanocephala</i> (Latham)	White Ibis	Sch IV
<i>Pseudobis papillosa</i> (Temminck)	Black Ibis	Sch IV
<i>Plegadis falcinellus</i> (Linnaeus)	Glossy Ibis	Sch IV
<i>Platalea leucorodia</i> Linnaeus	Spoonbill	Sch I
Order ANSERIFORMES		
Family ANATIDAE		
<i>Branta ruficollis</i> (Pallas)	Siberian Redbreasted Goose	Sch IV
<i>Anser fabalis</i> (Latham)	Pinkfooted Goose	Sch IV
<i>Anser albifrons</i> (Scopoli)	Whitefronted Goose	Sch IV
<i>Anser erythropus</i> (Linnaeus)	Lesser Whitefronted Goose	Sch IV
<i>Anser anser</i> (Linnaeus)	Greylag Goose	Sch IV
<i>Anser indicus</i> (Latham)	Barheaded Goose	Sch IV
<i>Dendrocygna javanica</i> (Horsfield)	Lesser Whistling Teal	Sch IV
<i>Dendrocygna bicolor</i> (Vieillot)	Large Whistling Teal	Sch I
<i>Tadorna tadorna</i> (Linnaeus)	Common Shel Duck	Sch IV
<i>Tadorna ferruginea</i> (Pallas)	Brahmini Duck	Sch IV
<i>Anas acuta</i> Linnaeus	Pintail	Sch IV
<i>Anas crecca</i> Linnaeus	Common Teal	Sch IV
<i>Anas formosa</i> Georgi	Baikal Teal	Sch IV
<i>Anas poecilorhyncha</i> Forster	Spotbilled Duck	Sch IV
<i>Anas platyrhynchos</i> Linnaeus	Mallard	Sch IV
<i>Anas strepera</i> Linnaeus	Gadwal	Sch IV

<i>Scientific Name</i>	<i>Common Name</i>	<i>Status</i>
<i>Anas falcata</i> Georgi	Falcatad Duck	Sch IV
<i>Anas penelope</i> Linnaeus	Wigeon	Sch IV
<i>Anas querquedula</i> Linnaeus	Garganey	Sch IV
<i>Anas clypeata</i> Linnaeus	Shoveller	Sch IV
<i>Netta rufina</i> (Pallas)	Redcrested Pochard	Sch IV
<i>Aythya ferina</i> (Linnaeus)	Common Pochard	Sch IV
<i>Aythya baeri</i> (Radde)	Baer's Pochard	Sch IV
<i>Aythya fuligula</i> (Linnaeus)	Tufted Duck	Sch IV
<i>Aythya marila</i> (Linnaeus)	Scaup Duck	Sch IV
<i>Nettapus coromandelianus</i> (Gmelin)	Cotton Teal	Sch IV
<i>Sarkidiornis melanotos</i> (Pennant)	Comb Duck	Sch IV
<i>Bucephala clangula</i> (Linnaeus)	Goldeneye Duck	Sch IV
<i>Mergus merganser</i> Linnaeus	Common Marganser	Sch IV
Order	FALCONIFORMES	
Family	ACCIPITRIDAE	
<i>Elanus caeruleus</i> (Desfontaines)	Blackwinged Kite	Sch IV
<i>Aviceda jerdoni</i> (Blyth)	Blyth's Baza	Sch I
<i>Aviceda leuphotes</i> (Dumont)	Blackcrested Baza	Sch I
<i>Pernis ptilorhyncus</i> (Temminck)	Honey Buzzard	Sch I
<i>Haliastur indus</i> (Boddaert)	Brahminy Kite	Sch IV
<i>Accipiter badius</i> (Gmelin)	Shikra	Sch I
<i>Accipiter trivirgatus</i> (Temminck)	Crested Goshawk	Sch I
<i>Accipiter nisus</i> (Linnaeus)	Sparrow-Hawk	Sch I
<i>Accipiter virgatus</i> (Temminck)	Basra Sparrow-Hawk	Sch I
<i>Buteo rufinus</i> (Cretzschmar)	Longlegged Buzzard	Sch I
<i>Butaster teesa</i> (Franklin)	White-eyed Buzzard-Eagle	Sch I
<i>Spizaetus nipalensis</i> (Hodgson)	Hodgson's Hawk-Eagle	Sch I
<i>Spizaetus cirrhatu</i> s (Gmelin)	Changeable Hawk-Eagle	Sch I
<i>Hieraaetus fasciatus</i> (Vieillot)	Bonelli's Hawk-Eagle	Sch I
<i>Hieraaetus kienerii</i> (Geoffroy)	Rufousbellied Hawk-Eagle	Sch I

<i>Scientific Name</i>	<i>Common Name</i>	<i>Status</i>
<i>Aquila rapax</i> (Temminck)	Tawny Eagle	Sch I
<i>Aquila nipalensis</i> (Hodgson)	Steppe Eagle	Sch I
<i>Aquila clanga</i> Pallas	Greater Spotted Eagle	Sch I
<i>Aquila pomarina</i> Brehm	Lesser Spotted Eagle	Sch I
<i>Ictinaetus malayensis</i> (Temminck)	Black Eagle	Sch I
<i>Haliaeetus leucoryphus</i> (Pallas)	Pallas's Fishing Eagle	Sch I
<i>Ichthyophaga ichthyaetus</i> (Horsfield)	Greyheaded Fishing Eagle	Sch I
<i>Ichthyophaga nana</i> (Blyth)	Himalayan Fishing Eagle	Sch I
<i>Torgos calvus</i> (Scopoli)	Black Vulture	Sch IV
<i>Gyps fulvus</i> (Hablizl)	Griffon Vulture	Sch IV
<i>Gyps indicus</i> (Scopoli)	Longibelled Vulture	Sch IV
<i>Gyps bengalensis</i> (Gmelin)	White backed Vulture	Sch IV
<i>Circus cyaneus</i> (Linnaeus)	Hen Harrier	Sch I
<i>Circus macrourus</i> (Gmelin)	Pale Harrier	Sch I
<i>Circus pygarrowus</i> (Linnaeus)	Montagu's Harrier	Sch I
<i>Circus melanoleucos</i> (Pennant)	Pied Harrier	Sch I
<i>Circus aeruginosus</i> (Linnaeus)	Marsh Harrier	Sch I
<i>Circaetus gallicus</i> (Gmelin)	Short-toed Eagle	Sch I
<i>Spilornis cheela</i> (Latham)	Crested Serpent Eagle	Sch I
<i>Pandion haliaetus</i> (Linnaeus)	Osprey	Sch I

Family    FALCONIDAE

<i>Microhierax caerulescens</i> (Linnaeus)	Redbreasted Falcon	—
<i>Falco biarmicus</i> Temminck	Lagger Falcon	Sch I
<i>Falco peregrinus</i> Tunstall	Peregrine Falcon	Sch I
<i>Falco severus</i> Horsfield	Oriental Hobby	Sch IV
<i>Falco chicquera</i> Daudin	Redheaded Marlin	Sch I
<i>Falco vespertinus</i> Linnaeus	Redlegged Falcon	—
<i>Falco naumanni</i> Fleischer	Lesser Kestrel	—
<i>Falco tinnunculus</i> Linnaeus	Kestrel	—

<i>Scientific Name</i>	<i>Common Name</i>	<i>Status</i>
Order	GALLIFORMES	
Family	PHASIANIDAE	
<i>Francolinus francolinus</i> (Linnaeus)	Black Partridge	Sch. IV
<i>Francolinus gularis</i> (Temminck)	Swamp Partridge	Sch. IV
<i>Coturnix coturnix</i> (Linnaeus)	Common Quail	Sch. IV
<i>Coturnix coromandelica</i> (Gmelin)	Blackbreasted Quail	Sch. IV
<i>Coturnix chinensis</i> (Linnaeus)	Bluebreasted Quail	Sch. IV
<i>Pardicula manipurensis</i> Hume	Manipur Bush Quail	Sch. IV
<i>Arborophila atrogularis</i> (Blyth)	Whitecheeked Hill Partridge	Sch. IV
<i>Lophura leucomelana</i> (Latham)	Kalij Pheasant	Sch. IV
<i>Gallus gallus</i> (Linnaeus)	Red Junglefowl	Sch. IV
<i>Pavo cristatus</i> Linnaeus	Common Peafowl	Sch. I
Order	GRUIFORMES	
Family	TURNICIDAE	
<i>Turnix sylvatica</i> (Desfontaines)	Little Bustard-Quail	Sch. IV
<i>Turnix tanki</i> Blyth	Button Quail	Sch. IV
<i>Turnix suscitator</i> (Gmelin)	Common Bustard-Quail	Sch. IV
Family	GRUIDAE	
<i>Grus grus</i> (Linnaeus)	Common Crane	Sch. IV
<i>Anthropoides virgo</i> (Linnaeus)	Domoiselle Crane	Sch. IV
Family	RALLIDAE	
<i>Rallus aquaticus</i> Linnaeus	Water Rail	Sch. IV
<i>Rallus striatus</i> Linnaeus	Bluebreasted Banded Rail	Sch. IV
<i>Rallina eurizonoides</i> (Lafrenaye).	Banded Crake	—
<i>Porzana parva</i> (Scopoli)	Little Crake	—
<i>Porzana pusilla</i> (Pallas)	Baillon's Crake	—
<i>Porzana porzana</i> (Linnaeus)	Spotted Crake	—
<i>Amaurornis fuscus</i> (Linnaeus)	Ruddy Crake	Sch. IV
<i>Amourornis bicolor</i> (Walden)	Elwes's Crake	Sch. IV
<i>Amourornis akool</i> (Sykes)	Brown Crake	Sch. IV

<i>Scientific Name</i>	<i>Common Name</i>	<i>Status</i>
<i>Amouornis phoenicurus</i> (Pennant)	Whitbreasted Waterhen	—
<i>Gallicrex cinerea</i> (Gmelin)	Water Cock	—
<i>Galinula chloropus</i> (Linnaeus)	Moorhen	—
<i>Prophyrio porphyrio</i> (Linnaeus)	Purple Moorhen	—
<i>Fulica atra</i> Linnaeus	Coot	Sch. IV
	Family OTIDIDAE	
<i>Eupodotis bengalensis</i> (Gmelin)	Bengal Florican	Sch. I
	Family JACANIDAE	
<i>Hydrophasianus chirurgus</i> (Scopoli)	Pheasant-tailed Jacana	Sch. IV
<i>Metopidius indicus</i> (Latham)	Bronzewinged Jacana	Sch. IV
	Family CHARADRIIDAE	
<i>Vanellus cinereus</i> (Blyth)	Greyheaded Lapwing	—
<i>Vanellus indicus</i> (Boddaert)	Redwattle Lapwing	—
<i>Vanellus spinosus</i> (Linnaeus)	Spurwinged Lapwing	—
<i>Pluvialis dominica</i> (Muller)	Eastern Golden Plover	Sch. IV
<i>Charadrius leschenaultii</i> Lesson	Large Sand Plover	Sch. IV
<i>Charadrius dubius</i> Scopoli	Little Ringed Plover	Sch. IV
<i>Charadrius placidus</i> Gray	Longbilled Ringed Plover	Sch. IV
<i>Charadrius mongolus</i> Pallas	Lesser Sand Plover	Sch. IV
<i>Limosa limosa</i> (Linnaeus)	Blacktailed Godwit	Sch. IV
<i>Tringa totanus</i> (Linnaeus)	Common Redshank	Sch. IV
<i>Tringa stagnatilis</i> (Bechstein)	Marsh Sandpiper	Sch. IV
<i>Tringa nebularia</i> (Gunnerus)	Greenshank	Sch. IV
<i>Tringa ochropus</i> Linnaeus	Green Sandpiper	Sch. IV
<i>Tringa glareola</i> Linnaeus	Wood Sandpiper	Sch. IV
<i>Tringa hypoleucos</i> Linnaeus	Common Sandpiper	Sch. IV
<i>Capella nemoricola</i> (Hodgson)	Wood Snipe	Sch. IV
<i>Capella stenura</i> (Bonaparte)	Pintail Snipe	Sch. IV
<i>Capella megala</i> (Swinhoe)	Swinhoe's Snipe	Sch. IV

<i>Capella gallinago</i> (Linnaeus)		Fantail Snipe	Sch. IV
<i>Capella minima</i> (Brunnich)		Jack Snipe	Sch. IV
<i>Calidris ruficollis</i> (Pallas)		Eastern Little Stint	—
<i>Calidris minutus</i> (Leisler)		Little Stint	—
<i>Calidris temminckii</i> (leisler)		Temminck's Stint	—
<i>Calidris subminutus</i> (Middendorff)		Longtoed Stint	—
<i>Philomachus pugnax</i> (Linnaeus)		Ruff and Reeve	—
	Family	ROSTRATULIDAE	
<i>Rostratula benghalensis</i> Linnaeus		Painted Snipe	Sch. IV
	Family	RECURVIROSTRIDAE	
<i>Himantopus himantopus</i> (Linnaeus)		Blackwinged Stilt	Sch. IV
<i>Recurvirostra avosetta</i> Linnaeus		Avocet	Sch. IV
	Family	IBIDORHYNCHIDAE	
<i>Ibidorhyncha struthersii</i> Vigors		Ibisbill	Sch. IV
	Family	GLAREOLIDAE	
<i>Glareola pratincola</i> (Linnaeus)		Collared Pratincole	Sch. IV
	Family	LARIDAE	
<i>Larus brunnicephalus</i> Jerdon		Brownheaded Gull	Sch. IV
<i>Larus ridibundus</i> Linnaeus		Blackheaded Gull	Sch. IV
<i>Sterna albifrons</i> Pallas		Little Tern	Sch. IV
	Order	COLUMBIFORMES	
	Family	COLUMBIDAE	
<i>Treron apicauda</i> Blyth		Pintailed Green Pigeon	Sch. IV
<i>Treron sphenura</i> (Vigors)		Wedgetailed Green Pigeon	Sch. IV
<i>Treron curvirostra</i> (Gmelin)		Thickbilled Green Pigeon	Sch. IV
<i>Treron pompadora</i> (Gmelin)		Pompadour Green Pigeon	Sch. IV
<i>Treron bicincta</i> (Jerdon)		Orangebreasted Green Pigeon	Sch. IV
<i>Ducula aenea</i> (Linnaeus)		Green Imperial Pigeon	Sch. IV
<i>Ducula badia</i> (Raffles)		Imperial Pigeon	Sch. IV
<i>Macropygia unchal</i> (Wagler)		Bartailed Cuckoo-Dove	Sch. IV

<i>Scientific Name</i>	<i>Common Name</i>	<i>Status</i>
<i>Streptopelia orientalis</i> (Latham)	Rufous Turtle Dove	Sch. IV
<i>Streptopelia decaocto</i> (Grivaldszky)	Collard Turtle Dove	Sch. IV
<i>Streptopelia tranquebarica</i> (Hermann)	Red Turtle Dove	Sch. IV
<i>Streptopelia chinensis</i> (Scopoli)	Spotted Dove	Sch. IV
<i>Chalcophaps indica</i> (Linnaeus)	Emerald Dove	Sch. IV

## Order PSITTACIFORMES

## Family PSITTACIDAE

<i>Psittacula eupatria</i> (Linnaeus)	Large Indian Parakeet	Sch. IV
<i>Psittacula krameri</i> (Scopoli)	Roseringed Parakeet	Sch. IV
<i>Psittacula alexandri</i> (Linnaeus)	Redbreasted Parakeet	Sch. IV
<i>Psittacula cyanocephala</i> (Linnaeus)	Blossomheaded Parakeet	Sch. IV
<i>Psittacula himalayana</i> (Lesson)	Slatyheaded Parakeet	Sch. IV
<i>Loriculus varnalis</i> (Sparman)	Indian Lorikeet	Sch. IV

## Order CUCULIFORMES

## Family CUCULIDAE

<i>Clamator coromandus</i> (Linnaeus)	Redwinged Crested Cuckoo	Sch. IV
<i>Clamator jacobinus</i> (Boddaert)	Pied Crested Cuckoo	Sch. IV
<i>Cuculus sparveroides</i> Vigors	Large Hawk-Cuckoo	Sch. IV
<i>Cuculus varius</i> Vahl	Common Hawk-Cuckoo	Sch. IV
<i>Cuculus canorus</i> Linnaeus	Cuckoo	Sch. IV
<i>Cuculus saturatus</i> Blyth	Himalayan Cuckoo	Sch. IV
<i>Cuculus poicephalus</i> Latham	Small Cuckoo	Sch. IV
<i>Cacomantis sonneratii</i> (Latham)	Banded Bay Cuckoo	Sch. IV
<i>Cacomantis merulinus</i> (Scopoli)	Plaintive Cuckoo	Sch. IV
<i>Chalcites maculatus</i> (Gmelin)	Emerald Cuckoo	Sch. IV
<i>Surniculus lugubris</i> (Horsfield)	Drongo-Cuckoo	Sch. IV
<i>Eudynamys scolopacea</i> (Linnaeus)	Koel	Sch. IV
<i>Rhopodytes tristis</i> (Lesson)	Large Greenbilled Malkoha	—
<i>Taccocus leschenaultii</i> Lesson	Sirker Cuckoo	Sch. IV

<i>Scientific Name</i>	<i>Common Name</i>	<i>Status</i>
<i>Centropus sinensis</i> (Stephens)	Crow-Pheasant	—
<i>Centropus toulou</i> (Muller)	Lesser Coucal	—
	Order	STRIGIFORMES
	Family	STRIGIDAE
<i>Tyto alba</i> (Scopoli)	Barn Owl	Sch. IV
<i>Tyto capensis</i> (Smith)	Grass Owl	Sch. IV
<i>Phodilus badius</i> (Horsfield)	Bay Owl	Sch. IV
<i>Otus spilocephalus</i> (Blyth)	Spotted Scops Owl	Sch. IV
<i>Otus scops</i> (Linnaeus)	Scops Owl	Sch. IV
<i>Otus bakkamoena</i> Pennant	Collared Scops Owl	Sch. IV
<i>Bubo bubo</i> (Linnaeus)	Great Horned Owl	Sch. IV
<i>Bubo nipalensis</i> Hodgson	Forest Eagle-Owl	Sch. IV
<i>Bubo zeylonensis</i> (Gmelin)	Brown Fish Owl	Sch. IV
<i>Bubo flavipes</i> (Hodgson)	Tawny Fish Owl	Sch. IV
<i>Glaucidium brodiei</i> (Burton)	Collared Pigmy Owlet	Sch. IV
<i>Glaucidium cuculoides</i> (Vigors)	Barred Owlet	Sch. IV
<i>Ninox scutulata</i> (Raffles)	Brown Hawk-Owl	Sch. IV
<i>Athene brama</i> (Temminck)	Spotted Owlet	Sch. IV
<i>Strix leptogrammica</i> Temminck	Brown Wood Owl	Sch. IV
<i>Asio flammeus</i> (Pontoppidan)	Shorteared Owl	Sch. IV
	Order	CAPRIMULGIFORMES
	Family	PODARGIDAE
<i>Batrachostomus hodgsoni</i> (Gray)	Hodgson's Frogmouth	—
	Family	CAPRIMULGIDAE
<i>Caprimulgus indicus</i> Latham	Indian Jungle Nightjar	Sch. IV

