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SHIKAR MEMORIES



TYPICAL GAME COUNTRY, LAISHENG

(Frontispiece)

SHIKAR MEMORIES

*A RECORD OF SPORT AND OBSER-
VATION IN INDIA AND BURMA*

By

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ILLUSTRATED FROM PHOTOGRAPHS

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TO
MY WIFE
A GOOD "SPORTSMAN"

PREFACE

AFTER nearly thirty-six years of big and small game shooting in India and Burma, I have been induced by friends to record my experiences and observations of the various animals encountered

I always think that in many books on shikar too much is devoted to the killing of the animal, and that its habits of life are not sufficiently described. The shooting of an animal is only actually of interest to the hunter.

How many young men go out to the Colonies ignorant of everything relating to shikar, which most of them intend to indulge in? I hope, therefore, that this book will not only be of interest but a guide to them.

It has been possible to preserve a fairly full diary of these hunting expeditions, and it is from this diary that this book has been mostly compiled.

I have purposely refrained from entering into any lengthy arguments upon the habits of big game, and, beyond some additions to some of the subjects from other shikaris, notably Brander-Carter, a fine hunter and keen naturalist, my thanks are due to Mr. C. H. Ingles, F.Z.S., M.B.O.U., Director of the Darjeeling Museum, for having added the descriptions, etc. (given by Mr. Brander-Carter), which are accurate and therefore invaluable to the hunter as well as to the naturalist.

All my leave in India was spent in shikar and fishing, for I am afraid I am not a social animal. I hated the clubs, meets and dinners incidental to a life there. I was

never happier than when in the jungle, far from the haunts of man, surrounded by wild life in all its forms, and amid the beauties of forest, mountain and river.

Here one conversed with nature, and what greater charm than this ? After camping one returned to Headquarters feeling fit and fresh to resume one's duties. I would advise every one proceeding to India to go in for shikar. As long as you have a gun or a fishing-rod in your tramps abroad you are happy—even if you draw blank !

The true hunter must be a naturalist and botanist, as such knowledge then gives additional zest to sport. The shikari must also cultivate his powers of observation. The old hunter sees and notices everything. The training for shikar is that of an athlete. One must be very fit to undertake serious big-game hunting. My advice to attain this is to avoid alcohol and over-eating ; to lead a regular life, and acquire mental occupation and a good conscience. Avoid late nights, big dinners, meets, and stuffy club-rooms.

I am an advocate for tobacco in moderation ; it is good as long as the smoke is not inhaled. A pipe or cigarette at the end of a hard day by the camp fire is very soothing. Some of the fittest men I know have been serious shikaris all their lives, and when they retire they look twenty years younger than their real age, and with the energy and vitality to enjoy life for the remainder of the allotted span.

The love of shikar is born and bred in the bone, and is certainly hereditary. My father was a great hunter and a dead shot. I remember what a privilege it was, at the age of five, to help him reload his cartridges, and later when I was allowed to carry his cartridge bag. At the

age of eleven I was allowed to handle and shoot with a twelve-bore muzzle-loading Joe Manton. My brother and I used to wander out and shoot everything we saw in the shape of parrots, hawks, owls and sparrows. As will be seen, our true sporting instinct had not then developed, and my father became alarmed at our expenditure of ammunition, so said that we must eat everything we shot. After this some discretion was used and we confined ourselves strictly to game. The shot we used was a mixture of 1's, 2's, 4's and 8's. Sometimes in our excitement the shot was put in before the powder, and we had to extract the paper with a corkscrew, and with the aid of the ramrod.

During the time spent at school and at the university I had ample opportunity for shooting rabbits, first bolting them with ferrets. This form of shooting is a splendid training by which to become a quick and good shot.

The shikari should have a camera and a good pair of X 8 Zeiss binoculars. I regret now that I could not afford a camera in my earlier days of shikar, for by this I have lost opportunities of unique and interesting subjects. Nowadays the feeling is not so much desire to kill as to take pictures of wild life which would be of interest to others. This is the right spirit, especially as game is decreasing year by year. Let my readers not think me a hypocrite, but the feeling is that, as one gets older, blood-lust gets less; one hates taking life, and feels a sense of remorse for all the animals and birds slain by rifle and gun.

This sentiment comes sooner or later to all men who have done a lot of shooting, and especially to big-game hunters. Life is just as precious and joyous to a splendid

beast as it is to a human being, and now, at my present age, nothing would induce me to kill anything big excepting a tiger or a rogue elephant. I would much rather encounter most animals in their natural surroundings, observe their habits and take photographs, so substituting the camera or cinematograph for the rifle.

Still, those glorious days spent in camp and in the jungles are a joy to look back upon, and time will never efface them. For now there is only the retrospect in all its detail and vividness. All the encounters with dangerous beasts to be fought over again !

In a book of this kind the ego must often occur, and for this I must apologise, but from the fact that they are personal reminiscences this cannot be helped.

My thirty-six years' collection of trophies I have presented to the Bristol Museum, as I could never hope to have a house in which all of them could be placed.

And, as a last prefatory word, I must pay a tribute, and offer grateful thanks, to my wife, for she has not only shared with me the vicissitudes and exposure, both in camp and out, of large and small game shooting during the last thirty years—with a constant courage often severely tested—but has been my infallible remembrancer upon the details of many incidents that might otherwise have been lost to memory.

H. S. W.

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CHAPTER I

MANIPUR, ITS BIG AND SMALL GAME

IN 1891 I had great luck in being posted to Manipur.

On reporting myself for duty at Allahabad I was ordered to march with a wing of a Bengal infantry regiment to Buxa Bhotan ; but, as I was stony broke and had no field kit, these orders were cancelled, and I was ordered to proceed to Manipur for duty with a wing of a Gurkha regiment stationed there.

No one could tell me how to get to my station, but after some trouble I found that I could get to Dhubri by rail and thence to Gauhati. After that I had to launch into the unknown, to traverse the great Namba Forest, and then through the Naga Hills to Manipur. I footed it the whole distance, about 250 miles.

In the Namba I had trouble. My only servant, a drunken Madrassee, went sick, and I had to cook my own food. My carts were often held up by wild elephants, and kerosene tins had to be rattled to make them leave the narrow cart-track through the forest.

The Dak bungalows, so called, were wretched—grass structures with half the roofs off, and I often slept with an open umbrella above me. At Kohima I was received most hospitably by the Gurkha regiment stationed there, and this made up for my starvation *en route*. Nowadays there is a splendid road from Manipur to Manipur Road, with palatial rest-houses, and one can motor right through.

Unfortunately I had no gun or rifle on that long march, for I saw game in abundance, and so cursed my luck. At Manipur we were quartered in the Durbar Hall. This was the building where the Durbar was to have taken place, and where the Political Officer Grimwood, and some other British officers, were confined and ultimately executed. I eventually heard what had actually occurred in some detail from my Manipuri bearer, Sungoi Singh, who witnessed the tragedy, though, the incident being well known, there is no need to repeat it here.

My first view of the valley was like a visit to paradise after the country I had traversed. A beautiful, green valley, surrounded by wooded hills on the right and left, and the lovely Logtak lake shimmering to the south. From a height the rivers looked like silver streaks winding their ways to the lake. The valley itself stood at an altitude of 2000 feet. The climate was excellent and we never used punkahs. The rainfall was about 60 inches in the year.

The cold months after the rains and the early spring were delightful. There were, of course, drawbacks, especially in respect of stores, which had to be transported over 100 miles, via Cachar, by coolies. These stores were most expensive, the consequence being that mess bills were very heavy. But, on the other hand, milk, vegetables, fowls, pigeons, etc., were very cheap. Mutton or beef we did not taste for years.

I liked the Manipuris; they were a sporting lot, and we had some wonderful polo with them on diminutive ponies. Sometimes twenty-four a side, and no rules as to crossing or crooking sticks. Hard knocks and falls were frequent, but I liked it better than the game on

bigger ponies. The ponies were cheap, from 30 to 40 rupees. Unfortunately, the best ponies had been taken away by the regiments leaving Manipur after the rebellion was over. But I managed to get some good ones afterwards, which turned out trumps. Burma ponies, we found, were no good for polo. They had very hard mouths, and could not turn quickly owing to their thick necks. The true Manipuri pony is like a small Arab, in fact they come of Arab blood.

The Manipuris say that the larger the false hoofs at the back of the fetlock the better the pony ; and if the pony has a dark line down the back, small head, clean legs, good shoulders, and rather a ewe neck, it is perfect.

There were no goals, the two ends of the ground representing them, and whichever side scored eleven goals first won. A man kept the score by means of small sticks placed alongside each other.

The Manipuri players looked very picturesque in their polo kit—coloured “ dhotis,” bright red leggings of cloth, plush jackets, and coloured, tightly-fitting turbans. The turban was so arranged that only the nose and eyes were exposed. Each man grasped the limb of the stirrup between his big toe and second. The polo pony's body was covered with ropes to which were attached balls of wool, and rosettes here and there, in order to break the impact of a ball. A thing like a tea-tray, of Japanned leather, was attached to the saddle and curved over in front to protect the legs of the rider. This leather tea-tray also protected the pony, and when galloping it rattled, so making the pony go faster. The polo-stick was held about 18 inches from the end. It was practically all wrist-work, and they beat us hollow in dribbling a ball,

and in making the most extraordinary shots, some from under the neck or behind the tail of the mount.

The game was fast and furious, and it was no uncommon sight to see five or six ponies on the ground at the same time. But in spite of all this we never had any serious accidents.

Another rule, not in our game, was that it was permissible to catch the ball in mid-air, ride towards your opponent's goal and to hit it with your polo-stick to score a goal.

The Manipuris are a very clean people, perhaps with the exception of their water-supply. I had many a pleasant meal in their villages when shooting, and they are experts at making a fish curry, although it is very hot. My dish was a lotus leaf, and fingers served as knife and fork.

These people are full of humour, very musical, and makers of pretty music too. When sailing down to the Logtak in a boat I always had one of these musicians who made up songs to the accompaniment of a sitara, a kind of guitar. The men are of good physique and the young girls distinctly pretty. The virgins have bobbed hair and a pony-crop. They wear one embroidered garment called a phanek. The women do all the hard work so do not retain their looks very long.

All Manipuri houses face east, and are kept scrupulously clean. No European, or any other caste, dare enter a compound, for if so it is defiled. The Manipuris are strictly orthodox Hindus, even refusing to eat food cooked by a Hindu, up-country Brahmin. So, in all the jails, one had to get a Manipuri-Brahmin cook. In fact, no one was allowed to enter the prison cook-house, not even myself.

Whilst I was in Manipur an American Baptist missionary appeared on the scene, and began distributing tracts in the Bazaar. The Manipuris complained to the Political Agent and this would-be reformer was turned out into the hills where he continued his work and lived like a lord.

Manipuri dances were very pretty, and the dresses gorgeous and effective. One never tired of them as one did of most Indian nautches, which are monotonous and get on one's nerves. The Manipuri women wear natural flowers in their ears, and their wedding festivals are very curious. The girls first beat the bridegroom with their switches, then a procession is formed with all the furniture belonging to the couple, the four-poster, wooden bed being most prominent.

They dispose of their dead by cremation. A portion of the frontal bone is preserved, and when a sufficient number are collected these are taken by a Brahmin priest to be thrown into the Ganges.

Before our occupation punishment was very severe. A man received 500 strokes with a double cane, one man on either side laying it on the prisoner's back. When a man was condemned to death he had to run to a place called Shooganoo, which lay about nineteen miles due south of Manipur, and as he passed villages every one turned out and beat him. When he reached the place a pit was dug. He was then placed in this with only his head sticking out, and an end was put to his suffering by the executioner coming up and breaking his skull with a club.

Their boat-races were very amusing, dug-outs being used, and manned by twenty or thirty men with paddles. The helmsmen were gorgeously dressed, their turbans

being decorated with the blossoms of the *Vanda cœrulea*, a kind of orchid.

There were Mohammedan Manipuris as well, so-called Panguns, but neither were a patch on the Hindus, whose women were not *purdanashin* or veiled.

The Manipuris were most civil, obliging people, and gave me great help in my shikari trips. Occasionally, a relative of the deposed Rajah, the Moirang Ningthou, used to accompany me on these, and made all arrangements for my camp.

On arriving at Manipur I very soon found that it teemed with small game, and big game also was to be had in the hills around and eastward towards Burma: so I got a battery and set to work.

In Manipur valley itself, panther, boar, hog, deer, snipe, golden plover, geese, duck of all varieties, quail, black partridge, Kalij pheasant, and green pigeon were in great numbers, as well as the rare Elds deer. I never saw a bear, tiger, or jungle fowl in the valley itself, or a hare or sambhur. In the hills serow, bison, tragopan, and sambhur were to be had, and beyond Tammu every kind of big and small game existed, from an elephant to a snipe. One can therefore imagine it was then a sportsman's paradise, and during my sojourn in the valley I was able to supply game to the various messes and to the Sepoys of the regiment. All guns were confiscated from the natives, and trapping of all game was prohibited.

Almost every day, after a visit to hospital, I would ride out to the shooting-grounds, tramp with my dogs, return again at 3 p.m. for a bath and a game of polo. So the days passed pleasantly, and one became as hard as nails.

The C.O. and I would often make a trip of ten days to the Logtak lake, and camp on one of its beautiful islands. I made also several trips into Burma, footing it from Tanmu to Sagaing, almost opposite the old city of Ava.

Snipe actually existed in thousands: pin-tail, fan-tail, painted snipe, jack, wood-snipe, and an occasional solitary snipe were all to be had. I believe that some of the true snipe, and certainly the Painters, bred in the valley. The snipe usually arrived about the 5th August and left about the middle of May. The bheels about the first week in August were drying up, and walking along the borders one was always certain of a good bag.

Then there were splendid, peaty bogs at the bases of the Langol hill and the Nongmail ching. The peat was springy and the walking good. At certain times the bogs were blue with wild iris, and it was a lovely sight. Every now and then, for a change, a Black partridge would get up with a whirr.

Once, when shooting in one of these bogs which had been partially fired, I heard a curious sound coming from a bush. Looking under it I saw an emaciated, clouded leopard, his hair singed and feet blistered, unable to move. He was too weak to charge. Poor brute, he gave a feeble snarl, and I put an end to his misery by a charge of No. 8 shot. I suppose he had been caught in the conflagration.

In the tall grass there were small, damp patches, and it was very pretty shooting to rush through this and pot the snipe as they topped the reeds. We used to find plenty of snipe, as well, in the dried-up moats of the fort. But these were gross feeders and, like some Black partridge, had a disgusting odour, so we never touched them.

Then driven snipe were great fun. Some of the bheels

in the wet season were covered with water-lilies of all colours, a beautiful sight. Later, these patches of water dried up, leaving the stems of these flowers standing up 4 or 5 feet in height. It was impossible to walk up snipe in this stuff, so we posted ourselves at one end whilst beaters started at the other. The snipe came over at a terrific pace and required accurate and straight shooting at all angles. I remember once knocking a snipe over when coming straight towards me, and, as it fell, catching it like a cricket-ball in my hand. On another occasion, whilst we were at revolver practice, a snipe came and sat down near the target, when Captain C. bowled it over with his revolver. We also shot snipe from a dug-out canoe, and as they rose from the floating weeds.

Towards the end of April snipe get very fat, laying this up as a food-store for their long migratory flight to the lakes of Bhutan and Tibet. At this period they were A.r. for the table. I found the pin-tail commoner than the fan-tail in Manipur.

Wood-snipe were generally found in swampy jungle that had been fired. They were very numerous. The flight was slow as compared with that of true snipe; rather an owl-like flight, for after flying 30 yards or so they would flop down, and so were easily walked up.

Many people confound wood-snipe with woodcock; but it is easily told by its much darker colour, the shape of the head and the less prominent eyes; also by the barring of the feathers on the underside of the wing. They are not very good to eat.

I think I shot only one snipe during the whole time I was in Manipur, the size of the bird weighing about seven ounces. The light colour serves to distinguish it

from a wood-snipe or a woodcock. I never got a woodcock in the valley, although I have put them up alongside water-courses in the neighbouring high hills. The Manipuri name for the snipe is Chiglowbee, and it is derived from the sound the bird makes when it rises.

My biggest bag to my own gun, in a single day, was ninety-nine birds; but with more cartridges my bag would have reached well over the hundred. I can still see myself riding back at full gallop to Headquarters, holding my snipe-stick full of birds in one hand in order to get them home in time for mess.

The Jack, or Painter, I never cared to shoot. The first is a stupid little chap, flopping down a short distance every time you put him up; the Painter flies very slowly, and is no good for the table. But, I will record this, that after shooting accurately at snipe, and you do happen to get a shot at a Painter or Jack, it is probably 10 to 1 that you will miss! The Jack has a twisty flight and is a small mark to hit. It loves places where there are short rushes sticking up in clumps here and there. I noticed that when snipe come in first, and when flying high up looking about for favourable feeding-grounds, they have an undulating flight. They would then come down at a terrific pace, causing a loud, drumming sound, set up by the current of air rushing through the pinion-feathers.

After many years of snipe-shooting I think the Indian snipe flies slower, and does not twist so much, as the European. An exception is on a windy, misty, cold morning; or with birds that are driven. On a hot day they fly very slowly and do not go any distance. In Sylhet, during the heat of the day, I have shot them in

thick jungle and from under bushes of the wild azalea. When sitting, they remain absolutely motionless and are very hard to see.

On two occasions I have got two snipe with one barrel, but one tea-planter told me that he had got six ! Friends, of course, chaffed him, saying that the number went up with each successive year !

The hardest and most difficult snipe-shooting occurs when one is walking them up in flooded paddy-fields early in the season. They then lie up on the dry ridges, and you are fairly sure to have the wrong foot forward when a bird rises. It is very dangerous walking along the ridges round Manipur, for it is full of snakes. I have often blown a cobra or a Russell's viper to pieces when so doing ; and it is as well to wear a pair of leather gaiters at this sort of shooting.

In Sylhet the natives trap numbers of snipe by means of a spring-trap with a noose. There is very good snipe-shooting in Sylhet and in Rajshaki. In other districts, like Tezpur, snipe were very scarce. When the fields are being ploughed in April snipe will be found in the open fields, where they find plenty of food in the shape of small snails, which constitute their principal food. Snipe also eat earth-worms. Their bills must be very sensitive, as most of the food has to be felt for underground. These holes generally tell you that snipe are present. I once knew a zealous sportsman who carried a stuffed woodcock's head, and purposely put others off the scent by boring holes in places where woodcock were not ! But, in any case, you may be certain that you will not find snipe where there is much water, or where the grass is long and tangled.

For a snipe gun I recommend a 16-bore, but it means straight shooting, and the killing range of a 16 is greater than that of a 12-bore. It has been possible to kill snipe at 60 or 70 yards with this bore. Some use a 20-bore, but this seems too small. The best-sized shot is No. 8 ; and for snipe-shooting it is better to use brass cases, although these are more expensive, whilst E.C. smokeless is the best powder. Some of the nitro powders are too much of a strain on the barrels and breech, and the recoil is greater. A gun with ejector-mechanism is the best. But never refill your empty cases ; if you do you will be disappointed in the result.

In Manipur two kinds of black partridge were obtained. The ordinary Francolin and the painted Francolin. The latter were found in the low hills skirting the valley east towards Chung hai. It was less common than the black partridge in Manipur, but in the Kubbo Kale valley it was very numerous. In the early morning the call of the jungle-cock, and that of the painted partridge was one of the first joyful sounds one heard. The call is " Khah-ra-Khah " repeated at intervals. The Burmese name for it is " Khah." The black partridge were found in hundreds in the Manipur valley, and in the valley of Miankhong, leading up to Kairong and the Naga Hills. The Hindustani name is " Kala Teetur " and the Manipuri " Ooranbee." In the breeding season the cocks get on to some mound or ant-hill and challenge each other. The natives say it calls " Khuda taree Kudrut," " God gives blessing or kindness." It is a beautiful call and very pleasant to hear.

It was very difficult to get black partridge in Manipur before the jungle fires. They are terrible runners and lie very close. But a good dog will put them up. After the

jungle fires, and when the green grass cropped up, was the time. Patches of unburnt jungle were left here and there, and out of every patch two or three brace could be put up by beaters or a dog. In the reeds bordering a nullah or small river, and unburnt, one was sure to find some.

Often, when shooting "Blacks" in this stuff, a hog-deer would bound out and race away across the plain. At close range it was possible to bowl them over with shot. During a big jungle fire, and if one stood at the edge, in a safe place, one could get shots at runners, but I never cared for this. They come out literally in scores, and in recently burnt stuff are very difficult to see.

Black partridge was also found in the peaty bogs I have spoken of when dealing with snipe. It gets up with a great "whirr," which is apt to startle one. It rises almost perpendicularly, and then goes fairly straight. But a great mistake is often made by firing too quickly on the rise.

Black partridge are very fond of a blue berry growing in Manipur. I have found these bushes crammed with partridges. The black partridge seems to be the most frequent bird to soar after being shot, for a wounded bird will shoot straight up higher and higher and then suddenly drop dead. They do this when shot in the head, or neck. But I have seen duck, geese and snipe do the same thing.

The black partridge breeds in Manipur, but, curiously enough, I never found a nest, probably because the jungle was too thick. My biggest bag was fourteen brace in one day, besides snipe and duck, and I found No. 4 shot the best for them, but often got them with No. 8.

A good dog is absolutely necessary for black-partridge shooting, otherwise you will have difficulty in putting them

up, and of finding them after being shot. I had a splendid dog named "Rags," a cross between an Airedale and an Irish terrier. He had a splendid nose, retrieved well, feared nothing, even boars and panthers, and was as hard as nails. A better dog I could never wish for. He used to jump for joy when he knew he was off for a day's shooting, and after this had to run many miles behind my horse. In the course of the day he must have covered many miles, but was never tired. Poor "Rags" eventually got hydrophobia in Sylhet, and had to be shot. We had many happy years together, and his memory is still cherished.

I had his descendants for several years, and they all inherited his sporting qualities. A good dog is the sportsman's best friend and companion, and especially when he is alone in the jungles. What better company can man wish for? His eyes speak what his voice cannot utter, and still some say he has no soul? Well, if man has it I think a dog certainly possesses one. A dog is more staunch and true than a good many friends.

In Manipur there were several kinds of quail. Painted quail, button quail, bustard quail with three toes, the rare Manipur quail only found in Manipur, and looking more like a small partridge, and the grey or common quail (very rare). The painted quail were very handsome and were found in swampy places. These small birds were hardly worth wasting powder and shot on, excepting the Manipuri quail, of which I obtained some specimens for collections and museums.

The bustard quail's head is almost bare of feathers, and it is distinguished by its three toes. In the Naga Hills I got several bamboo partridge (*Bambus coloa Fytchei*). These were found in dense jungle—a species of *Artemisia*

—and when flushed perched on trees from which you had to shoot them.

I never saw the Kyah or swamp partridge in Manipur, although they were very numerous in other parts of Assam, such as Nowgong and Sylhet. Many Peura, or hill partridge, were obtainable in the hills north of Manipur. They utter a peculiar note like a wail, and if you can imitate it they can be called up. Once I remember sitting and imitating one, when another man shooting with me nearly bagged me, so I congratulated myself on my proficiency.

It is wonderful how the birds can hurtle through thick jungle without dashing themselves to pieces. They almost beat a bronze-winged dove or a parrot in this respect.

Duck existed in Manipur in millions, but I think that Mesopotamia beat it in numbers. On the Logtak lake, when flushed, they got up with a roar like thunder and darkened the sky. Every bheel held duck. My favourite places were Phoching, Laishoa, and the Logtak. The duck came in about November and left in March. On a moonlight night one could hear them whirring over our mess, making their way to the Logtak and other sheets of water. Of course, certain duck never left Manipur and bred there, such as the Spot-bill, the Small-whistler and the Cotton teal.

The whistler is supposed to breed in trees, but I have found their nests on the ridges between paddy-fields. I have also found the nests of the Spot-bill in the same place. Both varieties, like the lapwing and the capercailzie, sham injury when disturbed. The Cotton teal builds in bheels and also in the hollow of trees. I once actually saw a Cotton teal fly down to a sheet of water with a youngster on her back.

The following varieties of duck and teal were obtained

in Manipur : Mallard, Widgeon, Gadwall, Pin-tail, Spot-bill, Shoveller, Pink-headed duck, Red-headed Pochard, Red-crested Pochard, Black-crested Pochard or Golden eye, White-eyed Pochard, Brahminy duck, large and small Whistlers, Cotton teal, Common teal, Garganey, Marbled teal, and Bronze-capped teal. Mallard were very scarce, and all the time I was in Manipur I think I only got five. I imagine the sheets of water were too open for them. They prefer narrow channels with plenty of jungle at the sides, and are rather shy. I once, at Tezpur, shot a Mallard whose legs were mere stumps. I can only surmise that it was late in leaving its breeding ground in Tibet, and that the feet had become frost-bitten and had dropped off. It was in good condition so was none the worse for its mutilation. I should say Pin-tail, Widgeon, Gadwall, Black-crested Pochard, and Whistlers were most numerous, and, of course, Common teal. I only shot one Pink-headed duck, a couple of Merganser, and one Bronze-capped teal, a beautiful bird, having much of the Pin-tail colouring about it.

It is an extremely difficult thing to distinguish the various duck and teal, when one first begins shooting. The best plan is to get E. C. S. Baker's superb book, *Indian Duck and their Allies*, or *The Ducks of India*, by R. E. Wright and Douglas Dewar, and to compare every duck you shoot with the description and coloured plate. Hume and Marshall's *Game Birds of India* is good, but it is out of print and now very expensive, though most regimental messes have it.

I once saw a flock of duck flying up the Chungai River, but I could never make out what they were. They were large, black and white birds, and had rather pointed tails.

The true duck are distinguished from the pochards by the absence of the webbing of the hind toe. I never saw a Nukta or Comb duck in Manipur.

The pochard is a terrible diver, and crippled birds dive all over the place, get entangled in the weeds at the bottom and become lost. My man used to dive and get them occasionally. Then again they will come to the surface amongst weeds with only the beak projecting, and are very hard to see. The spot where the duck is, or where it is entangled, is often indicated by air bubbles rising to the surface. These cripples give one an exciting chase sometimes.

But what riled me most was to have bird after bird carried away by the great Bonellis eagle (Manipuri name, Koruk-Lowbee) and by the red and white Brahminy Kite. For this reason I often had to shoot them. The first named is sacred in some parts of Assam and one must, therefore, be very careful not to shoot them near villages. They build huge nests in some high, solitary tree, often in a village, and return to the same every year.

The swish of the wings duck make in flight varies, and the practised ear can tell, without looking, what variety is passing. All duck and teal feed during the night, returning to their resting places, or the bheels, for the day, where they pass their time preening, or sleeping with head tucked under a wing and standing on one leg, but there are always some on the qui vive.

When the paddy is flooded duck and teal do a great deal of damage and wax fat.

I once saw a Bonellis eagle chase a flock of teal. The latter dashed headlong into the water and disappeared. Why they were not killed by the impact astonished me.

Amongst duck you will find Black coot, but these are

easily distinguished by the way they skim the water, using feet and wings. They are of uniform colour and one can generally see the white frontal plate at the base of the beak.

I once took a subaltern out duck-shooting and, on meeting at tiffin time, he was delighted to tell me that he had got a lot of a new kind of duck. On looking into his boat I found that every bird was either a coot or a shag. He was very annoyed when I told him that they were all "Koochnaies."

Every one knows that story about a Paddy-bird that was palmed off as a King Snipe on a "Griffin" ?

To get good duck-shooting one must get up very early ; for it is then that they come in from their feeding grounds; and, conversely, in the evenings you can get them again as they go on flight to their feeding grounds.

Before shooting on a bheel study its surroundings ; watch where the duck come in to their rest. This is also indicated by the great number of cast feathers lying about. Then, in the evening, watch the line of flight to their feeding grounds. They invariably stick to the same line going and coming. There are various ways of shooting duck, but undoubtedly the best is to be found when they are flighting. The mist, which generally hangs over a bheel in the morning, then favours operations.

When you see them coming in from their feeding grounds, hide yourself in rushes or grass close to the resting place. Have a man with you to hand the ammunition because you may be sometimes waist-deep or higher in water. A decoy duck or two and a duck-call are useful. But the latter must be sounded properly. Under these conditions you get splendid shooting ; the shots probably being fired

so rapidly that your gun gets too hot to hold. If you get a cripple shoot him and pick up your dead birds later.

Duck come down with a terrific smack on the water, and once I was hit full in the chest by a falling bird, which made me gasp.

Some little time after disturbance ducks settle in the open water, or some other place, when it is a good plan to get a man in a boat armed with a muzzle loader to frighten them. By this method more good shooting can be got, and by it I have picked up thirty-eight and forty birds without moving.

Then, in the evenings, it is a good plan to hide somewhere in the line of flight to their feeding grounds, when you will get all the shooting you want. Where two bheels adjoin each other, separated by a piece of land, is a good place to hide, for the birds fly from one bheel to the other. When shooting remember that the Pin-tail is the first to leave, and generally flies high. Whistlers are generally a nuisance for they are the first to discover your hiding place and give you away. You can see them flying over, necks craned, and looking down at you.

In Manipur dug-outs are used, but be sure to get a steady one, not too long, and one that does not leak. Personally I did not care much for this sort of duck-shooting; it gets monotonous and, after some time, duck get to know the killing-range of your gun and keep out of it. But if you do it is a good plan to have a small "Morah" or stool to sit on, as it is not very pleasant sitting in water. Sit well forward with your man paddling behind. When the ducks get wild a screen of grass placed in front of you is effective. My paddler would sometimes lie flat in the stern and propel the dug-out with his feet working like a screw.

When four or five of us shot on the Logtak huge bags were made ; as many as four hundred and fifty in one day. Of course this is nothing to the bags made in other parts of India, such as Bhurtpore, where several thousand are shot in one day. But this is slaughter and is to be deprecated. Our bags were never wasted, as there were plenty of people to feed. Never shoot anything that can't be put to some purpose.

I have tried shooting duck by moonlight, but it is very difficult to see the birds and not worth the candle, as one is liable to get a chill and contract malaria.

Other places with good duck-shooting were Marcoli in the Sylhet district, and in the Tangour and Hakaluki Haors in the same district. But these could not compare with Manipur and Mesopotamia.

For the table, undoubtedly, the best bird is a teal that has fed on flooded paddy. A properly roasted teal with chip potatoes, a slice of lemon and a little cayenne pepper is a dish fit for the gods. Next comes the Pintail, then Gadwall and Widgeon. All the Pochard family are very fishy, but this taste can be got rid of by putting a large, raw onion inside them prior to roasting. They are also bearable in curry.

The Shoveller and Whistler are not good, so refrain from shooting them. The same applies to the Brahminy duck, the so-called " Chukwa and Chukwee." It is said that when a male loses his mate he never pairs again, and vice versa, like the Sarus or red-headed crane. Spot-bills show great devotion to each other. When one is shot the other will come again and again to hover over the dead bird, and, regardless of danger, falls a victim to his attachment.

I have collected Whistlers' eggs and hatched them under

a hen. As soon as they are out of the egg they show a wild instinct, and, like the wild cat, are untamable. They, like the Cotton teal, are very fond of water covered with water-lilies, and their colouring is very protective, especially when the lotus is withering. By the way, it is not generally known that the nuts and roots of the lotus are excellent eating, and that the former are very like the hazel nut.

The Cotton teal is a very pretty bird. It has rightly been called the "butterfly teal," and when first seen looks like one. The male is a brilliant, glossy green and white with red eyes. The female is of a dull colour. These birds, flying on a lily-covered bheel, make as pretty a sight as one would wish to see. They are strong divers, and crippled birds are hard to secure. The Cotton teal is really a small goose.

For duck a 12-bore is the best, although I have also used a 16. When shooting fighting duck I used a No. 8 shot and think it better than No. 4, as all such shots are fairly close. The 8- or 10-bore Paradox are more useful for long shots.

In these duck-bheels were large numbers of the nailless otter, and I got some good specimens. In winter they possessed very fine pelts. When waiting for duck I have watched a number of them come out on to the bank and play like kittens. Then one would stand up on his hind legs like a rabbit and survey the situation. But any movement or noise sent them plunging into the water.

Like duck, geese were in thousands, I think more numerous than they were in Mesopotamia. They came in later than the duck and left in March. Once when up about 7000 feet, and when the geese were migrating, I watched

for two hours "Gaggle" after "Gaggle," in wedge formation, pass over me. Every "Gaggle" had a leader, and often he would leave the apex of the "V" and fly back to hurry up stragglers. It was a wonderful sight and gave one some idea of their numbers.

Geese feed on the green grass that crops up on the bheels as the water dries up; this is a species of dhoob grass. I have watched them feeding in a long line with watchers placed at both ends as sentries. So they advance, cropping the grass and making a gaggling noise, whilst the sentries are changed from time to time. Geese feed also on the singara nut, which forms a species of water-weed. Each nut has several hard spikes, and these are crushed by the beaks preparatory to swallowing. These nuts are also very good for humans to eat when boiled. When dry these spikes are dangerous, for my men were often injured when tramping barefooted in a bheel. Geese also eat the paddy that is left in fields after threshing.

Coolen or Grey crane often accompany wild geese and are very cute and troublesome, giving the alarm long before the geese themselves have spotted you. The livers of these cranes are excellent eating, but it is generally necessary to use a small bore rifle to bag one. In some places where geese have not been shot at they were not at all wild. One could often get within thirty to forty yards of them in a boat.

Two kinds were obtained, the grey lag and the barr-headed goose. The latter were rare and are commoner on the "Churs" or sandbanks of the Brahmaputra and Ganges, where they were very difficult to get owing to the open nature of the country. The best plan there was to dig a deep hole in the sand, bale out the water, put a water-

proof sheet down, sit and wait. With a small rifle this makes very pretty shooting.

Geese feed in the paddy-fields after the rice has been cut, and during the early hours of the morning, leaving before the sun rises to fly back to their resting places. The best place I found for goose-shooting was in the paddy-fields near Bishenpur on the Cachar road, and at Moirong at the western end of Logtak lake. We first found out the fields they came to by feathers and droppings, and as the straw of the paddy was left in most fields we used to hide in it. Then all round the paddy-fields there was tall grass, and we took advantage of this when stalking them. One had to get up very early, and, of course, the mist favoured operations.

Captain C. and myself once determined to make a record bag. So we shot them in the early hours of the morning at Bishenpur and then went after them in dug-outs on the Logtak during the day-time. In two days we had got one hundred and sixty-five. I am not a believer in making big bags, but we were young and bloodthirsty then !

I remember there was one huge field at Bishenpur, in the middle of which a large flock of about two hundred birds used to settle, and there was no getting near them. I noticed, however, that they did not mind the village buffalo, so I got hold of a man with one, and screening myself behind it, gradually worked the animal up nearer and nearer till within twenty yards of the flock. I then dropped to the ground and fired the single 8-bore. Away went the buffalo helter-skelter, and I picked up fifteen geese.

On the Logtak the geese did not like the large open

sheets of water, preferring instead, smaller, isolated bheels lying further south. These were covered with decaying water-lilies and singara weed. To me to paddle was an impossibility, so my man used to propel the boat by pulling on the stalks and weed at the side. In some of these places, where I expect the report of a gun had never been heard before, the geese were in hundreds and very tame. They rose like snipe and the shooting was fast and furious.

I have knocked over geese with No. 8 shot, but the best shot to use is A.A. or No. 2. An 8-bore is necessary when the birds get wild, and, of course, nothing less than a 12-bore should be used. For the table the wild goose is not a patch on most duck. The meat is rather dark, coarse, and dry, and there is an absence of fat ; however, in our mess, roast or curried wild goose was always a welcome change, and in winter I used to shoot and send them as far as Kohima in the Naga Hills, for the officers there. But to do this it was necessary to take out all the insides and stuff the bodies with finely-powdered charcoal ; this preserved the meat.

Besides the birds I have mentioned the Logtak and other bheels teemed with other species of water fowl ; Grebe, Crested and ordinary, Glossy Ibis, Storks, Redshanks, Godwits, Sandpipers, Pelican (a few), Spoon-bills, Rails, Large white and black Ibis, Herons, Large black and white Storks, Darters, Jacana, bronzed and pheasant tailed, Blue and Black Coot and Cormorants.

The Blue Coot were lovely birds of a turquoise blue with blood-red bills and frontal plate, but I never shot them. It was a grand splash of colour to see about sixty or seventy of these birds feeding together in an open, green space on the margins of the lake. These birds flick their tails as they

walk like an English Coot. They have enormous feet and claws to enable them to sit on the rushes and tall grass growing on the lake's margin. The Shags sat on the poles on which the fishermen had their nets, with their wings spread out for drying, and looking for all the world like so many German eagles on crests. The Crested grebes were very handsome birds with silk-white chests looking almost like fur, but it was a difficult matter to get the fat out of the skin.

Once when shooting on the margins of the lake I found a huge nest of the giant white-and-black stork standing nearly four feet in height. The legs of this bird are red, a huge beak and head, and the neck a glossy, greenish black. There was one young one in this nest, and I brought it back to Manipur. It eventually got very tame and came to me when I called it, but its diet was rather expensive as it consumed bucketfuls of fish. Its leg was broken by some Gurkha urchins, so I had to amputate it, but even without this it seemed quite happy. It used to swallow any kind of snake, even cobras. Finally I found it lying dead one day in a moat of the fort, but never found out who did the deed.

Regarding the big game of Manipur, I have dealt with this in articles in previous pages. The jungles round the lake simply swarmed with wild boar, and whilst duck-shooting I often bagged one. There were also Elds deer, but I never got any until the grass and reeds were fired. There were very few green pigeon in Manipur. They used to come down to eat the fruit of the Peepul (*Ficus religiosa*), got very fat and made excellent eating. Kalij pheasant were also numerous in the hills round Manipur, so much so that near one village close to Phoching I got fourteen, all males, in one day.

The Manipuri name for this bird is Waba, and the natives trap it in a curious way. They set several nooses. The trapper then conceals himself near and begins rapping on a piece of hard skin to imitate the drumming of the males when challenging each other. They then get entangled in the nooses. The Cacharis put up a very low fence of twigs, generally round a water supply, leaving intervals, with nooses, for the birds to get through. I once destroyed about two hundred and fifty yards' length of such traps, which play terrible havoc. For, like the Santal, wherever the Cachari settles every living thing is wiped out.

Here I learnt the language thoroughly and passed the examination, getting a reward of 500 rupees, which came in useful for purchasing ammunition and ponies. In fact, I got to know, in seven and a half years, the whole of Manipuri State from end to end.

What more could a young fellow wish ? Good shooting, good fishing, a first-rate C.O., a fine regiment of good sportsmen, and a sympathetic Political Agent. Those seven and a half years were like a long, splendid holiday. My work was light, and I am afraid that a longer stay would have damaged professional knowledge as a doctor. I left Manipur with the deepest regret and have often longed to revisit it. But I feel that I should not see it again as the Manipur I had known.

CHAPTER II

THE TIGER AND ITS SHIKAR

THE ambition of every shikari in India is to bag a tiger, and with what pride he views his first. It is also a popular belief that tiger cannot be got unless one has an introduction to some Indian Rajah, or without the expenditure of hundreds of rupees for beaters. This is a mistake. Provided one is keen and is prepared to undergo some exposure and hardship the bagging of a tiger, or tigers, is not difficult, as I will show.

The Hindi name for tiger is "Bag." The native shikari recognises two varieties, the "Bag" and the "Sher Bag," the latter being a larger animal with a so-called mane, but which is really a ruff of long hair encircling the lower part of the neck. But both these are of the same species.

Some authorities are of opinion that the ancestor of the Indian tiger is the Siberian, and certainly, in Assam, the large size of same and preponderance of white and long hair bear this out. The Manipuri name is Kiejow. Latin name, *Felis tigris*.

Compared with the lion the tiger is a much finer animal in every respect. His wonderful colouring, his movements, his ferocity and pluck make him an object of admiration. On the move the body assumes sinuous or snaky movements and each paw is brought down in a deliberate manner. Then, to see him spring, making great horizontal leaps of twenty-five and thirty feet, is a sight for the gods. Curiously

enough, he cannot spring any height like the panther, and a net seven or eight feet high will serve to confine him.

His strength is enormous. I have seen a tiger drag a full-sized buffalo several hundred yards. His movements are like a flash when he has been missed, or when he snatches away a "kill" with the same ease that a cat carries away a mouse and that would take eleven men to drag. I have seen this several times, and in consequence the hunter must never relax vigilance when sitting over a "kill." The panther is a skunk, the tiger anything but. A tigress will defend her cubs to the very last, and often when a cub is shot she will have her revenge or do her best to recover it.

S. of Golaghat, during a flood, bagged four tigers on a "chur" of the Brahmaputra, the tigress escaping. Next day the servants came to say that there was a tiger in the compound, evidently bent on revenge, so S. sallied forth and bagged her also.

The tiger is widely distributed throughout India and Burma. They are to be found in the Central Provinces, the United Provinces, the Deccan, Mysore, Travancore, Gunjam district, the Sunderbunds, Bihar, Orissa, and in Assam (Naga Hills, Garo Hills, Lushai, and North Cachar). There are no tigers in Ceylon, but I fancy no province holds more tiger than Assam. In Orissa there were many at a place called Angul, and several of these turned "man eaters." Tigers are numerous in the Dooars, especially in the Jalpaiguri district. H., a great shikari, during his stay in these parts bagged, I believe, sixty-five tigers. When I was in Sylhet, some years ago, there were many tiger in the north-west corner of the district, and at Jaintiapur. But they were sadly diminished by hosts of gipsies who used

to come up in boats during the rains to trap and poison them. Most of the skins used to be taken back to their district for the reward, and the authorities were none the wiser.

Other places in Assam, where tiger was numerous, were the Nowgong and Gauhati districts and in Dhubri. In the last place huge bags have been made with the help of elephants. In the Sunderbunds tiger were at one time very numerous, but with many emigrants settling, and increase in navigation, they are now not so numerous. Many people, including myself, going to Assam by the Sunderbunds steamer-service have seen tiger on the banks of "khals," and a Mrs. M. told me that, once when coming up a creek three tigers swam a "khal" just in front of the prow of the vessel, and no one on board had a rifle.

Sitting on the deck one day with my wife, and just as the sun was setting, we saw a tiger emerge from the jungle downstream. It came for a drink. I rushed into my cabin, got my rifle and had a shot. I forgot to allow for the movement of the vessel, my shot threw up the sand a few feet beyond him, and he disappeared like a flash.

Many of these Sunderbund tigers were man-eaters, and did not hesitate to carry off men from the boats moored near the bank. Many a woodcutter and fisherman has never returned to his homestead. I do not know whether any European met with his death in this way, but as "shikaris" from Calcutta were always going to Saugor and elsewhere to bag tiger it is likely. B., a well-known shikari in Assam, told me that he had bagged thirty-five tigers in the Sunderbunds. The places where people had been killed were marked with red flags, and were put up to warn others.

Many people do not know that the lion is found in India, but this can be done in the Gir forest. This lion is maneless, and I believe the Mesopotamian lion was introduced here to improve the breed. In Mesopotamia the characteristic of the lion is a striping of the legs, very like that of the Katiwar horse. The lion is scarce now in Mesopotamia, although in the days of Bhaairam, the great Persian hunter, they were numerous. During my two years' service in Mesopotamia only one troop of five was seen at Awaz, near the Persian frontier.

All my tigers have been bagged in Assam and during my thirty-six years in India these totalled seventeen. Assam is an ideal country for tigers, large rivers with numerous churs, heavy grass-country with patches of thick forest, game fairly plentiful, and thousands of tame buffalo and cows to prey on. For this reason great destruction is caused among cattle, sometimes five or six being knocked over just for sport and to teach their cubs. In many cases herdsmen have to shift their quarters owing to such ravages.

I have come across tigers in all sorts of country, in grass jungle, in grass jungle interspersed with patches of forest, in ravines and in mountainous places, where I have seen their tracks at an altitude of 6000 feet. Some years ago a tiger suddenly made its appearance at a rest house on the Phagu road near Darjeeling. This was at Tonglu, with an elevation of 10,374 feet. One was shot by an officer of my regiment on the parade ground at Shillong. The small tilas or hills with jungle and swamps in between, and not far from the Tezpur Tower, held many tigers, so that, whilst after small game, we always took our rifles. Very often, therefore, a tiger was included in the day's bag.

It was here, and on two occasions, when after Floriken on foot I put up a tiger, which fortunately bounded away. Another was peppered by G. with No. 8 shot whilst after small game.

Tigers are often found in caves, but there were none of these in Assam, excepting at the "Kopili," and inhabited by bears. Wherever the tiger is found there must be water. The tiger hunts by day as well as by night, and if a cattle-killer usually by the former, and if a game-killer by the latter. After a meal he has a drink, and if the surrounding jungle is favourable he will lie up in some cool place within a few hundred yards of the "kill." I have often come upon their seats and have known that if the ground is hard it is that of a tiger, but principally by the shed hairs found in the seat.

The tiger is a strong swimmer and in hot weather will immerse himself in water. Tigers have been known to swim the Brahmaputra in flood. In the water the head is raised high, and constantly shaken to get the water out of the ears.

Tigers dread jungle fires, and, with the wild pig, soon make tracks out of it. There is no doubt that they, except man-eaters, are shy and avoid man, though at times they get very bold. There are many instances. In Tezpur one walked along the Ex. Engineer's bungalow-verandah at night; this had been freshly cemented, and the pug-marks were unmistakable. I once shot one at Tezpur not fifty yards from my gate, as will be spoken of later. At Haflong a tiger took away a pony feeding on the golf course, and one I never succeeded in bagging would enter the buffalo-sheds at night and kill, and moreover mauled a herdsman very badly when he went to investigate.

The tiger is much more cautious than the panther, and if fired at from a machan and missed becomes very cunning. He will kill, have a meal, and never return ; hence the many blank nights sitting up over " kills."

In Tezpur, and in broad daylight, a tiger once pounced on a horse that was being led to Behalighat for a " dak," and in Nowgong a tea-planter and his wife, driving in a buggy from the Club, had the horse killed. At Kaitamabi, not far from Manipur, a man-eater bit or tore away the sides of the grass-hut in which the coolies working on the telegraph line were lodged and bagged his victim. In this case the C.O. of my regiment and myself were just about to start out to try and slay him when a Naga brought in the head and skin for the reward. This Naga, it appears, after fortifying himself with Yu, had sat behind a bush close to the corpse, and had killed the tiger by hurling a poisoned spear at him.

As is well known, tigers cannot climb trees, but a sloping tree is often taken advantage of to get a better view. The man-eater of Kharupatia, who nearly got me, used a sloping tree, and if he saw a solitary milkman proceeding to the river ghat he grabbed him. He would never attack if there was more than one man.

The tiger also has a habit of sharpening his claws, almost daily, upon a tree, usually a seemul, so accounting for his clean claws. The natives say that tigers select these trees because they like to see the reddish sap, like blood, oozing out. By observing these claw-marks the hunter can often obtain valuable information of the presence or whereabouts of a tiger.

The manner in which a tiger kills his prey is a disputed point. The upward blow of the fore-arm, favoured by the

throwing back of the victim's head, and so producing dislocation of the spine, is the general belief. But after examining many "kills" I have come to the following conclusion. The tiger springs at his victim's side or flanks, holding on with his powerful claws. His main object is to paralyse the beast by biting deeply into the spine in the cervical, dorsal or lumbar regions. Deep wounds made by the canines are always apparent. The weight of the tiger, something like 450 to 500 pounds, helps also to pull the animal down. The horns of a buffalo or bison are not of any use with the tiger in this position. I have seen, in some cases, a piece of flesh bitten clean away and in consequence a wound into which you could put your two fists. This can only happen in the region of the neck. If the quarry is a large one, a horse, for instance, the tiger pursuing tries his utmost to hamstring the animal, after which it is, of course, entirely at his mercy.

I have often, when following up a track where a buffalo had been chased, come upon the tuft of the tail which had been seized by the tiger and torn off in the attempt. I once shot a very old, solitary bison upon whom there was not a vestige of a tail; his flanks had deep scars, and I came to the conclusion that this was the work of a tiger. Sometimes in an attempt to hamstring the animal is emasculated.

As to human victims, I have made post-mortems on several cases, and in almost every one the man has been seized by the chest, which showed two deep wounds in front and two behind, caused by the canine teeth. In one case the scalp of a beater had been torn down over his ear, and in another, of a herdsman, the face and arms had been terribly mauled. In the latter case a tigress with two

cubs attacked without provocation. The man was bringing in milk to Haflong, armed only with an umbrella. He was walking along a jungle-path and met this tigress with her offspring. All three dashed away into the jungle, but I suppose the cubs became separated from the mother. The man walked on and was suddenly attacked. He eventually beat off the tigress with his umbrella and came into Haflong for treatment.

