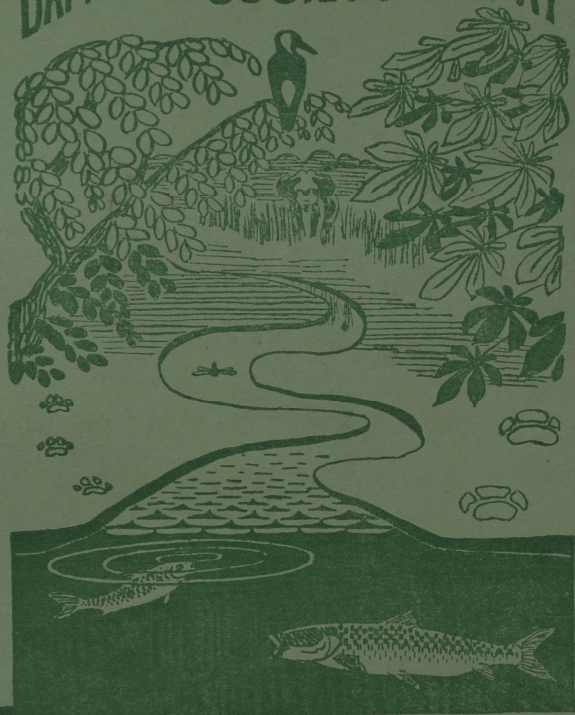


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SOCIETY



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Edited by C. M. INGLIS, F.Z.S., F.E.S., E.M.B.O.U.

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The Society was started about the end of 1923, the objects being to maintain the Museum in a proper condition; to promote the study of Natural History and to get together, as complete as possible, collections of Natural History specimens from a limited area, including "the civil districts of Jalpaiguri and Darjeeling and the State of Sikkim", as well as what could be procured from the neighbouring countries of Tibet, Bhutan and Nepal.

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DRYONASTES RUFICOLLIS.
The Rufous-necked Laughing-Thrush.
5/8 Nat. size.

JOURNAL
OF THE
DARJEELING NATURAL HISTORY SOCIETY.

Vol. VIII. No. 3.

Game Birds of Sikkim, including the Darjeeling District, and
of the Jalpaiguri District, Bengal.

By

C. M. INGLIS, F.Z.S., F.E.S., E.M.B.O.U.

(Continued from page 62).

(36) The Black-breasted or Rain-Quail.

Coturnix coromandelica (Gmelin).

This is a smaller and handsomer bird than the Common Quail.

The cock has the upper plumage very similar to that of the Common Quail but generally richer in colour. The primary quills, however, have *nobars* on the outer webs. He has the same anchor-shaped mark on the throat but this is much darker, being almost black, and the rest of the throat is pure white. The sides of the breast and flanks are warm vinous-buff, with broad black stripes, the amount of black on the breast increasing with age, old birds having the whole breast of that colour.

The bill is black in the breeding season and yellowish-brown, bluish below, at other times of the year. The iris is brown and the legs are pale fleshy to yellowish-fleshy.

The length is 6.25 to about 7 inches, the wing 3.25 to 3.60 inches and the tail about $1\frac{1}{4}$ inches. The weight varies from 2 to 3 ozs.

The hen is very like that of the Common Quail but can easily be recognized by the primary quills having *nobars* and by her smaller size. The colour too is generally richer in tone and the spots on the breast rather smaller.

The colours of the soft parts and measurements are about the same in both sexes.

The distribution, as given by Stuart Baker, is "Practically throughout Ceylon where it is rare, India and Burma to the Shan States. Obtained at Simla, 7,000 ft., by Dodsworth."

There is nothing very definite about its status in our area. Stevens says it "has been reported to have been obtained in the Rummam Valley where it may possibly be resident to some extent." Masson wrote in his "*Game Birds of Darjeeling*," "I have frequently shot these birds in the rains but never saw more than one at a time. Latterly, down in the valleys, I have started five or six together, and last February I shot two on the banks of the Ramam." Travers tells me he shot one at Baintguri in the Duars, many years ago but has never seen any of late years. On the 6th July 1933 he wrote to be:—"In my notes I wrote I had seen the B. B. Quail in January, February and March."

This Quail is more or less locally migratory, often absent in places in the cold weather where it is common in the rains. Davidson assumes these wanderings are due to its search for food, water and shelter and is, no doubt, correct.

They are met with singly in the cold weather and in pairs from April to October. When the young are able to fly and until they are about 8 months old coveys may be seen but otherwise, even where most plentiful, each bird acts independently.

In general habits they resemble the Common Quail but are more often met with in grass and less in crops than the latter bird; they will also take to scrub jungle during the hotter months. Sometimes they enter compounds, where there is any longish grass and come out in the mornings and evenings to pick up food along the paths.

Their chief food appears to be grass-seeds, but grain and insects are also eaten.

Their flight is very similar to that of the Common Quail and, except for its smaller size, it is nearly impossible to tell it from that bird. Hume writing about it from a sporting point of view says:—"Rain Quail afford just as pretty shooting as the Common Quail when they are numerous; indeed as they run less and fly rather faster, they yield perhaps better sport; but I have never known it possible to make such huge bags of these as one can of the other. In Upper India, during the winter and spring, you are pretty sure to pick up a brace or two along with the Grey Quail (with which they seem to associate on friendly terms) when shooting this latter; but I never knew more than five brace killed at this season in a day by one gun. But just when they first appear in the Doab in June or July, according as the rains are early or late, you may manage by hard work to get from twenty to thirty brace in a day if you have steady dogs and there is plenty of grass about from two to three feet in height, or if, as in the case in some districts, there are a good many fields of the dwarf early rain millets."

This Quail is not supposed to be as good for the table as the Common Quail but we have found little difference except that the latter is generally fatter.

The call of the Black-breasted Quail is a musical quickly repeated *whit—whit—whit—whit*.

This Quail is certainly monogamous being always seen in pairs from April and when the hen is sitting the cock is continually calling to her.

The Black-breasted Quail breeds during the rains. The nest is a depression in the ground, either natural or made by the bird itself, and is usually lined with a little grass. It is generally placed in standing crops or thin grass of moderate height but even sometimes in the open.

They lay from 4 to 11 eggs which are similar to those of the Common Quail but smaller, averaging about 1.09×0.83 inches.

This Quail does well in captivity even in the English climate. Mr. Seth Smith who kept it at home considered it a very charming bird for a well turfed aviary. This bird soon got tame and bred freely, usually rearing two broods in the year. He gives the incubation period as from sixteen to eighteen days.

One of these birds kept in the rooms of the Bombay Natural History Society lived for about or over seven years.

We now come to the last of the true Quails the genus *Cryptoplectron* which is confined to India. The tail has 10 feathers; the wing is short and rounded and the leg has no spur. There are only two species, each with a subspecies; one subspecies occurs in our area.

(37) **Primrose's Bush-Quail.**

Cryptoplectron manipurensis inglisi (Ogilvie-Grant.)

The adult cock has the forehead, round the eye, cheeks, chin and throat chestnut; in front of and behind the eye white; ear-coverts brown. The rest of the upper plumage is grey narrowly barred with black, the bars on the lower back and rump being mostly confined to the basal half of the feathers; some of the scapulars are more boldly barred, the bars more or less confluent forming irregular blotches; the wings are brown, the innermost feathers barred with darker

brown. The neck and upper breast are grey with faint blackish shaft-streaks; the rest of the lower plumage is pale rufous-buff, rather deeper on the centre of the breast, each feather with black markings forming a cross with a broad cross-bar. The under tail-coverts are black spotted and tipped with white.

