THE ZOOLOGIST:

A MONTHLY JOURNAL

OF

NATURAL HISTORY.

FOURTH SERIES.-VOL. II.

EDITED BY

W. L. DISTANT.



LONDON:

WEST, NEWMAN, & CO., 54, HATTON GARDEN.
SIMPKIN, MARSHALL, & CO., Ltd.

1898,

A CHAT ABOUT INDIAN WILD BEASTS.

BY COLONEL F. T. POLLOK.

THE TIGER (Felis tigris).

Foreigners say that wherever Englishmen travel the cry is "Let us go and kill something." This alludes, of course, to our love of sport, and they rather laugh at our enthusiasm for slaying the feræ naturæ; but I attribute two-thirds of our acquired possessions to the innate love of sport implanted in the breasts of our islanders. Our pioneers have generally been men in search of game. To be a successful sportsman a man must study the habits, manners, and customs of the beasts he intends to hunt. I propose to relate here certain facts which can well be impressed upon the minds of naturalists as well as others.

India is our great nursery, and in it game is still plentiful. Hog hunting is pre-eminently the grandest sport. After it comes Tiger-shooting off Elephants and out of howdahs. Tigers can be shot on foot only in Central India. Where Tigers abound, the grass is too high and too thick for a man on foot to have a fair chance. But mounted on a fairly staunch Elephant, the pursuit is most enjoyable.

It has been a disputed point how a Tiger strikes down his prey. A noted sportsman wrote as follows:—"Some years back, at Pykara, not far from the bungalow, a Tiger took a fancy to a Todah (a hill man) in preference to the Buffaloes he was tending. Two other Todahs were witnesses of the affair, and they described how the Tiger behaved. Having caught the man, he amused himself for some time by letting him go, and then dodging him as the poor victim tried to escape, before killing him outright, notwithstanding the shouts and yells of the two spectators."

There are divers opinions as to the exact mode by which a Tiger takes its prey. Popularly he is supposed to lie in ambush, and spring on his victim as it passes his lair; or, by watching at a pool, awaits the arrival of animals in quest of water. These

would offer but precarious chances even to so cunning and stealthy a foe as the Tiger, as all wild animals are so wonderfully cautious in their approaches to such resorts. The Tiger too would betray his presence to them by that peculiar smell attaching to him, so that the odds are greatly against our striped friend's success, though of course he occasionally is rewarded by catching some unwary over-thirsty animal that rushes to the pool heedless of the consequences. But this will not apply to the Tiger on the hills, where no paucity of water ever occurs to such an extent as to drive the game to any one spot to drink. That the Tiger's principal food in certain localities is game there can be little question, but how he takes it is not well known, and perhaps may never have been witnessed by anyone.

I have a theory of my own on this point; let us ventilate it. In the first place, the Tiger must have room to spring on his victim in the sholas,*—many are sufficiently clear to allow this, and no doubt he takes advantage of such spots when a chance offers in them; but in general the woods are dense with undergrowth interspersed with trees so close together that the spring of the Tiger and the force of the blow must-I should say-be greatly interfered with. Then, again, his presence, as before said, is so liable to detection by the Deer that his chances of capture are remote; but at night the Deer are out in the open, and then perhaps, the wind being by chance in his favour, he may succeed; and I am disposed to believe that this is the most likely time for him to do so, though he is in no way restricted as to time or place, for he slays tame Indian Buffaloes oftener during the day than during the night, and at times close to their habitations. All Deer possess an acute sense of smell, and against it a Tiger has to contend before he can provide his larder with game; but how does he manage it? We cannot give him the credit of the intellect of man, who, in pursuit of game, is well aware nothing can be done down wind. Were it so, not a Sambur or Deer would be left alive. The Tiger would bag them all just as he pleased,—in fact, he would then be able to kill any Deer when he wanted it. We have so far considered the acuteness on the part of the game to ensure them against total destruction, and I have only one further observation to record, and that is

^{*} Wooded ravines.

how often the presence of a Tiger is indicated by the actions of the Sambur and other Deer and also by various Monkeys. If disturbed by him in a sholah during the day, the Deer immediately resort to the open, watching with eagerness the wood they have quitted, and generally warning the neighbourhood with loud consecutive bells; whilst Monkeys will perch on a branch above the feline, and keep up a constant chatter, and in their language swear at him until they acquaint the whole forest with his presence. That a Tiger is stealthy and quiet in his movements we all know; that velvet paw of his, so soft and yet so formidable, enables him to tread the woods and forest so noiselessly that the sharp-eared Deer may often be taken by surprise, and fall a victim to its blow; and but for the tell-tale scent emanating from his striped hide, numbers would be destroyed. That he, when hungry and sharp-set, is always on the prowl there can be no question, and it is on these occasions that he is supposed to adopt a very wily plan to secure his food.

On a late occasion when a well-known sportsman killed a fine Tiger, he was attracted to the spot by the belling of Sambur and the call of the Spotted Deer. On quietly approaching, he perceived the Tiger lying down under some bamboos watching or listening to the Deer, who kept calling. Before any result could be observed, a well-planted ball slew the feline on his couch. It then occurred to the sportsman that it was not at all improbable that this act of the Tiger lying down calmly in sight or hearing of his prey might be one of his devices to allure the game within reach. We know how proverbial is the curiosity of Deer, and how, when uncertain of the object before them, they will at times advance towards it. In the Sambur this is more particularly the case, and may it not be that the Tiger is aware of this propensity, and so-like Jacko and the Crow-feigns sleep or death to attract the unwary and inquisitive victims? That he also tries his speed at times, the following instance is good proof.

