

THE DIARY OF A
SPORTSMAN NATURALIST
IN INDIA BY E. P. STEBBING

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WITH ILLUSTRATIONS FROM PHOTOGRAPHS
AND SKETCHES BY THE AUTHOR AND OTHERS



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CHAPTER VIII

FOREST LIFE AND SPORT IN EASTERN BENGAL

Chittagong—The District and Hill Tracts—South Lushai Hills—An interesting fauna—The buffalo and rhinoceros—The mithan—Elephants and the Keddah Department—Mode of travelling—The tidal creeks and coast-line of Bay of Bengal—Bird life—The rivers of the area—Magnificent scenery and dense forest—Animal life of the forests—Swimming deer—Monkeys crossing a river—Rafting out forest produce—The game problem—The native and his umbrella—Shifting cultivation—Trackless forests—Difficult to find game—A fine animal sanctuary—Game in the Collectorate Forests—A Christmas shoot—A game card—The civet-cat—Dogs used with the beaters—Pig—A tussle with an old boar—The dogs go in—Death of the pi-dog.

DURING the closing years of the century I found myself stationed in Chittagong in Eastern Bengal. This district has earned an unenviable notoriety for malaria amongst officials and more especially amongst Forest Officers, the official connexion of many of the latter having been suddenly terminated by a medical certificate and a trip home. The climate suited me apparently, and during the three years I was there I had little fever.

The division was a very fine one for the zoologist and sportsman. For the charge included, firstly, the Chittagong district with its seaboard and network of tidal canals and series of low rocky ridges clothed with bamboo jungle, both localities invariably teeming with a variety of animal life including birds, much of it totally different from the fauna one had been studying in Chota Nagpur and the Central Provinces. Secondly, the Forest Officer held sway over the forests of the neighbouring Chittagong Hill Tracts District, an enormous, chaotic mass of wild pathless jungle-clad hills covering an area of some four thousand square miles. The hills in this tract run in parallel series of ridges more or less due north and south down to the seaboard, the rivers

and streams being the "roads" of the country and much of the travelling being done by water. To the north the district abutted on the South Lushai Hills of the Assam Province.

This tract of country is of extraordinary interest. In the old days, and not so far off either, the smaller one-horned rhinoceros (*Rhinoceros sondaicus*) roamed over these jungles. Alas, he has gone now for ever, the last being killed in the Chittagong district somewhere about the late 'eighties or early 'nineties. The bison of these parts, the gayal or mithan, first cousin to the gaur we have already had tussles with, still exists in the hill tracts and, of course, further north and east. But protection will be needed if this fine animal is to be preserved in its wild state. It is true that, unlike the gaur, it can be domesticated and will cross with the village cattle. I have seen it very often in the villages throughout the district. Buffalo used to exist in a wild state, but are no longer to be found in the jungles of which I write although their near relative the domestic animal possesses in these parts many of the attributes of its wild confrère and is an animal for the European to beware of. I do not know what makes these so-called tame buffalo so vicious in Eastern Bengal. They are often perfect devils so far as the sahib is concerned. I had a small adventure with one of these brutes once, being pursued by one, and have not forgotten it. It was only luck that enabled me to get clear. I was returning to my boat moored in one of the tidal creeks, after having inspected some small revenue station or other. It was about three o'clock in the afternoon, and I was trotting along the banked-up road running through the rice fields. Suddenly I heard a dull, hollow sound of galloping hoofs behind me. Turning in the saddle I saw about twenty yards away a large buffalo in full cry. One glance at his face was enough for me and I realized that the tales about the "tame" buffalo of these parts were fully justified in this instance. My pony must have realized the position sooner than I did, for he had been pulling hard for several minutes and I had wondered what on earth he was up to, as we still had a good many miles to go. He was a sorry tat at the best, a borrowed animal. I dug spurs into him now and we scurried up the road at our best pace. Five minutes passed and I realized that the buffalo was gaining steadily on us. I became seriously alarmed and cast about



CHAPTER X

THE JUNGLES OF THE BENGAL DUARS AND ASSAM

Fauna of Bengal Duars and Assam—Country to east and south—The rivers—Forest growth—Magnificent fauna sanctuaries—Disappearance of big game in western part—The Tista Division—Methods of shooting—Rhinoceros—Types of forest—Game formerly abundant in Duars—Migration of elephants to hills—Sambhar—Reason for smaller heads—Sitting up over a salt-lick—Shift my post—The zareba—Moonlight in the forest—A sambhar appears—Night noises—An unexpected intruder—A tiger kills the sambhar—An uncertain shot—An anxious vigil—The morning's discovery.

A SCORE of years ago, and less even than that, the elephant, bison, rhinoceros, all shy animals and animals requiring extensive jungles to live in, roamed through the great jungles of the Bengal Duars and Assam from the Jalpaiguri Forest Division eastwards, in numbers that may be characterized as large without undue exaggeration.

Those who have a first-hand acquaintance with these jungles at the present day could tell a very different tale. And yet these great jungles still form, or could be made to form, an ideal sanctuary for game life, and animal life, speaking in a zoological sense, of this part of India.

To the west of the area under consideration stretch the extensive forests of the plains and submontane hills of Nepal, a country closed to shooting to the European save

by invitation of the Ruler or Durbar. To the east the Naga and Manipur Jungles of Eastern Assam stretch across the Chindwin River into the extensive, almost illimitable jungles of Upper Burma and still further east into Chinese Yunnan. South in the western area the great jungles are bounded by the cultivated plains, whilst in their eastern sections they stretch, as we have already seen in a previous chapter, southwards through the rough tableland of the Khasia and Garo Hills and the Lushai Hills into the Chittagong Hill Tracts and Chittagong Collectorate, and still further east, south of Manipur, through the Chin Hills into the Arakan Hill Tracts to Akyab on the sea-coast. On the north this extensive tract of country is bounded by the great chain of the Eastern Himalaya, Bhutan and the outlying parts of Tibet, rising more or less steeply out of the plains, and forming a natural barrier to the further extension of the fauna of the region in that direction. The great Brahmaputra, that highway of Assam, drains north-eastern Assam as its great tributary, the Megna, does the south, the former eventually joining the Ganges. The two rivers best known to the sportsman are the Tista on the west, coming from Sikkim and flowing down the beautiful Tista Valley, and the Monas on the eastern borders of Assam, famed for its mahseer fishing. The tract of country under consideration is for the greater part under forests, in the form of fine primeval high forest of valuable timber trees and other soft-wooded species of all ages and in great variety, varied by extensive tracts covered by bamboos, cane brakes, grasses, or scrub jungle.

The whole of this area is not under the management of the Indian Forest Department. We have seen that Nepal is an independent State, to give one exception. So is Bhutan to the east of Nepal. But a vast tract of the area above roughly enumerated is under the charge of the Department, either in the form of Reserves, Protected, or Unclassed Forests. Perhaps nowhere in India is to be found so large an extent of practically conterminous heavy jungle—jungles capable of forming a permanent sanctuary to the larger and shier, as equally to some of the smaller and rarer forms of zoological life and to forms which are at present unknown to science. Nowhere throughout the Indian Empire is the zoological life of greater interest to the scientist, and in no other part would the institution of great permanent sanc-

tuaries be more feasible or prove of such high value both in the interests of the maintenance of the fauna and of its study.