The bill is dark grey, the base of the mandible lighter and in some specimens this is tinged with yellow, the iris is brown and the legs are orange-red, the back of same and the toes lighter; the claws are light brown.

The length is about $6\frac{1}{2}$ inches with a wing 3.4 inches and tail 2 inches.

Immature cocks resemble the hen but show a few chestnut feathers on the chin and throat.

The hen resembles the cock but has no chestnut on the head and the mantle is merely margined with black. The lower plumage is much paler being buff instead of rufous-buff.

We did not weigh any of our birds but as they are the same size as the typical race the weight will probably be the same. Stuart Baker gives this as 2.28 to 2.65 ozs. in cocks and 2.37 to 2.94 in hens.

The chick has the centre and sides of the crown rufous the rest being deep brown: there is a streak from base of the bill over each eye; another from the base of the bill under each eye to the ear-coverts and one from the gape below the ear-coverts, dark brown; the region round the eye is yellowish-white. The upper plumage is rufous-brown, the feathers subterminally banded with deep brown and tipped with rufous, the shaft-streaks are whitish; the scapulars and wing-coverts are deep brown with broad rufous edges. The flight feathers are brown, the inner webs banded outwardly with rufous. The chin, throat and abdomen are whitish and the breast and flanks mixed dark brown and rufous.

The bill, except base of upper and tip of lower mandibles, is dark greyish, the remainder is albescent; the iris is brown and the legs fleshy, the back of the tarsus and the toes being yellower.

The distribution as given by Stuart Baker is "The foot-hills and adjoining plains of the Eastern Dooars, Jalpaiguri and Assam, East to Sadiya." The only actual specimen secured in the Duars was at Alipur-Duar but Primrose, who knew the bird well in Goalpara, saw it not far from the Torsa river and Shebbeare believes he has seen it.

There is very little recorded about this handsome little Quail, the sum total being a short note by Lt. Col. Thornhill and a longer one by myself. The former got it at Alipur-Duar in the cold weather of 1885-86, but it was only on my sending home specimens from Goalpara to the British Museum that this skin was properly identified. Lt. Col. Thornhill wrote as follows:—

"On more than one occasion I put up a couple of Quail when tracking tiger in long grass, and realized that they were new to me. The male was a lovely little bird, resembling a miniature black partridge it seemed to me, and both birds had a habit of flinging themselves headlong into the tall grass, in an apparently reckless manner, possibly with the object of forcing a way to the ground through the grass. After I had got the tiger I went after the Quail. I missed the male but dropped the hen bird. I could not get the cock to rise again and feared I had wounded him.

The birds lived within a mile or so of the Rest House, and were found in the long grass to the north-east of the Sub-Divisional Officer's house.....I imagine they are (or were) regular visitors to these quiet haunts and are probably spread over various parts of the Duars." (*Jour. Bom. Nat. Hist. Soc. Vol. XV p. 527*).

The type specimens were got by Primrose and myself in Goalpara, Assam and the note I wrote about these birds is:—

“Whilst staying with my friend Mr. A. M. Primrose at Mornai Tea Estate in the Goalpara District of Assam, I had several opportunities of studying these birds and the following notes are compiled from my own observations and also from those of Mr. Primrose who kindly allowed me to use his notes. We identified the bird as Humes' Bush-Quail, but on my sending a sketch home Mr. Ogilvie-Grant said he expected it was a new species, and on my sending a series of skins they confirmed his opinion and he has paid me the compliment of naming it after me.

This Quail is, if anything, the commonest quail got in that garden, but, on account of the nature of the jungle it frequents, it is seldom seen and difficult to get. They are found in damp, dense ekra jungle which grows in the nullahs and when these get inundated during the rains they move into higher pieces of ekra and also into the sungrass. We have never seen them on absolutely dry ground except when feeding, at other times they keep exclusively to the damp nullahs. Our observations are mainly confined to the cold weather and up to April as after that the jungle is too heavy to walk through or have beaten. They are excessively local birds, only certain patches of jungle holding them and they frequent the same spot year after year. Although there may be, what appears to us, identical patches of ekra in the same nullahs and which one would think should contain the quail, still none will be found in them. One very soon gets to know which patches are worth beating and which not. Many of these birds must get destroyed in the fierce grass fires which rage in that part of Assam during the early part of the year. A good method of getting these birds is as follows:—

A day or two before the beat takes place, burn patches in the nullah leaving those which contain the birds. This has to be done carefully. This thinning of the jungle gives one a

better chance, as it leaves the birds fewer spots to put up in when flushed and also fewer wounded birds get lost. Without doing this it is very difficult indeed to retrieve wounded birds as they run a lot and have a knack of getting over the ground at a good pace. A good dog or two would of course be of great service both for retrieving and putting up the birds. Burning the grass in front of one as one goes along is no use as the birds only run before or else through the fire and will not take to flight. They are usually seen in covies of four to six, but during March and April they get into larger ones containing from six to twelve birds or perhaps even more. On the 28th March, Mr. Primrose wrote that they were *exceedingly plentiful* and that he picked up four during one evening's stroll. He had hopes of obtaining the eggs but up to date they are still *desiderata*. The covies separate on being disturbed, some birds flying on ahead and others back over the beaters. They are not difficult to flush a second or even a third time with a sufficient quantity of good beaters. At first they rise straight up in the air and they go off with a straight, steady flight for about fifty yards and then drop suddenly. This habit they have of dropping suddenly, often makes one believe that one has missed one's bird instead of which it is probably stone dead where it fell and also *vice versa*. On touching the ground they either start running at once or else, if the beaters are close up, they will squat. It is most difficult to spot them either running over or squatting upon the burnt grass for their colour matches that of the ash most perfectly. When they squat they sit very closely being sometimes picked up alive by the beaters. Their note is like that of the Painted Bush-Quail (*Microperdix erythrorhynchus*) and is often uttered when the covey separates. As far as we could observe males outnumbered females. Their food consists principally of seed. They very occasionally, are flushed from the edge of the tea. We, on several occasions, came across covies feeding in the open on the burnt ground up to about mid-day and probably during dull weather they feed there all day. With fair luck and straight powder, two men, one taking each side of the

nullah, ought to be able to account for every bird in it. Our biggest bag for a morning was eight birds, but that, I am certain, could easily be beaten in a place like Mornai. They are known by the name of '*Kala goondri*' at Mornai Tea Estate, where all our specimens were obtained. Adults showed signs of breeding in the beginning of March and we were fortunate enough in obtaining a fully fledged young one on the 11th of January." (*Jour. Bom. Nat. Hist. Soc. Vol. XIX pp. 1 to 3 with a coloured plate.*)

The few of these Quail which we, with great reluctance, allowed to go to the pot were excellent eating.