One afternoon, on reaching the summit of a high hill commanding a well-known valley for game, my friend espied three or four Sambur in a swamp below; he noticed that they were on the qui vive, and could not divine the cause, especially as what appeared to be a stag was lying down in the swamp, but very far from the other Deer. On turning his binoculars on this object,

to his surprise he saw it was a grand Tiger; and while in the very act of looking at him, he saw him gather himself up, and with three magnificent bounds fly through the air in the direction of the Deer. The latter, however, were too quick for their foe, and, scampering off, all got away; the Tiger then crouched sulkily, and on seeing the hunter approaching, he too was off like a shot. Now this I consider as very probably the manner in which a Tiger takes his prey at night, and one can imagine it to be most destructive.

Tigers are not particular as to the state of their food being fresh or otherwise. It was observed on the Anamalies that these animals seldom, indeed never, were found to resort to the carcases of Gaur that had been shot until the effluvia from them was exceedingly strong,—indeed, it may be said when in the highest state of putrefaction; and on one occasion, when the feline had dragged the putrid carcass some distance, the sportsman was able to follow it up to the spot by the scent, and found the Tiger quietly reposing near to the offensive remnants of the defunct. In many cases it has been noticed that he makes his lair conveniently close at hand to prevent the intrusion of any assistance in the demolition of the carcass.

On one occasion, I was present when the noise of the descent of a large number of Vultures on a dead Buffalo, lying just outside a sholah, caused the Tiger who had killed it, to put in an appearance at noonday to protect his rights to the beef from the feathered tribe, and not one of the obscene birds would go near the body as long as Mr. Stripes was in sight. It is evident from a Tiger's droppings that he usually consumes the whole of the animal he slays, even to the very skin, as he voids large quantities of hair.

I may here record another instance of craftiness on the part of the Tiger in approaching his game, and which the natives firmly believe in, and that is that the Tiger is often heard to reply to the bell of a Sambur or the call of a Deer, and that he does so with a low muttering growl, or sometimes with a short impatient grunt, at the same time stealing on quietly towards the sound of the Deer's call. This answer of his seems to elicit a reply from the Deer, and the Tiger, ascertaining with tolerable precision the position of his prey, is guided accordingly, stops

his growling, and perchance secures a victim. Tigers, it is well known, prey at times on their own tribe, as the following instances will show.

A Leopard was half eaten by a Tiger by the side of a "kill," and there were evident traces of a struggle having taken place. Whether the Tiger ate his enemy out of revenge, or found him fresher and more tasty than the body over which they had fought, I will not hazard an opinion; but, though strange, it is not uncommon either with the hairy or the feathered tribe,—birds of prey doing the same, for I shot a Falcon in the act of feeding on a Kestrel it had struck down. Another instance is known of a Tiger having killed a young Tiger over a dead bullock, and partly eaten him. I have known several instances, when two Tigers have fought in Assam, of the survivor demolishing the defeated.

There is a peculiar and singular distinction in regard to the mode of breaking up their prey between the Tiger and the Panther; the former invariably commencing on the hind quarter of the animal slain, and the latter at the fore quarter or chest. There is no reason shown for this strange difference, but it is a well-established fact, and one perfectly recognized by native shikaries, who will, without hesitation, pronounce which animal is the culprit by observing these particulars.

We now come to an instance where some sportsmen did see a Tiger strike down a cow. "We had been tempted off our proposed line of march on the 11th by the receipt of news of a Tiger having killed two cows in the bed of the river near the village of Pipulkulti; and, encamping at Watoli, had sent our shikaries to tie up Buffaloes near Pipulkulti, and also near Amba, a village in the opposite direction, near which there had been a 'kill' about a week previous. The news came in early from both directions: 'Nothing from Amba, and "no kill" from Pipulkulti'; but Shaikh Boden, our head shikarie, who had inspected the latter place, had found fresh tracks, so we determined to try our luck, and started after breakfast with about twenty coolies for a beat. One mile below Pipulkulti the Pen Gunga river averages in breadth from four to five hundred yards, when a large nullah runs into it from the Berar side. In the bed of the river there are a number of small flat islands covered with a description of Cypress grass, affording sufficient cover for

a Tiger to take refuge in. Shaikh Boden proposed beating diagonally up the bed of the river, and that we should post ourselves half-way down the bank, behind some bushes on the upper extremity of the cover,—the disposition of the islands (on which was the only cover) being such that the chances were greatly in favour of the Tiger being forced within easy range. This plan we agreed to pursue, and were walking along the northern bank on our way to our posts, when we were stopped by the cry, 'Bagh hai,' and on looking down to the bed of the river, saw what apparently was a very large Tiger stalking a herd of cattle that had come down to water. We crouched down, and had the luck to see the whole business. The Tigress, as she proved to be, when first seen, was stealthily stalking a white cow, which was some little way off from the main body of the herd, and, taking advantage of the slightly undulating bed of the river, had probably approached across an open space of perhaps five hundred yards before this cow had seen her; the rest of the herd were behind one of the islands, and could not yet see the enemy. The white cow allowed the Tigress to approach to within about eighty yards before she appeared to notice her danger, and at first seemed to be fascinated by the appearance of the brute creeping towards her, and it was only when the Tigress commenced to increase her pace to a trot that the cow made off. The trot increased immediately to a lumbering gallop, as the Tigress had now got on to the firmer ground that surrounded the islands, and in a very short time she skirted over a small ridge into close proximity of the herd, which was then commencing to scatter on the news received from the white cow. The gallop turned into a charge, and in a few seconds the Tigress had picked out a fine young cow, on whose back she sprang, and they both rolled over together in a heap. When the two animals were still again, we could distinctly see the cow standing up with her neck embraced by the Tigress, who was evidently sucking her jugular; the poor cow made a few feeble efforts to release herself, which the Tigress resented by breaking her neck."