<i>Scientific Name</i>	<i>Common Name</i>	<i>Status</i>
<i>Caprimulgus macrurus</i> Horsfield	Longtailed Nightjar	Sch. IV
<i>Caprimulgus affinis</i> Horsfield	Franklin's Nightjar	Sch. IV
Order	APODIFORMES	
Family	APODIDAE	
<i>Collocalia brevirostris</i> (McClelland)	Indian Edible-nest Swiftlet	—
<i>Chaetura caudacuta</i> (Latham)	Whitethroated Spinetail Swift	—
<i>Chaetura gigantea</i> (Temminck)	Brownthroated Spinetail Swift	—
<i>Chaetura sylvatica</i> (Tickell)	Whiterumped Spinetail	—
<i>Apus melba</i> (Linnaeus)	Alpine Swift	—
<i>Apus pacificus</i> (Latham)	Large Whiterumped Swift	—
<i>Apus affinis</i> (Gray)	House Swift	—
<i>Cypsiurus parvus</i> (Lichtenstein)	Palm Swift	—
<i>Hemiprocne longipennis</i> (Rafinesque)	Crested Swift	—
Order	TROGONIFORMES	
Family	TROGONIDAE	
<i>Harpactes erythrocephalus</i> (Gould)	Redheaded Trogon	Sch. IV
Order	CORACIIFORMES	
Family	ALCEDINIDAE	
<i>Ceryle lugubris</i> (Temminck)	Pied Kingfisher	Sch. IV
<i>Ceryle rudis</i> (Linnaeus)	Lesser Pied Kingfisher	Sch. IV
<i>Alcedo hercules</i> Laubmann	Blyth's Kingfisher	Sch. IV
<i>Alcedo atthis</i> (Linnaeus)	Common Kingfisher	Sch. IV
<i>Alcedo meninting</i> Horsfield	Blue-eared Kingfisher	Sch. IV
<i>Ceyx erithacus</i> (Linnaeus)	Three-toed Kingfisher	Sch. IV
<i>Pelargopsis capensis</i> (Linnaeus)	Storkbilled Kingfisher	Sch. IV
<i>Halcyon coromanda</i> (Latham)	Ruddy Kingfisher	Sch. IV
<i>Halcyon smyrnensis</i> (Linnaeus)	Whitbreasted Kingfisher	Sch. IV

<i>Scientific Name</i>	<i>Common Name</i>	<i>Status</i>
Family MEROPIDAE		
<i>Merops leschenaulti</i> Vieillot	Chestnutheaded Bee-eater	—
<i>Merops philippinus</i> Linnaeus	Bluetailed Bee-eater	—
<i>Merops orientalis</i> Latham	Green Bee-eater	—
<i>Nyctornis athertoni</i> (Jerdine & Selby)	Bluebearded Bee-eater	—
Family CORACIIDAE		
<i>Coracias benghalensis</i> (Linnaeus)	Indian Roller	Sch. IV
<i>Eurystomus orientalis</i> (Linnaeus)	Broadbilled Roller	Sch. IV
Family UPUPIDAE		
<i>Upupa epops</i> Linnaeus	Hoopoe	Sch. IV
Family BUCEROTIDAE		
<i>Aceros nipalensis</i> (Hodgson)	Rufousnecked Hornbill	Sch. I
<i>Rhyticeros undulatus</i> (Shaw)	Wreathed Hornbill	Sch. I
<i>Anthracoceros malabracius</i> (Gmelin)	India Pied Hornbill	Sch. I
<i>Buceros bicornis</i> Linnaeus	Great Pied Hornbill	Sch. I
Order PICIFORMES		
Family CAPITONIDAE		
<i>Megalaima virens</i> (Boddaert)	Great Hill Barbet	Sch. IV
<i>Megalaima virens</i> (Vieillot)	Lineated Barbet	Sch. IV
<i>Megalaima asiatica</i> (Latham)	Bluethroated Barbet	Sch. IV
<i>Megalaima haemacephala</i> (P.L.S. Müller)	Coppersmith	Sch. IV
Family INDICATORIDAE		
<i>Indicator xanthonotus</i> Blyth	Honeyguide	—
Family PICIDAE		
<i>Jynx torquilla</i> Linnaeus	Wryneck	Sch. IV
<i>Picumnus innominatus</i> Burton	Speckled Piculet	Sch. IV
<i>Micropternus brachyurus</i> (Vieillot)	Rufous Woodpecker	Sch. IV
<i>Picus myrmecophoneus</i> Stresemann	Little Scallybellied Green Woodpecker	Sch. IV

<i>Scientific Name</i>	<i>Common Name</i>	<i>Status</i>
<i>Picus canus</i> Gmelin	Blacknaped Green Woodpecker	Sch. IV
<i>Picus flavinucha</i> Gould	Large Yellownaped Woodpecker	Sch. IV
<i>Picus chlorolophus</i> Vieillot	Small Yellownaped Woodpecker	Sch. IV
<i>Dinopium benghalense</i> (Linnaeus)	Lesser Goldenbacked Woodpecker	Sch. IV
<i>Dinopium shorii</i> (Vigors)	Himalayan Goldenbacked Woodpecker	Sch: IV
<i>Dinopium javanense</i> (Ljungh)	Indian Goldenbacked Woodpecker	Sch. IV
<i>Gecinulus grantia</i> (McClelland)	Paleheaded Woodpecker	Sch. IV
<i>Mullerpicus pulverulentus</i> (Temminck)	Great Slaty Woodpecker	Sch. IV
<i>Dendrocopos mahrattensis</i> (Latham)	Yellowfronted Pied Woodpecker	Sch. IV
<i>Dendrocopos canicapilus</i> (Blyth)	Greycrowned Pigmy Woodpecker	Sch. IV
<i>Blythipicus pyrrhotis</i> (Hodgson)	Redeared Bay Woodpecker	Sch. IV
<i>Chrysocolaptes lucidus</i> (Scopoli)	Large Golden backed Woodpecker	Sch. IV

Order PASSERIFORMES

Family EURYLAIMIDAE

*Serilophus junatus* (Gould) Hodgson's Broadbill —

*Psarionus dalhousiae* (Jameson) Longtailed Broadbill —

Family PITTIDAE

*Pitta nipalensis* (Hodgson) Bluenaped Pitta —

*Pitta brachyura* (Linnaeus) Indian Pitta —

*Pitta sordida* (Muller) Hooded Pitta —

*Pitta cyanea* Blyth Blue Pitta —

<i>Scientific Name</i>	<i>Common Name</i>	<i>Status</i>
Family ALAUDIDAE		
<i>Mirafraga assamica</i> Horsfield	Bush Lark	Sch. IV
<i>Eremopterix grisea</i> (Scopoli)	Ashycrowned Finch-Lark	Sch. IV
<i>Calandrella acutirostris</i> Hume	Hume's Short-toed Lark	Sch. IV
<i>Calandrella raytal</i> (Blyth)	Sand Lark	Sch. IV
<i>Alauda gulgula</i> Franklin	Eastern Skylark	Sch. IV
Family HIRUNDINIDAE		
<i>Riparia riparia</i> (Linnaeus)	Collared Sand Martin	—
<i>Riparia paludicola</i> (Vieillot)	Plain Sand Martin	—
<i>Hirundo rustica</i> Linnaeus	Swallow	—
<i>Hirundo daurica</i> Linnaeus	Striated Swallow	—
<i>Delichon nipalensis</i> Horsfield & Moore	Nepal House Martin	—
Family LANIIDAE		
<i>Lanius tephronotus</i> (vigors)	Tibetan Shrike	—
<i>Lanius schach</i> Linnaeus	Rufousbacked Shrike	—
<i>Lanius cristatus</i> Linnaeus	Brown Shrike	—
Family ORIOLIDAE		
<i>Oriolus oriolus</i> (Linnaeus)	Golden Oriole	Sch. IV
<i>Oriolus chinensis</i> Linnaeus	Blacknaped Oriole	Sch. IV
<i>Oriolus traillii</i> (Vigors)	Maroon Oriole	Sch. IV
Family DICRURIDAE		
<i>Dicrurus adsimillus</i> (Bechstein)	Black Drongo	Sch. IV
<i>Dicrurus leucophaeus</i> Vieillot	Ashy Drongo	Sch. IV
<i>Dicrurus annectans</i> (Hodgson)	Crowbilled Drongo	Sch. IV
<i>Dicrurus aeneus</i> Vieillot	Bronzed Drongo	Sch. IV
<i>Dicrurus remifer</i> (Temminck)	Lesser Racket-tailed Drongo	Sch. IV
<i>Dicrurus hottentottus</i> (Linnaeus)	Haircrested Drongo	Sch. IV
<i>Dicrurus paradiseus</i> (Linnaeus)	Greater Racket-tailed Drongo	Sch. IV

<i>Scientific Name</i>	<i>Common Name</i>	<i>Status</i>
Family ARTAMIDAE		
<i>Aramus fuscus</i> Vieillot	Ashy Swallow-Shrike	—
Family STURNIIDAE		
<i>Saroglossa spiloptera</i> (Gigors)	Spottedwinged Stare	Sch. IV
<i>Sturnus malabaricus</i> (Gmelin)	Greyheaded Myna	Sch. IV
<i>Sturnus padodarum</i> (Gmelin)	Brahmini Myna	Sch. IV
<i>Sturnus contra</i> Linnaeus	Pied Myna	Sch. IV
<i>Acridotheres tristis</i> (Linnaeus)	Common Myna	Sch. IV
<i>Acridotheres fuscus</i> (Wagler)	Jungle Myna	Sch. IV
<i>Gracula religiosa</i> Linnaeus	Hill Myna	Sch. IV
Family PYCNONOTIDAE		
<i>Pycnonotus melanicterus</i> (Gmelin)	Blackheaded Yellow Bulbul	Sch. IV
<i>Pycnonotus jocosus</i> (Linnaeus)	Redwhiskered Bulbul	Sch. IV
<i>Pycnonotus leucogenys</i> (Gray)	Whitecheeked Bulbul	Sch. IV
<i>Pycnonotus cafer</i> (Linnaeus)	Redvented Bulbul	Sch. IV
<i>Criniger flaveolus</i> (Gould)	Whitethroated Yellow Bulbul	Sch. IV
<i>Scientific Name</i>	<i>Common Name</i>	<i>Status</i>
<i>Hypsipetes virescens</i> (Blyth)	Rufousbellied Bulbul	Sch. IV
<i>Hypsipetes flavalus</i> (Blyth)	Browneared Bulbul	Sch. IV
<i>Hypsipetes madagascariensis</i> (Muller)	Black Bulbul	Sch. IV
Family CORVIDAE		
<i>Cissa chinensis</i> (Boddaert)	Green Magpie	Sch. IV
<i>Dendrocitta vagabunda</i> (Latham)	Indian Tree Pie	Sch. IV
<i>Dendrocitta frontalis</i> Horsfield	Blackbrowed Tree Pie	Sch. IV
<i>Corvus splendens</i> Vieillot	House Crow	Sch. V
<i>Corvus macrorhynchos</i> Wagler	Jungle Crow	—
Family CAMPEPHAGIDAE		
<i>Hemipus picatus</i> (Sykes)	Pied Flycatcher-Shrike	—

<i>Scientific Name</i>	<i>Common Name</i>	<i>Status</i>
<i>Tephrodornis virgatus</i> (Temminck)	Large Wood Shrike	—
<i>Tephrodornis pondicerianus</i> (Gmelin)	Common Wood Shrike	—
<i>Coracina novaehollandiae</i> (Gmelin)	Large Cuckoo-Shrike	—
<i>Coracina melaschistos</i> (Hodgson)	Smaller Grey Cuckoo-Shrike	—
<i>Coracina melanoptera</i> (Ruppell)	Blackheaded Cuckoo-Shrike	—
<i>Pericrocotus flammeus</i> (Gorester)	Scarlet Minivet	Sch. IV
<i>Pericrocotus brevirostris</i> (Vigors)	Shortbilled Minivet	Sch. IV
<i>Pericrocotus ethologus</i> Bangs & Phillips	Longtailed Minivet	Sch. IV
<i>Pericrocotus solaris</i> Blyth	Yellowthroated Minivet	Sch. IV
<i>Pericrocotus roseus</i> (Vieillot)	Rosy Minivet	Sch. IV
<i>Pericrocotus cinnamomeus</i> (Linnaeus)	Small Minivet	Sch. IV
<i>Chloropsis hardwickii</i> Jardine & Selby	Orangebellied Chloropsis	Sch. IV
<i>Chloropsis cochinchinensis</i> (Gmelin)	Goldmantled Chloropsis	Sch. IV
<i>Irena puella</i> (Latham)	Fairy Bluebird	Sch. IV
	Family IRENIDAE	
<i>Aegithina tiphia</i> (Linnaeus)	Common Iora	Sch. IV
<i>Chloropsis aurifrons</i> (Temminck)	Goldfronted Chloropsis	Sch. IV
	Family MUSCICAPIDAE	
<i>Pellorneum ruficeps</i> Swainson	Spotted Babbler	Sch. IV
<i>Pellorneum albiventre</i> (Godwin Austen)	Brown Babbler	Sch. IV
<i>Trichastoma tickelli</i> (Blyth)	Tickell's Babbler	Sch. IV
<i>Trichastoma abbotti</i> (Blyth)	Abbott's Babbler	Sch. IV
<i>Pomatorhinus ruficollis</i> Hodgson	Rufousnecked Scimitar Babbler	Sch. IV
<i>Micrura pusilla</i> (Hodgson)	Brown Wren-Babbler	Sch. IV
<i>Stachyris ruficeps</i> Blyth	Redheaded Babbler	Sch. IV
<i>Dumetia hyperythra</i> (Pranklin)	Rufousbellied Babbler	Sch. IV
<i>Macronus gularis</i> (Horsfield)	Yellowbreasted Babbler	Sch. IV
<i>Timalia pileata</i> Horsfield	Redcapped Babbler	Sch. IV

<i>Scientific Name</i>	<i>Common Name</i>	<i>Status</i>
<i>Turdoides earlei</i> (Blyth)	Striated Babbler	Sch. IV
<i>Chrysomma sinense</i> (Gmelin)	Yelloweyed Babbler	Sch. IV
<i>Chrysomma altirostre</i> Jerdon	Jerdon's Babbler	Sch. IV
<i>Paradoxornis flavirostris</i> Gould	Gould's Parrotbill	Sch. IV
<i>Turdoides longirostris</i> (Hodgson)	Slenderbilled Babbler	Sch. IV
<i>Turdoides striatus</i> (Dumont)	Jungle Babbler	Sch. IV
<i>Garrulax moniligerus</i> (Hodgson)	Necklaced Laughing Thrush	Sch. IV
<i>Garrulax pectoralis</i> (Gould)	Blackgorgeted Laughing Thrush	Sch. IV
<i>Garrulax leucolophus</i> (Hardwicke)	Whitecrested Laughing Thrush	Sch. IV
<i>Garrulax ruficollis</i> (Jardine & Selby)	Rufousnecked Laughing Thrush	Sch. IV
<i>Garrulax phoeniceus</i> (Gould)	Crimsonwinged Laughing Thrush	Sch. IV
<i>Pteruthius flaviscapis</i> (Temminck)	Redwinged Shrike-Babbler	Sch. IV
	Family CAMPEPHAGIDAE	
<i>Minla cyanouroptera</i> (Hodgson)	Bluewinged Minla	—
<i>Yuhina castaniceps</i> (Moore)	Chestnutheaded Yuhina	—
<i>Yuhina bakeri</i> Rothschild	Whitenaped Yuhina	—
<i>Yuhina xantholeuca</i> (Hodgson)	Whitebellied Yuhina	—
<i>Alcippe rufogularis</i> (Mandelli)	Redthroated Tit-Babbler	Sch. IV
<i>Alcippe poicephala</i> (Jerdon)	Quaker Babbler	Sch. IV
<i>Alcippe nipalensis</i> (Hodgson)	Nepal Babbler	Sch. IV
<i>Muscicapa ferruginea</i> (Hodgson)	Ferruginous Flycatcher	Sch. IV
<i>Muscicapa parva</i> Bechstein	Redbreasted Flycatcher	Sch. IV
<i>Muscicapa strophciata</i> (Hodgson)	Orangeorgetted Flycatcher	Sch. IV
<i>Muscicapa hyperythra</i> Blyth	Redbreasted Blue Flycatcher	Sch. IV
<i>Muscicapa hodgsonii</i> (Verreaux)	Rustybreasted Blue Flycatcher	Sch. IV

<i>Scientific Name</i>	<i>Common Name</i>	<i>Status</i>
<i>Muscicapa westermanni</i> (Sharpe)	Little Pied Flycatcher	Sch. IV
<i>Muscicapa superciliaris</i> Jerdon	Whitebrowed Blue Flycatcher	Sch. IV
<i>Muscicapa sapphira</i> (Blyth)	Sapphiredheaded Flycatcher	Sch. IV
<i>Muscicapa grandis</i> (Blyth)	Large Niltava	Sch. IV
<i>Muscicapa sundara</i> (Hodgson)	Rufousbellied Niltava	Sch. IV
<i>Muscicapa macgrigoriae</i> (Burton)	Small Niltava	Sch. IV
<i>Muscicapa poligonys</i> (Brooks)	Brook's Flycatcher	Sch. IV
<i>Muscicapa unicolor</i> (Blyth)	Pale Blue Flycatcher	Sch. IV
<i>Muscicapa rubiculoides</i> (Givors)	Bluethroated Flycatcher	Sch. IV
<i>Muscicapa banymas</i> Horsfield	Largebilled Blue Flycatcher	Sch. IV
<i>Muscicapa tickelliae</i> (Blyth)	Tickell's Blue Flycatcher	Sch. IV
<i>Muscicapa thalassina</i> Swainson	Varditer Flycatcher	Sch. IV
<i>Muscicapella hodgsoni</i> (Moore)	Pigmy Blue Flycatcher	Sch. IV
<i>Graminicola bengalensis</i> Jerdon	Large Grass Warbler	
<i>Orthotomus sutorius</i> (Pennant)	Tailor Bird	
<i>Orthotomus cucullatus</i> Temminck	Goldenheaded Tailor Bird	
<i>Locustella certhiola</i> (Pallas)	Pallas's Grasshopper Warbler	
<i>Locustella naevia</i> (Boddaert)	Grasshopper Warbler	
<i>Chaetornis striatus</i> (Jerdon)	Bristled Grass Warbler	
<i>Megalurus plaustris</i> Horsfield	Striated Marsh Warbler	
<i>Acrocephalus aedon</i> (Pallas)	Thickbilled Warbler	
<i>Acrocephalus stentoreus</i> (Hemprich & Ehrenborg)	Great Reed Warbler	
<i>Acrocephalus orientalis</i> (Temminck & Schlegel)	Eastern Great Reed Warbler	
<i>Acrocephalus dumetorum</i> Blyth	Blyth's Reed Warbler	
<i>Acrocephalus agricola</i> (Jerdon)	Paddyfield Warbler	
<i>Hippolais caligata</i> (Lichtenstein)	Booted Warbler	
<i>Phylloscopus collybita</i> (Vieillot)	Chiffchaff	
<i>Phylloscopus affinis</i> (Tickell)	Tickell's Leaf Warbler	
<i>Phylloscopus fuligiventer</i> (Hodgson)	Smoky Willow Warbler	

