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CONTENTS OF VOLUME XXXVII No. 2.

	PAGE
THE GAME BIRDS OF THE INDIAN EMPIRE. By E. C. Stuart Baker, C.I.E., F.Z.S., F.L.S., M.B.O.U., H.F.A.O.U. Vol. V. Part XXI. (With a coloured plate)	245
REVISION OF THE FLORA OF THE BOMBAY PRESIDENCY. By the late E. Blatter, S.J., Ph.D., F.L.S. Part XXIV. (With 3 plates and one block)	255
STALKING A HERD OF SAING. (Good Sport with a Camera in Burma.) By E. H. Peacock. (With 3 plates)	278
THE VERNAY SCIENTIFIC SURVEY OF THE EASTERN GHATS. (Ornithological Section). By H. Whistler, M.B.O.U., assisted by N. B. Kinnear, M.B.O.U. Part VIII.	281
THE GAME BIRDS AND ANIMALS OF THE MANIPUR STATE WITH NOTES ON THEIR NUMBERS, MIGRATION AND HABITS. By J. C. Higgins, I.C.S. Part VI. ..	298
SOME BEAUTIFUL INDIAN TREES. By the late E. Blatter, S.J., Ph.D., F.L.S., and W. S. Millard, F.Z.S. Part XV.	310
THE PALM CIVETS OR 'TODDY CATS' OF THE GENERA <i>Paradoxurus</i> AND <i>Paguma</i> INHABITING BRITISH INDIA. By R. I. Pocock, F.R.S. (With 3 text-figures.)	314
ON THE BIRDS OF THE ADUNG VALLEY, NORTH-EAST BURMA. By N. B. Kinnear.	347
THE LIFE-HISTORY OF <i>Myrmarachne plataleoides</i> (CAMBR.) A Spider-mimic of the Indian Red Ant. By A. P. Mathew, M.A. (With a plate)	369
ON THE TYPE LOCALITY AND SYNONYMY OF <i>Eoglaucomyz fimbriatus</i> AND ITS LOCAL RACES. By J. L. Chaworth-Musters	375
A NOTE ON <i>Sciuropterus gorkhali</i> LINDSAY WITH REMARKS ON <i>Petaurista caniceps</i> AND ITS ALLIES. By J. L. Chaworth-Musters.	376
A NOTE ON THE BIRDS OF GHAZIPUR. BY Rev. F. S. Briggs.	378
THE FLORA OF WAZIRISTAN. By the late E. Blatter, S.J., Ph.D., F.L.S. and J. Fernandez. Part IV. (With 3 plates)	391
THE HYDERĀBĀD STATE ORNITHOLOGICAL SURVEY. By Sālim A. Ali. Part V. (With 3 plates)	425
EARTH-EATING AND SALT-LICKING IN INDIA. BY J. F. Caius, S.J., F.L.S., and S. K. Chhapgar, B.Sc., Analyses XXXII-XXXV.	455
REVIEWS :—	
I.—Evolution of habit in Birds	460
II.—Nature Study Readers	461
III.—Indo-China-A Sportsman's Opportunity	462
IV.—' Darwin '.	464
OBITUARIES :—	
Father E. Blatter, S. J.	466
Dr. Ernst Johann Otto Hartert	474
Mr. Francis James Mitchell	475
Mr. Heugh S. Symons.	477