What induces a Tiger to prey on human beings? Some affirm that it is only when age overtakes the animal and he finds himself unable to cope with his ordinary victims, Deer or cattle, that he falls upon man; and it is stated in support of these views

that man-eaters are mangy and decrepit beasts, sans teeth, sans hair, and sans anything and everything that makes a Tiger the formidable creature he is in his prime. This is occasionally true, but man-slayers have also constantly been found to be sleek, lusty, and in their full strength and vigour. It is not, therefore, entirely dependent on age and its concomitant weakness that the Tiger takes to this habit. I think the argument advanced by many observers and naturalists that the animal, either accidentally or by press of hunger, having once seized a man and found out what an easy captive he had made, and in addition that the flesh is palatable, takes advantage of this acquired knowledge, and thenceforth becomes that dreaded being,—a man-eater,—is equally reasonable with the former, and may be accepted perhaps as the more probable of the two.

LEOPARD (Felis pardus).

Although there is but one species, there are two varieties of this beast. The larger is styled by sportsmen the "Panther"; the Snow Leopard is only found in the Himalaya range in altitudes ranging from 8000 to 10,000 ft. The Panthers grow up to nearly eight feet in length, and are more savage, active, and determined than many a Tiger. The colouration is orange yellow, passing into white below. It is spotted with deep or brownish black, sometimes distinct, sometimes composed of two, three, or even four points disposed in a circle and surrounding a space, always somewhat darker than the ground colour, and shading into it below. Along the spine, on either side, the spots are arranged in parallel bands. On the head and legs the circular spots pass by degrees into mere points; the tail is ringed with annular spots. On the hinder part of the ears is a clear spot. In the true Panthers the rings are more regular than in the Leopards; but no two skins are exactly alike in marking. Panthers live more on cattle; Leopards principally on Dogs and any small game they can find,—consequently one is an inhabitant of the plains, and the other of hilly ground. Leopards are very plentiful in the Cossyah and Jynteah Hills, and when Shillong was first occupied, any Dog that ventured out of the house after dark was sure to be seized and carried away. Notably two large towns, Burpeltah and Hazoo, in Assam, were infested with

Panthers; there were cane-brakes in their midst,—they were of course straggling places,—and out of these almost impenetrable lairs Messrs. Mackenzie and Campbell shot several Panthers. I killed a couple in Hazoo. A Leopard is more difficult to circumvent than a Tiger, as it approaches its kill in the most wary and cautious manner, examining every yard of the ground, and, being arboreal in its habits, it scans the surrounding trees, which a Tiger only does after it has been shot at once or twice from a coign of vantage. They prowl about after sunset till dawn in search of prey.

Another peculiarity of the Leopard tribe is that when an animal has been killed by one, it commences to feed upon the fore quarter and viscera, whilst the Tiger attacks the hind. A maneating Tiger is bad enough, but when Panthers take to preying on the human kind they are ten thousand times worse, as they force their way into the frail huts of the natives and devour the people. In some places in the Nizam's dominions, on the borders of the Nirmal Jungle, the average of deaths from Panthers was one man a day; whilst in others it rose to two! I have known whole districts deserted on account of these scourges, and it is almost impossible to exterminate a family, as the caves they generally inhabit have underground passages, and to smoke them out is impossible; there are, too, so many entrances, that where to sit up is also an uncertainty. Yet native shikaries, by means of crossbows and poisoned arrows, kill a great many Leopards and Panthers a year for the sake of the reward offered by Government.

Whilst a "griff" at Secunderabad, three of us lived together. We had a Panther, then more than half grown, which had been captured when a baby and carefully brought up. We used to go up on to the flat-terraced roof and take the Panther with us. One of us would sit down at the further end with his back towards the beast, who was then let loose; in fact, in those days he was seldom confined. Directly the beast thought he could do so unperceived, he would stalk the sitter, who took care to stand up and face the brute before it got within springing distance, and it was amusing to see the innocent look it would put on, and gaze in any direction rather than to where the ottoman was placed; he would then be removed further off and

again released, the sitter resuming his seat, and he would at once commence to restalk. At last he got too big and too dangerous, and we had to chain him at the foot of a tree, in which he spent the greater part of his time. I had bought two English Greyhounds of some considerable value. They got loose one night and attacked the Panther, who, chained as he was, soon put both hors de combat, and they were so mauled that, though by timely interference we saved their lives, they were ever afterwards useless for coursing. We had a large Sambur, fully three years old. In passing under a branch of the tree, where the Panther was crouching, the beast sprang down upon it, and would have killed it, had not our servants been at hand to rescue the Deer. We eventually turned him and a Bear we had, loose on Mole Alley Race-course, and speared them.

Shikaries sitting upon trees and machans have been carried off by them; and two Karens travelling through a forest in the Tenasserim District got benighted, and erected bamboo platforms on the branches of a large tree. During the night, the lower man was awakened by a Leopard climbing up the tree; he called out to his comrade, who was too sleepy to pay any attention, and was seized and carried off.