The nidification of this Quail still remains unknown but it is not likely to differ much from that of the typical race the Manipur Bush-Quail (*Cryptoplectron manipurensis manipurensis*) which was found breeding by Stuart Baker. He writes:—"On the 13th May I found a nest containing four eggs in some thin grass, not more than a couple of feet high on a grass-covered hill in North Cachar, shooting the hen bird off it. The nest was merely a hollow among the roots of the grass, lined with a little grass. The eggs are indistinguishable from those of other *Cryptoplectron* but are purer white than most; they measure 30·4 × 24·1, 31·2 × 23·5, 31·2 × 24·0 and 29·3 × 24·9 mm." The eggs of the Painted Bush-Quail which are the best known are described by Hume as being "long ovals, pointed towards the small end, somewhat glossy, spotless and of a uniform, often very pale, *café au-lait* colour."

To be continued.

Our Laughing-Thrushes of the genus *Dryonastes*.

By

C. M. INGLIS, F.Z.S., F.E.S., E.M.B.O.U.

The Laughing-Thrushes belong to the very large family *Timaliidae* which has three sub-families, the *Timaliinae*,

to which the Laughing-Thrushes and Babblers belong; the *Sibinae*, consisting of the Sibias, Bar-wings, Staphidas, Sivas, Yuhinas, Ixulus and Erpornis, and the *Liotrichinae*, containing Liothrix, Cutia, the Shrike-Babblers, Ioras, Myzornis, Chloropsis, Mesia, Minla and Hypocolius.

The Laughing-Thrushes are divided into five genera, *Dryonastes*, *Garrulax*, *Ianthocincla*, *Trochalopteron*, *Grammatoptila* and *Statocichla* all of which, except *Statocichla*, are represented in our area.

The genus *Dryonastes* consists of eight species and subspecies but only two are found in our area. They are easily recognized.

1. The Rufous-necked Laughing-Thrush.

Dryonastes ruficollis (Jard. and Selby).

(With a coloured plate.)

Field identification:—An olive-brown looking bird with most of the head and breast black and with bright chestnut patches on the sides of the neck, lower abdomen and under tail coverts. Seen and *heard* in small or large parties in scrub, bamboos, long grass, etc., from the *plains* up to as high as 5,400 ft. They keep up a continual chattering and shrieking.

Description:—Length about 10 inches; wing 4 inches and tail $4\frac{1}{2}$ inches.

Top of the head slatey-grey, the rest of it, the chin and upper breast black. Rest of plumage olive-brown except the sides of the neck, lower abdomen and under tail-coverts which are bright chestnut. Sexes alike.

Bill black; legs livid brown; iris bright red. *Distribution*:—Very common in the Duars and in the hills up to 4,550 ft.; but we have also seen it as high as 5,400 ft. at Rinchenpong in Sikkim. It is a resident bird.

Outside our area:—Eastern Nepal, through Assam, North and South of the Brahmaputra, Manipur, Lushai, Tippera and Chittagong Hill Tracts, and Bhamo and the Upper Chindwin." (Stuart Baker).

Habits, etc.:—A very gregarious bird, as are all the Laughing-Thrushes, going about in parties of from half a dozen up to thirty or so. They inhabit thick scrub, often near villages, bamboos and long grass and keep up a veritable babel of chatterings, shrieks and laughs. They are not shy birds though not seen as often as they are heard. They feed a good deal on the ground, their food consisting of insects, seeds and also fruit. According to Buchanan Hamilton they are easily tamed and sing like a Blackbird!!

With regard to their nidification Stuart Baker says "In Sikkim they breed mainly in May but in Assam they seem to be breeding almost equally all through April, May and early June and I have taken eggs from the middle of March to the middle of August." A nest taken by Mr. Matthews at Namring, 3,000 ft., was found on the 2nd May "in coarse grass land, 4 ft. from the ground, in a clump of thick grass stems growing round a bush". Both Mandelli and Gammie took many nests up to about 4,500 ft. elevation. They were mostly "found in scrubby jungle fixed in bushes, within five or six feet of the ground." He also took two from bramble bushes. Stuart Baker says they breed in all kinds of cover but that, above everything, they "love scrub, secondary growth in deserted cultivation or mixed scrub in bamboo-jungle." He has, however, found nests "built in the deepest parts of humid, evergreen forest." The nests found by Mandelli and Gammie were "deep or rather compact cups, varying from 5 to 6 inches in external diameter, and 3.25 to 3.75 in height; the cavities about 3.25 in diameter and 2.25 in depth. The nest is composed almost entirely of dry bamboo-leaves bound together loosely with stems of creepers or roots, and the cavity is lined with black and brown rootlets, generally not very fine." The portion of the nest sent to us by Mr. Matthews is a very

compact cup. Stuart Baker says that most of the nests he has found have been "rather untidy exteriorly." The eggs number three or four, they are very glossy and very pale skim-milk blue in colour "very rarely pure white or almost so, equally rarely a rather darker blue." (*Stuart Baker*). They average 1.02 by 0.75 inches.

The coloured plate shows the bird on *Lantana* scrub.

2. The Grey-sided Laughing-Thrush.

Dryonastes caeruleatus caeruleatus (Hodgson).

Field identification:—A medium sized bird only found in the hills from 2,000 to about 6,000 ft. It is rufous-brown above and white below with grey sides. Seen in parties of half a dozen frequenting undergrowth in forest and making the usual noisy chatter of all Laughing-Thrushes.

Description:—Length about 11 inches; wing 4.2 inches and tail 4.8 inches.

Upper plumage rufous-brown with narrow black edges to the feathers on the crown; forehead, round the eyes, top of cheeks and ear-coverts, and point of chin black; rest of ear-coverts mostly white. Lower plumage white with the flanks grey. Sexes alike.

Bill horny black; legs pale fleshy; iris red or red-brown.

Distribution:—In the hills only from about 2,000 ft., where O'Donel procured it at Buxa, up to about 6,000 ft. Stuart Baker says Stevens found it breeding at 9,000 ft. but this is not mentioned in his "*Notes on the Birds of the Sikkim Himalayas*."

Outside our area:—"Nepal, hills North of the Brahmaputra and hill-ranges of North Manipur, Naga Hills to Dibrugarh." (*Stuart Baker*).

Habits, etc.:—The habits are much the same as those of the last species. It is found in undergrowth in forests and bamboos. We have never come across them in as large parties as the Rufous-necked Laughing-Thrush and they are not quite as noisy.

The breeding season appears to be May and June but a nest was taken, in Sikkim in July. Gammie took nests in the Cinchona Reserve at Mangpu at elevations between 3,500 and 5,000 feet. The nests "were always in forests with a more or less dense undergrowth. The nest is placed in trees at heights of from 6 to 12 feet from the ground, between and firmly attached to several slender upright shoots. It is cup-shaped, normally rather shallow, composed of dry bamboo-leaves and twigs and lined with root fibres. One I measured was 5 inches in diameter by 2.5 in height exteriorly; the cavity was 4 inches across and only 1.3 deep. Of course they vary slightly. As far as my experience goes they do not lay more than three eggs, indeed, at times only two." Another nest was placed in small bamboos and "composed externally entirely of dry bamboo-leaves loosely tied together by a few creepers and a little vegetable fibre and lined pretty thickly with fine black fibrous roots." Stuart Baker mentions Otto Möller having taken two nests in the Cinchona Plantations, they were placed 5 and 10 feet from the ground. The same author also says Stevens found "it breeding in Native Sikkim at 9,000." Hume describes the eggs as "a beautiful clear, rather pale, greenish blue." They average 1.18 by 0.82 inches.