	PAGE
MISCELLANEOUS NOTES :—	
I.—The Indian Vampire (<i>Megaderma lyra</i>) feeding on a Pipistrel. By C. McCann, F.L.S.	479
II.—An Unusual Tiger. By A. C. Lothian	479
III.—Do Foxes occur in Burma? By T. R. Livesey	482
IV.—A Bison sanatorium. By R. C. Morris	483
V.—White Bison. By R. C. Morris	483
VI.—Growth and shedding of Antlers in Sambar (<i>Rusa unicolor</i>) and Cheetal (<i>Axis axis</i>) in South India. By R. C. Morris	484
VII.—Growth and shedding of antlers in the Swamp Deer (<i>Rucervus duvaucelli</i>) in the United Provinces. By F. W. Champion, I.F.S.	485
VIII.—Notes on the Swamp Deer (<i>Rucervus duvaucelli</i>) in Assam. By C. A. R. Bhadian, I.F.S.	485
IX.—Clicking sounds made by Muntjac. By Sundara Raj	486
X.—A large pair of elephant's (<i>Elephas maximus</i>) tusks from Burma. By J. K. Stanford, I.C.S. (<i>With a photo</i>)	486
XI.—Statistical record of growth in the Indian Elephant (<i>Elephas maximus</i>). By G. Hundley	487
XII.—On the occurrence of the White-collared King-fisher (<i>Sauroptatis chloris</i> Bodd.) in the District of 24-Perganas with a note on juvenile coloration. By S. C. Law.	488
XIII.—Nesting habits of the Blue-Rock Pigeon (<i>Columbia livia</i>). By H. N. Acharya	490
XIV.—Occurrence of the Mandarin Duck (<i>Aix galericulata</i> Linn.) in the Manipur State. By C. Gimson	490
XV.—Migration and decrease of Snipe in the Andamans. By J. Miles Stapylton, I.C.S.	491
XVI.—Observation on the nest of the Dabchick (<i>Podiceps ruficollis</i> Vroeg). By P. S. Sundara' Raj (Mrs.)	492
XVII.—A Large Mugger (<i>Crocodilus palustris</i> Lesson) from Bikaner. By The Secretary to the Heir-Apparent, Bikaner ...	493
XVIII.—Note on the Loggerhead Turtle (<i>Caretta C. olivacea</i> Eschscholtz) depositing its eggs. By J. B. Greaves (<i>With a plate</i>)	494
XIX.—The Larva of the Lobster Moth. (<i>Stauropus dentilinea</i> Hampson). By Col. F. C. Fraser, I.M.S. (<i>With a plate</i>). ..	495
XX.—The Flee-Beetle (<i>Haltica cyanea</i> Weber) feeding on the leaves of the Water Chestnut (<i>Trapa bispinosa</i> Roxb.) By C. McCann.	496
XXI.—Outbreak of Millipedes at Jalgaon. By V. G. Deshpande ...	497
XXII.—Termite collecting in South India for food. By T. V. Subramaniam	498
XXIII.—A note on the males of <i>Emerita</i> (<i>Hippa</i>) <i>asiatica</i> . By M. Krishna Menon	499
XXIV.—Occurrence of <i>Isoëtes coromandelina</i> L. in the Bombay Presidency. By C. McCann, F.L.S.	501
Proceedings of the Annual Meeting	503

THE GAME BIRDS AND ANIMALS OF THE MANIPUR
STATE WITH NOTES OF THEIR NUMBERS, MIGRATION
AND HABITS.

BY

J. C. HIGGINS, I.C.S.

PART VI.

(Continued from page 95 of this volume).

QUAILS.

Five species of quail reside and breed and two migratory species have been recorded, but are most uncommon. There are not sufficient quail anywhere to make it worth while to go out after them alone. A few are bagged out snipe or partridge shooting, but many sportsmen let most of them go as not being worth powder and shot. The best bag is 110, in 1915-16. The Manipuri name for all the quails is *sorbol*, irrespective of species. The name is sometimes corrupted to *soibol*.

The Japanese Grey Quail (*Coturnix coturnix japonica*).

One specimen is recorded as having been shot in Manipur in 1899.

The Common or Grey Quail (*Coturnix coturnix coturnix*)—Manipuri, *sorbol*.

This species is rare in Manipur, as it is in Assam: as Baker¹ says, it only 'struggles into that province'. Further, the variation in the numbers seen from year to year is considerable. In some years a fair number are bagged, while in others not a single one is flushed. The same seems to be true of the Assam valley. In 1920-21, the first year I was in Nowgong, I bagged 15: in 1921-22 and 1922-23 I never saw one. The earliest recorded in Manipur was shot on September 3rd (1919) and the latest on April 20th (1919), but these are the only records in September and April. Only 80 have been shot since 1910, the best year being 1916-17, when 17 were bagged. The best days were:—

10-3-17	...	5
19-1-26	...	4

Being always on the lookout for *C. c. japonica*, and not being entirely certain of my identification, I submitted a single skin to

¹ Op. cit., *J.B.N.H.S.*, vol. xxix, No. 3, p. 583.

the Society in 1916, followed by a small series in the next year. With reference to the single skin, Mr. Millard wrote:—

‘It is a very difficult matter to say exactly which species this is. It does not tally exactly with either the description of *japonica* or *communis*. So far as we can ascertain, the specimen sent is mid-way between these two species, having points of resemblance to both. . . . It is probable they interbreed and on the border line where the two species meet one would find birds grading into either *japonica* or *communis*.’

and later:—

‘In Japan and China *coturnix communis* during the breeding season occupies the same tract of territory as *c. japonica* and there is no doubt that all sorts of hybrids are produced.’