The opening of the country has been largely responsible for the restriction of the animals' haunts in Bengal and Assam. For instance the Western Duars no longer contain sufficiently extensive jungles to harbour rhinoceros and buffalo. To the apathy displayed in the past by the authorities in this region is attributable the deterioration of the stock almost to the verge of extinction. The forests are in large blocks, and it would have been sufficient to enforce the existing rules under the Forest Act. Neglect on this score has now reduced the numbers of such animals as rhinoceros, buffalo and bison to such small figures that deterioration if not extinction must follow. This point, i.e. the neglect to enforce existing rules and regulations, applies, or applied till recently, generally throughout India.

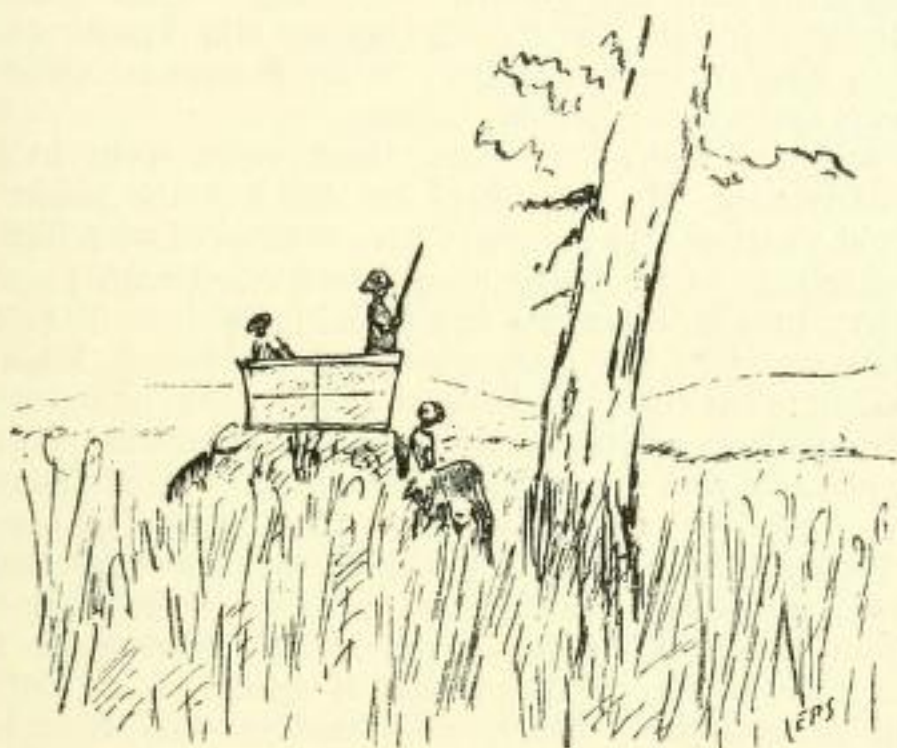
In Assam sanctuaries have been in existence for some years in Goalpara and elsewhere, and these are closed to all shooting. In Jalpaiguri and the Buxa Duars no rhinoceros, buffalo or bison may be shot at all, as the forests are nominally sanctuaries for these animals, but the blocks of forest are too small to contain animals of such wandering propensities. Access to the Bhutan Hills during the hot weather is also now cut off, owing to the settlements of Nepalis on the outer hills. The animals thus have a much restricted habitat, and cannot get away into the outer hills as formerly during the fly season in the hot weather.

Fortunately Burma was disarmed comparatively recently, and the Government has not granted gun licences in anything like the same numbers as elsewhere. In many places game is believed to have increased, but the European sportsman has been at work there and the fine herds of brow-antlered deer or Thamin (*Cervus Eldi*) were almost exterminated before measures of protection were introduced. Deterioration must of necessity follow even if the race does not become exterminated.

During a delightful two years' sojourn in charge of the Tista Division with headquarters in the beautiful little hill station of Kalimpong, four thousand feet up in the Himalaya (British Sikkim), and some twenty-five miles to the east of Darjiling, I was able to make some acquaintance with the plains fauna of the Bengal Duars, the western

part of the area I am discussing. Some years later I was able to extend my observations during a tour through Goalpara to the east of the Bengal Duars, and still further east into the Tezpur jungles.

They are magnificent jungles in this western tract, alike in many characteristics to the great Terai jungles of North-West India, which we shall consider later, but so unlike in others. The *sál* tree, which reaches the eastern boundary of its range near Tezpur, forms the principal species commercially in these great forests as it does in the Terai, but how different is their character! Here in the east the



climate is very hot and very damp, with the consequence that the vegetation is exceedingly dense, abounding in creepers, undergrowth, and tall grass, almost impervious, save to the elephant, rhinoceros and buffalo, whilst the luxuriant growth of canes, bamboos, giant creepers, a variety of brilliant flowering shrubs, and gorgeous-coloured orchids point to the tropical nature of the area. The grass both in and outside the forests is dense and high, and shooting save from the back of an elephant is almost an impossibility, if results are to be secured. Practically the only other method is to sit in a machan. In the foothills to the north the rhinoceros is sometimes pursued on foot,

the animal being tracked down into some mud-hole where he is wallowing, keeping off the flies and passing away the heat of the day; but such work is extremely arduous in the terrific and enervating heat. I never had the chance of trying it myself, which was disappointing, as I should have liked to compare it with bison tracking in Chota Nagpur, the Central Provinces and elsewhere.

Further to the north in Assam and to the east a different type of forest—the so-called “evergreen” forest—is met with. These areas are still more impenetrable, canes, creepers, bamboos, and tall grass forming dense thickets beneath the high tree growth. Shooting in these jungles, as already indicated in the Chittagong Hill Tracts which have a similar type of forest, is an extremely difficult, arduous and usually barren pastime.

It was a glorious two years, those years spent in the Tista Division. My work kept me down in the plains all the cold weather. The country here is covered with illimitable stretches of tea cultivation interspersed with patches of heavy jungle of varying size belonging either to the tea gardens or under the management of the Forest Department. Game at this period was abundant, although already a note of alarm at its decrease was being sounded by the older planters who were fond of descanting on its abundance in the “good old days,” as they called them. Of course the clearances of great tracts of primeval forest and jungle for tea cultivation would have a natural effect on the distribution of the animals previously existing in the locality, and the probability is that at the time I am writing of the animals were nearly as abundant only they had retired to a greater distance from the areas cleared for cultural purposes. Anyway, at the period of my first acquaintance with this area it was a paradise for sport. Tiger may be said to have been plentiful, leopard numerous, bison (gaur) not yet exterminated from these western areas, and elephants yearly visitants in the monsoon months. In fact some probably remained all the year round, retiring up into the higher hills to the north during the hot weather when the big horse-flies proved too much of a curse even for the thick skins of these pachyderms.

It was ever a source of interest to me to travel up into the mountains from the plains forests by one of these elephant paths or runs. Hollowed out or beaten down

CHAPTER XXI

GAME SANCTUARIES AND GAME PROTECTION IN INDIA

Necessity for the protection of the game and fauna generally—Abundance of game in former times—Causes of decrease of game—Opening up of the country—The sportsman—The native shikari—The unarmed poacher—Attitude of Supreme and Local Governments in former times to game preservation—Present attitude—Government of India the owner of the game—Attitude of villager in matter—The Game Sanctuary—Description of types of Game Sanctuaries—Game protection in the Central Provinces—Policing of Sanctuary—The New Indian Game Act—Some reflections on the Act—The outside sportsman in the district.