<i>Phylloscopus fuscatus</i> (Blyth)	Dusky Leaf Warbler	
<i>Phylloscopus inornatus</i> (Blyth)	Plain Leaf Warbler	
<i>Phylloscopus trochiloides</i> (Sundevall)	Dull Green Leaf Warbler	
<i>Phylloscopus reguloides</i> (Blyth)	Blyth's Leaf Warbler	
<i>Phylloscopus cantator</i> (Tickell)	Blackbrowed Leaf Warbler	
<i>Scircercus affinis</i> (Hodgson)	Allied Flycatcher-Warbler	
<i>Abroscopus superciliaris</i> (Blyth)	Yellowbellied Flycatcher-Warbler	
<i>Brachypteryx hyperythra</i> Jerdon & Blyth	Rustybellied Shortwing	
<i>Brachypteryx leucophrys</i> (Temminck)	Lesser Shortwing	
<i>Erithacus calliope</i> (Pallas)	Rubythroat	
<i>Erithacus svecicus</i> (Linnaeus)	Bluethroat	
<i>Erithacus pectoralis</i> (Gould)	Himalayan Rubythroat	
<i>Culicicapa ceylonensis</i> (Swainson)	Greyheaded Flycatcher	Sch. IV
<i>Rhipidura hypoxantha</i> Blyth	Yellowbellied Fantail Flycatcher	Sch. IV
<i>Rhipidura albicollis</i> (Vieillot)	Whitethroated Fantail Flycatcher	Sch. IV
<i>Terpsiphone paradisi</i> (Linnaeus)	Paradise Flycatcher	Sch. IV
<i>Hypothymis azurea</i> (Boddaert)	Blacknaped Flycatcher	Sch. IV
<i>Tesia cyaniventer</i> Hodgson	Dull Slatybellied Ground Warbler	
<i>Tesia castaneocoronata</i> (Burton)	Chestnutheaded Ground Warbler	
<i>Cettia pallidipes</i> (Blanford)	Palefooted Bush Warbler	
<i>Cettia fortipes</i> (Hodgson)	Strongfooted Bush Warbler	
<i>Cettia brunnifrons</i> (Hodgson)	Rufouscapped Bush Warbler	
<i>Bradypterus thoracicus</i> (Blyth)	Spotted Bush Warbler	
<i>Cisticola exilis</i> (Vigors & Horsfield)	Fantail Warbler	
<i>Cisticola juncidis</i> (Rafinesque)	Streaked Fantail Warbler	
<i>Prinia rufescens</i> Blyth	Beavan's Longtailed Warbler	
<i>Prinia hodgsonii</i> Blyth	Franklin's Longtailed Warbler	

<i>Scientific Name</i>	<i>Common Name</i>	<i>Status</i>
<i>Prinia cincereocapilla</i> Hodgson	Hodgson's Longtailed Warbler	
<i>Prinia gracilis</i> (Lichtenstein)	Streaked Longtailed Warbler	
<i>Prinia subflava</i> (Gmelin)	Plain Longtailed Warbler	
<i>Prinia socialis</i> Sykes	Ashy Longtailed Warbler	
<i>Prinia flaviventris</i> (Delessert)	Yellowbellied Longtailed Warbler	
<i>Erithacus brunneus</i> (Hodgson)	Blue Chat	
<i>Erithacus cynurus</i> (Pllas)	Orangeflanked Bush Robin	
<i>Copsychus saularis</i> (Linnaeus)	Magpie-Robin	
<i>Copsychus malabaricus</i> (Scopoli)	Shama	
<i>Phoenicurus hodgsoni</i> (Moore)	Hodgson's Redstart	
<i>Rhyacornis fuliginosus</i> (Vigors)	Plumbeous Redstart	
<i>Cinclidium leucurum</i> (Hodgson)	Whitetailed Blue Robin	
<i>Enicurus scouleri</i> Vigors	Little Forktail	
<i>Enicurus immaculatus</i> (Hodgson)	Blackbacked Forktail	
<i>Enicurus leschenaulti</i> (Vieillot)	Leschenult's Forktail	
<i>Saxicola insignis</i> Gray	Hodgson's Bush Chat	
<i>Saxicola torquata</i> (Linnaeus)	Collared Bush Chat	
<i>Saxicola leucura</i> (Blyth)	Whitetailed Stone Chat	
<i>Saxicola caparata</i> (Linnaeus)	Pied Bush Chat	
<i>Saxicola jerdoni</i> (Blyth)	Jerdon's Bush Chat	
<i>Saxicola ferrea</i> Gray	Dark-grey Bush Chat	
<i>Monticola rufiventris</i> (Jardine & Selby)	Chestnutbellied Rock Thrush	Sch. IV
<i>Monticola solitaries</i> (Linnaeus)	Blue Rock Thrush	Sch. IV
<i>Myiophonus caeruleus</i> (Scopoli)	Blue Whistling Thrush	Sch. IV
<i>Zoothera citrina</i> (Latham)	Orangeheaded Ground Thrush	Sch. IV
<i>Zoothera dauma</i> (Latham).	Golden Mountain Thrush	Sch. IV
<i>Zoothera marginata</i> Blyth	Lesser Longbilled Mountain Thrush	Sch. IV

<i>Scientific Name</i>	<i>Common Name</i>	<i>Status</i>
<i>Turdus ruficollis</i> Pallas	Redthroated Thrush	Sch. IV
Family	PARIDAE	
<i>Melancholora sultanea</i> (Hodgson)	Sultan Tit	Sch. IV
<i>Parus major</i> Linnaeus	Grey Tit	Sch. IV
Family	SITTIDAE	
<i>Sitta castanea</i> Lesson	Chestnutbellied Nuthatch	
<i>Sitta frontalis</i> Swainson	Velvetfronted Nuthatch	
Family	MOTACILLIDAE	
<i>Anthus hodgsoni</i> Richmond	Hodgson's TreePipit	Sch. IV
<i>Anthus novaeseelandiae</i> Gmelin	Paddyfield Pipit	Sch. IV
<i>Anthus godlewskii</i> (Taczanowski)	Byth's Pipit	Sch. IV
<i>Motacilla indica</i> Gmelin	Forest Wagtail	
<i>Motacilla flava</i> Linnaeus	Yellow Wagtail	
<i>Motacilla citreola</i> Pallas	Yellowheaded Wagtail	
<i>Motacilla caspica</i> (Gmelin)	Grey Wagtail	
<i>Motacilla alba</i> Linnaeus	Pied Wagtail	
Family	DICAEIDAE	
<i>Dicaeum agile</i> (Tickell)	Thickbilled Flowerpecker	Sch. IV
<i>Dicaeum chrysorrheum</i> Temminck	Yellowvented Flowerpecker	Sch. IV
<i>Dicaeum cruentum</i> (Linnaeus)	Sacrltbacked Flowerpecker	Sch. IV
<i>Dicaeum ignipectus</i> (Blyth)	Firebreasted Flowerpecker	Sch. IV
Family	NECTARINIIDAE	
<i>Anthreptes singalensis</i> (Gmelin)	Rubycheek	Sch. IV
<i>Nectarinia asiatica</i> (Latham)	Purple Sunbird	Sch. IV
<i>Aethopyga saturata</i> (Hodgson)	Blackbacked Sunbird	Sch. IV
<i>Aethopyga siparaja</i> (Raffles)	Yellowbacked Sunbird	Sch. IV
<i>Arachnothera longirostris</i> (Latham)	Little Spiderhunter	Sch. IV
<i>Arachnothera magna</i> (Hodgson)	Streaked Spiderhunter	Sch. IV

<i>Scientific Name</i>	<i>Common Name</i>	<i>Status</i>
Family ZOSTEROPIDAE		
<i>Zosterops pulpebrosa</i> (Temminck)	White-eye	Sch. IV
Family PLOCEIDAE		
<i>Passer domesticus</i> (Linnaeus)	House Sparrow	
<i>Passer montanus</i> (Linnaeus)	Tree Sparrow	
<i>Ploceus philippinus</i> (Linnaeus)	Baya	Sch. IV
<i>Ploceus megarhynchus</i> Hume	Finn's Baya	Sch. IV
<i>Ploceus benghalensis</i> (Linnaeus)	Blackthroated Weaver Bird	Sch. IV
<i>Ploceus manyar</i> (Horsfield)	Streaked Weaver Bird	Sch. IV
<i>Estrilda amandava</i> (Linnaeus)	Red Munia	Sch. IV
<i>Lonchura malabarica</i> (Linnaeus)	Whitethroated Munia	Sch. IV
<i>Lonchura malabarica</i> (Linnaeus)	Whitethroated Munia	Sch. IV
<i>Lonchura striata</i> (Linnaeus)	Whitebacked Munia	Sch. IV
<i>Lonchura punctulata</i> (Linnaeus)	Spotted Munia	Sch. IV
<i>Lonchura malacca</i> (Linnaeus)	Blackheaded Munia	Sch. IV
Family FRINGILLIDAE		
<i>Carpodacus erythrinus</i> (Pallas)	Common Rosefinch	Sch. IV
Family EMBERIZIDAE		
<i>Emberiza aureola</i> Pallas	Yellowbreasted Bunting	Sch. IV
<i>Emberiza spodocephala</i> Pallas	Blackfaced Bunting	Sch. IV
<i>Melophus lathami</i> (Gray)	Crested Bunting	Sch. IV
Class REPTILIA		
Order SQUAMATA		
Family TYPHLOPIDAE		
<i>Ramphotyphlops braminus</i> (Daudin)	Common Blind Snake	Sch. IV
<i>Typhlops bothriorhynchus</i> (Gunther)	Assam Worm Snake	Sch. IV
<i>Typhlops diardi</i> (Schlegel)	Large Worm Snake	Sch. IV
Family BOIDAE		
<i>Python molurus</i> (Linnaeus)	Indian Python	Sch. I

<i>Scientific Name</i>	<i>Common Name</i>	<i>Status</i>
Family COLUBRIDAE		
<i>Stoliczkai khasiensis</i> Jerdon	Earth Snake	Sch. IV
<i>Lycodon fasciatus</i> (Anderson)	Banded Wolf Snake	Sch. IV
<i>Oligodon melazonotus</i> Wall	Wall's Kukri Snake	Sch. IV
<i>Oligodon erythrorachis</i> Wall	Red-striped Kukri Snake	Sch. IV
<i>Calamaria pavementata</i> Dum & Bibr.	False Wolf Snake	Sch. IV
<i>Blythia reticulata</i> (Blyth)	Iridescent Snake	Sch. IV
<i>Natrix peali</i> Sclater	Peal's Water Snake	Sch. IV
<i>Amphiesma stolata</i> (Linnaeus)	Striped Keelback	Sch. IV
<i>Amphiesma modesta</i> (Gunther)	Gunther's Keelback	Sch. IV
<i>Pseudoxenodon macrops</i> (Blyth)	False Cobra	Sch. IV
<i>Macropisthodon plumbicolor</i> (Cantor)	Green Keelback	Sch. IV
<i>Xenochrophis piscator</i> (Schneider)	Checkered Keelback	Sch. IV
<i>Elaphe frenata</i> (Gray)	Assam Trinket Snake	Sch. IV
<i>Elaphe porphyracea</i> (Cantor)	Black banded Trinket Snake	Sch. IV
<i>Zaocys nigromarginatus</i> (Blyth)	Green Rat Snake	Sch. IV
<i>Liopeltis frenatus</i> (Gunther)	Striped Snake	Sch. IV
<i>Chrysopelea ornata</i> (Shaw)	Ornate Flying Snake	Sch. IV
<i>Aheatulla nasutus</i> (Lacepede)	Common Vine Snake	Sch. IV
<i>Boiga multimaculata</i> (Boie)	Large Spotted Cat Snake	Sch. IV
<i>Boiga guincunciata</i> (Wall)	Assam Cat Snake	Sch. IV
Family ELAPIDAE		
<i>Bungarus fasciatus</i> (Schneider)	Banded Krait	Sch. IV
<i>Naja naja</i> (Linnaeus)	Cobra	Sch. II
<i>Ophiophagus hannah</i> (Cantor)	King Cobra	Sch. II
Family VIPERIDAE		
<i>Trimeresurus mucrosquamatus</i> (Cantor)	Brown spotted Pit Viper	Sch. IV
Family AGAMIDAE		
<i>Calotes versicolor</i> (Daudin)	Common Garden Lizard	—

<i>Scientific Name</i>		<i>Common Name</i>	<i>Status</i>
	Family	GEKKONIDAE	
<i>Hemidactylus brooki</i> Gray			—
<i>Hemidactylus frenatus</i> Schlegel			—
	Family	VARANIDAE	
<i>Varanus monitor</i> (Linnaeus)		Monitor Lizard	Sch. II
<i>Varanus salvator</i> (Laurenti)		Water Monitor Lizard	Sch. I
	Order	TESTUDINES	
	Family	TESTUDINIDAE	
<i>Geochelone elongata</i> (Blyth)		Yellow headed Tortoise	Sch. IV
	Family	LORICATA	
	Family	CROCODILIDAE	
<i>Gavialis gangeticus</i> (Gray)		Gharial	Sch. I
	Class	AMPHIBIA	
	Order	ANURA	
	Family	BUFONIDAE	
<i>Bufo melanostictus</i> Schneider		Toda	—
	Family	RANIDAE	
<i>Rana cyanophlyctis</i> Schneider		Bull Frog	Sch. IV
<i>Rana tigerina</i> Daudin		Tiger Frog	Sch. IV
	Family	MICROHYLIDAE	
<i>Microhyla ornata</i> (Dum. & Bibr.)		Tree Frog	—
	Family	HYLIDAE	
<i>Hyla</i> sp.		Tree Frog	—
	Family	ENGYSTOMATIDAE	
<i>Cacopus globulosus</i> (Gunther)		Tree Frog	—
		PISCES	
	Class	TELEOSTEI	
	Order	CYPRINIFORMES	
	Family	CYPRINIDAE	
<i>Accrossocheilus hexagonolepis</i> (McCl)			
<i>Barilius barila</i> (Ham.)			

*Barilius barna* (Ham.)  
*Barilius bendelisis* (Ham.)  
*Barilius sacra* (Ham.)  
*Barilius vagra vagra* (Ham.)  
*Chagunius chagunio* (Ham.)  
*Cirrhinus reba* (Ham.)  
*Catla catla* (Ham.)  
*Crossocheilus latius* (Ham.)  
*Danio dangila* (Ham.)  
*Danio devario* (Ham.)  
*Danio rerio* (Ham.)  
*Danio aequipinnatus* (McCl.)  
*Esomus danricus* (Ham.)  
*Garra gotyla* (Gray)  
*Lebeo pangusia* (Ham.)  
*Lebeo rohita* (Ham.)  
*Labeo dero* (Ham.)  
*Labeo boga* (Ham.)  
*Puntius chola* (Ham.)  
*Puntius conchoniis* (Ham.)  
*Puntius gelius* (Ham.)  
*Puntius guganio* (Ham.)  
*Puntius hexastichus* (McCl.)  
*Puntius sophore* (Ham.)  
*Puntius ticto* (ham.)  
*Rasbora daniconius* (Ham.)  
*Salmostoma bacaila* (Ham.)  
*Semiplotus semiplotus* (Ham.)  
*Tor putitora* (Ham.)

Family PSILORHYNCHIDAE

*Psilorhynchus sucatio* (Ham.)

*Psilorhynchus balitora* (Ham.)

Family COBITIDAE

*Botia dario* (Ham.)

*Botia rostrata* Gunther

*Noemacheilus botia* (Ham.)

Order SILURIFORMES  
Family BAGRIDAE

*Mystus bleekeri* (Day)

*Mystus vittatus* (Bloch)

Family SISORIDAE

*Erethistoides montana* Hora

*Gagata viridescens* (Ham.)

*Gagata cavia* (Ham.)

*Glythorax striatus* (McCl.)

Family SILURIDAE

*Wallago attu* (Schneider)

Family CLARIIDAE

*Clarius batrachus* (Linnaeus)

Family HETEROPNEUSTIDAE

*Heteropneustes fossilis* (Bloch)

Family OLYRIDAE

*Olyra kempfi* Chaudhuri

*Olyra longicaudata* McCl.

Order ATHERINIFORMES  
Family BELONIDAE

*Xenentodon cancila* (Ham.)

Family CYPRINODONTIDAE

*Aplocheilus panchax* (Ham.)

Order CHANNIFORMES  
Family CHANNIDAE

*Channa marulius* Hamilton

*Channa orientalis* (Schneider)*Channa punctatus* (Bloch)*Channa striatus* (Bloch)

Order SYNBRANCHIFORMES  
Family SYNBRANCHIDAE

*Monopterus cuchia* (Ham.)

Order PERCIFORMES  
Family CHANDIDAE

*Chanda ranga* (Ham.)

Family NANDIDAE

*Badis badis* (Ham.)*Nandus nandus* (Ham.)

Family ANABANTIDAE

*Anabas testudineus* (Bl.)

Family BELONTIDAE

*Colisa fasciata* (Schneider)*Colisa sota* (Ham.)

Order MASTACEMBELIFORMES  
Family MASTACEMBELIDAE

*Macrogathus aculeatus* (Bloch)

INSECTA

Order ODONATA  
Family COENAGRIONIDAE

*Aciagrion pallidum* Selys*Ceriagrion olivaceum* Laidlaw*Lestes nodalis* Selys

Family LIBELLULIDAE

*Neurothemis intermedia atlanta* Ris

Order DERMAPTERA  
Family CARCINOPHORIDAE

*Anisolebis annulipes* Dohrn.

Family LABIIDAE

*Labia ridens* born.

*Labia* sp.

Family PYGIDICRANIDAE

*Echinosoma* sp.

Order ISOPTERA

Family TERMITIDAE

*Microtermes umsaе* Roonwal & Chhotani

*Nasutitermes garoensis* Roonwal & Chhotani

*Odontotermes assamensis* Holmg.

*Odontoetrmes parvidens* Holmg. & Holmg.

*Odontoermes obesus* (Ramb.)

Order HEMIPTERA

Family APHIDIDAE

*Aphis fabae solanella* Theobald

*Aphis gossypii* Glover

*Lipaphis erysimi* (Kltb.)

*Myzus persicae* (Sulzer)

*Macrosiphum (Sitobion) rosaeformis* (Das)

*Greenideoidea (Pentatrichosiphum) luteum* (Basu)

*Rhopalosiphum maidis* (Fitch)

*Toxoptera aurantii* Boyer de fonscolombe

*Greenidea (Trichosiphum) Sp.*

Order COLEOPTERA

Family SCARABAEIDAE

*Cathersius molossus* Linn.