The man-eater leaves only the feet, hands, and skull of his human victim. In the North Cachar Hills the relatives and friends organise in order to do all they can to recover these remains that they may be buried near the victim's village ; for they say that if these are not recovered the man's ghost will always haunt the village.

Valuable information can be gleaned of the kill of a tiger or panther by :

(1) Observing a flock of vultures sitting in a tall tree, especially if one by one they fly and settle in the jungle, when the " kill " is easily found.

(2) By observing vultures taking the same line of flight. If you are certain there has been a " kill," and the vultures do not stir from the tree, ten to one the tiger is at the " kill."

(3) A flock of vultures suddenly rising from the jungle. This is caused by the tiger making rushes at them to drive them off. The tiger generally drags his kill into thick jungle, where the vultures cannot see or get at it, for the vulture finds the body by sight and not by smell. Solitary vultures perch themselves on tall trees, and when others see some trekking to a particular spot the rest follow.

A most extraordinary thing happened at Haflong. Information was brought to me that a tiger had killed a horse

about two miles from the station. I went to the spot and followed the track along which the animal had been dragged. The first drag had been through scanty scrub, and I noticed a lot of the hair from the horse's tail wrapped round the branches of bushes. Just before the tiger got the "kill" into heavy jungle I found the tail, and bitten clean through. It therefore looked as though the tiger thought the tail an impediment to progress, and so got rid of it. If so, this showed intelligence.

On another occasion, when sitting up over a kill, and in order to make sure that the tiger did not snatch it suddenly before I could fire, I bound a strong, thin wire-cable to one of the hind legs, and the other end to a stout pole driven deeply into the ground. A cloud obscured the moon during the night-watch, the result being that the tiger pounced, and the "kill," pole, and wire disappeared before the rifle could be lifted. Next day I went to look for the "kill," and there, about thirty yards from the spot, was the hind leg bitten off but still attached to the pole by the wire. The tiger's efforts were evidently impeded by these, and so he got rid of them by the simple process of removing the leg to which they were attached. The body was found in a deep nullah several hundred yards away.

This tiger was a huge brute and very cunning. I do not know how many times I went after him without success, but as he was doing much damage, and, at the request of the magistrate, I am sorry to say that I had to set poison for him, and the corpse was found after several days.

The tiger drags his kills backwards, and not as a cat does a rat, as depicted in some illustrations. This is because he can then exert full muscular action, and especially his full weight. But it is not always that weight comes to his aid,

for I have seen a tiger drag a full-grown cow some distance up a hill with a 45° gradient. Where a kill has been dragged one can always see the marks and scrapings of the tiger's claws on the ground. It is easy to see from these incidents what enormous strength a tiger has. All senses, too, in the tiger are very acute, especially that of hearing. One has only to examine the dried skull of one to see the enormous development of the tympanic bullæ, on the under-surface of the temporal bone, to realise this. The ears are comparatively small but cup-shaped, to receive all sound vibrations. Nor are the whiskers for adornment only, for they are supplied with large nerves, so serving to make him aware of obstacles, such as thorns, when moving through the jungle at night. The eye has a tapetum, like the panther, and when a light is thrown on it, it glows like an emerald or a glow-worm. The sense of smell is very acute. The ethmoidal sinuses in the tiger's nose are very large. No two tiger skins are alike, and the markings about the forehead and on the tail vary very much. The colour of those specimens shot in the hot plains is much lighter than that of animals shot in hilly country or in thick forest. With age, and with preserved skins, the colour becomes paler. Many of these pale tigers have been described as White Tigers or Albinos. This is a mistake, because a tiger to be a true Albino must have no vestige of a stripe, and the iris must be blue. In a taxidermist's shop-window in Calcutta I saw a so-called white tiger exhibited. Certainly the stripes were fewer than those of the average tiger, but it was not an Albino. The only Albino tiger ever shot was obtained in Assam, where many people saw it.

The Black Tiger (melanotic variety) is also rare. I think Brander-Carter mentions an authenticated instance where

such a tiger was obtained in the Central Provinces. Many more of these varieties would be obtained were it not for the fact that they are destroyed, and probably eaten, by the mother, when she sees the monstrosity in the litter.

The length and thickness of a tiger's tail vary very much, for in some this is short and thick, and in others long and narrow. The under-parts of the tiger are white, with stripes, and behind each ear there is a round white spot. It is important to note this, as on a fairly dark night one can see these spots although the body is not distinct. For this reason, when a tiger is chary about coming up to a "kill," and sits up on his haunches gazing at it, he looks just like a white pillar, so offering a target to the hunter.

When galloping along fairly hard ground his pads make a thudding sound which can be heard at a considerable distance.

The size of the tiger can be judged by the size of the pug-marks. That of a male is larger and more rounded than that of a female. In clay or sand they are very distinct, but in grass and on hard ground difficult to see when tracking.

The canine teeth are very strong, long, and conical at both ends. In the courts situated amongst the wild Naga and Kuki tribes the oath is always taken by a witness in this way. He takes the canine of the tiger, places it between his teeth and bites it; after this he says, "If I do not tell the truth may a tiger kill and eat me!" But they are subject to decay, and in an old tiger they are usually worn, yellow, and broken, especially the canines.

The skin of a tiger or tigress in its prime has a sheen like that of a racehorse, and one hardly finds a tick on it. In an older animal the hair is short, rough, and mangy, and one shot by the magistrate of Haflong had hundreds on

him, which I have good reason to remember, for I helped to skin him. During the process we had to scrape off the ticks, swarming up our arms, with the skinning-knife.

The cry of a tiger when courting, or when separated from the tigress, is a sort of booming noise repeated several times, and succeeded by a "Woof, woof, woof," rapidly uttered. When he charges he roars, and a tigress separated from her cubs makes a plaintive mewling sound.

I have often compared this booming sound with that produced by a Burmese gong heard at a distance. Does the tigress also produce this sound ?

The tiger when on the prowl hates going into unbroken or very thick jungle on account of the tenderness of his pads ; he will therefore follow the paths of other animals, and I have often seen pugs along the Government roads.

It is useful to know that when beating for tiger with a line of elephants the tiger will very often break back. When wounded he will charge the line, and if not knocked over will usually spring at the elephant's head. In this position the elephant cannot use his tusks, so puts his head down and tries to crush the tiger between it and the ground. He will then put his forefeet on his attacker and then, after getting him between his fore- and hind-legs, will toss the body backwards and forwards till every bone is broken. I have seen this done in the case of a charging bear.

Elephants, when in the presence of a tiger, behave in different ways. Sometimes a trained shikari elephant, who has been in at the death of many tigers, will get frightened and bolt ; at other times an absolutely untrained elephant will stand. I have met several instances of this. On one occasion my wife and I were on a pad elephant, and after

small game. At the edge of a small bheel we saw the branches of a small bush shake, and were peering down when, all of a sudden, a tiger sprang out and bolted with his tail straight out. I snatched my rifle from the mahout and had a long shot, but, of course, missed. Had the elephant showed any signs of uneasiness I should have been prepared, for a properly trained shikari elephant will raise his trunk in the direction of the animal, or hit his trunk on the ground.

Elephants get fearfully mauled sometimes ; my father had an elephant that had had a piece of the trunk bitten out high up, which exposed the trunk-cavity. The poor brute could therefore only drink water by submerging the trunk above the hole, but in pouring this down his throat he lost a considerable amount.

There has been considerable discussion about the length of the tiger. In the Press one reads of 12-foot and 13-foot tigers. I myself have yet to see an 11-foot one ! It is evident that the measurements of these fabulous tigers have not been taken in the proper manner. The length may have been taken after being in the mochi's hands, or perhaps, as with fishermen, there has been exaggeration. Two of my biggest tigers, measured on the spot, were only 10 feet $4\frac{1}{2}$ inches and 10 feet 2 inches respectively. My opinion is that the maximum length of a tiger is not more than 10 feet $5\frac{1}{2}$ inches. Should you see what the owner calls a record tiger, or a large one, look to the breadth of the skin. If this is not broad and proportionate to the length you may be sure that the skin has been stretched. The tigress, of course, is smaller. My biggest tigress was 8 feet 6 inches. But I saw the skin of a man-eater measuring 9 feet 6 inches ; though in this case even it is possible that

the skin may have been stretched. I should say that 8 feet 9 inches is the maximum length for a tigress.

In Assam the tigress brings forth under dense bush, but in places where there are caves these are used. Once a tea-garden coolie, whilst looking for yams, saw two little objects under a cane-bush. He put them in his loin-cloth, and was surprised when he was told that they were tiger cubs. They grew up eventually and got quite tame, for one day, in going to their owner's bungalow for an inspection, I saw both seated in a deck-chair in his verandah. It was curious to see also that if a cow or goat came into the compound all their wild instinct would return, for they would crouch with ears held back, and attempt to stalk the animal. I have seen the same thing happen with the young of wild dogs.

The tigress usually has two cubs at a birth, but three, four, and five cubs are not uncommon. Even when small they are savage little brutes, but not so much so as young panthers, though both must be handled with caution. It is stated that after birth the father tries to destroy the cubs, and that the tigress has great difficulty in preventing this. Perhaps he thinks that too much attention is being given to the bairns instead of to the lord and master.

The cubs accompany the mother on her hunting expeditions until they are quite a good size. She instructs them in all the art of killing, and after they are perfect at it they go off on their own. If one gets news of several cows being knocked over at the same time it is certain to be the work of a tigress with cubs. Another curious thing. If one is sitting over a live bait, such as a young buffalo, it is always the cub that comes first to the animal, and if the cub attacks the bait the tigress dashes out and assists. I

have seen this occur several times. Also, if the buffalo is sitting the cub first sniffs at it, and then, with a growl, attacks it. On one occasion I distinctly saw the cub seize the buffalo by the back with its teeth. With another "kill," which was undoubtedly the work of a tiger, there were throat-wounds akin to those produced by a panther, a very unusual fact. Some tigers, especially cattle-killers, are enormously fat, and this fat is highly prized by the natives as a cure for rheumatism. It is well worth preserving this to meet some of one's hunting expenses. In Calcutta it was possible to get 12 rupees for a quart bottle of tiger's fat, and fifteen or sixteen quart bottles can be obtained from a good tiger. But one could not carry about a lot of "empties," so I got the fat melted down into kerosene tins over a slow fire, and the scum at the top skimmed off from time to time. Lengths of bamboo with one knot intact were then filled with the melted fat, which solidified, and the mouth was then plugged with leaves. The fat could later be melted and bottled off at headquarters. This fat is found especially on the flanks, between the legs far back, and around the stomach and kidneys. This fat-melting process was a nuisance, however, in camp, as nearly all the servants were interested in it. The whole camp reeked of tiger's fat, and we thought sometimes that even the food was tainted with it.

The claws are also useful, but I think a skin without them does not look well. A careful watch must therefore be kept on them, as natives value and steal them. It is extremely disappointing too, to find that, on the arrival of one's tiger in camp, the whiskers and claws have been removed *en route*. To avoid this I always had cloths tied round the head, and each of the paws, made one man responsible for

them, and threatened dire punishment if anything happened to them. Then again, if one keeps the dried skull the canine teeth are sure to be removed unless one makes a frequent inspection. Once, when coming to England on leave, I left all my skulls in my bungalow, and when I returned most of the canine teeth had been removed.

The tiger is not so easily trapped as the panther ; he is far too cautious. But in one case I know of, a man-eating tigress was caught in one, the bait inside being a live pig. The native more often sets a trap with a poisoned arrow on a spring-gun. The Gurkha is very clever at this method. The Cacharis have a very effective trap made by pulling the halves of very strong bamboo apart up to the knot, and so adjusted that the halves collapse and strangle the beast. I forget the details of the mechanism, but it is a very unsuspected contrivance. A native who had poisoned a number of tigers told me of an infallible formula, but I will not divulge the secret. I have only poisoned one tiger, and, when following on his tracks, found that he had torn up the earth, smashed bushes and small trees, and had thrown himself about in his convulsions. I had once a sub-assistant surgeon at one of my outlying dispensaries, and discovered that he was making quite a lot of money by poisoning tigers with strychnine taken from dispensary stock. The case was inquired into ; he was severely punished and transferred to a non-tigerish district !

Sylhet is the only district in India where the methodical trapping of tigers is practised. Here whole villages combine, and each village keeps up a length of very strong net, but only about 7 feet high. When there is a "kill" the Punjalis, as trackers, locate the body. Then word is given

and the nets, slung on poles, are hurried to the spot. The net is then put up to encircle him, and is supported on very strong uprights. This circle may be a mile or more in circumference. Then every man and youth issue forth, armed with spears, guns, and pointed bamboos, prepared for a long vigil by night and day. They arrange themselves round the net, lighting fires at night here and there. When the tiger makes rushes at the net he is forced back with the spears and bamboos. The jungle is gradually pressed down by felling a tree which elephants drag to and fro, and as this is done the circle is diminished, until the tiger is confined in a narrow space. Then a machan is erected, and whoever pays the highest price is allowed to shoot the tiger.

This affair may last five days or more whilst the net-circle gradually closes, and at the end the poor beast is so thirsty that when water is poured down a split bamboo, placed slantwise over the net, he comes up and drinks it. It is of course a very cruel sport, but I was anxious to see it. An opportunity occurred whilst my wife and I were in camp at Jaintiapur. A tiger was netted, and we proceeded on a pad elephant, prepared to spend the night at the place. We took off the pad to serve as a mattress, and made ourselves comfortable in order to watch events, hoping the tiger would make a dash at that section of the net opposite us. We could hear his roar and the hubbub of the prodders as the tiger made rushes in other directions. Then, all of a sudden, about 11 p.m., there was a terrific roar and the tiger sprang at the net exactly in front of us. The net bulged outwards with the impact, and then he was driven back by several stalwarts, but we found that he had bitten through several strands. It

was a wonderful sight, and made more weird by the glow of the number of fires around. In this net three wild pig were also enclosed, and these also made false rushes from time to time. I afterwards heard that they had been disposed of by the tiger. We left at daybreak. I was offered the "honour" of shooting the tiger when all was ready, but declined. It seemed marvellous that, although the net could not have been more than 7 feet high, the tiger never attempted to leap over it. Sometimes, however, the tiger does manage to escape.

Once at Jafflong (Sylhet District) I was going to sit up for a tiger which had been giving trouble at G.'s garden. When I arrived I heard that two tigers had been netted, and also, much to my delight, that both had managed to escape.

The tiger, I think, prefers pig to anything else. Once, when shooting small game with my wife, I saw about fifty or sixty pig, of all sizes, crossing a dried-up bheel. We afterwards heard that a tiger was about and these pig were trekking to a more wholesome spot. When there is a tiger about, or a jungle fire has started, the wild pig will be the first to go.

The game-killer generally prefers to go for something big, so preys chiefly on sambhur or chital. A barking deer is rarely worth the trouble. But when game is scarce they will not hesitate to prey on porcupines, and very often in the attack the quill penetrates the foot or even the bowel or nostrils. If so, the wound usually festers, gets fly-blown, and, if in the foot, produces club-foot, which reduces the beast's killing powers for deer and cattle. Then very likely he turns man-eater.

A tiger will not look at a goat or dog; it is therefore of

no use using these as bait. A fat young buffalo is the best. I have been told by men who have shot in the Sunderbunds that tigers will not hesitate to eat crabs, shell-fish, and even frogs, when hard pressed for food. One extraordinary instance happened in Haflong whilst I was there. The tiger's stomach was full of a kind of grasshopper that feeds in thousands on the *adjuratum* plant. This tiger was very old and out of condition ; but one knows how cats will eat all sorts of insects and become thin.

A tiger will hesitate to attack a solitary wild boar, but sometimes he does and a dour struggle ensues. I had a sporting servant who witnessed such a fight, and he told me that the tiger slunk away leaving the boar master of the situation. Whilst at Haflong I visited the scene of such a combat. The long grass for yards round was flattened down, and the earth torn up and covered with blood. From the tracks one could see that the tiger had bled profusely, and I concluded that the boar had had the best of it. Once, while shooting at Kopili (North Cachar Hills), I came on the droppings of a tiger, and in it were the hairs of a bear.

It is a mistake to imagine that a tiger will not touch a "kill" that has been dragged up to a convenient tree by the shikari. No doubt one that has been fired at will not, but if the "kill" is dragged with a rope in all probability he will.

For the purposes of nature the tiger will come on to a path. There is no earth scratched up as in the case of the panther, and there is no attempt at concealment. The animal that he has killed and eaten is easily diagnosed by the hairs found in such ; red for a chital, greyish-black for sambhur, and so on. As the droppings get older

they turn white, and this is due to the calcium phosphate in the bones he has eaten. Once I found, on opening up a tiger, that the stomach was full of dried bamboo leaves, but I do not think the tiger ate these with the object of vomiting, like the cat with grass. I think the "kill" was lying on a lot of these fallen leaves.

The natives say that if the head of the "kill" points south it is unlucky; also, that if the tongue points to the right, between the teeth, it is a lucky omen and the hunter will bag another tiger. I would mention also, in this connection, that if you see the tongue out between the teeth it is certain that your tiger is dead.

The lore of lucky and unlucky omens amongst native shikaris is very interesting. The Kukis place implicit faith in these omens. Their chief lucky omens are: if, when sallying forth to hunt, you see a butcher-bird with its breast towards you, it is a good omen. The Kukis saw off the excrescences at the base of a sambhur's horn, bore a hole in it, and wear it as a necklace. If this makes the neck itch where it touches the skin it is favourable, and off the hunter goes! As they are a dirty lot, I fancy this ornament tickles fairly often. A jack or fox passing on the right is a bad sign. If the mahout sees that this is likely to occur he will guide the elephant so as to pass on the left.

A tiger will often have a regular beat, crossing and returning the same way for several days. In such cases it is well worth putting up a machan where the pugs are seen. The same habit applies to a panther.

The tiger is bagged in various ways, but driving it with beaters is rather expensive, unfair to the beaters, and a simple matter to the sportsman. Nor does it entail much

danger, labour, or knowledge of woodcraft. With elephants in line is the sport of the Maharajah, and men with a long purse. The tiger is then generally hemmed in by an eventual ring of elephants and shot. With a single shikari elephant it is much more sporting and exciting; sitting up in a machan over a "kill" by the tiger, or over a live bait, is the best method, but I must own that it is decidedly cruel. Many times I have felt sorry for the beast on the ground whilst one is perched safely above. In many cases, however, the live bait can be saved by shooting the tiger before he has made his spring. Of my seventeen tigers two have been shot from the back of a single elephant, two on foot, and the remainder from a machan set up over a dead or live animal.

Some years ago a noble lord, at the annual dinner of the Shikar Club, made a speech, and took objection to big game hunting by means of searchlights projected from a motor-car. In machan shooting at night some sort of artificial light is necessary, and I presume he included this method. He said: "That the people sit up all night, always in *absolute* safety, and when they penetrate the darkness with their flashlights and turn them on the prey, the animals become bewildered before they are shot."

I agree with him in his opposition to shooting from a motor-car, but is not there more sport and danger in this than fox-hunting, coursing, otter and stag-hunting, where the animal is panic-stricken and bewildered for hours on end? Then what has the critic to say about shooting pheasants reared by a keeper?

To my mind nothing can be called "sport" unless the shikari runs risks, tries to get his game by his own efforts

and by an acquired knowledge of its habits and of woodcraft. Again, the machan is neither quite safe nor comfortable. In the case of a panther there is the possibility of the brute coming up the tree after you. One risks the chance of a snake-bite or of contracting malaria and other diseases. But, apart from these, there is the night-long vigil, with torture to be endured from mosquitoes, gnats, ants, and leeches. No, machan shooting is not all "beer and skittles," for there is much toughness of fibre, forethought, and patience needed.

An animal is, no doubt, bewildered by the powerful headlights of a motor-car, but not by the simple apparatus attached to the rifle for night shooting. In my experience the tiger always springs to the side and lies down as soon as a light is flashed on him.

To make machan shooting a success make a decision to sit up over every "kill" you hear of, wet or fine. The proportion of successes is very small, as so many untoward circumstances may arise, but there is always the element of luck. Some men get a tiger on the first night spent in a machan, others will sit up night after night and never bag one. In this form of shooting one must depend on information from the natives, unless one ties several buffalo up in the hope of a "kill"—an expensive business. Therefore, secure the goodwill and confidence of all natives around you; treat them fairly and properly as human beings and you will never regret it. I have found the average native very obliging and helpful, and many a fine trophy have I obtained from information supplied by my subordinates simply because I treated them fairly. Never lose your temper if you meet with non-success. Several natives have told me that they would not do

anything for a particular sahib because, if he did not get anything, he abused and even kicked them. One has to depend on the natives for putting up the machan and procuring buffaloes, so, apart from other reasons, it is well to keep in with them.

Many depend on the shikari or villagers to put up machans of bamboo or sticks. This is a mistake. The cutting creates a lot of noise and often disturbs the quarry. To rig up one takes a long time, and where one cannot supervise arrangements the machan is often unsuitably placed, much too large and conspicuous, and perhaps uncomfortable. Remember, the tiger is not very far away, and probably watching the whole process for his destruction. To avoid all this I used a permanent machan. It was just like a small chair minus the legs; the seat just broad enough to sit on; the bottom was made of newar, a kind of broad, country tape, which can be tightened if it gets slack. Fore and aft, where the legs should be, four very strong iron rings were fixed. These were to hold the hooks of the rope-ladder, and also to secure the machan with rope to the tree. A loop of rope fixed to the front for resting the feet to obviate cramp, and a cushion over the newar.

The advantage of such a machan is that as soon as you get news you can go out with it, and, after selecting your tree, can put it up in a short time with the minimum of noise. The ladder for mounting your perch is important. The native usually makes one of bamboo which, of course, attracts attention. I had a rope-ladder made of strong hemp, with wooden rungs every 18 inches or so. At the end were two strong hooks, which were inserted into the rings. Such a ladder should be about 22 feet long, and

can be obtained from Messrs. Manton & Co., Calcutta. The native ascends the tree—he can climb anything, but the Gurkha excels—the hooks are hitched ; another holds on to the other end and up you go. When comfortably settled unhitch the hooks, and your men hide the ladder some distance away.

There is something fascinating about night shooting. There you are, high up and miles away from any habitation, your brain and every sense very active with expectancy. On a moonlight night the senses often run riot, for you seem to see all sorts of non-existent animal-forms in the forest. A bat or a nightjar swishes past you ; you hear the hoot of an owl or the “ hoo, hoo ” of the crow-pheasant or rain-bird ; and when the latter call the cry is repeated by others for miles around. They seem to call every two hours or so. Then the Tucktoo or giant Gecko has a very sonorous and pleasant sound. All these are comforting to the lone watcher. But I must say that sitting up on a dark, rainy night, without luck, is very irksome.

THE BAIT

The best bait, as I have said, is a young buffalo. But do not be palmed off with a thin one, as the tiger, unless hard pressed for food, will not look at it. A fat buffalo in Assam costs from 12 to 15 rupees. Have it tied, if possible, in a path where it shows up in the moonlight, and not too close, about 15 yards away from the machan. The halter must not be put round the neck because, if so, the tiger will be suspicious ; its tightening may strangle the animal ; or at the crucial moment, in its struggles, it may uproot the peg and then everything is finished. I

always tied my buffalo in the following way. One short rope was fastened round the fetlock of the near fore-leg, and another to the off hind. The other ends were fastened to stout pegs, well driven into the earth and rammed down hard. To make these pegs secure it is a good plan to mix stones with the earth before ramming. It is a good thing, also, to rub the rope over with some liquid mud in order to remove all human odour. The bait is then supplied with grass, which keeps it quite happy.

The behaviour of the bait when the tiger is approaching varies. Some will sit quite still, but others, if sitting, rise up suddenly and look in the direction of the danger, with ears pointed forward. I have never seen a buffalo stamp its feet like a goat.

In my experience a tiger will generally turn up between 7 and 10 p.m. If he does not put in an appearance during this time he will probably come between 4 and 6 a.m. in winter, and between 3 and 5 in summer.

It is wonderful to note how he will take advantage of all shadows and nullahs when approaching on a moonlight night, and very often will spring when a cloud temporarily obscures the moon.

A tiger when shot will sometimes emit a "woof," but if mortally wounded is usually silent. I have shot two tigers who, on receiving the bullet, raised themselves in the air on their hind legs and made clawing movements, but I have never seen a tiger bite at the wound, as in the case of the panther.

When your men are leaving you tell them to talk, because the animal, if within earshot, or watching, may then think the coast clear. A tiger or panther which has

not been fired at will rarely look up, but I have seen this occur with a very cunning tiger, whom I sat up many times for and never bagged.

The reflection of light in a tiger's eyes is green, and looks wonderful at night. When he makes his side-leap he generally crouches, and when approaching a "kill," or bait, comes along very slowly, every now and then halting and sniffing with lowered head to take in the situation ; he will even sometimes sit up on his haunches. On getting within 10 yards of bait or "kill" he makes his spring, with or without a growl. A cub generally comes up quite close to the bait and sniffs at it before springing on it. The tiger eats the liver, lungs and spleen, but leaves the paunch, which is generally the tit-bit fancied by the wild boar. Once, when tracking up a "kill," I came across a solitary old boar within a few yards of me, munching the paunch, and I promptly shot him. As a rule, tigers will not eat a corpse that is high, but only when hard pressed for food. A cunning tiger will kill, have a meal, and never return. But they get very bold sometimes, and have been shot in the heart of a town. They enter buffalo-sheds to kill, and have been known to drag a mahout off the back of an elephant whilst he was watering it. The latter evidence of boldness was at the address of a man-eating tigress.

The behaviour of various animals and birds will often indicate the presence of a tiger. (1) Monkeys become very excited, chatter, and make a noise like a grunt ; very often the old male will sway from side to side, and both grunt and scold. (2) The scream of peafowl. (3) A kakur barking. (4) Bulbuls are very clever. On two occasions I spotted the place where the tiger was lying

by the behaviour of these birds. They sat on the bush beneath which the tiger was lying, flicking wings and tail rapidly and making a curious rattling, scolding sound. Once, when posted on foot in a nullah, I saw one of these birds behaving in this manner, and told the D.C., who was next to me, that I believed a tiger was there. Unfortunately, he refused to budge, and just as the beaters were advancing a bomb was flung in, when out he dashed and mortally mauled a man. (5) A jungle fowl constantly cackling is also a sign. (6) When a herd of cows, quietly feeding previously, all of a sudden stampede. (7) A horse behaves in a curious way. He takes short gallops, then turns round with head high, tail curved, nostrils dilated, and emits loud snorts. It was by knowledge of this action that I secured the biggest tiger I have had the luck to shoot.

Never have your machan placed on a slope, for the tiger might easily spring down on you. Once I was seated in an awkward machan so placed. I heard the sun-grass behind me rustle, and the tiger passed under me, actually shaking the machan when he passed underneath, for it was supported by bamboo posts. Owing to my position I could not fire, and the tiger never approached the "kill," which was lying below me.

Another way of sitting up for tiger is waiting in a hole or trench dug in the ground. The Gurkha uses this method and at Lanka there was an old Sikh mistree who had bagged several in this way. I have only tried this method twice. Once in Tezpur the tiger came behind me, and had he chosen to spring I could not have turned in the trench. The second experience was at Haflong. I sat up in a trench with a herdsman, within

5 feet of the "kill"; unfortunately this trench was dug on a slope. Logs tied together were placed over us, leaving a space between them and the parapet through which to shoot. It rained heavily and was a pitch dark night. My night-light went out of order; the tiger arrived; I had a shot at where I thought he should be—and missed! So well were we concealed that, just before nightfall, a harmless jackal came up to the "kill" and, after his meal, actually approached our trench and smelt the barrel of my rifle. On discovering us he shot off like a bolt.

That was the most miserable night I ever spent. We stood in liquid mud up to our knees—and the smell from that herdsman! a mixture of sour milk, onions and sweat, added to every now and then by the odour of the defunct cow. At daybreak no one came to remove the logs, so, with great trouble, we removed one and crawled out. The wet clay had dried on the herdsman's face, and he looked for the world like a white kaffir. Never again did I try the trench method, and would not recommend it.

One of the most splendid sights my wife and I ever saw in wild life was in the Gohpur Tezpur district. We were on a pad elephant at the time. I had just got off to stalk some geese that had settled in a pool of water. The rest of the bheel was covered with dhoob grass with not a bush or tree in it. My wife, soon after, shouted to me that a tiger was chasing some wild buffalo, and looking in the direction she indicated I saw a tiger dashing after five of them. The tiger was woofing and making huge springs; the buffaloes going hard, with their tails held straight out. Looking carefully at the spot—about 150 yards away—from which the animals had come out, I caught sight of a tiger's head peering above the grass.

I therefore did a stalk, but lost sight of him. Getting back on to the elephant we proceeded, and soon after heard the most piteous sounds proceeding from the jungle, like the "bah" of a sheep, only much louder. We then found a young buffalo dragging itself along, with fang-marks in its back, which had caused paralysis of the hind legs, so we terminated its sufferings. There was no tree to sit up, and we were miles from camp, so that nothing more could be done ; but there were evidently two tigers ; one kept off the herd, leaving the other to finish off the calf.

CHAPTER III

MORE EXPERIENCES WITH TIGER

WHILST I was stationed at Tezpur, a tiger entered the town byres and killed. One day word was brought to me that he had entered the cow-house of our Deputy Commissioner and mauled a large cow. My bungalow was only a short distance away. Below the cow-house was my drive, and a large mango tree stood near. I therefore decided to place a machan in the latter. The cow was then carried by my convicts and placed on the road almost opposite my machan.

I first ascended the perch at 6 p.m. to place some sporting kit in the machan. I then went up to dinner and returned at 7 p.m. On my left was a jungle-covered hill with a road up to the top, as being a view-point for the townspeople. It was a beautiful moonlight night, and about 11 p.m. I saw an animal coming down the road. It looked at that distance like a small pony, for I could not see the stripes. The animal descended with great caution, halting at intervals. Then some native in the D.C.'s servants' quarters coughed, whereupon the beast turned and went up the hill again. After a while he returned along the road and reached the spot where this path joined my road; he then gave a bound and disappeared.

I might have had a shot at him before he leaped, and I cursed myself for not having taken the chance. But in

about ten minutes, with a growl, he leaped out on to the cow. His forepaws held the cow's neck as she sat, and he was just about to sink his fangs into it when I fired. At the shot he sprang up against the tree I was in, only to roll into the jungle nullah below. From where I sat I could hear the death-gurgle, so knew that I had got him. Next morning I had to start very early on census work, but I was determined to find him beforehand. I told my syce that I was about to do so and, after fortifying his courage with a little alcohol, we proceeded to the nullah, and found our quarry about 20 yards down.

He was a young male tiger, with a perfect pelt, and in splendid condition. He measured 8 feet 11 inches, and I found that on the night I shot him he had tried to enter a cow-byre on the other side of my bungalow. He was driven off from there and had then come for the wounded cow. This was the second tiger that had been shot in the station.

The jungle within five miles of Tezpur held many tigers. My wife, B. and I went out frequently for small game, but always took our rifles with us. One evening we were returning from such an outing, on elephants, when B. saw a horse behaving in the curious way I have already described, and he was sure that there was a panther or tiger about. No sooner had he said this than there came a succession of roars from the sun-grass not very far from us, so we went in that direction. The beast kept about 30 yards in front of the elephants, the sun-grass moving gently, and every now and then another roar. Whilst so proceeding we came to a nullah, about 700 yards long, covered with null and very swampy. The jungle on the other side had been burnt. As we reached the edge of it,

the tiger roared again. I then told B. that the beast would probably come out and that one of us ought to get to the other side so that the elephants might proceed in line along each bank.

My mahout, much against his will, and of the elephants as well, crossed the nullah, after nearly sinking in the quagmire. As my elephant reached the far bank I caught sight of the tiger's head and neck above the null, but he immediately withdrew. So we silently followed along the bank until the end of the nullah was reached. I then called to B. that we should wait, as I felt sure our quarry would come out, and this we did, with elephants kept very quiet.

Ten minutes later I saw the tiger emerge about 50 yards away, put his nose to the ground, and follow the track of my elephant. He actually got to within 20 yards of me before he raised his head and stopped. I then fired at his chest and rolled him over. This tiger made clawing movements in the air and roared. Our other two elephants then came up and, as he was still alive, B. gave him the *coup de grâce*, unfortunately smashing the skull, which I had to piece together afterwards.

Next morning I sent out some of my convicts with a cart, and the body was brought in. He was a huge beast, taping 10 feet $4\frac{1}{2}$ inches, the largest tiger I have seen or shot in Assam. He had a ruff, a beautiful pelt, and was of the Sher Bag type. Whilst skinning him I found that the pad of one forefoot had a deep wound right across it, and there were recent wounds as if from claws on his body. The question therefore arose: did this tiger roar at this unusual time and continue it from pain, or was he challenging the male he had had a fight with a few days

previously to fresh combat? I am inclined to the latter view, and that the two males were probably after the same tigress.

One evening, about a fortnight after this incident, we were returning close to where we had seen the horse behaving in a peculiar manner, and a Gurkhali herdsman shouted to us that a tiger had just killed a cow. We rather disbelieved him, and proceeded to the spot carelessly, so that we were surprised to find three tigers on the "kill," all of whom dashed away before we could fire.

There was no tree near, but, after my wife had gone home, B. and I decided to drag the "kill," with the help of an elephant, up to a seemul tree not very far away. The pad was taken off the elephant, the elephant sent away, and we sat up waiting.

We decided between us not to fire until the tiger was actually on the "kill." I was sorry afterwards that I had so agreed.

Unfortunately there was no moon, but very soon I saw the tiger moving round in a semi-circle, like a shadow, about 25 yards from the "kill." Every now and then he would squat on his haunches, giving the appearance of a white pillar, as his under-parts were exposed. I think I might have bagged him had it not been for our agreement. In any case he never came up although we waited hours, and because I think he must have seen the huge machan. It is actually unwise to sit up with another in the same machan, especially with a native who coughs or scratches himself at the crucial moment.

G., our Superintendent of Police, was very anxious to bag a tiger, so we made tracks one Sunday for "Tigerland," and I promptly spotted two King vultures on a

seemul tree. One of them left the tree, flew some distance over the jungle and then returned. Here there was evidently a "kill." On going close to the seemul tree we saw the ekra grass near it flattened down, and blood, so took up the trail of the "drag" and found the buffalo's tail lying on the ground about 20 yards away from the scene of the struggle. The jungle had been fired, leaving fairly large patches unburnt here and there. Out of one of these I saw part of the corpse protruding, and thought I saw the reeds move. We were on a pad-elephant, and G. was in front as he was to have first shot. I told the mahout to go round the patch, and when we reached the far end there was the tiger walking quietly away in the open. I waited for G. to fire, but he had got tiger-fever badly and could not raise his gun. I then fired, the beast raised himself on his hind-legs and then made off. There was plenty of blood, and it was easy to track him into an unburnt patch. As we reached this we heard him growling, and the elephant, in spite of goading, refused to enter.

I then proposed to G. that we should get down and dispatch him on foot, but he did not seem to like the proposition at all. I therefore sent the elephant to the far end, and told the mahout to make as much noise as possible to divert attention. G. and I then entered shoulder to shoulder and at the ready, but had hardly gone far when we saw the tiger crouching not five yards from us, with his head on his paws, and looking in the direction of the elephant. We fired simultaneously and the beast rolled over dead. It was a dangerous thing to do, but I have learned since never to go after wounded tiger on foot.

We passed a Gurkhali Khuti on our way back to the station, and the men and women asked us to show the

tiger, so we got it off the elephant. The women stamped on it, spat at and abused it, in the choicest Gurkhale, for having killed so many of their herd. It was a young tiger, 8 feet 6 inches, and on examining it I found the wad of G.'s gun in the flesh. He was using a lethal bullet, and it showed at what a close range we had both fired. My first shot had hit the tiger high up in the back, fracturing the spine. G., a few days later, went out by himself and nearly had his foot taken off by an unwounded tiger, which definitely choked him off the breed !

I once had a very exciting time with the " Man-eater of Kharupatia " in the Tezpur district, on an occasion when I had to go to inspect a tea-garden, not far from the place where the beast seized his victims. A buggy was sent to the ghat for wife and self, and as we were going along I noticed two seemul trees with fresh claw-marks on them, so said to my wife, " I am sure a tiger will return to one of these trees to-night. I am going to sit up."

We had lunch with the tea-garden owner, and whilst on our return journey the groom with the spare horse came running to say that he had seen a tiger on the Government road. We quickly reached the spot, and it was not very far from where I had seen the marks on the trees ; also the huge pug-marks were quite fresh. This was about 5 p.m. and night was falling fast, so I whipped up the horse, made it gallop to the ghat, seized two cushions, my rifle, a few other oddments, and galloped back to the tree on which I had seen the most recent marks. Placed the cushions in a fork of it, and waited.

It was by then a lovely moonlight night, and about 10 p.m. Very soon I heard the tiger scratching at a tree

on my left. I then saw him cross the road till he came opposite my tree, and, as he crossed the road, I let him have it. He dropped flat in his tracks ; but like a fool I thought he was dead and did not fire my second barrel, and the next instant, with a "woof," he leapt up at me, missing my hanging legs by inches. He then plunged into the jungle behind, growling, and for some time making a tremendous commotion in the reeds. I was making preparations to spend the rest of the night in my uncomfortable perch, although already suffering the agonies of cramp, when, about 1 a.m., I heard the tinkling of bells from the carts which were taking the tea-chests down to the steamer ghat. As these came opposite me I shouted, "*Roko*" (Stop); and a carter exclaimed, "*Arrah Bhai, Bhoot hai!*" (Oh ! brother, it is a ghost). But I shouted again, "It is a sahib, and I am coming in one cart to the ghat." So down I came, made myself comfortable on the top of the tea-chests, with my head on my cushions, and had quite a good sleep. One cart I sent back to my host, to tell him that I had wounded the tiger, and to ask him to send fifty coolies at daybreak to look for him.

Next morning my wife and I also went to the spot. The coolies were all there, and we followed the track of the wounded animal. There was a dried-up bheel not far from the tree, showing gouts of clotted blood ; the dhoob grass was also torn up in all directions. Further on he had lain down, and later had gone into some thick jungle. I decided, therefore, that it was unwise to follow, and a little later tried to get an elephant from the Mauzadar on which to look for him, but was unsuccessful, so lost a fine tiger. I am certain, however, that he died, for no more herdsmen were killed.

On another occasion, H. of Bindikuri Tea Estate, at Tezpur, sent word that a tiger had killed and asking me to come. I persuaded B. to come also, with his shikari tusker elephant. H. had an elephant of his own. We then proceeded to beat the jungle several times, but on each occasion the beast broke back. As I myself had no elephant I was obliged to swarm up trees in the hope of getting a shot. There was here a patch of low sun-grass just beyond the thick forest jungle, which we thought would not hide a jackal. But just as we were giving up hope, I suggested that we beat this, and hardly had we entered it when the tiger moved. At this stage H. had kindly put his elephant at my disposal, and as soon as I saw this movement I told the mahout to go as fast as he could along a dry nullah at the side of this grass. I then saw a striped patch, fired, and the tiger rolled into the nullah. B. then came up and gave him his quietus.

On our way back to the garden I noticed B.'s tusker going groggily, and as we reached the tea-house it sank to the ground and died. I was sorry at B.'s loss, because the elephant was worth 4000 rupees and a splendidly staunch shikari. A few months before this the mahout had tried to steal it, and actually went off along the base of the hills to Dhubri to try to sell it, when he was collared. The elephant apparently never got over this, for I fancy it strained its heart over that awful country and by those forced marches.

My first tiger shot with the "Ever-ready" attachment was at Haflong. I sat up in a leaning tree on the edge of a declivity, and as there was a strong wind at the time, I was afraid that the tree might collapse. The tiger came, and as the light flashed on him he jumped to the side



(Upper) TIGER SHOT AT HAFLONG

(Lower) AN 8' 11" TIGER SHOT ON THE DRIVE OF OUR HOUSE

but it revealed his eyes only, and so close to the ground that I supposed him to be crouching. I fired, accordingly, beyond the eyes, and as there was no sound I thought I had missed. My men arrived in the morning and asked if I had got him. I replied, "No." But on looking again carefully, to my delight I caught sight of his tail, and found him dead, with the bullet between his shoulders. We had to carry that tiger—three of us—about 200 yards up a hill, and then wait on the railway line hoping that a train would come along. This eventually happened, and the driver stopped. The body was deposited at the station, and then borne in triumph into Haflong.

Whilst at Haflong our Magistrate, C., asked me to accompany him on tour through some practically unknown shikar country. He was very anxious to bag a tiger, and he got his wish. We made several camps on the Dehingi River, and in the mornings tossed up for places—up or down the river. Our boats were dug-outs.

One day, near the Langting camp, and just as we were getting out of our boats, there was a terrific commotion. We saw the cook rushing down with some of his pots and pans, and the kit with the tablecloth, etc. When we asked the cause we were told that a wild elephant had come out close to where our tea-table was laid. I always carried some country bombs in my kit for bear-caves, so taking two of these I went to the spot. The elephant had moved into some bamboo jungle near, but I could hear him, so threw in a bomb and away went the elephant.

After tea we decided to go down the river together, with two men, in the hope of a shot, and as we neared a chur one of the boatmen, who was standing, called out that there was a large deer walking along the chur. I

promptly stood up and saw that it was a tiger, and going away from us, though every now and then looking back. I told C. and, running the boat on to the sand, he stood up and had a shot. The tiger gave a "woof" and disappeared into the jungle. It was a fine shot, the distance being about 120 yards. C. was naturally excited and wanted to follow him up. As the light was nearly failing I replied, "No, let us follow one of the branches of the river and have a look." This we did, and soon heard a noise and saw the tiger lying on a bank, moving his head only. I fired without warning C., who was rather impetuous and wanted to go up to the beast, and, to make certain, I put in another shot.

We then sent the men back to camp to fetch two more boats, and waited on the spot in pitch darkness, listening to elephants trumpeting not far from us. At last we saw the torches of the boatmen coming down the river, but did not get that tiger back to camp till nearly midnight.

Of course C. was delighted. His tiger measured nearly ten feet, was very fat but mangy, and swarming with ticks. Proceeding to our next camp we found that a herd of elephants had gone right through our camp and laid low some of the grass shelters. At this time Government kheddah operations were proceeding on the right bank of the Dehingi, and one evening we counted seventeen sambhur, all does, feeding close to the river. On our way to our final camp on this river we saw the body of a wild buffalo lying in shallow water. It was evident that a tiger had killed it, and as there was a steep piece of ground with a convenient tree we decided to sit up. But the tiger did not come, and we gave up at about 2 a.m., after which we had a bad time with our boat, even with the

help of torches, for it ran aground in the shallows, making it necessary to get out and push, the consequence being that we did not get to camp till 6 a.m. We were ready at 7 a.m., however, to strike through unknown country into the hills, where C. left me and walked forty-two miles into Haflong.

Whilst at Haflong the mahout in charge of the railway elephant came and told me that a big tiger had been following the elephant, but with what design I do not know. To substantiate his report he had cut out a piece of clay with the impression of its pug. The size of it showed that it was that of a very large tiger, and I was determined to bag him, but I do not remember how many times I sat up for him. I once saw his head for an instant, and then it disappeared before I could fire. He had become very cunning because he had been fired at by my tracker.

A sportsman from Calcutta came up to the station whilst I was absent, and asked if he could have the help of one of my men. He then sat up, and this tiger came out to within a few yards of the "kill" in bright moonlight. But the sportsman in question was so nervous that he could not fire, so my man, armed with this sportsman's shotgun, gave him a charge of shot, so spoiling for ever the chance of getting him.

Before this incident this same tiger killed a large cow, and I sat up as usual. My glasses became dimmed, and whilst wiping them the tiger came and went—with the cow! He had to cross a boulder bed, and as he dragged it I could hear the noise made by the body being bumped against the stones. I then called my men up with three successive revolver shots, and they told me that they

could not find my rope-ladder in the place in which they had put it. Next morning my wife and I, with the men, went to investigate, and found that it had been taken away some distance from the original spot ; that some of the wooden rungs had been reduced to matchwood, and on others there were deep indentations of the tiger's teeth.

The reason why the tiger attacked it I can only conjecture. Did he attack it for the human smell ? Or had he got himself mixed up with it on the way to the " kill " ? I think it was the latter.

We found that, after crossing the stony nullah, he had dragged the " kill " up a steep hill, showing that the brute's strength must have been enormous. I did not sit up near the " kill " as there was no near-by tree. This tiger's next " kill " was inside a buffalo-shed ; he also mauled the owner very badly when he dashed out of the only entrance. After this I had the " kill " dragged just outside the shed, cut two holes in the side-matting, and sat up with one of my men, telling him not to put his head out through this. But this the fool did just as the tiger was coming up, otherwise I should have bagged him. He did a lot more damage, so our Magistrate asked me to get rid of him in any way ; so I got a tiger gin-trap, built a zareba round his " kill " and buried the trap at the entrance. But the cunning beast broke through the zareba at the far end and dragged the " kill " out ; so at last I had to poison him, much to my regret.

One day, whilst I was at Sylhet, a boy came running into the station, saying that, as he and another boy were throwing stones into a nullah to oust a civet cat, a large red beast had dashed out and killed his companion. The body was brought in afterwards, and I at once saw from

the teeth wounds in the chest that a tiger had killed the boy. Our D.C., myself, and a sporting zamindar, decided to go for him, but the Government elephants were away so we had to go on foot. The spot was shown us—a nullah about 700 yards long, overgrown with adjuratum and rice-fields, but bare on either side. The D.C. thought that the place could never hold a tiger, as it was a spot only two and a half miles from the station and a few yards from the Government road. I suggested that we go and find out, and soon discovered the pugs of a very large tiger in the nullah. By this time the villagers had mustered in great strength, armed with spears and bombs. We then posted ourselves on the ground, in the nullah, and told the villagers to beat towards us and fling in bombs. Whilst we were waiting I saw a bulbul sitting on a bush, chattering and flicking its wings, and, about thirty yards away, a jackal sitting. I then told the D.C. that the tiger was there, and lying low under a bush. I was in the centre, the zamindar on my right, and the D.C. on my left. The beaters came along, and as one of them flung a bomb into the place where I had seen the bird it was answered by a “woof.” I then dashed into the open, saw something red being supported by two men, and as I went closer saw that it was a third man and terribly mauled. One side of his scalp was hanging over his ear, and the tiger had bitten him through the chest. A stretcher was made, and he was hurried to the station, but, though all in our power was done for him, he died during the night.

The D.C. then sent out about twenty Civil police to surround the nullah, and supplied them with blank ammunition. Government elephants were sent for next morning, and we went out to find, to our dismay, that the police

had all stayed in one place and had loosed off all their ammunition. Of course the tiger had got away from the far end of the nullah. We eventually picked up his tracks, but he got into some impassable jungle and so we lost a good chance of bagging a murderer.

A few months after this the same tiger killed a man at Ferohugarj, fifteen miles from Sylhet. He was then tracked into a disused Mohammedan graveyard, but killed three more men in the attempt to bag him, and was shot by B. of the police before he could do further damage.

After three years of military duty in the Great War, and on reverting to civil employ, I was posted to the unimportant station of Jorhat, Sibsagar district. I had no work to do in this station; my hospital was demolished, and I had to look after a jail of seventy convicts, with no work to do except to carry stones on their heads from one end of the jail-yard to the other, for the sake of their health. The consequence was that I took every opportunity to tour in the district, where vaccination, sanitation, fighting influenza, and shikar kept me happy. My favourite spot was Gauresagar, about nine miles from Sibsagar. Here there was a very nice rest-house, and the country between this place and Desangmukh held small and big game.

On my first visit the village postmaster told me that four tigers had, for the past six years, given a lot of trouble by preying heavily on the herdsmen's cattle, chiefly buffalo. He said that his postal runners had often seen them on the Government road. One of the four appeared to be a large solitary male, which he called the "bald tiger," apparently suffering from some sort of skin disease,

and that the remainder consisted of a tiger, tigress, and a fairly large cub.

I decided to have a try at them, so got a young buffalo, tied him up, and ascended my machan about 5 p.m. one evening. The tiger did not appear that night, and I was rather wearied with my night-long vigil when, just as dawn was breaking, I happened to look to my right down the Government road, and to my astonishment saw a tiger come out of the jungle on to the road about 200 yards away. He crossed the road, put his nose to the ground, and came slowly along to the bait. I could not fire, owing to my position, until he was quite close to the bait. But when he did, I let fly, and must have done this as he crouched to spring, because my bullet went over his back, and he disappeared like a flash.

I was so disappointed that I returned to my station, but before going I told the postmaster to keep me informed, and sent a sporting inspector of vaccination to keep a look-out during his work in that locality. As a consequence a report came a few weeks later that the tigers were again on the ramp.