It is uncertain the number of cubs a Leopardess brings forth at a birth; but a chum of mine killed one with no fewer than seven young ones. Black Leopards are but a lusus natura. They are more abundant in moist climes overrun with sombre forests than in more open country, though they are occasionally found here and there in open as well as wooded lands. In the dense forests of Malaya and Lower Burma Leopards exist principally on the Gibbon Apes, as other game is scarce. Nature therefore adapts their colouration to their surroundings. An ordinarily marked Leopard would be too conspicuous, and would die of starvation. The fittest—the black—survive, as they are not so easily seen. A black Pantheress who mated with an ordinary Leopard had two or three litters which showed no signs of being melanoid. In Africa the ordinary Leopard, as distinguished from the Panther, is most plentiful, and great numbers are killed every year by the natives with poisoned arrows. Numbers are caught in traps, and Colonel Montagu, of the Commissariat, caught twelve Leopards and one small Tiger in a trap in his compound at Shillong.

THE HUNTING CHITAH (Cynœlurus jubatus).

This is found here and there in India, but is unknown in Ceylon. It is most common in Eastern Africa, more so than in India. They are more plentiful in Oude and Upper India than in Southern India; and I never saw but one, and that I was lucky enough to shoot, in the wild state. It is not found in Assam or Burma. I have seen many in captivity. We had a couple when I was a child. They are largely used by native rajahs and other personages to pull down wild Antelope, but it is not an exciting sport. When slipped from the cart, in which he is carried as near to a herd of Antelope as possible without frightening them off, he first cautiously walks towards his quarry, and with bristles erect. When the Antelopes perceive him, and he is within one hundred or even one hundred and fifty yards of them, he rushes at them with incredible speed, and if he overtakes one, as he generally does, within that distance, he fastens on its throat. If he fails to reach within that space, his wind being exhausted, he desists, and walks about in a towering rage, but soon allows his attendants to blindfold him, and to put him back on the cart. If he kills, the shikarie fills a saucer full of blood, and whilst the Leopard is lapping it up, he is hooded and led back. His call is a bleat-like mew. If taken as cubs, the natives assert they are useless for the chase. Only the adult ones who have been trained by their parents to hunt are of any use in a domesticated state. I never heard of their breeding in confinement in India; but I believe an instance or two has occurred in the large zoological establishments on the continent. None have bred in our "Zoo." The young, when born, are covered with soft brown hair, without spots, which is curious, as even the young of the Lion and Puma are distinctly marked with spots, which disappear in time. It is capable of domestication; Dr. Jerdon, the naturalist, had one that followed him about like a Dog, and was always sportive and frolicsome. Chitahs in a wild state, if wounded, will turn to bay and fight to the death.

Bears (Ursus tibetanus and U. labiatus).

Of the Bears of India, the Isabelline, or Brown Bear, of the Himalayas (*Ursus tibetanus*), which is allied to the Syrian Bears, is found in the Terai along the foot of the Bhootan range of mountains and in Assam. The Ursus labiatus is confined to the peninsula of India and Ceylon, although I did shoot one in Assam. How it got there was a puzzle to Jerdon, the naturalist, as he declared it was not to be found in that part of the country at all; but as I had the almost fresh skin with skull attached, seeing was believing. But I must own that out of a good many shot by myself and others in that and the adjacent countries it alone was labiatus, all the others were tibetanus. Why this latter Bear should be so styled has been a puzzle, for it is not found in Thibet at all. The two Sun Bears are found in Burma and downwards in Malaya. The Sloth Bear is an ungainly-looking beast. It has long shaggy hair, a prolonged and very flexible snout and lower lip. The fur is black, and the muzzle and the tips of the feet being of a dirty white or yellowish colour. Its breast is ornamented with a whitish V-shape; a ball placed therein being certain death to the beast. This Bear feeds on White Ants, fruit, and honey; but although such a great authority as Sir Samuel Baker asserts it is not carnivorous, yet I have come upon both the labiatus and the tibetanus devouring the remains of dead animals which we had shot a day or two previously.

There is just sufficient danger in Bear shooting to make it an exciting sport. Bear spearing off horseback is undoubtedly a grand sport, but the Ursæ are seldom met with on ridable ground; but the late Geoffrey Nightingale must have speared several hundreds of them. If a Bear is wounded when in company with another, he invariably goes for his comrade under the idea, I suppose, that he has been the aggressor. They charge in a most determined manner; but when close by, they generally rise on their hind legs and claw at the sportsman's face. I have seen some terrible wounds inflicted by them, principally on unoffending woodcutters. It is useful to carry a stout spear with a crossbar when following up a wounded Bear. My shikarie, Mogul Beg, was charged by an old he-Bear; he thrust the broad blade a little way into the chest, but, stumbling, failed to drive the weapon home. The Bear seized the crossbar by the fore feet, and fairly drove the blade through his own body!

They all have very long powerful claws, by means of which

they climb up trees without a branch to the height of sixty or seventy feet by simply digging their claws into the soft bark. The Karens, following their example, fill a haversack with bamboo pegs, and driving in one and standing on it, they insert others into the bark the whole way up; and I have seen them thus ascend the bole of a forest monster fully twenty-five feet in circumference, and without a branch for one hundred feet, after the huge honey-combs pendant on the lower lateral branches.

A large Bear will be about six feet in length, and weigh close on eight hundred pounds; not that I ever weighed one myself, but I have been told so by those who had. They seldom have more than a couple or, at the most, three cubs at a birth, and the little ones often ride on their mother's back. More people are killed annually in Assam by Bears than by Tigers. They are fond of rocky ground, and have their dens formed naturally by slabs of stone lying one on the top of the other; but in parts of Assam and Burma they lie on the open prairies in a dense patch of either long grass or in a thicket. Although Bears are very numerous in both countries, they seldom fall a prey to the sportsmen excepting in the hilly districts. When hunted on Elephants, they manage to evade the line, the noise made in forcing a way through the long grass gives them warning that their enemy man is nearing their lair, and they quietly shamble away. Why Bears should be so subject to cataract of the eyes I do not know, but it is a common disease amongst them. Elephants dislike Bears, and fear them more than they do Tigers.