The Indian Plantive Cuckoo.

(*Acomantis merulinus passerinus*).

Picture a dark greyish bird, about the size of a bulbul, with dirty yellow legs and red eyes, and you will envisage a casual description of this most unattractive bird. Seemingly aware of its plain plumage it will thrust itself upon your notice

complaining the while in plaintive tones. The call, which is a mournful cry, is most unmusical, but not so far as concerns the bird, for, perched conspicuously on the branch of a tree, it will call persistently and to a degree of irritation to those who, perforce, must listen!

Its unattractive appearance and unmusical call has not passed without recognition from the hill folk, for unto it have they assigned the name "Suby", whereby hangs a tale which is in keeping with its sombre colouring and profuse lamentations. The story, which is legendary, depicts a woman fording a stream with her baby on her back when she slipped, thereby dropping the infant who was immediately carried away by the relentless torrent.

Overcome with grief and despair at the loss of her child, the mother threw herself into the stream where she also found a watery grave. Subsequently, the mother was reborn as a Plaintive Cuckoo and is now forever calling out in mournful tones the name of her lost child which was "Suby". Towards the end of August this bird commences to lose its voice, and the noise then emitted would lead one to imagine that it was suffering from a severe cold; this, also has its allegory with the hill people who say that it was in August when the unfortunate mother lost her child, so that, after having called incessantly for months, the cracking of the voice is merely symbolic of the terrible memories which that month conjures up for the grief stricken mother!

Although this bird is supposed to live on an entirely insectivorous diet, I have seen it eating berries off a tree.

T. A. BALDRY,

Tumsong T. E.

Bears and their Shikar.

BY

COLONEL H. S. WORD, I.M.S.

My remarks apply to Bears as observed in the Province of Assam. The only other place I have been after them was in the Forest Reserve opposite Darjeeling.

There are three kinds of Bears in Assam. 1. The Himalayan Black Bear. 2. The Sloth Bear. 3. The Malay or Sun Bear.

1. The Himalayan Black Bear.

The Hindi name is *Bhalu*; Nepalese *Reech*, Manipuri *Sowom* and the Kuki *Wumpee*.

This Bear is not as common as the Sloth Bear in Assam. There were a great number beyond Manipur, between that State and the Naga Hills. They were common in the Haflong district of the North Cachar Hills and I have also seen them in the jungles in the Tezpur District at the foot of the Bhutan ranges. They are common in the Himalayas.

This Bear prefers mountainous and hilly country but I have come across them in the plains where, apparently, they had wandered in search of food. It is, essentially, a lover of forest where it can find plenty of fruit, honey, etc. Some of the places they inhabit are truly terrible for the sportsman who tracks them up consisting of rocky nullahs, roaring torrents, ravines covered with dense undergrowth, and *pathiboi*, a kind of thorny acacia. It can truthfully be said that a Bear will face *any* jungle its hide seems impervious and non-sensitive to thorns or bee stings. It can travel fast over the rockiest and steepest ground and is equally at home in a tree, any of which he can scale with ease. It is astonishing the way it can balance itself and turn and twist on a branch which one cannot conceive would bear its weight.

It can dig like a miner with its powerful claws and will spend a whole night digging out juicy morsels such as the fat grub of the big scarab beetle, or the queen of a termites nest, etc. They are quite handy with their teeth though these are seldom used as weapons of offence, for this purpose its powerful claws are used. It will spend days gnawing away the wood, round a hole in a tree to get at a bees nest oblivious of the attacks and stings of the angered insects. I have come across such gnawings in all stages. While the animal is engaged at this operation it makes a curious, musical mumbling noise, which can be heard from a considerable distance. It is a sound indicating pleasure and is also made, sometimes, when the animal is at rest and it then places the pad of its paw in its mouth and emits this sound. During the operation there are deep inspirations and excessive salivation. I once had a tame Bear and by applying butter to its paw it would produce this noise; it closed its eyes and its whole appearance denoted extreme pleasure. I asked my shikari why Bears made this noise and he said it reminded them of the hum of bees in a hive and that they imagined they were rifling it, when one analyses the sound one can be led to believe that there may be something in this theory but I am inclined to think it is just a sign of pleasure equivalent to the purring of a cat.

All Bears are nocturnal animals and do most of their feeding at night. Their eyes are very small for the size of the animal and their eyesight is very poor. With exposure to the sun the eyes soon get affected with cataract and opacity of the cornea; readers of the Journal must have noticed how often this is the case in Bears in Zoos. The sense of hearing is very poor too but that of smell is very acute enabling them to locate some joicy morsel or root far below the surface of the ground.

Just as the sun is setting or soon after, Bruin emerges for his night of wandering and will cover many miles in quest of food returning at the first streak of dawn to pass the day

in sleep, either in a cave, a fork of a tree or on a specially built *nachan* in a tree top. It is an omnivorous animal, its chief food being fruit, honey and grubs; various wild fruits are consumed such as that of the Jamun, ber and medlars; the berries of the wild figs are greedily devoured and this particular Bear is very fond of acorns, on which diet it waxes fat in the autumn, preparatory to hibernating. Bears levy heavy toll on the villagers' crops especially on the *maka* or Indian corn. This usually is during the rains when this crop ripens and often the villagers will appeal to one to shoot the marauder. It is weary and unhealthy work. I once tried this form of shikar but never again; one generally goes down with a dose of malaria after doing so. Bears will also eat carrion, once, while after pheasants in the *kunds* at the back of Landour near Mussorie, I came across a Bear feeding on a dead pony. The food they like most of all is honey, scarab larvæ and termites and wasps. In places where Bear are found one comes across deep pyramidal shaped holes which they have dug. After the annual forest fires the roasted tree ants' nests and their contents afford tasty food and burnt jungle is a sure find for Bears in the early morning or evening. They also dig out the larvæ of the common black and yellow wasp from the ground. Once while shooting with F. in the Tezpur jungles, as we were returning to camp in the evening. We saw a Bear about 800 yards away which appeared to have two humps on its back. We put our elephants at full speed and hurried to the spot which was on a huge open, burnt plain. F. fired and rolled over the Bear, the same shot killing one of the cubs which the mother was carrying on her back thus accounting for the hump. The other cub was full of life and clasped the foreleg of F's elephant, which made the latter get very excited. It hung the cub backwards and forwards between its legs as if playing football with it, on being returned the cub was just a bag of bones. All three were carried back to camp and with the help of a lantern we examined the slata. Out of the exit wound caused by the bullet streams of white grubs were pouring out; at first we

thought there must have been an old wound which was infested by maggots but next morning, on closer examination, we found that they were the larvæ of the common black and yellow wasp, several dead adults were coming out as well. We opened the stomach and found it full of comb, larvæ and adult wasps, the Bear had eaten everything. Now how could that Bear have avoided being stung on the lips and the tongue? I believe there must be some immunity or non-sensitiveness to bees' and wasps' stings. It is the same in some people the sting from a bee or wasp causing them no pain or swelling. My wife is a subject of this immunity.