My wife and I at once went to Gaureesagor, and I was prepared to spend ten days there, doing inspection work during the day and sitting up for tigers by night. For four nights running I sat, getting into my perch at 5 p.m. and descending shortly after dawn, whilst the mauzadar supplied me with young buffaloes. My machans were all placed on the side of the Government road and I had to shift them from time to time.

The first night was spoiled by some tame buffaloes. The cub, as usual, came up first, and the young buffalo, before being touched, gave a peculiar cry, but before I

could say "knife " a herd of tame buffaloes appeared and kept the tigress and cub off my bait. It was a splendid sight to see, in bright moonlight, the two tigers dashing across the road as they were chased, and they never made a second attempt. My first vigil was therefore a blank, and after this I ordered the herdsmen to tether their animals in their " khuti " during the night.

In preparation for the second night I shifted the machan farther up the road, towards Desangmukh, choosing a large peepul tree. I settled in my seat about 5 p.m., and very shortly after a whole troop of Rhesus monkeys came to pass the night in the same tree. I noted that some of them clasped a branch and went to sleep. About 8.30 p.m. the buffalo got up and showed restlessness. It gazed down the road, and at the same time the monkeys became excited. These signs showed that tigers were about, but, although I waited hours, they did not show up. In the morning I discovered the pugs of three not 30 yards away from the bait, and I could only surmise that the monkeys' chatter had put them off.

On the third night I shifted my machan to another tree and had luck. It was a gorgeous moonlight night, and about 9 p.m. I saw an animal, about the size of a large retriever dog, coming down the road with a crouching gait. My buffalo was then sitting. I saw then that it was the cub. It came up and sniffed at the bait, the buffalo not moving. Then it gave a growl and seized the quarry by the back. As it did this the tigress dashed out from the opposite side, and all three were rolling and struggling almost under my machan. The tigress had got hold of one hind-leg, and started pulling towards the jungle. I could only see her head, but I calculated where

her body would be, and fired. She gave a huge leap, clearing the road with one bound. I then heard the death-gurgle and knew that I had got her. In the morning, whilst waiting for my men with the ladder, the postman came along. I shouted to tell him that there was a wounded tigress near the road, and he promptly left it and took a detour to the post office.

I later saw a large amount of blood in the road, and, following the tracks, found that the tigress had gone up a nullah running parallel to the road. Up this I went, and about 20 yards away found her lying on the bank. Peering down I found that she was stone dead, the tongue clenched between the teeth and on the right side. A good omen !

She had a beautiful skin with a sheen on it like that of a race-horse, and not a tick on her. The body was borne in triumph to the rest-house and skinning operations became the order of the day. The post-mortem on this tigress was an eye-opener and a lesson. I found that her heart and large vessels were in pieces, yet she had gone a long distance before falling dead—at least 80 yards !

The buffalo, owing to the mauling it had received, unfortunately died, and for the fourth night there was a discussion as to where the body should be left. Whether at the original spot or elsewhere. The natives said, leave it as it lay, but owing to the proximity of the tigress's blood I thought the tiger might be suspicious. I therefore had some jungle cleared behind the machan and the corpse placed there to await events. Whilst I was sitting that night in the machan I heard a kind of snoring sound going on in the tree above me. This was rather disturbing and got on the nerves, so I investigated and found a

large cleft in one of the branches, and that the noise issued from it. The sound might be made by either an iguana or a python, so, to prevent the creature from coming out, I got my overcoat and stuffed it well home. Next day we pulled out a large iguana !

About 9 p.m. I heard the tiger roaring. This was repeated several times, and he appeared to be moving in a semicircle. I was watching the Government road for him when I seemed to see a shadow pass almost directly in front of me, and the next moment out he came into the middle of the road, flicking his tail and making a purring noise. I promptly fired and he galloped down the road, his pads giving loud thumps as they came down on its hard surface. I thought I had missed him, and cursed my bad luck, as at the distance, barely 10 yards, I should have floored him.

My men came as usual in the morning, and I found the bullet embedded in the road, but not a drop of blood. We followed up for about 100 yards along the road, and then found that the beast had entered the heavy jungle on the right. Here we found blood fairly high up on the reeds. We then came upon a dried-up bheel, where the grass and earth had been torn up, and, farther on, a place where he had lain down. He had then got into some impenetrable stuff through which it was not safe to follow on foot.

I then decided I would get an elephant and follow him up in the afternoon, and got back on to the road very despondently. I had actually taken my rifle to pieces, and was just putting these into the case when I heard one of the natives shout, " Bag ! Bag !" I promptly rushed to the spot, minus the rifle, to find the discoverer

up a tree ; so up I went too and saw the tiger lying full stretch close to my machan, and only moving his head. I thereupon rushed back for the rifle, climbed the tree and shot him.

I could not at the time understand why he had come back to die there, but this was revealed when I made a post-mortem. My first bullet had perforated the stomach, and the only water for miles around was a small pool not far from my machan. The wounded beast could not find any water on the other side of the road so had returned : but the drinking of the water was his undoing as it had set up acute peritonitis.

On the same night, at about 4 a.m., and whilst in the machan, I had heard the most unearthly sounds coming from behind me. I could not understand them at the time, but later recognised them as those of the dying tiger. He was a very heavy animal, with a splendid coat, a ruff, and taped 10 feet 2 inches.

The villagers and herdsmen were delighted, as these four tigers had taken heavy toll of their cattle during the last seven years.

The last experience was perhaps the most thrilling I had at tiger shooting. It was also at my last camp in India. The scene lay on the Dehingi River, a favourite shikar ground. The previous day had been strenuous, so I decided I would not wander far. My wife and I therefore went for a stroll to get some jungle fowl and a " barker," accompanied by two trackers and my sporting kit. I had on rubber-heeled shoes, and went on in front, the rest following about twenty yards behind. The path we had followed for some time suddenly dipped, and when I looked down it four tigers confronted me, not twelve paces away. The group

consisted of a tiger, a tigress, and two fairly large cubs, the latter being between the parents. I was carrying my .256 Mannlicher, so stepped back a few yards and beckoned to the others to sit down. I then advanced, and as the tiger was nearest me, fired at him. He rolled over and the rest of the family bounded into the jungle. As he struggled I fired again, and yet another shot as he dragged himself into the heavy jungle on my left. The stuff he had gone into was very dense, and it was therefore unwise to follow him. As a matter of fact, he had only gone about fifteen yards into it and had then lain down.

For an hour all four of us stood near the spot, the tiger growling at intervals, till at last I told one of the trackers to climb a tree to see if he could see the beast. He did so and then pointed with his finger, so I climbed also, and was just able to see the head and neck moving. Another shot and all was still.

We then went in and found that it was a beautiful specimen, later showing a measurement of 9 feet 10½ inches in length.

I was unable to raise carriers that day, but fifteen men came and set off the next morning, and a bamboo stretcher with poles was made for the portage of the body. As it was being placed on this the tigress dashed out close to us, but did not attack. She, however, made a peculiar mewing sound, similar to the sound one hears in zoos before feeding time. The men were thoroughly alarmed and practically ran the two miles to camp with the tiger.

I am fairly certain that if I had left the body where it lay, and had climbed a tree and waited, I should have bagged the tigress. But it would have meant being marooned, for no one would have dared to come back and fetch it.

About a hundred yards from camp the tiger was skinned and placed on a bamboo frame. That evening my wife and I were sitting in front of our tents, when, all of a sudden, we heard roaring about a mile away, and this gradually got nearer and nearer, until one was made in the thick adjuratum jungle close to camp. I therefore supposed that the tigress meant business. The whole of the servants and coolies were in a state of panic and wanted to leave the spot. I decided on to-morrow, but what a night we had. It was necessary to accompany the servants with a loaded rifle to and fro from kitchen to tent whilst having dinner, and to do sentry duty over a shed where my wife was having her bath. The servants refused to sleep in their huts, so all huddled for the night into my tent and I slept in my wife's. Two loaded rifles lay at my side in case of need. We lit a huge fire, and had every lantern burning all night. The next morning only four men were available for our kit, and at least twenty-four more men were needed. However, we went on about nine miles to a village, got porters and sent them back for what kit we had left behind. I also sent my two trackers, and told them to be sure to bring back the skull and skin of my tiger. When they returned, they had an astonishing report to give me : firstly, that the tigress and cubs had eaten the corpse of the tiger ; secondly, that the pugs of the tigress and cubs were found at the spot where our camp stood ; thirdly, that my trackers had tried to get the skin of the tiger, but that the tigress had dashed out, and so, much to their regret, he had to leave it. But in any case I am certain from her behaviour that that tigress was thirsting for revenge at the loss of her mate.

I must in any case pay a tribute to my wife, for she

showed not the slightest fear or nervousness under very trying and dangerous circumstances. This incident, with all its thrills, was at least a fitting conclusion, as it happened, to thirty-six years of tiger hunting and shikar, and would that I could live those days over again.

CHAPTER IV

THE MAN-EATERS OF LANGTING

THE following incident is so similar to that which occurred on the Uganda Railway some years ago that I have called it "The Man-Eaters of Langting."

The scene of these tragedies is laid at the small railway station, Langting, on the Assam-Bengal Railway. The station lies on the railway between Silchar and Gauhati, not very far from the hill station of Haflong, where I lived after retirement, the consequence being that I was able to take an active part in the extermination of the perpetrators.

This little railway station, and the villages around, were in a state of panic for weeks, and traffic was very nearly held up. The station-master had barricaded the station building with rice bags and, for a time, not a single person could venture outside his dwelling for fear of being snapped up by man-eaters.

There were four of them: a tigress and three panthers, the latter consisting of two males and a female. The station-master had a *pucca* building, with a six-foot wall all round, for himself and his family; but to make it safer he had erected a high scaffold inside, where he and his family slept at night. Trains used to go past the station without any of the staff emerging, so great was the panic.

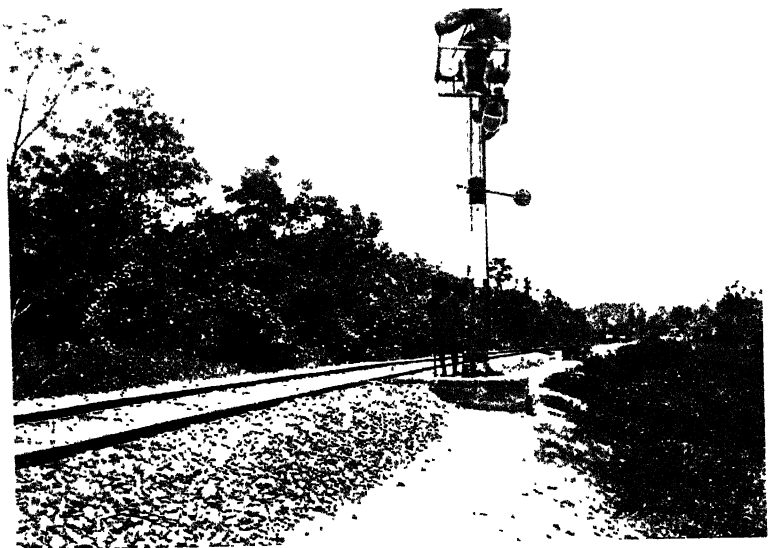
These occurrences bring out forcibly two facts well known to sportsmen—(1) That a tigress will revenge herself

after being deprived of her young or her mate ; (2) That the taste of human flesh, once acquired by panther or tiger, is incurable, and often then they will not look at cow or goat again.

Whilst I was trying to slay these beasts, goats and cattle were straying and feeding in the jungle all round the station, and yet, during a fortnight, not a single one was touched.

The start of the whole trouble occurred in this way. Some subordinates in the police, from down country, had come up for a few days' shikar to Langting. One day three of them went out on foot and, crossing the Langting River, came on a tigress with two cubs. They were afraid to shoot the tigress so bagged one of the cubs. From that day the tigress turned into a man-hater and a man-eater ; whilst parts of some of her victims were eaten by three panthers, and they, too, took to the habit.

The railway company kept three elephants at Langting for dragging timber from the forest for sleepers. One morning the mahout and his assistant were walking down the line towards the station, the latter carrying a gunny-bag with some grass for his goats. The tigress sprang from an embankment on to the grass-cutter, fortunately venting her fury mostly on the gunny-bag, but also mauling the grass-cutter on the neck. The mahout pluckily drove off the tigress and the injured man was sent for treatment to Badarpur. He was in hospital ten days and then returned to his work at Langting. But the very next day after his return, and as he was walking down the line, he was pounced on by the same tigress, carried off, and his body never found. From this date the killing of human beings was intensified and the place was in a state of panic.



(Upper) MACHAN ON A SIGNAL POST 400 YARDS FROM THE STATION AND
FROM WHICH TWO PANTHERS WERE SHOT
(Lower) MY LARGEST PANTHER, SHOT AT HAF LONG

I was asked to go to Langting by my Magistrate and, although at that time of the year, June, the place was a death-trap for fever, I made my bundobust and went down. The railway authorities kindly placed two railway carriages at my disposal and also the elephants. S., a sporting engine-driver on the railway, had arrived the previous day, and had been fortunate enough to bag one of the panthers. He had had an exciting time. The people had noticed that the man-eaters used to cross the line close to a bridge and a signal-pole, about four hundred yards from the railway station on the Gauhati side, so S. decided to place his machan on the top of the signal-pole. He had a dummy made of grass and clothed it to represent a pointsman with a lighted lamp in its hand.

Just before dark the panther appeared on the opposite side, not twenty yards away from where S. was seated. S. fired and the panther came straight for the dummy and sprang on it. Unfortunately S.'s magazine jammed so he was unable to get in a second shot, and the panther made off into the jungle. Next morning the elephants were turned out and the panther was found, about two hundred and fifty yards away, practically disembowelled, most of its intestines having been left in the ageratum jungle, through which the animal had dragged itself.

I saw the skin ; it was a young male in perfect condition, and with no malformation to cause it to take to man-eating.

When I arrived at the station I found that two other railwaymen had arrived, so we had to toss up for machans before going to sit up for the night. I, fortunately, had first choice of place, so, after consulting the railway people, decided to place my machan on the signal-post from which S. had shot his panther.

I had a goat tied up a few yards away which I thought might help, and had not been more than ten minutes in my perch when I saw the head of a panther appear above the jungle not sixty yards away. He stood for a few minutes and then came in my direction. There was a leopard trap on the other side of the nullah opposite my machan, and I saw the beast walking and sniffing all round it, but I was not going to fire unless I made dead certain of him, so waited till he started to descend and cross the nullah, when I fired and rolled him over dead.

There was great rejoicing and the body was carried in triumph, with curses and spitting, to the station. I examined the body carefully next day and found he was very old, of very light colour, with broken, yellow teeth and worn claws. The fur was very sparse and mangy and swarmed with ticks, also scars from old tick-bites. The body was much emaciated and the stomach quite empty. So all the conditions were present for a potential man-eater.

The Jemadar mahout recognised him as being the beast that killed a woman near a hut close to the station. A few days before my arrival screams were heard near this hut, and the Jemadar mahout and others went to the rescue and drove off this panther which had attacked a woman venturing outside to get some sticks. The woman was told not to go outside but a short while afterwards again did so, was grabbed and dragged away.

Next day the panther was skinned, and to protect it from rain and jackals I pegged it out on the floor of the old rest-house at Langting. But what was my astonishment, on going up next day to inspect it, to see fresh pug-marks of

a panther all round the rest-house. The prowling beast had even entered the verandah.

A few days later Government sent down fifteen rifles under an Indian officer to help us. Machans were placed all round the station, but the two remaining beasts could not be brought to bag. They had evidently become very wary. One night the panther did pass under one of the Sepoys' machans, but I fancy he was asleep and did not see it.

C. now suggested that we should resort to stratagem, saying that he had a tiger-trap at Lumding. The idea was to get the smell of a human being into this by filling it partly with old clothes taken from the mahouts and coolies, and then sit up inside amidst this unpleasant stuff. The idea appeared to me to be sound and worth trying, so the great cage was brought down from Lumding and wheeled into the jungle near by. I was to fire three shots with my revolver when we had had enough of our stinking prison.

C. and I entered the cage, which had a huge wooden door. By 1 a.m. I could see that he was fed-up, as he began to get restless and shift about. He a little later said that he wanted to get back, so I fired three shots. We waited an hour and, as no guard appeared, we decided to get out. C. could not get the door to budge, but it was raised by our united efforts. C. suggested that I should get out first, so with an electric torch in one hand and my loaded revolver in the other, I emerged. C. was not slim so he took time to extricate himself. We then walked back two miles along the line to the station, fortunately without mishap. There was dense jungle on both sides of the line and the tigress, if she wished, could have easily got one of us.

She was now killing higher up the line, and *khubber* of

human "kills" was brought later to us. Most of the victims were Cacharis, who had gone into the jungle to cut bamboo. In most cases only the bones of the feet and hands were found. The Cacharis believe that if the remains are not found and burned in the usual way the ghost of the victim will be restless and haunt the place where he or she was killed, so every endeavour is made to recover remnants.

Ultimately every one, except S., went down with fever. The military police returned to Silchar and I to Haflong and Darjeeling. After we left we heard that S. had a most exciting time.

The tigress after a time, it appears, returned to Langting to resume her murderous career, for one day one of the mahouts was returning from work and had halted to give the elephant a drink at a bheel close to the station. The tigress sprang up and took the man off the animal's back, the elephant stampeding to the *pilkhana* near the station. This mahout was the brother of Motadevi, the railway pointsman, and Motadevi swore vengeance.

Word was sent to S., the three railway elephants were mustered, and the party proceeded to investigate. Motadevi refused to mount an elephant and followed behind armed with a spear. The remains of the mahout's corpse were found, the chest having been partly devoured. The corpse was fastened by chains to the last elephant, a tusker, the party proceeded in single file, and came out of the jungle with Motadevi in the rear with his spear. On the way there was a roar, the tigress seized Motadevi and took him off. His body was never found. All three elephants stampeded. S. was on the leading tusker, and to save himself from being dashed to pieces by trees sprang and caught hold of a branch, The elephant then got rid of the other

occupants and the pad and rushed off into the forest. It joined a wild herd and four months elapsed before it was recaptured. Its body was one mass of wounds probably inflicted by wild elephants. The middle elephant in the line stampeded to the *pilkhana*, and the last one, with the corpse, threw the mahout and stampeded down the line towards Haflong, going through all the tunnels and under the bridges with its ghastly burden dangling at its side. It went for about seven miles, but at about the fifth the chains came loose and the corpse fell on the line. The early goods train discovered it next day and the guard wired to our magistrate.

S. was considerably shaken so returned, leaving the two remaining man-eaters to continue their killing ; but they did not survive long, for both were trapped. The tigress was enticed into a trap baited with a pig, and the panther into a leopard-trap baited with a goat.

I saw the skin and skull of the tigress. She was a very large animal, taping nearly nine feet, with good fur, free of mange and with unworn teeth. The villagers got the reward of 400 rupees given by the Government and the railway authorities, and so ended this jungle tragedy.

CHAPTER V

ELEPHANTS FROM ABOVE AND BELOW

ONLY those sportsmen who are fortunate in being posted to Assam or Burma have the best opportunities for this form of shikar, and it is the ambition of every big-game hunter to bag an elephant. In elephant-hunting also one has to depend upon oneself. The hunter must track up the animal by himself as Indian natives have a wholesome dread of the beast and will more often than not bolt at the critical moment.

One would think that such a large animal will leave a distinct spoor, and so it does in soft or swampy ground. But on hard ground the spoor is scarcely visible ; at most, a small impression made by the nails of the feet. One must trust therefore to other signs of fresh tracks, such as recent droppings, a freshly-broken branch of tree or bamboo, a crushed leaf or blade of grass.

It is very difficult to see an elephant in thick forest, for if he scents or sees danger he will remain absolutely quiet and motionless. If a tusker, probably the first thing that will attract your attention will be the gleam of his tusks, or, if he is scenting you, his trunk will be raised and curved forward at the end and be moving a little. A slight movement of the ears may direct your attention to the spot where he is standing. Never fire at an elephant therefore unless you sight him well and can get vital shots. An

elephant shot in the lungs or abdomen will go for miles, and will die a lingering death.

The vital shots are : (1) When he is facing you fire at the upper end of the protuberance at the base of the trunk. This shot will go straight to the brain after traversing about eight inches of spongy, bony matter.

(2) When broadside on, fire at a point midway between the eye and the top of the ear, into the ear-hole, or behind the ear as he has his ears cocked when on the alert. Either of these shots will drop an elephant dead.

An African hunter, fortunately not British, once advocated shooting an elephant in the knee, so placing the beast at the mercy of the hunter ; a cruel and unsportsmanlike method.

The real difficulty however is, where should one aim when an elephant charges ? The bump shot is impossible as the animal's head is thrown up, so I think the best thing to do is to fire at the throat, fairly high up, as one may be certain then to sever either the carotid artery, jugular vein, the large nerves, or, with luck, break or shatter the spinal column. I do not advocate firing into his chest.

I have dropped two charging elephants with this neck shot ; both falling a few feet away from where I fired, and thus saving my life.

The hunter should always jump to the side after firing, although the elephant charges with his eyes open. This move will give the hunter time to reload, or dodge behind a tree, before the elephant has time to renew the attack.

My first elephant was shot not very far from Tammu in the Kubbo-Kalé Valley. N. and I rode the seventy-two odd miles that lay between Manipur and Tammu in one day, taking nine hours and changing ponies four times.

The going was very rough, and we were very sore next morning. But in spite of this we sallied forth, N. in one direction and I in another. I picked up the tracks of a solitary bull bison, near the site of a deserted village, where it had been feeding on plantain shoots, when, all of a sudden, a herd of about thirty elephants passed in line about fifty yards away, from left to right.

A tusker headed the herd, and as I had obtained permission to shoot one, I fired. The animal sunk to his knees, but before I could give him the left barrel a female, with a calf, left the herd and came straight for me. She had her head raised and trunk coiled. I gave her the left barrel in the neck. She came on with blood spouting from her throat and dropped in a sitting position not five yards from me, where she started vomiting large clots of blood. I then turned round for my trackers to get more cartridges, but they had bolted and climbed a tree. I was naturally angry and ordered them to come down. I eventually got a further supply and so was able to put an end to both wounded elephants. It was a narrow escape, for I should surely have been killed had my first shot not felled the female. I therefore learnt a lesson, and that to always carry spare ammunition myself when after dangerous game. Hosts of villagers came for the meat, and by evening not a vestige of flesh remained. She had small tusks, and these I kept, also the feet.

The Darrang district in Assam was a great place for rogue elephants, and, on arrival, I laid myself out to bag one or two. I learnt that there were at the time two of these; one known as the "Bindikuki rogue," and the other the "Sesa." These two had been the terror of the district for a number of years, and no one had seemed to have had

the pluck to go after them, despite the tea-gardens in the vicinity, where they did their work of destruction. The Bindikuki rogue had also claimed a few human victims, and I asked H., a planter, to send me word to headquarters directly one or both were about.

One afternoon I got a wire saying " The Bindikuki rogue on the job," and as there was no train, I got a trolley from the station-master and went straight to H.'s bungalow. The village suffering the damage was about four miles from the garden, so we proceeded there at once, and on reaching it saw that practically the whole of the plantain crop had been destroyed, paddy trampled and eaten, and the villagers in a state of panic. The villagers said that the elephant would return towards nightfall. So we waited.

Unfortunately a thunderstorm came on and it rained in torrents ; the night was as black as pitch ; the elephant did turn up, but I told H. that it was useless going after him in such weather, and that it would be better to return to his home and pick up the tracks next morning. He agreed, and the villagers promised to turn up in force. When we did return to the village there were about twenty men armed with spears, bows and arrows, and a musket or two, ready to go with us.

The tracks led into a very dense forest, and we had not got more than a few yards into it when the elephant trumpeted, and our whole escort bolted, leaving us to contemplate one another. H. said, " What are you going to do ? " I replied, " Follow him up," and this we did. The track after a while diverged into two, so H. took the right and I took the left.

I had not gone more than forty yards, however, when I heard a swishing noise, and pressing through the creepers,

cane bushes and other jungle I saw the gleam of his tusks. The brute was standing about thirty yards from me, head-on, but I could not get the frontal shot because his up-raised trunk covered the vital spot. He was scenting me but could not see as his sight was obscured by a double cataract of both eyes, as I discovered afterwards. I found, however, that by kneeling I could get a better view, and having done so, I said to myself, "As soon as you drop your trunk I will let you have it." After a little while, which seemed a wait of hours, he did so, and I fired. The next moment he came straight at me, his head raised in the air and trunk coiled. I fired again at his neck; there was a spout of blood and he dropped about five yards from me.

I do not think H. had gone very far along his track, for shortly after grassing the rogue down, I received a violent clap on the back from him, and a "Well done, old chap." The rogue had a beautiful pair of almost symmetrical sabre-shaped tusks, each weighing 54 lbs., measuring 19 inches in circumference, and 5 feet 4 inches in length. I was naturally pleased, and on examining the body later I noticed four or five bumps under the skin like little, hard tumours. On cutting into these out dropped spherical bullets that some of the villagers must have fired on former occasions from a muzzle-loader, and which had penetrated only about two inches below the surface. He had also a scar high up on his forehead, and on examining the bone under this, I found another spherical bullet that had penetrated to about three inches. This old warrior had certainly carried a lot of lead about with him.

I found my first shot had gone rather high, and so had failed to stop him. This rogue was very old; I should think fifty or sixty years of age. The tips of the ears were

very much turned down and the skin was wrinkled. The circumference of the forefoot was 57 inches, giving the height approximately at 9 feet 6 inches.

My next encounter was with the Sesa rogue, and the place at which I bagged him was not very far from the spot on which the Bindikuki rogue was shot. It was arranged once more that H. should send me a wire when he appeared, and when the news came I went by the earliest train to Sesa, a railway station on the Tezpur-Balipara Railway, where H. met me. The first thing I came across close to the station was a villager crying bitterly, wringing his hands and saying that the elephant had, during the night, destroyed his whole crop of paddy. It had then apparently gone off to a small tea-garden about three miles from the station and had wrought havoc there by pulling down the roofs of four or five huts, putting the occupants to flight and then consuming all the paddy stored in the interior of the huts.

We picked up his tracks at the demolished huts, and accompanied by H.'s trackers and ten or twelve other men, we proceeded along them.

He had apparently made for some dense forest, and we had been going for some time in this when I heard a loud snoring which the men said was the elephant asleep. But when this got louder and louder our following, as on a former occasion, bolted. Just at this stage H. seems to have contracted a bad attack of cramp, the consequence being that I had to leave him and go on alone. This rogue was usually accompanied by two females, but on this day, fortunately for me, the ladies were not present. But the jungle was awful, for I purposely left the track, judging that the elephant would suspect danger from the direction

in which he entered, and also that he would probably scent me. So I made a detour and crawled through some dense ringall jungle on hands and knees.

The snoring now seemed to get feebler, and it was very difficult to locate the direction from which it came ; the sound having a sort of echo about it. But whilst creeping along slowly I suddenly caught sight of a large yellow mass in front and not ten yards away, looking for all the world like a huge ant-hill. Even at that small distance it was still difficult to decide that the snoring issued from the great bulk until I noticed that it heaved up and down with each sound.

The first glimpse of the elephant I got was his back, for he had this towards me. It was of no use shooting yet, so I crept nearer and more to my right. From this fresh position I could see his neck and later his huge head. He was lying full length, head on ground, and at a distance of some five yards or so. I crawled no further but fired a rapid right and left into the most prominent part of the occipital bone. The huge brute just lifted his head, dropped it, and never moved again, having been practically killed in his sleep.

It seemed rather a mean thing to do, but how could I have acted otherwise ? He was a rogue, had to be killed, and the encounter too close to allow of a more sporting risk to be taken. He was a huge beast and in splendid condition. The circumference of the forefoot was 67 inches, giving his height at 11 feet 2 inches. This is about the maximum height of the Indian species.

The tusks were about 3 feet long, but very thin. I unfortunately did not cut them out on the spot and they were stolen during the night ; probably by some of the

garden coolies. This dead elephant gave me a lot of trouble. I was constantly getting telegrams asking for its removal, for it was fouling the air for a mile around. So at last I mustered the municipal sweepers, headed by the Jemadar, and when they came back they said, "It was awful job." They had to cut it up in pieces and bury each separately. The skull adorns the entrance to the Chota bungalow at Bindikuki tea estate, and there are the two holes close to each other in the skull made by those bullets.

Another encounter with a rogue occurred near a garden at Orangajuli, situated in the N.W. corner of the Darrang district, and at the foot of the Bhutan Hills.

On my arrival for inspection the garden manager, H., met me with, "Doc., you are in luck. Yesterday a rogue chased my elephant out of the forest and the D.C. has proclaimed him"; so we started on the following day, after lunch. My wife was with me and we mounted together on H.'s shikar elephant "Pyari," and H. himself on a borrowed one. We picked up the tracks of the rogue at the place where he had chased H.'s elephant. Siriman, the mahout, asked me to be on the look-out whilst he looked down and did the tracking.

We had tracked the rogue for about two hours when I saw a large, black object about forty yards away, in some rather high grass. Siriman called to me to fire but what I saw was the back and posterior of the beast, so refrained. But he must have heard us, for he turned his head, without shifting his body, and looked round at us. I then took the opportunity of a temple shot and fired. He promptly whizzed round and, with a scream and trunk coiled, charged down on us. My second barrel failed to stop him, and the next moment he had almost touched our elephant, but

there was just time to push home one other cartridge before he swept us off with his trunk, to place the muzzle of the rifle at his head, and fire without even bringing it to the shoulder.

To our mutual relief the great brute rolled over and then from side to side, with all four legs in the air. He was then finished with a soft-nose bullet.

He proved a huge specimen in the prime of life and condition. The circumference of the foot was 62 inches, giving his approximate height at 10 feet 4 inches. The tusks weighed 58 lbs. each, were 5 feet 6 inches long along the curve, and $19\frac{1}{2}$ inches in diameter. A perfect pair with blunt, conical ends. I gave H. one and took the other.

When returning home we shot a solitary bull bison which charged and gave us a devil of a time. This was indeed a bag to be proud of, and accomplished in seven hours. There was also a Ganesh in the forest, but he was not dangerous so we did not go after him. H.'s garden and surroundings were a sportsman's paradise, for one could get bison any time, also sambhur, peafowl, swamp deer, and bear. He is dead now, but I shall always feel indebted to him for many days of fine shikar and hospitality.

Some little time later my wife and I were trekking across the Cossyah Hills to Shillong, from where we were proceeding to Bombay and then to England. At one of the rest-houses I heard that a proclaimed rogue was about, playing the devil with the crops and chasing natives at a village called Umtopo. The Dak bungalow chowkidar said this village was only three miles away, but it proved to be more like six. Natives are always very unreliable as to distances. However, next morning I started with a sporting kit,

Selim and a Cossyah, having decided to spend the night in the vicinity of the rogue's depredations.

I got to the village eventually and found every one very drunk. They informed me that they did not know where the elephant was, so I told the headman that if I did not receive *khubber* by the evening that there would be trouble. I therefore constructed a small hut on a near-by hill and waited events. At about 4.30 p.m. two men came rushing up to say that they had seen the elephant in the valley below. There was therefore no time to waste as the shades of night were falling fast. Selim and I tore down the hill, with the two informers. The tracks, leading into 15-foot null (reed), were pointed out to us, and then the men bolted. We followed them and had not gone more than 100 yards when I heard a branch crash and, on looking in the direction, saw a black patch which seemed like the head of the beast. I fired, and away he went, with Selim and I following closely on his heels. There were plenty of blood-tracks, but we had to give up owing to the gathering darkness, and find our way out by the help of torches.

I started out next morning very early and found that the elephant had sat down, or rather lain down, not very far from where we had given up the evening before. A fine cast of his tusk was in the soil, and there was plenty of blood. We eventually came up with him in heavy jungle, and the Cossyah with us shinned up trees for a view, but he got away into grass about 15 feet high before I could get a shot at him. He appeared to be a huge brute with a magnificent pair of tusks, but in this sea of grass it was impossible to sight him properly till I climbed a solitary tree and saw that he was going very groggily and rolling

from side to side. I tracked him till nearly sundown and then, much to my disappointment, had to give up.

What a weary journey it was to get back to camp. It had been a tramp of nearly nineteen hours and I was thoroughly done up, nor could I spare another day without missing the boat at Bombay.

And now for the sequel. About three months after I reached England, I received a photograph from a certain magistrate, with a letter saying that he had got the Umtopo rogue two months after I had left, and that the tusks were 6 feet 8 inches long. On return from leave my tracker, Singbia, told me that the elephant had been found dead four days after I had left, and so I lost a magnificent trophy.

In the course of hunting other game my wife and I often came on wild elephants. One day we went up the Rowai River to fish, and apart from fishing gear only took my shotgun. On our way upstream I thought I would go and inspect a salt-lick to see if bison had recently visited it. I asked my wife to sit on the river-bank whilst I was away, and when close to the salt-lick a tremendous trumpeting and a rushing occurred. The men shouted, "Run, run," and we tore down hill. I pushed my wife into the boat and we made for a small island in midstream. From here we could hear elephants on the opposite bank making loud rumblings, so had rather an anxious time. Why that herd charged us I do not know, for a herd of elephants usually moves off when it sees man.

On another occasion, whilst carrying our folding Ford boat through jungle to negotiate some rapids, we heard strange sounds from the opposite bank, and, looking up, saw three elephants gazing at us from the top of a cliff.



(Upper) WILD ELEPHANTS IN THE JUNGLE, DEHINGI.

(Lower) A MORNING'S BAG OF BARKING DEER AND JUNGLE FOWL.

These moved off after a while, and in like manner did elephants we came on in the Langting forests.

My final experience with elephant occurred when at a last camp in India, on the Dehingi River. A few days before we set out I saw a fakir standing outside my gate, and as I passed through he said, " Sahib, you are going for shikar. You will run a risk of being killed by an elephant, but take these and they will protect you." He then handed me some pieces of wood dyed red. I gave him baksheesh, thought his prophecy nonsense, and put the pieces of wood in my pocket.

One day, a little later, I made for the Longari River, near which there were some fine sambhur. I had four men with me at the time. My head tracker was in front, and we were following the tracks along the river-bank when, suddenly, as we neared a bend, the trackers jumped back and whispered, "Hathi." I immediately seized my rifle from one of the men and looked ahead, to find a huge Makna, motionless, and with his ears cocked, about twenty yards away. I had no permission to shoot him, but determined to let him have it if he charged. So we stood gazing at each other for fully five minutes. He then began to kick the sand up with his forefoot, and rapped his trunk on the ground, which meant mischief.

I now thought of the old dodge of making an elephant bolt, so picking up a pebble hit it against my rifle. The huge beast screamed and went at a slow pace up the bank, but stopped at the edge of the forest to look down at us. I then pelted him with stones to make him move, and we never saw him again.

Had he charged, and a bullet had failed to stop him, we might have had a nasty time. What the " fakir " foretold

therefore came true. But how did he know what was going to happen? I rather liked fakirs, and used to have long talks with them about their travels. They often gave me valuable information of shikar, as most of them live in the jungle-caves or tramp throughout the length and breadth of India.

Later on, in my account of panther, I tell of how I was unable to secure a single animal without the help of a fakir's pujah.

There are two interesting points in relation to these great beasts—those of "Elephant Pearls," and the question as to where elephants die. There are, I believe, only two cases recorded of the former being found, perhaps because hunters have not looked for them, but they are considered very lucky, and are worth a fortune.

These "pearls" are found in the pulp of the tusk. They are about as long as a man's little finger, white and showing some striation. They are not enamel but composed of dentine. My theory is this. At the top of the tusk containing the pulp the dentine is ridged. In the process of development, this ridge, or part of it, becomes detached and falls into the pulp, where it is subject to movement and so gets smoothed down. An authenticated instance is that of one found in a tusker shot by a forest officer in the Chittagong Hills tracts.

Where do elephants die? This question has been discussed by naturalists, hunters, and travellers. Some say that there are regular places far removed from human ken—so-called "elephant cemeteries"—where all elephants die. These places have been described by various people as existing both in Africa and India. This is a definite idea of the Cingalese. Others believe that an old elephant dies

wherever he happens to be. But it is a fact that finding an elephant dead in a forest is very rare. It is also a well-known fact that all old and diseased animals will resort to some out-of-the-way spot to die in. Nature is very cruel in this respect. There is no sympathy amongst healthy animals for one old or diseased.

In the whole of my experience, I have never once come across a dead elephant in the forests frequented by them. The late Mr. A. Porteous, I.C.S., told me that he had seen several bones of elephants around a mountain lake in the Lushai Hills. Sanderson, the great elephant hunter, only saw the remains of one female elephant, and that one known to have died whilst calving, also of one drowned. He never came across the carcass of any elephant that had died of old age. He says that the Sholagas and Kurribas believe there is a place, unseen by human eye, to which elephants retire to end their days. Faunthorpe, Champion, and Sir William Gowers, have, I believe, come across dead elephants.

I think Mr. D. D. Lyell, the African hunter, has come to the right conclusion. He says: "When an aged or badly wounded elephant instinctively feels that his days are numbered, he will naturally go away alone, and the animal will certainly make for water in fairly flat country, for some rivers can only be reached by going down steep banks; therefore marshy low land will likely be chosen and the elephant will be bogged; and being too weak to struggle out, will eventually go under and disappear completely."

Sir William Gowers has expressed the same opinion. The remains of a dead elephant probably disappear through the agency of scavengers, fungi, etc., and in many cases the remains are hidden by rank and dense undergrowth.

With all this definite opinion I think one has to come to the conclusion that the so-called " elephant cemeteries " are a myth, and only believed in by wild tribes.

Whilst stationed in Manipur the Kukis told me that there was a mountain lake on the plateau of Kowbruh where elephants died. I visited this lake, and certainly there were elephant bones on its shores, but not numerous enough to warrant the conclusion that any number of elephants died here ; for there were vast herds in the forests at the base and on the plateau. This lake had never been visited by my men, for it was supposed to be haunted by devils and ghosts. I believe that a brother officer and I were the first Europeans to visit it.

CHAPTER VI

SOME ENCOUNTERS WITH LEOPARD

I CALL this animal either leopard or panther, as it is a moot point as to whether they are the same animal or a distinct species, the difference dependent possibly upon the preponderance of rosettes, size, and build. Those who adhere to the theory that they are distinct, say that the leopard is a smaller animal, has a longer tail, spots preponderate rather than rosettes, build slender and head rather small, long, and narrow.

On the other hand, the panther is heavily built, being somewhat stocky ; rosettes preponderate ; tail short and thick ; head massive and round, with very well-developed masseter muscles. The colour is a dark red compared with the lightish yellow colour of the leopard. In any case, having encountered a large number of these animals, I have come to the conclusion that the leopard and the panther are the same animal, only modified by environment and the amount of food available. For, as in the same way as there are slender and stocky cats so would it seem to be with the leopard.

The panther so-called is generally got in the hills and where there is forest. The leopard usually in the plains, or found hanging round villages, to pick up any dogs, goats, cats or fowls they are able to get hold of.

The leopard when compared with a tiger is a nasty, low, cunning beast, and one that can conceal itself in a bush

where a fox would with difficulty hide itself. Sometimes when pressed for food, they get very bold, and I know of one case of a padre's dog, sitting at his master's feet, carried away by a leopard, which entered at one door of his sitting-room and out of the other. Dogs following their masters or mistresses have been taken away at dusk. When I was at Tezpur a near-by planter heard a tremendous cackling in his fowl-house at night. He proceeded to investigate with the aid of a hurricane lantern, and the leopard sprang right over his head and disappeared. On another occasion an assistant of Partabgarh tea estate heard the chain of his dog rattling at night. The bungalow had a double storey, and as his lantern flashed on the wooden stair a panther passed him, rushed upstairs and took refuge in a bathroom. The door was promptly slammed to and the assistant went to wake up the manager. They together broke the ekra wall but could see nothing, so decided to wait until dawn. Just as morning broke they heard a terrific crash, and, on investigation, they found that the panther had jumped right through a glass window several feet from the ground. The wretched dog was cowed and shivering in a corner, but it hardly had a scratch on it. The panther had landed on a duranta hedge below, and they found some of his fur sticking to it.

Just before I left Haflong a small panther got into the magistrate's fowl-house, laid out about twenty fowls, and was ignominiously killed by the sweeper with a club.

The native often mistakes a civet cat for a leopard, but the magistrate's fowl-house raider was a young leopard, for I saw it distinctly.

Once, in Nowgong, the officers of our regiment were dining with a planter. Sometime after dinner the servants

came rushing in to say that there was a " bag " in the cook-house. I got hold of a rifle, climbed the ladder and flashed a hurricane-lantern inside, but was disappointed to see that it was only a ring-tailed civet.

The small Indian leopard feeds mostly on fowls, dogs, cats, and porcupines. The larger go for game, and I have seen good-sized cattle pulled down by them. The panther always goes for the throat of his victim, so severing the jugular vein. He drinks the blood, and usually leaves the carcass for a return visit. When attacking man he generally jumps on his shoulders, which accounts for natives I have seen with mauled scalps. At Tezpur, the bungalow of the superintendent of police was quite close to ours, both on low hills with a jungly ravine between. One evening, just as the superintendent was reaching his bungalow after a visit to the club, he heard his little dog squealing but not in sight. Next day he set some of his police to look for the dog's remains. The head only was found, so he organised a " beat," and my wife was an onlooker from our garden. This beat had been proceeding for a little while when, all of a sudden, the panther sprang on a policeman's back and they both rolled down the hill together. The man was badly mauled but ultimately recovered.

Panthers have a great liking for fowls, for when in Manipur the fowls all round us disappeared mysteriously. So we arranged a search, and ultimately came on a panther's lair in a deep nullah, and in it there must have been about sixty fowls' bodies in various stages of decomposition, some recently killed. A regular storehouse.

Many shikaris have had to have their arms amputated through blood-poisoning as the result of panther wounds. That fine shikari and naturalist, Mr. E. C. S. Baker, of the

Indian police, unfortunately lost an arm in this way. The slightest scratch from this animal is apt to produce septic poisoning, and treatment, to be effectual, must be applied at once in the form of an application of strong tincture of iodine, and injected all round the wound. When one comes to examine the projected claws of a panther and discovers the horrible smelly stuff collected at their bases, often of a green colour, one can realise the millions of dangerous germs collected there.

The panther, unlike the tiger, never claws at trees. This action is almost the daily toilet of a tiger, the consequence being that the latter's claws are always clean and have no accumulation. The panther cleans his claws by scraping backwards in the ground like a dog, after micturating, and an observant eye will often see these marks along jungle-paths. The panther behaves at this operation very much like a cat. I have seen a panther scrape a hole in the ground for the purposes of nature, and then cover it up with earth. The tiger never does this. The particular panther in question, after the operation, raced round and round the spot, presumably thanking God that he was clean inside and out !

The panther, like the tiger, removes the "kill" to a densely-wooded ravine, or to dense bushes, so that vultures will not devour it. But once I saw the remains of a calf concealed in the fork of a tree, and at some distance from the ground.

The panther generally begins eating the "kill" from the rump-end. The tiger begins at the belly, far back between the legs, and if a cow the region of the udder is first attacked. The panther will go on eating the "kill" when it is far advanced in decomposition. The tiger, on the other hand, is rather particular, and if there is plenty of

game or cattle, prefers to kill again to obtain fresh meat. It is curious that a panther will sometimes stick to a tiger to save himself the trouble of killing. He is thus sure of a meal without exertion. Such a case came to my notice in the North Cachar Hills. The tiger was a very large one, and wherever that tiger went the leopard followed.

Panthers will sometimes, like a jaguar, lie on a thick branch of a tree and spring on game passing below, and this is the usual method of the "Bandar Bag," or clouded leopard, and I can quite imagine that a clouded leopard is capable of catching monkeys as they spring from tree to tree. The clouded leopard is essentially an arboreal animal, even going so far as to bring forth its young in the hollow of a tree.

The panther is widely distributed throughout India, Burma, and Ceylon, and I am inclined to believe that the snow leopard is really the ordinary leopard which has undergone changes on account of environment through the ages.

The black panther is well known. It is not a distinct variety but a case of melanism. If the skin is held in a certain light the rosettes and spots are to be seen; but during all my years of shikar I have never seen a black panther. They are rare, but occur in the Pegu district in Burma. My brother bagged two with No. 4 shot when after jungle-fowl. When I was in Sylhet the S.D.O. of Habiganj shot one that took refuge in a villager's hut. He did this by climbing up on to the roof and removing some thatch. Truly luck, and shikar made easy!

I believe that black panthers and albino tigers would be more common were it not for the fact that in the animal world Nature abhors monstrosities, or anything

deformed or out of the usual. These black and white cubs are purposely killed, and perhaps eaten, by the mother. The black leopard has lovely yellow eyes, and when roused looks the perfection of ferocity. He is practically untamable and hardly ever takes to his keeper in captivity.

The skin of one is indeed a trophy to be proud of, and the animal is beautifully camouflaged. It is very difficult to spot a panther in the jungle unless he is on the move.

Ideal panther-ground were the rocky hills on the right bank of the Brahmaputra, in Tezpur. During the heavy floods over the low country on the opposite bank they used to swim over and take refuge on our side. These Tezpur hills are the resort of numerous panther, and one large cave among them was also occupied by fakirs. I liked these chaps and used to talk with them. They had travelled much, and often gave me valuable information about the haunts of big game, so when I had tied up goats and sat up over them again and again without avail I asked one of them the reason of my non-success. He replied, "Your Honour will not get any unless I do puga and utter certain mantras." I asked, "What puga?" ; and he replied, "Only the matter of sacrificing a goat." I gave him 3 rupees, and as a result got five panther out of these hills. It is probably stupid to believe in occult power but there are the facts.

B., whose bungalow was not very far from mine, trapped a number of leopards ; but I hated this trapping, and when asked to shoot a beast in a trap by natives I always refused. An engine-driver in the A.B. Railway did quite a lot of business by placing traps at the various stations along the line. I often felt inclined to set fire to them.

A leopard is a fool as far as a trap is concerned and will go "bald-headed" into it; not so the tiger. In Sylhet the villagers used to trap leopards, which they brought into the station for a tamasha, the trap being provided with wheels. A huge net, about 20 feet high and with a slope inwards, was then erected and the leopard let loose. In the centre some jungle stuff was placed.

I only went once to see this, and took my hunting pack consisting of five dogs, who were crosses between Irish, Airedale, and fox terriers. They were without fear, having pulled pig and fishing-cats. I was curious, however, to see how they would behave in the presence of a leopard, of which dogs generally have an unwholesome dread. I put them all in under the net and they went straight for the leopard. There was a terrific rumpus and the panther slunk into the patch of jungle. Unfortunately his tail showed, and my dogs, after investigating, seized this. Then there *was* a tamasha. The panther bounding about like an india-rubber ball and the dogs dashing in and turning to avoid him. After a while they had had enough, and came to the net, with their tongues lolling out, asking to be let out. Strange to say, not one of them was touched. A platform is erected at one end, and whoever pays the largest sum can shoot the leopard and have the skin. It is generally done by a sporting zamindar. The Sylhettis are experts at trapping tiger with nets.

I have never driven panthers with beaters. It is dangerous in the Assam jungles, where the undergrowth is very thick, although it may be less so in the Central Provinces or Punjab; but it is not fair to the beaters because one or two are certain to be mauled. All my

panthers have been shot from a machan over a "kill," or by tying up a goat.

The machan must be placed higher than that for a tiger from the fact that the panther can make a long, upward spring. When wounded, a panther will sometimes climb a tree after a hunter.

One such case happened in Sylhet. I saw the man after the occurrence, and his scalp was torn and hanging down over his ear ; he was also bitten and clawed on the shoulder. I applied iodine, injected, stitched him up, and he recovered. It is well to take a heavy revolver and a hunting-knife with you in a machan. At close quarters a rifle is useless. I always took a revolver with me, whether sitting up for tiger or panther. The goat must be tied with strong rope and a knot that does not slip and strangle it. The peg must be long and hammered well into the ground, or else at the critical moment, as once happened to me, the goat may bolt with the up-rooted peg. The goat generally begins to bleat vigorously, which is all the better for attracting "spots."

I had a celebrated nanny-goat whilst at Tezpur, and with her help I must have shot about a dozen panther. She never made a noise, but invariably looked up towards my machan and then went on grazing. As soon as she smelt panther she stopped grazing, or rose up if sitting, and with ears projected in the enemy's direction awaited events. She also stamped with her forefeet ; all of which was valuable information. I gave her to the jail when I left Tezpur, and afterwards I heard that she had presented it with three kids at one birth. She was never harmed, but once had a narrow escape. Somehow, when sitting up, my vigilance relaxed, and looking in her direc-

tion I spotted a panther not 10 yards away and crouching for a spring. He was bowled over, luckily, just in time.

Often the panther will come up behind one's machan, though one generally hears the crackling of the leaves, and for this reason it is well not to tie your goat too close to the perch. I have shot panther over "kills" at all hours of the day; but, in the majority of cases, the animal approaches just before the sun is setting.