*Onitis subopacus* Arrow

*Onitis philemon* Fabricius

*Ontitcellus sinetus* Fabricius

*Onthophagus bifasciatus* Fabricius

*Onthophagus sagittarius* Fabricius

	Order	LEPIDOPTERA
	Family	DANAIDAE
<i>Eupoea mulciber</i> (Cram.)		
<i>Danaus melissa</i> (Cram.)		
<i>Danaus aglea</i> (Cram.)		
	Family	ERYCINIDAE
<i>Zemeros flegyas</i> (Cram.)		
	Family	HESPERIIDAE
<i>Suastus gremius</i> (Fabr.)		
	Family	LYCAENIDAE
<i>Cheritra freja</i> (Fabr.)		
<i>Castalius rosimon</i> (Fabr.)		
<i>Catchrysops strab</i> (Fabr.)		
<i>Heliophorus oda</i> (Hew.)		
<i>Jamides celeno</i> Moore		
<i>Jamides bochus</i> (Cram.)		
<i>Neopithecops zalmora</i> (Butl.)		
<i>Rapala pheritima</i> (Hew.)		
<i>Zizeeria gaiko</i> (Trimen)		
<i>Zizeeria otis</i> (Fabr.)		
	Family	NYMPHALIDAE
<i>Ergolis ariadne</i> (Johans.)		
<i>Neptis hylas</i> Moore		
<i>Precis almana</i> (Linn.)		
<i>Precis lemonias</i> (Linn.)		
	Family	PIERIDAE
<i>Appias lyncida</i> (Cram.)		
<i>Delias belladonna</i> (Fabr.)		
<i>Delias eucharis</i> (Drury)		
<i>Eurema hecabe</i> (Linn.)		
<i>Ixias pyrene</i> (Linn.)		

## Family SATYRIDAE

*Melanitis leda* (Drury)

*Melanitis phedima* Cram.

*Mycalesis mineus* (Linn.)

*Orsotrioena medus* (Fabr.)

*Ypthima philomela* (Linn.)

## FAUNA OF PALAMAU TIGER RESERVE

Under the programme of survey of the fauna of Tiger Reserves, in India, a team from the Zoological Survey of India explored the Palamau Tiger Reserve, Daltongunj, Bihar, in March 1983 under the leadership of Shri S.M. Ali, Scientist SD. Earlier to this, Betla portion of the Palamau Reserve was surveyed by the same author from 1972 to 1977 for the study of wildlife particularly the elephant and the spotted deer (Ali 1981, 1984; Mitra 1982). Shahi (1977) also dealt with the wildlife of this region of Bihar.

### TOPOGRAPHY

#### (i) *Physical features :*

The Palamau Tiger Reserve came into existence in June, 1974. An area of about 930 sq. km. in the southern section of the Palamau district of Bihar was brought under the Tiger Reserve, with the core area of about 200 sq. km. It includes Betla, Chipadohar, Garu, Baresand, Lat and Kutku forest ranges.

Geographically, the Palamau Tiger Reserve lies in the western part of the Chotanagpur Plateau. It is enclosed between two rivers, North-Koel in the northwest and Apang in the northeast. Topography of the terrain is undulating and varies between 300 and 1200 m in altitude. The drainage is from south to north towards the river Son. The Tropic of Cancer passes through its southern section close to Netarhat.

#### (ii) *Geology :*

Geologically, the entire area is under Archean rocks. The Precambrian rocks are deposited towards north beyond Garu, Triassic rocks towards west of Garu, and the Pleistocene and Recent alluvium towards the southern part. Tertiary rocks are exposed towards the northeastern part. The soil types are submontane, with laterites, quartzites and amphiobolites, and alluvial mainly of red and yellow. The soil undergoes erosion, and chemically it is acidic (pH 6.0) and contains oxides of silicon, aluminium, iron, calcium, magnesium, sodium, potassium and phosphorous (Mitra 1982).

#### (iii) *Climate :*

The climate of the Reserve is tropical. The summer is hot, with temperature rising to 48°C, and the winter fairly cold. The area receives an annual rainfall of about 1200-1300 mm, caused

mainly by the southwest monsoon from June to September. The Reserve contains several artificially made water holes and a natural nullah. The animals depend mainly on these sources for their water requirement particularly during the summer.

(iv) *Vegetation* :

The vegetation is tropical moist deciduous, consisting mainly of sal trees in association with bamboo and Khair; epiphytes are limited to damp shady places. In some patches, dry deciduous vegetation prevails, with forest floor fairly open and having grassland. Some important species of plants in the area are mentioned below :

Sal (*Sorea robusta*), Semul (*Bombax ceiba*), Khair (*Acacia catechu*), Palas (*Butea monosperma*), Mahua (*Madhuca latifolia*), Bahera (*Terminalia belerica*), Asan (*Terminalia alata*), Arjun (*Terminalia arjuna*), Haldu (*Adina cardifolia*), Teak (*Tectona grandis*), Dhoura (*Anogeissus latifolia*), Kharpot (*Garuga pinnata*), Tendu (*Diospyros melanoxylon*), Kusum (*Schleichera oleosa*), Semla (*Bauhinia retusa*), Salai (*Boswellia serrata*), Rori (*Mallotus philippinensis*), Dudhi (*Wrightia tomentosa*), Bija-paisar (*Pterocarpus marsupium*), Ber (*Zizyphus mauritiana*), Kath-ber (*Zizyphus xylocarpa*), etc. Some of the grasses are Bamboo (*Dendrocalamus strictus*), Sarkanda (*Saccharum munja*), Khasi grass (*Saccharum spontaneum*), Dub (*Cynodon dactylon*), etc.

#### FAUNAL ANALYSIS

The Palamau Tiger Reserve, with its tropical moist deciduous forest, consisting mainly of sal and bamboo, and the grasslands, harbour a great variety of animals, both vertebrates and invertebrates.

The following number of taxa of various groups of animals were recorded from the Tiger Reserve.

Name of group	No. of families	No. of genera	No. of species
Mammalia	21	39	47
Aves	38	75	100
Amphibia	1	2	3
Mollusca	4	4	4
Coleoptera *	8	46	69
Lepidoptera	9	10	10
Orthoptera	10	30	32
Neuroptera	2	3	3
Odonata	5	10	10

Name of group	No. of families	No. of genera	No. of species
Crustacea	4	4	7
Arachnida	6	6	7
Acarina	1	1	3
Porifera	1	1	1

\* Additional 22 families of Coleoptera were also collected.

From the above list it is obvious that the mammal, bird and insect fauna of the Reserve is quite rich. A glance at the census report of the Palamau Tiger Reserve (1983) reveals that the mammalian fauna of the Reserve is not only varied but also rich in absolute number. When analysed on the basis of the status accorded in the Schedules of the Wildlife (Protection) Act, 7 species are listed in Schedule I and another 10 in Schedule II. They are the Tiger, Leopard, Leopard Cat, Indian Wolf, Elephant, Gaur and Indian Pangolin. Other important species are the Rhesus Macaque, Hanuman Langur, Bengal Fox, Wild Dog, Sloth Bear, Small Indian Civet, Indian Grey Mongoose, Striped Hyena, Jungle Cat, Wild Boar, Chital, Sambar, Barking deer, Nilgai, Four-horned Antelope, Indian Black-naped hare, Indian Crested porcupine and number of species of rats, bats and shrews.

Of more than a hundred species of birds reported from the Reserve, the Crested Serpent Eagle, the Indian Shikra and the Peafowl are listed in Schedule I of the Wildlife (Protection) Act. Some of the common species are Lesser Whistling Teal, Cotton Teal, Spotbill Duck, Black and Grey Partridge, storks (2 spp.), lapwings (2 spp.), egrets (2 spp.), pigeons (4 spp.), kingfishers (3 spp.), bee-eaters (3 spp.), owls (2 spp.), vultures (3 spp.), Crested Serpent Eagle, wagtails (5 spp.), wood-peckers (3 spp.), crow-pheasant, nightjars, parakeets (3 spp.), babblers (2 spp.), shrikes (2 spp.), bulbuls (3 spp.), orioles (2 spp.), drongos (3 spp.), Scarlet Minivet, etc.

Three species of amphibians namely, *Rana cyanophlyctis*, *Rana limnocharis* and *Uperodon systoma* are reported from the Reserve. The species of *Rana* are economically important, hence, included in Schedule IV of the Wildlife (Protection) Act.

Among invertebrates, the insect fauna is also diverse. It is represented by 69 species of beetles, 10 species of butterflies, 32 species of grasshoppers, 10 species of dragon and damselflies, 3 species of neuropterans besides a host of other variety of insects. Apart from insects, 7 species of crustaceans and arachnids and a species of sponge are also reported from the Reserve.

#### Population status :

The population estimates of the various species of mammals in the Palamau Tiger Reserve during 1983 (*vide* 26th meeting of the Steering Committee of Project Tiger Report, 1986) are given below. It throws some light on the status of these species in the Tiger Reserve.

1. Elephant, (*Elaphas maximus*) 65 (*vide* Shahi, 1986)

2.	Spotted Deer ( <i>Axis axis</i> )	:	17476
3.	Gaur ( <i>Bos gaurus</i> )	:	500 (Approx.)
4.	Sambar ( <i>Cervus unicolor</i> )	:	4097
5.	Barking Deer ( <i>Muntiacus muntjac</i> )	:	1915
6.	Nilgai ( <i>Boselaphus tragocamelus</i> )	:	232
7.	Four-horned Antelope ( <i>Tetracerus quadricornis</i> )	:	20
8.	Wild Boar ( <i>Sus scrofa cristatus</i> )	:	14322
9.	Rhesus Macaque ( <i>Macaca mulatta</i> )	:	22749
10.	Hanuman Langur ( <i>Presbytis entellus</i> )	:	17065
11.	Indian Hare ( <i>Lepus nigricollis</i> )	:	738
12.	Wolf ( <i>Canis lupus</i> )	:	75
13.	Jackal ( <i>Canis aureus</i> )	:	—
14.	Hyaena ( <i>Hyaena hyaena</i> )	:	68
15.	Wild Dog ( <i>Cuon alpinus</i> )	:	1368
16.	Sloth Bear ( <i>Melursus ursinus</i> )	:	389
17.	Jungle Cat ( <i>Felis chaus</i> )	:	—
18.	Tiger ( <i>Panthera tigris</i> )	:	62

*List of fauna occurring in Palamau Tiger Reserve*

MAMMALIA

Order INSECTIVORA

Family SORICIDAE

<i>Scientific name</i>	<i>Common name</i>	<i>Status</i>
<i>Suncus murinus</i> (Linnaeus)	House Shrew	—

Order CHIROPTERA

Family PTEROPODIDAE

<i>Pteropus giganteus</i> (Brunnich)	Indian Flying Fox	Sch. V
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<i>Scientific name</i>	<i>Common name</i>	<i>Status</i>
<i>Cynopterus sphinx</i> (Vahl)	Short-nosed Fruit Bat	Sch. V
<i>Rousettus leschenaulti</i> (Desmarést)	Fulvous Fruit Bat	Sch. V
Family	EMBALLONURIDAE	
<i>Taphozous longimanus</i> Hardwicke	Tomb bat	—
Family	MEGADERMATIDAE	
<i>Megaderma lyra lyra</i> Geoffroy	Indian False Vampire	—
Family	RHINOLOPHIDAE	
<i>Rhinolophus rouxi rouxi</i> Temminck	Rufous Horseshoe Bat	—
<i>Rhinolophus lepidus lepidus</i> Blyth	Blyth's Horseshoe Bat	—
Family	VESPERTILIONIDAE	
<i>Pipistrellus coromandra</i> Gray	Indian pipistrelle	—
<i>Pipistrellus mimus</i> Wroughton	Indian pygmy Pipistrelle	—
<i>Pipistrellus dormeri</i> (Dobson)	Dormer's Bat	—
<i>Scotophilus kuhli</i> Leach	Lesser Yellow Bat	—
<i>Scotophilus heathi</i> (Horsfield)	Greater Yellow Bat	—
Order	PRIMATES	
Family	CERCOPITHECIDAE	
<i>Macaca Mulatta</i> (Zimmermann)	Rhesus Macaque	Sche II
<i>Presbytis entellus</i> (Dufresne)	Hanuman Langur	Sch II
Order	PHOLIDOTA	
Family	MANIDAE	
<i>Manis crassicaudata</i> Gray	Indian Pangolin	Sch I
Order	CARNIVORA	
Family	CANIDAE	
<i>Canis lupus pallipes</i> Sykes	Wolf	Sch. I
<i>Canis aureus indicus</i> Hodgson	Jackal	Sch. II
<i>Vulpes bengalensis</i> (Shaw)	Bengal Fox	Sch. II

<i>Scientific name</i>	<i>Common name</i>	<i>Status</i>
<i>Cuon alpinus dukhunensis</i> (Sykes)	Wild Dog	Sch. II
Family	URSIDAE	
<i>Melursus ursinus</i> (Shaw)	Sloth Bear	Sch. II
Family	VIVERRIDAE	
<i>Viverricula indica</i> (Desmarest)	Small Indian Civet	Sch. II
<i>Herperstes edwardsi nyula</i> (Hodgson)	Indian Grey Mongoose	Sch. II
<i>Paradoxurus hermaphroditus</i> (Pallas)	Palm civet	Sch. II
Family	HYAENIDAE	
<i>Hyaena hyaena</i> (Linnaeus )	Striped Hyaena	Sch. III
Family	FELIDAE	
<i>Felis chaus kutas</i> Pearson	Jungle Cat	Sch. II
<i>Felis bengalensis</i> Kerr	Leopard cat	Sch. I
<i>Panthera pardus fusca</i> Meyer	Leopard	Sch. I
<i>Panthera tigris</i> (Linnaeus)	Tiger	Sch. I
Order	PROBOSCIDEA	
Family	ELEPHANTIDAE	
<i>Elephas maximus</i> Linnaeus	Indian Elephant	Sch. I
Order	ARTIODACTYLA	
Family	SUIDAE	
<i>Sus scrofa cristatus</i> Wagner	Wild Boar	Sch. III
Family	CERVIDAE	
<i>Muntiacus muntjac vaginalis</i> (Boddaert)	Barking Deer	Sch. III
<i>Axis axis</i> (Erxleben)	Spotted Deer	Sch. III
<i>Tetracerus quadricornis</i>	Four-horned Antelope	Sch. I
Family	BOVIDAE	
<i>Bos gaurus</i> Smith	Gaur	Sch. I
<i>Boselaphus tragocamelus</i> (Pallas)	Nilgai	Sch. III

	Order	LAGOMORPHA	
	Family	LEPORIDAE	
<i>Lepus nigricollis ruficaudatus</i> Geoffroy		Indian Hare	Sch. IV
	Order	RODENTIA	
	Family	SCIURIDAE	
<i>Petaurista petaurista philippensis</i> (Elliot)		Giant Flying Squirrel	Sch. II
<i>Funambulus pennanti</i> Wroughton		Northern Palm Squirrel	Sch. IV
	Family	HYSTRICIDAE	
<i>Hystrix indica</i> Kerr		Indian Crested Porcupine	Sch. IV
	Family	MURIDAE	
<i>Millardia meltada</i> (Fray)		Metad	—
<i>Rattus rattus arboreus</i> (Horsfield)		House Rat	Sch. V
<i>Mus musculus</i>		House Mouse	Sch. V
<i>Mus booduga</i>		Field Mouse	Sch. V
<i>Bandicota bengalensis</i> Gray		Lesser Bandicoot Rat	—
<i>Tatera indica indica</i> (Hardwicke)		Indian Gerbil	—
		AVES	
	Family	CORVIDAE	
<i>Corvus macrorhynchos</i> Wagler		Jungle Crow	—
<i>Dendrocitta vagabunda</i> (Latham)		Indian Tree Pie	Sch. IV
	Family	PARIDAE	
<i>Parus major</i> Linnaeus		Grey Tit	Sch. IV
	Family	MUSCICAPIDAE	
<i>Turodoides striatus</i> (Dumont)		Jungle Babbler	Sch. IV
<i>Turodoides caudatus</i> (Dumont)		Common Babbler	Sch. IV
<i>Sexicoloides fulicata</i> (Linnaeus)		Indian Robin	Sch. IV
<i>Copsychus saularis</i> (Linnaeus)		Magpie-Robin	Sch. IV
<i>Copsychus malabaricus</i> (Scopoli)		Shama	Sch. IV

<i>Scientific name</i>	<i>Common name</i>	<i>Status</i>
<i>Turdus merula</i> Linnaeus	Blackbird	Sch. IV
<i>Muscicapa thalassina</i> Swainson	Verditer Flycatcher	Sch. IV
<i>Terpsiphone paradisi</i> (Linnaeus)	Paradise Flycatcher	Sch. IV
<i>Rhipidura albicollis</i> (Vieillot)	Whitethroated Fantail Flycatcher	Sch. IV
Family	PYCNONOTIDAE	
<i>Pycnonotus leucogenys</i> (J.E.Gray)	Whitecheeked Bulbul	Sch. IV
<i>Pycnonotus jacosus</i> (Linnaeus)	Redwhiskered Bulbul	Sch. IV
<i>Pycnonotus cafer</i> (Linnaeus)	Redvented Bulbul	Sch. IV
Family	LANIIDAE	
<i>Lanius excubitor</i> Linnaeus	Grey Shrike	—
<i>Lanius vittatus</i> Valenciennes	Baybacked Shrike	—
Family	CAMPEPHAGIDAE	
<i>Pericorocotus flammeus</i> (Forster)	Scarlet Minivet	Sch. IV
<i>Coracina melanoptera</i> (Ruppell)	Black-headed Cuckoo-Shrike	—
<i>Coracina novaehollandiae</i> (Gmelin)	Large Cuckoo-Shrike	—
Family	DICRURIDAE	
<i>Dicrurus adsimilis</i> (Bechstein)	Black Drongo	Sch. IV
<i>Dicrurus caerulescens</i> (Linnaeus)	White-bellied Drongo	Sch. IV
<i>Dicrurus paradiseus</i> (Linnaeus)	Racket-tailed Drongo	Sch. IV
Family	ORIOLIDAE	
<i>Oriolus oriolus</i> (Linnaeus)	Golden Oriole	Sch. IV
<i>Oriolus xanthornus</i> (Linnaeus)	Blackheaded Oriole	Sch. IV
Family	STURNIDAE	
<i>Sturnus contra</i> Linnaeus	Pied Myna	Sch. IV
<i>Sturnus pagodarum</i> (Gmelin)	Blackheaded Myna	Sch. IV
<i>Acridotheres tristis</i> (Linnaeus)	Common Myna	Sch. IV