IN this chapter I propose to treat of the question of Game Sanctuaries and Game Protection ; whilst in the succeeding ones the matter will be regarded from the economic point of view and the wider aspect of the protection of the fauna of the country generally. All sportsmen who have studied the question at all closely will readily agree that it is not possible for a country, for any of the countries of the world, to continue indefinitely to provide either sport or commercial products unless some measure of protection is extended to the animals which yield them. Our own islands form an apt illustration. Had not a vigorous protection been afforded to the animals combined with the formation of extensive sanctuaries—the New Forest and Forest of Dean were Royal Sanctuaries in olden times—some of our formerly existing wild animals would have been exterminated at a far earlier date than was the case ; and nowadays all sport necessitates the closest protection, combined with artificial rearing, to maintain the required head per area. And the bulk of the animal life so reared and protected, deer, birds and fish, is sold for human consumption after it has been shot or captured.

It might have been thought that a country so extensive as India would not have required that protection should be extended to its fauna for many a long year to come. Yet a perusal of the incidents and deductions contained in the previous pages will, I think, prove that this is by no means the case.

I propose, therefore, to lay down the rifle and consider the beautiful jungles of India from the point of view of the steps which appear necessary to ensure the maintenance of the game and fauna generally, in the threefold interests of its health-giving capacity and enjoyment to the hard-worked Anglo-Indian, in the interests of its revenue-producing possibilities, and in those of zoological science.

During the past decade or so it has become increasingly evident to the keen sportsman in India, to the man who is not alone animated by the mere desire to kill, that the game of the country is in many parts in serious danger of disappearing owing amongst other causes to the extraordinary developments in modern sporting rifles, to the greater facilities in communications and to the increasing numbers of those out to kill. With many others—it would be invidious to mention names since there must be many with whom I am unacquainted—I have given this question careful study for some years. As a result of observations carried out personally, and enquiries made in many parts of India, I have been gradually led to the conclusion that it is not only the game animals that are in jeopardy, but the fauna as a whole and especially that very interesting portion of it which has its home in the jungles and great forests. Under the orderly and systematic conservation of the forests by the Forest Department it has become evident that a proportion of the shier members of the fauna, those who require large areas of *untouched* primeval forest to dwell in, must without adequate protection inevitably disappear. Now this is an important matter, and admittedly opens out a very large question; but it is one, I think, which is not beyond the scope and power of the Government of India to grapple with aided by the advice of its scientific experts, combined with the help which the true sportsmen in the country will be only too ready to offer. And it has its economic side, a not unimportant one. This aspect of the question, which it is probable will require similar consideration and treatment in America, Africa and

elsewhere, will be considered later. We will at present confine ourselves to the protection of game animals.

The most natural way to afford an asylum to animals which are in danger of extinction from overshooting, is by the closure of tracts of country of varying size to all shooting in order to allow them unrestricted rest to breed and increase in numbers. In this manner the recognized Game Sanctuary came into being and such exist in India, America, Africa and elsewhere.

In India we are only in the initial stages of this form of protection, and much yet remains to be done. By the placing on the statutes of the "Wild Birds and Animals Protection Act of 1912," to be dealt with shortly, the Government of India practically placed the whole responsibility for the protection of the game in the country in the hands of the Local Governments.

On October 24th, 1911, I read a paper before the Zoological Society of London¹ entitled "Game Sanctuaries and Game Protection in India." Dr. P. Chalmers Mitchell, C.B.E., F.R.S., Secretary of the Society, took this paper as the basis of portions of his Presidential Address before the Zoological Section of the British Association at Dundee in the following year. I shall refer to this Address later.

My paper dealt with the subject under various sections, portions of which I propose to briefly deal with here. The New Act of the Government of India received the assent of the Governor-General in Council in September, 1912. My paper only dealt with the draft Act which has little affinity with the measure actually passed into law.

If it is desired to obtain some idea of the abundance of game animals in India in the past, one has only to read some of the sporting chronicles of old-time shikaris. What a glorious shikar country it was in the days of yore, and what a royal time our fathers and grandfathers had of it!

To mention but a few of these classic volumes: Forsyth's *Highlands of Central India*, Sterndale's *Seonee or Camp Life in the Satpuras*, Sanderson's *Thirteen Years' Sport among the Wild Beasts of India*, Simson's *Sport in Eastern Bengal*, Kinloch's *Large Game Shooting in Thibet, the Himalaya, and*

¹ Published in *Proceedings Zool. Soc. Lond.*, p. 23. March, 1912.

Central India, Colonel Fife Cookson's *Tiger Shooting in the Dun and Alwar*, Baker's *Wild Beasts and their Ways*, Pollok's *Sport in British Burma*, Pollok and Thom's *Wild Sports of Burma and Assam*, Pollok's *Sporting Days in Southern India*, etc., and, a more recent and admirable volume, Eardley Wilmot's *Forest Life and Sport in India*. One and all of these stirring reminiscences convey in language which there is no mistaking that up to a score or so of years ago India was a paradise *par excellence* for the sportsman. What then, when we contrast present conditions, do these fascinating volumes teach us—inevitably tell us? That the game of India is on the decrease, on a very rapid decrease, and that the good old days of yore are gone never to return.

That the modern rifle has to some extent been responsible for the present state of affairs is beyond cavil—its accuracy and also the cheapness with which the more roughly made forms can be purchased. The native shikari has now to some extent replaced the old blunderbuss of his father's days by a breech-loader, and when possessed of such kills an infinitely larger head of game in the year as a consequence. The weapon itself costs 45 rupees only, but it is doubtless the price of cartridges which mercifully prevents the breech-loader from coming into as general use amongst this class of men as would otherwise be the case.

But the startling decrease which the head of game existing in India has undergone during the last two or three decades cannot be attributed only to the improved accuracy of the weapons with which the modern-day sportsman is armed. The opening out of the country and the consequent restriction of the animals is also largely responsible. It is now some years since the buffalo disappeared from the United Provinces forests—about the nineties of last century or thereabouts. Bengal and Assam, e.g., the Western Duars, no longer contain sufficiently extensive jungles to harbour rhinoceros and buffalo. The great increase in the number of sportsmen who visit the jungles annually on sport intent, an increase brought about chiefly by the greatly improved communications owing to railway and road development, has also been a great factor in the case, and motor-cars will intensify it. The two other important factors are the native armed shikari and that curse of the country the unarmed poacher. It is probable that there are—because the trade is now a more paying one—an infinitely greater number of competent

native shikaris in existence ; I write " competent " in the sense merely to express their power to *kill* game. The vast majority of these men are poachers pure and simple, as were their fathers and fathers' fathers before them. Formerly, however, owing to their antiquated low-power weapons, the damage they were capable of doing was of a negligible quantity : nowadays it is far otherwise, and the methods to be put in force to deal with them form one of the most difficult problems those responsible for the upkeep of the game in the forests, and country generally, have to solve.

The plea ever placed in the forefront by such men is that the guns are required to protect the villagers' crops, and this plausible excuse has been accepted in the past by Local Government after Local Government ; and we can quite see the difficulties that have confronted the latter, and still do so, in a settlement of the question. It cannot, however, be said to have been ever satisfactorily or fairly faced, and this inaction on the part of the central authority has checkmated the efforts of many a Collector and Forest Officer in his attempts to keep down the number of (poaching) guns in a district. A sympathetic Government was always too eager to listen to the tales of destruction of crops, and the District Officer, without local knowledge, preferred to err on the side of liberality, and so readily granted licences to applicants.