I saw a magnificent sight once when sitting up over a "kill" in broad daylight. The "kill" had been left on an open piece of ground. There was also a large flat rock close by. I was sitting in the fork of a tree overlooking the "kill," and on the opposite side of this, when all of a sudden a large panther sprang on to the rock, lashed his tail, purred, and looked down. He sprang off again and came to the "kill." I then bowled him over, but had to give up tracking owing to the darkness. At night there was heavy rain which washed out all traces of spoor and blood; so I lost him.

Most panthers, if not fired at first, will come straight up to a "kill"; but in other cases the shikari will only see the head peering over the grass some distance away.

I have often noticed, when sitting up for panther and tiger on a fairly moonlight night, that the animal waits until a cloud obscures the moon. One then only hears the sound of torn flesh, the grinding of the bones, or a peculiar, hollow sound as the killer drags out the intestines, liver, etc. It is best to wait, but in the case of the tiger the "kill" is often dragged away at the moment of obscurity. For dark nights, some sort of artificial light must be used to illuminate the "kill." The panther does not mind a light. Some have been shot with the aid of

a hurricane lamp placed on the ground or in a tree. A planter friend of mine used an arrangement which met with considerable success. This consisted of an ordinary tea-chest, one side open, painted green, placed on the ground and covered with grass or jungle stuff. Inside was placed a hurricane lantern with a bull's-eye in the chimney. He shot tiger with the help of this contrivance ; but for my own part I always used a powerful " Ever-ready " torch, fixed by a clip arrangement to the barrel of my rifle. Before putting such a torch on to the rifle it should be adjusted in order to give a clear circle of light. Of course this can be done in the machan ; but all sitters know how important it is to make no noise or movement likely to scare the quarry.

Make sure that it is a panther and not a jackal. Hold the rifle with barrels pointed upwards, turn on the light, and bring the rifle down as quickly as you can to the " kill." If it is a tiger or panther, and the animal is facing you, the first thing seen is the green reflection of the eyes, which shine like two glow-worms. This green reflection is due to the reflected rays from the tapetum which lines the choroid covering of the eye, and is characteristic of all carnivora and some night-birds. It gives the beast good nocturnal vision. The jackal and wild dog's eyes have a red reflection and the same is the case with deer. The civet cat's is green. On a rainy night the moisture dims the torch-glass and needs constant wiping. It is well also to see that the screw tightening the clip is really screwed home and the clip firm, otherwise one may find that in the moment of action the mechanism becomes detached and falls to the ground, as has happened to me.

Sitting up at night over a " kill " is most interesting,

and I have had some wonderful experiences. Long before a panther appears, several things may happen ; usually a mongoose or civet will first come up and ravenously snatch morsels of flesh. Then a jackal, eating also in the same manner and glancing in all directions with a frightened look. Once I saw a beautiful bird, of magpie appearance, with a red bill and legs, perch on the " kill " and feast himself. One's imagination also runs riot whilst sitting up, and even bushes take the forms of various animals.

Have your machan placed near the spot where the animal left the " kill." Be sure, too, that the machan is placed in a tree where there are no red ants, which can be generally spotted by the leaves being clumped together in masses ; these masses are their nests. There is also a long ant with a red head and wasp-like waist which gives a bad bite, but which can be seen running up and down the stems. Also take some anti-mosquito stuff—a mixture of citronella, carbolic acid, and eucalyptus oil. You will have a miserable time without it.

Let me also advise no one to sit up in a machan during a thunder-storm, for then your rifle is practically a lightning conductor. Once, when sitting up, a tree, not 15 yards away from me, was struck by lightning ; and after that, as soon as I saw sheet-lightning flickering on the horizon, and with lowering clouds about, I immediately called up my men.

It is generally supposed that a panther is usually preceded by a jackal, the so-called " pheal," but this is not always the case. It is also said that the jackal always makes his unearthly noise when a panther or tiger is about, and there can be no doubt about this ; but the noise is also made under other circumstances. Once I

heard a jackal "phealing" on a river-bank at the moon. I have also heard this call when a jungle fire is in progress. It is probably a cry of distress and corresponds with the baying of a dog.

Panthers sometimes can be very bold. Some years ago, at Tezpur, after a dinner-party, we were sitting at the end of a verandah in the moonlight. A few yards from this verandah were some stone steps leading to the garden. All of a sudden my wife exclaimed, "What is that looking at us from the step?" I looked, and at once saw that it was a panther's head, and rushed in for my rifle, but the animal had disappeared on my return. That night he killed a goat in the Dom village below our bungalow, and the next day I sat up over the remains and shot him in broad daylight.

Panthers vary in length. My largest were 8 feet $4\frac{1}{2}$ inches and 8 feet $7\frac{1}{2}$ inches, but I believe the record is held by the C.P., where one over 8 feet $8\frac{1}{2}$ inches was shot. It is also well known that panthers turn man-eaters, and when they do they are perfect terrors owing to their cunning and boldness.

There is, I believe, an instance of one which accounted for over 300 human beings before it was brought to book. I have been out twice after man-eating panthers; once in the Mangaldai sub-division, when I sat up over human remains. It was an eerie experience, for with tense nerves, and every sense alert—I thought once that I could see that corpse move—and the brute never turned up.

When a panther ages his colour becomes pale, fur scanty, body very thin, teeth worn and yellow; the masseter muscles of the jaw atrophy, and the claws split and become blunted.

The panther, like the tiger, usually drags the "kill" backwards, but if a goat or a small calf the victim is carried trailing at the side.

When at Haflong a panther entered the verandah of the Assistant Inspector of Police, who was lying ill with malaria at the time, and killed a calf. News was brought to me, and I went to investigate. The panther had carried the calf to a ridge about a quarter of a mile from the place of the "kill." From this ridge a steep precipice dropped down for 350 or 400 feet, and it was evidently the beast's intention to throw the carcass over the precipice into the thick jungle at the foot, where he could eat it at leisure. But he had miscalculated, for we saw the "kill" resting on a slab of rock below and about 15 feet down. The Magistrate and I decided to sit up, so we had two machans put up, and tossed for places. I won the better one, a tree growing almost at the edge of the precipice, inclined at an angle of 45 degrees, and the abyss below.

Just at sunset I sighted the panther coming along a narrow track on the side of the precipice and 50 yards away. I fired, the beast gave a growl, sprang into the air, and then disappeared below. The bumps his body gave as he made his last plunge were quite audible, as was the low, guttural sound emitted by a dying panther or tiger, and I knew that I had got him.

Next morning the Magistrate and I, with my shikaris and some police, went to investigate, and found the panther stone dead. His last drop must have been about 60 feet; but when opened up, and beyond the damage done by the bullet, I found every other bone intact. He was a fine beast, over 8 feet in length, and with a beautiful dark pelt.

On another occasion, in Haflong, North Cachar Hills, I sat up over a "kill," but the machan was badly placed in a seemul tree, and I sat with a thick branch between my legs, I eventually saw the panther's head appear to my extreme right. He came along, offering a good broad-side shot, but owing to my awkward position I could not turn and so get the rifle up to the right shoulder. Below me was perfectly clear ground and beyond that a nullah. The panther entered the latter, but, on emerging, drew back instantly. Then, on the hillside opposite, where the jungle had been fired and the green grass was cropping up, I saw a barking deer feeding quite quietly and not 30 yards from where the panther had come. The next instant I saw the panther spring on to the deer, and both rolled down into the jungle below. It was now nearly dark, so I could not investigate.

Another experience, also at Haflong, concerned a panther which had killed a large cow in a plantation, and had actually dragged it about 20 yards to a strong fence. The cow's horns had evidently become entangled in the fence, for I found the "kill" in this position, and concluded, from all I saw, that the killer must have been a very large and powerful animal. And I was right! At dusk he returned quite boldly, and from behind where I sat. After investigating the place in the fence where the horns had stuck, he then jumped over and settled down to his feast. At this stage I shot him dead and then summoned men with revolver shots; but they never came. So I had to spend the rest of the night in the machan, during which I don't know how many times my torch flashed on that lovely animal in my admiration of it.

The panther, if not dropped in his tracks, will generally spring into the air in a succession of leaps, accompanied by angry growls, and in doing so bends his body into a succession of C's. He will also sometimes bite at the wound, like a jackal. His vitality at times is wonderful. I once hit a panther with a soft-nose .450 H.V. bullet at 20 yards' range ; and the bushes close by were covered with blood, pieces of flesh and hair, but he vanished and I never got him. To follow up a wounded panther on foot is courting disaster. I have only done it once !

An officer of the B.I. lost his life in Manipur in such an attempt, and got his orderly badly mauled. I have found, too, that a native has more chance of recovering from panther wounds than a European, for among the former I have seen almost hopeless cases recover.

The Central India Horse used, at one time, to go after panther on horseback with a hog-spear. It must have been exciting sport ! The natives employ traps set with poisoned arrows, regular leopard-traps, and spring-guns. Poisoning is also used when they can get hold of strychnine. But these ways of getting the beast are only legitimate in the case of a man-eater.

Until my last camp in India, I never had the luck to shoot or see an adult clouded leopard. According to native information they were fairly common in the North Cachar Hills ; and they were certainly numerous in the Sylhet forests at the foot of the Tippera Hills, for the planters got several. In fact, one of them, bicycling along a forest path, came on two cubs. He picked up one and peddled back to his bungalow as hard as he could go. Their arboreal habits and excellent camouflage make them difficult to see. The young clouded leopard is just like a

civet cat in appearance. The beautiful black rings and rosettes of the adult animal are not then developed, but the disproportionate size of the paws and absence of smell will serve to distinguish them.

Once when at a zamindar's house, his sons told me that they possessed a young civet. I asked to look at it, and was able to tell them at once that it was a young clouded leopard. Moreover, I had hardly made the statement when the little brute sprang at the leg of one of the boys. The lad was saved by his puttees, and it was removed by throwing a thick rug over it. Though a small beast it showed all its species' signs of savagery.

The colour of the adult has a greyish background, and on this are black markings arranged in circles, rosettes, ovals, and other shapes. Somehow the markings remind one of those of the boa constrictor, only darker. The tail is very long and must be very useful as a rudder when jumping from tree to tree. The muzzle of the specimen I shot was pointed and rather narrow. But some I have seen had broad, big heads. Mine was 54 inches in length, with a splendid coat and beautiful markings, but, to my regret, it was ruined by a so-called taxidermist in Calcutta, the consequences being that a valuable trophy was lost.

A curious thing about this animal is the shape of the pads, and their extreme hardness. When we speak of a pad we usually think of something soft. The tiger, leopard, and lion have very soft pads to enable them to reduce sound whilst walking or stalking prey. The clouded leopard does not need this because he captures all his game in the trees, or by dropping on them from a branch. Climbing trees must also harden the pads. In

any case they feel like dried leather, and are wonderfully adapted to this animal's arboreal habits. The native name for it is "Bandar Bag" or "Monkey Tiger." I cannot say whether this name is given because it climbs and springs from tree to tree like a monkey, or because its food consists principally of monkeys. My hunters gave the latter explanation. One can imagine the terror, clamour, and damage made by a clouded leopard's sudden visit to a tree where a troop of monkeys are settled for the night. I imagine, however, that two or more males in a troop of Rhesus monkeys would keep off the beast. In some places I have seen Rhesus monkeys settled for the night in groups of three and four and on the ledges of a steep cliff. Perhaps they were afraid to take shelter in trees for fear of leopards and snakes.

The Cacharis told me that even a scratch from a clouded leopard was more dangerous than that of any other animal, and that the injured nearly always died. The clouded leopard brings forth in the hollow of a tree, but I do not know how many are produced at a birth, though I have been told that two cubs have been seen together. The smell of the clouded leopard is not unpleasant, and may be expressed as that of a squirrel; in fact, quite different from the definite stink of a panther.

My encounter with a clouded panther was rather exciting. It was my last camp on the Dehingi in the North Cachar Hills, and we had a guest from Calcutta staying with us. A few days previously we had come across the spoor of a large sambhur on the banks of the Longai River, and about four miles from the camp. So, one morning, before dawn broke, we started out for it, carrying a hurricane lantern. About a mile out the hunter,

who was carrying my rifle, forgot something he had not brought from camp, so went back, leaving the other trackers and myself to go on slowly. But we had not gone 100 yards when there was a rush in the jungle on our left. My trackers said that it was a deer, but the next instant a dark animal shot straight up the bare trunk of a tree about 10 yards off our path. I at once thought of a clouded panther. The beast climbed about 80 feet up and lodged itself in a fork of the tree. I had only my shotgun so I went to the foot of the tree, from where I saw the brute's head looking down at me. I fired the right barrel, and this was followed by much tossing about, after which the beast settled down again in the same fork. I then fired the left, which brought down the leopard, with a thud, almost on the top of me, when it disappeared.

Owing to the uncertain light I was not keen on following it up, so we got on to the path and marked the spot in the sand with a circle and cross, intending to investigate on our return. We then had a tremendous tramp after the sambhur, encountering a huge makna elephant *en route*, and which is referred to elsewhere. On our homeward journey we failed to find our mark and returned to camp disappointed. I gave my wife and friend all details of the encounter, and found that they had been for a walk along the identical path that morning. My wife, who has a wonderfully observant eye and bump of locality, then said, "I can tell you where that mark is." So, to prove this, all three of us, with my two trackers, went off at once. We found the mark and, on getting to the spot, saw the animal lying flat, with his head away from me, about 20 yards away from the foot of the tree. It looked

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almost done, and, as I did not wish to spoil the skin with another shot, took my wife's heavy walking-stick and despatched it with a knock on the head. It was a beautiful beast, and I found that my first shot had blinded both eyes, which was lucky for us. But there was a feeling of regret that the poor brute had survived for so long.

CHAPTER VII

THE BISON AND ITS SHIKAR

SOME account of the natural history, habits, habitat, and pursuit of this splendid animal may be useful. Fortunately I have had exceptional opportunities of shikaring the bison, and most of these have been gained in Assam, Mysore, and Burma, but all the largest, solitary bulls have been bagged in Assam.

Anyone who has never seen a bison before can have no idea of the enormous size of this animal. In fact, I know of some men who, when they came on their first bison, simply could not fire, being absolutely awe-stricken.

The bison may well be called "the Lord of the Forest." A tiger may pounce upon a straggling youngster, but will hesitate to attack a herd or an old, solitary bull.

Assam is the province *par excellence* for bison. About thirty years ago bison existed there in great herds. My wife and I once counted a herd of 120 head at Kopili. But, like every other species of game, their numbers have diminished through the ravages of rinderpest contracted from domestic buffaloes and cows.

During our last visit to Kopili, in 1926, we hardly saw a single track. The pity of it ; and all brought about by the foolishness of a weak magistrate who allowed people to settle in this game paradise, and who ultimately wiped out everything in the way of game.

The bison is known as *Bos gaurus*, Gurkhali, Gabee

Gai ; Manipuri, Lun[†] Sun—the same name as applied to the Tsine—Burmese, Peaung.

The Assamese and Nagas distinguish two kinds of bison. The ordinary one found in Mysore and the Central Provinces is called the Gabee Gai, and the other, and larger, is called the Methun or Methuna.

I hope to show, although many naturalists will disagree with me, that the methun and bison, although belonging to the same family, are distinct animals. The gayal, on the other hand, is a hybrid between the methun and the ordinary black cattle of the hill tribes, and has distinctive characteristics. The bison is found in Assam, Burma, Central Provinces, Mysore, Coorg, and Travancore. It is not found in Ceylon or in the North-Western Provinces.

In Assam I found them most numerous in the North Cachar Hills, and in the Darrang district where it adjoins the territories of Bhutan and North Lakhimpur. I came across a good number in the great Namba forest, and they were fairly common in the Upper Chindwin forests, between Kandot and Tammu. I also found numbers along the base of the Chin Hills in the Kubbo Kale Valley between Tammu and Kelawa.

In the reserved forests of the Mysore State, i.e. the Jagar Valley, bison were very numerous, especially in the vicinity of Hipla. It was here that in a fortnight my brother and I bagged five solitary bulls, the head of one being almost a record for these jungles. A military officer had been there before us, so we made up our minds to try and beat his largest head—and did. But we did work for our game. It meant a start from our camp every day before dawn, and the return never before 10 p.m.

The bison is a shy animal. He will never be found

close to the haunts of man. Also, bison will never be found fraternising with buffalo, but wild elephant and bison will be found not far from each other. Bison follow, especially in dry months, herds of elephants, as they feed on the leaves, bamboos, and branches of trees that have been pulled down and left in their wake.

They get so used to elephants that if one is shooting from an elephant it is possible to get almost alongside a bison before its suspicions are aroused that there are men on top. One day two young methun lay close to the feet of our elephant. I told the mahout to make the elephant sit down with a view to securing them, but sensing that something unusual was up they made off.

The bison is found in the plains as well as in mountainous and rocky country. I have seen bison tracks at an elevation of 8000 feet on the confines of Manipur. It is wonderful what steep declivities they will climb and descend. Their powerful shoulder-muscles aid them in this, and their hoofs are very hard. Some bison never descend into the plains, and with these animals the undersides of the hoofs will be found rough and irregular. These hill bison are enormous and carry the best heads. At these altitudes they are free from the attacks of the gadfly, are not disturbed much, and food is plentiful in the shape of stunted bamboo "ringall." The bison, owing to a peculiar secretion, does not mind the gadfly so much as other animals. At the height of the gadfly season, when other animals have fled to immerse themselves in water or hide in the giant cardamom, bison will be found in the open jungle. I will speak of this secretion later on.

Bison prefer hilly country, with grassy valleys intervening and clumps of thick forest interspersed. It is im-

possible to track them up on foot when the jungle is unburnt, but after the jungle fires they feed on the green grass that later sprouts, and bamboo shoots as well. Then the conditions for stalking are ideal.

From the top of a hill, with glasses, one can spot a herd, or solitary bull, and then stalk. Bison feed in the early morning, in the evening and, I believe, at night too. As soon as the sun rises they go off to lie up in some cool spot in the forest, generally in the wild cardamom. I have said that possibly they feed at night too, as they require an enormous amount of fodder, and the short evening and morning hours hardly give them time enough.

Bison cannot stand much heat, and yet I have never heard of a bison wallowing like the buffalo, and of the numerous specimens shot, not a single one had a vestige of wet or dry mud on him. They never immerse themselves in water. They must have water, and like all other animals resort periodically to salt-licks. They are very fond of the leaves of the wild acacia and the cardamom. They also eat the fallen fruit of the Ootunga or elephant apple, the fallen flowers of the Bombax, and a sour fruit like a large olive called "Katha." In hill animals I have found the paunch crammed with this fruit. I have also found it in the barking deer.

Where there are steep hills and valleys, as in the Jagar Valley, bison will descend into the valley to feed at night, leaving at the streak of dawn; ascend high up, and sit down in a spot where there is a good look-out against danger. Whilst feeding they walk very slowly, but when alarmed they go off with a snort at a terrific pace, their tails sticking straight out and heads low.

Bison emit two sounds. One is the ordinary "moo" or bellow of the bovines; the other is a whistling sound, generally given as an alarm. A wounded bison will bellow just like a bull and will gnash his teeth in his fury. In watching a herd feeding it will be noticed that there are always two or three cows on the alert. A solitary bull will almost invariably be found not far from a herd. He is kept away from his harem by the younger bulls and so gets morose, savage, and bad-tempered. Although bison and methun are found on the same ground, the animals keep to their particular herd. Bison produce one or two calves at birth, I fancy one a year; I do not know what the period of gestation is. These young bison or methun are pretty little fellows, covered with long, soft, close, curly hair like the young buffalo, and the legs are rather long and stocky. The colour is a dark brown. A herd is generally led by an old cow. The cows do not show that antipathy to young of other animals which is so noticeable in domesticated bovines. In this respect they resemble the elephant.

When in the North Cachar Hills a forest officer told me that in one day he counted seven bison dead from rinderpest. Bison are remarkably free from ticks. But often these will be found on the under-parts in the vicinity of the genital organs, where the animal cannot get his rough tongue to work to dislodge them. In these regions I have seen them clumped together like long purple grapes.

I have already mentioned that bison are very shy animals, but in Burma I have often picked up their tracks in the vicinity of an abandoned village, where I fancy they must have come to browse off young plantain-shoots. Both *Bos gaurus* and the methun are found in Assam

and Burma, but the methun is not found in Mysore, Coorg, or the Central Provinces.

The maximum height of the true bison is about 18 hands. The young bulls are a reddish-brown, and as age advances the colour becomes almost black. The hocks are white. There is a well-marked tuft at the end of the tail coloured blackish-brown. The under-parts are greyish-white, and the hair on the forehead ashy-grey. The hoofs are yellow and small in comparison with the size of the animal. The spoor is heart-shaped and like that of a large deer, the spoor of the bull being wider. There is no dewlap. The horns of a young bull are of a reddish-yellow colour with black points. As age advances the horns assume a greenish colour, the bases get gnarled and corrugated, and some of the superficial layers of horn have flaked off by constant rubbing against trees. In very old animals the tip of one horn or both get rubbed off, leaving the ends conical or irregular. The bison has no need to grow bosses of hair at the bases like the Cape buffalo, or to have the frontal carapace of the tsine. This is because the frontal bone is of enormous thickness and hardness, and sufficient to withstand the concussion of the blows when they fight. The chief characteristic is the very high shoulder, and from this the dorsal ridge gradually slopes down towards the hind-quarters. In some measurements the foreleg is drawn forward and not kept in a straight line with the highest point of the ridge, and so has given rise to exaggerated heights.

One sportsman in Chittagong is said to have bagged a 24-hand methun! After seeing the head I had my doubts. The forehead of the true bison is much narrower transversely than that of the methun, and the rising

frontal crest, so characteristic of the bison, is absent in the methun, with whom it is almost a straight line between the bases of the horns. The frontal bone in the true bison is concave, that of the methun almost flat. Then again, the curved or arched nasal bones, which give an old methun rather a ram-like look, does not exist in the true bison. This arching of the bones of the nose is seen in the American bison, the auroch, the musk-ox, and the yak.

Every one knows that all bison have descended from the auroch, whose remains have been found in prehistoric caves. The descendants as they exist to-day have been modified according to their environment and climatic conditions. The American bison and the Russian are the only ones that retain most of the characteristics of their progenitors, but they are, of course, pygmies when compared with them.

The yak has been provided with long hair, with a fluffy undercoat and bushy tail, to withstand the terrible cold under which he exists. His hoofs are large and splayed so as to act as a snow-shoe. Those of the species that have had to exist in the tropics have lost the woolly hair. Indeed, in some old methun bulls the upper part and sides of the body are entirely bereft of hair; and during the death-throes, when perspiration breaks out, the skin looks and shines like a "bhístie's" mussack, or water-carrier's leather bag.

The sladang of the Malayan Peninsula has also undergone modification, and after having gone into the subject thoroughly I have come to the conclusion that the sladang and methun are the same animal. It is curious that the fauna of Assam and its tribes resembles those of the

Malayan Peninsula and its adjacent islands. For instance, the cambustang, or red serow, which is found in Malaya and Sumatra, is found in Burma and Assam and nowhere else, excepting perhaps Darjeeling. The tapir or Malayan beast is only found in Lower Burma. The same holds good of the tsine. The methun's characteristics I have, more or less, described. He is much larger than the bison. The maximum height of the animals I have shot reached 22 hands. One can imagine what a huge beast he is when thinking of a 15-hand horse. The skin when pegged out will measure 17 feet from the nose to the tip of the tail, and the girth of the body round the chest 9 feet 6 inches. The hoofs are larger, broader, and more splayed than those of the bison. There is a distinct dewlap. The skin of the neck is 2 inches in thickness. It will take four good men to carry the complete head and neck ; and a photograph given shows that a man crouching behind a head is almost concealed.

The breadth of the methun forehead is enormous, and it is almost flat. The horns are very large and massive. The head of a grand old solitary bull is indeed a trophy to be proud of. The sweep of my largest head is 72 inches and the basal girth 24 inches. I have a head that measures no less than 26 inches at the bases of the horns. The horns assume a beautiful greenish tinge in old bulls and take on a splendid polish. The tips are black. I should say the methun is blacker than the bison.

With some of my animals the skin and hair on the under-part of the belly, and inside the thighs, were of a saffron-yellow colour. I have seen the same coloration in sambhur. This is due to a peculiar secretion. It comes from special glands in the skin, and these give out the strong, charac-

teristic, bovine scent. After death some of this secretion will be found to have crystallised, and looking like particles of resin. I believe that this secretion in the bison has some property helpful in warding off the attack of gadflies, as well as for other uses.

So strong is the scent that I have often been aware of a herd, or a solitary bull, long before I have seen them, when the wind was favourable. No doubt, too, it serves the animals as a guide in following the others up when isolated, as they rely more on scent than actual sight of the tracks.

The profuse perspiration that breaks out on a dying bison is peculiar to it. I have never seen it in any other animal. I think it is murder to shoot a herd bull, as the horns are generally small and no trophy. What the hunter aims for is a solitary bull. The indications of the whereabouts of a solitary bull are (1) observing bushes gored and trampled down ; (2) the ground torn up and even small trees uprooted ; damage wrought in his fits of must and temper ; (3) large spoor.

The spoor of the methun is much like that of the buffalo, and not heart-shaped as in the bison. I have already spoken of the broken and blunted horn-ends of the solitary bull. He tries his very best to rub these away. Natives have told me that the reason for this is that a type of weevil gets into the cone and produces irritation and pain, and so the animal tries to get rid of it. In dried bison-heads every shikari is familiar with the holes that are produced by some weevil, but whether this is the same insect or not I cannot say.

Bison have particular trees against which they rub their horns, and in the forests I have come across trees

whose trunks have become quite smooth and worn in this process.

The ears of an old solitary bull will always be found to be slit and scarred from rubbing his head against thorny thickets. Of course the horns might get broken off in combat. To see a fight between two bulls must be a sight for the gods, but I do not think that anyone has had the luck to see one.

The forehead of an old bull methun is ashy-grey, contrasting deeply with his black body. The gayal (*Bos frontalis*) has been improperly called the methun. No doubt he is partly a methun, this animal having crossed with the black hill-cattle of the Nagas, Kukis, and Lushais.

The gayal is about the same size as the true bison, but I should say that the dorsal ridge is not so pronounced. Altogether, he is less massive than the methun. The legs are not so thick and the hoofs are smaller. The forehead is flat and wide, and has just a vestige of the frontal bony crest. The predominating colour is black with white hocks. But I have often seen piebald gayal either black and white, or red and white. The horns never attain the size of those of the bison and methun. They are rather short cones directed outwards and upwards; the tips never curve inwards. These gayal are domesticated by the hill tribes, Kukis, Nagas, Tankuls, Daphlas, and Akas, but they do not drink the milk, looking upon it as excretion similar to urine. They are kept to be sacrificed on "ghennas" or feast-days, and are bartered; if a buck Naga wishes to marry a girl he has to give so many gayal, pigs, etc., to the bride's father.

It is a hideous sight to see one of these animals sacrificed. The poor brute is enclosed in a strong bamboo

cage. The men and women, young and old, are generally filled up with "yu," a very strong liquor distilled from rice or millet and called "Job's tears." They then dance madly all round the cage, the men springing up in the air with ornamental spears and slapping their thighs and buttocks. Then the headman plunges a spear into the gayal's heart, the blood rushes out, is collected in calabashes, and cooked into stuff much like a black pudding. After this the flesh is eaten. The "yu" jar is made of cane smeared with clay and sun-baked. It stands in an open place. Into its interior is inserted a number of hollow bamboos, like our straws for cocktails, and anyone can go and have a "pull" at it.

Some of the hill tribes will eat anything. I have seen them eat white ants, the larvæ of huge scarab beetles dug out of a manure heap, grasshoppers, civet cats, and jackals, but they will not eat a vulture. The decomposition of the meat makes no difference; they even consume it when it has turned green. Eggs are not eaten fresh. In consequence of this they get a very nasty, spreading sore called the "Naga sore" which, after healing, produces extensive scarring and deformity. The Kukis and Nagas have told me that many years ago the wild methun were encouraged to approach the vicinity of villages by putting out salt, and that by so doing they crossed with the tame cattle.

These gayal wander all day long in the jungles with no herdsman, but return to the village at nightfall. I fancy many of them get the call of the wild and disappear, but I have never come across one. I know, however, of a village in the North Cachar Hills where a herd of buffalo, originally tame, had become semi-wild, and that, although

they never entered the village during the night, they used to sleep on a plateau about 400 yards away. The Magistrate and his wife, whilst on tour, were charged by the herd, and had to flee. The edict then went forth that the herd was to be exterminated, and it was driven up to a place where men armed with spears were concealed in trees. The result was that most of the herd were killed, and the rest left the place.

Much has been said of the ferocity of the bison, but I think this has been exaggerated. The bison is not nearly so ferocious as the buffalo, either when wounded or unwounded. He fears man and will generally get out of his way. Of course there have been instances of hunters having been gored to death or trampled on. Of the numerous bison I have killed only three charged at the shot. I also know of a man who had four ribs smashed by a bison. Another, an officer of the Seaforth Highlanders, was severely gored by one in Assam. But the most extraordinary experience was that of B., the Forest Officer of Kandat in the Upper Chandwin. When shooting he always took his bull terrier with him. One day he was following up a bison and came on the animal. He fired, the bull charged and got home, knocking B. down and smashing the stock of his rifle. The bull terrier seized the bull by the muzzle, enabling B. to take safety up a tree. The bull terrier let go and trotted back to camp. His men then knew that something had happened, so led by the dog, they found B. up his tree and the bison standing below. The bison, on seeing the men, moved off, and B. descended, none the worse for his nasty experience.

B. was one of the finest shikaris I have ever met. All his shooting was done on foot, and he never wore boots.

The consequence was that the skin on the soles of his feet was as thick and insensitive as a native's, and he could traverse silently any kind of ground. He used to disappear into the jungle for days, accompanied by two men and his bull terrier. He never took a tent, and followed up tsine and bison for days. Poor B., he eventually succumbed to a severe go of dysentery ; I am afraid the outcome of his habit of roughing it. All the fine trophies in his bungalow at Kandat were later destroyed by fire. He and I were going to have a great shoot all around Homalin, high up in the Chandwin, but, owing to his death, this trip never came off.

The bison, when charging, holds his head very low ; the tail is held almost straight out, and, I believe, he shuts his eyes. Before he charges he snorts. The rate at which a charging bison can travel is terrific. I have seen bison leap across a 16-foot nullah apparently without any great effort. If a bison does get home the hunter will either be tossed or trampled on. If the bison does get you down he will either go off or return to the charge. Fortunately, if one is prone on the ground no damage can be done by the tips of the horns, owing to their inward curvature ; but the beast can inflict severe injuries by stamping with his sharp and heavy hoofs and so reducing his victim to pulp. Then, in some cases, when he has tasted the salty blood, he will lick the flesh off the bones. I have never seen an instance of this, but the Kukis have told me that the methun does it.

The Burmans, the Tsine, and Tibetans greatly dread hunting the wild yak on account of this habit. They conceal themselves in pits up to which the animals are driven. In the Naga Hills, Assam, and Mysore, bison are

trapped in large pits concealed by leaves and branches of trees. These are made wedge-shaped and in consequence the animal becomes stuck fast in its struggles. In the Naga Hills I have seen huge circles of these pits, which were very dangerous. One of our sepoy fell into one, and so they were made illegal by the D.O. The entrapped animals are speared.

For sambhur, pig, and barking deer the pit is circular, and at the bottom a spike of a very hard wood called "nahar" is placed to impale the animal.

One day, whilst stalking buffalo, we came on an open pitfall. There was a great rustling going on in the dead leaves at the bottom. What the animal was we did not know, so one of my trackers volunteered to descend. We had no rope, so we put a cane ring round his body, tied to this several lengths of knotted cane and lowered him. He called out that it was a "Goe Samp" or iguana. We hauled him up, and out he came holding a five-foot iguana by the neck. This supplied a savoury meal that evening, the flesh being similar to that of chicken. That same evening we came on a porcupine's burrow. It was underground, had sticks and leaves placed over it, like a dome, and there were both entrance and exit holes. My men said that they would first see whether there was anything inside, so took a long piece of cane and thrust it in, when a lot of mosquitoes flew out. This was a certain sign of occupation. One man then stood ready with his "dah" and another lit a fire and blew smoke down. The mother got off scot free, but four young ones came out one after the other and were killed. There was much feasting that night, and my men went to sleep with a bellyful.

I have only known one instance of a bison charging a planter without provocation. This incident happened in the Sylhet district. G. was riding along a forest road to his garden. He suddenly heard a snort, and, looking behind, saw that a bison was after him. He put spurs to his nag and galloped for all he was worth. About two miles from his bungalow there was a bamboo bridge supported on wooden trestles. G. galloped over this with the bison gaining ground. As he reached the other side he heard a crash, and, looking round, saw that the bison had disappeared. On reaching his bungalow he sent coolies to investigate. They found the bridge smashed and the bison lying in the wreckage, in which it had become entangled and injured. G. then came along and bagged his solitary bull. Bison hunting under exceptional circumstances.

Bison droppings are enormous masses and afford valuable information as to how far the animal is from the hunter. They look just like an enormous soup-plate turned upside down. In my younger days I was amused to see how my tracker put his big toe into a mass to test its temperature—a warm one indicating that the animal was not far off. Anyway it was a cleaner and more convenient way than testing it with his finger. The white hunter cannot do this, as he is shod. I have noticed that the droppings of a buffalo, although quite as large, are flatter.

At the spots of deposit one will see hundreds of black scarab beetles converting the stuff into balls and rolling them along with their hind legs to convey to their burrows for feeding the larvæ. They have mighty fights over the balls, and it is very amusing to watch them. They steal

them from one another and roll over and over in the struggle for possession.

Tracking up an old, solitary bull may be an easy matter, or may be a long chase. I remember once that an old bull led me a dance for two days, and that I got him on the morning of the third. I had only two men with me, carrying my kit and simple provisions, composed of Morton's Rations. One tin served for breakfast and dinner. The contents were warmed up by making a hole in the tin and warming this over a fire. At night we made shelters of bamboo and grass, and I had two black coolie blankets. For bison tracking one has to be in the pink of condition. It means tramping over rough, jungly country, sometimes uphill and downhill from the streak of dawn until nightfall; so let no one think that it is an easy matter. Of course, shooting from an elephant is an easy matter, and one can get quite close up as the bison never looks up, as do most animals.

My first introduction to the hunting of this animal was a very fortunate and happy one. I had heard that the Jagar Valley, in Mysore, was a good place. I therefore got three months' leave from my C.O., proceeded to Bangalore, and called on the private secretary to the late Maharajah. He was very nice and gave permission and a "parwana" to shoot in the Hipla reserves. In consequence I asked my young brother to accompany me, and also D., as he knew the ropes and would be useful. We had to take everything with us, and, as the water was reputed to be bad, soda water was a heavy item. We trained to Kadur, then by tonga to Chickmagalur.

From here all our stores had to be carted about twenty-eight miles to Hipla, and here we made our headquarters

in the Forest Bungalow. This shoot was in April, and therefore extremely hot. Every morning my brother and I would toss up for choice of direction, and never meeting again until the evening. D. always said that he would accompany us, but we found that he preferred his bed, and in consequence our rations disappeared much quicker than we had calculated for.

The Jagar Valley was considered very malarious, and was called "the white man's grave." But it was lovely country, covered with huge forest trees and clumps of small and giant bamboos, whilst here and there showed large open spaces of bush and grass. Villages were scarce, and were surrounded with coffee plantations and areca palm. The natives drank coffee, and whenever I asked them for a drink I was given a steaming bowl, with milk, which was very refreshing.

Along either side of the valley ran the Baba Booden range of hills. The undergrowth on these hills was nilu, the seeds of which make the jungle-fowl very drunk. On the slopes and near the summits the dwarf screw-pine grew in abundance. The place was an ideal one for shikar. In the forest, and under the bamboo clumps, there was practically no undergrowth, so that one could see clearly a long distance. The place swarmed with game, spur-and jungle-fowl, sambhur, large herds of chital or spotted deer, and bison tracks all over the place. These hills on either side rose to an altitude of about 2000 feet, most of them culminating in grassy plateaux.

One day, when tracking up a bull in the higher ranges, I saw no less than eleven sambhur stags walking in single file and descending a hill ; but an arrangement had been made not to fire at anything except bison. The sambhur

had apparently been fighting, and were now descending to rest in the forest below. Very near this place I saw a spot where, apparently, a tiger had pulled down a sambhur. The undergrowth was flattened out and here and there were tufts of sambhur hair and blood.

I got my first three bulls without any difficulty and, although these were fair heads, I was not satisfied, but I had luck. This part of Mysore is inhabited by a semi-wild tribe of people called Gaudas. They are aborigines, scantily clad and very dirty. They prefer decomposing meat, but are excellent fellows and, like the Bhils, good trackers.

One evening, while sitting over the camp-fire, I said to my tracker that there must be bison with bigger heads than those I had secured in the valley, "and if I get a good one I will give you 50 rupees." I could see then that he was cogitating. Next day he said to me: "There is the Rajah of the bison in the valley, but if I help you to kill him the villagers will outcaste me, as the Rajah is worshipped; I dare not tell you." I replied: "Think what 50 rupees will mean to you; it will keep you and your family for three or four years in grain." He hesitated, and at last said: "Very well, I will lead you to him tomorrow. But remember he is a god, very savage, and he either kills you or you him, so be careful!"

From where we stood he pointed to a high mountain about three miles away, with a plateau at the top. "There," he said, "the Rajah rests during the day; he can see the whole world from that place. He comes down to the forests at night to feed and as dawn breaks he goes up to his 'killa' (fort) to rest." I returned to camp very much elated with this news, told Bill, my brother,

that I was going after him next day, and hoped he would not mind not tossing up for direction. He said: "All right, old chap, and the best of luck!"

Next day, at the streak of dawn, my Gauda tracker and I started on the great adventure. The mountain was about seven miles away from our camp. It was hard work finding our way through the jungle in the half-light, but the morn was fresh and bracing. On reaching the base of the mountain we picked up the fresh tracks of the bull. The track then led up the slope of the mountain. The undergrowth was nilu, and here and there a screw-pine stood out. The gradient was very steep and the soil composed of loose shale, so that one kept slipping backwards at almost every step. When we had reached to within 500 feet of the top my tracker said: "Rest, sahib, you have a dangerous job before you." He also said that he would go ahead, and when he drew back I was to go forward. All my senses were now strained to the highest pitch, but we proceeded very quietly. As we neared the top the tracker jumped back and I sprang forward, to see, not five yards away from me, the great bull sitting in an open space, his head raised, chest exposed, and staring wildly at me. I immediately fired at his chest, and gave a jump to the left. It was lucky I did, for he charged and rooted up a large rock almost on the very spot from which the shot was taken. The shot itself had apparently broken his spine, for he rolled over with his legs kicking in the air, bellowing in his rage at being unable to get at me. At a distance of three yards I fired my second shot and killed him. He was a grand beast, with a magnificent head.

I was very pleased, patted my tracker on the back, and

told him he would get his reward. I found that the horns were indented by reason of the rock and the force of his charge. The place where this mighty bull lay up was a veritable fortress. It was surrounded on all sides by rocks except at the entrance, and it was evident that he sat down facing this on the look-out for danger. I thought afterwards what a narrow squeak I had had, for that jump to the side had saved me.

When we went back to camp there was great rejoicing, and on the next day every one, including my servants, started off to bring in the head. What a job we had. The hacking and cutting turned the edges of all our knives, dahs, kukris, and hatchets. The skin on the neck was two inches thick. The head and neck were tied on to bamboo poles, and it took four good men to carry them. The skin I gave to the tracker, and the Gaudahs ate the flesh of their god.

About four days before we left camp, I wounded a bull which I came across in a grassy forest-clearing. We tracked him till nightfall and then gave up. Next morning my tracker did not turn up as usual, so I sent to his village to find out the reason. The messenger returned saying that the tracker had not gone back home the evening before. We then set out to look for him, and eventually heard a shout, and from a clump of giant bamboo he emerged, looking very scared. He told us that as he was going along he was chased by an elephant and had taken refuge in this clump. The elephant, after wandering round the clump, left, but he was afraid to come out.

The man recovered, Bill and I proceeded to look up the rogue. We found the place where he had sat down for the night, and he was apparently a large tusker, as in the

ground we saw the impression of these ; we also noted that in the rear of the spoor was the impression of a chain. The man then told us that he had escaped from captivity, and that a piece of chain was still on his hind leg. That very evening, some villagers came in and reported that the rogue had killed a woman when on her way to a well, and that he had literally torn her to pieces.

I wrote off at once to the magistrate at Chickmagalur for permission to shoot him, but unfortunately the magistrate's reply only arrived the day we were leaving, and so I lost a fine trophy. I heard that, after we left, this rogue killed some more people, but women only. The brute's method was to trample on the body, and then tear the legs and arms away. I think he was ultimately killed by a police officer.

The day before we left, news was brought in that my bison had been found, so we proceeded to the spot. By this time the carcass was very much decomposed, and simply crawling with larvæ of blow-flies, but, nothing daunted, each Gauda took off his only cloth, bundled the meat into it and tied it up. I noticed that the fat, now green, was a great tit-bit, as it was carefully wrapped up separately in broad, green leaves. So the procession, with their stinking loads placed on the head, marched back to camp at the Forest Bungalow.

We arrived very late so that many of the men could not return to their villages. There was, however, an empty godown available and possessing one door, so I told them they might sleep in there.

On the way back to camp, after cutting up the bison, I saw a red animal standing near a bamboo clump, about forty yards away. This I thought was a barking deer, so

fired and knocked it over. It made a noise like a stricken "Pi" dog, and then I knew that it was a wild dog. At this noise several more appeared, but soon made off. The wounded animal feigned death when we went up to it, so my men killed it and took it away to eat.

Next morning, when I went to rout out the men, I found the door shut, and on pushing it open the smell that greeted my nostrils nearly knocked me down. It seemed impossible that those sixteen or twenty men, with the same number of stinking parcels and a wild dog, could have occupied that small room for the whole of a hot night.

I would have remained longer in this lovely valley had we not been warned that heavy rain was expected and that our carts would probably not be able to get to Chickmagalur on account of landslips. We therefore made arrangements to move, and with the intention of making a night march, sent our carts on ahead. As we had nothing better to do we strolled out close to the Forest Bungalow and bagged a fine cheetul. We disembowelled it, and carried it slung on to a bamboo into camp, the penalty being that the muscles of our shoulders were stiff for days after.

On the way to Chick heavy rain fell, and about ten miles out we found our carts held up by a landslide. B. and I then decided to push on, and I told my men to get workmen to repair the road in the morning. Bill went on ahead, and when I caught him up he was standing on a bridge fast asleep from fatigue. We reached Chick rest-house in the early hours of the morning drenched to the skin and very hungry. We rooted out the khansammah who said that he had only marmalade, condensed milk and no tea, so we appeased our hunger on this mixture, clothed in red blankets and awaiting the arrival of our carts, which

did not arrive till 9 p.m. Next day, we proceeded to Kadur and trained to Bangalore.

Our bison heads were wrapped in straw and put into the luggage wagon. The smell of these heads permeated every station we stopped at, and people on the platforms went about holding their noses or putting up their handkerchiefs. However, we were very proud of our heads. D. got a bad go of fever after arriving but B. and I escaped. I think we must have sweated the malarial poison out during our treks after bison under burning skies and a brazen sun. So ended a very fine trip.

From military service I was transferred to Sylhet in Assam. Bison were only found here in the high ranges rising from the right bank of the Rowai River. But on one of my fishing trips I was determined to have to go at them, so one day, very early in the morning, Bhagat, my tracker, two spare men and myself set out. We were to come out on the Rowai River high up, so orders were given that a boat be sent up to a certain spot to bring us down to the camp. After a very stiff climb of about three hours we came on a plateau, and picked up the fresh tracks of bison. We followed up for hours, and at last heard the crashing of bamboos on a steep slope. It now began to rain hard.

At last I saw a bull with a good head put his muzzle up to get some leaves, and at the same time saw Bhagat, who was above me, beckoning. I forgot to put my rifle back to half-cock. In getting up I slipped and off it went. Of course, the whole herd stampeded, and I was left cursing my bad luck.

The sun was now setting, it was pouring torrents, the lightning lit up the skies and thunder rolled and echoed in the hills. We were miles from the Rowai, and there were no

paths. I was also drenched to the skin although I had a waterproof cape. Fortunately, the men had brought along a supply of torches, consisting of a rag soaked in kerosene stuck into a hollow green bamboo.

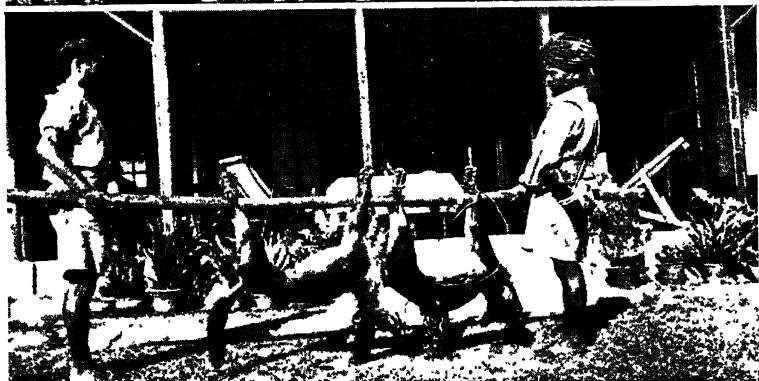
On the way down I witnessed an extraordinary sight, and it was well that it did occur because it assisted us to find our way over very difficult ground. The whole ground, twigs, leaves, and everything were lit up with a phosphorescent light. Whether this phosphorescence was due to the slime of snails, slugs, and earthworms or to some form of bacteria, I cannot say.

But our dismay was great on reaching the Rowai River to find that there was no boat. The men had come, but were afraid of wild animals. Here we were then, stranded, wet to the skin, teeth chattering, and very hungry. No fire could be lit as there was nothing dry. I then told the two extra men with me that I would give them 20 rupees if they went to a village about two miles higher up the river and secured a boat. So we waited and waited until, at last, to our relief we heard the splash of oars. This was about 4 a.m., and I had been on the go for twenty-four hours.

How those two men got to the village I do not know. They had to swim the river several times, wade through rapids, besides running the risk of wild animals. We were not long in reaching camp, and I walked up to it in only my boots and waterproof cape, thoroughly exhausted. However, bed, hot bottles, a hot bath, brandy, and hot food soon revived me, and I slept like a log, with no bad after-effects. There was a fine salt-lick on the banks of this river frequented by bison and elephant, but although I went after bison here I never got one. On two trips to the Chindwin I obtained two good heads. When tracking up

the first bull my career of shikar was nearly ended by the charge of an elephant. The other bull I got under peculiar circumstances. I had had a long, terribly hot, unsuccessful day after tsine in May. We were returning to camp rather despondent. As we were talking, my tracker Toinem pointed to a small hillock on my right. I looked up and, to my astonishment, there moved a solitary bull, feeding and quietly descending as though apparently not minding us at all. As he was head on I could only fire at his forehead. As I fired there was a snort, a rush, and the brute charged down. I jumped, as usual, to the side, and as he dashed past I gave him the second barrel. He plunged on into the jungle, there was a crash, a gurgle, and I knew I had got him. I believe that in this case the smoke of the black powder and the jump to the side saved me, as he charged the smoke. On examining him I found that my first bullet had penetrated the base of the right horn low down, but had failed to reach the brain. My second shot had shattered the heart, but still he had gone thirty yards before succumbing, which shows the enormous vitality of these animals.

From Sylhet I got my chance to visit that grand place, Kopili. My wife and I first went up to Shillong and then marched, via Jowai, through the beautiful Cossyah Hills to Kopili, where we got permission to use the forest bungalow. It was a lovely spot, and at this visit simply swarmed with all kinds of game, especially bison. The jungles had fortunately been fired some time prior to our visit, and the green grass had sprouted up everywhere. There were patches of thick forest in the ravines, and all through this the beautiful Kopili River, with its crystal pools and rapids, flowed. The sambhur were so tame that



(Upper) HOW WE WENT AFTER GAME, DEHINGI.

they would let one approach within a few yards of them, so I left them alone. To get bison we had to start very early in the morning, and then go out again about two hours before the sun set. My wife and I, with our trackers, used to start at 4.30 a.m., taking with us a hurricane lamp, which we hung up on a branch as dawn broke. Then we ascended a hill and used the glasses. Sometimes we saw two or three herds at the same time, and if we did not spot a solitary bull we used to creep up close to a herd and observe them.

One day, towards evening, I spotted a solitary bull feeding on the top of a cliff, which rose sheer from the bed of a nullah, so did a careful stalk and got opposite to him on the other bank of the ravine. He looked splendid. His whole body was silhouetted against the red sky of the setting sun, and looked like a statue cast in bronze. I fired at a range of about eighty yards. At the shot he galloped away, and next morning we found him dead in a ravine about thirty yards away from where he was hit.