<i>Scientific name</i>	<i>Common name</i>	<i>Status</i>
<i>Acridotheres ginginianus</i> (Latham)	Bank Myna	Sch. IV
Family PLOCEIDAE		
<i>Ploceus philippinus</i> (Linnaeus)	Common Weaver Bird	Sch. IV
<i>Lonchura striata</i> (Linnaeus)	Whitebacked Munia	Sch. IV
<i>Lonchura malabarica</i> (Linnaeus)	White-throated Munia	Sch. IV
<i>Estrilda amandava</i> (Linnaeus)	Red Munia	Sch. IV
<i>Passer domesticu</i> (Linnaeus)	House Sparrow	—
Family FRINGILLIDAE		
<i>Carpodacus erythrinus</i> (Pallas)	Common Rose finch	Sch. IV
Family HIRUNDINIDAE		
<i>Hirundo rustica</i> Linnaeus	Swallow	—
Family MOTACILLIDAE		
<i>Motacilla cinerea</i> Tunstall	Grey Wagtail	—
<i>Motacilla citreola</i> Pallas	Yellow-headed Wagtail	—
<i>Motacilla maderaspatensis</i> Gmelin	Large Pied Wagtail	—
<i>Motacilla alba</i> Linnaeus	White Wagtail	—
<i>Motacilla flava</i> Linnaeus	Yellow Wagtail	—
Family ZOSTEROPIDAE		
<i>Zosterops palpebrosa</i> (Temminck)	White-Eye	Sch. IV
Family NECTARINIDAE		
<i>Nectarinia asiatica</i> (Latham)	Purple Sunbird	Sch. IV
Family DICAIDAE		
<i>Dicaeum erythrorhynchos</i> (Latham)	Tickell's Flower-pecker	Sch. IV
Family PICIDAE		
<i>Picoides mahrattensis</i> (Latham)	Yellow fronted Pied Wood-pecker	Sch. IV
<i>Picoides nanus</i> (Vigors)	Pigmy Wood-pecker	Sch. IV

<i>Scientific name</i>	<i>Common name</i>	<i>Status</i>
<i>Dinopium benghalense</i> (Linnaeus)	Golden backed Wood Pecker	Sch IV
Family	CAPITONIDAE	
<i>Megalaima haemocephala</i> (P.L.S. Muller)	Crimson breasted Barbet	Sch. IV
Family	CUCULIDAE	
<i>Cuculus varius</i> Vahl	Brain-fever Bird	—
<i>Eudynamys scolopacea</i> (Linnaeus)	Koel	Sch. IV
<i>Centropus sinensis</i> (Stephens)	Crow-pheasant	
Family	PSITTACIDAE	
<i>Psittacula eupatria</i> (Linnaeus)	Large Indian Parakeet	Sch. IV
<i>Psittacula krameri</i> (Scopoli)	Rose-ringed Parakeet	Sch. IV
<i>Psittacula cyanocephala</i> (Linnaeus)	Blossom-headed Parakeet	Sch. IV
Family	CORACIIDAE	
<i>Coracias benghalensis</i> (Linnaeus)	Blue Jay	Sch. IV
Family	MEROPIDAE	
<i>Merops orientalis</i> Latham	Green Bee-eater	—
<i>Merops philippinus</i> Linnaeus	Blue-tailed bee-eater	—
<i>Merops leschenaulti</i> Vieillot	Chestnut headed Bee-eater	—
Family	ALCEDINIDAE	
<i>Ceryle rudis</i> (Linnaeus)	Lesser Pied Kingfisher	Sch. IV
<i>Alcedo atthis</i> (Linnaeus)	Common Kingfisher	Sch. IV
<i>Halcyon semnyrnensis</i> (Linnaeus)	White-breasted Kingfisher	Sch. IV
Family	UPUPIDAE	
<i>Upupa epops</i> Linnaeus	Hoopoe	—
Family	APODIDAE	
<i>Cypsiurus parvus</i> (Lichtenstein)	Palm Swift	—
Family	CAPRIMULGIDAE	

<i>Scientific name</i>	<i>Common name</i>	<i>Status</i>
<i>Caprimulgus asiaticus</i> Latham	Indian Jungle Nightjar	Sch. IV
Family RALLIDAE		
<i>Amaurornis phoenicurus</i> (Pennant)	Whitebreasted Waterhen	Sch. IV
<i>Fulica atra</i> Linnaeus	Coot	Sch. IV
Family STRIGIDAE		
<i>Bubo zeylonensis</i> (Gmelin)	Brown Fish Owl	Sch. IV
<i>Athene brama</i> (Temminck)	Spotted Owlet	Sch. IV
Family ACCIPITRIDAE		
<i>Sarcogyps calvus</i> (Scopoli)	Black Vulture	Sch. IV
<i>Gyps bengalensis</i> (Gmelin)	Indian Whitebacked Vulture	Sch. IV
<i>Neophron percnopterus</i> (Linnaeus)	Scavanger Vulture	Sch. IV
<i>Spilornis cheela</i> (Latham)	Crested Serpent Eagle	Sch. I
<i>Accipiter badius</i> (Gmelin)	Shikra	Sch. I
Family COLUMBIDAE		
<i>Teron phoenicoptera</i> (Latham)	Common Green Pigeon	Sch. IV
<i>Columba livia</i> Gmelin	Blue Rock Pigeon	—
<i>Streptopelia chinensis</i> (Scopoli)	Spotted Dove	Sch. IV
<i>Streptopelia decaocto</i> (Frisvaldszky)	Ring Dove	Sch. IV
Family PHASIANIDAE		
<i>Pavo cristatus</i> Linnaeus	Common Peafowl	Sch. I
<i>Gallus gallus</i> (Linnaeus)	Red Junglefowl	Sch. IV
<i>Galloperdix spadicea</i> (Gmelin)	Red spurfowl	Sch. IV
<i>Perdicula asiatica</i> (Latham)	Jungle Bush Quail	Sch. IV
<i>Francolinus francolinus</i> (Linnaeus)	Black Partridge	Sch. IV
<i>Francolinus pondicerianus</i> (Gmelin)	Grey Partridge	Sch. IV
Family GRUIDAE		
<i>Grus antigone</i> (Linnaeus)	Sarus Crane	Sch. IV

<i>Scientific name</i>		<i>Common name</i>	<i>Status</i>
	Family	BURHINIDÆ	
<i>Burhinus oedicephalus</i> (Linnaeus)		Stone Curlew	Sch. IV
	Family	CHARADRIIDAE	
<i>Vanellus indicus</i> (Boddaert)		Red-wattled Lapwing	—
<i>Vanellus malabaricus</i> (Boddaert)		Yellowwattled Lapwing	—
<i>Tringa hypoleucos</i> Linnaeus		Common Sandpiper	Sch. IV
<i>Tringa glareola</i> Linnaeus		Spotted Sandpiper	Sch. IV
	Family	ARDEIDAE	
<i>Egretta garzetta</i> (Linnaeus)		Little Egret	Sch. IV
<i>Bubulcus ibis</i> (Linnaeus)		Cattle Egret	Sch. IV
<i>Ardeola grayii</i> (Sykes)		Pond Heron	Sch. IV
	Family	CICONIIDAE	
<i>Ciconia episcopus</i> (Boddaert)		Whitenecked Stork	Sch. IV
<i>Ephippirhynchus asiaticus</i> (Latham)		Blacknecked Stork	Sch. IV
	Family	ANATIDAE	
<i>Nettapus coromandelianus</i> (Gmelin)		Cotton Teal	Sch. IV
<i>Tadorna ferruginea</i> (Pallas)		Brahminy Duck	Sch. IV
<i>Anas poecilorhynchus</i> J.R.Forster		Spotbill Duck	Sch. IV
<i>Dendrocygna javanica</i> (Horsfield)		Lesser Whistling Teal	Sch. IV
	Family	PODICIPEDIDAE	
<i>Podiceps ruficollis</i> (Pallas)		Little Grebe	—
	Class	AMPHIBIA	
	Order	ANURA	
<i>Rana limnocharis</i> Wiegmann		Indian Cricket Frog	Sch. IV
<i>Rana cyanophlyctis</i> Schneider			Sch. IV
<i>Uperodon systoma</i> (Schneider)		Skipper Frog	—

<i>Scientific name</i>	<i>Common name</i>	<i>Status</i>
	Phylum	MOLLUSCA
	Class	GASTROPODA
	Order	MESOGASTROPODA
	Family	THIARIDAE (=Melanidae)
<i>Thiara (Melamoides) tuberculata</i> (Muller)		
	Order	BASOMATOPHORA
	Family	LYMNAEIDAE
<i>Lymnaea (Pseudosaccinea) luteola f. australis</i> Annandale & Rao		
	Family	SUBULINIDAE
<i>Opeas gracile</i> (Hutton)		
	Class	BIVALVIA
	Order	EULAMELLIBRANCHIATA
	Family	UNIONIDAE
<i>Parietyia (Radiathla) caerulea</i> (Lea)		
	Class	INSECTA
	Order	ODONATA
	Family	COENAGRIONIDAE
<i>Ceriagrion coromandelianum</i> (Fabricius)		
	Family	PLATYCNEMIDIDAE
<i>Copera marginipes</i> (Rambur)		
	Family	GOMPHIDAE
<i>Ictinogomphus pertinax</i> Selys		
<i>Onychogomphus putcherrimus</i> Fraser		
	Family	CORDULIIDAE
<i>Epopthalmia vittata vittata</i> Burmeister		
	Family	LIBELLULIDAE
<i>Lathrecista asiatica asiatica</i> (Fabricius)		
<i>Trithemis festiva</i> (Rambur)		

*Brachythemis contaminata* (Fabricius)

*Pantala flavescens* (Fabricius)

*Sympetrum hypomelas* (Selys)

Order ORTHOPTERA  
Family GRYLLIDAE

*Gryllus* sp.

*Gryllus bimaculatus* De Geer

*Teleogryllus mitratus* (Burm.)

*Grylloides sigillatus* (Wlk.)

*Gymnogryllus minor* Chapard

*Loxoblemmus detectus* (Serville)

Family ACRIDIDAE

*Ceracris deflorata* Brunn.

*Aulacobothrus luteipes* (Wlk.)

*Trilophidia annulata* (Thunb.)

*Acrotylus humbertianus* Saussure

*Leva indica* (Bol.)

*Oedaleus abruptus* (Thunb.)

*Acrida exaltata* (Wlk.)

*Gastrimargus africanus africanus* (Saussure)

*Morphacris citrina* Kirby

*Ditopternis venusta* (Wlk.)

Family CATANTOPIDAE

*Teratodes monticollis* (Gray)

*Xenocatantops humilis humilis* (Serv.)

*Spathosternum prasiniferum* (Walk.)

*Tristria pulvinata* (Uvarov)

*Catantops pinquis innotabilis* (Wlk.)

	Family	PYRGOMORPHIDAE
<i>Chrotogonus (Ch.) oxypterus</i> (Blanch.)		
	Order	MANTOIDEA
	Family	HYMENOPODIDAE
<i>Ephestiasula intermedia</i> Werner		
<i>Creobroter laevicollis</i> (Saussure)		
<i>Deiphobe infuscata</i> (Saussure)		
<i>Humbertiella</i> sp.		
	Order	DICTYOPTERA
	Family	HOMOEAGAMIIDAE
<i>Therea nuptialis</i> (Gerstaecker)		
	Family	PYCNOSCELIDIDAE
<i>Pycnoscelus surinamensis</i> (Linnaeus)		
	Family	BLATTIDAE
<i>Blatella germanica</i> (Linnaeus)		
<i>Blatella humbertiana</i> (Saussure)		
	Family	DEROCALYMMIDAE
<i>Trichoblatta sericea</i> (Saussure)		
	Family	EPILAMPRIDAE
<i>Stictolampra plicata</i> (Novas)		
	Order	NEUROPTERA
	Family	ASALAPHIDAE
<i>Suphalomitus brevis</i> Kimmim		
<i>Protidricerus</i> sp.		
	Family	MYRMELEONIDAE
<i>Myrmeleon clothilde</i> Barks		

Order COLEOPTERA  
 Family CICINDELIDAE

*Cicindela* sp.

Family CARABIDAE

*Oxylobus* sp. *vr lateralis* Dej.

*Macrochilus 3-maculatus* Oliv.

*Calleida* sp.

*Abacetus* sp.

*Omphra* sp.

*Chlaenius posticus* (F.)

*Clivina* sp.

*Colpodes* sp.

*Harpalus* sp.

Family DYTISCIDAE

*Hydaticus luzonicus* Aube

*H. fabricii* Macleay

*Cybister limbatus* Fabricius

*Cybister tripunctatus asiaticus* Sharp

*Hyphoporus aper* Sharp

*Hydaticus vittatus* (Fabricius)

*Sandracottus dejeani* Aube

*Laccophilus flexuosus* Aube

*Laccophilus parvulus* Aube

*Laccophilus chinensis inefficiens* Walker

*Hyphydrus renardi* Severin

*Yola consanguinea* Reg.

*Guignotus inconstans*

*Laccophilus sharpi* Reg.

Family HYDROPHILIDAE

*Berosus indicus*

*Sternolophus rufipes*

*Hydrophilus* sp.

*Coelostoma* sp.

Family HISTERIDAE

*Hister* sp.

Family STPHYLINIDAE

*Indoscitalinus* sp.

*Staphylinus* sp.

Family SCARABAEIDAE

Subfamily MELOLONTHINAE

*Brahamina* sp.

*Apogonia* sp.

SubFamily RUTELINAE

*Adoretus* sp.

*Anomala* sp.

SubFamily COPRINAE

*Gymnopleurus cyaneus* (Fabricius)

*Gymnopleurus gemmatus* Harold

*Gymnopleurus sinuatus* (Oliver)

*Catharsius pithecius* (Fabricius)

*Copris ropertus* Walker

*Caccobius vulcanus* (Fabricius)

*Caccobius meridionalis* Boucamont

*Caccobius inermis* Arrow

*Onthophagus bonasus* (Fabricius)

*Onthophagus quadridentatus* (Fabricius)

*Onthophagus dama* (Fabricius)  
*Onthophagus ramosellus* Bates  
*Onthophagus catta* (Fabricius)  
*Onthophagus ramosus* (Wiedemann)  
*Onthophagus sagittarius* (Fabricius)  
*Onthophagus spinifex* (Fabricius)  
*Onthophagus ensifer* Boucamont  
*Onthophagus centricornis* (Fabricius)  
*Onthophagus cervus* (Fabricius)  
*Onthophagus palamoui* Chatterjee & Biswas  
*Oniticellus pallipes* Fabricius  
*Oniticellus spinipes* Roth  
*Oniticellus cinctus* (Fabricius)  
*Orepanocerus setosus* (Wiedemann)  
*Onitis subopacus* Arrow

Subfamily APHODIINAE

*Aphodius* sp.

Family CERAMBYCIDAE

*Chlorophorus annularis* Fabricius

*Stromatium barbatus* Fabricius

*Margites* sp.

*Clytini* sp.

*Olenecamptus* sp.

*Apomecyna saltator* (Fabricius)

The following families of Coleoptera also occur in the Palamau Tiger Reserve area.

Trogidae; Limnichidae; Elateridae; Lampyridae; Bostrichidae; Anobiidae; Ptinidae; Cleroidae; Nitidulidae; Erotylidae; Endomychidae; Tenebrionidae; Monommidae; Mordellidae; Colydiidae; Meloidae; Aderidae; Anthicidae; Chrysomelidae; Bruchidae; Anthribidae; Cyrinidae.

	Order	LEPIDOPTERA
	Family	PAPILIONIDAE
<i>Papilio demoleus</i> Linnaeus		
<i>Graphium nomius</i> (Esper)		
	Family	PIERIDAE
<i>Catopsilia pyranthe</i> (Linn.)		
	Family	NYMPHALIDAE
<i>Euthalia nais</i> (Forster)		
	Family	LYCAENIDAE
<i>Amblypodia amantes</i> Hewitson		
	Family	SPHINGIDAE
<i>Marumba spectabilis</i> (Butler)		
	Family	NOCTUIDAE
<i>Nyctipao macrops</i> Linn.		
	Family	AGARISTIDAE
<i>Aegocera bimacula</i> Walker		
	Family	GLYPHIPTERYGIDAE
<i>Phycodes</i> sp.		
	Family	NOTODONTIDAE
<i>Antheus servula</i> Drury		
	Class	ARACHNIDA
	Order	ARANEAE
	Family	ARANEIDAE
<i>Neoscona mukerjei</i> Tikader		
	Family	TETRAGNATHIDAE
<i>Tetragnatha andamanensis</i> Tikader		
	Family	HERSILIDAE
<i>Hersilia savignyi</i> Lucas		

- |   |          |               |
|---|----------|---------------|
|   | Family   | LYCOSIDAE     |
| <i>Lycosa carmichaeli</i> Gravely                               |          |               |
| <i>Lycosa mahabaleshwariensis</i> Tikader                       |          |               |
|   | Family   | THOMSIDAE     |
| <i>Tharpyna</i> sp.   |          |               |
|   | Family   | SATTICIDAE    |
| <i>Marpissa dhakuriensis</i> Tikader                            |          |               |
|   | Subclass | ACARI         |
|   | Order    | METASTIGMATA  |
|   | Family   | IXODIDAE      |
| <i>Boophilus micropus</i> (Canestrini)                          |          |               |
| <i>Rhipicephalus sanguineus</i> (Latrielle)                     |          |               |
| <i>Hyalonma marginatum isaaci</i> Sharif                        |          |               |
|   | Class    | CRUSTACEA     |
|   | Order    | ISOPODA       |
|   | Family   | ONISCIDAE     |
| 1. <i>Porcellio assamensis</i> Chopra                           |          |               |
| 2. <i>Porcellio spinicornis</i> Say                             |          |               |
|   | Family   | ARMADILLIDAE  |
| 3. <i>Cubaris robusta</i> Collinge                              |          |               |
|   | Order    | DECAPODA      |
|   | Family   | PALAEMONIDAE  |
| 4. <i>Macrobrachium lamarrei lamarrei</i> (H.M. Edw.)           |          |               |
| 5. <i>Macrobrachium dayanum</i> (Henderson)                     |          |               |
|   | Family   | POTAMONIDAE   |
| 6. <i>Paratelphusa guerini</i> var. <i>pocockiana</i> Henderson |          |               |
| 7. <i>Paratelphusa jacquemontii</i> Rathbun                     |          |               |
|   | Phylum   | PORIFERA      |
|   | Class    | DEMOSPONGIAE  |
|   | Order    | HAPLASCLERINA |
|   | Family   | SPONGILLIDAE  |
| <i>Trochospongilla latonchiana</i> Annandale                    |          |               |

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## FAUNA OF SIMLIPAL TIGER RESERVE

### INTRODUCTION

Under the programme of survey of the fauna of Tiger Reserves, in India, a team from the Zoological Survey of India explored the Simlipal Tiger Reserve, Mayurbhanj district, Orissa in January-February, 1986 under the leadership of Shri S. M. Ali, Scientist SD. The present report deals with the vertebrate fauna of the Reserve. This Reserve is one of the nine which came into existence during 1973.