The subject of Bears being so fond of the larvæ of the large scarab beetle is so interesting that I will go into it in detail. This beetle popularly known as the rhinoceros beetle, from the horns that project from the head, makes balls of Bison, Buffalo and Elephant droppings, preferably those of the latter. It digs a tunnel several feet into the ground and makes a large cavity at the end, the clay all round this cavity is compressed and made smooth by the beetle turning itself round and round. The balls of manure are then trundled by the hind legs, one after the other, into this cavity. The female generally does this, the male acting as an escort to see that she is not robbed on the way by another beetle. When sufficient fodder is provided for the grub she lays her egg in the mass. The larva, when fully in the grub stage, is about 2 inches long, greyish-white in colour with a reddish head, more like a caterpillar than a beetle. This is the morsel so prized by the Bear. Where there are regular manure heaps the beetle does not take all this trouble but lays her egg in the heap. After the jungle fires the ground gets baked and with it these nests. It is very puzzling when one comes on these round clay balls, split open by the Bear, lying near a digging. They look like a broken chatty (earthen vessel) and I did not know what they were until my tracker explained to me.

A detailed description of the Himalayan Black Bear is not necessary. In old animals the ruff round the neck is well

marked; it is also blessed with a special bone in a certain part of its body, not exactly where the lucky bone of a Tiger is found but in the lower regions; this bone is always kept as a trophy and I am told makes an excellent cigarette holder!!! As a demonstration of muscle I do not think anything, except the monitor lizard, can beat the muscles in the fore-arm of the Bear; and this, combined with the weight of the paw, enables it to inflict the most terrible wounds. As it always strikes at the head one comes across cases, generally of unfortunate grass cutters, where the whole face has been, practically, removed by one stroke of the paw. In the hills I have seen men with their mutilated features covered with a cloth to hide them. In one case, when I was at Tezpur, some natives were netting deer; unfortunately a Bear got into the net, bit the strands and attacked the trappers. Before it was despatched it had laid low two of their number. They were brought to my hospital, one man was practically scalped and the other very badly mauled about the face. I did all I could for them but both died from shock. The Bear always stands up before it strikes.

The claws of the Himalayan Black Bear are shorter than those of the Sloth Bear and the spoor is very like that of a human being.

Whether there are two varieties of the Himalayan Black Bear is a mooted point. This question was raised in the Journal some time back. I am inclined to believe that the large and small one are the same animal, the difference in size being accounted for by abundance or deficiency in food.

The Bear loves water and when it is hot, on being chased when wounded, it will take to a pool to cool itself, it hates heat and light.

In old Bears the teeth get yellow and broken or ground down. The sagittal or occipital ridges of the skull are very large and the lower jaw atrophies.

The she Bear produces one or two cubs at birth. A cave is generally selected for this purpose but once, when we were in "cholera camp" not far from Manipur, we discovered that one had produced in a very extraordinary place. This was a narrow, deep, very rocky nullah, across which a large tree had fallen, and the leaves and debris had filled up the space beneath the tree, we got some sepoy to stir up the stuff while N. and I stood ready at the outlet for the mother. She came out at a tremendous pace. It was N's shot first and I was not sorry he missed, our men then made a thorough examination of the nest and produced two cubs, each about a foot long, hairless and very like the enlarged young of a white rat. They were quite blind. We took them back to camp and the problem arose as to how to feed them. N. and I took charge of one each. We first of all tried feeding them with buffalo milk soaked up in cotton wool but this was not a success; then I proposed feeding bottles and two were produced from my hospital. These did quite well but my whole supply of rubber nipples was exhausted by the time the little beggars could feed themselves. They grew rapidly and I shall never forget all the trouble they gave us. Mine used to yell two or three times during the night for its bottle and I had to get up and feed it just like a child. They were jolly little beasts full of fun; they wrestled with each other and with us. Before we left camp for Cantonments they used to wander into the adjacent jungle for food but always returned every evening. They would eat anything but what they enjoyed most was lemonade. They would sit up on their hind legs, hold the bottle in their paws and gulp down the contents. As they grew bigger they became less docile, their wild instincts were aroused and returning. One day they visited a village about three miles away; the villagers got alarmed, so we set off to capture them. One of them injured a sepoy before it was captured. We could see that they were getting more savage so N. tethered his by a chain to a huge dumbbell and gave it a bottle of lemonade to pacify it but the little brute hit his face with its paw and tore his upper lip. Our C. O. said they

must be got rid of; so, although we parted with our pets with much reluctance, they were despatched to the Alipur Zoo. Two years later I visited the Zoo and my little *Bhalu* at once recognized me. It came up to the bars of the cage and let me caress and scratch it, all the time making funny little noises. The poor little beast died a year later. I pitied the poor brute in the sweltering heat of Calcutta and am sure it must have often recalled the happy days it spent with us in our camp. So it is with all pets in India.

It is generally thought that the Himalayan Black Bear lies up in a cave during the day: this is fairly correct and perhaps applies to the Himalayas and certain parts of Assam, but, in the hills around Manipur, one comes across regular *machans* in trees where Bears lie up. These are roughly constructed by branches of the tree being pulled down and some bitten off to form a smooth platform. In one tree I saw three *machans*; one large one for the mother and two smaller ones for her cubs. Of course during the hot weather and the rains the *machans* are carefully concealed by the foliage and only come into evidence in the winter, after the leaves have fallen. Now why is it that Bears prefers *machans* to caves in certain places? The reason is that in certain parts the caves are at the sides of rocky water courses which during the rains become roaring torrents and flood the caves. The Bear knows this and considers the *machan* safer for its sister. It is also cooler up there and flies, ticks, etc., are less troublesome. In accounts on Bears I have never read of the *machans* so the subject is rather interesting. When shooting in the Forest Reserves opposite Darjeeling I came across platforms of branches and reeds placed generally in a stream or on a damp spot by Bears but these were ground *machans*. Where Bears frequent, forest trees in fruit are often seen with their trunks scarred by Bears claws in climbing to obtain the fruit and broken twigs, fruit and leaves may be seen on the ground beneath the tree. A favourite tree is visited night after night until the fruit is finished and this fact is often taken advantage

of in shooting Bears by native shikaris; it only entails a little patience to sit up for them.

In forests where Bears are found regular play-grounds exist, generally in isolated glades of short grass, the grass all pressed down in their gambols.

Bears, when suddenly come upon, will attack and make a most ghastly noise when doing so which is rather unnerving to the inexperienced sportsman. They also make a terrible noise when fighting and during sexual congress.

(To be continued.)

Big Game and Nature Photography.

By

W. MILBURN.

(With two half-tone plates.)

The keen interest, particularly in India, taken in photographs of big game and other wild life, makes one wonder why nature photography has not, to a greater extent, taken the place of shooting.

Many older shikaris in particular, although they still enjoy the sport of the chase, view the results with regret. They no longer desire to shoot and for them, photography with its equally interesting trophies is an ideal sport wherein the jungle craft they have attained will stand them in good stead.

Many people who lack knowledge of photography, imagine that a great deal of time and experience is required before passable results are obtained. It has, however, made such strides during the last ten years that a few hours study of any good modern text book on the subject and a weeks practice will, if the "time and temperature" method is



[Author's Copyright.]

A TIGER ON THE PROWL

used and given favourable conditions, produce good results from the start. Naturally, the more one studies the subject, the better will these be under adverse circumstances.

It is, in fact, not so much the photography as the subject that usually gives most trouble and a knowledge of the animal's habits is the main factor towards success.