Another morning we saw a very large, solitary bull quietly walking along below a ridge about 800 yards away. So I told my wife to remain behind, and ran as hard as I could, up hill and down dale, to get within range, as I knew that he was making for the thick forest, and once there my chances would be few. As I topped the last ridge there was the bull, walking slowly, about 150 yards away. I decided at once that I would take my only chance, as it was impossible for me to get any nearer without the risk of being spotted.

Lying down, I took careful and steady aim with the .450 H.V., and fired. The bull dropped on his knees, and after recovering himself went over the ridge at a terrific

speed and disappeared. I ran as hard as I could, and in the intervening valley nearly got bogged. But my astonishment was great, on topping the next ridge, to see the bull standing broadside on, about ten yards away with his head down, tottering and looking very sick and groggy. He was too far gone to charge, and was killed with a second shot.

On examining him I found no vestige of a tail, and there were long scars on his flanks and hind-quarters. I can only surmise that, when he was younger, he must have been attacked by a tiger which, when springing, must have torn off the tail bodily. To do this the tiger must also have landed on the bull's haunches, to be shaken off again, the victim surviving only to fall to my rifle some years later.

This was the grandest and biggest bull I ever shot. He was very old, hardly any hair on his body, and the teeth very much worn. He had a head measuring 72 inches in its sweep, and the basal girth of the horns was 24 inches. The colour of the horns was green with black tips. One horn was slightly worn, otherwise the sweep would have been greater. The ears were very much slit-up, and the underparts of the belly were of a saffron colour. Truly, a grand old bull, and the horns are one of my most treasured trophies.

I made several trips to the Kopili, and never came back without some bison heads, excepting on my last trip in 1926, when I saw that everything had been wiped out by settlers and rinderpest.

I am thankful that I saw it at its best, but what is left for the next generation of sportsmen? Nothing! I disliked these settlers. They were Christians, but a dirty, lazy, drunken, and immoral lot, who had laid waste this paradise.

One would not mind if these people had a sporting instinct, but the native destroys for the pot and kills everything. These same folk had also poisoned, trapped, netted, and dynamited the pools. As we came down the river we saw thousands of dead fish floating down. In this way are these destroyers of nature to be allowed to continue their evil ways until the jungles of India are bereft of everything living. When will the Government realise this ?

On one of our visits to Kopili we were nearly burnt out by a forest fire. Every one of us had to turn out, armed with branches of trees, to beat it out.

I took leave to England from Sylhet, and on my return was promised the Durrang district—a very good one for shikar. But they could not get the old I.M.S. man there to retire, so I was posted to Mymensingh, where the whole of my time was occupied in medico-legal work, as there were murders almost every day. At last, however, I got Durrang, and lost no time in getting information about big game. Bison were numerous on the northern boundary in this district, especially in the north-east and north-west corners. They used to come down from the hills after the annual jungle fires. They were also found along the rivers Borelli Sona, Rupa, and Gabru. I luckily found out a place in the north-eastern corner, unknown to the planters, and kept this place secret. Fortunately also I had a dispensary here, so this dispensary was inspected several times a year. And I do not think I ever came away without something big. In the other corner of the district was a tea-planter, H., a nice chap and a good sportsman. His estate was named Orangajuli, and to him I was indebted for great hospitality and some glorious days of shikar. He had the best shikar elephant, “Pyari,” that I had ever seen, and a

splendid mahout, called Siriman, who was as keen as mustard.

The place in the north-east corner was Gohpur, almost on the border of the North Lakhimpur district. Shortly after I left the district a tea-garden was opened up in the midst of these happy hunting grounds, so I suppose that to-day all game has disappeared.

Not far from here one of the worst tragedies that has occurred in India took place. G., a tea-planter, had a very isolated garden on the Daphla Durrang frontier. One day his assistant, B., came up to G.'s house and said that a Santal coolie would not turn out to work, and that he also forbade his wife and children to do so. G. replied that he would send for his horse and ride to the Santal's hut. He went and saw the coolie standing at the entrance, armed with a 5-foot bow and an arrow fixed in the string. The Santal called out, "Why do you come unarmed? Go back to your bungalow and fetch your gun. I have my bow and we will then see which is the better man of the two." G. was naturally annoyed and, jumping his horse across a ditch, approached the coolie. The Santal at once let drive his arrow, which pierced G.'s chest in the region of the heart. G. then galloped back to the office and his assistant. On reaching it he said, "For God's sake pull this arrow out." Poor G. was by then streaming with blood. B. turned faint and replied that "He could not do the job," so G. got hold of the shaft and pulled. But it came away, leaving the head still sticking in his chest. The tea-garden doctor was about thirty miles away, and daks were put out to summon him, but before the European doctor arrived the native doctor had cut out the arrow.

This coolie, after wounding G., fled to the forest, pursued

by practically all the labour present, for G. was very popular. In the chase he laid out two men with his dah. The coolies eventually got him and literally dragged him through the jungle, for he arrived in my jail with hardly a sound portion of skin on him.

A fortnight later I got an urgent telegram asking me to come and see G. I started from Tezpur at 5.30 a.m. and got to G.'s bungalow at 10.30 p.m., travelling by steamer, carriage, elephant, and boat, whilst a horse carried me the last few miles. I at once saw that G. was suffering from tetanus and I could hold out no hope. He died on the second day after my arrival. The whole affair distressed me greatly. We buried him in the garden, and I had to read the burial service.

The night after the funeral E. and I were sleeping under one mosquito-net. A servant came rushing in about 2 a.m. to say that a wild elephant was pulling down the roof of the cook-house. E. and I at once got hold of G.'s rifles and went out in our pyjamas.

The night was so pitch dark that we could only hear the noise the brute made as he demolished the structure. I saw that nothing could be done and that we were courting disaster, so we went back to the bungalow. Next morning we found that this elephant, after demolishing the cook-house, had crossed the tennis-court and had gone off into the forest.

As for the murderer, his wounds healed, and he was tried and condemned to death. He gave me a lot of trouble, shamming illness and struggling with warders, and he had to be hanged lying down on the scaffold. He had been, ever since capture, very sulky, morose, and never expressed his regret.

On my first visit to Gohpur I made special inquiries regarding bison. Every one, including my assistant, said that there were none. It is a curious thing that the native, through fear, distrust, and perhaps thinking that he might be put to trouble, will purposely tell a lie. I was determined, however, to find out for myself, so, procuring an elephant, I proceeded to the foot of the hills, where I found numerous tracks of bison, buffalo, and bear. The next day my wife and I started, and were not long in picking up the tracks of a solitary bull bison.

My wife was sitting on the pad in front, and I was behind her. All of a sudden she touched me and pointed to the right. There, almost below our elephant stood a huge bull, his ashy forehead looking very massive. I fired when in rather an awkward position, and the recoil nearly tumbled me off the elephant. Indeed, I should have fallen had my wife not caught hold of me. The bull dashed off, so that I had to descend and track him through some very high, wild cardamom. I saw him at last about forty yards away, going very groggily and swaying like a ship at sea. I fired again and he dropped. The head was a very good one, in fact my second best.

During another visit we came on the tracks of a big bull. The bushes in the vicinity were trampled down, several small saplings rooted up, and the ground torn up. But we could not find him. My tracker, Laloong, who was afterwards killed by a rhino, advised me that to get the bull we must reach this spot at dawn. Accordingly, one day later, we started from camp at 2.30 a.m. with a hurricane lamp, as it would take three hours to reach the foothills. On getting near the spot, which was undulating country, I heard a snort, and then saw a tail swishing madly

in the air. My tracker funk'd it, so I did a careful stalk, taking advantage of any and every little mound and bush.

Then I saw from a distance of forty yards a sight I shall never forget. The bull was snorting, pawing up the ground with his hoofs, his tail swishing in the air like a whip, and he was turning his head from side to side against a small tree, evidently in a bad mood. I fired behind his shoulder, which brought him to his knees, but he got up again, though very shakily. Before I could fire my second barrel there was a rush, and the bull was surrounded by about twenty cows, who stared in my direction, apparently alarmed but had not seen me. Had they seen me they would probably have charged. I fired again and the bull dropped dead, whilst the rest stampeded into the forest. We walked back to camp and sent an elephant to fetch the head. It was a grand one, the horns measuring 26 inches at the base with perfect, uninjured points.

One day we came across the wild "pan" in fruit, the betul leaf of the Indians. I ate some and developed symptoms very like cholera, so I advise no one to touch it. The horse-flies in this district were the worst I had ever experienced. Patches of them, about the size of one's palm, would settle on our elephant, and when I killed them with a slap my hands were covered with blood, and streams ran down the elephant's sides.

The best bag I ever made in one day happened as follows: I had to go and inspect H.'s garden in the north-west corner of the Tezpur district. When my wife and I arrived, H. said, "Doc., you are in luck. There is a rogue elephant I have got proclaimed, and we will go after him to-morrow. Yesterday he chased 'Pyari' when the mahout took her out to collect fodder, and no one dares to

go into the forest for wood." H. got an elephant for himself from Dimakhusi tea estate, giving my wife and self "Pyari." But I deal with our encounter with this rogue in a chapter on the elephant, so suffice it to say that I bagged him after he had charged and had very nearly done for us.

We were on our way home when Siriman, the mahout, spotted something black sitting in some wild cardamom. He said it was a bear, but I could see that it was a bison. I fired, the bull charged, and for once "Pyari" lost her nerve and bolted for all she was worth. The bull got home, and was actually pushing "Pyari" along. We had to stoop low to avoid being dragged off by branches of trees, and both lost our hats. The bull after a while left off butting the elephant. Siriman got her turned, and H., who had in the meantime come up, finished the bull. It was a wonderful day and full of thrills. The next day we went to look for our hats, but some animal, probably a jack, had eaten the leather lining of both.

We were very sorry to leave Tezpur, and as the bison in the North Cachar Hills were absolutely protected by Government, my days after them ended. I doubt, though, whether anybody else in India has had the same luck with, and opportunities for hunting, this fine animal that I have had.

I started with a 12-bore Masu, using a steel-tipped bullet and seven drachms of black powder. It was most efficient and very light. After my Masu was smashed up by a rhino, and when possessed of more cash, I got an 8-bore and a .450 H.V. by Gibbs. I soon found that the 8-bore was too heavy to yank about all day, so sold it. The .450 was as perfect and efficient a rifle as I could wish for. With it I have shot every kind of big game. Its

killing and stopping powers were tremendous. Of course, in India, the .450 is a prohibited bore, and I had to get special sanction from Government to use mine. I should, therefore, advise getting a .461 by Gibbs, and in addition a 10-bore Paradox as a second rifle. With these two one can face anything.

I always used the soft-nose bullet for bison, buffalo, tsine, tiger, and deer, and hardly ever lost an animal. I will go so far as to say that, at close range against rhino, the soft-nose is more effective than the solid. I lost several rhino by using solid. I only used the latter against elephant, for if hit in the right place the elephant will fall stone dead.

Let no hunter think that he can safely kill big game with a small bore rifle, although that great hunter Selous was an advocate of small bores. Conditions in Africa are different from those in India. In the latter the jungles are thicker and more difficult to withstand, and escape from, the charge of an enraged animal. I know of two men who lost their lives by using a .303 against big game. The dying words of one, a police officer in Burma, were, "This would not have happened had I been armed with a heavier rifle."

One more word of advice—besides the cartridges in your rifle always carry some spare rounds in your pocket or in a cartridge-belt. The staunchest of natives will bolt sometimes in a tight place, generally shinning up a tree. I nearly lost my life once when facing a charging elephant because my man bolted with my ammunition. It is also advisable to carry a heavy revolver in case you come to close grips. I always carried a .450 Webley and a Gurkha kukri.

Now, in respect of dress and its colour. I have seen

men wear shorts and puttees only, and come back with their knees fearfully scratched and torn. Puttees, to my mind, are an abomination. They exert unequal pressure on the muscles of the legs, are always coming undone and impede the circulation. A good pair of stout stockings is far better, or, alternatively, soft leather gaiters. In the leech season I wore nothing on my legs, and wore rubber shoes so that any leeches could be seen and removed. Good strong boots, with Phillips' soles, are necessary. They should be well treated, inside and out, with castor oil to keep them soft and prevent blistering or sore feet. Personally, I prefer "ski" boots for all sorts of shooting, and even use them for fishing.

The condition of the feet is as important to the hunter as it is to the soldier.

As to clothes, when the jungles were green I wore knickerbockers of Jangra cloth of a greenish shade (this cloth is made by the Elgin Mills at Cawnpore), and a green flannel shirt, with very thin Aertex underwear. This Jangra cloth is very strong and practically impervious to thorns.

In the dry season, when almost everything was brown, I wore khaki knickerbockers, and coat or shirt to match. For headgear a good solar topee, with a brim that does not come too low down in front and behind, is the best. I preferred the Basra hat. You must have a chin-strap when tracking through heavy jungle, otherwise your hat will be left behind. Where there was shade, and therefore no danger from the sun, I used to substitute an ordinary soft cap.

Pushing through with a topee makes a great noise. Some advocate wearing canvas-bottomed shoes. But in the damp

sodden jungles of Assam they slip. I lost a bison once owing to this. Even in the Himalayas, where they are much worn, they are useless where the ground is strewn with fallen pine-needles, for then one is liable to find oneself tobogganning down a hillside instead of going quietly. No, I think good ski boots with Phillips' soles are the best.

Always carry some tincture of iodine for wounds, and carbolic oil, 1×20 strength. You must inject the iodine all round the wound. Some anti-tetanic serum is good, and Lauder Brunton's outfit for snake-bite is easily carried in the pocket. I got the tip from my trackers of using tobacco and salt for leeches. They carried little linen bags filled up with chewed tobacco, salt, and the rheeta nut or soap nut. As they proceeded the bag was taken, spat on, and rubbed between their toes and up their legs. It was very effectual. I have seen a tracker scoop out the leeches between his toes with his dah.

Leeches in Assam are a fearful nuisance. If one stands for a moment, especially amongst fallen leaves, you will see leeches making for you from all directions. They seem to smell blood from afar. They even climb trees to get at you, or will drop from a tree on to you. If a vein happens to be opened the wound may bleed for days; it may also cause a poisoned wound, or may turn into a boil. The bleeding may want a minor surgical operation; but, generally, alum or an application of silver nitrate stick will stop it. A very good, simple plan to stop bleeding is to burn some cotton wool, or spider's web, dry the part and clap on the charred débris, and a bandage round.

It is very awkward when leeches get into the nasal passages of cows and buffaloes, and sometimes those of

man. The only way to get them out is to prevent the animal from drinking water for two or three days. Then a basin of water is held a few inches from the muzzle. The leech then emerges and is caught with forceps. Sometimes, salt and water injected into the nose removes it ; and every one knows that a pinch of salt on a leech will make it release its hold.

Two of my dogs were once attacked by leeches, whilst swimming round me in a bheel where I was duck shooting. Their whinings first attracted my attention. On picking them up I found that their bellies were covered with elephant leeches, which we removed by cutting them in half with a pocket-knife. These leeches were striped green and yellow, and fortunately do not go for man.

I shot a sambhur once which had one side of its mouth full of leeches.

When going along a forest-path in single file, always walk in front. It is the man behind that will get most leeches on him. I have proved this over and over again.

And now to come to the comical part of bison shooting. A certain regiment had come up to Assam from down country to construct an important road. The medical officer died very suddenly, so I was detailed for temporary duty as M.O. One morning the armourer went to the C.O.'s tent and said that there was a bison feeding close to the camp. Out came the C.O. with his .577 and shot it. I knew it was a tame gayal, but said nothing. Next morning, whilst the C.O. was admiring his trophy, one of my Kuki trackers appeared in a great rage and said that the sahib had shot his methun. He demanded compensation, which the C.O. refused. The Kuki went and reported the occurrence to the Political Agent, and the C.O. was ordered

to pay 80 rupees! He got off lightly, as a methun is worth treble that amount.

Another officer of the corps shot a tame buffalo by mistake, and another had a Government elephant severely mauled and had to pay up. Altogether, the big game adventures of this unit in Assam were rather disastrous. It was about this time that I got very bad malaria. The C.O. refused to let me go into Manipur, so I wired direct to my chief, and he permitted me to proceed ; and not only that, but he met me half-way with a bottle of champagne, which worked wonders. What human contrasts one meets. It is our fate to serve under good and bad chiefs whilst serving His Majesty in India. But it is good to be able to say that as far as my service went the bad ones were in the minority.

CHAPTER VIII

“ STILL ” HUNTING INDIAN RHINO

IN Africa, where there are practically no jungles, and it is less dense and fairly free of immense tall reeds and grass, shooting on foot of the African species has been done. My experiences after this beast on foot were undertaken after I had used elephants without success. Every sportsman knows the dread elephants have of rhino, and whilst I was in India, it was said the only two elephants that were staunch to them were in the possession of the late Maharajah of Cooch Behar.

It was disheartening, when on an elephant, to pick up the fresh tracks of rhino, or where he had been feeding during the night, and to go on tracking and tracking through miles of giant null and ekra, or fording bheels; then, at the end of it, to come up to the place where the beast lay in his “ seat ” or wallow, and after being greeted with the ominous whistling grunt, to find the elephant whizz round and carry one three or four miles before stopping—sometimes into a quagmire.

Anyone who has been on the top of a runaway elephant will agree with me that it is an unpleasant experience, whether on a howdah or pad. The beast stumbles, and falls about, and a rolling ship in a storm is not in it. But worst of all he tries to shake the pad off as well as the occupants. In a howdah it is still worse, for one is then rattled like a pea in a drum. An elephant I was once on

bolted, went absolutely mad, and the only way by which the mahout could stop it was to drive the pointed end of the iron goad into its tongue. All this made me finally decide to try stalking rhino on foot, and in this manner I since went after both the great Indian rhino and the smaller Sumatran species.

Booreegaon, a wild tract situated on the right bank of the Brahmaputra in the Darrang district of Assam, where lay the beds of the old Brahmaputra, was the scene of these operations. In this tract were bheels, null, ekra and a certain amount of simul (bombax) and wild plum. For about fifty square miles neither a villager nor habitation was to be seen. It was an ideal spot for rhino, and it is no exaggeration to say that in this comparatively small area there must have been twelve or thirteen rhino. Kaziranga, the Sanctuary of Assam, was on the opposite bank, and I think rhino were attracted to this spot after the jungle fires and when the young, succulent null-shoots appeared.

I managed to get hold of an Assamese tracker, Laloong by name. A ripping chap, but an inveterate opium-eater, who would not budge in the morning until he had had his dope, and he kept it up with small doses during the day. But poor Laloong met a horrible fate, as I shall relate, though before doing so it may be of interest to give a few details of the habits of the larger and smaller varieties.

The smaller rhino is found at the base of hilly country where the forest is dense and interspersed with streams and cane-brakes. I have seen them in considerable numbers in the foot-hills of Tipperah, Sylhet, and Lushai. In the small ravines of these districts are swamps and streams where cane takes the place of null, and it is there that the smaller rhino lies up and has his wallows. But it is terrible

stuff to get through, and when stalking one cannot do so without considerable noise and damage from the thorns on the cane. The small Indian rhino, on this account, is a difficult animal to approach. He lies up in his wallow, and like the large species, has at least one ear and his nose stuck up above the mud, and his sense of hearing is very acute.

The droppings are always in heaps, and similar to those of the large rhino. He is very fond of the fruit of the ootunga (*Dellenia indica*) or elephant-apple, the consequences being that the urine is just like blood. He also eats the bark of certain trees and creepers, and I have seen the bases of some trees almost entirely stripped of bark by him. He travels very quickly, and is quite at home when moving either up or down hill. He is not so dangerous as the large rhino, and trusts generally to swift flight. The spoor is a trefoil, similar to that of the large one but, of course, smaller. When he comes across a fallen tree he always goes round it, being unable to raise his feet to any height. Laloong told me that the rhino sometimes lifts a fallen tree with its horn, and in this way often kills the young one following behind.

The smaller rhino is a great wanderer ; in fact it is on record that one was shot in a tank that supplied the engine of a tea-house with water. When disturbed he snorts like the larger rhino, but I have never heard him make the whistling noise of the latter, nor have I ever come across him in pairs as I have the larger. Both have favourite trees upon which the horns are sharpened and cleaned.

The large rhino is fond of the dhoob grass which crops up in the drying bheels during the cold weather, and here, too, the wild dog-rose grows and is also devoured.

The best way to get on to the fresh tracks of the large rhino is to visit a bheel, and if after the smaller one the streams. The rhino feeds at night, and at the streak of dawn will go eight or ten miles to have his siesta in the tall null and ekra. These seats can be seen in numbers when stalking, and in his progress through the reeds regular tunnels are made. Many wallows, both old and new, may be found, and into these he plunges when troubled by the heat, usually spending the hottest hours of the day in them. On leaving them he is covered with mud, which cakes and is impervious to the bites of mosquitoes and other biting flies. When wounded and pursued he will often plunge into them, *en route*, to cool himself before he goes on. This condition makes tracking an easy matter because the wet mud adheres to the reeds and grass during his passage.

Many believe that the horn of a rhino is used as an offensive weapon. This is not correct for its only use is for digging its wallows. His weapons of offence are the huge, sharp, tusk-like teeth, sharp as razors, at the side of the lower jaw. When using these the upper lip is turned up and the lower one down, so exposing them to the full. These can inflict terrible gashes, and were it not for the shields every fight with one another would mean disembowelment for one of the combatants.

The flesh of the rhino is in great demand ; even Brahmins can eat it, and a fistful is sold for four annas. The horn may fetch anything from 400 to 500 rupees. To bag a rhino, therefore, is to a native both a godsend and a gold mine, and, for this reason, the Assam Government had to take measures in time to protect it from extermination. The Marwaris treasure the horn, and cups are made of it, which are supposed to possess the property of making

poisoned drink harmless when placed in them. Scrapings of the horn are also used as medicine to prevent an abortion. In the opinion of some natives the urine is supposed to possess anti-malarial properties, and, I believe, at zoological gardens quite a lot of money is realised by the sale of this secretion.

A native will build a hut in a tree, above a heap of droppings, and wait there a week or more to get the rhino, an iron arrow being fixed into the bullet to make it more effective.

The smaller rhino, though nothing like so aggressive as the large one, will, when wounded, and followed up, charge, and takes some stopping. A female deprived of its young, like most animals, is most dangerous, and will charge at anything coming near her. The young of the large rhino become very tame up to a certain age. A friend of mine in Assam had one and it used to go out every day with its keeper and fetch back its fodder on its back, like an elephant; but I have never heard of the young of the smaller species being kept in captivity.

When feeding, or undisturbed, the rhino walks very slowly, but when chased it is astonishing with what speed the animal can travel. I estimate that its speed at full gallop is about fifteen miles per hour. It will go through unbroken null or ekra like a rabbit through bracken, ploughing a clear path in its progress. Even half-burnt null and ekra, which sometimes baffles an elephant, is nothing to a rhino. When chased he spins round every now and then to face the pursuer, and then dashes off again. For easy passage through swampy ground the rhino has no rival, and it is wonderful to note how slightly the feet sink in this. His weight and wedge-shaped head help him

to get through heavy jungle, and the thick hide protects him from thorns and ekra stumps.

When charging the rhino utters a loud nasal snort, lowers the head and comes thundering along. Sometimes he will not charge home, but will stop a few paces off shaking his head from side to side, and striking the feet on the ground like a cow. The tail is also rapidly whisked.

The sense of sight is bad, but smell, and hearing especially, are very acute.

He visits salt licks like most animals. I have never seen rhino swim, but presume he is a good swimmer, as I know rhino have crossed rivers like the Brahmaputra and Borelli when in flood.

The ashes of burnt jungle are eaten by him, no doubt for the saline matter contained.

But now to some experiences after rhino on foot. They were thrilling times, and, although the last experience ended in a tragedy, I look back to those days with pleasure and my heart beats fast when recalling them.

This sort of shikar can only be done after the jungle fires, April and May if in Assam, when the sun's heat is terrific. It also means a long tramp, wading through and swimming bheels and forcing one's way through unburnt jungle and wild cardamoms ten or eleven feet high ; a very weary and tough job.

My longest day, according to my diary, was from 3 a.m. to 11.30 p.m., allowing one hour out of this for a halt for rest and lunch. I was so tired at the end of it that the slightest movement caused cramp in the legs. Every sportsman who has had a long day after markhor and ibex over difficult country knows the feeling.

My wife and the tracker Laloong were with me on my

first adventure. We procured an elephant to take us to the bheel where we hoped to pick up fresh tracks. We found these, evidently of a bull rhino that had been feeding there during the night. My wife then returned to camp and Laloong and I proceeded to follow them up.

We had left camp at 3 a.m. and had reached the bheel at daylight. From here we tracked through the tunnels and burnt jungle till 1 p.m., when, after crossing a large piece of burnt jungle we came to a patch still unburnt, with some simul trees and wild plums, and Laloong declared the bull must be lying up in this. He was right.

On entering it the tracks became very plain. Laloong led the way armed with a 12-bore rifle, and I followed with a .450 H.V. In one of the tunnels our way was blocked by a huge mass of dead reeds several feet high, the accumulation of years. I thought it impossible for the rhino to have got through this, but Laloong held on and crawled under this heap, then suddenly drew back and held up his finger. I then knew that we had found our quarry.

I, in turn, crawled under the heap, not an easy job, and was astonished to see a huge rhino about eight yards away, standing broadside on and not moving a muscle. From this awkward position I fired at his shoulder; he gave a snort and made a rush, but fortunately not in our direction, otherwise both of us would have been trampled flat.

We went after him, the tracking being easy as there was plenty of blood. He went on and on, only stopping at a few wallows *en route*, till blood marks became less distinct, when we had to trust to other signs. He ultimately got into an old bed of the Brahmaputra, impenetrable to anything but a rhino, and here we had to give up. Night was

now falling, and there were many miles to go before reaching camp, which we did not do till 11.30. There was no moon and how we managed to find our way through those swamps and jungles I do not know, excepting that I was wet to the skin and my clothes almost in tatters.

Next day we went out on an elephant in search for the wounded beast, but when we reached the spot the mahout declared that the elephant would sink in the quagmire in which the rhino had taken refuge, the result being that I not only lost him, but felt keenly his possible sufferings before the end came.

I rested in camp the whole of the next day as there was some official work to be done, but on the following one Laloong and I started out again.

We left camp at 3 a.m. for another bheel where we came on the fresh track of a bull, but it was not till 2 p.m. that we came up with him. I managed to get within ten yards but unfortunately he was in heavy stuff and I could not choose a vital spot. I fired, there was a snort, and suddenly I found myself caught by the coat and dragged into the null at the side of the tunnel. Laloong was the tractor, and had he not done so the rhino would have got us. We followed him up, and he, like the first one, took to impenetrable jungle, so again we had to turn towards camp without definite results.

After bath and dinner, Laloong came for orders for the next day, but I told him I was going to take a rest in camp. He then begged me to lend him my 12-bore and six cartridges to shoot pig. He returned on the following evening with five cartridges and said “ he had missed a pig.” We then had a dispute as to which bheel we should visit next day. Whilst after another rhino I had noticed the track of a big

bull in another bheel and said, "Laloong, we will go there." He tried to dissuade me, and said he knew of still another bheel where there were three rhino. But I stuck to my proposal, much against his wish.

We started from camp at 4 a.m. and on reaching the bheel were not long in picking up fresh tracks of the bull. Then began the long track and push with bended back through unburnt ekra and null. Making one's way through the maze of tunnels was weary and hot work, but we were hot on his tracks by 1 p.m., as evidenced by warm droppings and freshly-trodden grass. We cautiously advanced, side by side, with rifles at the ready. I could see that Laloong was not his usual self, and in fact appeared nervous. We then came to a tunnel which branched into two, and after proceeding a few yards along the right-hand one, Laloong held up two fingers denoting there were two, and drew back a few yards.

I now decided to take the left branch in order to get a side shot. No sooner had we done this than there was a loud snort and I saw a rhino thundering down on us. The next instant the rhino was within a few feet of Laloong, who was on my right, almost touching him, tossing its head from side to side and stamping its feet. Laloong threw up his arms with a look of terror, and when the rhino was almost between his legs I let drive. The beast retreated eight or ten paces, bleeding profusely, and undecided whether to charge again or not. I was just going to let him have my left barrel when down the left branch of the tunnel came another rhino snorting terrifically, and this time full tilt at me. I jumped to the side and, as the brute nearly touched me, fired, and he went on. I then looked to my right but could see nothing of Laloong; he had vanished.

I called his name several times and got no reply, but at last heard a choking sound and knew that something serious had happened.

I made my way through unbroken ekra in the direction of the sound, and after going about twenty yards found my poor tracker covered with blood, and his clothes torn to shreds. His body was practically a pulp, there were teeth-marks in his side and his skull had been apparently fractured. The poor fellow was still alive, and getting his head on my knee I pulled the clotted blood and bits of broken ekra from his mouth. Five minutes later he was dead.

The jungle was trodden down all round showing that the rhino had made sure of his kill. My rifle was not there, and after the tragedy I searched to find it about ten yards away smashed to bits. A curious circumstance was that the stock showed the imprint and depression of one of the nails of the rhino's foot.

Apparently what happened was this. Whilst engaged with the second beast the wounded bull must have charged down on the tracker, got a hold of him and had carried him through the unbroken ekra, stamping on him and worrying him as a dog does a rat.

I was now in a dilemma because I could not leave the body. I therefore stood near, with rifle cocked, in case the wounded rhino should return. I had mounted guard like this for $4\frac{1}{2}$ hours when I heard a swishing in the jungle, and my joy was great to see an elephant, which my wife, who was in camp, had procured from the Mauzidar, and had sent in search of us.

I wrapped the body of poor Laloong in grass, placed it behind me on the pad and told the mahout to take us to his village, some $7\frac{1}{2}$ miles away. On the way I noticed

a lot of vultures collected in one spot, and on going there found to my astonishment the remains of a young rhino, apparently quite fresh. It was then that the whole drama dawned on me. Laloong on the day on which I had lent him my rifle, had shot the calf belonging to the pair which behaved so viciously ; and it was on that account he had showed his reluctance to go to my bheel.

When I got to the village I had a bad time, for the villagers, including his family, became truculent and menacing. They at first said that I had shot him, but after seeing the body were satisfied that he had been killed by a rhino, and I was then able to tell all I knew about the shoot-of the calf. I sent a wire to my D.C. when I reached camp, and he asked for a report. The eventual verdict was that I was blameless, and that the death had been accidental.

After this occurrence the vernacular press tried to make out that I was responsible, but I think I did all that could have been done in the circumstances, and had I known the calf had been killed I certainly should never have gone after rhino on foot in that area.

After this tragic and thrilling adventure I promised my wife never again to go after rhino on foot.

One of the wounded animals was seen crossing the Brahmaputra by some Gurkhali herdsmen. He was sickly and probably died in Kaziranga Reserve. But my regret then was that I had not bagged the murderer.

The rhino is not an aggressive animal, like the African, excepting in special circumstances, and owing to its extreme shyness it does not raid crops like the elephant.

Let us hope that the race will multiply and flourish and, after the lapse of years, will afford sport to the coming sportsman. As a result of the formation of the Kaziranga

Reserve, a forest officer who visited it before I left India computed the number there at 32 or 33 head.

May I also offer this small suggestion to fellow-sportsmen who wish to hunt the rhino on foot. Use a .461 H.V. rifle and use soft-nosed bullets, not solid, as the range is usually very close. I lost a number by using the latter.

CHAPTER IX

THE INDIAN BUFFALO AND TSINE

COMPARED with the domestic species the wild buffalo is a giant. The height at shoulder attains to 16 or 17 hands, and the girth is enormous ; and in my experience, and next to the rhino, it is a most aggressive and dangerous animal when wounded. At times he will charge an elephant. He is also very hard to kill if the first shot does not floor him, for it seems that he gets over the shock of the first bullet, and I know a case where seventeen bullets were put into one before he was bagged.

The buffalo when wounded and followed up waits with his head on one side and horns lowered, ready for the charge. Another stratagem resorted to is to slip back on his tracks, wait at one side of them, and then charge the unwary hunter occupied following the blood and tracks ahead of him.

A herd of cows with calves is specially dangerous. I was once following up a wounded bull in some tall ekra and null, when I was suddenly ignominiously pulled to the side by my shikari. Almost at the same moment a snorting herd hurtled past the spot on which we had been standing.

My shikari afterwards told me that he had heard the warning note of a charge, and in my subsequent hunts after this animal I became well acquainted with it. The sound is like " kenk, kenk," repeated three or four times.

The wild buffalo is found in Assam, Burma, Ceylon, and in the Central Provinces. Years ago there were vast herds in Assam, but rinderpest, the clearing of the jungles by immigrants, and the introduction of tame ones by Gurkhali settlers—the so-called Gurkhali Khutis—have played havoc. The Assam jungles are ideal for buffalo, huge savannas of ekra and null, with here and there clumps of forest and large bheels. Buffalo, as every one knows, cannot do without water. The amount of green stuff they require is also enormous, and, like the elephant, they can do with very little sleep.

All my shikar after buffalo has been done in Assam and Burma, and in my time the Namba Forest, which extends from Golaghat to the foot of the Naga Hills, was chock full of them ; I have even shot them not 100 yards from the road. At a place called Bokojan there was a celebrated area called the Rengma Pothar. This swarmed with game, and a friend who was many years in Assam once saw every kind of big game here, after the pothar had been fired and the green grass and null-shoots were out ; an ideal ground for feeding. In 1891 I saw this friend returning from a shoot in this area, and on his elephant he had the head of a rhino, a methun, and a buffalo.

This pothar was all cultivated before the Burmese invasion and when the Queen of Dimapur held sway. In these dense forests, especially near Dimapur, one comes upon beautiful carved pillars of ancient temples, and numerous remnants of what were once tanks, now used as wallowing-places for wild animals, and overgrown with cane-brake, grasses, and lianas.

It was close to one of these deserted tanks that I saw

an old tree, bare of everything, and in it there were six nests of the wood duck (*Anas nemoricola*). Several were sitting at the time. Those eggs would be worth a lot of money now !

I have shot buffalo in Sylhet Myminsungh and in the Darrang Sibsagar districts, also at Tammu on the confines of Manipur and Burma. Buffalo were also numerous in the Nowgong district and in the Golaghat sub-division. The last place was eventually cleared out by a local Rajah, a sportsman himself, but he used to hold shikari parties consisting of globe-trotters. Elephants were brought up by the hundred ; the herds were ringed in by these and volley firing continued until every living thing in that circle was killed. I believe that even a paddy-bird had no chance. The planters rightly demurred at this indiscriminate slaughter and the Government tabooed the intrusion of this type of sportsman.

In the Dhubri district, and in the Garo Hills, buffalo were at one time numerous ; and I think the largest heads have been obtained there. Tiger were very numerous here also, and a sporting zamindar of Goureepur and his party once bagged forty-three in a fortnight. One of our chief commissioners, Sir Archdale Earle, also made a big bag in the same place. But all this country has now been opened up, so it is " Good-bye " to the shikari.

At one time buffalo were numerous in the Sunderbunds, but now there are only a few, and those remaining have been crossed with tame herds and are not worth shooting.

There are two kinds of buffalo in Assam, and one is found in the vast savannas of ekra and null. This animal is smaller and lighter in colour than the other, but carries the biggest head, especially the cow ; and a head of

13½ feet between the tips of the horns has been obtained by the late Maharajah of Cooch Behar. A magnificent trophy.

Shooting buffalo on foot in these jungles is very dangerous, and the hunter must be well armed and have all his wits about him. The buffalo makes tunnels through the grass like the rhino, and when following up buffalo, or an elephant, through this stuff, it is wonderful to see how silently the quarry moves. There is hardly a flicker of the long grass to indicate his presence. In these savannas are also treacherous quagmires and quicksands which are very dangerous to elephants. The buffalo seems to be able to go unharmed through all this, and to see him go through a bheel covered with grass and weeds is an eye-opener.

My wife and I once nearly came to grief in one of these *ponks*. The elephant became alarmed, plunged from side to side like a ship at sea and tried to shake us off the pad. The mahout, by much goading, got him out, otherwise we might have all sunk in the black stuff.

The best way to get buffalo is to go to the partly dried-up bheels in the morning or evening, where the dhoob grass is lush. If lucky you will find the herd feeding at the edge of the tall grass, or not far from it. Pick out the bull, though ten to one he is not with the herd, when the only thing to do is to pick up his tracks and slog after him on foot. I have only shot one cow, although I have seen several with good heads, always preferring to make for the solitary bull and so obtain the thrill of a lifetime.

The other variety is found in dense forest, with here and there open stretches of grass. This forest buffalo is

a bigger animal, very black, and with short, coarse hair. The horns are not large but very thick and massive, rough and gnarled. With some of my heads the basal girth tapes 18 inches. The plates of horn are often knocked off by the animal rubbing them against trees. These small horns are a provision of nature, as in the dense forests large horns would be a nuisance; and in like manner to the Assam sambhur, a large animal, but with poor head.

The buffalo is an unsociable animal. You will never find elephant or methun near a herd. He tolerates deer, however, and I have seen swamp-deer, and a hog-deer, feeding with a herd. A solitary old buffalo is indeed, like the bison, lord of the jungle. Even a tiger hesitates to attack him. He plods along without exciting himself, excepting when roused by the hunter. He is also a shy animal, and very rarely raids crops in his vicinity; but, like the rhino, once man appears off he goes to more secluded spots. The tea-garden and crop-raider is usually a cross between the tame and wild variety. These hybrids can easily be distinguished by their small size, length of horns, and by a white semilune on the chest, similar to that of a bear. These buffalo attach themselves to a tame herd and visit their wives at night. The herdsmen consequently do not like them being shot, for they improve the stock.

I was told on one occasion that one visited a herd, so off I went, camped not far from the Khuti and told the men to wake me when he came. I was not disturbed, and the men said that he had not come. But, on examining the ground, I came on the seat in which he had been squatting about 20 yards away from the tethered cows.

I promptly followed on his tracks, but only heard his snort, and his hoofs thundering ahead of me.

During the heat of the day, the buffalo either resorts to a secluded pool of the river, or immerses himself in a bheel, the head, and sometimes the nostrils only, being above the water. Every now and then the head is plunged under the water. At other times he resorts to mud and wallows like a rhino. His hide becomes covered with the sticky clay, which dries and so prevents horse-flies and mosquitoes annoying him. This condition may account for the buffalo's remarkable freedom from ticks and leeches, although the latter may possibly enter the nasal passages.

The spoor of a buffalo bull is enormous, and resembles the shape of two huge kidneys joined together. I have also seen a rare species of buffalo possessed of a heart-shaped spoor, and, in fact, more like that of a methun.

The buffalo produces only one calf at a birth. I have never seen a cow with two. The calves are pretty little beasts, of a brown colour and covered with long hairs and lanugo, which is of course shed later. The legs are long in proportion to the body, very solid, and thick. When in distress they bellow just like a bull. The female, and, in fact, the whole herd guard the young with the greatest care.

The third species found in Assam is the Mishmi Hill buffalo. A friend and I once, accidentally, came on the spoor of this animal at the foot of the Bhutan Hills in the Darrang district. The spoor resembled that of a very large methun. We followed up these tracks into hilly country and put up a herd in a pool of water on a plateau. When they stampeded I fired and dropped one. A casual

examination showed that the animal possessed a foot which did not splay much, and the under-parts were very hard. There was a good growth of hair, and the horns, instead of sweeping backwards, had an almost perpendicular direction from the head. We sent out coolies next day to fetch the head and skin, but, being in an out-of-the-way place, they failed to find the body, and so I lost a rare trophy.

I believe Colonel Woodthorpe came across this animal in the Mishmi Hills when he was making his survey of the Hukong Valley, and, as the Mishmi Arbor, Daphla-Aka, and Bhutan Hills are a continuous range north of the Brahmaputra, it is not unlikely that some may have strayed to the hills further west.

The buffalo was the first big animal I ever shot in India, and this first experience nearly brought disaster.

On a journey in 1891 to take up my first appointment at Manipur I met an old Assamese shikari, who at that time was chowkidar of the rest-house at Bokojan : and, of course, the topic was shikar. He told me that the place was full of buffalo and that there was one with a very large head. I had no weapons, so had to look forward to expeditions after them later. He said, " Sahib, if you get a buffalo give me a gun " ; and I promised to do so.

My opportunity occurred a few years later, when marching with the 42nd Gurkha Rifles from Manipur to Shillong. On reaching Shillong I was transferred to the 44th Gurkha Rifles, now the 2/8th, so had to march back to Manipur. At Bokojan the chowkidar said to me : " You are in luck. The big buffalo killed two tame ones on the banks of the Dhansiri yesterday, and we are sure to get him." Here was luck indeed !

Our C.O. was a fine sportsman, and said he would halt the regiment on the morrow to enable me to secure it. The 2/8th was a splendid regiment, the officers keen sportsmen, and I look back with pleasure to the years I spent with them. But it is sad to reflect that many of the fine fellows of my day laid down their lives in the Great War. On the following morning, at streak of dawn, the chowkidar and I started. We soon picked up and followed his tracks, getting deeper and deeper into the primeval forest, full of cane-brakes, and no sky visible. It was infernally hot, and horse-flies were much in evidence. About 11 a.m. the chowkidar told me that there was a large tank not far off, and that the big buffalo would be there for his siesta ; and he was right.

We eventually came on this tank. It was surrounded by a thicket of cane and grass, and the fresh spoor led into it. The old man warned me that this buffalo was a budmash, and that either I would kill him or he would kill me. After this solemn warning he remained behind.

I entered the tank, now overgrown with short, rank grass, through a tunnel in the cane-brake, stooping low to avoid the thorns. As I entered the shallow water at the edge I suddenly caught sight of the huge brute sitting down at the far end. He immediately raised his head, and I fired at his neck. There was a plunge and a snort, and he came straight for me at a pace, considering his route consisted chiefly of sudd, that was an eye-opener.

I could hear the old chowkidar shouting: "*Maro, Sahib, maro!*" I let him come up to within five yards before firing my left barrel, which fortunately turned him. He retreated slowly, and fell with a groan almost exactly where I had first seen him. I put in two more shots and

then all was still. I was naturally delighted, and patted the old man on the back before hurrying back to camp by a short route.

My C.O. and the others were as glad as I, and the C.O. ordered the bandsmen to go out and bring in the meat and head to the strains of music. When I heard the band approaching I rushed down the road to view the head. It proved to be a forest bull, with a sweep of 8 feet 7 inches, and very massive at the base, taping 16½ inches. The horns were very much gnarled, but the tips sharp and unbroken.

There was great rejoicing in camp, and much buffalo meat was consumed by certain castes in the regiment. The tongue and marrow-bones were kept for our mess the next day, and uncommonly good they were.

I was using, at the time, a 12-bore rifle by Masu, 7 drachms of black powder, and a special bullet made by Manton—steel tip, soft lead and tin sheath, and a copper base. This bullet mushroomed very much and gave a hard knock. Before leaving, I presented an old M.H. rifle to the chowkidar—ignorant of the regulations—and two years after received a letter from the D.C. of the Naga Hills asking whether I had given a rifle to the chowkidar. Of course I said "Yes." The D.C. was a very nice fellow whom I had met, and, as a first offence, I was forgiven. But I was sorry the old man had been deprived of his prize, and begged the D.C. to give him a licence for a smooth-bore muzzle-loader, and he did so.

There were no buffalo in Manipur, but the tame variety had enormous horns. The ordinary Bengali buffalo had not then been introduced to spoil the breed. These animals were used for ploughing, milking, and for hunting

deer, the latter being speared during heavy floods from buffalo-back. They were also used to drive out tigers, when one appeared in the valley, which was very rarely.

Whilst in Manipur I made several trips into the upper Chindwin, and obtained several good heads. Once, as Toinem, my tracker, and I were walking along the river, on the look-out for game, and on rounding a river bend, we saw, not 50 yards away, a herd of about twenty buffalo almost submerged in a pool. I just saw a sea of horns, so could not pick out the bull, and before I could do so they had stampeded up the bank on to a chur. My shikari hustled me on saying that they would cross the chur and river, and get into the thick jungle beyond. So we followed up at breakneck speed, and as we reached the far end of the chur there before us was the bull, standing broad-side on, and about 80 yards away. I fired, and he went off apparently disabled in the hind-quarters. We waited, secure in the knowledge that he would be sure to lie down and get stiff; then, climbing various trees, we saw the tall grass flicking about 40 yards away. I had with me a magazine rifle, in addition to my 12-bore, so I emptied the magazine at the spot, and, when all movement stopped, proceeded cautiously, to find the bull dead.

Poor Toinem was killed a year after by a wounded buffalo, and I lost a fine tracker and faithful companion.

The other expeditions here were uneventful.

The regiment was transferred, a few years later, to Kohima, and as there was no game there except bamboo-partridge I applied for long leave. But my colonel told me that if I cancelled my leave he would give me, as a Civil appointment, the best station, barring Shillong, in Assam. I decided to accept this and so bade farewell to

all ranks with whom I had spent so many happy years. I was sorry in a way as, shortly afterwards, the regiment was ordered on the Tibet expedition, and got into Lhasa.

I had plenty of time in which to join up, so instead of proceeding by the ordinary route, I struck north-east to reach the head-waters of the Dihang, for from there I could go by boat to Golaghat through some grand and untouched game-country. One of my brother officers had also lent me a magazine rifle as a spare weapon.

My first march met with disaster. Some of my kit was loaded up on Manipuri ponies, and when I got to the rest-house these ponies had not appeared, so I returned, to see my bearer standing in tears. He said that one of the ponies had rolled over a khud with my rifles, that he was afraid to investigate, and afraid to come and tell me. I then went to the scene of the accident and found that the stock of the magazine rifle was broken, the 12-bore luckily intact, and the pony only bruised.

On my way I picked up Havildar Singbir Lama, who had retired from the 42nd Gurkhas. He had married a Naga woman, and was known all through the Naga Hills as a mighty and fearless hunter. He had accounted for many tigers and rogue elephants. He was also the only man who knew, and could not lose his way in, the great Namba Forest. He told me that he could never lose his way as he carried the pebble out of the gharial's stomach in his pocket. He was certainly a wonderful tracker, knew everything about animals, birds and their ways, and was invaluable to me in making all arrangements for transport, boat, etc. After two more marches I reached the Dihong.

There was splendid mahaseer-fishing here, and I ob-

tained good sport. I also saw my craft for the first time. It consisted of two huge dug-outs lashed together and connected by a bamboo platform. On top of this a small tent was pitched, and everything looked very snug and comfortable.

But my present objective was the Rengma-Pothar, and we were to cut our own way through the forest to get to it. Singbir said that we could easily get there and back in a single day, so Singbir, myself, and two Nagas started one morning at dawn.

We went slowly as the jungle was very thick and cane-brakes had to be negotiated, also trees along the route had to be barked with a kukri to guide us on our return. It was 2 p.m., and we had been on the tramp since day-break with still no sign of the pothar, when Singbir said : " Sahib, I will go and bring back news as to whether the grass has been fired and of any prospects of game. You return to camp with the two Nagas. They will easily find the way as the trees along the route have been marked." I eventually agreed to this, but was sorry we parted company here as future events will show.

It will be well to mention here that whilst the regiment was stationed at Kohima and Manipur eight or nine riflemen who had gone into this forest were never found or heard of again. One Sepoy eventually found his way out, near Golaghat, a raving lunatic from the effects of hunger and exposure.

I therefore turned back, and only an hour later a terrific storm came on ; the rain came down in torrents, and this and the lightning nearly blinded us. I then noticed that the Nagas had begun to look frightened, and they admitted that they had lost the track. Unfortunately I had

neither compass nor watch. "Well," I thought, "here's a go!" So, after marking a tree, I took the lead, and had been going for an hour or so when, to my dismay, I found we had come back to the very spot from where we had started. By this time the two Nagas were behaving like lunatics, weeping, wringing their hands, and crying, "We are lost! We are lost!"

Night was now falling, so, from fear of getting more seriously involved, I decided to spend the night where we were, and in the hope that a search-party would be sent out from camp. I selected two trees with forks and across these I told the men to put branches to form some sort of shelter. And what a night I spent! The rain still came down in torrents. I was soaked to the skin, hungry, and thirsty; mosquitoes in millions and tree-lice began to attack. I fired four shots, but, owing to the thunder, they never heard them from the camp. The two Nagas, up in the tree with me, were gibbering like idiots. Morning broke at last after a night of misery, but it was still pouring cats and dogs. All the next day it rained, and for a second night I climbed into my desolate perch. No help came from the camp. If the weather had only cleared I could have got some sort of direction from the sun.

That night I said to myself, "If no help comes tomorrow I shall put an end to myself with a bullet. I cannot endure this thirst, exposure, hunger, and torture any longer."