With regard to the series he wrote:—

‘The quail are all *Coturnix communis japonica*, as they undoubtedly would be, situated as you are on the border line of these two species.’

I have always examined my Grey Quail carefully, and most of the specimens I have shot appear to be intermediate between the two races, though some approximate very closely to *C. c. coturnix*. The throat feathers are only slightly, not definitely lanceolate: but the reddish tint of the throat and flanks is very noticeable, in comparison with the typical Grey Quail. But I have never found a specimen which was sufficiently close to the description of *C. c. japonica* to make it worth while sending the skin for identification, on suspicion of its belonging to that species. The true *japonica* must be very rare indeed in Manipur.

Baker¹ refers to ‘breeding birds being found as far east as Manipur’. He does not quote his authority for this statement, and I have no confirmation of its breeding, unless the bird shot in April can be taken as such: but this does not seem to be very conclusive evidence.

The Indian Blue-breasted Quail (*Excalfactoria chinensis chinensis*)—Manipuri, *sorbol*.

As Baker² remarks, ‘this species is very common in Manipur’. At the same time, it is only found in small parties, and I have only once seen them sufficiently thick to allow of anything like a ‘bag’ being made—on March 22nd, 1916, when we shot 13 and could have shot more. The next best bags were 8, on January 10th, 1916, and January 19th, 1919. The best year’s bag is 68, in 1915-16. In the hills I have never found them plentiful, even where the terrain is suitable. They like wetter country than most of the quails and are frequently put up on grazing grounds at the end of the rains, when snipe shooting, and occasionally in bogs, especially in the spring. As a table bird they are far superior to the Grey Quail.

¹ Op. cit., *J.B.N.H.S.*, vol. xxix, No. 3, p. 580, and *Fauna of British India*, vol. v, p. 373.

² Op. cit., *J.B.N.H.S.*, vol. xxix, No. 1, p. 4.

The Manipur Bush Quail (*Cryptoplectron manipurensis manipurensis*)—Manipuri, *sorbol amubā* ('the black quail'): I have never heard it called *lāng sorbol* ('the snare-quail').¹

This sporting little bird appears to be getting scarcer, as the last 13 years have only produced 93 birds—the same number as the four seasons 1915-16 to 1918-19. The decrease is probably due to increasing population and the consequent spread of cultivation. None have been shot in the past two years, and I have not even seen one. The best year is 1918-19, when 42 were shot. Good days were:—

24-3-26	...	17
10-3-17	...	14
19-3-29	...	13

Hume's² failure to flush them by burning the grass is not surprising. Partridges very rarely fly out of burnt grass and quails never, probably from fear of the hawks which hover round, eating the insects. The birds break out at the edges and run to the nearest cover. Inglis³ has remarked this characteristic, in his notes on *C. m. inglisi*.

There is nothing to add, regarding their habits, to the notes recorded in the Journal by Baker and Inglis (referred to above), and by Connor.⁴ I have seen these birds in the bogs and swamps in the south of the valley and also in the glens which run into it.

The Burmese Bustard-quail (*Turnix suscitator plumbipes*)—Manipuri, *sorbol*.

Fairly common, both in the valley and in the hills, in suitable localities, but nowhere really plentiful. The best year's bag is 18, in 1917-18, and good days were:—

22-3-25	...	9
5-3-18	...	7

This bird, like the other button-quails, is better eating than the Grey Quail.

The Little Button-quail (*Turnix dussumieri*)—Manipuri, *sorbol*.

This bird is not common, but occurs in suitable localities, as Baker⁵ says, 'mostly in fairly wide stretches of *sun*-grass, not necessarily very long or very dense'. I have also shot it on grazing grounds with very little cover. The best year's bag was 7 in 1925-26. Only 18 have been bagged altogether, but, like the other small quail, they are sometimes allowed to go unmolested.

The Burmese Button-quail (*Turnix maculatus maculatus*)—Manipuri, *sorbol*.

This species is very scarce. It has been recorded on 13 occasions only, but personally I have only seen it five times in 17

¹ *Fauna of British India*, vol. v, p. 383.

² Baker, 'Game Birds of India, Burma and Ceylon', *J.B.N.H.S.*, vol. xxix, No. 4, p. 858.

³ *J.B.N.H.S.*, vol. xix, No. 1, p. 3.

⁴ *J.B.N.H.S.*, vol. xviii, No. 2, p. 496.