We all know the way these licensed gun-holders go to work. A machan (platform) is built on a known deer-run on the edge of the forest and just without its boundary, if not inside, with the connivance of the Forest Guard. The shikari occupies his post in the late afternoon—he is no respecter of a close season or of sex or age—and by sunrise next day several bucks and hinds may be lying round the machan ; the skins, horns, should there be any of the latter, and the flesh are taken off to the bazaar, where a ready sale is found for them throughout the country. The meat is sold locally, the skins and horns being bought by middlemen for export. It was a common thing to see on the platform at wayside stations near forest areas piles of skins and horns booked, and openly booked, in defiance of all rules and regulations, to some large centre.

I would not be understood to say that it is the native shikari alone who acts in this way. It is an open secret

that the native soldier of shikar-loving propensities, as also his British brother, will act in an exactly similar manner when occasion offers. Once, however, this matter is properly faced, the latter class of offenders can easily be coped with. For the non-military native offender a licence to protect his crops should be given only after careful personal enquiry on the ground by the District Officer. Also the sale of venison in the open market should be made a criminal offence.

The whole crux of the position is, of course, the necessity for regulating the number of animals killed, so as to prevent deterioration or extermination of the game. The European has generally been considered to be more destructive than the native of the larger animals, gaur, rhinoceros, buffalo. But even this is doubtful, when the poaching proclivities of the native are taken into account. In any event rules and the proper control and management of shooting-grounds can control the European. The native is, however, not so easily dealt with. In order, therefore, to arrest the slaughter which takes place ostensibly to protect crops, some special measures are necessary. Wherever it can be proved that game is no longer destructive, the licences should be cancelled and the weapons called in. In other cases where destruction is still being done the guns must be retained. Since, however, these weapons are given merely for the protection of the crops, they should be restricted to that purpose and be rendered unfit for any other. This can be easily done by cutting down the gun-barrel to eighteen inches or two feet.

There remains the unarmed poacher. To date this man and his methods appear to have escaped all notice. And yet the part he has played in the past and is playing at present is bringing about a serious decrease in the game—and other animals—which is at least as great if not greater than the rest of the above-mentioned causes put together. The Government to date has never considered this side of the question. And yet this is the conviction held, I believe, by many well-known authorities, such as, e.g., Mr. Douglas Dewar, I.C.S., P. Wyndham, I.C.S., P. H. Clutterbuck, I.F.S., and W. F. Perrée, I.F.S. I have detailed in the previous chapter some of the poachers' methods, the diabolic barbarity and inhuman cruelty of which is beyond credence. There can be little doubt that with this record before one, and but a

tithe of the practices in force throughout the country have been mentioned, the poacher must be put down if game animals are to be afforded adequate protection.

It may be admitted, so far as the sportsman is concerned, that the steps taken to protect game have considerably improved the position. Local Governments throughout the country have revised their Game Rules, and in some cases have ordered the formation of Game Sanctuaries in addition to limiting the number of head of game to be shot in a district or block of forest to a definite number per year. Further, in certain provinces sportsmen are only allowed to kill individually a certain head of each different species of animal, thus eliminating the worst feature of the old-time sportsmen—the butcher, whose boast was not the size of the trophies he obtained so much as the *number* of animals he had killed. For the departures thus made throughout the country I think a due meed of credit should be accorded to the Nilgiri Game Association. Inaugurated about 1885, this Association has now for years not only protected the game of the Plateau which the sportsmen and the Todas between them were surely exterminating, but has enabled an increase to be maintained and recorded. The annual reports of the Association point to a satisfactory increase in the head of ibex or saddlebacks (*Hemitragus hylocrius*) and the sambhar (*Cervus unicolor*). For some years past the number of such to be shot by each sportsman has been regulated under the authority of the Association, directly supported by Government. The departure thus initiated in the distant Southern Plateau was followed in the far North when the game of Kashmir was threatened with extinction owing to the annually recurring large influx of sportsmen who visited the Fair Vale. Game Protection in Kashmir now forms a separate Department of the State, and one which has fully achieved under its able head the objects anticipated from its inauguration. The late enlightened ruler of Chamba State also took up the question, and prohibited all shooting except on passes issued on his own authority.

Whilst such laudable commencements were thus made to preserve the game of areas which, owing to their peculiarly favourable climatic conditions for the European sportsman, were threatened with extinction, the Local Governments in India for long remained apathetic in the matter. Game

Rules were in existence for the Forest Reserves of the country, but they related chiefly to a close season, the latter in some cases only applicable to the females, and the same was the case for the open country, where the rules usually related to birds only. These regulations were, however, openly broken, and the penalties in existence were practically rarely put into force, except by some exceptionally energetic officer; and even then an appeal was often upheld and the orders passed reversed.

At length, however, the apathy that hung over this question gave place to some show of interest, which was followed by activity on the part of the Government of India, galvanized into activity by the outcry, increasing in intensity each year, that the game of the country was doomed and that but a few years separated it from extinction. Local Administrations were addressed on the subject of the Rules and Regulations in force in their Presidencies and Provinces under the Forest and other Acts, and as to the steps necessary to be taken to prevent the extinction of the several heads of game, excluding carnivora. This led to many separate enquiries being undertaken throughout the country, to a prolific correspondence in the Press, of which desultory rumblings are still heard, and to many improvements being initiated in the Shooting and Game Rules throughout India. I am aware that I am laying myself open to serious attack in thus stating the case, but it is maintained that any and every rule that is made with the idea of *protecting* the game of a country is a step in the right direction, and therefore advantageous both to the sportsman and the game itself, however hard it may seem to fall on a particular body of individuals or on a particular individual.

What was required was to fix the close seasons definitely, and the Government of India have now, as we shall see, promulgated an Act to give power to fix a close season for different kinds of animals.

It must be remembered that the old-time rulers in India were the *de facto* owners of all the forests and waste lands of the country, including all the animal inhabitants thereof. The Government of India are the present owners, and have, therefore, every right to safeguard this valuable property. They have done so in the case of the forests. But they have been slow to realize the value of the animals and the

fact that a very reasonable profit can be made out of this valuable asset.

The native of India has never made any claim to the ownership of game animals (mammals) or birds, since he has never possessed it. He only asks that his crops should be protected against their depredations, and legislation which will do this will never be resented.

That steps have been taken in the right direction is all to the credit of the Administration, but a study of the present position renders it obvious that many of the difficulties have not as yet been faced by the authorities. I propose to allude to these in the succeeding sections. It will first, however, be necessary to consider what the Game Sanctuary really is and what its formation aims at.

THE GAME SANCTUARY¹

The idea of the Game Sanctuary was a natural outcome of the indiscriminate slaughter to which wild animals have at all times and in all countries been subjected by man. So long as it was man imperfectly armed against the animal with its natural sagacity or fierceness to protect it, conditions were equal, or in favour of the animal, and there was no reason for intervention. From the day, however, of the introduction of the breech-loader and the repeater and a whole host of perfectly built weapons of every kind, enabling man to kill with comparative ease and certainty, the odds were against the animal and the question of affording some degree of protection to the game of a country became of paramount importance; and, curiously enough, the question became most vital in the more uncivilized, uninhabited, and wilder portions of the globe. Such shooting grounds were open to one and all, just as for centuries the shooting in India had been open, with the result that the modern rifle soon threatened the extinction of all game. That modern conditions have rendered this quite feasible the two well-known and oft-quoted instances afforded by the practically extinct American bison and the extinct quagga of South Africa sufficiently illustrate.

In India we have come within measurable distance of

¹ For a list of the Game Sanctuaries of the country, both in British India and the Native States at that time, see my paper on "Game Sanctuaries, etc.," *Proc. Zool. Soc. Lond.*, pp. 33-46 (1912).

exterminating the rhinoceros (*Rhinoceros unicornis*), which, together with the elephant and the gaur or Indian bison (*Bos gaurus*), would without protection probably soon disappear from the jungles which have known them for so long.