Next day broke fine and I was never before so glad to see the sun. It gave me east, and as the Dihong ran almost north and south I thought that if I kept the sun directly in front it would be possible to strike the

river, and then easily find camp by proceeding upstream.

My men were useless as guides, so I had to take the initiative, and with forked stick and kukri cut through that awful stuff, consisting almost wholly of cane-brake. The ground, of course, was a quagmire, and several nullahs full of water had to be crossed.

After some hours, to our joy we struck the river, and with a shout I dashed into it to get a drink of comparatively clear water. My clothes were torn almost to ribbons, and when I took these off several huge leeches dropped out ; so I had a bath and got rid of more of them.

On reaching camp I found every one in a terrible state, and my bearer weeping tears of grief and joy. I had my bath, a meal, and went to bed, and must have slept on for eighteen hours or more. This experience somehow damped my ardour for shikar in that forest.

When shooting in dense and extensive forests it is advisable to carry some Very lights.

After all this I thought I would take it easily going downstream, get into my flannels, and only shoot what game I might see on the banks.

We got a move on eventually, and later on, as we dropped downstream, I heard the goat-like bleat of a polyplectron, calling from cane-brake not far from the river-bank. As I had never seen or shot a specimen I went in. It was a pot-shot, but I managed to drop him, and Singbir went to retrieve. Almost immediately he reappeared, and very excited, to call : " Sahib, here is the largest spoor of a buffalo I have ever seen. He is solitary and must be a huge animal with a fine head ! " At that news my depression dispersed, I rushed back to

the boat, put on shikar kit, took something to eat and drink, and off we started.

I must confess that I felt a bit nervous after my previous experience, but placed implicit trust in Singbir to see us out of the wood. And what a dance that buffalo led us! He had swum the Dihong River twice, and, as there were no boats, we had to do likewise.

About 1 p.m. his tracks led into a small bheel covered with ekra and null, and containing a few feet of ponk and water. A huge, solitary goolur fig tree stood near the track by which he had entered. Of course he might have gone right through the bheel into the forest beyond, and because of this possibility Singbir directed me to hide behind this tree whilst he went round to see if the buffalo had come out. If not, he said, he would fire two shots, when the buffalo would come out by the path he had used in entering. A little later two shots rang out, there was a terrific commotion, a squelching noise in the bheel, and out he came at a walking pace not 6 yards from me. He never saw me, because he was driving the flies from his flanks with his magnificent horns. As he passed I let him have the right barrel. He went down, but before I could fire a second shot he was up again and had turned by the same track into the bheel. Then Singbir came round and asked whether I had got him. I replied that I had hit him and there was plenty of blood, but what was to be done? His reply was, "We will go on after him." This action was perhaps courting disaster but we entered the bheel hot on the tracks, Singbir cutting away the ekra and null with his kukri.

We had not proceeded 20 yards when Singbir pointed to his left. I looked and saw the buffalo not 10 yards

away, with his head to the side and horns well down, ready to charge. I fired, both of us jumped to the side, and he dashed past us like a steam-engine. So we followed up again and, about 30 yards further on, found him lying at full stretch, his head away from us and his great horns sticking up. I was just meditating another shot when up he got and came straight at us. We jumped aside as before and again the beast thundered past us. I believe now that he was feigning death in order to make sure of us.

At this point Singbir said, "No more, sahib, the beast has a 'shaitan' (devil) in him, and if we follow him up he will kill one of us. He is sure to die, and we shall find him dead in the morning."

With much reluctance I took his advice and went back to the boat. Next day, at daybreak, we started, and found the goolur was full of cawing crows. Then Singbir pronounced our quarry dead, and after a while we found him.

The splendid trophy I had got proved well worth all that work and danger. He was a bull in the prime of life, with a sweep of horns 8 feet 9 inches, and $16\frac{1}{2}$ inches in circumference at the base. The tips of the horns were as sharp as a spear. The head was skinned and as much of the flesh removed as possible; it was then attached by a long piece of cane to the stern of the boat and towed for three days, so that by the time the rest-house was reached the flesh had softened and could be easily removed.

At Sylhet I was laid up with malaria; all the leech-bites turned into boils, and a bad time ensued for a while. In Sylhet, and at the Tangour Haor, I only got one buffalo.

My next station was at Mymensingh, and here I obtained some good shooting with the then Maharajah Soorja Kanta Acherjee of Mymensingh. He used to give a Christmas shoot, and had his sixty-seven elephants out. The Maharajah was a man of very fine presence, a splendid shot, and of charming personality. We used to talk shikar for hours.

We only got one tiger, but here I managed to bag a good solitary buffalo. The marsh partridge were in hundreds at the foot of the Garo Hills, and it made very pretty shooting from the back of an elephant as they whirled over the top of the long grass.

I was then, to my delight, transferred to Tezpur, as it was a very good district for big game, and at the end of my stay I had secured many tiger, buffalo and bison, besides other game, and there was excellent mahaseer-fishing as well. I lost no time in getting information of big game from the natives, because the planters were sometimes jealous and therefore reticent on the subject. My patients often gave me much valuable information as their work took them into out-of-the-way places, and my favourite ground was Gohpur, on the Lakhimpur frontier. I had a dispensary here, so an excuse was given for inspecting it several times in the year.

One day my wife and I were returning after a fruitless day after buffalo not far from Gohpur, and just as it was getting dark we came upon a solitary one. I had a shot at him as he galloped off, and thought I had hit him, so proceeded next morning with two elephants to investigate. My wife and I were on one elephant and the other carried my sporting kit, and Helim armed with my .360 express. On nearing the spot we found the buffalo sitting and

waiting for us at the edge of the jungle. When within 50 yards of him he came straight for Helim's mount. The elephant promptly turned and bolted with the buffalo butting him along at the rump. I could see, however, that the latter was going rather groggily, and when he dropped at last a few yards behind the elephant I gave him his quietus. Helim came back looking ten years older, but luckily the elephant was not injured.

I found that the shot of the previous day had broken the poor brute's foreleg high up. Whether this buffalo was waiting for us or had come out in the open for coolness and escape from flies I cannot say.

On another occasion my wife and I were returning, at dusk, through a dried-up bheel with heavy null when, far off, I spotted five or six buffalo feeding at the edge. I dismounted and stalked them on foot, but when within 50 yards they stampeded, so I fired a snap shot at one in the rear. It dropped, but unfortunately turned out to be a cow, though with a good head. Next day, search as I would, I could not find the bullet wound, and I leave my readers this puzzle to solve.

I believe a tea-garden has been opened up at Gohpur, so that splendid game country is probably no more.

THE TSINE

This is the Burmese Wild Ox and called by them Tsine or Saing. The Manipuri in the Kubbo Kale Valley call it Lumsun. It is also found in Java and Sumatra, where it is called Banting.

The question arises as to whether this ox was originally a wild species or whether it is the domestic ox of the

Burman run wild, for one can see among Burmese cattle animals similar in colour to the tsine, although much smaller. I am inclined to agree with the former idea, as it is well known that when domestic cattle run wild piebald specimens are sometimes produced. I have never heard of piebald tsine, and it is therefore more likely that some of the domestic cattle of Burma have been crossed by bull tsine, so giving the offspring the characteristics of the tsine. This piebald tendency is seen in the gayal where the domestic Naga cattle have been crossed by the methun, and also in the wild cattle which are found on some of the islands not far from Chittagong.

The tsine is found only in certain parts of Burma ; in the Kubbo Kale Valley, in the Arakans Yomahs, in the Ruby Mines district, in the Shan States, and at Homalin, situated near the head-waters of the Churdwin River.

All my tsine hunting was done in the Kubbo Kale Valley, and grand sport it was. The valley adjoined Manipur territory, and from here I made several trips, covering the seventy or eighty miles separating Manipur from Tammu on horseback in a single day.

Some years ago there was a good rest-house at Tammu, and from it one could get on to tsine ground not three miles away. There were herds in this valley numbering twenty or thirty, and one came across them all along the base of the Chur Hills as far as Kalewa. Before leaving India I had intended visiting again these grand hunting-grounds, which had held game of every kind, from elephant downward. But the myook (native magistrate) at Tammu informed me that it was of no use my coming as all game had either been destroyed or driven away by the people employed in the timber trade.

The tsine is a true ox. Some think he possesses a dorsal ridge like the bison, but this is not so. The back is perfectly straight from the rump to the base of the neck. In form a tsine nearly resembles a Chillingham bull, for the hump is poorly developed. A bull tsine in the prime of life stands about 15 hands, and when on the alert is a splendid sight.

The young bulls are of a chestnut colour, and as they get older the colour changes to dark brown above and greyish underneath. In very old bulls the colour is a uniform iron-grey and they are known as grey bulls. These carry the best heads, and are very difficult to bag, being wary and shy. I have only seen one grey bull and then failed to bag him, because I was rather tired and careless after a long day's tramp. But half an hour later, to make up for my disappointment, I bagged a bison not far from camp.

In the young bulls there are white patches on the rump, also present in the cows, and these are very conspicuous when a herd stampedes. The legs are clean with beautifully-shaped hoofs, which, in the female, make a heart-shaped spoor, and wider and broader in the case of the bull. The tail and ears are long; the former having a good tuft of brownish hair, very useful for beating away gadflies, which make these animals' lives a misery. In the gadfly season tsine do not take to water like other animals, but lie up in forests or ascend into the hills.

The horns are very characteristic and make a fine trophy. Their direction is outwards and upwards, and their sweep backwards. They are of a greenish colour with black tips. Owing to the direction of the horns the tsine cannot do much damage to the hunter; but he

stamps, and so can do damage with his feet. Burmans say that he will lick the muscles off a man's leg or arm if he gets him down, and the same thing is told of the yak or bison. I have not been able to verify the statement, but there must be some vestige of truth in it, for if the animal tastes the salt he will very likely go on licking until the bone is exposed. The bases of the horns are much corrugated, and the skin on the forehead of a young bull is almost two inches thick, whilst the surface is patterned with small areas resembling scales. With old bulls this skin throws out horn, so that a kind of smooth carapace with convexity forward joins the bases of the horns. All of which is a provision of nature. The tsine's frontal bone, when compared with that of the bison and yak, is comparatively thin, so, in order to avoid concussion during encounters with each other, this thick skin, and later on the carapace, are given for protection.

My largest tsine bull carried horns over 30 inches when measured along the outer curve, and this head remained a record for many years ; but I believe horns measuring 33 inches have since been obtained. On measuring this head, now in the Bristol Museum, I find that there has been shrinkage, the measurements being as follows : Right horn, 28 inches ; left horn, $28\frac{1}{2}$ inches ; girth base, right horn, 15 inches ; sweep, 65 inches or 5 feet 5 inches ; girth base, left horn, 15 inches.

The skin of a bull when pegged out can measure 17 feet from tip of tail to muzzle, and is prized by the Burmese for making sandals. The scrotal sac is covered with fine, short, silky hair which the Burman also utilises for making tobacco pouches.

The country all round Tammu was very beautiful and

ideal tsine country. To the east, across the river, were large tracts of kine grass ; southwards were miles upon miles of teak forest with clear crystal streams running through them, and under the teak no heavy jungle, only kine grass here and there. Sometimes one came upon beautiful open glades of a short green grass, and always saw hog-deer here. To the west there were small hills with ravines covered with the same grass, and higher up came the bamboo belt with sago palms. Higher still the country was strewn with boulders and rather thick jungle. But it was chiefly on the west side that I bagged most of my tsine.

I have found that tsine, unlike bison, never ascend very high, but prefer the low hills, for after the yearly fires the bamboos throw out shoots which the tsine are very fond of ; consequently, where these are he is certainly to be found.

The tsine, when wounded, will charge. When alarmed he snorts and goes off at a tremendous pace with tail stuck straight out. He also makes leaps to get over the fallen timber. It is a beautiful sight to watch a herd feeding in bamboo forest, with the sun shining on their satin-like hides. I always think that the sight of a herd of cheetul or of tsine feeding is one of my most beautiful memories of the jungle.

My first introduction to tsine was on a very hot morning in April. The jungles had been fired and the gadfly season was in full fling. We found tracks of a herd, followed them up, and came on a clearing in the forest in which timber had been felled. My tracker pointed, but I could see nothing. At last, looking close to the ground, and about fifty yards away, I saw a sea of tails

flicking vigorously to keep away the tormentor. I then selected one and fired. The animal got up, tottered, and fell, whilst the rest of the herd stampeded. At close quarters the animal charged, and I dropped her—a cow as it proved—with a shot. Whilst all this was going on, my tracker got very excited and pointed to my left, just in time to see a huge bull disappear. This herd had been sitting in a saucer-shaped depression amongst the fallen timber, and so had been almost invisible at first.

My biggest bull gave me a very exciting time. I had obtained three months' leave for a visit to Sagaing, so, instead of going via Rangoon I thought I would go by the Kubbo Kale Valley to Kalewa, along the base of the Chin Hills, and then take the steamer up the Irrawaddy, so making it possible to visit my favourite, and practically untouched, hunting country.

I managed to secure some good heads of bison and buffalo on the way down, but no tsine, and had hardly been ten days away when a wire came from my C.O. to return post-haste as cholera had broken out in the regiment. I decided, thereupon, to return by the same route, but had a fearful time as the monsoon had set in, the country swarmed with leeches, and all the rivers were in heavy flood. I nearly lost my charger in the Tammu River, for I thought I could get him into a large dug-out. But he cleared it and was washed away. I found him eventually about 800 yards down-stream, with his haunches in the water and forefeet stuck in the mud; but he was extricated and proved to be none the worse for his immersion.

At the rest-house my tracker, Tocnem, came up excitedly to say that he had seen the spoor of a big bull

near one of the salt-licks, and that we must get him, so I decided to halt the next day and try.

Dawn saw us on his tracks, which we picked up at a salt-lick. He was evidently accompanied by two cows, which would make our job more difficult, as it is the cow that is usually the sentry and gives the alarm. The animals had taken to low, undulating, grassy country, but we found that the cows had fortunately left their lord and master. Later, as I came over a ridge, I heard a snort and, across the ravine, saw the bull tearing away broadside on. I took a hurried snap shot with no result, and cursed my luck, but following on his tracks we found a great deal of very bright blood. There were no bubbles in it, so it was evident that my shot had not entered the lungs.

On we went for some three hours, but the bull had taken to the broken and rocky ground, which was his undoing. We came on him at last, standing in some heavy jungle not 15 yards away. He was staring wildly at us, and, before he could charge, I had dropped him. It was a grand beast and I patted my tracker on the back.

On my return to Manipur the C.O. asked for my diary. He saw, set down, that I had halted one day, and asked my reasons in writing for the delay. I told him frankly that I had halted to bag a tsine, when he had me up in the orderly room, gave me a dressing down, and so the matter ended.

This grand head adorned the walls of our mess for many years. The wound this bull got from my first bullet was curious. The first bullet had cut the tendon of one of the hind legs, and had also lacerated the main artery, the consequence being that the animal was practically ham-

strung, and this with the added loss of blood prevented him going very far, especially as he had taken to very rough ground.

B., the forest officer at Kandat—a splendid sportsman, and very like in appearance to the great hunter, Selous—did a lot of tsine shooting in the Kubbo Kale Valley. He never wore boots or shoes, so being able to stalk noiselessly in the teak forests where the fallen leaves make silent tracking difficult. He possessed some fine heads, which were unfortunately destroyed when his bungalow at Kandat caught fire. He died many years ago of dysentery, contracted from exposure and hardship at his work and on his hunting expeditions.

CHAPTER X

THE INDIAN BEAR

IN Assam there are three kinds of bear, the Black or Himalayan Bear, the Sloth Bear, and the Malayan Sun Bear. The Nepalese say that there is a still smaller variety of the Himalayan Bear, and that it is much more savage than the larger variety. They call it the Sano Reech, but to my mind there is no difference excepting in size.

Bears are widely distributed through India wherever there are hills, mountains, and forest, and the places in Assam where they were most numerous were the North Cachar Hills, the hills on the northern side of Manipur, along the banks of the River Kopili, at the foot of the Cossyah Hills, and in the Dorrang district. I never saw a sloth bear in Manipur, but in the other places mentioned both kinds were obtained. The small Malayan Sun Bear I have only seen in the Nowgong district, but it was also obtained in the great Mamba Forest, which extends from Golaghat to the foot of the Naga Hills. The reserve forests opposite Darjeeling held several bear, but, although I went after them often I had no success.

All my bear hunting has been done especially round Manipur and at Kopili, sometimes called the "Hot Springs."

Bears are dangerous animals and will attack without being wounded, though a good deal depends upon the temper in which they may be found. If come upon

suddenly they are prone to charge ; and the fact is that the eyesight and hearing are very poor but the sense of smell very highly developed.

Bears are nocturnal in their habits, feeding at night and returning at daybreak to their retreats in caves or dense jungle. They prey on ants, wasps, raid bees' nests, and eat all kinds of fruit, especially that of the baer or wild plum, the goolur or wild fig, and the jamun, a purple fruit with a magenta interior. They also eat acorns, and where near cultivation will raid the maize crops and do a great deal of damage.

Both Himalayan and sloth bears dig into the ground to get at wasps' nests and ants. One can always tell that there are bear about by seeing these pyramidal holes all over the place, and the trunks of fruit-bearing trees scarred by their claws when climbing.

Ursus Thibetanus is fonder of honey than the sloth, and one will sometimes see spots that he has been gnawing away at for days in order to get at a bees' nest. His thick hair protects him from the effects of stings upon the body, but his nose and lips must be vulnerable, though he does not seem to mind the risk. He is also very fond of the larvæ of the large scarab beetle. These larvæ are found deep in the ground, and a bear will dig for hours to get at, to him, a juicy morsel. The yellow and black wasps building in the ground are also very much sought after.

I once shot a bear at dusk, and what appeared to be maggots of the blowfly kept pouring out of the bullet-holes. When I opened the stomach later I found it to be full of adult wasps and their larvæ, together with pieces of comb. This she-bear had been carrying two cubs on her back, which in the fading light looked like two humps.

One cub was unfortunately killed with the bullet that had slain the mother, but as soon as the elephant I was on came up, the other left the dead mother and clung on to the elephant's leg. The elephant then became angry, threw off the little beast and literally played football with it, the fore-legs kicking it backwards and the hind-legs forward. When I examined the cub afterwards I found it simply a bag of bones.

Bears will occasionally eat carrion, for once I saw one eating a dead pony which was highly decomposed. They also lie up in caves during the day, although the sloth bear prefers to lie under some large boulder of much the same colour as himself, and for obvious reasons.

In Assam the sloth bear is always found on ground called karkhani. This consists of numerous ant-hills, surrounded by very thick, thorny jungle. He will go through jungle impervious to any other animal, and it seems that the more prickly and thorny it is the better he likes it. A six-foot-high belt of nettles is nothing to him; he goes through it as a rabbit does through bracken.

When following a wounded bear he will almost certainly lead you a dance over awful ground, so you must be prepared for rough work.

I have said that bears usually resort to caves, but in the Manipur Hills they never use these, but make platforms of branches and twigs of trees. On these they lie with the cool breeze blowing on them, and free from leeches and other noxious pests. Sometimes two platforms are made, one for the female and one for the male, and I have seen these platforms in the Langting forests. They will also make such platforms when lying up in a

damp ravine, though in this case the platform is on the ground.

There are caves along the sides of a mountain stream in Manipur, but I fancy bears do not occupy these for fear of being flooded out by heavy rain and a consequent spate. At the Kopili only caves were used.

Sometimes one will hear a humming sound produced by a bear. This is a sign of pleasure, and is produced by inspiration and expiration when he sucks his paw. A tame bear can be persuaded to make this noise if a little treacle or castor oil is smeared on them. But why the bear does this is disputed. Some say he does it to alleviate the pain of a cracked and injured pad, but I think the native explanation is the better, namely, that the bear imagines he is raiding a bees' nest, and in his pleasure imitates their hum.

I have seen terrible wounds produced by bears, and often one may see a man with a cloth tied over his face—much of it having been torn away by a stroke of a bear's paw. One case I remember well, because when the man smoked the smoke issued from the back of the neck through a sinus that had formed. The folk usually mauled are grass-cutters who have suddenly come on a bear.

After seeing the enormous development of a bear's forearm-muscles, one can imagine the damage that can be done by a stroke from it. It is supposed that a bear always stands up to attack; but this is not always the case, at least in the sloth bear, for it charges on all-fours and knocks over previous to mauling.

When a civil surgeon in Tezpur, two men mauled by a sloth bear were brought into hospital. These men were catching deer in nets when, all of a sudden, a bear tumbled

into the net, and before he could be speared had bitten through the rope and attacked. One man had had his nose and eyes torn away, the other had deep holes in his skull, which penetrated the brain, for the bear had apparently bitten him. Both men died of shock.

The sloth bear when attacking makes a blood-curdling sound, but nothing in comparison with the sound produced when making love. The Tibetan bear attacks silently, as I have known to my cost.

Bears are very fond, too, of the roasted ants' nests which fall from the trees during a conflagration. Recently burnt jungle visited in the early morning or towards sunset is a certain time and place for bear.

The Tibetan bear, when compared with the sloth, is a handsome animal. The sloth is an ungainly beast, not unlike a pig, and has a longer snout and claws. Both have the white patch on the chest, both attain an enormous size and weigh anything up to 400 pounds. The largest bear I ever shot was 6 feet 8 inches from tip of nose to tip of tail. The Malayan sun bear has a lemon-coloured chest-patch ; and being far less savage, even in its adult stage, makes a delightful pet.

When in Cholera Camp at Manipur some sepoy informed me that they had found a bear's nest, and thought that there might be young inside. Consequently N. and I sallied forth one morning, accompanied by a few Gurkhas. The spot indicated was a small nullah ; a tree lay across this, and against this a lot of débris had accumulated, consisting of branches and leaves. Under all this was an opening.

It was decided that N. should have first shot, so we sat on the fallen tree above the opening, and our men pro-

ceeded to stir up the nest with long bamboos, when out came the she-bear. N. had his shot, but missed. All the débris was then removed and we found two cubs, eyes yet unopened and looking exactly like the young of white rats. We took these back to camp, and for a long time fed them with milk soaked on cotton-wool. As they grew older, bottles and india-rubber teats from the hospital were substituted. The teats came to an end, but they gradually took to rice, milk, and food of all kinds.

But they were a bit of a nuisance in infancy, for they yelled at night and, like babies, would not go to sleep without being fed. They became great pets, however, and would even wrestle with us. They were also passionately fond of ginger-beer, standing up and drinking with the bottle held in the forepaws. During the day they would wander into the jungle, but always came back to our hut in the evening. We were about this time due back at Manipur. Our bhaloos had also grown apace ; but we saw at the same time that they were becoming savage, and this was evidenced one day when one of them mauled N., tearing his lip. Our C.O. therefore ordered that they be got rid of, and they were sent to the Calcutta Zoo. One died shortly after, but three years later I visited my remaining pet and it immediately recognised me. It came at once to the bars of the cage, showed the greatest affection, and let me stroke it. I was sorry for the poor beast when contrasting its caged state with the free and cheerful time it had in camp.

I was attached for temporary duty to the 28th Bombay Pioneers when they were constructing the Manipur-Kohima road, and T. of this regiment proposed that we

should have a ten-days shoot on the slopes of Kowbruh, which practically rose up from the camp at Kaitimabi. And what a bundobust he made of it: no tents, no camp-beds, added to which we ran out of provisions and lived for two days on mushroom-curry! We were additionally unlucky for it poured practically the whole time.

On our return route to camp, T., with one tracker, walked below me, and I, with my tracker, was above. I had only a short time before put my head into a bamboo wasps' nest and got severely stung, though my jungle man had applied the sliced root of the wild cardamom, which alleviated the pain but distracted attention. T. was rather short-sighted, so that we were both startled when, all of a sudden, I saw T.'s tracker pointing and T. straining forward to see what it was. I promptly rushed down to him, and both of us simultaneously sighted a bear. He faced in our direction, and not fifteen paces away, the white on his chest standing out distinctly. Our shots rang out together and away went our quarry. T. was using a 12-bore Paradox and I a 12-bore rifle. There was blood in plenty and we followed in hot haste, going over ground covered with nettles and thorns.

A little later we came upon a stream, a pool of which was red with blood; apparently the wounded bear had had a bath, and my tracker maintained that he did this to stop the flow of blood. A little later again we sighted him climbing a hill, when I fired and hit him. I was now leading, and as I passed up-hill and beneath a big tree the bear came hurtling down on the top of me, sending my rifle and helmet flying, and dashing me to the ground. The bear, in the meantime, had crouched down about five yards away, and was making up his mind whether to

charge or not. T. fired but unfortunately missed him, and off he went again.

My damages were a knee-wound and a sprained ankle. T. followed up and tracked the wounded bear into a patch of grass, but before he went he asked me to lend his tracker my shotgun and five cartridges.

I managed to hobble back the seven miles to camp with the help of my tracker. T., I found, had arrived before me. He had got the bear, but the stock of my shotgun was so much matchwood and the breech and trigger-guard twisted.

It appears that T. had sent his man into the grass with my shotgun to stir up the bear, he taking up a position on a rock overlooking the scene of this operation. The tracker had dutifully peppered the bear, the animal had rushed him and had got hold of the gun that he had dropped. After mauling this he broke cover, and T. had shot him. He was a huge specimen and it took eleven men to carry him down. He was also very fat, and several days were employed in melting down the fat, which is good for rheumatism.

I could never afterwards decide whether that bear dropped on to me accidentally or with the definite object of attack.

After this incident and the previous exposure undergone, I contracted a high fever and was delirious for days. A little later I begged the C.O. to allow me to be carried in a doolie to my regiment in Manipur. This he refused, so I took the matter into my own hands and wired my chief in Shillong, who gave immediate orders for my return. He also met me on the road with a pint bottle of champagne, which was such a pick-me-up that I soon recovered.

When my wife and I were at Kopili I went out one evening to look for bison, and from the top of a small hill saw a large animal some distance away in burnt jungle. My tracker declared it to be a bison, but with the help of my glasses I saw that it was a bear.

There was no time to lose because it would soon be dark, so we ran down the hill and some distance toward the spot, when my tracker, being unarmed, refused to come any further and swarmed up a tree. A little later I peered over a ridge and sighted my quarry digging for ants or wasps. The only target offered was a huge posterior. I fired and the bear dropped dead in the hole he had been digging, my bullet had raked him from stern to stem. It took eleven good men in relays to carry him in. He measured 6 feet 8 inches in length, had very thick hair, and was very fat.

It was shortly after this that a tragedy occurred, for my favourite servant shot himself accidentally with my 10-bore Paradox when after a bear he had wounded during the previous evening. His loss was very depressing at the time, and for this reason I did not pay much attention to the skin, which was ruined in consequence. I gave, however, strict instructions about the skull, and when moving camp inquired about it. My cook replied that one of the coolies had made soup of it!

Kopili was full of bears, especially at the Koorung, where there were numerous caves, and it was at one of these that my servant met his death. No native would venture to the Koorung unless accompanied by a white hunter.

The magistrate and I once tried to get the bears out by throwing bombs there, but owing to flooding that

year these caves had no tenants. The superintendent of police, however, once bolted three by bombing a cave. The Koorung was certainly an eerie place, and this feeling was added to by the pools of water near it, which were as black as ink. Game of all kinds abounded here, and the tracks of bear could be seen in all directions. One could even smell them !

CHAPTER XI

INDIAN BOAR AND HIS CHARACTER

THE Wild Boar's courage has been sung in poetry and prose, and of this there can be no doubt. When wounded he never utters a sound, and dies fighting to the last breath.

From ancient times boar hunting has been a favourite sport. This is clearly shown in many an old picture and tapestry, both on horseback and on foot, with trained hounds. In the Black Forest of Germany a wounded boar is supposed to have shown the place where one of the most famous mineral and curative springs existed, and these are used to-day with beneficial results.

In India the boar, for sporting purposes, is looked upon in the same light as the fox, and to shoot one is considered a terrible crime. This is, of course, right in country suitable for hog-hunting, but in places where the ground does not allow of this type of sport it would seem justifiable to shoot them. Some people have no idea of the vast damage boars can do to both standing and root crops. In fact, in some parts of India agriculture would be impossible were these animals not thinned out. I have seen a field of potatoes destroyed in one night by a herd, and they are also very destructive to sugar-cane crops.

The boar is omnivorous, eating almost everything under the sun, including worms, snails, spiders, scorpions, grubs, and even poisonous snakes. I once kept four Wild Boar

and often saw them make a meal of cobras, the head being devoured as well. In the forests, berries, acorns, and various fruits falling from trees, afford them plenty of food, and in the hill forests, on account of this abundance, he attains a huge size.

One can always tell where Wild Boar are by their rootings in the soil. In the Sylhet district they do so much damage that the fields for many miles have to be protected by wooden fences. Sometimes the villagers turn out in hundreds to drive them into nets, where they are shot or speared.

A big, solitary boar is indeed "Monarch of the Jungle." He fears nothing, and even the tiger hesitates to come to grips with him; but when this does occur the fight invariably ends in favour of the boar. I have seen spots upon which fights between tiger and boar had taken place, and there was every evidence that the tiger had had the worst of it.

But it is strange that the boar should occasionally eat carrion, and one thing he is very fond of is the grass inside the stomach of an animal killed by a tiger or panther. Both tiger and panther generally pull out whole the stomach and its contents and do not eat it. This tit-bit is the boar's haggis! On two occasions, when following up the "kill" of a tiger, I have come suddenly on Wild Boar at their meal. One was barely a yard away from me, and luckily for me I shot him before he could attack. Wherever there is a solitary boar about one will always see certain trees with the bark and wood worn away; for it is there that the animal has been sharpening his tusks.

Wild Boar, when young, and up to a certain age, make

very interesting pets, and will follow their owner like a dog. But later on they become savage and destructive and have to be destroyed. The sow makes a regular hut for her litter, oval in shape, with an inlet and outlet ; and in consequence, if one is seen of comparatively fresh grass it is fairly certain that the young are inside, and the litter may number anything between five and eight.

I once came upon one of these huts whilst mounted on an elephant. The sow had been asleep outside and bolted on seeing us. From inside the hut we pulled out five youngsters ; pretty, little, brown and yellow-striped animals, marked very like the common Indian palm-squirrel. The youngsters were distributed to various people, but all came to an unhappy end.

Sometimes an old solitary boar will take possession of one of these abandoned huts as shelter from sun and heavy rain.

In the Sylhet district, the native Chamars camp out once a year, taking with them all the domesticated sows. These are then crossed by Wild Boar to improve the breed. Some tame sows are enormously fat, the consequence being that the teats touch the ground and are apt to be injured. In order, therefore, to prevent this a "jou jou" bandage is bound tightly round the body.

The Wild Boar is widely distributed through India. In Manipur there were thousands of them, and in the Sylhet district they were nearly as numerous. I believe that in Assam, especially in the hills, the boar attains his maximum size. There are also certain hill boars that never descend into the plains, and I have met with them at an elevation of 6000 feet, and higher. In the plains a

35-inch or 37-inch beast is considered a big one, but the hill boar measures 40 inches at the shoulder.

Once, when after sambhur high up in the hills, I surprised a boar in his wallow. He got out looking very savage and contemplating a charge. I bowled him over dead, luckily, and he proved to be an immense animal, measuring 6 feet 8 inches from end of tail to tip of snout, with tusks $9\frac{1}{2}$ inches long, but very massive. He must have weighed between five and six hundred pounds, for it took seventeen good men in relays to get him back to camp. When shot, I had to leave him, as there were only three of us together at the time. I was, of course, afraid that the carcass would be eaten by tiger or panther, but my tracker came to the rescue. He took off his dirty sheet and, placing it on the body, said, "Now, sahib, nothing will come near the corpse." And he was right.

Personally, I think that 11 inches is about the maximum length of a tusk, for I have measured necklaces made out of these, and worn by the Nagas, and have never found them above 11 inches. Tusks longer than this probably owe their length to the fact that the upper tusk has been worn away, or broken, so that there is no friction to keep down the growth of the latter. It is a well-known fact that if a rat loses his upper incisors the lower ones will grow indefinitely, and ultimately penetrate the skull. Such a case is recorded by Frank Buckland.

Boars' tusks make rather pretty ornaments, but in tropical heat are apt to crack unless smeared over with solid paraffin or wax. The Nagas and other wild tribes use them as necklaces, and also to adorn their wicker helmets, when two tusks joined together form a crescent in front.

In Assam two types of Wild Boar are found, the ordinary sort and the Pigmy Hog, which is very like the American Peccary. I have seen the latter in the Dorrang district and have shot one in the Nowgong forests near Lanka.

The Pigmy Hog is very savage, and a herd have been known to tree a man, like the Peccary, and keep him there until help came. Wild Boar may be found in any kind of country, and I have put them up in very tall grass. As a rule they prefer jungle in the vicinity of bheels and swamps. If crop-raiders, they generally lie up in sugar-cane plantations hard by. On the banks and churs of large rivers, they are found in the low, juniper-like scrub, called Jow in Hindustani.

Boars are good swimmers, and it is a mistake to suppose that they cut their throats with their fore-feet when doing so. I have seen Wild Boar as well as a Hog-deer swim across the Brahmaputra.

When comparing the Indian boar with the European, I think that the European never attains the shoulder height of the Indian; that the tusks are smaller and thinner; that the coat of the European is larger and thicker; that the hind-limbs in the European are more slender; that the head and neck are more massive in the European. I have measured several skins of boar shot in the Thuringian forests and have found the largest to be six feet.

Boars are very afraid of jungle fires, and when one is blazing, are the first animals to flee. Very often, too, if a tiger is about, there will be a trek to more wholesome parts, for it is well known that the tiger prefers pork to anything else. My wife and I once saw such a trek owing to this cause, and there must have been thirty or forty animals

of all sizes in the herd. They passed almost in single file and not very far from our elephant.

One-third of a boar's tusk projects outside the lower jaw-bone, and two-thirds inside the bone, this is just the very opposite to the way of an elephant tusk with two-thirds of its length projecting outside and one-third covered. The tusk itself consists of enamel and dentine, the layer of enamel being fairly thick. It is subject to caries like other teeth, and its existence does not improve the temper of the beast.

The boar is a dangerous animal ; sometimes he will charge at sight, and especially if one suddenly comes upon him. My first tracker had a narrow escape from one. He went after jungle-fowl armed with a single-barrel muzzle-loader, met a Wild Boar and foolishly fired at it. The beast charged and luckily for Singbia there was a horizontal branch of a tree above him. At the charge he jumped and tried to swing himself on to it, whilst the brute passed underneath just missing him. This was repeated several times, till the boar got sick of it, when Singbia returned to camp, looking very pale about the gills.

A boar can inflict frightful and often mortal injuries. In the course of my duties as medical officer I have had to deal with many such wounds. One man had a rip, 8 inches long, behind the knee ; the artery was exposed and could be seen pulsating at the bottom of the wound. He recovered, and it was fortunate that the main artery had not been lacerated. On another occasion in Sylhet a man was brought into hospital with his back cut to ribbons by a boar, and through one of the deep wounds the lung, or part of it, protruded, so that at each inspiration it swelled up like a child's india-rubber ball. It would appear

that he had been sitting down not far from his village for a purpose of nature when a boar attacked him. He wisely lay on his stomach and let the animal do its worst. And this, by the way, is the best thing to do if attacked.

And again, in Sylhet, a tragedy occurred in a tea-garden. The coolies wounded a boar and came and told M., the manager, who said he would go out the next day. In the meantime the wounded boar had got into some thick jungle on the side of a river channel. The coolies offered to drive the animal up to M., but he insisted on tracking it up. As he came opposite its hiding-place it charged, the shot failed to stop it, and it ripped poor M. in the abdomen, nearly disembowelling him. M., although grievously wounded, fired another shot and killed the brute. M. then died and the two bodies lay a short distance from one another. A wounded boar is just as dangerous as a tiger ; his onslaught is terrific, and he shows neither fear nor mercy.

Wild Pig are very subject to rinderpest and one year in Manipur they died in hundreds.

It was here also that I had my first experience of boar-hunting. Round the Logtak lake there was jungle and the shores supplied plenty of food for them. The roots of a small rush and the singara nut represented the chief food here, and although they generally feed at night in secluded spots, they could also be seen feeding two hours after sunrise and two hours before sunset. I once obtained nine boar in one morning, and all the carcasses were sent into headquarters, where the men of my Gurkha regiment were glad to get pork as a change of diet.

My first boar nearly cost me my life. I had wounded one and was following him through the long grass—my tracker

being in front with my 12-bore rifle over his shoulder—when all of a sudden there was a bang, the trigger of the rifle the tracker was carrying had caught in some obstacle. The bullet missed me by inches, and from this incident I learnt a lesson never to allow a native to carry a loaded gun before or behind one and whether tracking or not.

I had shot several boar on the margin of the lake one morning, and was walking rather carelessly along a grassy nullah when, on turning a corner, I came within five paces of a huge boar. The beast stood his ground, his bristles stood up on his neck, he made a gnashing sound with his tusks, and I could see the evil look in his eyes. I promptly dropped into a kneeling position and shot him dead. A few seconds would have made all the difference—probably to myself.

On another occasion I was returning one evening to camp when my tracker and I saw a large animal moving slowly across a grassy glade some eighty yards away. My tracker said that it was a young buffalo, but I knew it at once to be a huge boar. I promptly fired and broke the animal's back, but in the excitement of the incident forgot to reload, so that when taking another shot at a few yards there only came an ominous click. At the click the wounded boar, despite his paralysed hind limbs, came for me. I had no time to load, so drew my heavy kukri, struck him on the head and killed him. He proved to be a huge specimen, 39 inches at the shoulder and with eight-inch tusks.

In Manipur we used to burn miles upon miles of reed and grass jungle, and it is no exaggeration to say that eighty or ninety Wild Pig used to break out at one time. These dense jungles were generally surrounded by swampy

plains covered with short green grass, and on these we used to select the largest pig and chase and shoot them on foot.

My pack of dogs usually accompanied me to help in the fray, and one day we heard a terrific row proceeding from a partly-burnt patch. On arrival at the spot I found my five dogs tackling a small boar, and holding on to parts which prevented their quarry wounding them. But as I thought that some of them might eventually be injured, I called them off and shot the boar.

During these boar-hunts we used to get other game. There were black partridge in hundreds and many hog-deer. Both of these afforded very pretty shooting when we went over the burnt areas, but we emerged from them looking like chimney-sweeps.

In Sylhet also I had some experiences with Wild Boar. One day, the Assistant-Magistrate, my wife and myself, were out on elephants after small game. We were at the edge of a nullah, when suddenly a big boar dashed out and got four charges of shot in his rump. This seems to have angered him. About 200 yards away were three men cutting grass and he went straight for them. They were up in trees like a shot, and perching on the top like paddy-birds. I saw the boar put his fore-feet against one of the trees in an attempt to get at his victim, and I thought what a good thing it was that boars cannot climb trees.

When the boar first broke I noticed that he went rather lame, so I got my rifle from my man on the third elephant, and followed up to get a shot at 150 yards, which broke his back. But the plucky brute was not yet done, for he got his haunches against a tree and faced the elephant. I then finished him with a third shot. I found later that he had a big scar on one knee, and, on cutting into this, I

found an embedded spherical bullet, which had probably been fired from a native musket. The animal was a very old one, with scarcely any bristles, and the upper and lower tusks were yellow and broken.

This chapter would not be complete without reference to pig-sticking, or to give it a nicer name, hog-hunting. I was lucky once to be transferred to Rajshaki where, on the banks of the Ganges, there was grand hog-hunting country. Celebrated hog-hunters like Crawford and Taylor, the genial and hospitable manager of the Midnapur Zamindary, have hunted this country. I believe Taylor had 247 first spears to his credit ; he also had a remarkable accident. One day he speared a boar which had come at him from the side of a nullah. In the attempt he tore a biceps muscle almost in two. Poor Taylor, he was also crippled during the War, but still remained his cheery self. We have had many pleasant days at his home, and his hospitality was unbounded. Our Assistant-Magistrate, H., was a great hog-hunter. There was a big boar in the vicinity of Nator, in the Rajshaki district. H. determined to get it and sallied forth alone. In his attempt he lost all his spears so, nothing daunted, went to the nearest village to borrow the Chowkidar's spear and killed the boar with it.

One day when hog-hunting I came upon an Assistant-Magistrate, O. D., on his horse, but minus his spear. I asked the reason. He replied, " Inside those low bushes is a boar with my spear in him, and I haven't got another." I dismounted with my spear and proceeded to investigate. I soon saw the boar with both haunches horizontally transfixed ; and so caught up in the bushes that he could neither move backward nor forward. In such a position he was easily put out of his misery.

And what fearful country our nags went over. We never saw or thought of the deep nullahs that we negotiated when our blood was up, but going over the ground again and slowly, showed some of us the many pitfalls we had escaped.

Hog-hunting is a great sport, because there is an element of danger attached to it, and I can only wish that I had had more opportunities of hunting the mighty boar from horse-back.

CHAPTER XII

THE WAYS OF THE WILD DOG

DURING all those years of shikar I had many opportunities of observing the habits of this animal, and I have been fortunate because, owing to its shyness and innate fear of man, many Anglo-Indian sportsmen have never seen it.

The Wild Dog (*Cuon dukhunensis*) is found over the greater part of India where there are large tracts of forest, either in the plains or hilly country. I have even come across these animals at an elevation of 7000 feet. They are very numerous in Assam and in the Jagar Valley, Mysore. I have also seen them in great numbers in the Feudatory States of Orissa. Years ago they were also abundant in the Central Provinces, but owing to the stringent measures taken by Government, and the ample reward offered for their destruction, they have been considerably reduced so far as the latter is concerned.

In Assam the Wild Dog is increasing to an alarming extent, and game is being exterminated by them in some parts. When I left India the reward had been discontinued, an action which will certainly lead to an increase of these pests. Nothing keeps them down ; no epidemic seems to affect them ; trapping and poison are of little use, so that shooting is the only real means of destruction. Happily, the Wild Dog has a cannibalistic tendency, and I have a shrewd suspicion that when game cannot be procured they destroy and eat each other.

It is curious how occasionally one finds them with one eye destroyed, and this, I think, is caused by a stick during the mad rush after game. This is analogous to the number of one-eyed mahouts also seen who ride the koonkies in mela shikar after wild elephant.

The Wild Dog is the most hated animal in the jungles, for immediately they appear in any locality all game, especially deer, is either killed or flies elsewhere. It has also been said that elephants, tigers and leopards dread this marauder, but this I do not believe. Herds of bison and buffalo do not seem to mind them, and Wild Dogs would never dare to attack a herd of these, though they might, perhaps, pull down a solitary bull. I have never, however, known of an instance of this sort. Their chief victims are deer, principally sambhur and barking-deer, but they also prey on Wild Pig, and I actually saw ten or twelve of them attack an enormous, solitary boar.

The Wild Dog is always in the pink of condition, sound both in limb and body. When the skin is removed there is not a particle of fat, and the muscles are perfect marvels. The only other animal resembling him in muscularity is the Monitor-lizard or "goee samp," a very active creature.

There are two varieties of Wild Dog in Assam; one, larger and lighter in colour than the other, but there is no difference in shape. He is a foxy-looking beast, and it also resembles the ordinary "Pi dog," but the muzzle is more pointed and the tail bushy.

They are generally found in packs, but during the breeding season the dog and bitch go about together; and they hunt silently after giving tongue. An animal is singled out and chased until brought down. In most cases the animal takes to water, generally a pool with steep cliffs on one side.

I once saw what was evidently an organised drive. Some of the pack were posted at the top of a nullah, and the rest drove the hunted animal up to them ; but as one of the former fell to my rifle their little game was stopped.

Every sportsman must be familiar with the native belief that the Wild Dog, before chasing an animal, urinates in a circle some distance away and that, in consequence, the hunted animal will not go beyond this, but breaks back. There is also a belief that they urinate into the eyes of their victim and so blind it. The performer must be a first-class shot in the latter case!

When attacking any animal the dog's main object is to disembowel it. A poor sambhur hind once rushed into one of my camps with several feet of intestine protruding. They also attack the head, lacerating it frightfully. I have seen a sambhur fawn with the whole of its muzzle torn off and both eyes destroyed.

It is a curious fact that the selected victim is more often a stag than a hind. I think the reason for this is that the stag's antlers must impede it during its blind rush through dense forest, thus making it the easier victim to bring down. It is in any case a good thing that the stag is so selected, otherwise there would be no game left. In the Mysore jungles I once came on the " earths " of Wild Dogs and counted no less than twenty-six antlers lying round the burrows.

I do not know whether Wild Dogs breed in these colonies. The only " earth " I ever dug out was an isolated one, from which I took a litter of five pups of about seven weeks old. They were nasty, smelly little beasts, but did not attempt to bite. I brought them back to the regiment and made a present of them to the C.O. He promptly had a large cage

made for them, but they proved uninteresting and always appeared dull and depressed in captivity. When a cow or goat strayed into the compound, however, they brightened up, and a glint of savagery appeared in their eyes as they all crouched and stared at the animal.

The smell of the Wild Dog is similar to that of the jackal, but not so rank. I have heard the Wild Dog make a whining sound like an ordinary dog, especially when one of a pair loses its mate. When shot, it yelps just like a "Pi dog." It is wonderfully silent when on the move, and the tail, which is never raised, is whisked rapidly from side to side. It is also adept at feigning death, so when one is shot be sure it is dead or else you will never see it again. It is likewise very hardy. One I shot with a .360 express, and which was afterwards hammered with a bamboo by my shikari, very nearly got away when we were not looking.

The Wild Dog prefers fresh meat, but if game is scarce will eat carrion several days old, such as the kill of a tiger or leopard.

I once shot a Wild Dog absolutely devoid of hair ; it was affected by some skin disease. The hair is in any case generally full of ticks, and many have scars as the result of wounds either from fighting or from thorns in their mad pace through the jungle.

On one occasion I had news of a "kill" and had a machan put up. The "kill," a cow, had dropped her calf in her struggles, and this was lying a few feet away. At about 10 p.m. I heard a tearing nose, and turning my night-light and rifle on to the place saw as many as six Wild Dogs at the "kill," their eyes giving a red reflection when seen by the flashlight. They looked up but were not scared, so I let them continue their feast. Four hours later I heard

the angry cough of a leopard, the real owner of the "kill." Shortly afterwards there was the sound of a rush, and again turning my light on to the "kill" I found that the dogs were still there. They had apparently driven the leopard away and would not let him approach the "kill." Morning broke, and while awaiting the arrival of my men with the rope-ladder, I noticed that most of the "kill," as well as the calf, had disappeared. Then suddenly I saw a large black animal come over the opposite ridge and took it to be a bear. Soon after there was a sound of munching, but owing to the density of the undergrowth I could not see what animal was making it. Almost immediately after there was a rush down hill, and in a clear space not thirty yards from me I saw a huge solitary boar surrounded by ten or twelve Wild Dogs, some attacking him in front and others in the rear, though none were actually coming to grips with him. The old boar turned round and round like a top, champing his tusks, and at times, charging his enemies. I watched the encounter for five minutes, and then, wishing to secure the boar, I shot him. He rolled downhill and was afterwards found dead; a fine massive beast, 39 inches at the shoulder, with tusks 9 inches long.

On the shot the Wild Dogs dispersed and I sat still in the machan. About a quarter of an hour later I saw, not far from the scene of the combat, two Wild Dogs carrying off the calf between them. I fired at the nearest one with a .450 soft-nosed bullet, and although killed the beast stood up for a few seconds before toppling over.

I afterwards discovered that the old boar had been making a meal off the stomach of the "kill" when he had been attacked.

I have often wondered how the combat would have

ended had I not interfered. I expect, however, that it would have been in favour of the old boar, as the dogs appeared loath to get to close quarters. It was, anyway, a sight that falls to the lot of few, and I would not have missed it for anything, for from this incident I learnt the following facts: that Wild Dogs are not afraid of the flash-light; their ability to drive and keep a leopard off its "kill"; that Wild Dogs do not fear the sound of a rifle.

I again sat up over what was, judging by the tracks, a leopard's "kill." This time the real owner did not put in an appearance, and at dawn the "kill" was still in its original place. But during the night-vigil I heard a terrific crashing in the bamboo jungle below me, and turning on my "Ever-ready" I caught sight of an elephant, who, thoroughly alarmed at the flash, went crashing away through the jungle.

But at dawn, as before-mentioned, a couple of Wild Dogs, a dog and a bitch, appeared, and made their way to the "kill," about forty yards distant, with noses close to the ground and tails whisking from side to side. I shot the leader, which rolled down a few feet into the scrub. I then waited and after a ten minutes' interval the other dog came along and, finding the corpse of its mate, began worrying it. I fired again and it dropped dead, to lie across the body of its dead mate. They were both slung on a pole and taken to the magistrate. The D.C. possessed a bull-dog which had been, up to then, always on very friendly terms with me, but after the exhibition of these Wild Dogs it constantly growled at, and on one occasion attacked, me.