A dark room, though preferable, is not necessary. Developing can be done at night using tanks, a cupboard can usually be made light tight for plate changing, even in camp, a few blankets covering the slides and plates is sufficient if this is done after dark. If as meticulous attention is paid to detail in developing the negative as is necessary in obtaining the exposure, the photographer need not fear failure.

Flashlight photography obtains the most successful results in this country. The nocturnal habits of big game combined with the denseness of the jungle in North East India, makes it almost indispensable because it is the only branch of photography in which the operator has full control of his most essential feature, light.

I personally, use the Nesbitt apparatus, but this is by no means essential. Very good results can be obtained by means of flares, and other methods will suggest themselves to enthusiasts. The main point is that the exposure must be short so that action is stopped, this makes all the difference between an 'alive' or 'wooden' looking result.

Flash light powder is certainly expensive, but the camera need not be so. The one used for the illustrations appearing with this article, cost only Rs. 65. In daylight work the position is altered. One has no control over the light therefore a far better lens is required. Sufficient light does not percolate through the heavy foliage of our jungles to give successful results and only occasionally will one have the good fortune to meet a denizen thereof in the open, returning home after dawn. These flashes of luck occur in every game and the man ready to take advantage of them, naturally scores,

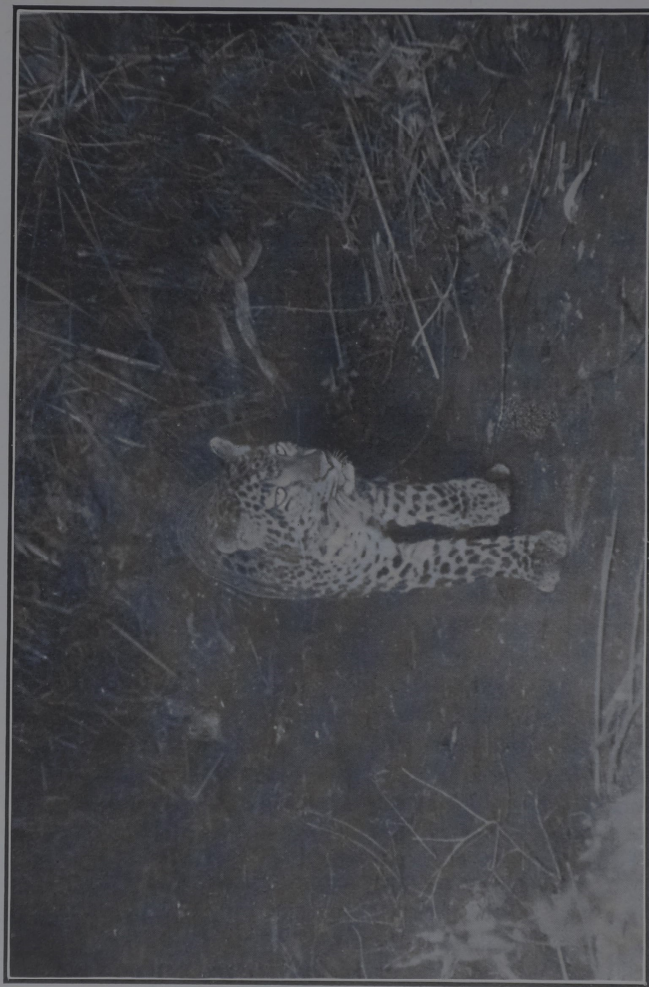
But on the whole, daylight work is better suited to the smaller mammals and birds.

These few notes may, I hope, serve to point out that the technical side of photography is simple and should be feared by no one, but I should also like to put in a word for the preservation of our fauna.

The modern rifle has undoubtedly taken much of the spice out of shooting as a sport. It is so accurate and deadly at long range, that the personal element has been largely obliterated and the animals are rapidly sharing the same fate. On every hand we hear the tale of the extermination of game. Native poaching is blamed and is certainly one of the causes, but only one. Advance of civilisation in the form of roads, railways and cultivation are others which we cannot fight, but by using the camera instead of the rifle or gun, we can at least refrain from hastening the end while yet obtaining the same enjoyment from our sport.

For sport it is, requiring physical endurance and unlimited patience. In the case of daylight work, a quick eye and steady hand must be added to these and ability to follow bird or beast through heavy jungle, ready to seize one's opportunities, probably with poor light necessitating a fairly slow exposure, knowing that the slightest movement of the camera spells failure. In the case of flashlight photography, success lies chiefly in the preliminary work of tracking the animal and studying his ways. Though the actual moment of taking the photograph may not require one's presence, the thrill of feeling one has judged correctly as to his whereabouts at a given time and succeeded in placing the camera to within say exactly twelve feet of him, is well worth attaining.

In either case, should failure result, the disappointment may be great, but one has the consolation of knowing that no harm has been done nor a wounded animal left to die a lingering death.



[Author's Copyright.]

A LEOPARD ON THE PROWL

Fishing in India and in Europe.

By

COLONEL H. S. WOOD, I.M.S.

(Continued from page 78.)

I have spoken of Butchwa or Butter fish (*Eutropiichthys vacha*), they are caught with worm and when rising take a small fly spoon well. It has barbels and should be handled carefully because the spine of the pectoral fin can inflict a very painful wound. The eyes are very large and sometimes, when caught, this fish emits a distinct squeak. They are delicious for the table, have hardly any bones and the flesh is of a light yellow colour hence the name.

Wallago attu.—The Bengali name is *Boali*. This is a mud fish, scaleless and very ugly. It has long barbels and a large mouth armed with teeth. It mostly feeds at the bottom of rivers and often sulks under overhanging banks amongst reeds and rubbish. It is an extremely voracious fish. I once caught one which was struggling on the surface of the water, having swallowed a fish almost as large as itself. It could neither dive nor swim but just flapped about on the surface. I have taken *Boali* on the spoon but they give no sport. They are dirty feeders and the flesh tastes muddy. (In Bihar we found young *Boali* quite good eating. *Editor*.) In camp my servants used to sit up at night catching them with a hook baited with the entrails of fowls; they caught quite a number some of them 15 lbs. in weight. (In Bihar they are often caught with a live frog on a hook, the frog squats on the surface of the water; one man uses a number of rods, thus baited, stuck in the ground on the edge of a tank or river. *Editor*.)

Garfish.—The Garfish (*Xenentodon cancila*) is a terrible nuisance as it constantly gets on to even big spoons when fishing for Masheer. They are nasty, slimy things with a

horrible, strong froggy odour. The only beautiful thing about them is that, when first taken out of the water, they have a lovely transparent, iridescent and opaline play of colours but this soon fades. They are full of fat and the natives liked them but we never ate them. In the Assam rivers I have seen them more than 18 inches long.

In addition to the above the Assam rivers hold a silvery Carp or shall I say a Roach. When the flying termites are on the move one sees these fish rising in hundreds to secure them, and fine sport can be got by baiting a hook with the termite. They rise just about an hour before sunset which is the time when the flying termites appear. This exhausts the river fishes. Of course there are many others like the Rock Carp, etc., but as they won't take any bait I leave them as non-sporting fish.