With a view to affording a certain protection to animals of this kind and of giving a rest to species which have been heavily thinned in a district by indiscriminate shooting in the past or by anthrax, drought, etc., the idea of the Game Sanctuary was introduced into India (and in other parts of the world) and has been accepted in many parts of the country. The Sanctuary consists of a block of country, either of forest or grassland, etc., depending upon the nature of the animal to which Sanctuary is required to be given; the area has rough boundaries such as roads, fire lines, nullahs, etc., assigned to it, and no shooting of any kind is allowed in it if it is a Sanctuary pure and simple; or the shooting of carnivora may be permitted, or of these and of everything else save certain specified animals.

Sanctuaries may be formed in two ways :

I. *The area is automatically closed and reopened for certain definite periods of years.*

II. *The area is closed until the head of game has become satisfactory, and the shooting on the area is then regulated, no further closing taking place, save in exceptional circumstances.*

I. *The Sanctuary is automatically closed and reopened for a definite period of years.* The Sanctuary is notified for a period of years: this period would naturally be variable, but it is of importance, I think, that it should not be placed at too great a length, or the animals in the Sanctuary, so long immune from danger, would on the reopening of the area be so unused to the sportsman that they would be shot down in a very short space of time. Probably the period during which a block of forest is closed to all shooting should never exceed, at the most, three years. Sir John Hewett, when Lieut.-Governor of the United Provinces, held the opinion that a period of five years for a Sanctuary was too long. He thought that the ground of the Sanctuary should be changed every two or three years, probably the former, and that the animals would soon learn where the Sanctuary was. He also agreed that before opening a Sanctuary to sportsmen the area should be *beaten* through so as to distribute and disperse the game, and not have them

collected together Noah's-ark-fashion on a large scale for the first permit-holder who enters to shoot down with ease.

Whilst, however, this system of opening and closing areas to shooting is best adapted to some localities and to certain classes of game, it is quite inadequate for the satisfactory protection of others. In many parts of India I would favour the second suggestion as being by far the most satisfactory in the long run and in some cases essential.

II. *The area is closed until the head of game has become satisfactory, and the shooting on the area is then definitely regulated, no further periods of closure being enforced save in exceptional circumstances.*

The length of time a Sanctuary should be in existence is of very considerable importance, and to a certain extent is intimately dependent upon a knowledge of the habits of the animals for which the Sanctuary is formed. The period of closure to be effective must depend :

(1) On the condition of the head of game of the area when the Sanctuary is first formed.

(2) *On the nature of the animal*, e.g., the rhinoceros, with a period of gestation of two years and a period of fifteen years before it reaches maturity, would require practically permanent closure of its haunts to produce any appreciable result, as has, in effect, been carried out in Goalpara in Assam.

The procedure followed should usually be determined by the condition of the head of game on an area. There would be no question of fixing a definite period for the Sanctuary in the first instance. When the requisite effect on the game had resulted from its formation, careful and efficient rules and management should be sufficient to keep up the head of game, and it would not be necessary to continue the rigid exclusion of sportsmen. It would be sufficient to limit *the number of each species* to be shot *each year*, as is done in many parts of the Central Provinces. When the limit had been reached the shooting of the species in that locality would cease for the year.

Once a sufficient head of game has been established in a locality, it is questionable whether regulated shooting each year would not have a better effect than the alternative proposal of closure for a term followed by a period of unrestricted shooting. It would certainly minimize the chance of the animals becoming too tame.

It may be of interest to give as an instance the procedure in the Central Provinces.

As a whole, the Central Provinces may be considered to be one of the most advanced regions so far as game protection is concerned. The shooting regulations provide that areas or blocks of forests may be closed to shooting *absolutely* for purposes of forest management or as *sanctuaries* for the protection of game, other than carnivora, for the destruction of which special permits may be issued. The list of closed forests or blocks is prepared each year in October by the Conservators and is published in the Central Provinces Gazette, and copies are hung up in the offices of the Deputy Commissioner and Forest Officer.

It will thus be obvious that the Game Sanctuaries in the Central Provinces are formed automatically by the closing alternately of different forests or blocks of forest yearly. As a matter of fact, however, most of the present Sanctuaries, though in many instances reduced in size, have been Game Sanctuaries since 1902, though a few others have been added later. It would be better if these areas were closed for periods of not more or less than three years. Of course, in the case of areas reserved for purposes of forest management it is possible that they are closed for a considerable period of years, but nothing is said on this score in the rules nor as to the length of time blocks are closed for purely sanctuary purposes.

In addition to the automatic closure and opening of blocks there are other most valuable restrictions for the preservation of game, and I believe that I am correct in stating that this procedure is now applied to most of the blocks, instead of automatically closing and opening them. In any particular block or series of blocks only a certain head of any particular species may be shot. As soon as this number has been reached, that species is closed to shooting for the year. This rule might well be introduced elsewhere in the country. The permit of each sportsman is endorsed with the number of head he may shoot, e.g., one bison, one sambhar, two chital, four other deer, and carnivora *ad. lib.*, *provided the maximum number of head of the species allowable to be shot in the year has not been already reached.* This latter information is supplied to the sportsman either by the divisional officer or by the Range officers in the areas for which his permit is made out. Were not this latter pro-

vision in force, one sportsman might shoot the whole number of, say, barasingha (*Cervus duvauceli*) permissible for the year and thus close this particular animal to succeeding rifles for the rest of the season—a somewhat unfair and onerous restriction.

The size of a Sanctuary must, of course, entirely depend on local conditions and on the nature of the animals to be protected. Such animals as the rhinoceros or gaur, which are of an extremely shy disposition and are given to roaming considerable distances, would require an area of considerable dimensions, whereas chital (*Cervus axis*) and hogdeer (*Cervus porcinus*) would require a comparatively small one.

Pheasants, again, would not require large areas, and the same applies to the hill sheep and goats—a nullah or certain nullahs being proscribed as closed to shooting, as, in fact, is done in Kashmir.

Game Sanctuaries may then be of several kinds :

1. Entirely closed to all shooting.
2. Closed to beating only.
3. Closed to the shooting of certain species of game.
4. Closed to shooting of all game, save noxious ones, carnivora, pig, etc.

The question of enforcing the Sanctuary law against shooting is one of some difficulty. In Reserved Forests it is comparatively easy, since all shooting without special passes in such areas is forbidden and the granting of these would be stopped for Sanctuaries. Outside, however, the matter is by no means so simple, and the people of the country, particularly the shooting element, will require a careful education if they are to understand and respect the Sanctuary, should it be formed in Government Waste Land. It will be necessary to fully explain the uses of Sanctuaries, and the reason for closing the areas as soon as attempts have been made to form them.

At present anyone may enter on land, which is not reserved forest, and shoot. To alter this would at once curtail what is a prescriptive right, and this is the main obstacle to the introduction of a Game Law. Rich and poor alike enjoy this privilege, and although the occupier may in time come to learn that shooting rents can add to his income, or reserve his waste land for his own shooting and close it to the general public, as is done in some cases in the Dun below the Mussoorie Hills, it will be difficult to introduce restrictions

on areas in which shooting is practically a right in all but name.