One district in which I was stationed possessed, near some hot springs, a celebrated locality for bear. There were

numerous caves here, and the only way by which to dislodge the bears from these was by means of bombs.

One day, whilst a friend and myself were busy at this game, we heard a great splashing in a stream about 100 yards above us. We at once stopped bombing operations and proceeded in the direction of the sound, to find, in a pool, two sambhur hinds and a fawn. They stood with their backs against a high rocky cliff, and on the opposite bank some red objects were moving, evidently Wild Dogs.

The two hinds constantly struck the water with their forefeet, and after watching them for a while we fired at the dogs and dispersed them.

The poor, terror-stricken creatures allowed us to come within three yards of them. The fawn's head was terribly lacerated so we put it out of its agony. The hinds disappeared into the jungle, and we at least felt glad to have saved them from a horrible death. The Wild Dogs were quite silent although they had brought their quarry to bay.

Again, when in Cuttack on leave I accepted an invitation from a feudatory chief to shoot tiger. I left for the palace, some twenty miles away, on a country-bred and had to swim a river *en route*. When I landed on the opposite bank I found that the path led through dense forest, so proceeded on my journey for a while and then stopped for a rest, but did not dismount. Whilst doing this I heard the sound of heavy breathing, and turning round discovered a pack of Wild Dogs not fifteen yards from me, with tongues lolling out and looking very savage. After watching them for a while I went ahead at a walk, but was surprised to find a little later that the pack was following me. I then gave my nag a dig and we trotted on, but still

the dogs followed. It then dawned on me that the beasts meant mischief, so I galloped my horse for the remaining six miles, not drawing rein till we reached the palace.

I can't account for the behaviour of this particular pack because the Wild Dog has an innate fear of man. Possibly they had been disappointed in the chase, were hungry and therefore in an excitable condition. On the other hand, they may only have had designs on my horse. At any rate, they saw red, and it was a most exciting experience, and probably one of the only instances of man being chased by them.

I will now show that there exists in Wild Dogs a cannibalistic tendency.

On another occasion, when in camp, my wife and a friend were wandering along the bank of a river and came to a spot which had apparently been the scene of a fight. On returning to camp, they told me that there was a lot of blood and red hair about, and my wife also brought back an ear for identification.

Being much interested the three of us visited the spot next morning, and the evidence was so plain that I had no difficulty in reconstructing the tragedy. The ear, hair, and tracks in the sand were those of Wild Dog. Apparently the pack had decided on eating one of their number, a struggle had ensued, one had been killed, and the corpse had then been dragged into the jungle.

At first sight I took the ear to be that of a barking-deer, but on examination of it, the hairs on the spot and the absence of all deer-tracks, convinced me that only Wild Dogs took part in this episode.

I was the more certain about it because I had seen, as already mentioned, a bitch spring on to the dead body of

her mate and start to worry it. She would no doubt have eaten it had I not shot her.

It is to be hoped that as game gets scarcer this cannibalistic taste will increase to the point of extermination, for before I left India game was getting so scarce in many areas that Wild Dogs took to killing domestic cattle. This is a very serious menace for the future, and the Government of India would do well to deal with the problem by the offer of ample rewards for the slaying of these brutes, the terror of the wild denizens of the jungle.

In the Central Provinces, I understand, the reward is 15 rupees for each Wild Dog, and in Assam, where the curse is worst, Government would be advised to offer the same amount, and also to engage special native hunters to exterminate these pests. At present no reward is given in Assam.

I have also read of Wild Dogs fraternising with deer, the latter not showing the slightest indication of alarm or fear. This has been noticed by Champion, that close and accurate observer of nature, and also by Mr. T. A. Baldry of Tumsing tea estate, who writes in the *Journal* of the Darjeeling Natural History Society. I must say that I have never seen this, and, on the contrary, my experience has been that as soon as Wild Dogs appear in a locality the deer disappear.

Perhaps cases of fraternisation may be explained by the following facts—that these dogs are afraid to attack a herd, for unity is strength; that the dogs in question may have been gorged, so not inclined for a long chase or risk of injury; that there may be some unwritten law of the jungle.

One can understand Wild Dogs fraternising with the domestic variety, as they are closely related. Wild Dogs

will not attack the tame brother as long as shown friendliness, but will do so if the least aggressiveness is shown. It is a mistake to suppose that Wild Dogs intentionally drive their quarry to water. The stricken animal knows that water is a place where it has a chance of escaping from its pursuers. A stag hunted by hounds almost always takes to water. In addition, during the chase, the hunted animal get thirsty, and so has an additional reason for doing so.

The Wild Dog, like the civet cat, ferret, and ratel has glands at the root of the tail from which can be ejected a noxious and pungent secretion at the animal's will. This is noticed when one approaches a wounded dog. Wild tribes such as the Nagas, Ghonds and Bhils believe that prior to chasing an animal Wild Dogs pass this secretion, and that, in consequence, the hunted animal runs in a circle and is easily killed. They also say that this secretion is forced into the eyes of the hunted animal and that it blinds it. It is far more probable that this strong scent helps Wild Dogs to find each other more easily in dense jungle.

CHAPTER XIII

DEER HUNTING AND OBSERVATION

Sambhur—Hog Deer—Swamp Deer—Cheetul—Thamin—
Manipur Deer—Barking Deer

Sambhur

THE Sambhur is, I think, India's largest and heaviest deer, and in Assam it seems to attain its maximum weight and height ; but, curiously enough, the horns are disappointing, their size not being nearly as long as those obtained in the Central Provinces and in the Nilgiris. This is probably a provision of Nature. Large horns would encumber an animal very much in the dense primeval forests of Assam, where cane, lantana, and adjuratum abound.

I have, unfortunately, not kept any record of measurements, but can say that what is sacrificed in length is made up in basal girth. I saw one head the basal girth of whose horns was $9\frac{1}{2}$ inches, and the horn looked like a piece of gnarled oak. It is curious that with heads obtained in the Naga Hills the spread was not great, and I mean by this that the distance between the "royals" was small. I think they are not shed annually. At the bases of the horns, and in the length, will be found remnants of the bark and fibre of trees against which the animal has been rubbing them to get rid of the velvet. In fact, wherever Sambhur are found one comes across small trees from which the bark has been removed and left hanging in strips.

The Sambhur is found wherever there is thick forest with grassy slopes, ravines, and glades, and, of course, there must of necessity be plenty of water. I have also shot them in sun-grass and reed-jungle. In Assam they love forest, skirting the banks of rivers where there is plenty of bamboo-jungle and rich grass. They come out in the mornings and evenings to feed, and I have shot Sambhur by moonlight, such a large animal then being easily seen.

Once, one evening, when shooting with my D.C. in the Cachar jungles, we counted seventeen Sambhur, all does, feeding on the river-bank not 200 yards from our camp. At this time Kheddah operations were being conducted in the forest not far away, so that these animals may have been driven there and collected.

I have seen most Sambhur in the Namba Forest, Assam, through which the Dihong flows ; in the forests on the banks of the Dehing in the North Cachar Hills ; in the mountain ranges to the north of Manipur, although not a single one in the valley itself ; and numbers in the Jagar valley in Mysore.

It was in the last named, and one morning, when after bison, I saw eleven, all stags, walking in single file down a slope, and fancy they were going to have a fight somewhere, as the rutting season was on.

Sambhur are found at great heights ; the finest stag I ever saw was on the plateau of Kowbruh (8000 feet), lying to the north of Manipur ; whilst some of the best days I ever had were on hills of from 5000 to 6000 feet high. The plateau of Kowbruh was an ideal place for Sambhur : patches of thick forest, interspersed with stretches of sun-grass and bamboo. After the annual fires, and when the

green grass had cropped up, it was glorious sport stalking: herds of perhaps seven or eight, though hard work.

It was on a glorious winter morning up on the happy hunting-grounds that I saw one of the finest sights I have ever seen—two Sambhur stags in mortal combat. When my tracker and I had almost gained a ridge we heard a noise like the sound of castanets, but much louder. My tracker promptly whispered: "Two stags are fighting," so we went silently up and peered over the ridge. Below us, not twenty yards away, were two stags, their antlers apparently locked, but almost immediately each took a few backward steps and charged each other. They were apparently well matched, as neither gave ground. Their bushy tails waved rapidly the whole time; the whites of the eyes showed, and their breath condensed in the cold atmosphere.

We watched them for fully ten minutes, and then the lust for trophy got hold of me. I fired at the bigger, and rolled him over. The other was away like an arrow, and finally disappeared over the farther edge of the plateau. I should have liked to have seen the end of that combat, and probably would have done had I had a camera instead of a rifle.

Sambhur feed morning and evening and probably during the night, for I have come on them walking along the banks of rivers after midnight. Salt-licks are also visited nocturnally. During the heat of the day they retire to dense forest or thicket and lie down, sometimes in the same seat day after day. One comes across numerous seats where Sambhur are plentiful.

The hair of the Sambhur sheds easily and is to be seen on these seats, so that it is easy to identify the animal.



(Upper) OUR CAMP, DEHINGI

(Lower) RIVER SCENE, DEHINGI

When gad-fly pests appear, in April and May, the Sambhur either ascend very high up into the hills where it is too cold for their tormentors, or they take to the shallow pools of a river and submerge their bodies till only their heads are above water. The ears are constantly in motion, and every now and then the head is dashed into the water to rid itself of the pests.

In the Dihong I have seen six or seven Sambhur together in shallow pools. Besides gad-flies, Sambhur are attacked by ticks and leeches : in fact, and excepting pig, I think Sambhur are the most ticky animals in the jungle. These pests attack where the animal cannot lick or rub them off, mostly on the under surface of the body and on the genitals, and hang there, swollen with blood, like bunches of grapes.

It is well to keep clear of a Sambhur when it is being skinned, as the ticks leave the cold body and make a bee-line for fresh fields on the human body. I once shot a Sambhur with a bunch of leeches which had found lodgment between the teeth and the cheek. The animal could not have got rid of them in any way, and must have suffered fearful discomfort. I have also found leeches, striped green and yellow, in the nasal sinuses, and five or six inches long. This is known as the elephant leech.

On the neck of all Sambhur will be found a bare, circular patch, varying in size from that of a rupee to a much larger circle. This has been caused by a tick, and the irritation caused makes the animal try to rub it away against a branch.

The Sambhur wallows in hot weather, and I have shot them when covered with black, moist clay. One of these, which had sought the company of a swamp-deer hind, had

a huge wound in the side literally alive with maggots of the bluebottle-fly, so that its sufferings were well ended.

Sambhur will eat wild fruit of all kinds, the jamun, ootunga, aula, etc., and they also eat the flower of the bombax. Monkeys are most useful to them, and they will follow a herd of elephants or bison for the sake of the bamboo leaves which these animals pull down. Sambhur are also very fond of the fallen petals of the koochnal, a wild bauhinia, the wild plum (baer), and bamboo-seed which falls to the ground after flowering.

The bamboo flowers every seven or eight years and then dies. The hill tribes say that when this occurs the crops will be poor.

The Sambhur also levies a heavy toll on the crops of the villagers who go in for jhooming, and on every field a shed is raised in which a night vigil is kept. The watcher has a string tied to various empty kerosene tins, and he makes a din by pulling the string every now and then. A great number are shot by the native shikari at night, who sits up in ambush near the crops. The Nagas catch them in pits, at the bottom of which is usually a spiked bamboo. They also catch them by a very painful spring-trap, made by bending a sapling, and to this attaching a rope with a noose. This sapling is then so arranged as to fly up as soon as the animal steps on it.

Sambhur are not at all shy in areas where not molested. A doe and a fawn once came down to the river to drink when my dug-out was not ten yards away. They did not mind me in the least, and it was a pretty sight to see the fawn skipping and pirouetting round its mother.

It is needless to say that the Sambhur's sense of hearing, sight, and smell is very acute. I think the first sense is

most strongly developed. The ears are in almost constant motion, and this movement gives the animal away, for otherwise it would be difficult to detect it in thick forest. It is also the animal most hunted by the wild dog, and when hard pressed it will take to water or to the vicinity of man. The animal is either disembowelled or blinded by being mauled about the head. If a doe, when facing a wild dog which has entered the water to attack, it strikes with its forefeet ; if a stag it thrusts with its horns. The pointed hoof can inflict severe injury on a dog. But once wild dogs come into a locality harbouring Sambhur, the latter move off to another.

I spoke of Sambhur visiting salt-licks, and these are the places where the native shikari can bag them easily. In a large salt-lick in the Nowgong district there must have been at least ten machans stuck in trees and bamboo-clumps, cleverly concealed. The tiger, too, takes this opportunity, and will be at the sides of the paths leading to a lick.

One evening, whilst my wife and I were sitting outside our tents, pitched on the bank of the Tuibach River in the North Cachar Hills, we heard piteous noises proceeding from the jungle across the river, and my head tracker told me that a tiger had got hold of a Sambhur. The night was pitch dark, but taking my petrol hurricane-lamp we waded the stream towards the lick and saw nothing. Next morning we visited the spot again and the whole tragedy was revealed. We found the seat of the tiger close to the path, jungle trampled down in the struggle, tufts of Sambhur hair lying about, and finally the body. I thereupon put up a machan over the "kill" and sat up that night, but without success. But I remember that before

it got dark a most beautiful bird, apple-green and blue in colour, and about the size of a jay with a reddish bill, kept hopping on to the corpse and gulping down morsels of flesh ; a mongoose also helped itself from the same " table."

Sportsmen often talk of the " bell " of the Sambhur, but I must confess that I have never heard it ; what I *have* heard, especially when the animal is disturbed, is a sonorous " honk, honk," which has a ring in it. The young make a noise exactly like that of a barking-deer, and anyone who has heard the piteous cries of a wounded Sambhur never wishes to hear such again.

The colour of old males is almost black, and light brown in younger animals ; old does, too, are almost black. The young are not spotted, and their legs are very sturdy and strong. The under-parts are whitish, but in old animals the skin is sometimes saffron-coloured, like that of some bison. I have also seen this colour under the tail. Old males have a mane of stiff long hair. The lachrymal fossæ are well developed, and in one doe I found rudimentary mammæ placed well forward.

The flesh is coarse, dark, and tough ; the only portions fit to eat are the tongue and the marrow of the bones. The Nagas believe that the bile is a panacea for all diseases, and in opening one up, the " Boss " Naga, usually the head tracker, always takes the gall-bladder. The genital organs are also in great demand, for by eating these the Naga hopes to be rejuvenated.

The most enjoyable way to shikar Sambhur is to stalk them in the hills. C. of my regiment (8th Gurkhas) and I took two days to climb Kowbruh, near Manipur, and the first night we slept in a hollow tree. During the night it

rained heavily and we were thoroughly soaked. Next morning we started early, and on gaining the top saw a magnificent stag gazing at us. I fired and the cartridge snapped, another did the same, and the beast bounded away, to my disgust. On this same plateau we found innumerable tracks of Sambhur, elephant, and bison, but my only luck that day was to bag a male Tragopan pheasant.

Needless to say, Sambhur can be shot from an elephant, and by this method it is surprising to find how close one can get to them. Presumably they mistake the tame elephant for a wild one, to which they are accustomed. One can also use a dug-out floating silently downstream, and look out for them on the banks at the edge of the forest. One may also have the luck I had in seeing a stag cross a river.

Driving may be resorted to, but, as far as I know, this is only done by the planters in Sylhet, where the low, isolated, jungle-clad hills between the areas of tea cultivation hold Sambhur, pig, barkers, jungle-fowl, kalij, and where sometimes a tiger or panther may break cover. Then again, in Ceylon the Sambhur, erroneously called elk, is hunted by elk hounds, which are like a fox-hound but larger, whilst the huntsmen follow on foot. But this form of sport is very strenuous, and far more sporting than stag hunting as conducted in England. Many women participate in the sport, and, at Newara Eliya, I admired the way in which they negotiated the steep inclines.

Many malformations are found in Sambhur horns owing to breakage during fights or injury when in the soft velvety stage. At the base of the burr of some antlers an isolated piece of horny matter is found, and this is prized by the Kukis, who carefully remove it, drill a hole, and wear it as

a neck-ornament and amulet to tell whether any particular day is auspicious for shikar.

My Kuki hunter assured me that if, in the morning, the skin itched where the ornament hung it would be a good day. The Kukis also place great faith, for an auspicious day, in the position of any butcher-bird they may happen to see. If the bird faces the hunter it will be a good day, and if looking away, a bad one.

The Sambhur is also very subject to rinderpest. At the Hot Springs, Kopili, North Cachar Hills, there were at one time hundreds of Sambhur, but when I last visited them, in 1926, hardly one was to be seen. The huge herds of bison had also disappeared. The disease had been contracted from infected tame buffalo belonging to villagers who ought never to have been allowed to settle in these parts. When I first visited this delightful spot there were also scores of peafowl, but the natives had wiped them out both by trapping and shooting on moonlight nights as they roosted on the trees. The fish in the Kopili River close by had been poisoned, and it was with sorrow and heart-burning that I left the place, thinking of the grand wild life that had been exterminated during the short period of fifteen years. I proposed long ago to the Assam Government that the Kopili should be made a sanctuary, but the War intervened and the matter was pigeon-holed.

I believe also that there is a hybrid Sambhur—a cross between it and the swamp deer. I once obtained a head, which can be seen in the Bristol Museum, which I take to be that of a hybrid stag. This animal was shot in the Tezpur district at the foot of the Bhutan Hills, in comparatively dry country and in thick forest. The specimen was not black but a very dark brown; hair very long and

coarse ; under-parts white. As the animal bolted there came a noise like castanets. I afterwards found that the moist clay in which the animal had been wallowing had hardened into numerous balls adhering to the hairs, and these, in movement, rattled against each other to give the illusion. I also once shot a Burmese brow-antlered deer that had the same covering. The brow-antler of the specimen I speak of is like that of the swamp deer, but the royal resembles more the Sambhur type.

The Hog-Deer

This is rather an ungainly animal for a deer, the legs being shorter and smaller in proportion to the body. The hair is coarse, thick, and almost bristly, hence the name Hog-Deer. The colour of the youngster is tawny with a mottled look, but the coat of the old male is almost black, as also are the legs. This dark colour is very marked in animals shot in jungles that have been fired, the Hog-Deer being especially partial to these.

This species when disturbed rushes away at a great pace, with the head held very low and belly close to the ground. When it comes to a nullah, or very swampy ground, its bounds to clear these are a pretty sight. It is rather shy, rarely exposing itself where there is cultivation, but keeps to the null, ekra, and sun-grass jungles. It is rarely found in forest excepting in Burma, where I have put them up in the kine grass which grows under the teak. Here, also, in some remote bheel that has partly dried up in the winter, and which is surrounded by dense reeds and grass, I have come on herds right in the open. In such places when not molested they are not shy, at least to the crack

of a rifle, and I well remember bagging a fine male at the third shot, the other two having missed their mark. Hog-Deer must have water close at hand, and after the jungles are fired hide in the tall, unburnt reeds and grasses on the banks of rivers, so affording very pretty running shots when driven out by beaters.

The places in which I have seen most Hog-Deer are : Lochiwalla in the Doon; in the Tangaur Haor, north-eastern corner of the Sylhet district; the Kubbo Kalé valley in Burma; in Manipur; at Lanka, in the hill section of the Assam Bengal Railway, Nowgong district.

I have heard also that they are numerous in the Terai, but since last visiting those glorious shooting-grounds, the numbers of these, like other game, have diminished. The first time I visited Lachiwalla Hog-Deer were as numerous as rabbits, rushing in all directions through the tall grass. The shooting was difficult, but my uncle obtained eight in one day and fed the whole of the station on venison. Manipur was the place *par excellence* for this species, and, being a valley at 2000 feet above sea-level, I think it is the highest altitude at which they are found.

From 1891 to 1898 I spent happy years in this sportsman's paradise. The heavy grass and reed jungles were fired regularly, and, after a fall of rain, green grass and shoots of null sprang up. Here and there small patches of jungle remained unburnt, and from these the deer were driven as already mentioned. We used also to stalk them in the partly dried-up bheels, and all this had to be done on foot as no elephants were available. The sixty-two elephants belonging to the Rajah of Manipur were all killed off after the rebellion on account of overwork, under-feeding, and rinderpest.

Hog-Deer afforded another form of exciting sport to us young bloods, although now I look upon it as cruel and unsportsmanlike.

About eleven miles to the north of Manipur was a place called Laishoa, which was by nature specially adapted to this particular form of sport, for here we rode them down on 11½-hand Manipuri ponies and speared them. We were joined in these hunts by sporting Manipuri Mohammedans, all mounted on these little "rats" except myself. I possessed a vicious, man-eating country-bred, but he was great at the game, and seemed to enjoy it as much as I did, but he nearly came to grief one day.

This place, Laishoa, was a valley with an area of about 35 square miles, covered with ekra, null and sun-grass; a flat plain entirely bare of tree-jungle. It was surrounded and shut in on all sides by hills rising to 500 or 600 feet; in fact, like a crater. It was very marshy and a long nullah with water ran through its length. About six weeks before the appointed day, half the valley on one side of the nullah was fired, and the grass allowed to grow up to a foot or so in height. It was then we met, and the whole cavalcade moved on to Laishoa; some of the riders being armed with polo-sticks instead of spears. On the appointed day for the hunt the other half was burnt, and out came the Hog-Deer, five and ten at a time. Each horseman selected his quarry, or perhaps four or five would go after the same animal. The runs were fast, furious, and long, and soon the plain resembled a cavalry charge in very loose order, ponies and horsemen careering madly in all directions, and many were the falls and plunging of ponies in the treacherous ground.

Once a Hog-Deer that I was after crossed over what I

thought to be a nice green bit of turf. My country-bred thought so too, and we started to gallop over it. There was a loud squelch and my horse, with me on his back, had disappeared excepting his head and neck. The brute actually ate grass in this dilemma, and to watch the visible head and neck doing this was decidedly uncanny. Many came to my rescue and bamboo levers had to be placed under my mount before he could be got out.

I got my syce to clean us up and we carried on. That same afternoon I had a stern chase after a Hog-Deer and ultimately he rushed up a very steep hill. I followed, and the gradient was so steep that often both pursuer and pursued came to a dead halt. Once my nag, in spite of spurring, refused to budge an inch, and with my quarry only about five yards from me, also done. I therefore dismounted and speared him on foot.

Our return showed a thoroughly wild-looking lot : ponies, saddles, clothes, covered with black mud and ashes. It took three or four soapings to remove the stuff, but one's nails were discoloured for weeks.

Several fine heads were obtained in Manipur. My longest pair measure nearly 27 inches.

The horns are very handsome and not unlike the sam-bhur's. They are, I believe, shed annually.

I think the Hog-Deer attains its maximum size and weight in the Manipur Valley. It was curious, too, how one often came across the gnawed fallen antlers ; probably the work of hungry jackals.

Hog-Deer are very strong and savage ; it is therefore well to approach a wounded animal with caution. The males will kill each other when fighting, generally by disembowelling.

When very young they make nice pets but become wild and savage with age. They are excellent swimmers, for I have often seen them swimming strongly in the Brahmaputra when in flood, and during which time they are sometimes caught by the Lascars on the steamers. At flood time numbers take to the high churs of the river, the natives go out in dug-outs after them, and indiscriminate slaughter takes place. I remember one instance of this when forty-two were obtained in a single day—and this close to a police station during the close season!

I have never heard Hog-Deer make a sound or call of any kind, except once when I heard a grunt on putting-up one at close quarters.

The flesh is excellent and perhaps, next to the kakur, the best of all deer, but an old male is apt to be rank.

In the Doon, when skinning one of these deer, numerous encapsuled grubs were found in the non-hairy side of the pelt. These were the larvæ of gadflies, but one would have thought that the thick coat was impervious to the laying of gadfly eggs close to the skin.

The Swamp Deer

The Nepalese name for this deer is Barasingha, but I believe this name is also used for the Kashmir Stag.

I have only observed this deer in Assam, so that I can only speak of it in that province. It is found in other parts of India: the Central Provinces, at the foot of the Siwaliks in the Doon, and in the Dooars. Years ago it was found in great numbers throughout the plains of Assam but owing to merciless slaughter there are very few left. The parts of the province in which I have seen

it in comparatively large numbers are: at Lanka ; Now-gong district ; in all the country lying to the right of the railway line going to Gauhati ; at Gohpur, Darrang district, and between this district and Lakhimpur.

It is rather stupid and not at all shy, which has contributed greatly to its diminution. The colour is almost a chestnut, turning darker with age. The does are lighter in colour, and the young spotted. It is a very handsome animal and makes a grand sight in the early morning or before sundown, when seen standing in the rich grass of a dried-up bheel and at the edge of the heavy grass-jungle ; its hide with a sheen on it like a racehorse, plus its beautiful horns and carriage. The hair is not so coarse as either that of the sambhur or Manipur deer. The neck is long and the ears are well developed.

I have found Swamp-Deer in all kinds of jungle. They have been put up in heavy null and ekra, in sun-grass, and in sparse forest ; but the type of terrain they like best is a bheel surrounded by heavy reed- and grass-jungle. In winter these bheels dry up, producing a rich crop of " dhoob " grass and wild rose, which these deer love.

They are sociable animals and feed with rhino and wild buffalo in such places ; I have also seen them with sambhur and hog-deer. They never come on to cultivation, excepting where rice-fields come almost up to the heavy jungle. At Lanka there is a quantity of a kind of screw-pine which, after the forest fires, sprouts young leaves from the apparently charred stems, and the deer feed on these.

It is only possible to stalk them on foot after the jungle fires. This is hard, hot work, and after a hunt one emerges

with torn clothes and blackened like a chimney-sweep. Unfortunately the horns are in velvet during the winter months and early spring, and it is very disappointing after such stiff work to bag a stag and find the horns of no use as a trophy.

Elephants are generally used to get through the heavy stuff to the bheels, when one can dismount, walk round one on the look-out, then to the next, and so on.

I fancy a large number of Swamp-Deer are destroyed by tiger, as I have always come on the latter's tracks in these bheels. The tiger evidently lies in wait in the heavy jungle at the edge of the bheels for his prey.

As a rule, when these deer are found in herds, they as a rule consist of does and fawns, the stag secreting himself somewhere. At Lanka, one day, I saw fourteen does all together, and moreover they let my elephant come quite close to them before bolting.

The horns are very handsome, and a Swamp-Deer's head is the commonest trophy one sees in a villager's hut, in a forest office, in the houses of officials and tea-planters, and sometimes in dak bungalows. In the heavy floods natives, as with the spotted and other deer, go after them in dug-outs and kill a number. The total extinction of the Swamp-Deer, as far as Assam is concerned, is probably only a matter of time, though I believe a sanctuary for this deer has now been established in the Nowgong district, not far from Lanka, and if so this is a good move.

Years ago Lanka had a great number of Swamp-Deer, but when I last visited it I hardly saw one. Can this be wondered at when all the villagers, pensioned Gurkhas, and tea-garden coolies possessed guns? The village carpenter, acting as subordinate Forest Officer, was also

armed. The Manzadar possessed an elephant and guns, and I expect he accounted for a good many out of season. To a villager a Swamp-Deer is worth about 25 rupees, and if the man is caught he is hauled up before the local magistrate and fined 5 rupees, so leaving him a handsome margin of profit. My experience tells me that it is of no use entrusting the preservation of game, or the enforcement of game laws, to a native Forest subordinate, as so many of them are open to bribery and corruption.

I had the satisfaction once of getting evidence of corruption against one of these and he was dismissed. This man used to allow his brother, an elephant mahout in the employ of the railway, to shoot in the forest reserve provided he was given a share of the venison and the proceeds of the sale of the animal.

I once met a retired Indian officer who was spending his last days in a Gurkhali "Khuti." He was armed with a Martini-Henry rifle which had been presented to him on retirement. I asked him what he shot, and he replied, "Everything, including does and fawns." Is it a wonder then that, year by year, game is decreasing in India?

To put matters right heavy fines or imprisonment for infringing game laws should be imposed; discrimination in the issue of game-licences, and if issued for crop protection a gun with a short barrel; the formation of more sanctuaries; the total prohibition of the shooting of any species that has diminished in numbers in any particular locality; the prevention of native deer-hunting from dug-outs during the heavy floods; efficient supervision by a European. The European Forest Officer of to-day, although interested in the matter, cannot entirely control. His office-work has so increased that often he can hardly

leave his desk for touring purposes. In Africa and America we have European supervision : why not in India ?

Every sportsman and naturalist discountenances the wholesale slaughter of duck, sand-grouse, etc., taking place in some of the native states, and it is difficult to understand how high officials can bring themselves to take part in such slaughter. I knew of one party of so-called sportsmen who visited a bheel, in Assam, swarming with duck, and shot so many that part of the bag had to be buried.

The Cheetul or Spotted Deer

The handsomest of all our Indian deer. Its form is very graceful, everything being in proportion. The colouring is beautiful and so is the shape of the horns, the royals at their termination forming a handsome forking. One of the most splendid sights in the early morning is to see a herd of these animals grazing the rich grass on the bank of some crystal forest-stream, with a background of bamboos and sal forest, and the sun on their dappled hides. Such scenes I have often seen in the Jaggar Valley, Mysore district.

I might have bagged many in this beautiful valley but my brother and I had decided not to shoot anything but bison, unless close to camp. This valley lies not very far from Kadur and was a sportsman's paradise years ago ; bison, cheetul, sambhur, and spur fowl simply swarmed. I was lucky to get a pass from the present Maharajah's father and we had the time of our lives in this glorious country. It is, however, very difficult to get a pass now, as these are reserved for the Maharajah and high officials. In my time Cheetul herds of sixty or

eighty animals could be seen : but during the three weeks we were here I only fired at two. One was a stag which I missed, my bullet striking a ringal bamboo in a clump of which he was standing ; the other was unfortunately a doe, for I could not see the entire animal. I shall, however, never forget that doe.

My brother and I were about three miles from camp when I bagged her, but we got a bamboo, slung her up, and carried her a long way. It was hard work !

Another place in which I saw many Cheetul was the Chunderbunnee Forest of the Doon Siwaliks, and those were no days of luxurious camps. My uncle, who was as hard as nails and expected every one else to be so too, used to give we boys an annual shikar at Lachiwalla or Futteepore in the Mohan Pass. We proceeded huddled up in ekkas, and nothing in the way of luxury was taken. I think tea, flour, rice, dal, curry powder, and other condiments were our only provisions, and our crockery, tin mugs and enamel plates.

When we reached the camp we had to build our own shelters with the help of the servants, as we generally placed these far away from villages. We had two coolie blankets and a pillow apiece, no camp-beds, and only grass for a mattress. Each morning we proceeded in different directions ; some went off to fish in the Sone River close by, and we practically lived on game the whole time. These outings made us as hard as nails, and we learnt much about tracking.

All this youthful experience became very useful to me in after years, and it would be perhaps a good thing for the youth of to-day if it did more of such roughing.

The greatest pleasure in shikar is to work hard for it,

and I am no believer in shoots where everything is done to give the hunter the minimum of exertion. The real shikari should know all about the habits and tracks of an animal ; know all the names of the trees and shrubs he meets with in the jungle ; the forest cries of bird and animal. He should also be able to track any animal independently of a native tracker. Given this experience he will then find that his days are full of interest, that he will become observant, and that nothing will escape his eye.

The Cheetul loves sal forest, and somehow I have always associated it with pea-fowl. The Cheetul also, at times, utters a very weird noise, which beats the howl of the hyena. I heard this only in the Jaggar Valley ; it was certainly an eerie sound and quite undescrivable, but whether a sound of alarm or challenge I am unable to say.

Many years ago, as already mentioned, the Siwaliks afforded splendid hunting grounds, but before I left India, in 1927, I was told that game had sadly diminished there, like everywhere else in India. This, I was told, was due to indiscriminate shooting by native shikaris. The chief damage, however, was done by Gurkha sepoy, belonging to the regiments usually stationed in the Doon. These men get leave on the pretext of going to their homes, but actually go hunting. The consequence is that everything is shot, the surplus meat dried on machans over a slow fire and afterwards sold. There is no doubt, therefore, that a sanctuary for game should be made in the Siwaliks to protect its fauna from further annihilation.

Years ago the Cheetul was found in Assam, and I believe

also the black buck. Now a single herd of the former still exists, but only in one place. Hill, of Orangajuli, and I have twice seen this herd of about fifteen animals in the sal forests north-east of Orangajuli, Darrang district, and very close to the Bhutan Hills. We could never get near them; they were terribly shy and their dappled hides disappeared like a flash through the forest.

I fancy the Cheetul and black buck have been wiped out by the heavy floods so notorious in Assam, for there the rivers rise many feet and the beds change in the space of a few hours. In flood-time, too, the animals would be an easy prey to hunters in dug-outs and armed with spears.

The forests between Dhubri and Gauhati, along the railway, are ideal ground for Cheetul, and I do not see why a few animals should not be introduced there and protected.

Thamin

(The Burmese Brow-antlered Deer)

Whilst stationed in Manipur I made two hunting trips into Burma, aggregating three months, so had ample opportunity of hunting this deer.

I suppose, next to the barking-deer, this is the commonest and most widely distributed deer in that country, and every shikari there must have shot it. It is the game of the sporting Tommy Atkins, and takes the place of the black buck in India.

The Burmese recognise two varieties, the Thamin Wah and the Thamin Whet. The difference in name has simply been brought about by a difference in the surroundings

and food of the two animals. The Thamin Wah is found in very arid, sandy country of very scarce grass and forest. The only tree in sight when I obtained a specimen of this Thamin was the babool or mimosa. Water in these parts, especially during the winter, is very scarce, and the Burmans told me that this animal can go without it for a very long time, and even resorts sometimes to drinking its own urine. There may be some truth in this statement for all the specimens shot had a distinctly nasty odour.

My brother and I saw lots of them in the country lying between Manipur and Sagaing, and they were especially numerous at Aligappa.

The Thamin Wah is not a handsome animal, for the colour is light brown and the coat stiff and staring. The horns obtained in this locality were also poor and very brittle. As an instance, one of the stags I shot broke its right horn when it fell.

An unusual incident happened on this occasion. A doe was standing beside the stag and the Meads shell fired burst low, bowled over the stag, and unfortunately broke the leg of the doe. The Burmans with me then gave chase and secured her, much to their delight.

My brother and I were mounted, and it was a long way to Sagaing, but we were determined to take some of the venison to our people. So we cut off a haunch and carried it alternately for fifteen miles. We were sorry afterwards for the trouble we had taken, as it was the nastiest venison I have ever tasted.

Burmans, being Buddhists, will not take life, but they are glad of a feast of meat provided by someone else. In fact they will eat anything. I once killed a hamadryad

and the Burmans took it away to eat. They gather round a carcass like vultures. On another occasion, when an elephant was shot, nothing but the bones were left by the evening. The boss took the tip of the trunk, and I gathered that it was dried and used as a medicine.

In the locality where Thamin were found grew any amount of madder, a shrub with rather a pretty, broad leaf, milky juice, and blue flowers. I was told that Thamin were fond of this plant.

On my second visit to Burma my brother was stationed at Shwebo, and as there was some fine Thamin Whet ground in the neighbourhood we planned an expedition. He told me that the deer were shy, the forests thick, and that it would be hopeless to try to stalk them on foot. He therefore got hold of two Burmese carts, rigged up bushes at the sides and away he went.

It appears that Thamin do not mind a cart, for they are so accustomed to seeing those of the people working in the forest. The same stratagem is used for getting near black buck in the North-West Provinces ; furthermore, the Burmese cart will go anywhere and the bullocks are certainly wonderful.

After many joltings from descending and ascending nullahs and ditches we arrived at the teak forest, but nothing could be heard beyond the creaking and bumping of the cart, until, on entering an open glade, a splendid sight met out gaze. Fifteen or sixteen stags were grouped together, apparently collected for a fight. I picked out one and my brother another. Both fell and the rest galloped away. My stag's head proved a very fine one, and I was well pleased. The horns were very dark ; the royals flattened at the ends with five or six tines project-

ing from the edges of each ; they were rough like a sambhur's ; the brow antlers had a sharp upper edge and were very white at the tips, whilst near the base was a small tine like a tubercle.

The Burmans call this variety Thamin Whet from the fact that the animal has long bristly hair like a pig ; whet being the Burmese for pig. The stag I shot was almost black, but others I saw, being younger, were lighter in colour.

The Thamin Whet cannot do without water so must have marshes or partly dried-up pools in which to wallow, and certainly the country through which we passed resembled this. It also must have forest in which to lie up during the hot hours of the day.

Next day I obtained a running shot at a stag which, as he ran, made a rattling sound. On examination I found that his coat was covered with black, wet clay, and that on the upper parts this had formed elliptical-shaped balls about the size of a plum. There were masses of these, and it was these knocking against each other which had produced the sound.

I imagine the young are spotted like other deer, but have not observed one ; also, I never saw a single doe, so cannot describe her. Unfortunately, my measurements of the horns were not kept. I have seen many heads in Burma, but the finest collection of heads of this deer I ever saw was that of Waller Senior, Esq., of the Survey in Bangalore, and I doubt whether any museum has such a fine show.

Evans writing on this deer has noticed how often one eye is damaged, and which he thinks has been caused when fighting.

Manipur Deer

When stationed in Manipur from 1891 to 1898, I had exceptional opportunities of observing and hunting this deer, and as an outcome of this experience believe the Manipur Deer is simply the Brow-antlered or Thamin of Burma which has undergone modifications owing to the intensely marshy and difficult ground in which it is found. In fact, no other animal could exist in such swamps.

Many years ago it was found in all the marshes of Manipur, but it was mercilessly hunted and trapped by the Mohammedan Manipuris, called Panguns, till we took over the State, when the Political Officer stopped all trapping.

I have only found it in two localities in Manipur : at a place called Cockshai where the local Rajah used to keep all his elephants ; and at Shooganoo, about thirty miles south of Imphal, on the southern shore of the Logtak lake. The Manipur River flowed out of this lake, and between its outlet and the low hills, separating Manipur from Burma, was a huge morass consisting of dense reeds, grass and water, and covered with algæ and weeds. Only a few jarul trees were visible in this huge bog, and this was the home of the Manipur Deer.

Here also were numerous floating islands, and during heavy floods I have found the deer leave them for comparatively dry ground at the bases of the low hills skirting the morass on the west. In this morass there is a peculiar rush which has a leaf like iris and is bulbous. The deer are very fond of this root and dig it up with the frontal tine, which, with this deer, will be found very white and polished.

This deer must have entered Manipur by way of the valley through which the Manipur River flows, for everywhere else it would have been impossible to cross the high and rough mountains that exist north, west, and east.

These morasses simply swarm with a peculiar red, mottled, hairy mosquito, which gets up in thousands as one wades through the stuff, and becomes most irritating, even when settling. I can safely say that no other animal except this deer could live in such a place. Nature has given it a very thick coat of long, bristly hair, and the ears, which are very long, are protected inside by a thick mass of interlacing hair. Leeches also swarm, but, curiously enough, I have never shot one of these deer with either leeches or bites on it. It is possible that the salts of the sweat permeate the hair and so keep them off.

The Manipur Deer is a very stupid animal and full of curiosity. The Manipuri name "Sangai," or "the animal that looks at you," exactly describes him. When put up he will do this for a long time, and if put up at a distance one can, by waving a handkerchief, entice him to come within rifle-shot, as can also be done with the black buck. When alarmed, it stretches its neck to its full extent, the large ears are thrust forward, and he utters a sound like "chough, chough," often repeated. I have never seen a fawn with its mother; and, in fact, it would be impossible for the little beast, when very young, to follow her in this quaking mass. I believe, therefore, that she hides it amongst the reeds on one of the floating islands, and returns now and then to give it nourishment.

These deer are found in herds of six or seven, usually all does, the stag generally concealing himself very cleverly

in the rushes and reeds. I have come upon solitary stags, and, in the rutting season, they of course collect for their combats. I have also come across stags sitting with nothing but the tips of the royals projecting above the rushes. At other times they resort to camouflage to hide their antlers, and this when first seen is very puzzling. In the course of digging up the roots of the rush, or rubbing off the velvet, whether purposely or accidentally, the leaves and stalks of the rushes are deposited *en masse* between the horns, and dry there, so resembling the surrounding jungle. To see a stag staring at one with his tussock, like a miniature haystack, on the top of his head is indeed a curious sight, and certainly most effective.

Once I took out a brother officer to shoot one of these deer, and came across one so camouflaged. I pointed it out to him, but as he declared it was only jungle I fired and killed, much to his disgust.

The colour is brown, but in old stags the coat becomes almost black. The colour of the doe is lighter. The underparts are white and the tail is very bushy and long. The most curious feature lies in the hoofs; these are very long, the under-surface being convex, so forming an elastic pad. The rudimentary hoofs are very large; the two sides can be widely separated, and at their junction here is an indication of slight webbing. The hoofs are hairless to right above the rudimentary ones. All this was evidently been given by Nature to enable the animal to move freely and securely in bogs. In the Sitatunga an African antelope inhabiting similar marshy ground possesses a similar type of hoof. I imagine the fawn is spotted at first, but cannot say, as I have never seen one.

The action of this deer is very peculiar. Instead of

bounding with fore- and hind-feet coming on to the ground at the same time, it seems to be proceeding on its hind legs, the body being held almost vertical. This action prevents it from sinking in the quagmire, which, of course, it would do if all four feet were brought to the ground together.

The horns of Manipur Deer are curious. I have shot animals in which the royal and the brow-antler formed a semicircle, there being no tines at all on the royal. This type is seen in young stags. In others there is a flattening at the end of the royal, and there may be five or six points protruding from the edge. In older animals there is a tine developed nearly at the base of the brow-antler, and projecting from the concavity. The royal projects backward and then forward and inward. I have seen heads which were difficult to tell from those of the marsh variety of the Burmese thamin, but I think I am right in saying that the brow-antler is longer, more cylindrical, and a good deal whiter than with the thamin. With some thamin the brow-antler has a distinct edge from the greater opportunity got of rubbing against trees. The horns of the Manipur Deer are hard in winter, the opposite condition to that of the swamp-deer. I do not think the horns are shed annually. I have now no records of measurements, but I remember I got one of 52 inches, measured along the curve from tip of brow-antler to end of royal. I have seen a 57-inch head measured in the same way.

The Manipur Deer's only enemy is man, as the wild dog is unable to enter their domain ; nor do they appear to be subject to rinderpest ; but inside their stomachs I have found the pallisade worm.

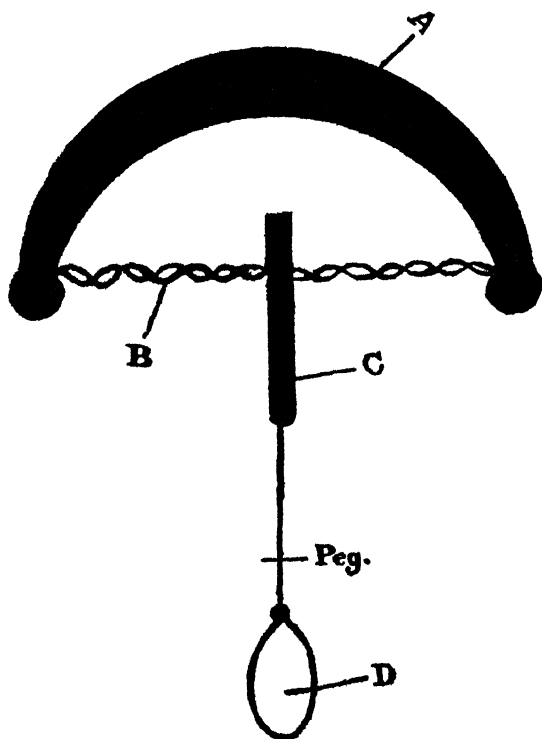
The Manipuris kill them from dug-outs during floods, or spear them mounted on buffaloes. They also trap them by an ingenious method. The trap consists of a solid bit of wood, shaped like a bow, the distance between the tips being about 27 inches (A in the diagram). Two strands of raw deer-hide attached to the ends of the bow (B). A strong lath of wood, generally made of nahar (iron wood) (C), which is inserted between the thongs when fully twisted. A bit of string rope with a slip-knot and attached to the lath (D). There is also a peg to fix the noose in the deer-track.

Trap for Deer

To set the trap the thongs are twisted from right to left, and when fully twisted the lath is inserted. Deer-tracks leading to the rush-beds are selected and the turf or peat is cut away to some depth to hold the bow-thongs and lath. The lath is drawn well over to the left and the noose fixed up with an arrangement that releases it as soon as the animal steps on it. Everything is concealed with leaves, bits of grass, etc. As soon as the animal releases the lath the latter flies to the right by virtue of the spring given by the twisted thongs, the slip-knot at the end tightens, and the animal is fast. The trap is on the principle of the schoolboy's skip-jack. Sometimes the whole trap is torn up when struggling, but the animal cannot go far as the trap becomes caught in the reeds.

Another form of trap in use is set by bending a sapling or bamboo, to which a loop is attached and fixed in the usual way. This kind of trap is much used by the Kukis and Nagas, and with it they also catch bear and panther ;

but in order to prevent such animals biting through the rope they drill a hole through a solid bit of hard wood and pass the rope through that.



Trap for Deer.

One day, when I was in camp, I was informed that a whole village of Mohammedans had been trapping deer at Shooganoo, and would be passing up the Irul River, on the banks of which my camp was pitched.

The Political Officer had given me the full powers of a forest officer, and asked me to see, on my tours, that there was no infringement of the game laws. I consequently had watchers posted along the banks. Next morning, at about 5 a.m., I was roused from my sleep and told that the poaching flotilla was on its way up the river and near my camp. Soon after they came, ten or eleven dug-outs, about fifty men, a number of traps and nets, and seven deer (all does !) of the Manipur Deer. I promptly had the whole lot collared, and they were escorted to Manipur under police escort with a letter to the Political Officer.

There was no I.P.C. in Manipur in those days, so they all received corporal punishment, had their traps burnt, and boats confiscated. I never saw any more trapping in these parts, but the amount of damage these poachers had done in a few days was incalculable, and when on my way later to this hunting ground I found more spring-traps set for the next expedition. These I promptly destroyed.

My method of hunting the Manipur stag was by stalking in this stuff, and if anybody wishes to attempt it, let him prepare himself for frequent duckings. It is very strenuous work and a torment owing to mosquitoes.

It was difficult to locate the game, so I hit upon a scheme. I had a bamboo, with the side branches cut off, carried behind me by four men—whom I did not envy. Every now and then this improvised ladder was fixed in the ground and held. I then climbed up and looked round to see if anything was visible. Should there be a deer in view I took the direction, and we proceeded till I got within rifle-shot of it. My head tracker proceeded in front, prodding the ground in front to indicate the fairly shallow stuff and so avoid many duckings. The stag,

owing to its dark colour, was easily spotted, but it was weary work.

My major, whom I took out one day, gave it up in the first few hundred yards after many cursings. An idea of the kind of ground through which we had to go can be imagined when I say that a stag I had shot could not be found till, at last, we spotted the point of one of the antlers sticking out, and we had great difficulty in extracting the animal.

I had many a hard day in these swamps. On my last shoot, "Humps" of my regiment and I started out on a beautiful moonlight night for this place; a ride of about thirty miles. We had sent out daks, but something went wrong with them, so our unfortunate nags had to go the whole distance. Worse still, we lost our way and did not arrive at camp till 5 a.m. We partook of some refreshment, went to bed for a short spell, and then started for our game at 6 a.m. Some time later we came up with six or seven stags all together. "Humps" and I fired almost simultaneously and two dropped. One had a splendid head, which, of course, both of us claimed—we were both using M.H. carbines. The discussion became very heated and relations rather strained; so much so that, on the way back, neither of us spoke to each other. On reaching the station argument recommenced. The C.O. heard of it and suggested that we should toss for it—and of course I lost.

I saw the larger head again, years later, in the Gurkha Mess at Shillong, and gazed at it with many a pang, for I was dead certain that I had bowled over the larger stag. Poor "Humps" was killed in Mesopotamia by a shell when facing the Turkish trenches, but before that we were fast friends again after that quarrel.

Our sporting transport sergeant-major gave us a great shoot once. The northern shore of the Logtak lake was supposed to hold some Manipur Deer, besides hundreds of pigs, hog-deer, black and swamp partridge. Our camp was then pitched at Cockshai, and the idea was to set fire to the jungle between this and the Logtak lake, an area of about eighty square miles. All of us, about eleven guns, were posted at the far end of a partly dried-up bheel, and we were to shoot as anything broke out into the open. First we saw columns of smoke far away and then huge flames began licking the sky, the dense columns of smoke almost blotting out the sun, which looked like a blood-red ball. Pig and hog-deer were the first to break, and the firing sounded like the rattling of machine-guns in action. All of a sudden the wind changed and, to our horror, the grass on the bheel began to burn furiously. The natives with us cried, " Run for the river ! " This was close to us and we all plunged headlong into it, keeping our heads under water while the fire roared past. But the worst was not over for, owing to the smoke, we were coughing and choking as we lay on the ground until this had cleared. It was a terrible ordeal, and had the far bank of the river not already been fired we should have been burnt or suffocated.