Sincere thanks are due to the Chief Wildlife Warden, Department of Forests, Orissa, and to Shri S. K. Mahapatra, Field Director, Simlipal Tiger Reserve, for providing facilities during the course of the Survey.

### TOPOGRAPHY

#### (i) *Physical features*

Simlipal Tiger Reserve (Fig. 1) is located in the Mayurbhanj district of Orissa between latitudes 21°30' and 22°10' N and longitudes 86° and 87°6' E. It covers an area of about 2750 sq. km. with a core area of about 846 sq. km. The area represents a compact block of hilly tract, ranging from 300 to 1250 m altitude, the highest peak being Meghasani. The major part of the forest is situated in the centre of a large mass of hills known as Simlipal Hills, which rise very precipitously from the plains of Udala and Baripada in the south and southeast, extending to Jashipur in the north, Bisai in the east and Thakurmunda in the west. These hills have innumerable crests and valleys, clad with rich forest and interspersed with countless nullahs and streams. A chain of hills comes out from this central mass of hills at its northeastern corner near Bisai, the Badam Pahar starting from near Jashipur, and Gerumahisani Hills near the eastern border. Between Gerumahisani Hills and Bisai, there are a large number of hills both big and small. On the south, the Nato Hills radiate from the southern face of central mass of hills, marching up to Dhatkidiraha and Nauda in the extreme southwest. The rest of the areas are more or less plains. These hills and surrounding plains extend over a vast area from near Balasore to Singbhum district, and from Deonjhar to Dalbhum of Bihar, and great differences in heights are met with *viz.* Meghasani c 1250 m, Dhudruchampa c 1008 m, Gerumahisani c 90 m, Badampahar c 830 m, Chahala c 775m., Debagiri Pahar c 680m, Baldiha Hills c 585 m, Bidubhandar Pass c 477 m, Jashipur c 400 m, Reruan c 371 m, Khiching c 356 m, Rairangpur c 262 m, Bangriposi c 121 m, Udala c 52 m, Baripada c 48 m, Betnoti c 44 m, Muruda c 19 m, Amarda c 18 m, etc, above the mean sea level.

#### (ii) *Geology*

Throughout the area, the submetamorphic series of rocks appear to be superimposed upon the metamorphic rocks. The latter are sometimes exposed by the denudation of the overlapping

submetamorphic rocks. The gneiss is at places highly granitoid, and true granites are quite frequent. Mica-schists with pegmatite veins are found in the area. The gneissic rocks are intersected by dykes of basic and intermediate rocks. The principal constituents of submetamorphic rocks and shales are iron ores, laterites, limestones and calcareous deposits, quartzites, phyllites and micaceous, teleose, and trapper-looking schists. The quartzites are sometimes bounded and not infrequently haematitic as well.

### (iii) *Climate*

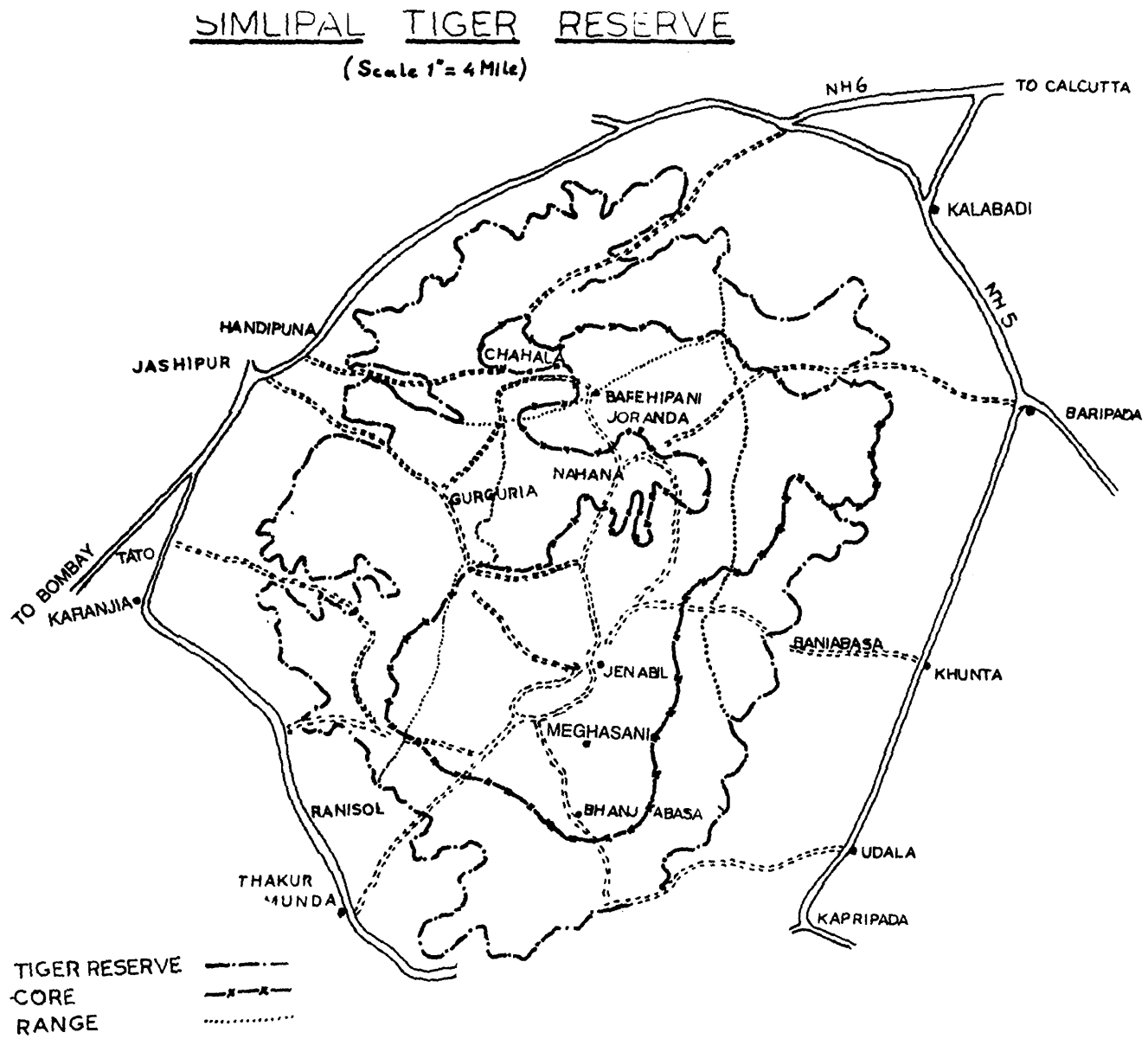
The climate of the area is warm and humid. It appears that the seasons are distinct, summer ranges from March to June, the monsoon from June to October, and the winter from November to February. Due to the monsoon winds from the Bay of Bengal being interrupted by Simli Pahar which attains an altitude of c 1250 m at Meghasani, the precipitation is generally higher in the Simli Pahar than in the surrounding region. From the topography and direction of the prevailing winds the rainfall register a general decrease from southwest to northeast. The average rainfall is maximum (c 225 cm) at Gurguria and minimum (c 100 cm) at Chahala, with an average of 170 cm. The maximum temperature during the summer ranges from 43°C to 49°C. The humidity is higher in the southern part namely, Baripada, Udala, etc, at the end of the summer, whereas Karanjia, Panchpir and central highlands are cooler in summer. Storm accompanied with thunder occur from April to June and often cause extensive damage to the forest area. The main rivers in the area are Burhabalanga, Palpala, Bandan, Khairi and Deo.

### (iv) *Vegetation*

The vegetation in the area consists of semi-evergreen, moist deciduous and dry deciduous forests and grasslands. However, Sal (*Shorea robusta*) forms the dominant species in a major part of forests.

The semi-evergreen forests are usually met with in deep moist valleys and are formed of *Michelia champaca*, *Artocarpus lakoocha*, *Toona ciliata*, *Mangifera indica*, *Ailanthus excelsa*, *Mesua ferrea*, *Stereopermum suaveolens*, *Xylia xylocarpa*, and *Bridelia retusa*. Along streambeds, in the moist and shady valleys, *Salix tetrasperma*, *Trewia nudiflora*, *Macaranga peltata*, *Saraca indica*, *Pongamia pinnata*, *Diospyros peregrina*, *Syzygium cumini* are commonly noticeable. Along the higher damp hill-slopes, the main forest trees are of *Bombax ceiba*, *Alstonia scholaris*, *Polyalthia cerasioides*, *Anthocephalus cadamba*, *Dillenia pentagyna*, etc., mixed with species of *Ficus*, *Litsea*, and *Citrus*.

The moist deciduous forests are found all over the area except in the deep moist valleys and Sal form the dominant species. The common associate species of Sal are *Pterocarpus marsupium*, *Anogeissus latifolia*, *Schleichera oleosa* and *Adina cardifolia*. Other species such as *Toona ciliata*, *Michelia champaca*, *Mangifera indica*, *Bombax ceiba*, *Careya arborea*, *Dillenia pentagyna*, *Gmelina arborea*, *Kydia calycina*, *Lagerstroemia parviflora*, *Terminalia* sp., etc., also occur in some areas.



Map of Simlipal Tiger Reserve

The dry deciduous forests are usually formed of *Anogeissus latifolia*, *Sterculia urens*, *Boswellia serrata*, *Dalbergia latifolia*, *Cleistanthus collinus*, *Erythrina suberosa* and *Cochlespermum religiosum*. The shrubs belong to genera *Nyctanthes* and *Helecteres*.

The grasslands are found on hill-tops and plateau areas above an altitude of about 900 m. These grasslands attain lush growth during the monsoon and are dominated by several species of *Dicanthium*, *Imperata*, *Arundinella*, *Bothriochlea*, *Cymbopogon*, *Heteropogon*, *Themada*, and *Pseudanthistiria*. These are associated with legumes and weeds of the family Compositae. In some places, species of *Dillenia*, *Symplocops*, *Shorea* and *Emblica* are also met with. The grasses that grow along the nullahs are those of *Imperata cylindrica*, *Saccharum spontaneum*, *Eulaliopsis binata* and *Thysanalaena maxima*.

The chief climbers are of *Bahunia vahlii*, *Milletia auriculata*, *Smilax macrophylla* and *Combretum decandrum*, which rarely occur in cool shady moist river gorges.

#### FAUNAL ANALYSIS

Simlipal Tiger Reserve with its varied habitats shelter a wide range of fauna both of vertebrates and invertebrates. The mammalian fauna is represented by as many as 46 species belonging to 42 genera, including a new species of palm civet, *Paradoxurus jorandensis* described by the Zoological Survey of India. Of these, 10 species are endangered and listed in Schedule I, and another 13 in Schedule II of the Wildlife (Protection) Act, as amended up to 1991.

Besides tiger, the Reserve harbours a good population of elephants for which it has been famous. The other notable wildlife species are the Rhesus Macaque, Hanuman Langur, Indian Pangolin, leopard, Leopard Cat, Jungle Cat, Wild Dog, Sloth Bear, Ratel, Hog Badger, Smooth-coated Otter, Common Mongoose, Large and Small Indian Civets, Common Palm Civet, Striped Hyaena, Wild Boar, Chital, Sambar, Barking Deer, Four-horned Antelope, Nilgai, Rufous-tailed Hare, Five and Three-striped Squirrel, and a number of species of rats, bats and shrews.

The avifauna is represented by about 250 species (136 species observed and the rest likely to occur) belonging to 151 genera, of which eleven species are endangered and listed in Schedule I. Some of the other common species are Hill Myna (*Gracula religiosa*), Red Jungle Fowl, spur fowl, egrets (2 spp.) bitterns (3 spp.), eagles and kites (9 spp.) Indian Courser, lapwings (2 spp.), parakeets (4 spp.) cuckoos (10 spp.) owls and owlets (11 spp.), nightjars (4 spp.) kingfishers (2 spp.) bee-eaters (4 spp.), barbets (4 spp.), woodpeckers (8 spp.), larks (6 spp.), drongos (6 spp.), shrikes (7 spp.) mynas (6 spp.) Himalayan Tree Pie, bulbuls (4 spp.), babblers (11 spp.), warblers (17 spp.), flycatchers (11 spp.), thrushes (5 spp.), pipits (6 spp.), wagtails (6 spp.), flowerpeckers (9 spp.) sunbirds (3 spp.), Malabar Tragopan, etc.

Fifteen species of reptiles (lizards 6 spp., snakes 9 spp.) belonging to 14 genera are reported from this Reserve of which the Indian Python and the Bengal Monitor fall under the endangered category. Similarly, among amphibians, 3 species of the genus *Rana*, a species of tree frog belonging to genus *Rhacophorous* and two species of toads are known from the area. Of these, the species of *Rana* are economically important, hence, included in Schedule IV of the Wildlife (Protection) Act.

In addition to the above, 5 species of fishes, 10 species of odonates and three species of spiders are also reported from the Reserve.

It is postulated that the Simlipal Hills, at present a part of the Eastern Ghats, was once connected with the Himalayas by a chain of intermediate hills and forest cover. But the link gradually disrupted, thereby isolating some of the geographical relicts. There are some species of fishes and birds found in the simlipal Hills which are known only from the Himalayas and the southern Assam hills in India; for example, the Hill stream fish *Tor Putitora*, and birds like the Heart-spotted Woodpecker (*Hemicircus canente*), the Himalayan Tree Pie (*Denodrocitta formosa*), the Short-billed Mountain Thrush (*Zoothera dauma*), and the Yellow-backed Sunbird (*Aethopyga ignicauda*). Further, the occurrence of a great variety of babblers are indicative of the presence of the same type of habitat in the Simlipal hills as of the Himalayas.

*Population status :*

The population estimates of some of the species of mammals in the Simlipal Tiger Reserve during 1986 (*vide* 26th meeting of the Steering Committee of Project Tiger Report, 1986) are given below. It throws some light on the status of these species in the Tiger Reserve.

	No. of individuals
1. Tiger ( <i>Panthera tigris</i> )	: 81
2. Leopard ( <i>Panthera pardus</i> )	: 67
3. Elephant ( <i>Elephas maximus</i> )	: 375
4. Gaur ( <i>Bos gaurus</i> )	: 198
5. Wild Dog ( <i>Cuon alpinus</i> )	: 50
6. Sambar ( <i>Cervus unicolor</i> )	: 7550
7. Chital ( <i>Axis axis</i> )	: 450
8. Chousinga ( <i>Tetracerus quadricornis</i> )	: 1200
9. Barking Deer ( <i>Muntiacus muntjak</i> )	: 4600
10. Mouse Deer ( <i>Tragulus meminna</i> )	: 3000
11. Wild Boar ( <i>Sus scrofa cristatus</i> )	: 9500
12. Procupine ( <i>Hystrix indica</i> )	: 10,000
13. Hanuman Langur ( <i>Presbytis entellus</i> )	: 10,000

Appendix – I  
MAMMALIA

<i>Name of species</i>	<i>Common Name</i>	<i>Status</i>
	Order INSECTIVORA	
	Family SORICIDAE	
<i>Suncus murinus</i> (Linnaeus)	Grey Musk Shrew	Common
	Order SCANDENTIA	
	Family TUPAIIDAE	
<i>Anathana ellioti</i> (Waterhouse)	Common Tree Shrew	Restricted in moist deciduous forest.
	Order PRIMATES	
	Family CERCOPITHECIDAE	
<i>Presbytis entellus</i> (Dufresne)	Hanuman langur	Sch. II. Seen at Upper Barakamra, Joranda, Berhipani, Chahala.
<i>Macaca mulatta</i> (Zimmermann)	Rhesus Macaque	Sch. II
	Order CHIROPTERA	
	Family PTEROPODIDAE	
<i>Rousettus leschenaulti</i> (Desmarest)	Leschenault's Rousette	Sch. V
<i>Cynopterus sphnix</i> (Vahl)	Short-nosed Fruit Bat	Seen at Jasipur. Sch. V
	Family RHINOLOPHIDAE	
<i>Rhinolophus rouxi</i> (Temminck)	Peninsular Horseshoe Bat	
	Family VESPERTILIONIDAE	
<i>Pipistrellus mimus</i> Wroughton	Indian Pygmy Pipistrelle	
<i>Scotophilus kuhli</i> Leach	Greater Yellow Bat	
	Order CARNIVORA	
	Family URSIDAE	

<i>Melursus ursinus</i> (Shaw)		Sloth Bear	Sch. II Seen at Barakamra & Joranda
	Family	CANIDAE	
<i>Canis aureus</i> Linnaeus		Asiatic Jackal	Seen near upper Barakamra. Sch. II
<i>Cuon alpinus</i> (Pallas)		Indian Wild Dog	Seen in Gorandi of upper Barakamra. Sch. II
	Family	MUSTELIDAE	
<i>Lutra perspicillata</i> Geoffroy		Smooth-coated Otter	In Deva river of upper Barakamra Sch. II
<i>Arctonyx collaris</i> Cuvier		Hog Badger	Sch. I
<i>Mellivora capensis</i> (Schreber)		Ratel	Sch. I
<i>Herpestes edwardsi</i> (Geoffroy)		Common Mongoose	Sch. IV
	Family	VIVERRIDAE	
<i>Paradoxurus hermaphroditus</i> (Pallas)		Common Palm Civet	Sch. II
<i>Paradoxurus jorandensis</i> Ali		White-banded Palm Civet	Sch. II
<i>Viverricula indica</i> (Desmarest)		Small Indian Civet	Sch. II
<i>Viverra zibetha</i> Linnaeus		Large Indian Civet	Sch. II
	Family	HYAENIDAE	
<i>Hyaena hyaena</i> (Linnaeus)		Striped Hyaena	Sch. III
	Family	FELIDAE	
<i>Felis bengalensis</i> Kerr		Leopard Cat	Sch. I
<i>Felis chaus</i> Guldenstaedt		Jungle Cat	Sch. II Seen at upper Barakamra and Joranda.
<i>Panthera tigris</i> (Linnaeus)		Tiger	Sch. I
<i>Panthera pardus</i> (Linnaeus)		Leopard	Sch. I

	Order	PROBOSCIDEA	
	Family	ELEPHANTIDAE	
<i>Elephas maximus</i> Linnaeus		Indian Elephant	Common. Sch. I
	Order	ARTIODACTYLA	
	Family	SUIDAE	
<i>Sus scrofa</i> Linnaeus		Wild Boar	Common. Sch. III
<i>Tragulus meminna</i> (Erxleben)		Mouse Deer	Seen in upper Barakamra and Joranda. Sch. I
<i>Cervus unicolor</i> Kerr		Sambar	Seen in upper Barakamra and Joranda. Sch. III
<i>Axis axis</i> (Erxleben)		Spotted Deer	Sch. III
<i>Muntiacus muntjak</i> (Zimmermann)		Barking Deer	Sighted near upper Barakamra; calls heard at Joranda. Sch. III
	Family	BOVIDAE	
<i>Bos gaurus</i> (Smith)		Gaur	Common. Sch. I
<i>Boselaphus tragocamelus</i> (Pallas)		Nilgai	Seen in Keonjhar Sch. III
<i>Tetracerus quadricornis</i> (Blainville)		Chousingha	Found in wooded and hilly areas. Sch. I