It is, we fear, hardly to be expected that the question of the formation of Sanctuaries and their closing will be received without opposition throughout the country, even amongst the Europeans, but I am of opinion that the matter is one of such great importance that the outcry of the few interested people opposed from personal motives to their formation on Government Land, both Reserve Forest and Waste Land, should not be allowed to blind the public generally to their immense value. It is conceivable that the Zemindar and large landed private proprietors would in course of time follow an example so set when its value had made itself apparent to them.

The policing of the Sanctuary is a matter requiring some consideration. It may prove comparatively easy to check illicit shooting both on the part of the European and native, although even this is not a facile matter in the case of Sanctuaries of large size in remote localities. The question of dealing with the poacher pure and simple who goes to work without firearms is even a more difficult problem, whose importance, as we have seen, has as yet been scarcely realized by either the Supreme or Local Governments.

THE INDIAN WILD BIRDS AND ANIMALS PROTECTION ACT OF 1912

This Act was passed on 18th September, 1912. It is entitled—"An Act to make better provision for the protection and preservation of certain Wild Birds and Animals."

Its clauses are as follows :—

Short title and extent.—1. (1) This Act may be called the Wild Birds and Animals Protection Act, 1912; and

(2) It extends to the whole of British India, including British Baluchistan, the Sonthal Parganas, and the Pargana of Spiti.

Application of Act.—2. (1) This Act applies, in the first instance, to the birds and animals specified in the Schedule, when in their wild state.

(2) The Local Government may, by notification in the local official Gazette, apply the provisions of this Act to any kind of wild bird or animal, other than those specified in the Schedule, which, in its opinion, it is desirable to protect or preserve.

3. *Close time.*—The Local Government may, by notification in the local Gazette, declare the whole year or any part thereof to be a close time throughout the whole or any part of its territories for any kind of wild bird or animal to which this Act applies, or for female or immature wild birds or animals of such kind; and, subject to the provisions hereinafter contained, during such close time, and within the areas specified in such notification, it shall be unlawful—

(a) To capture any such bird or animal, or to kill any such bird or animal which has not been captured before the commencement of such close time;

(b) To sell or buy, or offer to sell or buy or to possess, any such bird or animal which has not been captured or killed before the commencement of such close time, or the flesh thereof;

(c) If any plumage has been taken from any such bird captured or killed during such close time, to sell or buy, or to offer to sell or buy, or to possess, such plumage.

Penalties.—4. (1) Whoever does, or attempts to do, any act in contravention of Section 3, shall be punishable with fine which may extend to fifty rupees.

(2) Whoever, having already been convicted of an offence under this Section, is again convicted thereunder shall, on every subsequent conviction, be punishable with imprisonment for a term which may extend to one month, or with fine, which may extend to one hundred rupees, or with both.

Confiscation.—5. (1) When any person is convicted of an offence punishable under this Act, the convicting Magistrate may direct that any bird or animal in respect of which such offence has been committed, or the flesh or any other part of such bird or animal, shall be confiscated.

(2) Such confiscation may be in addition to the other punishment provided by Section 4 for such offence.

Cognizance of offences.—6. No Court inferior to that of a Presidency Magistrate or a Magistrate of the second class shall try any offence against this Act.

Power to grant exemption.—7. Where the Local Government is of opinion that, in the interests of scientific research, such a course is desirable, it may grant to any person a licence, subject to such restrictions and conditions as it may impose, entitling the holder thereof to do any act which is by Section 3 declared to be unlawful.

Savings.—8. Nothing in this Act shall be deemed to apply to the capture or killing of a wild animal by any person in defence of himself or any other person, or to the capture or killing of any wild bird or animal in *bona fide* defence of property.

Repeal of Act of 1887.—9. The Wild Birds Protection Act, 1887, is hereby repealed.

THE SCHEDULE

- (i) Bustards, ducks, floricans, jungle fowl, partridges, pea-fowl, pheasants, pigeons, quail, sand-grouse, painted snipe, spur-fowl, woodcock, herons, egrets, rollers and kingfishers.
- (ii) Antelopes, asses, bison, buffaloes, deer, gazelles, goats, hares, oxen, rhinoceroses and sheep.

SOME REFLECTIONS ON THE ACT

It will be of interest to consider in some slight detail several of the provisions of this Act. The Provincial Rules in force when it was passed comprised the Arms Act, Forest Act and Fisheries Act. The new Act extends to all India with the exception of Burma, and, of course, the Native States. Some of these latter are, however, already doing excellent work in Game Protection and others will doubtless follow any firm lead set them by the Imperial Government.

In many respects the present Act is a great improvement on the draft one. Instead of being confined to "game" animals and then endeavouring to define "game," "large" animal, and "specified kind" of animal it contents itself with the title "Wild Birds and Animals Act." The title, zoologically, is unfortunate, since the word "animal" comprises the whole of the fauna. If only birds and beasts are understood the title should have been "birds and mammals." I use the word "animal" to include the fauna as a whole. Section 2 (1) of the Act makes it applicable to certain classes of animals and birds specified in the Schedule, but with the saving clause, 2 (2) that the Local Government may by notification in the local Gazette apply the provisions of the Act to any kind of Wild Bird or Animal, other than those specified in the Schedule which, in its opinion, it is desirable to preserve. Thus in this respect the onus is put upon the shoulders of the Local Government. This is also the case with reference to the "close seasons." The responsibility of declaring a close season either for a part or the whole of the year for any species—"Kind of wild bird or animal," as the Act puts it—to which the Act applies is laid on the Local Authority.

The Schedule is the weak part of section 2 (1). It would have been far better either to have drawn it out in a more detailed form or to have omitted it altogether, the Local

Government being empowered in clause 2 (2) to enumerate a list of birds and animals which might be exempted from the protection of the Act from time to time, when their numbers had become excessive or for other specified reason. The periods of such exemption to be limited to a certain maximum, an extension of which period would require the sanction of the Government of India.

But even better than this would, I think, have been the preparation of a list of the fauna by groups and its inclusion in the Act. This, of course, can be done by Local Governments and it is a step which, I believe, is being undertaken in some Provinces. On this question I made the following remarks in my paper read in 1911:—

“ If the drafters of the Act were to apply to any Zoologist in the country who has a practical working and sporting knowledge of the game life of India they could be furnished with detailed lists of animals both large and small ; and by ‘ animals ’ I here mean ‘ mammals ’ classified, say, into some such groups as, e.g.—

“ (a) *Carnivora*. Each species in the country to be quoted.

“ (b) *Herbivora*. Each species in the country to be quoted.

“ The various deer, antelope, goats and sheep are all perfectly well known, and the preparation of lists detailing each animal by name is an absolutely easy matter.

“ (c) *Rodentia*. Including the hares, porcupines, etc., the total extinction of which from a sporting point of view is far from desirable.

“ (d) A *General Group* which may be made to include the rest of the *Mammalia*. This would allow protection to be extended, should it be deemed necessary from the point of view of the preservation of the species in the case of rare species now perhaps being exterminated for the value of their fur or for other reasons, to animals not at present included in the sportsman’s category of Game.

“ Turning to the Birds. There is no distinction made between migratory birds and non-migratory birds, and no mention made at all of *Insectivorous* Birds, and yet the distinction is one of enormous value in a great agricultural country like India, where the benefit the cultivators must derive annually from insectivorous birds is quite incalculable.

“ I suggest that the Birds be sharply defined into groups and the names of all the game birds and of all the chief insectivorous birds be definitely given in the Act. This like-

wise is a matter of the greatest simplicity, since there would be no difficulty in drawing up such lists."