Tank fishing.—I never took to this although I had tank full of *Rohu* (*Labeo rohita*) in my jails and compounds in various districts. One simply sat, smoked and watched for the float to bob. Poles were stuck here and there in the tank to which were tied bags containing the bait used, generally *atta* or plantains mashed and flavoured with *gur* (native sugar) or aniseed or garlic. (In Bihar we have often seen a wriggling mass of worms tied on to one of these poles. *Editor.*) The fish went for these and made the bamboo wobble then the fisherman dropped his baited hook by the side of the bamboo and bagged his fish. I used to get my servants to hook the *Rohu* and then I played him; but I disliked this kind of fishing. Almost every Zamindar in Bengal has his tank for fishing *Rohu*. This sport, entailing little exertion appeals to most of them and the *Rohu* is good eating and *Rohu* curry is not to be despised.

I once saw a most wonderful sight while crossing the Brahmaputra at Tezpur in a dug out. About 50 yards below me I saw a large fish shoot about 12 or 14 feet into the air and something dark in the water beneath it. I hurried the boat

towards the spot and there saw what it was. A Gharial had hold of a big fish and was playing with it as a cat does with a mouse, shaking its head from side to side. The Gharial gave a jerk and sent the fish, which was a *Rohu* of about 15 lbs., into the air. It then caught it in its jaws as it nearly touched the water. This tamasha went on for about eight minutes and then the Gharial sank with its prey. I was quite close so saw it all clearly. The Gharial seemed to catch the *Rohu* transversely every time. It was a most interesting sight and I have never seen a similar one recorded anywhere.

Turtles.—The Assam rivers, in their lower reaches were full of turtles. They basked on the banks, sitting on stones and snags and slid or dropped into the water as our boat passed them. They are in great demand by the Bengalis as the flesh is considered to have aphrodisiac properties. They grow to a great size and sometimes it requires two men to carry one. When the rivers fall the Bengalis spear them with a very long spear. Terrible cruelty is inflicted in turtle catching and in their transit. One sees the poor brutes alive, lying wounded by spear thrusts in the bottom of the boats. For transit the flippers are perforated by bamboo slips and tied to the head; the head also being secured to the side. They are tumbled anyhow into baskets and put into hot, stifling Railway vans. I shall never forget the sight of the poor creatures being trumbled on to a Railway platform on a very hot day. In their agony, they were crushing the stones in their jaws when they got hold of any. When required for use the carapace is sliced off while the poor creature is still alive. The S. P. C. A. should take some action in this matter and frame rules for humane transportation, etc.

Destruction of fish.—During the last part of my time spent in India, between 1922 and 1927, I noticed how the fish in the rivers were being exterminated just as the game was. In the North Cachar Hills poisoning and trapping was done on a large scale at all seasons of the year and owing

to fine meshed nets being used everything from 1 inch upwards was caught. Another most destructive method was the damming up of the outlets of bheels at the end of the rains. Bamboo traps were placed at these outlets and huge hauls were made. As many fish spawn in the bheels one can realize the immense destruction done to their fry. The fish are dried and converted into *sukti mas*, with a most abominable smell. Even after the water has been let out of the bheels one will see the Bengalis wading in the liquid mud looking for stranded fish and mud fish. One can always tell where this is going on as hundreds of Brahminy and ordinary Kites are attracted to the spot. In addition to these methods dynamite is used, which is obtained from P. W. D. subordinates when blasting operations are being done. To give the Mahseer a chance all fishing in the higher reaches of the rivers, except by rod and line, should be stopped from March to the end of the rains. This was done for a few years by Government in the Sylhet district and the increase in fish was remarkable. The matter should be enquired into by the Agricultural, Fisheries and Forest Departments and new legislation passed. It is very difficult for Forest Officers to stop poisoning as this is done in out of the way places and when discovered the miscreants bolt into the jungle. If heavy fines were inflicted on the villages near where the poaching is done it would have great effect. The use of nets with very fine mesh and the damming of bheels should be stopped altogether. For miles and miles along the banks of the Sylhet rivers I have seen "bird-cage" traps put down destroying millions of fry of all kinds.

The places and villages where fish drying goes on become most unhealthy spots. The smell of the fish attracts myriads of flies and the sanitation is very crude. Epidemics of cholera are very prevalent. I remember once going into a hut in one of these villages where, inside a room, there was a corpse, dead from cholera, and a few feet away the family was partaking of a meal, the food being covered with flies!

A curious custom is observed by the Manipuris when they go into camp for fishing. A colossal figure of a woman, made of clay, complete in every detail, is made lying on the ground. Pujah is done to this figure and garlands and dried fish are presented, the latter being placed in a certain part of her anatomy.

Before concluding my remarks on Indian fishing I must allude to a peculiar climbing fish (*Anabas testudineus*) that I saw in the Sylhet bheels. It is well known that a Climbing Perch exists in brackish waters of the Sunderbans. (This is we believe, the same fish. It is got both in the Estuaries and fresh waters.—*Editor*.) that can climb trees by means of its fins alternately contracting and expanding them. (It is very doubtful whether they really can climb trees.—*Editor*). In Sylhet it is called *Koi mas*. It is yellowish-red in colour (Those we have seen have been more brown-green in colour.—*Editor*). I have found them in the water that collects amongst the branches of some old Jharal tree. Of course this is only possible in the rains when the trees are surrounded by bheel water. Those in search of this fish should beware of snakes that take refuge in these trees. The branches are those that issue from the main trunk. Here they get plenty of food and are not harassed by predatory fish. I noticed that in these trees there were always cracks in the trunk leading up to the collection of water and it is only this condition that enables the fish to ascend, much in the same way as a mountaineer ascends a couloir. The sharp spines of the fins curving downwards give a hold as the fish pushes its way up. The *Koi* fish makes the most delicious curry I have tasted and let me recommend another fish for the same purpose the Black Mud fish a most forbidding looking creature but, nevertheless, excellent for the table. The Manipuri name for this fish is *Gnakra* and when it is caught it squeaks in the same way as the *Batchwa*.

I mentioned previously that in the river Veratri I saw Mahseer snapping up the withered and fallen leaves of the

Bauhinia as they were carried along by the current. The fish would not look at a spoon. I saw some grand fish in this river, some of them must have been forty pounders. This river is situated about 6 marches from Manipur and lies in a North-Easterly direction beyond Ukrul. We were not able to explore it much as, at the time, we were on a punitive expedition on the way to Somrah which lies in independant territory on the confines of the Upper Chindwin. The country all round was very beautiful, pine, oak and holly. The pines were very resinous with hardly any bark on the trunk, owing to the natural excessive exudations of the resin. From a commercial point of view I should think that the forests could be exploited with profit to produce turpentine. Towards the Manipur frontier there are a number of salt wells containing briny water. This is drawn up by a lever arrangement and the water is evaporated in pans to produce salt, horrid looking stuff looking like solidified ash. The evaporation is effected by means of fires, the wood of the resinous pine being used and therefore much valuable wood destroyed as, of course, there is no afforestation. In the neighbourhood of the brine wells, the whole country round is blackened with the smoke from the resin. The people, Nagas, who work the wells look like jet black devils as they never wash. Their houses and everything inside are the same.

The Nagas from the Independant territory beyond came into Manipur territory to purchase salt and it was this that led to our punitive expedition. Five women that came in died, on their return, probably from ptomaine poisoning. The tribe to which they belonged thought they had been poisoned by the Nagas in our territory. They raided, killed five people and took away the heads. The raiders were from the large village of Somrah and it was against them that our punitive expedition marched. Our force consisted of 200 Gurkhas, 4 British Officers, including myself, and the Political Agent of Manipur. We marched most of the way through beautiful country and had a great time.