⁵ *Game Birds of India, Burma and Ceylon*, vol. iii, p. 34.

seasons, and cannot vouch for the identification of the other eight being correct. Indeed, it is almost certainly not so: many sportsmen call the Blue-breasted Quail a 'button-quail', on account of its small size, and as that species has yellow legs, it is, I know, sometimes classified as this bird in error. Of my five birds, four were obtained in the Manipur valley and one in the Jiri valley, on the Cachar border. I have never seen it in the hills. The identification of the Manipur bird as *T. m. maculatus* and not *T. m. tanki* was confirmed by the Society, and it was remarked that the specimen sent 'differed slightly from the Burmese specimens, being darker'.

PIGEONS AND DOVES.

Doves of various species are common in the Manipur valley: pigeons are fairly common in the hills, but very rare in the valley. Consequently, the Manipuri has different names for the doves, but does not distinguish between the various species of pigeon and lumps them all together under the term *lam khunu* ('wild pigeon') or *ching khunu* ('hill pigeon'). Only 83 pigeons have been shot since 1916, many of them in the Kabaw valley of Burma, where they are plentiful.

The Bengal Green Pigeon (*Crocopus phænicopterus phænicopterus*).

Baker¹ says that south of the Naga Hills (which lie immediately north of Manipur) this species and the Burmese race (*C. p. viridifrons*) overlap. In the plains of the Surma valley, immediately to the west, which he knew well, he ascribes the birds to an intermediate type, tending towards *viridifrons*. I have never seen any of either species in Manipur itself, though I have no doubt they occur. But I have shot them on several occasions in the Kabaw valley, just across the Burma border, where they are plentiful, and all the specimens I have examined appeared to fall under the description of *phænicopterus*. This identification was confirmed by the Society in the case of a specimen sent up in 1916. It may be noted that, while Wickham² speaks of *viridifrons* as common in the Upper Burma hills, Hopwood and Mackenzie³ classify the bird of the northern Chin Hills, which adjoin both Manipur and the Kabaw valley, as *phænicopterus*.

The Ashy-headed Green Pigeon (*Dendrophasa pompadora phayrei*).

This species is fairly common in the hills. I shot a single bird in a village on the west edge of the Manipur valley, about 2 miles from the foot of the hills, on February 5th, 1915. Mrs. A. A. Barnard saw a few in Imphal in July, 1932. Three green pigeons, unidentified but probably of this species, were shot near the foot of the eastern hills on March 8th, 1920.

¹ *Indian Pigeons and Doves*, pp. 8, 18.

² *J.B.N.H.S.*, vol. xxxiv, No. 2, p. 340.

³ *J.B.N.H.S.*, vol. xxv, No. 1, p. 90.

The Thick-billed Green Pigeon (*Treron curvirostra nipalensis*).

This species is not uncommon in the hills. On March 23rd, 1918, I saw a number of flocks in the jungle surrounding a village in the eastern hills, at 4,200 ft. There was no doubt as to the identification, as a sepoy shot one the previous evening.

The Pin-tailed Green Pigeon (*Sphenocercus apicaudus*).

This species is not uncommon and has been shot in the hills.

The Orange-breasted Green Pigeon (*Dendrophasa bicincta bicincta* or *prætermissa*).

Mr. A. A. Barnard, I.S.E., saw a pair at Kanglatongbi, at the foot of the hills in the north of the valley, in July, 1932.

The Wedge-tailed Green Pigeon (*Sphenocercus sphenurus sphenurus*).

I have never seen or heard of this species in Manipur, though from Baker's¹ description of its habitat there seems to be no doubt that it must occur.

The Green Imperial Pigeon (*Muscadivora ænea sylvatica*).

Baker² says that this species is 'a bird of the hills and plains alike . . . in Assam and Burma'. It does not occur in the Manipur valley and I have never seen it in the hills. But it is common in the Kabaw and Jiri valleys, on the Burma and Cachar borders of the State, and also in the Nambar forest, at the foot of the Naga Hills on the north.

The Grey-headed Imperial Pigeon (*Ducula badia griseicapilla*).

Baker³ rightly says of the Manipur birds that 'though somewhat intermediate', they are nearest to *griseicapilla* and not to *insignis*. This species is fairly common in the hills, and one meets it frequently in *jhums*, on the march when one has no gun. I only once saw a large flock, of about 30, on November 22nd, 1931, in the south-western hills, at about 3,500 ft.

The Bronze-winged or Emerald Dove (*Calcophaps indica*).

This species is fairly common in the western hills, where it finds the evergreen forest which it likes. I have never noticed it in the eastern hills, though it may occur there.