Similarly in section 3 it would have been preferable had the Act definitely laid down with the authority of the Supreme Government behind it that the breeding seasons for all animals and birds should be a *close time* and have made Local Governments responsible that the breeding seasons for each species were definitely ascertained in their several jurisdictions and notified in their Gazettes. Not only would this have been more satisfactory in the interests of the preservation of all game animals, but it would have been a valuable aid to an extension of our knowledge of the life histories of many of the rarer animals and birds, since in order to render possible the working of the Act it would have been necessary to undertake such investigations throughout the country. Also it would have afforded certain protection to animals and birds other than "game" ones which run the chance of being neglected under present conditions.

The extension of this close or breeding season to a longer period for specified reasons could have then been safely left in the hands of the Local Authority. From the zoological and scientific point of view the Act of 1912 fails in not having officially and authoritatively recognized the breeding season in the interests of the fauna as a whole as a close time, power being given to the Local Government to proscribe within a certain defined area and for a certain definite period any species which was becoming noxious to the community.

Further, it would have been better had the Act (sec. 3) distinctly prohibited the killing of immature animals and birds, empowering Local Governments to notify exceptions in the case of dangerous carnivora, etc., when and only when considered necessary. If the Act is really intended, as we have no doubt that it is, to ensure the preservation of the fauna as a whole throughout the country certain definite prohibitory clauses laid down in the Act with the Authority of the Governor-General in Council behind them would surely be more likely to achieve the object arrived at than by placing the onus of enacting such clauses on the respective Local Administrations.

In sub-sections 3 (b) and (c) which concern themselves with the sale of animals and birds or parts of them killed in the close season, we should have liked to see skins and

horns especially enumerated. This would have checked their sale in the close seasons ; for the local officers would be acquainted with these seasons for the fauna of their own Province and Districts, and would be responsible for seeing the Act obeyed.

It is true that Local Governments have now framed Rules under sections 2 and 3, but this does not necessarily ensure such continuity of action as would have been secured had the Government of India taken the responsibility upon themselves.

There remains the poacher who without possessing firearms certainly outrivals in his power for cold-blooded slaughter the whole of the armed community. Neither the Government of India nor the Local Governments have yet attempted to deal with him. Clauses 2 and 3 do not really touch him. As the chapter on poaching shows to some slight extent his operations can only be described as devilish in their inhuman ingenuity. To the average officer, whether magistrate or forest, they are unknown. Even if a District official has some cursory knowledge that the native is a skilled poacher he in most instances has no specific acquaintance with the methods, the common methods, in force in his district and he will never have seen them put in force practically. The Government of India and the various Local Governments are, we may feel sure, unaware of their existence, or surely some effort would have been made to put an end to practices which involve appalling torture to the wretched animals thus done to death.

It may be suggested that what is required is the preparation of a schedule for each Province, detailing the various poaching contrivances in force in the Province, drawn up district by district. The schedule should be hung up in the offices of the Magistrates and Forest Officers and their subordinates, and a thorough acquaintance with it be exacted from all officers. Further, an annual return should be called for detailing the number of offences under each of the various poaching methods in force prosecuted in each district and the sentences imposed in each case.

The preparation of such schedules should present no difficulties. Some of the European officers of the Local Governments and many of the native officials would be able to give such information. By whatever means they are drawn up there can be little doubt of their urgent need.

In this connexion the 1912 Act would appear to require amendment, and severe penalties be enacted on the perpetrators of the cold-blooded and diabolical butchery of inoffensive animals which annually takes place throughout the country all the year round. For these men are no respecters of seasons nor of age or sex. Male and female, old and young, all are treated with the same terrible callousness. A man working a lame horse is taken up by the police in England and fined by a magistrate. And rightly so. And yet far greater barbarities are perpetrated daily in India without notice.

It is very necessary to stop the slaughter at present carried out by the native shikari, soldier and poacher during the close seasons, the proceeds of which slaughter in flesh, skins and horns finds a ready sale in the bazaars. Stop this traffic and you bring to an end one of the great incentives to kill.

Sub-sections 4 (1) and (2) deal with penalties. In a country like India it has always seemed to me that there should be two scales of fines. Fifty or a hundred rupees should be a sufficient deterrent to the poaching native shikari. But would it stop the more wealthy European shikari who, for instance, wanted to be able to say that he had shot a bison and sooner than go back empty-handed would risk the penalty and shoot a female? I had an instance of this kind of thing in Chota Nagpur myself. A wealthy so-called sportsman came up with a permit to shoot and seated in a machan had the animals in the forest driven past him and shot a cow bison and a three-week-old calf! The penalty did not stop him and he hoped by bluffing to be allowed to keep his spoils even if he had to pay the, to him, small fine.

Section 5 empowers the magistrate to confiscate all illicit spoils captured and should be fearlessly and unwaveringly put in force.

Section 7 empowers a Local Government to permit in the interests of scientific research a departure from the rules in force both in and out of the close season for any specified animal or bird or classes of such. A short decade ago this would have been hailed, and rightly hailed, as an example of broad-minded statesmanship. Now, however, the permission will require to be jealously watched; for the last few years have witnessed startling developments as a result

of the grant of such permissions. In fact so delicate has this question become that we would rather that the Supreme Government had kept this power in their own hands. Latter-day so-called scientific expeditions for the purpose of adding specimens to great Museums, to provide cinematograph films for alleged educational purposes, and so forth, have entirely altered the aspect of this question. For in some instances these so-called scientific missions have simply become glorified slaughter and butcher expeditions financed by a wealthy man in the name of science. The old-time butcher has not disappeared. He still exists, and with modern rifles his power for slaughter as we have seen is infinitely more terrible. But he is held in check by modern restrictions. He is unable to kill indiscriminately as he wants to. If he is wealthy he endeavours to get over the difficulty by fitting out a scientific (*sic*) expedition and so evades the law. Events move so fast nowadays that what would have been a perfectly safe clause a score of years ago, in fact a clause marking a distinct progress by the Supreme Government in its recognition of the claims of science, has now become a danger to the very aims and objects of the Act. Such a permit should never be allowed to take effect in any Game Sanctuary and the permission to kill in the name of Science should be retained by the Supreme Government. Glorified slaughter is not scientific research nor is it so considered by the great Museums in whose name it is sometimes carried out. If such expeditions are necessary it should always be possible to lay down definitely the number of head of each species which may be shot or trapped, specifying age, sex, etc. Every museum will agree to such a restriction, and the wealthy butcher, whose chief aim is to have a free hand in the forests, to remain unhampered by restrictions and to kill everything that gets up, would be kept in check.

Further, in the case of cinema films, the cold-blooded cruelty to trapped animals one sees depicted in these films—baiting the poor beasts to make them show their "points," trussing them up in most diabolical ways, etc.,—should be absolutely prohibited and met by severe punishment.

Section 8 deals with the old question of granting licences to protect crops. The making of rules in this respect must, of course, be left to Local Governments. This is obvious. The question is now, I understand, being treated with a

more enlightened knowledge than has been displayed in the past. In the interests of the hard-working ryot, a man of few joys, all that can possibly be done for his protection should be carried out. But the village shikari who lives by his gun should be discouraged. And the poacher should be put down with a firm hand.

The 1912 Act makes no mention of the granting of rewards for the slaughter of noxious animals or birds. This is a departure in the right direction. The matter can be safely left in the hands of the Local Governments and such grants should be made with discrimination and discretion. In my paper already alluded to I made the following remarks on this subject :—

“ I am of opinion that Game rewards in general should be abolished and that no provision on the subject should be included in the Game Act.