	Order	PHOLIDOTA	
	Family	MANIDAE	
<i>Manis crassicaudata</i> Gray		Indian Pangolin	Sch. I
	Order	RODENTIA	
	Family	SCIURIDAE	
<i>Funambulus pennanti</i> Wroughton		Five-striped Palm Squirrel	Common. Sch. IV
<i>Funambulus palmarum</i> (Linnaeus)		Three-striped Palm Squirrel	Less Common.
<i>Ratufa indica</i> (Erxleben)		Indian Giant Squirrel	Seen at upper Barakamra. Sch. II
<i>Petaurista petaurista</i> (Elliot)		Giant Flying Squirrel	Seen in southern parts of Simlipal Hills. Sch. II
	Family	MURIDAE	
<i>Mus booduga</i> (Gray)		Indian Field Mouse	Sch V
<i>Mus musculus</i> (Linnaeus)		House Mouse	Sch V
<i>Rattus rattus</i> (Linnaeus)		Common House Rat	Sch V
<i>Cremnomys blanfordi</i> (Thomas)		Blanford's Rat	—
<i>Vandeleuria oleracea</i> (Bennett)		Longtailed Tree Mouse	—
	Family	HYSTRICIDAE	
<i>Hystrix indica</i> Kerr		Indian Crested Porcupine	Sch. IV
	Order	LAGOMORPHA	
	Family	LEPORIDAE	
<i>Lepus nigricollis ruficaudatus</i> Geoffroy		Blacknaped Indian Hare	Sch. IV

## Appendix – II

## AVES

<i>Scientific Name</i>	<i>Common Name</i>	<i>Remarks</i>	<i>Status</i>
	Order	PODICIPEDIFORMES	
	Family	PODICIPEDIDAE	
1. <i>Podiceps ruficollis</i> (Pallas)	Little Grebe	R, C, Obs.	Sch. IV
	Order	PELECANIFORMES	
	Family	PHALACROCORACIDAE	
2. <i>Phalacrocorax niger</i> (Vieillot)	Little Cormorant	R, C, Obs.	Sch. IV
	Order	CICONIIFORMES	
	Family	ARDEIDAE	
3. <i>Ardeola striatus</i> (Linnaeus)	Little Green Heron	R, S,	Sch. IV
4. <i>Ardeola grayii</i> (Sykes)	Pond Heron	R, C, Obs.	Sch. IV
5. <i>Bubulcus ibis</i> (Linnaeus)	Cattle Egret	R, C, Obs.	Sch. IV
6. <i>Ardea alba</i> Linnaeus	Large Egret	R, C, Obs.	Sch. IV
7. <i>Ixobrychus cinnamomeus</i> (Gmelin)	Chestnut Bittern	R, C, Obs.	Sch. IV
8. <i>Ixobrychus sinensis</i> (Gmelin)	Yellow Bittern	R, S.	Sch. IV
9. <i>Ixobrychus flavicollis</i> (Latham)	Black Bittern	R, S.	Sch. IV
	Order	FALCONIFORMES	
	Family	ACCIPITRIDAE	
10. <i>Elanus caeruleus</i> (Desfontaines)	Blackwinged Kite	R, C, Obs.	—
11. <i>Pernis ptilorhynchus</i> (Temminck)	Honey Buzzard	R, Obs.	—
12. <i>Milvus migrans</i> (Boddaert)	Pariah Kite	R, C, Obs.	—
13. <i>Accipiter badius</i> (Gmelin)	Shikra	R, Obs.	Sch. I
14. <i>Butastur teesa</i> (Franklin)	White-eyed Buzzard-Eagle	R, Obs.	Sch. I
15. <i>Spizaetus cirrhatus</i> (Gmelin)	Crested Hawk-Eagle	R, Obs.	Sch. I
16. <i>Aquila rapax</i> (Temminck)	Tawny Eagle	M,	Sch. I
17. <i>Sarcogyps calvus</i> (Scopoli)	King Vulture	R, Rare,	Sch. IV
18. <i>Gyps indicus</i> (Scopoli)	Longbilled Vulture	R, C,	Sch. IV
19. <i>Gyps bengalensis</i> (Gmelin)	Whitebacked Vulture	R, C, Obs.	Sch. IV

\* R – Resident ; M – Migratory ; LM – Local migrant ; Obs. – Observed ; Coll. – Collected.

20.	<i>Circus cyaneus</i> (Linnaeus)	Hen-Harrier	M,	Sch. I
21.	<i>Spilornis cheeta</i> (Latham)	Crested Serpent Eagle	R, C, Obs.	Sch. I
	Family	FALCONIDAE		
22.	<i>Falco peregrinus</i> Tunstall	Shahin Falcon	R,Rare,Obs.	Sch. I
23.	<i>Falco chiquera</i> Daudin	Redheaded Merlin	R,Rare,Obs.	Sch. I
24.	<i>Falco tinnunculus</i> Linnaeus	Kestrel	M,	Sch. IV
	Order	ANSERIFORMES		
	Family	ANATIDAE		
25.	<i>Nettapus coromandelianus</i> (Gmelin)	Cotton Teal	R, Obs.	Sch. IV
26.	<i>Tadorna tadorna</i> (Linnaeus)	Common Shelduck	M, Obs.	Sch. IV
	Order	GALLIFORMES		
	Family	PHASIANIDAE		
27.	<i>Pavo cristatus</i> (Linnacus)	Indian Peafowl	R, C, Obs.	Sch. I
28.	<i>Gallus gallus</i> (Linnacus)	Red Jungle Fowl	R, C, Obs.	Sch. IV
29.	<i>Francolinus francolinus</i> (Linnaeus)	Black Partridge	R,	Sch. IV
30.	<i>Coturnix coturnix</i> (Linnaeus)	Common Quail	M,	Sch. IV
31.	<i>Perdicula erythrorrhynchua</i> (Sykes)	Painted bush Quail	R,	Sch. IV
32.	<i>Galloperdix spadiacea</i> (Gmelin)	Red Spur-Fowl	R, Obs.	Sch. IV
	Order	GRUIFORMES		
	Family	TURNICIDAE		
33.	<i>Turnix succitator</i> (Gmelin)	Common Bustard-Quail	R, C,	Sch. IV
	Order	CHARADRIIFORMES		
	Family	JACANIDAE		
34.	<i>Hydrophasianus chirurgus</i> (Scopoli)	Pheasant-tailed Jacana	R,	Sch. IV
35.	<i>Metopidius indicus</i> (Latham)	Bronzewinged Jacana	R, Obs.	Sch. IV
	Family	ROSTRATULIDAE		
36.	<i>Rostratula benghalensis</i> (Linnaeus)	Painted Snipe	R,	Sch. IV
	Family	RECURVIROSTRIDAE		
37.	<i>Haimantopus haimantopus</i> (Linnaeus)	Black-winged Stilt	M, C,	Sch. IV
	Family	BURHINIDAE		
38.	<i>Burhinus oedicnemus</i> (Linnaeus)	Stone Curlew	R,	Sch. IV

	Family	GLAREOLIDAE		
39.	<i>Cursorius cursor</i> (Latham)	Creamcoloured Courser	R,	Sch. IV
	Family	CHARADRIIDAE		
40.	<i>Vanellus indicus</i> (Boddaert)	Redwattled Lapwing	R, C, Obs.	—
41.	<i>Vanellus spinosus</i> (Linnaeus)	Spurwinged Plover	R,	Sch. IV
42.	<i>Vanellus malabaricus</i> (Boddaert)	Yellow-wattled Lapwing	R,	—
43.	<i>Vringa hypoleucos</i> (Linnaeus)	Common Sandpiper	M, C, Obs.	Sch. IV
	Order	COLUMBIFORMES		
	Family	COLUMBIDAE		
44.	<i>Treron pompadora</i> (Gmelin)	Greyfronted Green Pigeon	R,	Sch. IV
45.	<i>Treron curvirostra</i> (Gmelin)	Thickbilled Green Pigeon	R, Obs.	Sch. IV
46.	<i>Treron bicincta</i> (Jerdon)	Orangebreasted Green Pigeon	R, Obs.	Sch. IV
47.	<i>Treron phoenicoptera</i> (Latham)	Green Pigeon	M,	Sch. IV
48.	<i>Columba punicea</i> (Blyth)	Purple Wood Pigeon	R,	Sch. IV
49.	<i>Streptopelia orientalis</i> (Latham)	Rufous Turtle Dove	R, C, Obs.	Sch. IV
50.	<i>Streptopelia tranquebarica</i> (Hermann)	Red Turtle Dove	R, C, Obs.	Sch. IV
51.	<i>Streptopelia dicaocto</i> (Frevaldszky)	Ring Dove	R.C.Obs	Sch. IV
52.	<i>Streptopelia chinensis</i> (Scopoli)	Spotted Dove	R, C, Obs.	Sch. IV
53.	<i>Streptopelia senegalensis</i> (Linnaeus)	Little Brown Dove	R, Obs.	Sch. IV
54.	<i>Chalcophaps indica</i> (Linnaeus)	Emerald Dove	R, Obs.	Sch. IV
	Order	PSITTACIFORMES		
	Family	PSITTACIDAE		
55.	<i>Psittacula eupatria</i> (Linnaeus)	Alexandrine Parakeet	R,	Sch. IV
56.	<i>Psittacula krameri</i> (Scopoli)	Roseringed Parakeet	R,	Sch. IV
57.	<i>Psittacula cyanocephala</i> (Linnaeus)	Blossomheaded Parakeet	R,	Sch. IV
58.	<i>Loriculus vernalis</i> (Sparman)	Indian Lorikeet	R,	Sch. IV
	Order	CUCULIFORMES		
	Family	CUCULIDAE		
59.	<i>Clamator coromandus</i> (Linnaeus)	Redwinged Crested Cuckoo	M,	Sch. IV
60.	<i>Clamator jacobinus</i> (Boddaert)	Pied Crested Cuckoo	R,	Sch. IV

61. <i>Cuculus sparverioides</i> Vigors	Large Hawk-Cuckoo	R,	Sch. IV
62. <i>Cuculus varius</i> Vahf	Common Hawk-Cuckoo	R, Obs.	Sch. IV
63. <i>Cuculus micropterus</i> Gould	Indian Cuckoo	LM,	Sch. IV
64. <i>Cuculus canorus</i> Linnaeus	Cuckoo	M,	Sch. IV
65. <i>Cuculus poliocephalus</i> Latham	Small Cuckoo	R,	Sch. IV
66. <i>Cacomantis sonnerati</i> (Latham)	Banded Bay Cuckoo	R,	Sch. IV
67. <i>Cacomantis passerinus</i> (Vahl)	Plaintive Cuckoo	R,	Sch. IV
68. <i>Surniculus lugubris</i> (Horsfield)	Drongo-Cuckoo	R, C, Obs.	Sch. IV
69. <i>Eudynamys scolopacea</i> (Linnaeus)	Koel	R, C, Obs.	Sch. IV
70. <i>Rhopodytes viridirostris</i> (Jerdon)	Small Greenbilled Malkoha	R,	—
71. <i>Rhopodytes tristis</i> (Lesson)	Large Greenbilled Malkoha	R,	—
72. <i>Tocacua leschenaultii</i> Lesson	Sirkeer Cuckoo	R,	Sch. IV
73. <i>Centropus sinensis</i> (Stephens)	Crow-Pheasant	R, C, Obs.	—

## Order STRIGIFORMES

## Family STRIGIDAE

74. <i>Otus scops</i> (Linnaeus)	Scops Owl	R, C, Obs.	Sch. IV
75. <i>Otus bakkamoena</i> Pennant	Collard Scops Owl	R,	Sch. IV
76. <i>Bubo bubo</i> (Linnaeus)	Eagle-owl	R,	Sch. IV
77. <i>Bubo crormandus</i> (Latham)	Dusky Horned Owl	R,	Sch. IV
78. <i>Bubo zeylonensis</i> (Gmelin)	Brown Fish Owl	R,	Sch. IV
79. <i>Glaucidium radiatum</i> (Tickell)	Barred Jungle Owlet	R,	Sch. IV
80. <i>Ninox guttulata</i> (Raffles)	Brown Hawk-Owl	R,	Sch. IV
81. <i>Athene brama</i> (Temminck)	Spotted Owlet	R,	Sch. IV
82. <i>Strix leptogrammica</i> Temminck	Brown Mottled Wood Owl	R,	Sch. IV
83. <i>Asio flammeus</i> (Pontoppidan)	Shorteared Owl	R,	Sch. IV
84. <i>Tyto alba</i> (Scopoli)	Barn Owl	R,	Sch. IV

## Order CAPRIMULGIFORMES

## Family CAPRIMULGIDAE

85. <i>Caprimulgus indicus</i> Latham	Indian Jungle Nightjar	R,	Sch. IV
86. <i>Caprimulgus macrurus</i> Horsfield	Longtailed Nightjar	R, C, Obs.	Sch. IV

87.	<i>Caprimulgus asiaticus</i> Latham	Indian Nightjar	R,	Sch. IV
88.	<i>Caprimulgus affinis</i> Horsfield	Franklin's Nightjar	LM, Obs.	Sch. IV
	Order	APODIFORMES		
	Family	APODIDAE		
89.	<i>Chaetura sylvatica</i> (Tickell)	Whiterumped Spinetail	R, C, Obs.	—
90.	<i>Apus affinis</i> (J. E. Gray)	House Swift	R,	—
91.	<i>Cypsiurus parvus</i> (Lichtenstein)	Palm Swift	R, Obs.	—
92.	<i>Hemiprocne longipennis</i> (Rafinesque)	Crested Swift	R, Obs.	—
	Order	TROGONIFORMES		
	Family	TROGONIDAE		
93.	<i>Harpactes fasciatus</i> (Pennant)	Malabar Trogon	R,	Sch. IV
	Order	CORACIIFORMES		
	Family	ALCEDINIDAE		
94.	<i>Alcedo atthis</i> (Linnaeus)	Small Blue Kingfisher	R, C, Obs.	Sch. IV
95.	<i>Halcyon smyrnensis</i> (Linnaeus)	Whitebreasted Kingfisher	R, C, Obs.	Sch. IV
	Family	MEROPIDAE		
96.	<i>Merops leschenaulti</i> Vieillot	Chestnuthcaded Bee-eater	R,	—
97.	<i>Merops philippinus</i> (Linnaeus)	Bluetailed Bec-eater	R,	—
98.	<i>Merops orientalis</i> (Latham)	Green Bee-eater	R, Obs.	—
99.	<i>Nyctyornis athertoni</i> (Jardine & Selby)	Bluebearded Bee-eater	M,	—
	Family	UPUPIDAE		
100.	<i>Upupa epops</i> Linnaeus	Hoopoe	R, LM,	—
101.	<i>Tokus birostris</i> (Scopoli)	Common Grey Hornbill	R, Obs.	Sch. IV
102.	<i>Anthracoceros malabaricus</i> (Gmelin)	Large Pied Hornbill	R,	Sch. I
	Family	CORACIIDAE		
103.	<i>Coracias benghalensis</i> Linnaeus	Indian Roller	R, C, Obs.	Sch. IV
	Order	PICIFORMES		
	Family	CAPITONIDAE		
104.	<i>Megalaima haemacephala</i> (P. L. S. Muller)	Crimsonbreasted Barbet	R, C, Obs.	Sch. IV

105.	<i>Megalaima asiatica</i> (Latham)	Bluethroated Barbet	R, Obs.	Sch. IV
106.	<i>Megalaima zeylanica</i> (Gmelin)	Large Green Barbet	R,	Sch. IV
107.	<i>Megalaima lineata</i> (Vieillot)	Lineated Barbet	LM,	Sch. IV
	Family	PICIDAE		
108.	<i>Hemicircus canente</i> (Lesson)	Heartspotted Woodpecker	R, C, Obs.	Sch. IV
109.	<i>Picumnus innominatus</i> Burton	Speckled Piculet	R,	Sch. IV
110.	<i>Micropternus brachyurus</i> (Vieillot)	Rufous Woodpecker	R, Obs.	Sch. IV
111.	<i>Dinopium benghalense</i> (Linnaeus)	Goldenbacked Woodpecker	R, Obs.	Sch. IV
112.	<i>Picoides maci</i> (Vieillot)	Fulvousbreasted Pied Woodpecker	R,	Sch. IV
113.	<i>Picoides marhattensis</i> (Latham)	Yellowfronted Pied Woodpecker	R,	Sch. IV
114.	<i>Chrysocolaptes festivus</i> (Boddaert)	Blackbacked Woodpecker	R,	Sch. IV
115.	<i>Chrysocolaptes lucidus</i> (Scopoli)	Large Goldenbacked Woodpecker	R,	Sch. IV
	Order	PASSERIFORMES		
	Family	PITTIDAE		
116.	<i>Pitta brachyura</i> (Linnaeus)	Indian Pitta	R,	—
	Family	ALAUDIDAE		
117.	<i>Mirafra javanica</i> Horsfield	Singing Bushlark	R, Obs.	Sch. IV
118.	<i>Mirafra assamica</i> Horsfield	Bush Lark	R, Obs.	Sch. IV
119.	<i>Mirafra erythroptera</i> Blyth	Redwinged Bush Lark	R, Obs.	Sch. IV
120.	<i>Eremopterix grisea</i> (Scopoli)	Ashy-crowned Finch Lark	R, C, Obs.	Sch. IV
121.	<i>Calandrella cinerea</i> (Gmelin)	Short-toed Lark	R,	Sch. IV
122.	<i>Alauda gulgula</i> Franklin	Eastern Skylark	R, C, Obs.	Sch. IV
	Family	HIRUNDINIDAE		
123.	<i>Riparia ripari</i> (Linnaeus)	Collard Sand Martin	M,	—
124.	<i>Hirundo concolor</i> Sykes	Dusky Crag Martin	R,	—
125.	<i>Hirundo rustica</i> (Linnaeus)	Swallow	M, Obs.	—
126.	<i>Hirundo smithii</i> Leach	Wiretailed Swallow	M,	—
127.	<i>Hirundo daurica</i> Linnaeus	Redrumped Swallow	M,	—