The Ashy Wood-pigeon (*Columba pulchricollis*).

On July 17th, 1926, I saw three large grey pigeons (not the Grey-headed Imperial Pigeon) in a small thicket of mixed pine and evergreen forest, on the upper slopes of the high range west of the Manipur valley, at 5,100 ft. I heard the call of the same

¹ Op. cit., p. 82.

² Op. cit., p. 94.

³ *Fauna of British India*, vol. v, p. 204.

bird in the same place on July 2nd, 1927. From Baker's¹ description of their calls, it seems probable that these birds belonged to this species and were not the Speckled Wood-pigeon (*Dendrotreron hodgsoni*).

The Indian Rufous Turtle-dove (*Streptopelia orientalis meena*)—Manipuri, *khunu chaphubi* ('the pot pigeon', alluding to the likeness of their colouring to that of a red earthenware pot, burnt blue in patches) or *leimā khunu* ('the goddess pigeon').

This species is fairly common. It frequents the Residency garden in flocks during the rains, beginning to appear about the end of May.

The Malay or Burmese Spotted Dove (*Streptopelia chinensis tigrina*)—Manipuri, *khunu hawaimān* ('the spotted pigeon').

Very common in the Manipur valley and lower hills. I have never examined them to see whether they are *tigrina* or *suratensis*. Baker² says that the Manipur birds are 'intermediate between *suratensis* and *tigrina*', but 'nearer the Burmese than the Indian form'.³

The Burmese Ring-dove (*Streptopelia decaocto xanthocyclus*)—Manipuri, *khunu halamān* (Hindu), or *khunu gurumān* (Muhammadan): I am informed that these names are both derived from the sound of the bird's call.

This species is common in the Manipur valley, especially near the foothills. An albino specimen was shot by Mr. C. Gimson, I.C.S., on December 26th, 1925.

The Burmese Red Turtle-dove (*Oenopopelia tranquebarica humilis*)—Manipuri, *wā khunu* ('the bamboo pigeon'). It is curious that the term 'bamboo-pigeon' is applied to *Streptopelia orientalis meena* in Bengal,⁴ as I can confirm.

These little doves are common in the Manipur valley. They are found in flocks on the grazing grounds at the end of the rains, and collect in very large parties in the cold weather. They are very fast fliers, and I have had excellent sport shooting them when driven over bamboos at the corner of a village.

The Bar-tailed Cuckoo-dove (*Macropygia unchall tusalia*).

I have only seen one in Manipur, in a glen off the Manipur valley in the south-west.

II

MAMMALS.

Big game is scarce in Manipur. The Manipur valley is too thickly populated and deforested to hold many wild animals. In

¹ *Indian Pigeons and Doves*, pp. 158, 175.

² *Fauna of British India*, vol. v, p. 243.

³ *Indian Pigeons and Doves*, pp. 205, 211.

⁴ 'Vertebrates of Jalpaiguri District', (Inglis, Travers, O'Donel and Shebbeare), *J.B.N.H.S.*, vol. xxvii, No. 1, p. 153.

the hills, the Kukis—the ‘scourge of God’ as far as wild animals are concerned, have completely killed off a number of species since they migrated northwards into the State a little over a century ago, and have greatly diminished the rest.

The Elephant (*Elephas maximus*)—Manipuri, *sāmu* (‘the black animal’).

The Elephant was formerly common in the hills, and the Maharajas used to run kheddahs: the last of which I can find any record appears to have taken place in 1872, when 21 were caught in the Leimatak valley, which is the next valley to the west from the Manipur valley. In 1913 I saw the skull of an elephant in the house of a Kuki Chief, which had been shot by him some years before in the valley of the Khuga river, which flows into the Manipur valley from the south-west. Now the only elephants in the State are a very few in the extreme north and north-west, adjoining the Naga and North Cachar Hills, and in the foothills adjoining the Kabaw valley of Burma, in the south-east. The only one recorded in the Game Book since 1910 was shot in the Kabaw valley, where they are fairly plentiful.

The Javan Rhinoceros (*Rhinoceros sondaicus*)—Manipuri, *sāmu gandā* (‘black animal rhinoceros’).

Now only found as an occasional straggler, the rhinoceros was formerly not uncommon in suitable localities in the hills. I saw a skull in 1913, in the house of a Kuki Chief, which he had shot in the valley of the Khuga river. In the past 20 years, 2 or 3 have been killed by Kukis in the lower valley of the Barak, near Tipaimukh, on the Lushai Hills border. These were probably stragglers from the North Lushai Hills. I have never had an opportunity of ascertaining with certainty to what species these belong, but they are probably *sondaicus*.