The Burmese Bear, Ursus malayanus, has a glossy skin, with shortish hair, muzzle blackish, but face, mouth, and lower jaw a dirty white, throat black, dividing the white part just mentioned from a large heart-shaped white mark covering nearly the whole breast, with a large black spot in the centre, and a few minute black dots over the remaining portion; the lower part of this heart is continued by a white line between the fore legs, and widened out again on the belly into a large irregularly-shaped spot. The head is flattened and very short, with far more of a canine than an ursine expression. Ears very small, smooth, and round. It seldom exceeds four and a half feet in length. It is

probably more intelligent and lively than the Indian variety. The Ursus euryspilus is again smaller, and the horseshoe on its chest is orange or rufous-coloured; and in both varieties the the claws are exceedingly long. Nothing a Bear relishes more than the larvæ of the White Ants, and to get at them he will demolish nest after nest, a work of great labour and of considerable time. Whilst sucking out the nests, which are at the very bottom of the Ant-hills, the forcible inhalations can be heard a long way off; and I have, on three or four occasions, guessed at their whereabouts by this noise, and slain them. They are great adepts at climbing. I had two Bears, both blind; they were quite harmless and almost tame, but if frightened and they struck a tree they were up it in a second. One of them used to get into the coolest corner he could find. Major Edgar of the 69th was living with me, and the Bear one night got into his bathroom, and rolled himself up amongst the watering-pots (earthenware chatties). The major, as usual, came home very late from mess, and in the dark went into the lavatory and stepped upon Bruin, who immediately stood up and clasped the field officer,—who had little clothes on, and was as hairy almost as the Bear,-round the chest! I was in the next room, and for a second or two I could not move for laughing, whilst he shouted to me to extricate him. This I at last effected without any damage having been done; but Edgar was so irate that I had to give Bruin away.

THE ELEPHANT (Elephas indicus).

This most useful and generally docile animal when domesticated is employed in many ways. It is essential for Tiger hunting in the vast prairies covered with long grass in Bengal, Assam, and Burma.

There are two varieties in the East: one, the Goondas, have large tusks; and the other, the Muchnas, which have none, or only rudimentary ones. Some naturalists assert that having tusks, or the contrary, is a freak of nature, like whiskers in a man; but the peculiarities which distinguish one male from the other also extend to the females. The Goondas have a broader expanse across the forehead, the bump between the eyes and the root of the trunk is more prominent, but the hollow between the

eye and ear—commonly called the temple—is less marked. The countenance is more pleasing, the eye brighter and kinder looking.

The Muchnas—called by the Burmese "Hines"—has the head much longer and narrower, the temple very much depressed. The trunk is longer and very ponderous, possessing immense strength, as if to compensate the animals for the want of the formidable tusks possessed by the Goondas.

If nature has not given intellect to these animals, it has given them an instinct next thing to it. One has only to hunt them in their wilds to learn how wonderfully Providence has taught them to choose the most favourable ground, whether for feeding or encamping, and to resort to jungles where their ponderous bodies so resemble rocks or the dark foliage that it is most difficult for the sportsman to distinguish them from surrounding objects; whilst their feet are so made that not only can they tramp over any kind of ground, hard or soft, thorny or smooth, but without emitting a sound. The Indian Elephants prefer forests by day and open ground by night, and feed on bamboos, wild cardamoms, plantains, null, branches (leaves) of trees, especially of the Ficus tribe, or long grass, which is abundant on all the plains. They are very fond of hiding in a wood in the vicinity of cultivation during the day, and sallying forth to plunder at night. They do a great deal of damage, not only in what they eat, but more in what they trample down and destroy. Elephants are at all times a wandering race; they consume so much and waste so much more, that no single forest could long support them, hence their roving propensities.

Whilst the European sportsman in India fires only for the brain of an Elephant, natives often kill them by firing at the point of the shoulder. Elephants have a very keen sense of smell and of hearing, and they must be approached up wind. In the dry season there are so many fallen twigs and dry leaves that it is almost impossible to come close enough to a herd to kill one; the slightest noise, and off they go! But after the jungles have been burnt and rain has fallen, especially when they are feeding on bamboos, they are easier to get at. Colonel McMaster, an excellent sportsman and naturalist, says of Elephants:—

"Those who only think of Elephants as they have seen these

domestic giants working at any of the innumerable tasks on which these almost reasoning slaves may be employed, can hardly imagine how puzzling a matter it is to distinguish them amongst the dark shadows and irregular outlines that fill up any portion of a landscape in their forest haunts. I was for some moments it seemed to me hours-waiting in long grass and reeds within a few feet—not yards—of the head of a fine tusker without being able to get a satisfactory shot at him, or even to see more than an indistinct dusky outline of form, or a dark shadow as his trunk was raised aloft when the mighty beast suspected that he scented mischief. Having at length made sure that there was something uncanny near him, he uttered a shrill cry and wheeled round on the very spot on which he stood, without exposing any more vulnerable target than his enormous hind quarters, at which it would have been wicked and wanton cruelty to fire, rushed down the hill, followed by his family (eight or ten unwieldly wives and sturdy children), whose progress, as they crashed through the dense underwood and undergrowth of long grass, caused a noise sufficient to startle anyone whose nerves were not tightly braced, and which my pen is certainly too weak to describe."