We saw no Manipur Deer but our sergeant-major got one on the burnt stuff on the following day. One of our men got badly ripped by a boar which he tried to spear. The beast had got him at the back of the knee, causing a wound about 6 inches long and exposing the whole of the popliteal artery, though fortunately this was not torn. He made a good recovery.

The various political officers of Manipur, recognising

the paucity, and probable extinction, of this animal, have framed very strict hunting rules, and the number of heads is limited. I hope these rules are taking effect and that many of these deer are still to be found.

The Barking-Deer

The Indian name for this deer is Kakur, the Burmese, Gee. It is sometimes called the Ravine Deer, and in Southern India is called the jungle sheep—a misleading title. It is widely distributed through India, being found wherever there are hills and wooded ravines. It is never found in the so-called plains. It sometimes ascends to considerable heights, to 6000 or even 7000 feet. At the foot of the hills in the Himalayas and Assam it will generally be found in greatest numbers. Probably it is in its greatest numbers in Assam, especially in the North Cachar Hills. I have also shot them in the Kubbo Kale Valley and in the Jagan Valley in Mysore

It is a very pretty deer, but Nature has certainly not been very kind to it in the way of camouflage, for it is seen very distinctly in green forests and when feeding in the open on green grass. When the leaves and undergrowth turn brown, however, it is difficult to see.

This deer's bark is one of the most familiar sounds in the Indian jungle. The bark carries a long way, according to the direction of the wind, and re-echoes amongst the hills. There is no doubt, too, that this bark is one of alarm, especially when it cannot make out for certain what has startled it; but once it has discovered the nature of the enemy it stops. When suddenly surprised it utters a succession of deep barks and runs away. Some-

times it will stop and thump the ground with its forefeet. Morning and evening are the times to hear this deer, though one may do so sometimes when the night is far advanced.

When running away a curious clicking sound may be heard, and some are of opinion that this is made by the hoofs; but there can be little doubt that it is made by the long canines which persist in this deer, as well as in the musk and mouse deer.

The Barking-Deer is a solitary animal, for very rarely are male and female seen together; in fact, monogamous, and not seen in herds like other deer. Strolling through the jungle he affords good sport with a .22-bore rifle, but the breed is very hardy, so the shot must be well placed. As an instance, I once shot one with a .450 H.V. It fell, and I went to pick it up when, to my surprise, it got up and I never saw it again.

Next to the sambhur, the wild dog relentlessly pursues this deer, and the banks of the Kopili River, in the North Cachar Hills, were strewn with the bones and skulls of the Munttack, after they had been driven into the water and the dogs had made a meal on the bank.

This deer feeds on grasses, bamboo leaves, and shoots of shrubs. It is also very fond of fruit of all kinds, and will follow troops of monkeys for this purpose. The fruit eaten is the jaman, the katha, a large fruit about three inches long, like a green olive and with a very sour taste. I have found the stomachs full of this fruit, and whole. Another fruit is the aonla, a kind of acacia, like a gooseberry, with a sweetish-bitter taste and much used by the wild tribes for making pickle.

A certain way of getting a specimen of this deer is to

find out an aonla tree daily visited by them, ascend the tree, put a blade of grass between the two thumbs, and blow. The sound produced is that of a fawn in distress, and soon the Barker will appear. This dodge is resorted to for calling up other deer and also wild dogs. It is rather unsporting, but one is hard up sometimes for meat in camp, so must resort to stratagem.

I once shot a deer by this method about two miles from camp, and was not going to leave it, so carried it through the camp lines, covered with blood from head to foot, much to the delight of my Gurkhas. The flesh of the Barker is the best of all venison, and I would give anything now for a Barker curry or chop !

The flowers of the seemul tree are also much sought after by this deer, and the neighbourhood of mustard crops and kissari dal (a kind of lentil) is a sure find, though generally one monopolises a patch and will let no others come near.

They usually select a place where there are running streams, for they must have pure water ; they will never drink from pools of muddy water. They also frequent salt-licks. A curious fact, also, is that the Barker is not susceptible to rinderpest like other jungle animals. I have come across dead bodies of bison, buffalo, and pig when the epidemic was on, but not one of a Barking-Deer. Possibly this immunity may be connected with their habit of drinking pure water from running streams.

This deer has a peculiarly mincing but dainty gait, the head and neck being jerked backward and forward at each step, and when running gives a succession of bounds, whilst the scut is raised to show the white underneath. The male stands about 2 feet 6 inches at the shoulder,

and the young male is of a bright red colour ; but as age advances the colour darkens, and with very old animals the colour is dark brown.

The horns are peculiar. There is a very long, hairy, and bony pedicle from which the horn starts. In a good head the tops curve backward like a hook, and a small tine projects at the base. The base is rough, and in it may be found pieces of bark and the fibre of trees, due to rubbing against these. The tips of the horns are sharp and polished, but because of their direction cannot be of much use for offence or defence. To compensate for this the canines are large and very solid, measuring as much as 3 inches round the curve, and projecting beyond the lip downwards. With these the Barker can inflict a serious wound, and this is instanced to my knowledge by a Cachari who found a Barker that had been disabled by wild dogs. He went up to dispatch it with his dah, when the animal ripped him in the abdomen and he died. I think the presence of the canines is as a weapon for fighting amongst themselves during the rutting season, though one would imagine that the female needed them more than the male for the protection of her young, but she is without them.

Up to a certain age these deer make delightful pets, but as they get older they become savage. I was once bowled right over by a tame male that I kept in my jail-compound, and because a visitor's dog had irritated it.

The horns are shed annually. The pedicle rises into a ridge as it descends over the frontal bone, and between these there are furrows or ridges, devoid of hair, producing a series of wrinkles and giving the animal's face rather an ugly look. In consequence of these it is sometimes called the Rib-faced Deer.

I once saw an albino Barking-Deer, and I have shot specimens with absolutely bare head and neck, due to some form of skin disease.

The lachrymal fossæ are large, and all the senses are acutely developed. The hoofs are very small and delicate, and the female is much lighter than the male. It has the habit of depositing its ordure in heaps in certain places. The smell of the kakur is peculiar to itself and not unpleasant, for it has rather a mossy smell and not unlike that of the flying squirrel.

The usual way to obtain these deer in Burma is by driving, and once, during a beat, a Barker dashed out on my left, where a steep precipice of about 300 feet descended to a dry water-course below. I fired at him, and he plunged over the precipice. On looking down I saw that the deer was hanging by one of his horns from a branch of a small tree on the face of the precipice. He struggled frantically, then, all of a sudden, plunged down and lay still. I found only one horn, but searched carefully and eventually found the other near-by. I had a knife-handle made from it, but it was stolen later from one of my camps.

On another occasion—in the Kubbo Kale valley—I sighted a Barking-Deer in a burnt teak-forest, and shot it ; but, on looking to my left, saw the retreating hind-quarters of a tiger. Apparently the tiger and I were stalking the same animal. In any case I followed up the tiger, but never came upon him, and naturally wished I had seen him before the deer.

When my wife and I went up and down the Assam rivers we often bagged this deer from our dug-out, as they fed on the banks or at the edge of the jungle.

When at Haflong two of these deer would come at night to feed in our compound, and were never molested, although doing damage to our vegetable garden. On another occasion one became entangled in some barbed wire of an adjoining house, the owner of which wanted me to shoot it, but I demurred and let it loose.

I think, and hope, that the Barking-Deer will hold its own in India despite rifles and traps.

CHAPTER XIV

SEROW AND BLACK BUCK

THE Kuki name for the former is Surrow, but in the Malayan Peninsula it is known as the Cambustang. I was very fortunate in being able to secure three specimens of this rather rare animal; rare in collections owing to the very difficult nature of the ground frequented by them. I have shot over burrhel, gooral, and mahakor ground, but the Serow ground beats them all for sheer inaccessibility and consequent risk.

The Serow belongs to the genus *Capricorns*, and included also are the Gooral (two species) and the rare Takin that is found chiefly in the Mishmi and Abor Hills.

Few, if any, white men, I believe, have shot the last-named. This animal is found very high up, near the snow-line. It is also very savage, and charges when wounded. It is shaggy and possesses horns like the African gnu.

The Mishmis have told me that at certain times of the year Takin come quite low down, to salt-licks, and are then easily obtained. As a case in point, a dead Takin was once found floating in the Borelli River of the Dorrang district, but was too far advanced in decomposition for the skin to be preserved. The Black Serow is only found in the Himalayas, and the Serow only in certain parts of Assam. There used to be splendid Serow ground in the mountains skirting the Manipur valley, especially on the

slopes of Kowbruh and near a village called Mapow on the eastern side.

There was also good Serow ground where the Cossyah and Sylhet districts joined, especially at the head-waters of the Hurry River, at Bunghat, and on the east side at the Ponatite. In the North Cachar Hills they were only to be found at a place called Laishong, but here there were a good many, though the ground was precipitous and difficult. Serow are also to be found in the Gano, but not in the Cossyah, hills. I believe also that Serow are to be had near Darjeeling, where the planters get them by driving. I do not know, however, whether this may not be the cambustang, for one animal I once saw was certainly darker and much smaller than the Assam variety.

The Serow is about as ungainly and ugly an animal as one would expect to see, for it has the appearance of a donkey, goat, and antelope all knocked into one. The muzzle is equine; the horns, feet, and hair smell like a goat. The young of the Serow is just like a little donkey, and is, in fact, rather a pretty little beast. The adult Serow stands about 2 feet 6 inches at the shoulder, and is covered with long, rough, reddish hair. The underparts are lighter. The muzzle is long, tail short and bushy and greyish underneath. The hoofs are broad and goat-like, the lachrymal fossæ are very well developed, and in an old animal there is arching of the nasal bones. The horns are a handsome trophy; they are black, about $9\frac{1}{2}$ inches long, and arch backwards. The horns of the female are smaller. At the bases of the horns there are circular rings for some distance, and also longitudinal lines which form small areas. In these one finds the fibre and bark of trees, against which the horns have been rubbed.

In life the pupil, like the goat's, is elongated, but after death it is round. The eyes show a beautiful green reflection, and as this animal is nocturnal in its habits perhaps a tapetum like that of the carnivora is present. The ears are fairly large and very hairy inside. This animal deposits its ordure in certain places, and heaps of these may be seen in all stages when tracking. The droppings are about the size of those of a sambhur, but are easily distinguished by the facets on them.

Serow feed during the night and during the day climb up amongst the rocks and precipices, generally selecting some spot where they can view anyone approaching. I have seen them sitting on a slab of rock and invariably looking down when danger is suspected; hence, when stalking, it is well to tackle them from above, which sometimes means a long detour.

Like all goats they hate rain, and when this comes on they lie under an overhanging rock or enter a cave. Many of their seats will be met with in following them up. They eat both grasses and leaf-shoots of various bushes; they are also passionately fond of betel.

For this reason the Cossyabs plant betel near the Serow grounds by trailing this creeper up forest trees. But much damage is done because, in order to get at the higher leaves, the Serow places its forefeet against the trunk.

The favourite ground of the Serow is the precipices which rise from some mountain torrent. On the face of these there are regular Serow paths where the rock has split and juts outward. These paths are so low in some places that the animal, let alone the hunter, has to crouch low and crawl. Then there are some very difficult corners where a false step, or slip, means certain death.

Like the Mohakar; the Kukis have told me that the Serow kills snakes by stamping on them. I can quite believe this because the Eches viper abounds on the slopes of Kowbrug, and it was here that I missed death by inches from one of these ; but I will tell of this later.

On this Serow ground I have also come across the very rare orange-bellied Langoor monkey and the pig-tailed baboon. The former has a very handsome skin, the grey and orange going well together, but I could never bring myself to shoot one. The other is a horrible, almost hairless, creature of a sickly yellow, with an awful smell which is perceptible for several yards. On the cliff-face there were, in some places, huge, grass, shoe-shaped nests of wild bees, and I was careful not only to give these a wide berth but not to fire a shot in the vicinity.

One has to be in perfect training for Serow hunting as the labour is very arduous ; the hunter will also have many blank days, though luck will come sooner or later.

My first Serow was bagged on the slopes of Kowbruh, and about 6000 feet up. I started early from camp, and after an arduous climb reached Serow ground. We found fresh tracks, and following this up came on a seat which looked to me too large for a Serow, though I thought it was a sambhur's. There then ensued discussion between myself and my Kuki tracker. At last he said, " Bend down, sahib, and smell it." I bent down and promptly heard a hiss, and a rustling sound produced by scales rubbing against one another. There lay an Eches, its head and neck ready to strike, not two feet from my face. I promptly killed it with a stick and congratulated myself on my narrow escape.

We then took up the tracks and followed them till

about 1.30 p.m., when I was thoroughly done, so lay down and rested. In a tree opposite me sat a large black squirrel with yellow belly. My Kuki begged me to shoot it. As I fired, and dropped the squirrel, there came a sound like "kenk, kenk," uttered in a ravine below us—the alarm note of the Serow. My tracker at once took me down and posted me on one side of the ravine, saying that he would roll stones down when the Serow would break cover. Two or three huge boulders then came hurtling down and the Serow appeared, going pretty fast and making for some precipitous rocks on the opposite side. I fired, but the animal kept on, and I cursed my luck. But on going up to the spot where it had stood we found some cut hairs, though no blood. I knew then that I had hit it, so followed and soon found blood. The going was comparatively easy for some distance, but soon the track lay under overhanging rocks, and so low that it forced us to crawl on all fours. I was in front and, on this occasion, had my dog "Rags" with me, but, owing to the difficult ground, he was unable to follow, though he was able to run along the base of the precipice below us. So we crawled till we came to a bend, and, on looking round the corner, saw the Serow not ten yards away, sitting, and looking very sick, on a slab of rock. It was impossible here to get the rifle up to the correct position, so my tracker caught hold of me by the legs whilst I bent out over the precipice and fired somehow. The Serow bounded up off the rock and must have fallen about 100 feet. I then heard "Rags" give tongue, showing that he was after the wounded animal. So we retraced our steps by crawling backwards for some distance, and then followed in the direction of the dog's bark.

It was here we saw a splendid sight. The Serow was standing on a narrow ledge of rock and "Rags" barking close to it. Our approach evidently gave him confidence for he closed with the animal, but was received with a butt which threw him down some 50 or 60 feet. That, I thought, is the end of poor "Rags," and a shot at the Serow sent him hurtling down on to the same spot. When we reached it we found the Serow dead, "Rags" refreshing himself by licking its blood, and none the worse for his fall. So ended a "perfect" day, and a Serow bagged by sheer luck.

I obtained one more Serow on the Kowbruh slopes without any trouble. It was raining heavily, and we tracked this one to some caves. He was sitting under an overhanging rock, and I was able to bag him before he spotted us. But I had many blank days and hard work, though they were all enjoyable.

I had heard that the Mapow Hills on the east side of Manipur, not far from Sengmai, offered good Serow ground, so, accompanied by a brother officer, set forth. Our trackers informed us that the Serow could be driven, so we got together about a hundred Naga beaters. And what a day we had, clambering over very difficult ground, up hill and down dale, and with almost complete want of luck, for the Serow invariably broke out in places other than where we were posted. However, the last beat brought us some. I had been posted on a ridge when one dashed out and went down the hill at a terrific pace. I took a lucky snap-shot and bowled him over dead. My companion almost wept with disappointment and fatigue, and I rather wished that he had bagged the animal. This Serow proved to be a male with perfect horns 9 inches in length.

We did not get back to camp till 8 p.m., and had been on the go since 6 a.m.

I went after Serow in the North Cachar Hills on several occasions without success; the only day when I did come on a beast my half-witted tracker shouted from behind, and, of course, the animal bolted, to my anger and disgust. This Serow's first leap was fully 60 feet downward, though it is true that it landed on soft ground. Such a leap tends to show, however, what tremendous shocks they can stand without breaking limbs or otherwise injuring themselves.

The Serow has no enemies excepting man. It would be a bold beast of prey that would dare attack one in its stronghold, for the attacker would surely be thrown over a precipice at the attempt.

The Cossyahs catch them by placing nooses in the tracks, or by means of a bow-trap.

Serow visit salt-licks like other animals, and it is here that fresh tracks can be picked up. They also run in a peculiar way with head and body close to the ground. Perhaps this habit comes from having to negotiate overhanging rocks.

At Burghat, near the Sylhet Cossyah Hills border, I had no luck. But it was here that one of my men caught a young one. As I could not feed it in camp I sent it in to headquarters at Sylhet, but it unfortunately died. One evening, whilst sitting out in front of our tents, we saw three Serow cross a scree on the opposite slopes, and very high up. They went over very slowly and in single file. These were delightful days of Serow-hunting, and during them I learnt much of their habits and terrain.

The Black Buck

This beast is the handsomest of all the Indian antelopes, both in form and the shape of the horns. The adult male is of a deep black on the upper parts with white belly. The younger males are brown, and the females fawn-coloured. The males, when seen at a distance, have an extraordinary appearance, from the lower parts blending with the colour of the sand, so that only the black upper parts are seen, and the animal in consequence appears to have a very narrow waist. The hoofs are rather broad and goat-like. The glands, near the inside of the eyes, are well developed, and the lachrymal fossæ deep. They carry a sharp, bushy tail.

The Black Buck is widely distributed throughout India. It is found in all the presidencies, in Bihar, the Punjab, and United Provinces, and I should say that the best heads have been obtained in the last two places. As one gets farther south the heads deteriorate, the horns become lighter in colour and get very brittle.

I believe, at one time, the Black Buck was found in Assam, but I believe also, that owing to floods they were, with the chital, wiped out. Years ago, in the early 'eighties, vast herds roamed over India. Travelling by railway from Calcutta southwards it was not unusual to see herds of two or three hundred quite close to the railway track. Since then they have been relentlessly shot by both natives and Europeans, and consequently their numbers have been considerably reduced. Perhaps, as far as the agriculturist is concerned, this is a good thing, for they do an enormous amount of damage to all kinds of crops.

The Black Buck's chief enemy is man. He is too fleet



to be pulled down by tiger, hyena, or panther, except when caught unawares. But this is unlikely considering the open country in which he is usually found. The Black Buck is also the favourite sport of Tommy Atkins, and many accidents have happened to natives when Tommy has been out, and also owing to the shooting of Black Buck in the neighbourhood of villages where they are held sacred, in spite of their destruction of crops.

The Black Buck is so swift that no horse living can equal it in speed, and such a thing as spearing one is unknown. Even on only three legs, they will lead a horseman a dance, and will go long distances when grievously wounded. When going all out they make high leaps in the air with all four feet off the ground and held close together. I have seen a Black Buck leap a six-foot cactus hedge with the greatest of ease.

They cannot however do without water, and prefer river water, but near Puki, and around the Chilka Lake, they drink brackish water. They feed on the berries of the baer, or wild plum, and on the corounda. All the senses are very strongly developed. I should place sight first, smell next, and hearing last. One can often see an old doe leading a herd, and it is generally a doe that gives the first alarm.

The horns possess a beautiful spiral and the two may be close together or splayed considerably; the latter are the handsomer. Anything above 24 inches is considered a good head and, for a long time, the head measuring $27\frac{1}{2}$ inches in the mess at Roorkee was once the record, but some of 30 inches and over have since been obtained. Those obtained in Southern India rarely exceed 22 inches.

These horns are in great demand by some natives, and are transformed into tables, lamp-stands, etc. In the old

days in Jeypore, a fighting weapon was made from two projecting horns upon a small shield with a strap at the back for grasping. Such a weapon represented a glorified knuckle-duster and could inflict a ghastly wound.

The flesh of the Black Buck is not very nice eating, being rather dry.

My Black Buck hunting was confined to the Punjab, and at Puri in Bihar and Orissa, where I had many enjoyable stalking days. There was also very good Black Buck shooting along both sides of the Umballa-Kalka Road, and between Umballa and Delhi; so that, when transferred to military duty in 1915, most of my Sundays were spent in shooting. But, besides Black Buck, one could get numerous grey partridge, quail, pea-fowl and hare, and we always came back with a good mixed bag.

His Highness, the Maharajah of Patiala, kindly gave me a permit to shoot in his vast preserve at Rajpura, not far from Umballa, which consisted of open, sandy tracts with bushes of corounda and baer interspersed. There was a delightful rest-house here in which my wife and I used to stay. And what a grand place for game it was. Nilgai, Black Buck, pig, pea-fowl, grey partridge, and hare abounded. I saw here herds of Black Buck which must have been five or six hundred strong. We were not allowed however to shoot nilgai, pig, or peacock. The nilgai, although an antelope, is considered by the natives to be allied to the cow and therefore sacred. It is in any case of no use to shoot nilgai or blue bull as the horns are no trophy, consequently I refrained from shooting them in other places when a chance was given. It was no use trying to get a male in a herd at Rajpura, for he was generally surrounded by his harem. Sometimes we sighted

one male with a few females, but in the larger herds there were always several males. We had, therefore, to confine ourselves to the solitary males. I noticed, too, that with the old males the colour tended to be brownish instead of deep black.

When out one morning we heard a clicking sound, so making a careful stalk in the direction of the sound we saw two Black Buck fighting with horns interlocked and both making a grunting sound. They were so occupied that we were able to watch them, at a distance of fifteen paces, for ten minutes. They repeatedly charged one another furiously, till at last, one turned, whereupon the other gave him a terrific dig in the rump which sent him galloping away. I had no wish to slay the victor after the fine performance he had given us, so he survived unscathed to fight another day.

The Black Buck has a curious habit ; when he cannot exactly make out what you are he lays his horns back on his neck and points his nose in the air. He also possesses a short mane, and this is erected when fighting.

Rajpura provided me with several heads of over 24 inches, and the venison went to my patients in the war hospital.

Puri was a grand place for Black Buck, especially on the Black Temple side. Here the country consisted of vast, open spaces of sandy soil with patches of green grass where water occurred. In these parts one also saw a curious sight which resembled some animal rather like a hedgehog running along the sand. It was actually the seed of a kind of grass with long slender spines, the whole being about 6 inches in diameter. This seed is carried by the wind, and represents a wonderful provision of nature, for if it fell

into the sand it would soon be buried feet deep, be burnt up and so never germinate. Along the seashore were sand dunes of considerable depth which made stalking a very difficult matter, and lengthened the ranges to 250 and 300 yards. It was pretty shooting, however, to bag an animal when on the run, and I used here a .256 Mannlicher Scho-nauer rifle by Gibbs, with a flat trajectory up to 300 yards, and never wished for a better or more effective weapon.

My wife and I would start for the Black Buck ground at 4 a.m. from our hotel, and it meant a walk of about four miles along the coast. On a moonlight night this walk was very delightful ; the air had a nip in it, the edge of the water fringed with a lace-like surf, and as the water receded the phosphorescent *noctiluca* were left like so many stars on the sand. As dawn broke the mosquitoes were very troublesome for a quarter of an hour, and we found that these lived in the crab-holes. The crabs were in millions, varying in size from a threepenny-bit upward. The larger ones owned yellow and red pincers, and some of these old warriors had only one as evidence of combat. As we walked they scuttled into their burrow by the thousands, when their eyes acted just like periscopes, for these were all one saw of the owner in his burrow. Sometimes a crab would lose its bearings and enter another's burrow, when if smaller it was promptly caught and devoured. These crabs are really the scavengers of the coast for they devour stranded aquatic creatures and dead snakes.

On one occasion I bagged a Black Buck, had it carried up to the top of a sand-dune, and disembowelled by my men. We were just starting to have lunch when one of these came up to say that a tiger was watching us from behind one of the dunes. I went to investigate, and saw

the head of a large hyæna about fifty yards away, but before I could get any nearer he was off, and though I chased him over those dunes I lost him down his earth in some ruins.

During my stay at Puri there were two conspicuous buck many sportsmen had been after unsuccessfully. One of these was always accompanied by four does, and they occupied a vast plain bereft of even a single bush. On the first day I went after them they were thoroughly on the qui vive and would not let me come within 600 yards. I then got hold of a country-bred horse and rode out. As soon as the herd sighted me it stood. So I rode in circles round it, narrowing the circle each time, with the herd always gazing in my direction, but never moving. When the radius of my circle had narrowed down to about 300 yards I dismounted, threw my left arm through the bridle, had a shot and the buck dropped. His head was about 22 inches, but the body was larger than usual.

The other buck had been reported to be in the vicinity of the Black Temple, and one lucky day I started out, at 4 a.m., to find to my joy, the old buck feeding all by himself. I at once took careful note of the wind and proceeded to stalk him. But at a distance of 600 yards he sighted me and was off. I followed and again came upon him standing at a distance of about 400 yards. I then thought of a piece of stratagem I had found effective when stalking other deer, and this was to hide behind a small dune and wave my handkerchief. This ruse actually made the buck walk in my direction to investigate, but after advancing some fifty yards he spotted me again, and off he went, taking to the dune country.

After this I tracked him for many hours, and at last, on

topping a dune, saw him standing just below the ridge of another opposite me, and at a distance of about 300 yards. My bullet kicked up the sand to his right, but to my surprise, instead of dashing away he made straight for where I was crouching, passed only fifteen yards to my right, and was brought down with an easy shot. But this was an unusual experience, and I can only account for it by a possible echo from my shot which deceived the animal as to direction. I have, in any case, read of this happening when hill-shooting.

I got him at about 1.30 p.m. ; the month was April and infernally hot, and the man accompanying me had long before given up and returned to Puri. I was not, however, going to give my buck to the hyænas, so, after disembowelling him, I put one leg through the tendons of the other and carried him.

After a mile or so I became both very thirsty and exhausted, so dropped my load and sat down. The tongue actually stuck to the palate. But an hour later I saw a man, told him to go to the Circuit House where my brother-in-law stayed, to tell him to send four men and some drink and food. After some hours these appeared, and never did a whisky-and-soda taste better, or go down with greater gusto, and my buck was carried in triumph. It was a good head of 23 inches, but I shall never forget the dance it led me.

I have only had one other experience of terrible thirst, and that was when stalking borrel on the Baluchistan Hills near Quetta, and when my trackers drank the entire contents of my water-bottle. As an outcome I fell when two miles from camp and had to be carried, but, on reaching camp, got some food and drink and threw myself on my bed without removing my clothes. It was perhaps just as

well I did not for, next morning, on shifting the top pillow there sat a large scorpion on the lower one.

One day, near the Black Temple, an unusual thing happened. I had put in a long shot at a buck and he had dropped like a stone, but when I had arrived within a few yards he was up and off. A second shot brought him down, and then I saw that he had only one horn. My first bullet must have struck the base and this had broken it and stunned the animal at the same time.

Many stratagems are adopted to get near Black Buck, but they are mostly unsporting and should not be resorted to. One is to disguise oneself like a native, with puggaree, etc. Another is to use a cart with a screen of leaves and grass at the sides. Buck are so accustomed to native carts that they suffer them to come up quite close, when the hunter can drop out of the cart and have his shot. They can also be approached by leading a pony or bullock towards them, the hunter concealing himself on the opposite side from the quarry.

In Jeypore cheetahs are kept for hunting Black Buck, and these are hooded and taken out in a cart. But if the cheetah does not bring down the buck in the first 500 yards he gives up. If a Black Buck is fleet one can imagine the pace at which a cheetah must travel to catch his buck.

Caution must be taken when approaching a wounded buck, for they are apt to charge and inflict mortal wounds. I had personal knowledge of a case where a native, near Kadur, was killed by a wounded buck, and where the wound in the abdomen set up peritonitis.

Although much harried I do not think that there is any chance of extermination, and stalking Black Buck is not only interesting but entails a good deal of labour and care.

CHAPTER XV

FISHING IN INDIA

FOR many years, when in India, I did not fish, and afterwards, when I did take it up I regretted the time and opportunities that had been lost. My advice, therefore, to all who go out to India, is to take up fishing. In conjunction with shooting it is a splendid hobby. Of Assam it may truly be said that where is good shooting there is good fishing, and vice versa.

After a hard day's shooting it is very pleasant to take the rod "out for a walk" along the banks of some lovely river, and to secure a change in sport and in one's diet. I have known people suffering from a nervous breakdown recover when they took up fishing, and you can go on fishing until you are well into the seventies or eighties.

It is not only the fish that interest one, there are birds, animals, butterflies, and other insects to observe, as one goes along, and to the fisherman the pools and rapids of some beautiful river are a real joy; the purling of the waters are music to his ears. What delightful memories come back of those days spent on some splendid river in Assam at the end of the rains when the cold weather was setting in.

As a general rule where you get good Mahseer-fishing the scenery is grand; great stretches of green, deep pools; rushing rapids; cliffs, with ferns and other exotics, rising abruptly from the river on one side, and the forest coming

right down to the water's edge on the other. Beautiful stretches of sand and shingle in parts and the forest full of all kinds of game, howling monkeys, the "tuk tuk" of the great hornbill, and various other jungle cries. While going along one sees barking-deer, peafowl, pheasants, sambhur, otters, monitor lizards, imperial pigeon, bar-tailed cuckoo, doves, and "greeners." With luck a tiger or a bison may be also seen. I myself have seen elephant while fishing, and many men in Assam have seen buffalo and bison.

It is always a good plan to take one's gun and rifle when out fishing as on the Assam rivers one never knows what one may come across. Then, too, there are gharials to shoot, also duck and teal. Some of the rivers in Assam, especially the Kopli and Doyang, harbour flocks of cormorants, and otters are very numerous. These, no doubt, do a great deal of harm and need keeping down.

On the Kopli I once counted a school of fourteen otters. They were amusing little beggars to watch. They came out of the water, played, rolled and scampered on the bank, chasing one another, rolling over and uttering snarls and squeally noises. Every now and then one would stand upon its hind legs and investigate, much in the same way as a rabbit does. Otters are very wasteful, they only eat part of a fish and leave the major portion. I think they enjoy the sport of catching fish as much as the eating. They make delightful pets if secured young; follow one about like a dog, but when grown up get savage and are inclined to bite strangers at feeding-time.

I was first initiated into the mysteries of fishing by a brother officer. Our cholera camp was situated on the banks of the lovely Chungai River in Manipur, about twelve

miles to the north-east of the city. My C.O. was a keen fisherman and one of the best. One day he said to me, "Doc, why do you not take up fishing?" I said, "I know nothing about it," and he said he would teach me. He took infinite pains, initiated me into the mysteries of tying fishing knots, names of flies, baits, etc., and gave me lessons on throwing a fly and casting. My first attempts were disastrous; my casts got hopelessly knotted up, and many times I had to climb trees to free my cast, and many times my flies went off with a flick amidst much cursing and swearing. However, with perseverance and patience, which every fisherman must have, I got to throw a line fairly well, and to cast. My C.O. set me up with an eight-foot Greenheart and tackle, and, after a time, I and H., a subaltern, used to go out for the whole day and bring back game, and any amount of fish.

I never regretted having taken up fishing, and in after years, when in civil employment, had grand opportunities of following this pastime.

The Chungai River swarmed with Booka, Mahseer, and Baril, but there were very few Barbus. The Booka ran to about 2 lbs. maximum, and took the silver fly-spoon well. I also caught them with acorns, and a small fig-like berry. The Baril, cooked like whitebait, were very good. At that camp we practically lived on game and fish. There was also no work to do, so for six months we had a fine holiday and got very fit, but had I remained much longer all my professional knowledge would have gone. H. and I lived in a grass hut; each of us had a camp-bed, and a deal box on end served as a table. The floor was clay, our fireplace a hole scooped in the ground, lined with stones and "leaped" with clay. We used to ride into Manipur once

a fortnight to get cigarettes and other necessities. It was, indeed, a happy and simple life.

Our C.O. had a half-savage Abor as his assistant bearer, whom we all thoroughly detested. When the C.O. gave him a hiding he took revenge by burning his master's kit. On one occasion he burnt the mosquito curtain so that the C.O. had to go without one for the rest of our stay. When we returned to Manipur the man was very miserable, and the Political Agent said he must be sent back to his country. He was therefore put in charge of some cartmen, but went to sleep under one of their carts and was crushed to death when this was being loaded up.

Our camp there was a pattern of cleanliness, order and sanitation. At that time there was a famine in Manipur ; rice was selling at 11 rupees a maund, so that hosts of Manipuris migrated to the Naga Hills. Our C.O. then made an order that everybody who passed through our camp had to do some work, we thus had plenty of free labour.

One day a party was passing through, accompanied by a "doolie," and, of course, all the men were put on to do their quota of work. My C.O. enquired who was in the "doolie," and when we peeped in we saw rather a good-looking Manipuri woman. The C.O. asked who she was, and was told that she belonged to the Padre Sahib's entourage, and that he was coming along behind. This Padre turned out to be an American Missionary on his way to the hills. He was very angry that his men, "etc.," had been detained, but our C.O. soon settled him, whilst wishing he could have put him on to some manual work. The woman was his bearer's wife! I must confess to having an antipathy to missionaries working amongst these splendid hill tribes. Under Christianising influences they become lazy

and degenerate, and lose all respect for themselves. They discard their handsome national dress for some form of European costume, so looking awful guys.

When I left military service I was fortunately posted to Sylhet. In this district, Ommaney, mentioned in Thomas's *Rod in India*, made his fabulous bags of Mahseer, and I soon found out the best places. These were the Ponatite at the north-west corner of the district, where the river debouches into the plains through a lovely gorge in the Sunamgunj sub-division.

I shall never forget my amazement when I first gazed on this fisherman's paradise. There was a huge pool, several hundred yards long, and, now and then, I could see the red fin of a Mahseer protrude above the water, and the Chilwa scuttle along the water when one of those fish rushed for them. "Here is luck," I said, but I was bound for disappointment.

Shortly before leaving the regiment I bought a lot of second-hand tackle from one of the subalterns. He had never looked after it, nor did I take the trouble to examine it carefully before I set out; the consequence being that, after each mighty rush, traces and line gave way and I lost all my fish and most of my spoons. I threw away the remainder of that tackle and ordered a new lot from Hardy, Manton, and Luscombe.

On my next visit to this place I got some nice fish, and secured a Goonch (*Bagarus yarelli*) of 67 lbs. with which I had great fun. I hooked him at the head of a rapid (I was using a No. 10 G. & S. spoon). He went off with a tremendous rush down to a big pool below, and I followed hard in my dugout, but when near the spot where he halted he rushed no more but bored down into the depths of the pool

and there remained. Still I could not shift him, and my line felt as if there was a stone on the end of it. My Khasia boatman swam to the bank and brought a lot of large stones in another boat and threw them into the water alongside my line. This shifted the fish, and I then got on to the bank and tried to play him, but despite every effort I couldn't reel him in and he lay tossing on the surface. Finally my Khasia took a pronged spear, swam out and brought him in. What an ugly brute he was! Piebald, with a very large mouth full of powerful teeth. On his head were plates the colour of "shagreen," very rough, a horny spine, also rough, on the front of the dorsal fin. The native name for the fish is Bag-mas.

This Ponatite was a fascinating place. In the higher reaches the cliffs rose abruptly from the water's edge, and the rocks assumed all sorts of fantastic shapes. On some of them I noticed writings in Urdu, and visited a wonderful cave full of bats. The higher reaches are difficult for boats, as there are rapids up which a dug-out cannot pass. There is also no path along the edge to reach the pools beyond, a folding boat is of no use, so the Mahseer is safe in those higher pools.

Hard by the Ponatite is the Tangour Haor which, at one time, swarmed with sambhur, hog-deer, pig, buffalo and tiger; but, like all places in India, the game has been decimated by zamindars, and slaughter during heavy floods.

Close to the Tangour lived an old Mohammedan called Toota Meah Sahib, a fine old Mohammedan gentleman of the old school, with a long, flowing, henna-stained beard. He used to accompany me on my fishing and shooting expeditions. He had a great reputation as a tiger slayer.

He never used a gun, but, during the floods, when a tiger became stranded on a fairly dry floating island, he would push his long boat into the reeds and spear it.

One day a tiger mauled him on the neck, and after this encounter his head jerked from side to side, evidently due to injury to his musculo-spinal nerve.

The first time I bagged a buffalo with him he jumped on to the carcass and shouted "Shabash-Sahib." He was a nice old man, but died before I left Sylhet. Would that India held many more like him! When he accompanied me in boats he always had his pet bald-headed coots in large cages with him. These coots made a loud noise like a drum. The Bengalis call them Seem-Kookra.

They have very long claws and the tame ones fight with the wild and hold tight until the trapper comes up and seizes both. When walking the coots flick their tails in a cheeky sort of way, after the manner of all coots and rails.

The worst of the Ponatite was that it had a bad reputation for malaria and I got a good dose of it.

The heaviest Mahseer I got here was 23 lbs., but had my tackle been good, in the first instance, I am sure I should have landed a 40-pounder.

The next best locality was the Hurry and its tributary the Rowai, both coming from the Khasia Hills. It was easily got at from Sylhet, so I had a permanent fishing-camp made at the junction of the two rivers. Any casual leave I obtained in the winter months I spent there. My chief D.C. and self used to spend the Pujah and Christmas vacations there and had a glorious time. We were then just like schoolboys out for a holiday. I remember once, on the upper reaches of the Rowai, we found a virgin pool where the fish had never seen a spoon, and we pulled out

7- and 8-pounders as fast as we could land them and cast our spoons. Burghat, a village close to where the Hurry rushed through the gorge and towering cliffs, making a noise like Niagara, was a beautiful place with a pool nearly three-quarters of a mile long. As the rivers had been closed by Government to fishing by nets and spearing for a number of years, the fishing was exceptionally good.

On the hills above Burghat there was good bison ground and I had some tremendous tramps after them. Along the Rowai were many salt-licks to which elephant, bison, deer, and pigeon came. One night on the Rowai I shot a sam-bhur by moonlight, and on another similar night I saw two leopards close to the bank of the river, but could not get a shot. We often heard elephant crashing in the bamboos, and once they gave us a nasty time which I will speak about when dealing with these.

My wife and I got 450 lbs. of fish in ten days, the largest Mahseer being 57 lbs., but he did not fight as well as some of the 16- and 23-pounders. He was a very thick fish. One day I hooked a fish while trolling from a dug-out ; I then got on to the bank and he led me a dance by rushes downstream. After a while he made towards some snags lower down the river and I knew that if he got there he would break. So I shouted to my wife to take the rod, give him the butt, and to hand me the .360 rifle which she was carrying. Then when his back and dorsal fin showed, I fired and bagged him, but it was rather a mean way of killing him.

Sometimes, on the banks of the Rowai, we came to spots which attracted butterflies, and the shimmering, quivering mass exhibited the most varied kaleidoscopic effects. One smallish butterfly we saw had transparent

wings veined with black, and from the end of the lawn-like wings a black corkscrew-like tail projected.

Below Burghat there was a very dangerous rapid, where many boats had been dashed to pieces and some lives lost. It was here that, one Christmas, my wife, servants and self missed death by inches. We had been camping at Burghat and on the day we were leaving a death occurred in the village, so none of the Khasia boatmen could take our boat down to our next camp. I was, however, able to obtain some boatmen from the manager of the Lalakhal tea-garden further down the river. Unfortunately I gave them some money before starting, never dreaming that they would spend it on drink. The consequence being that, just as we were going to shoot the rapids, the man who was steering fell overboard, and our boat swept down towards destruction. Very fortunately a side current caught us and took us on to a flat rock just above the roaring rapids, and there we stuck with the water pouring into the boat. We were, however, lucky as some men were on the bank, and, shouting for help, they came and rescued us. We saw nothing of the drunken man, and presumed that he had been drowned, but he turned up in the camp in the evening looking a miserable wreck. I felt like thrashing him, but finally decided that he had had enough punishment already. Had he been sober I believe he would have drowned.

The best stretch on the Hurry was between Burghat and the village of Pesaduar down the river. Below the latter I never caught a Mahseer.

After returning to camp I used to go out in the evening for Chilwa with a very light rod and cast of three very small flies, Cock o' Bondhu, Black Gnat, and Wickham's Fancy. It was great fun, and again and again I got a Chilwa on

each fly. I once got seventy-six in an hour they were so numerous. Cooked like whitebait they are excellent eating. I have seen the water quite rough with them, their heads sticking out above the surface of the water. They seemed to like the fish oil that floated down from the places where the women cleaned the fish for market.

After a few years I was transferred to Tezpur in the Darrang district. Here the best river was the Borelli, and the shooting in that locality was excellent, including rhino, buffalo, bison, and bear. It was, however, rather a difficult place to get at from headquarters, and on one occasion, when there, our camp was washed away and we had to retreat.

Uncle C., a tea planter, was a great fisherman, and as his bungalow was practically on the Borelli I had good sport with him. On one occasion a boatman got a treble hook through the web of his fingers. C. produced a pocket-knife, which I sharpened on a stone and sterilised with lighted matches, and cut it out. The man never winced.

On retirement, I fished the Dehingi and Kopili in the North Cachar Hills. The rivers and scenery were lovely, but the fishing was not a patch on that in the Sylhet district. This was mainly due to poisoning and the depredations by otters and cormorants. We used to see hundreds of dead fish floating down stream, and our servants had a royal time gathering them in. A good deal of damage was also done by fish-traps and dams. The shooting, however, was excellent, and we spent many weeks camping on the banks of these rivers.

During our three years' residence at Haflong we had many thrilling experiences with tiger on these rivers and in their vicinity, which I will speak of in another place.

Our camps were often miles away from villages, and we used to hear the wild elephants trumpeting in the forest around us. One day three of them watched us from a little way up a wooded cliff on the opposite bank. They flapped their great ears and moved silently away.

The birds on the Dehingi were very tame ; the wagtails used to come into our tent. Once, while my wife was fishing from a boat with a small G. & S. spoon, a blue kingfisher made a dash at it, missed it at the first attempt, but succeeded in catching it on a second attempt. It then started to fly off with it, but the spoon dropped and the bird perched on the rod within six inches of my wife's hand. I then tried to catch it, but it flew off.

There was good Butchwa-fishing in the Dehingi and I used to catch them with worm. They were excellent eating and [I can corroborate this as they were our best fish in Bihar, and a very sporting fish too—Editor] almost as good as Hilsa. It was curious, too, that all the Mahseer in the Dehingi had yellow fins. This river was also a great place for Gharial. I once wounded a monster, but didn't get him ; he occupied a large deep pool, and his girth was enormous. Many had tried to bag him, and I expect his hide was perforated and scarred with bullet holes. We also used to get peafowl on the banks of the Kopili, one of the few places in Assam where they are still to be found.

Later I invested in a Ford folding boat to surmount the difficulty of the rapids on these rivers. It could be carried by two people but was found to be too vulnerable owing to rock snags in the river. We once tore a hole in it, and I had to paddle hard to get her ashore before she sank, my wife being in her all the time and unable to swim. I would not recommend such a boat, but it is exasperating

to come on a lovely pool above a rapid, full of good fish, and no other way of getting at it except by trolling from a boat.

I have often climbed through the jungle and looked down from a height at the large and small Mahseer lazily swimming about near the surface of such a pool. But, the banks being too steep and covered with jungle for casting, one had to turn back with many regrets.

I kept careful notes of all my fishing expeditions, and these contained full weights, measurements, and notes on Mahseer, but unfortunately they were stolen when a despatch-box went missing. The notes were given to me by Khasias, and they know more about fish, and how to catch them, than anyone else.

I have always found these people very obliging and genial, and very keen on all kinds of sport. They are a very virile race, when not touched by education and the missionary. The women are good-looking when young, but soon grow haggard from hard work. They do practically all the work while the men fish and hunt, but many of the women can fish and handle a boat as well as any man. I have never, however, seen them use a spear. I once saw an old hag haul out Garfish one after the other. She was armed with a stick and line with a hook on it baited with a small broadish fish. She trailed and drew the bait over the surface of the water ; the Garfish grabbed it, and before it had time to loosen its teeth she had whipped it into the boat. She seemed to land one every three minutes, and the boat was full of them. The women also use the flying-ant as a fly and can cast with great precision.

It is sad that the Khasia, like many other Eastern people, regards his wife as a beast of burden. When he marries

he does not seek out a pretty face, but chooses a girl with a broad back and big calves.

These women are capable of carrying as much as 80 lbs. up very steep paths. The Khasias' houses are very dirty, as pigs, fowls, and pigeons are kept in the dwelling-room, and they swarm with ticks. When camping it is advisable therefore to keep well away from their villages on account of the stench emanating from drying fish, swarms of flies and numerous dogs. Leprosy is very prevalent amongst these people.

The Khasias use two kinds of boats for fishing ; one is the ordinary dug-out, and the other a real boat, made of Jharal wood and very light and strong. The latter draws very little water and the stern has a projection forming a platform on which a man can stand to pole or paddle. It is astonishing the number of knocks and bangs from rocks these boats can stand. Four men can easily carry one of these boats. Two men punt the boat upstream, and when coming downstream, or shooting rapids, one steers with a paddle in the stern whilst the man in front keeps the boat off the rocks with a bamboo. The Khasias are expert swimmers, and recover with great skill spoons and lines that have stuck in snags and rocks. In doing so they make a ring with the fore-finger and thumb round the line, and using this as a guide, they dive and release the spoon.

The Khasias have many ways of securing fish : (1) Netting ; (2) Using the rod and line ; (3) Poisoning ; (4) Spearing ; (5) Trapping ; (6) Casting with a very long rod and a hook baited with a dead fish. For poisoning they use the pounded bark of a tree which has a red appearance. They dam a pool and then poison it, the fish then become stupefied and rise to the surface of the water.

This is a very wasteful method as many of the fish float down the river and are lost.

They use two kinds of spears and are very dexterous with both. One has a single barb which is attached to the long shaft by a thick rope. They use this kind of spear when the Mahseer are moving up to spawn. As soon as the spear strikes the fish the spear-head loosens and remains in the fish whilst the long bamboo, attached to the head by the rope, bobs up and down on the surface of the water and shows where the fish is ; the latter is captured when exhausted. They sometimes catch 40- and 50-pounders in this manner.

The other spear has three prongs, and with it they either stick their fish from the bank or in deep water from a boat. My Khasia ghillie always used this method to land my fish. I seldom lost a fish, but once, when the spearman entered the water, the fish made a rush and the line got round his legs and snapped.

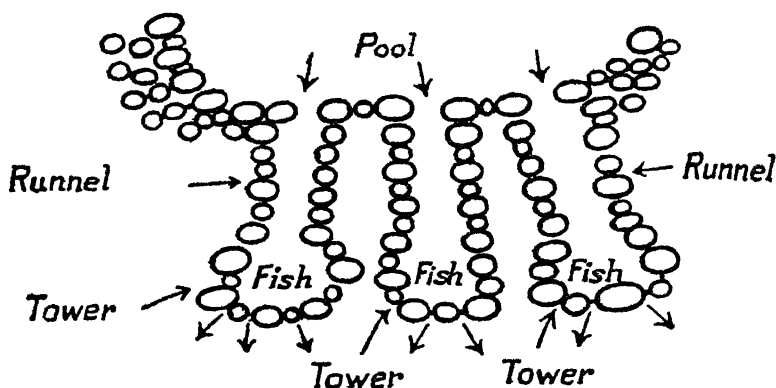
When fishing with rod and line the Khasias use as bait flying termites and green grasshoppers, or sometimes pieces of the fresh-water crab.

Trapping is a most destructive method, for fish from one inch long up to 40-pounders are taken in this way. The fish traps are of two kinds. One is made of bamboo cane, conical in shape and varies from a few feet in length up to about twelve feet. The river is dammed and the traps placed at intervals in openings with the entrance upstream. The water pours through them carrying the fish into them. The traps are emptied at intervals and replaced.

Other traps are small, either elliptical or square, like bird cages. They are constructed on the principle of a rat-trap. The fish enter but cannot get out owing to the

sharpened bamboos inside the cage at the entrance. These cages are sometimes baited with small pieces of fish or crab.

The most destructive trap of all for catching large fish is constructed entirely of stones and made as follows. When the rivers are falling, after the rains, the Mahseer come down from the higher reaches to the warmer in the plains. The end of a large pool is dammed up with boulders



several feet high ; every here and there an opening is left and this leads into a runnel, the sides constructed of boulders. This runnel leads into a castle or tower, about five feet high, made of large boulders. In this way practically the whole river is diverted into these channels, and all the fish are carried into these towers, are stranded there and caught. One year I saw these towers full of Mahseer varying in weight from 12 to 40 pounds. I got into one of them and tried to get hold of a big one, but was nearly knocked down in the attempt. The diagram above illustrates this trap, and the arrows facing down indicate the direction of the stream.

The larger fish are split open, dried in the sun and sold in the bazaars of the plains or in the local villages in the hills.

The Khasias cultivate the orange, betel palm and leaf, and generally are well-to-do. They manufacture a very potent spirit from millet and many are great drunkards. During big festivals they all get drunk except the women, who remain fairly sober

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