The Gaur or Indian Bison (*Bibos gaurus*)—Manipuri, *lamsan* (‘wild cattle’).

The bison was formerly found throughout the hills, but now occurs only in the mountainous forests of the headwaters of the Jiri and Makru rivers, near the North Cachar border, and in the foothills above the Kabaw valley. Tradition has it that a pair always resides in the wild uninhabited country on the lofty Laikot range, between the Barak and the headwaters of the Irang, in the north-western hills. Some years ago one wandered across the eastern hills from the Kabaw valley or Somra, into the valley of the Thoubal river, two marches east of Imphal. The bison is not very common, even in the Kabaw valley. Colonel Wilson¹ records that they ‘had existed in the State in fair numbers, but were practically wiped out by foot and mouth disease in 1896’. No doubt the Kukis helped.

¹ Op. cit., p. 182.

The Gayal or Mithun (*Bibos frontalis*)—Manipuri, *sandang*.

Lydeker¹ says that 'there has been much discussion as to whether the Gayal or Mithun is a truly wild animal or only a domesticated breed'. There is, I think, no doubt whatever that it is the latter, derived from the Gaur, with a strain of domestic cattle. The Gayal is kept as a domestic animal by hill men throughout the Manipur State, as well as elsewhere in Assam and Burma. Notes regarding it were published in the Journal recently by Mr. Livesey² and myself³. Since then, I have seen an entirely white Gayal and have heard of another.

The Bantin or Tsaing (*Bibos banteng*)—Manipuri, *santhou*.

Lydeker⁴ claims that the Tsaing 'occurs in the Manipur district, especially in the Kubbu (Kabaw) valley, between Manipur and Northern Burma'. As a matter of fact, this species now only occurs in Manipur as a straggler in the foothills above the Kabaw valley, where it is plentiful. But this valley is now wholly in Burma, although it was a part of Manipur prior to 1834, when it was ceded to Burma. The Tsaing formerly penetrated further into the State, as in 1913 I saw a head in the house of a Kuki Chief, which he had shot some years before in the Khuga valley.

Lydeker puts forward the theory that the 'Manipur Bantin', meaning the Kabaw valley animal, may be a distinct subspecies from the Burma Bantin. On this I can express no opinion, having had no experience of any but the Kabaw Tsaing, but the description of the Kabaw bulls given by Colonel Wood, which he quotes, is correct.

The Indian Buffalo (*Bubalus bubalis*)—Manipuri, *iroi* ('the swimmer').

The wild Buffalo does not occur at all in the Manipur State, and there is no historical record or tradition of its occurrence. I mention the animal because, as Lydeker⁵ quotes the Manipuri name, it might be inferred that the animal is found wild in Manipur.

The Serow (*Capricornis sumatrensis rubidus*). I can find no Manipuri name.

The Serow occurs throughout the hills. I have never shot one and have only seen one skin. But from enquiries it seems certain that only one form occurs—*C. s. rubidus*. This is confirmed by the observations of Moggridge⁶ with regard to the Upper Chindwin, on the east, and of Mackenzie with regard to the Upper Chindwin⁷

¹ *The Game Animals of India* (1924), p. 64.

² *J.B.N.H.S.*, vol. xxxv, No. 1, p. 199.

³ *J.B.N.H.S.*, vol. xxxv, No. 2, p. 444.

⁴ *Op. cit.*, p. 73.

⁵ *Op. cit.*, p. 83.

⁶ *J.B.N.H.S.*, vol. xix, No. 4, p. 981.

⁷ *J.B.N.H.S.*, vol. xxii, No. 4, p. 790.

and the Chin Hills,¹ to the south. In the Naga Hills also, to the north, Mills² ascribes the serow to this subspecies.

The Goral (*Nemorhaedus griseus*)—No Manipuri name.

This animal only occurs on three contiguous ranges in the south-western hills, Tonglon, Lungthul and Songchal (83 H, BC4) in the valley of the Tuivai river. Leddeker³ gives no indication of which species occurs in Manipur, saying that *N. hodgsoni* is 'said to occur in the Naga Hills, and *N. griseus* in Upper Burma. Pocock⁴ says that the Naga Hills specimen was probably *griseus*, to which subspecies he ascribes the Goral of the Lushai Hills to the south-west of Manipur and the Chin Hills to the south, which districts are only separated from the locality where the Goral is found in Manipur by the Tuivai river and its tributary, the Tuikui. I have never shot a Goral myself, but have seen them, including dead animals shot by Kukis. These appeared to correspond to the description of *cinereus*.