128.	<i>Delichon urbica</i> (Linnaeus)	House Martin	M,	—
	Family	LANIIDAE		
129.	<i>Lanius cristatus</i> Linnaeus	Brown Shrike	M, Obs.	—
130.	<i>Lanius schach</i> Linnaeus	Rufousbacked Shrike	R, Obs.	—
	Family	ORIOOLIDAE		
131.	<i>Oriolus oriolus</i> (Linnaeus)	Golden Oriole	M, Obs.	Sch. IV
132.	<i>Oriolus xanthornus</i> (Linn.)	Blackheaded Oriole	R, Obs.	Sch. IV
	Family	DICRURIDAE		
133.	<i>Dicrurus adsimilis</i> (Bechstein)	Black Drongo	R, C, Obs.	Sch. IV
134.	<i>Dicrurus leucopheus</i> Vieillot	Ashy Drongo	R,	Sch. IV
135.	<i>Dicrurus caerulescens</i> (Linnaeus)	Whitebellied Drongo	R,	Sch. IV
136.	<i>Dicrurus aeneus</i> (Vieillot)	Bronzed-Drongo	R, Obs.	Sch. IV
137.	<i>Dicrurus hottentottus</i> (Linnaeus)	Haircrested Drongo	R, Obs.	Sch. IV
138.	<i>Dicrurus paradiseus</i> (Linnaeus)	Greater Racket-tailed Drongo	R,	Sch. IV
	Family	CAMPEPHAGIDAE		
139.	<i>Tephrodornis virgatus</i> (Temminck)	Large Woodshrike	R,	—
140.	<i>Tephrodornis pondicirianus</i> (Gmelin)	Wood Shrike	R,	—
141.	<i>Coracina novaehollandiae</i> (Gmelin)	Large Cuckoo-Shrike	R, Obs.	—
142.	<i>Coracina melaschistos</i> (Hodgson)	Grey Cuckoo-Shrike	M, Obs.	—
143.	<i>Coracina melanoptera</i> (Riipell)	Blackheaded Cuckoo-Shrike	M, Obs.	—
144.	<i>Hemipus picatus</i> (Sykes)	Pied Flycatcher-Shrike	R,	—
145.	<i>Pericrocotus flammeus</i> (Froster)	Scarlet Minivet	R, Coll,	Sch. IV
146.	<i>Pericrocotus roseus</i> (Vieillot)	Rosy Minivet	LM,	Sch. IV
147.	<i>Pericrocotus cinnamomeus</i> (Linnaeus)	Small Minivet	R, Obs.	Sch. IV
	Family	ARTAMIDAE		
148.	<i>Artamus fuscus</i> Vieillot	Ashy Swallow-Shrike	R,	—
	Family	STURNIDAE		
149.	<i>Sturnus malabaricus</i> (Gmelin)	Greyheaded Myna	R, C, Obs.	Sch. IV
150.	<i>Sturnus pagodarum</i> (Gmelin)	Blackheaded Myna	R, C, Obs.	Sch. IV
151.	<i>Sturnus contra</i> (Linnaeus)	Pied Myna	R, C, Obs.	Sch. IV

152.	<i>Acridotheres tristis</i> (Linnaeus)	Common Myna	R, C, Obs.	Sch. IV
153.	<i>Acridotheres fuscus</i> (Wagler)	Jungle Myna	R, C, Obs.	Sch. IV
154.	<i>Gracula religiosa</i> Linnaeus	Hill Myna	R, C, Obs.	Sch. IV
	Family	CORVIDAE		
155.	<i>Dendrocitta vagabunda</i> (Latham)	Indian Tree-Pie	R, Obs.	Sch. IV
156.	<i>Dendrocitta formosa</i> Swinhoe	Himalayan Tree Pie	R, Obs.	Sch. IV
157.	<i>Corvus splendens</i> Vieillot	House Crow	R, Obs.	Sch. V
158.	<i>Corvus macrorhynchus</i> Wagler	Jungle Crow	R, C, Obs.	—
	Family	IRENIDAE		
159.	<i>Aegithina tiphia</i> (Linnaeus)	Common Iora	R, C, Obs.	Sch. IV
160.	<i>Chloropsis aurifrons</i> (Temminck)	Goldfronted Chloropsis	R, Obs.	Sch. IV
161.	<i>Chloropsis cochinchinensis</i> (Gmelin)	Goldmantled Chloropsis	R,	Sch. IV
	Family	PYCNONOTIDAE		
162.	<i>Pycnonotus melanicterus</i> (Gmelin)	Blackheaded Yellow Bulbul	R,	Sch. IV
163.	<i>Pycnonotus jacosus</i> (Linnaeus)	Redwhiskered Bulbul	R, C, Obs.	Sch. IV
164.	<i>Pycnonotus cafer</i> (Linnaeus)	Redvented Bulbul	R, C, Obs.	Sch. IV
165.	<i>Pycnonotus luteolus</i> (Lesson)	Whitebrowed Bulbul	R,	Sch. IV
	Family	MUSCICAPIDAE		
166.	<i>Pellorneum ruficeps</i> Swainson	Spotted Babbler	R,	Sch. IV
167.	<i>Trechostoma abbotti</i> (Blyth)	Abott's Babbler	R,	Sch. IV
168.	<i>Stachyris rufifrons</i> (Hume)	Redfronted Babbler	R,	Sch. IV
169.	<i>Dumetia hyperythra</i> (Franklin)	Rufousbellied Babbler	R,	Sch. IV
170.	<i>Macronous gularis</i> (Horsfield)	Yellowbreasted Babbler	R,	Sch. IV
171.	<i>Chrysomma sinense</i> (Gmelin)	Yellow-eyed Babbler	R,	Sch. IV
172.	<i>Turdoides caudatus</i> (Dumont)	Common Babbler	R,	Sch. IV
173.	<i>Turdoides malcolmi</i> (Sykes)	Large Grey Babbler	R,	Sch. IV
174.	<i>Turdoides striatus</i> (Dumont)	Jungle Babbler	R,	Sch. IV
175.	<i>Alcippe poioicephala</i> (Jerdon)	Quaker Babbler	R,	Sch. IV
176.	<i>Pomatorhynchus horsfieldii</i> Sykes	Slatyheaded Scimitar Babbler	R,	Sch. IV
177.	<i>Muscicapa latirostris</i> Raffles	Brown Flycatcher	M,	Sch. IV

178. <i>Muscicapa parva</i> Bechstein	Redbreasted Flycatcher	M, C, Obs.	Sch. IV
179. <i>Muscicapa superciliaris</i> (Jerdon)	Whitebrowed Blue Flycatcher	M,	Sch. IV
180. <i>Muscicapa poliogenys</i> (Brooks)	Brook's Flycatcher	M,	Sch. IV
181. <i>Muscicapa tickelliae</i> (Blyth)	Tickell's Blue Flycatcher	M,	Sch. IV
182. <i>Muscicapa thalassina</i> Swainson	Verditer Flycatcher	M,	Sch. IV
183. <i>Culicicapa ceylonensis</i> (Swainson)	Greyheaded Flycatcher	M,	Sch. IV
184. <i>Rhipidura aureola</i> (Lesson)	Whitebrowed Fantail Flycatcher	R,	Sch. IV
185. <i>Rhipidura albicollis</i> (Vieillot)	Whitethroated Fantail Flycatcher	R,	Sch. IV
186. <i>Terpsiphone paradisi</i> (Linnaeus)	Paradise Flycatcher	R,	Sch. IV
187. <i>Hypothymis azurea</i> (Boddaert)	Blacknaped Flycatcher	R, Obs.	—
188. <i>Cisticola juncidis</i> (Rafinesque)	Streaked Fantail Warbler	R, Obs.	—
189. <i>Prinia hodgsonii</i> Blyth	Franklin's Wren-Warbler	R,	—
190. <i>Prinia gracilis</i> (Lichtenstein)	Streaked Wren-Warbler	R,	—
191. <i>Prinia subflava</i> (Gmelin)	Indian Wren-Warbler	R,	—
192. <i>Prinia socialis</i> Sykès	Ashy Wren-Warbler	R,	—
193. <i>Prinia flaviventris</i> (Delessert)	Yellowbellied Wren-Warbler	R,	—
194. <i>Orthotomus sutorius</i> (Pennant)	Tailor Bird	R, C, Obs.	—
195. <i>Locustella certhiola</i> (Pallas)	Grasshopper Warbler	M,	—
196. <i>Acrocephalus dumetorum</i> Blyth	Blyth's Reed Warbler	M, Obs.	—
197. <i>Acrocephalus agricola</i> (Jerdon)	Paddyfield Warbler	M, Obs.	—
198. <i>Sylvia hortensis</i> (Gmelin)	Orphean Warbler	M,	—
199. <i>Phylloscopus collibita</i> (Vieillot)	Brown Leaf Warbler	M,	—
200. <i>Phylloscopus affinis</i> (Tickell)	Tickell's Leaf Warbler	M,	—
201. <i>Phylloscopus fuscatus</i> (Blyth)	Dusky Leaf Warbler	M, Obs.	—
202. <i>Phylloscopus inornatus</i> (Blyth)	Plain Leaf Warbler	M,	—
203. <i>Phylloscopus magnirostris</i> Blyth	Largebilled Leaf Warbler	M,	—
204. <i>Phylloscopus trochilloides</i> (Sundevall)	Dull Green Leaf Warbler	M, Obs.	—

205. <i>Seiurus burkii</i>	Blackbrowed Flycatcher- Warbler	M,	—
206. <i>Erithacus calliope</i> (Pallas)	Ruby Throat	M,	—
207. <i>Erethacus svecicus</i> (Linnaeus)	Bluethroat	M, Obs.	—
208. <i>Copsychus saularis</i> (Linnaeus)	Magpie-Robin	R, C, Obs.	—
209. <i>Copsychus malabaricus</i> (Scopoli)	Shama	R, Obs.	—
210. <i>Sexicoloides fulicata</i> (Gmelin)	Black Redstart	M, Obs.	—
211. <i>Saxicola torquata</i> (Linnaeus)	Stone Chat	M, Obs.	—
212. <i>Saxicola caprata</i> (Linnaeus)	Pied Bush Chat	M, Obs.	—
213. <i>Saxicoloides fulicata</i> (Linnaeus)	Indian Robin	R, C, Obs.	—
214. <i>Monticola cinclorhynchus</i> (Vigors)	Blueheaded Rock Thrush	M, Coll.	Sch. IV
215. <i>Monticola solitarius</i> (Linnaeus)	Blue Rock Thrush	M, Obs.	Sch. IV
216. <i>Zoothera citrina</i> (Latham)	Orangeheaded Ground Thrush	R, Obs.	Sch. IV
217. <i>Zoothera dauma</i> (Latham)	Shortbilled Mountain Thrush	M, Obs.	Sch. IV
218. <i>Turdus merula</i> Linnaeus	Blackbird	R,	Sch. IV
219. <i>Trudus unicolor</i> Tickell	Tickell's Thrush	M, Obs.	Sch. IV
	Family PARIDAE		
220. <i>Parus major</i> Linnaeus	Grey Tit	R, C, Obs.	Sch. IV
221. <i>Parus xanthogenys</i> Vigors	Yellowcheeked Tit	R, C, Coll.	Sch. IV
	Family SITTIDAE		
222. <i>Sitta castanea</i> (Lesson)	Chestnutbellied Nuthatch	R, Coll.	—
223. <i>Sitta frontalis</i> Swainson	Velvetfronted Nuthatch	R,	—
	Family MOTACILLIDAE		
224. <i>Anthus hodgsoni</i> Richmond	Indian Tree Pipit	M, Obs.	Sch. IV
225. <i>Anthus trivialis</i> (Linnaeus)	Tree Pipit	M, Obs.	Sch. IV
226. <i>Anthus campestris</i> (Linnaeus)	Tawny Pipit	M, Coll.	Sch. IV
227. <i>Anthus cervinus</i> (Pallas)	Redthroated Pipit	M, Coll.	Sch. IV
228. <i>Anthus novaeseelandiae</i> Gmelin	Paddyfield Pipit	R, Obs.	Sch. IV
229. <i>Anthus similis</i> Jerdon	Brown Rock Pipit	R,	Sch. IV

230.	<i>Motacilla indica</i> Gmelin	Forest Wagtail	M, Obs.	—
231.	<i>Motacilla flava</i> Linnaeus	Yellow Wagtail	M, Obs.	—
232.	<i>Motacilla citreola</i> Pallas	Yellowheaded Wagtail	M,	—
233.	<i>Motacilla cinerea</i> Tunstall	Grey Wagtail	M, Obs.	—
234.	<i>Motacilla alba</i> Linnaeus	Pied Wagtail	M, Obs.	—
235.	<i>Motacilla madraspatensis</i> Gmelin	Large Pied Wagtail	R, Obs.	—
	Family	DICAEIDAE		
236.	<i>Dicaeum agile</i> (Tickell)	Thickbilled Flowerpecker	R, Coll.	Sch. IV
237.	<i>Dicaeum erythrorhynchos</i> (Latham)	Tickell's Flowerpecker	R, Obs.	Sch. IV
238.	<i>Dicaeum ignipectus</i> (Blyth)	Firebreasted Flowerpecker	R, Obs.	Sch. IV
	Family	NECTARINIIDAE		
239.	<i>Nectarinia zeylonica</i> (Linn.)	Purplerumped Sunbird	R, Obs.	Sch. IV
240.	<i>Nectarinia asiatica</i> (Latham)	Purple Sunbird	R, Obs.	Sch. IV
241.	<i>Aethopyga ignicauda</i> (Hodgson)	Firetailed Sunbird	R, Obs.	Sch. IV
242.	<i>Aracnothera longirostris</i> (Latham)	Little Spiderhunter	R, Obs.	Sch. IV
	Family	ZOSTEROPIDAE		
243.	<i>Zosterops palpebrosa</i> (Temminck)	White-eye	R, Obs.	Sch. IV
	Family	PLOCEIDAE		
244.	<i>Passer domesticus</i> (Linnaeus)	House Sparrow	R, Obs.	—
245.	<i>Petronia xanthocollis</i> (Burton)	Yellowthroated Sparrow	R, C, Obs.	—
246.	<i>Ploceus philippinus</i> (Linnaeus)	Common Baya	R,	Sch. IV
247.	<i>Ploceus benghalensis</i> (Linnaeus)	Blackthroated Baya	R, LM,	Sch. IV
248.	<i>Ploceus manyar</i> (Horsfield)	Streaked Weaver Bird	R,	Sch. IV
249.	<i>Estrilda amandava</i> (Linnaeus)	Red Munia	R,	Sch. IV
250.	<i>Lonchura malabarica</i> (Linnaeus)	Whitethroated Munia	R,	Sch. IV
251.	<i>Lonchura striata</i> (Linnaeus)	Whitebacked Munia	R,	Sch. IV
252.	<i>Lonchura kellarti</i> (Jerdon)	Rufousbellied Munia	R,	Sch. I
253.	<i>Lonchura punctulata</i> (Linn.)	Spotted Munia	R,	Sch. IV
254.	<i>Lonchura malacca</i> (Linnaeus)	Blackheaded Munia	R,	Sch. IV
	Family	FRINGILLIDAE		
255.	<i>Carpodacus erythrinus</i> (Pallas)	Common Rose Finch	M, Obs.	Sch. IV

	Family	EMBERIZIDAE		
	Class	REPTILIA		
256.	<i>Emberiza melanocephala</i> Scopoli	Blackheaded Bunting	M,	Sch. IV
257.	<i>Emberiza bruniceps</i> Brandt	Redheaded Bunting	M,	Sch. IV
258.	<i>Melophus lathami</i> J. E. Gray	Crested Bunting	M, Obs.	Sch. IV

## Appendix – III

	Class	REPTILIA		
	Order	SQUAMATA		
	Suborder	LACERTILIA		
	Family	GEKKONIDAE		
	<i>Hemidactylus brooki</i> Gray	Brook's Gecko		—
	<i>Hemidactylus frenatus</i> Schlegel	Smooth House Gecko		—
	Family	AGAMIDAE		
	<i>Calotes versicolor</i> (Daudin)	Common Garden Lizard		—
	<i>Psammophilus blanfordanus</i> (stoliczka)	Rock Lizard		—
	Family	SCINCIDAE		
	<i>Mabuya macularia</i> (Blyth)	Striped Skink		—
	Family	VARANIDAE		
	<i>Varanus bengalensis</i> (Daudin)	Large Bengal Monitor		Sch. I
	Suborder	OPHIDIA		
	Family	TYPHLOPIDAE		
	<i>Typhlops diardi</i> (Smith)	Blind Snake		Sch. IV
	Family	BOIDAE		
	<i>Python molurus</i> (Linnaeus)	Indian Python		Sch. I
	Family	COLUBRIDAE		
	<i>Ptyas mucosus</i> (Rat Snake)	Rat Snake		Sch. II
	<i>Xenochrophis piscator</i> (Schneider)	Checkered Keelback		Sch. II

<i>Scientific Name</i>	<i>Common Name</i>	<i>Status</i>
<i>Chrysopelea ornata</i> (Shaw)	Golden Tree Snake	Sch. IV
Family	ELAPIDAE	
<i>Bungarus caeruleus</i> (Schneider)	Common Krait	Sch. IV
<i>Naja naja</i> (Linnaeus)	Indian Cobra	Sch. II
<i>Ophiophagus hannah</i> (Canter)	King Cobra	Sch. II
Family	VIPERIDAE	
<i>Trimeresurus</i> sp.	Pit Viper	Sch. IV

## Appendix – IV

Class	AMPHIBIA	
Order	ANURA	
Family	RANIDAE	
<i>Rana cyanophlyctis</i> Schneider	Skipper Frog	Sch. IV
<i>Rana limnocharis</i> (Wiegmann)	Indian Cricket Frog	Sch. IV
<i>Rana tigerina</i> Daudin	Indian Bull Frog	Sch. IV
Family	RHACOPHORIDAE	
<i>Rhacophorus maculatus</i> (gray)	Tree Frog	—
Family	MICROHYLIDAE	
<i>Microhyla ornata</i> (Dun. & Bibr.)	Ornate microhylid	—
Family	BUFONIDAE	
<i>Bufo melanostictus</i> Schneider	Common Indian Toad	—

## Appendix – V

	PISCES	
Class	TELEOSTEI	
Order	CYPRINIFORMES	
Family	CYPRINIDAE	
<i>Esomus danricus</i> (Hamilton)		
<i>Tor putitora</i> (Hamilton)		
Family	SISORIDAE	
<i>Clarias batrachus</i> (Linnaeus)		
Family	AMBLYCIPITIDAE	
<i>Amblyceps mangois</i> (Hamilton)		

- Family CHANNIDAE  
*Channa punctatus* (Bloch)
- Appendix – VI  
 INSECTA
- Order ODONATA  
 Family LIBELLULIDAE  
*Potamarcha congener* (Rambur)  
*Pantala flavescens* (Fabricius)
- Order LEPIDOPTERA  
 Family NYMPHALIDAE  
*Cyrestis thyodamus* Boisduval
- Family PAPILIONIDAE  
*Graphium doson eleius* (Fruhstorfer)  
*Papilio polytes romulus* Cramer  
*Papilio chaon chaon* Westwood  
*Papilio polymnestor polymnestor* Cramer
- Order COLEOPTERA  
 Family CHRYSOMELIDAE  
*Monolepta signata* (Olivier)  
*Aphthona nigrilabris* Duvivier  
*Phyllotreta chotanica* Duvivier
- ARACHNIDA  
 ARANEAE  
 Family ARANEIDAE  
*Agriope pulchella* Thorell
- ACARINA  
 Order PROSTIGMATA  
 Family TETRANYCHIDAE  
*Schizotetranychus andropogoni* (Hirst)
- Family PHYTOSEIIDAE  
*Amblyseius (Typhlodromips) syzygii* Gupta