“ It would be quite within the power of the Local Government to issue rewards for the destruction of a particular species which is on the increase and becoming a danger either to public life or property or to the sporting interests of a particular area of country.

“ Also, save in exceptional cases, e.g., rogue elephants and man-eaters, I would abolish the giving of a reward for *every* tiger, leopard, wild dog or wolf slain.

“ Where any of these animals were becoming a pest or scourge to the community or endangering the head of game of other species in any locality, the Local Government should notify or empower its officers to notify a reward or scale of rewards to remain in force until the danger is past and the balance of power between man and animal or animal and animal is once more normal. The rewards on the proscribed animals should then be taken off.

“ Every shooting season nowadays sees an army of eager sportsmen competing for blocks and shooting-permits, and surely the giving of the old-time reward for a tiger is quite unnecessary. I would leave the grant of rewards or offer of rewards to the discretion of the District Officer or Forest Officer. They would when necessary proclaim such and such an animal to be a man-eater or cattle-lifter of notoriety and would fix a reward upon the animal, procuring, if considered necessary, the sanction of the Commissioner or Conservator to their doing so. Why Government should nowadays pay a reward of from Rupees 20 to R. 50 for a tiger which may

be a pure game-eater and rarely if ever touches a cow (and there are numbers of such) is beyond comprehension. Sportsmen will not slack off if the rewards are withdrawn. Many a District official would be only too delighted if they would! Once a man-eater or a noted cattle-lifter is proclaimed, then make it worth the sportsmen's while to collect to tackle him by giving straight off a large reward commencing at R. 200 and going rapidly up to R. 500. It would be a far more satisfactory way of working the reward system both from the point of view of the cultivator, the man who lives on the soil, and that of the sportsman; and, I think, would probably be less costly to Government.

"Or rewards might be offered only for tigers in a district or parts of a district where a noted man-eater or cattle-lifter has made his home. For every tiger killed in this area a suitable reward might be given, say, R. 50, with the larger reward to be paid to the sportsman who bagged the particular man-eater or cattle-lifter proscribed. This would probably be the best method, since it would tempt sportsmen to have a try for the man-eater, knowing that they would receive a certain reward for each tiger killed, even if they should not be lucky enough to kill the proscribed beast."

Lastly, the New Act omits all special mention of separate rules with respect to the pursuit, killing or capture of game by non-commissioned officers or soldiers of the Army. Only the Supreme Government possesses the necessary authority and power to grapple with such a question. No Local Administration has power to override military regulations or permits granted to the Military by the Supreme Government, nor can such non-commissioned officers and men be brought within the jurisdiction of the civil courts as long as they are in the enjoyment of special privileges, such, e.g., as those enjoyed by the Gurkha Regiments. True the Act section 4 (1) applies the penalties to everyone, but in the absence of any direct clause this cannot obviously be made to apply to military individuals safeguarded by special privileges. How are such privileges to be reconciled with the 1912 Act? On this subject I made the following remarks in my paper and they appear to be still applicable:—

"Allowing that it is necessary to make separate rules for the Army ('this was the case in the draft Act; the Act as passed omitted all mention of such rules') I think that

the Act should specifically lay down that permits may not be given for parties of more than, say, four to six men from a cantonment to go out *together* to shoot in any area. At present it is well known that at times parties of from fifteen to twenty or more men go out into a block of forest and drive the game systematically into a *cul-de-sac* and then slaughter the animals in numbers. The Gurkha is particularly addicted to this form of 'sport' during the rainy season, when in the parts of the country where they are cantoned it is generally impossible for the European to go near the Terai forest owing to its great unhealthiness. Parties of military men should be small and the number of head they may shoot should be distinctly laid down on the permit, and penalties be enforced if this number is exceeded.

"I think the Game Act might embody some such definite ruling for the whole country."

In past years but scant attention has been paid to the severe attacks of a disease having kindred affinities to anthrax which appears at intervals and takes a heavy toll of the head of game (such as bison (gaur), buffalo, sambhar, etc.) on the area it affects.

Further, in years of severe drought the mortality amongst the wild animals of the country affected is often very heavy, and in the past this factor has received no consideration from the authorities in the interests of the wild game.

It may be suggested that in the wake of such calamities a very careful and detailed inspection of the area or areas affected should be undertaken, with the object of ascertaining which species have suffered and to what extent. Until such survey has been carried out, no shooting-permits should be issued for the area or areas. After the survey the species which have suffered severely should be notified, as also the area affected, and this area should be entirely closed to the shooting of those particular species for such period as will ensure their multiplication to the number of head it is required to maintain on the area. In closing such area the notification should distinctly state the reason for the closure. No true sportsman would be found to cavil at such a procedure.

And now to turn for a moment, in conclusion, to the question of the sportsman—the outside sportsman, not the

District official—and the rules under which he can enjoy sport in a District.

The rules under which the District official enjoys sport in his District are, it would appear, quite fair in most if not all Provinces.

I think, however, that the outside sportsman has often a justifiable complaint, though more often than not he goes the wrong way to work in making it, and so puts himself out of court.

The whole matter really turns, and must always turn, on the number of individuals of a particular species it is permissible to shoot in a given area. This number can only be fixed by the District Officers on the spot. There can be no cavil against this, as they are, or ought to be, the best judges on the question.

In fact, as matters in game protection at present stand, and in the absence of a separate Game Protection establishment, there can be no appeal from their decision.

Probably the best and most elastic method for the outside sportsman is to give him a block or blocks, depending on what is available on receipt of his application, and to enter on his permit the number of individuals of any one species he may shoot and the number of different species. This number would, of course, vary according to the length of time for which the permit was issued, but would never exceed a fixed maximum for each species. So far so good.

But it will doubtless soon be found necessary to definitely limit the number of head of a species to be shot in any one area in a year, as is done, in fact, in the Central Provinces. It is in this limitation that complaints arise and causes for friction come in.

For instance, supposing twelve sambhar may be shot in any particular block. A military man, whose leave season will not open before the 15th April, applies for and is allotted a block. He arrives to find the maximum annual number of the animal it is permitted to kill already reached and is debarred from shooting that particular species. It is quite conceivable that he might find more than one species in the same condition. In fact, the total number of head of a particular species might be easily shot off by the civilian element in the first couple of months of the open season, the animal becoming then *de facto* closed to shooting for the rest of the open season.

This is where the shoe pinches the heel of the military man very hard, as also, of course, that of his civil brother when shooting on areas outside of his own jurisdiction. To remedy a state of affairs which is undoubtedly a real grievance, it may be suggested that the number of individuals to be shot in a particular block or area in any one year should be allotted in a fixed proportion *throughout each month of the open or shooting season* for that animal, say, two or three or four per month, according to the total number notified as shootable during the season, any balance remaining from any one or more months being, of course, carried forward and distributed throughout the remaining months of that shooting season.

This would give the hot-weather sportsmen, both military and civil, who in pursuit of their favourite pastime are ready to put up with many and decided discomforts, an equal chance with their civil brother who is not so tied during the cold weather. The suggestion is made simply with the idea of giving a fair chance to all.

But I would suggest a further step. I would allot a certain proportion of the head of a particular species to be shot in an area to the local District officials, the balance going to the outside sportsman. The District officials could be left to make their own arrangements as to when their proportion of head was to be shot, but I think that in the case of the outside sportsman the number to be shot should be allotted throughout the shooting months, so as to give an equal chance to all the block-holders.

No reflection is intended on the District officials by any of these suggestions. They are made only in the interests of that particular quality all Englishmen pride themselves in possessing—Fair Play.]