The Sambar (*Rusa unicolor*)—Manipuri, *sajan*.

The Sambar of Manipur, which is not uncommon in the hills and in the glens running off the Manipur valley, belongs to the subspecies named *equinus* by Lyddeker,⁵ being of the Malay variety. The heads are, as a rule, not large, even for the Malay Sambar. I have seen two instances of abnormal horns, both brought in by hillmen. In the first, of which I have not preserved the measurements, the right horn was normal; but the left horn had five points, with a tine as long as the brow tine and between it and the beam, and also a tine as long as those of the crowning fork and between them. This head was unusually massive. The second is an extraordinary head, with six points on the right and four on the left horn. The length of the right horn is $25\frac{1}{2}$ in., and of the brow tine $10\frac{1}{8}$ in.; the forked tines at the end of the horn are short— $1\frac{3}{8}$ in. and $4\frac{7}{8}$ in.; but inside the beam and the brow tine, growing from the burr, are a second beam, $18\frac{1}{2}$ in., and a second brow tine, 4 in.; while between the main beam and main brow tine is a short sixth tine, $3\frac{5}{8}$ in. The burr measures $12\frac{5}{8}$ in. in circumference. The left horn measures $30\frac{1}{4}$ in. in length, with the rear tine of the fork $10\frac{1}{2}$ in. and the front tine $15\frac{3}{4}$ in.; the brow tine measures $18\frac{3}{4}$ in.; halfway up the front tine of the fork, a tine of $3\frac{1}{8}$ in. juts backwards towards the rear tine; there is a small rudimentary tine on the inside of the brow tine, not sufficiently large to count as a point; the burr is 11 in. in circumference, and the beam is $10\frac{3}{8}$ in. in circumference just below the fork.

¹ *J.B.N.H.S.*, vol. xxiv, No. 4, p. 762.

² *J.B.N.H.S.*, vol. xxix, No. 1, p. 228

³ *Op. cit.*, pp. 152, 154.

⁴ *J.B.N.H.S.*, vol. xxii, No. 2, p. 316.

⁵ *Op. cit.*, p. 232

The Hog Deer (*Hyelaphus porcinus*)—Manipuri, *kharisā*.

This species is not uncommon in the swamps in the south of the valley, the grassy tracts at the foot of the hills surrounding the valley, and the glens running off it. The heads are small.

The Manipuri Muhammadans hunt the Hog Deer in bands, consisting of mounted men armed with polo sticks and men on foot armed with spears, accompanied by trained dogs.

The Panolia or Eld's Deer (*Rucervus eldi*)—Manipuri, *sangai*: not 'sangnai' or 'sangrai', as in Lyddeker¹ and Oldfield Thomas.²

This species is found in the swamps and bogs in the south of the Manipur valley, and nowhere else in the State; incidentally, the whole valley is not 'one huge swamp', as Lyddeker³ says. In the swamps it is fairly common, but, although nominally preserved by law, its numbers have decreased in late years, owing to the attentions of wild dogs and poachers. In times of high flood the wretched animals are driven out of their haunts to isolated pieces of high ground, where the neighbouring Nagas and Muhammadans take heavy toll, regardless of sex, age, close season or the rules directing the taking out of licenses to hunt them.

The best heads shot since 1910 are those recorded in the Journal,⁴ bagged by Major-General H. C. Tytler (52 and 53 in., including the brow-antler), and by Jemadar Bahadur Khan, 17th. Infantry (53 $\frac{1}{4}$ in.).

The Muntjac or Barking Deer (*Muntiacus muntjak*)—Manipuri, *saji*.

This species is very common throughout the hills, and is found also in the isolated low hills and ranges in the valley itself, wherever they are sufficiently wooded. I have never examined the Manipur animals, with a view to determining whether they are *vaginalis* or *grandicornis*. Lyddeker⁵ puts them down as *vaginalis*, to which subspecies Mills⁶ ascribes the Naga Hills specimens. But Wroughton⁷ records both subspecies as occurring in the Upper Chindwin district, *grandicornis* having been obtained from the Kabaw valley. It seems probable, therefore, that both may occur in Manipur.

The Indian Wild Boar (*Sus cristatus*)—Manipuri, *lamok* ('wild pig').