Just before reaching Somrah we were met by the Chief and headmen of that place. They told us that they had cleared a good site for our camp on a plateau just below their village. Our C. O. was suspicious so we chose a site overlooking the village. We built a stockade, fixed up our two small six pounders and made ourselves comfortable. We were about 600 yards from the village as the crow flies.

Next day the Chief and headmen were summoned and the Political Agent laid down his terms which were, surrender of the murderers and a fine of Rs. 6,000 or its equivalent in cattle, grain, etc. They were given a week to comply with these orders. During the interval the men of Somrah became very truculent. They assumed full war-paint and made a demonstration by shouting, grimacing, jumping and indecent gestures; we could see that they were hurling abuse at us. A blank shot or two sent them all scuttling to cover. At the end of the week the Chief failed to comply so orders were issued to proceed to the village. The force was divided into four parties and I accompanied one under an Indian officer. When we entered the village we found it deserted except for some old hags and a few fowls; *Mithun*, pigs, goods and stores had all been removed. Several of the houses had human heads dangling from bamboos in process of dessication and in the interior of huts we found many more which had a sort of bamboo network over them. In one house I found a Rhino horn which I took; it was apparently one from a Sumatran Rhino. We discovered that all the paddy, pigs and huge gourds had been buried in pits and most cleverly concealed. Our men had enough pork to last them for several days and we burnt all the paddy and sent the gourds rolling down the hillside. After this the Political Agent ordered the village to be burnt. All the old ladies were removed and then there was a conflagration. The bursting bamboos made a noise like musketry and gun fire.

The burning of the village had the desired effect as next day five men were surrendered, four of them were old and one

a lunatic. Our Political was suspicious and asked for the real murderers, which, in a few days time, were produced and duly marched to Manipur, where they were tried and swiftly dealt with.

I brought away some collar bands and amulets made of real human hair; the interwoven and coloured strips of bamboo were works of art; the colours used were red and yellow.

The Nagas of Somrah were of magnificent physique, tall, clean and well set up. They were Tankuls and recognized by the peculiar manner in which they dressed their hair. It was short at the sides, long on the top, like a crest and tresses flowing down the back, like the plume of a French Cuirassier. They cut their hair by passing a thin board under it and chopping it with a *dao* or knife, which gives it a ridge-like appearance. The unmarried girls wear their hair bobbed with a pony crop. Some of these were very pretty with olive skins and pink cheeks. The married women wear their hair long and knotted at the back. In this village stone implements were used to pound corn, etc. I saw some wonderful ornaments made of huge pigs' tusks and some of their jabbing spears must have been twenty feet long, most useful in thick jungle.

All the country round was lovely and very interesting and is certainly worth a visit. I suppose we were the first white men to tread those regions where head-hunting goes on unchecked.

(To be continued.)

The Occurrence of the Sheldrake.

(*Tadorna tadorna*) in the Duars.

Mr. E. G. L. Webb of the Binnaguri Tea Estate was fortunate enough to bag a couple of these rare duck on the Toorsa river in March 1932 and has kindly sent me an account of his getting them. Unfortunately he did not realize that

they were far more valuable as specimens than as table-birds so they went to the pot!! However he kept some of the feathers which convinced both O'Donel and myself that the birds really were Shel Drake. We now give Mr. Webb's interesting account.

"I spent from 2nd to 9th March in the Hasimara District fishing and shooting. On the morning of March 2nd I was on the Toorsa, opposite Jaigon, with my brother. He fished southwards from the starting point and I to the north. Shortly after we parted company I noticed a flight of between 20 and 30 ducks on the water, some 200 yards away. The birds would not allow me to get within gunshot, rising off the water as I approached and settling after a short flight, being careful to keep just out of range. They did this several times and then I lost them round a bend in the river. Having come to a good pool I commenced to fish but having no luck here I worked up the river, gun in hand, my man following with my tackle. Suddenly a flight of duck were on me, going down stream, and flying very fast. I just had time for a shot and bowled one over into the stream. It was not a clean shot, as the bird dived, and it was carried out of sight by the current which was very strong. My brother had not seen the birds very clearly and opined that they were Goosander, which rather damped my ardour. I know very little about duck but noticed what handsome birds they were, their black, white and chestnut markings showing up clearly and also possibly their red bills.

On March 8th I was fishing opposite Beech with W. Stowell when we saw a flight of duck coming down. He suggested, that we might get a Goosander or two for our men who would not object to the fishy flavour of this bird. I was lucky enough to drop two birds with my right barrel and touched up another with my left which, however, continued its flight.

Stowell on closer inspection proclaimed the birds to be true duck of a species never before seen by him. They had

duck bills of a very bright red hue and, as far as I can remember, the legs were much the same colour. I had shot a drake and a duck and, except for the knob on the bill of the former, they were exactly alike in appearance, or so I thought. While examining them I pulled out some feathers to make into flies and very fortunately among these was one chestnut one. The birds not being Goosanders graced our table instead of that of our men and were found to be jolly good eating. On returning to the bungalow Stowell looked up his book on water birds, which is not illustrated, and we both came to the conclusion that the birds were Common Shell Duck.

On April 12th I went down to the Dudua, our local stream, to fish. I left the Government road near the bridge and worked northwards with my rod. I did not have a gun with me on this occasion. Round a bend in the stream I flushed, only 30 or 40 yards away, four Shell Duck which had been feeding on the ooze near the bank. They flew north and settled on the water about 200 yards away. They were undoubtedly the same birds as I had seen on the Toorsa.

I mentioned the matter to O'Donel a day or so later and he was sceptical. Shortly after, when I was at his place, he produced his book on ducks and asked me if I could recognize my bird among the beautiful coloured illustrations it contained. I soon did so. O'Donel still remained unconvinced and I mentioned the feathers which, up to that time, had been forgotten. When he saw them he capitulated and wrote to you about the matter. On seeing the feathers I understand you also are convinced, hence this long and painful account."

In India this handsome duck is mostly confined to the North being not uncommon in Baluchistan. It has been found sporadically in various other parts even as far as Burma. We were fortunate enough to obtain half a dozen specimens in North Bihar, four in 1905, one in 1916 and one in 1923. In Bengal it appears to be rare. Finn got several in the

Calcutta Market and Stuart Baker writes that it occurs in Eastern Bengal.

Their natural habitat is the sea-shore and that is the reason why so few are found inland, our sea-coast too is not very suitable for these birds. They fly, swim, dive and walk well and their food is principally animal matter, vegetables coming sparingly into their menu. Mr. Webb considered them good eating. I forget whether I ate those I got, at any rate *they* were *all* skinned. Stuart Baker writes as follows about them as a culinary quantity.

“Of course they are not good to eat; which of the animal-feeding ducks are? And Hume says “even skinning has no effect. It is certainly not to be expected it would have much, as flavour, unlike beauty, is more than skin-deep, though skinning has with many birds a certain amount of good effect.” Finn writes:—“as food it is one of the very worst of ducks, and indeed is not usually regarded as eatable.” How tastes differ, “what is one man’s meat is another man’s poison”!!

Editor.

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