General Hamilton-"Hawkeye"-wrote:-

"On another occasion I was blown at by a wild Elephant, who threw her trunk out from behind the jungle lining the narrow path along which we were running to intercept the herd, and blew her nose so suddenly in the chest and face of the leading man, that he fell back right upon me. We had cut this Elephant off from its companions, and having a young calf to take care of, she had loitered behind the herd. In this case we noticed the wonderful and extraordinarily quiet manner in which these gigantic animals noiselessly move through the forest when trying to avoid observation or danger."

Thick as is the skin of an Elephant, no beast is more tormented by Mosquitoes, Gadflies, and Leeches than he is. Hence his habit of covering his body over with earth, and squirting saliva about to drive off these pests.

I have never known an Elephant that could be invariably depended upon for dangerous shooting. Elephants that would one trip be as staunch as possible, would, the very next, run

from a Hare or small Deer; and a Pea-fowl or Partridge getting up with a whirr under their trunks would set them quaking with fear.

Although in the wild state Elephants feed not far from Rhinoceroses, and there is no antagonism between them, yet when caught and trained, the very noise made by a Rhinoceros will send them to the rightabout.

Tame Elephants are very subject to epidemics. It is to them what the rinderpest is to cattle,—they die off like rotten Sheep. The only hope of saving the stud is to scatter the animals as far apart as possible, and to let them loose to feed on aquatic plants, which grow in most of the large bheels of India. Elephants, like other animals, must die; yet during thirty years' wanderings in India, and of over three in Africa, I never came across the remains of an Elephant that had joined the majority through natural causes. What then becomes of their ponderous skeletons? Some say that the bones are consumed in the periodical fires; but what becomes of the massive skulls and tusks? I have seen every other wild animal of India dead, or rather have come across their remains; but though I had to wander over jungles in Burma and Assam for over twenty-one years, which were swarming with these pachyderms, I never came across the remains of a single one. Can the tales we read of in the 'Arabian Nights' be true, that when an Elephant feels his last hours or days near at hand he retires to their Golgotha, and there dies? Even if that were the case, how is it no such treasure trove has ever been found? I never met anybody—European or native—who had ever seen the remains of a dead Elephant unless it had previously been killed by human agency.

Elephants utter peculiar sounds to denote peculiar meanings. A whistling noise produced by the trunk indicates satisfaction; when they trumpet or utter a hoarse sharp scream, it is a sign of rage; a noise made by the mouth like "pr-rut-pr-rut" is a sign of alarm; so is the striking of the trunk on the ground accompanied by a pitiful cry; whilst a noise like "urmp-urmp" denotes impatience or dissatisfaction.

Elephants are caught in Keddahs, in pitfalls, and noosed off other Elephants specially trained for that purpose.

They snore a good deal when asleep, and I have seen them

use a foot for a pillow on which to rest their heads. They are very human-like in many of their ways. They get a piece of wood and use it as a toothpick; they will plug a wound with clay; they scratch themselves with the tip of their trunk, or if they cannot reach the part they take up a small branch and use that.

When thoroughly alarmed and seized with a panic,—by no means a rare occurrence,—scarcely anything will stop an Elephant. A sportsman incautiously took his steed up to a dead Bear, as he thought; but in putting her hind foot on Bruin, from whom no more sport was expected, she began to jump and trumpet, and set off at a fearful pace:—"On looking round I saw that the Bear had hold with his teeth of the right side of the Elephant's buttock. I instantly fired, and Bruin this time really fell dead; but the Elephant continued her mad career,—the howdah was broken amongst the sal trees, and it was only on arriving at a river where another Elephant was tethered that she pulled up."

There has been much controversy regarding the age to which an Elephant is supposed to live. The late Mr. Sanderson wrote a charming book, 'Thirteen Years Among the Wild Beasts of India.' In it he stated he believed that these animals lived up to one hundred and fifty years; that is, that the ordinary duration of Behemoth's life was one hundred and fifty compared to that of a man's seventy. In this I think he was altogether mistaken. The same sources of information—viz. the mahouts—were equally open to me. I had Elephants under me for over twenty-one years. My jemadar was a Keddah Havildar. I knew Mr. Nuttal, superintendent of Keddahs, for over thirty years, and they ridiculed the idea of general longevity in these animals. Mr. H. D. Nuttal says:—

"I have had an Elephant trained in a fortnight, but it generally takes two months and often longer. I have had Elephants out Tiger shooting two and a half months after capture; and five months after capture I have had them out chasing wild Elephants in the jungles, and even lassoed others off their backs."

As to their duration of life, he makes the following remarks, and the reader must remember that this gentleman was a Keddah officer of very many years' standing:—

"When the British captured Ceylon, a memorandum was found, left by Colonel Robertson, who was in command of the island in 1799, which stated that an Elephant attached to the establishment at Matura had served under the Dutch for upwards of one hundred and forty years—during the entire period of the occupation from the expulsion of the Portuguese in 1656, and found by them in the stables when they took possession of the island. The stories of Elephants living to an immense age in India I put no trust in, because with any favourite Elephants in former days (when the Jemadar had the naming of them) they had special names; and as their vocabulary of names was but limited, they used to give three or four Elephants the same name, as, for instance, 'Pobun Peary No. I., Pobun Peary II., Pobun Peary III.' Pobun means the wind, and an Elephant in the depôt possessing swift and easy paces would go by the name of Pobun, and when Pobun I. died Pobun II. became No. I., and so on, and a new one christened No. III. These appeared in the office books, while the casualty rolls were kept merely on fly-sheets, and were after a while disposed of as waste paper, and therefore no check was possible to the true identification of an Elephant; and as no trace could be found except in the office books, which simply showed the same names of Elephants running on continuously year after year, it appeared as if they (the Elephants) reached an extraordinary age. But all this has now been altered, and better books kept. I consider an Elephant to be at its prime about thirty-five or forty, and capable of working up to seventy or eighty years of age. An Elephant's life may extend rather longer than a human being's, but not by much; but I do not believe in animals (except a very occasional one) living up to 150 years. There are mahouts whose fathers, grandfathers, and great-great-great-grandfathers were all mahouts, and my opinion is founded on theirs, supplemented by my own observations of the past thirty years."