Pigs are common in the hills. In the valley they occur in the grassy tracts along the foothills and in the swamps in the south.

The Tiger (*Felis tigris*)—Manipuri, *kei*, *keijao* ('big tiger').

Tigers are found throughout the hills, and very occasionally in the valley near the foothills. But they rarely venture far from

¹ Op. cit., p. 251.² *J.B.N.H.S.*, vol. xxv, No. 3, p. 363.³ Op. cit., p. 253.⁴ *J.B.N.H.S.*, vol. xxi, No. 2, p. 655.⁵ Op. cit., p. 259.⁶ *J.B.N.H.S.*, vol. xxix, No. 1, p. 229.⁷ *J.B.N.H.S.*, vol. xxiv, No. 2, pp. 308, 309, and vol. xxiv, No. 4, p. 773.

the hills, as the Manipur valley is bare of forest, and, except in the swampy south, of heavy grass cover. Moreover, the Manipuris have an ancient organisation under which their villages are grouped into *keirups* or 'tiger-clubs', for the purpose of ringing and killing tigers as soon as they make their appearance.

Between 1910 and 1924 (when the system was abolished) rewards were paid to the hillmen for the destruction of 189 tigers.

The Leopard (*Felis pardus*)—Manipuri, *kabo kei* ('the Kabaw tiger').

Leopards are common throughout the hills and straggle into the low hills in the Manipur valley itself.

Between 1910 and 1924 rewards were paid to hillmen for the destruction of 595 leopards. Of these, about 380 passed through my hands, of which only 2 or 3 were black.

The Clouded Leopard (*Felis nebulosa*).

This animal occurs in the hills, but is uncommon.

The Golden or Bay Cat (*Felis temmincki*).

This cat also occurs in the hills, but is rarer than the previous species. I only remember seeing 2 or 3 brought in for the reward, in seven years.

The Leopard Cat (*Felis bengalensis*).

Not uncommon.

The Fishing Cat (*Felis viverrina*).

I have never seen this animal in Manipur, although it is fairly common in the Assam valley.

The Jungle Cat (*Felis chaus*)—Manipuri, *tokpā*.

Fairly common.

The Civet Cat (*Viverra zibetha*).

Rare; but a species of Palm Civet (*paradoxurus*), known in Manipuri as *moirāng sāthibi* ('the dirty animal from Moirang', a village in the south of the valley) is common.

The Wild Dog (*Cuon dukhunensis*)—Manipuri, *huithou*.

Not uncommon, in the hills and in the swamps in the south of the valley.

The Jackal (*Canis indicus*)—Manipuri, *lamhui* ('the wild dog').

Jackals are rare and do not multiply. They are said to have come up with the bullock carts, when the road through the hills to the Manipur valley from Assam was opened in 1896. Another tradition has it that a Political Agent who was administering the State during the minority of His Highness the Maharaja introduced missionaries, jackals and pleaders, in the interests of humanity. The Durbar have eliminated pleaders, but jackals and missionaries persist.

The Himalayan Black Bear (*Selenarctos thibetanus*)—Manipuri, *sāwom*.

This bear is common in the hills: between 1910 and 1924 the hillmen claimed rewards for 2,480 bears, at least 99 per cent of which must have belonged to this species. I only know one instance of a bear being found in the Manipur valley. In September, 1912, when I was staying at Moirang, at the southern extremity of the Loktak lake, some Manipuri fishermen brought in a large bear which they had killed with their paddles, as it was swimming across the lake. It had been visiting Ithing, an island on which His Highness the Maharaja has a fruit garden, and was making its way back to the western shore, about two miles from the hills.

The Bruan or Malay Bear (*Helarctos malayanus*)—Manipuri, *sāwom*.

This species occurs in the hills, but is rare. In a note recently published in the Journal,¹ I estimated the percentage brought in for rewards as not more than 1 per cent of the bears.

The Sloth Bear (*Melursus ursinus*).

Though common in Assam, this species does not occur at all in Manipur.

The head 'Various and Big Game' in the records includes the waders noted on above, occasionally shot for the pot or purposes of identification, the game and other animals mentioned, and otters (Man., *sanamba*). The latter are common in the bils and rivers, and the Manipuris say that there are two varieties.

Hares do not occur in Manipur at all.

A few Gharial (*Gavialis gangeticus*) penetrate up the Barak river from Cachar, as high as Tipaimukh or a little higher. There are none elsewhere in the State.

(The end).

¹ *J.B.N.H.S.*, vol. xxxv, No. 3, p. 673.