Rhinoceros unicornis).

There are three well-known varieties of Rhinoceros found in India, and perhaps there are two other varieties. R. indicus is the largest, the dimensions of one I killed being—extreme length

 $12\frac{1}{2}$ ft., tail 2 ft., height 6 ft. 2 in., horn 14 in. As a rule all Rhinoceroses are inoffensive; they inhabit such remote localities that they can seldom do damage to cultivation; yet if some ryot cultivates a patch of ground, and the pachyderms get scent of it, they will soon devour it. They are nocturnal by habit, and retire to dense thickets in the midst of a swamp soon after sunrise. It is naturally a timid animal, more anxious to escape than fight, and, notwithstanding their thick hides, far easier to kill than a Buffalo. It is an exploded idea that their skins are impenetrable. The outer cuticle offers no great resistance whilst on the living animal, but when removed and dried in the sun it will turn aside an ordinary bullet fired with a moderate charge of powder; yet heavy rifles with large bores and immense driving power behind are absolutely requisite, for the vital spots have between them and the skin such a mass of blubber, muscle, and bone that only a hardened ball driven as above described can reach them. If shot behind the ear an ordinary smooth-bore will account for them. I have seen a shikar knife driven in to the hilt behind the shoulder of one just killed by an ordinary man. The best material to mix with lead to harden the bullets is quicksilver. It should not be allowed to remain long in the crucible, as it will then evaporate; one-twelfth of quicksilver is sufficient. If too much is used the bullet gets brittle and flies to pieces on impact.

The R. indicus has only one horn, seldom 18 in. long, generally a good deal less; this is liable to fall off through injury or disease, but another will grow in its place. It is formed by a coagulation of hair, and the Indian variety only uses it to dig up roots, and never as a weapon of attack, like the African pachyderms. It has two formidable tusks in the lower jaw, and with one of them he can cut an Elephant's leg to the bone; and in season they fight a good deal amongst themselves, for I have seen not only the males but the cows scored all over. The skin is exceedingly thick, with a deep fold at the setting-on of the head, another behind the shoulder, and another in front of the thighs; two large incisors in each jaw, with two smaller intermediate ones below, and two still smaller outside the upper incisors, not always present. General colour dusky black. They are very plentiful along the Terai, and in the Durrung, Nowgong, and Goalpara

districts of Assam; and I believe are found also in the Yonzaleen, Arrakan, and Yomah ranges in Burma.

In the primæval forests there does not seem to be any hostility between the Elephant, Rhinoceros, and Buffalo. I have seen all three feeding within a few yards of one another, and I have also seen Rhinoceros and Buffaloes lying down together in the same mud-hole. But the domesticated Elephants dread these beasts far more than they do any other, why has always been to me a puzzle. When disturbed a Rhinoceros makes a peculiarly squeaking noise; directly an Elephant hears this ninety-nine times out of a hundred he seeks safety in flight. If the beast is quiet your steed will go up pretty close, but not if it utters its cry. If the ball is placed in the centre of the shield, rather low down over the shoulder, it penetrates the heart; if behind the shoulder the lungs are perforated. The beast makes off full pelt, uttering its squeak, but in a few minutes it falls down, and in its dying moments makes a noise which once heard can never be forgotten, and is a sure sign of approaching dissolution. A peculiarity of this beast is, that whilst it remains in a locality it will deposit its ordure only on one spot, and visits it for that purpose once when it commences feeding at night, and again before leaving off soon after daybreak. Considering the great value put on the flesh, hide, and horn of the animal, I am astonished that any are left alive. All a native shikarie has to do, is to dig a pit near this mound, and lie in wait until its usual visit, and then to pot it.

The Assamese do not waste a morsel of the flesh. The shields over the shoulders are dried in the sun; the rest of the hide is cut into strips, roasted over a charcoal fire, and devoured by them much as is the crackling of a pig by most Europeans. The horn, useless as a trophy to British sportsmen, is greatly prized by them, and has a purely fictitious value; they will pay as much as forty-five rupees a seer (2 lb.) for them. They invert them, store them in their namrghurs, place water in the cone at their base, and believe that it is an antidote to poison if partaken inwardly. Even the Maiwaries, strict vegetarians, have asked me to bring them the dried tongues; they pulverise them, and partake of a little when they are ill, and believe that it is a sovereign remedy against all diseases.

Although timid and anything but pugnacious, if driven to a corner and sore from wounds they will charge savagely. I never had one close with an Elephant of mine, though I have had them several times within a foot or two, but always managed to drop them before they did any harm; but I had an Elephant which I bought from Tye of Koliabar, a good and successful tea-planter, who had been mauled by one, and she was as good on Rhinoceros as an English pointer is on partridges. If there was one within two hundred yards of her, and she scented him, off she would go, and nothing in the world would stop her. At times they are gregarious, and Jackson, Adjutant of the 43rd Assam Light Infantry, and I came across fully twenty, if not more, in a (comparatively speaking) small patch of long grass and reeds, and dropped four and lost several others severely wounded; but there was an impenetrable jungle close at hand, into which they took refuge, and there was no following them up there.

THE LESSER RHINOCEROS (Rhinoceros sondaicus).

These are distinguished by their size, by their shields being less prominent, and their skins covered with square angular tubercles. The grow up to $4\frac{1}{2}$ ft. high—a monster may be 5 ft. These Rhinos are found in the Sonderbunds, in the delta of the Ganges, and extend throughout Assam, Sylhet, the Garrow Hills, Tipperah, Chittagong into Arrakan, and Burma, probably extending into the western provinces of China. The Burmese dread them very much, and declare that if they see a camp-fire they rush at and devour it! They live in swamps, almost quagmires and quicksands, between the lower ranges of the mountains in Burma, where it is impossible for a sportsman to get at them, though I shot a two-horned variety once near Cape Negrais by sitting up at night for one; but the sport is not worth the candle. The tortures we underwent that night from mosquitoes and sand-flies I shall never forget.

The ordinary R. sumatrensis is the best known two-horned variety. It is common in Burma and Malaya. Its body is covered with bristles, and the folds of the skin are deep, especially that behind the shoulder; the folds on the neck are not very distinct. The horns are generally mere knobs, but the one I shot

had a very fair front horn measuring fully nine inches, whilst that behind was little more than an inch or two.

In 1868 Captain Hood, Superintendent of Keddahs, and Mr. H. W. Wiches captured a new variety in Chittagong, and it has been named the Hairy-eared Rhinoceros (R. lasiotis). It has long hairy fringe to the ears, and long reddish hair on the body, the skin fine and granulated, the tail shorter. The only known specimen is, or was a short time ago, in our "Zoo," having been purchased for £1250.*

All Rhinoceroses, if caught young, are easily tamed. A dhoobey (washerman) had one for some time in Gowhatty, and it did not mind carrying burdens or letting people ride it. It is rather profitable to catch the little ones. If a cow with a calf is killed, the little one remains near the carcass. All Assamese villages have nets for catching various beasts, from Deer to Buffaloes, and it is easy to surround and capture the little one. One I captured was more savage than a Tiger; it was tethered by all four legs, and with a rope over its neck. It rushed open-mouthed at anyone it saw the first day, but soon quieted down. My two shikaries, Sookur (mahout) and Seetaram, his uncle, knew how to manage these animals. After grilling in the sun many hours Sookur poured a little milk over its head, and as it trickled down the little one curled up its lips; a little of the nourishment got into its mouth, which it greatly appreciated, and it readily took all that was given it. The next morning plantains mashed in milk were given to it. After three days it would follow Sookur about anywhere, and in a week or ten days it was quite tame. I had two of them, and sold them to Jamrach's agent, an Afghan, for 1200 rupees, delivered in Gowhatty; but I believe I ought to have got double the amount. The milk of a cow Rhinoceros is thin and sweet, very like a woman's in the earlier stages of nursing. One I shot was milked by my seik overseer, and he got more than two quarts from it. I tasted it just to see what it was like.

All Rhinoceroses live on herbage, long grass, null, wild cardamom, and branches of trees. The upper lip protrudes beyond the lower, and is very pliable. They delight to lie in mud-holes, and I have even shot them lying in a clear rippling stream. I have shot them right and left with one ball each, on an occasion; but frequently I have killed them with but one ball each. Though

^{*} Vide ante, p. 142.—ED.

than he could believe," I wonder what he would say to two having been killed by the same ball? I was not present, but knew all the sportsmen who were—when it was believed that, although Colonel Campbell fired two shots, they were at animals some way apart; whereas, when they went to examine the one that had fallen dead, they found another freshly killed lying alongside. It was an extraordinary fluke, of course, but I believe it occurred.*

THE TAPIR (Tapirus indicus).

It is odd that this pachyderm should be found only in Malaya and the Tenasserim Provinces in Asia, and again in South America. There is very little difference in the two, the Asiatic being somewhat the larger. They inhabit the inmost recesses of the densest forests, and are nocturnal in their habits. They possess short and movable trunks, by which they convey their food into their mouths. They have no mane, and the general colour of the hair is black. There is a white patch on the back and rump, and the sides of the belly are also white. They are easily tamed, and become as familiar as a dog. They possess immense strength, and although they can force their way through any forest, they yet have regular tracks which they follow, and which lead to a considerable number of them being shot, as skikaries lie in wait for them. The hides are valuable, and the natives like the flesh. They, like Rhinoceroses, must have marshy land handy to retire to; they swim and dive well, and are harmless, unless wounded and cornered, when they show fight. At times the people imitate their cry, and as they approach kill them.

THE PIGMY Hog (Sus salvanius).

In the vast dooars lying at the foot of the Bhootan range I have often put up small sounders of what I took to be young porkers deprived of their parents, and having to shift for themselves; so I never molested them. But on one occasion I had to go into Bagh dooar, at the embouchure of the Manass River, late

^{*} Mr. Chanler, in his 'Through Jungle and Desert,' records that his comrade Von Hohnel shot two Rhinoceroses dead with one ball from a Männlicher 25-bore rifle!

in the season; the freshets had already commenced, and I had great difficulty in crossing the river. All the islands were not submerged, and as Deer abounded, and I wanted meat for my numerous followers, I set to work to slay them. Seeing some of these small Pigs, and noticing that one about the size of a large Hare was inclined to be pugnacious, I thought I would like a sucking pig for myself, and shot it. My delight may be imagined when I found it to be a Pigmy Boar. I tried to obtain others, but failed. When young these animals are striped like the young of the Wild Pig. The males continue with the sounders, and are their resolute defenders.