



A FINE YOUNG MALE RHINO, WALLOWING IN THE MUD OF THE KAZIRANGA GAME SANCTUARY

INDIAN ONE-HORNED RHINOCEROS

A beast that has suffered severely at the hands of the hunter

THE Great Indian One-horned rhinoceros, only rivalled in size by the elephant, is still to be found in the northern parts of India. His range has now been restricted to Nepal, Bengal and Assam. Sixty years ago the rhinoceros was to be found roaming in considerable numbers all over the plains of Bengal and Assam, but he suffered severely at the hands of the hunter. Nearly every part of this huge animal, in some way or another, was considered valuable. His horn, of course, was most prized and found a ready market in China. The horn is actually composed of compressed hair, and was supposed to have aphrodisiac properties. His horn, however, was not the only part that was considered to have medicinal value, and there is little wonder that he soon disappeared from the more open country; and to-day we find him only in the more inaccessible parts of Nepal, in the region of Chaitwan, in Bengal, in the Jaldapara Sanctuary, and in Assam.

It is only about 40 years since the Kaziranga Game Sanctuary, in Assam, was formed primarily for the purpose of the preservation of the rhinoceros, and, in a lesser degree, buffalo and other game. The country is comparatively flat, and lies on the banks of the Brahmaputra river, consisting of an area of approximately 164 square miles of swamp and tree jungle, intersected by small streams and *bheels*. During the rains a large part of the sanctuary is completely flooded, and it is amazing how the rhino survives these severe floods that occur annually in this part of Assam. There are, however, patches of high jungle which are not completely covered with flood water, and it is presumed that the rhinoceros, in company with the wealth of other game, retires to these higher localities within the sanctuary, whilst others no doubt seek safety in the Mikir Hills, which rise within two miles of the sanctuary's boundary. They return to the swamps and *bheels* when the water subsides. To-day a very conservative estimate of the number of rhino within the sanctuary is 150-200 head.

It is here that one may see the rhino living as he has lived for generations, completely free from the attacks of man. He lives in perfect harmony with buffalo, deer and pig; and although the wild elephant and the rhino have nothing in common, they appear to get along happily together, for there are numbers of herds of wild elephant in the sanctuary. Indeed it is safe to say that, once the rhino has grown to a size likely to discourage the attack of a tiger, there is little doubt that he will live to a ripe old age.

Rhino may be seen on most days grazing or wallowing peacefully alongside a herd of swamp deer, with perhaps a herd of buffalo and the small *muntjac*, or barking deer, daintily nibbling the grass beside him as he keeps an ever-watchful eye on his surroundings.

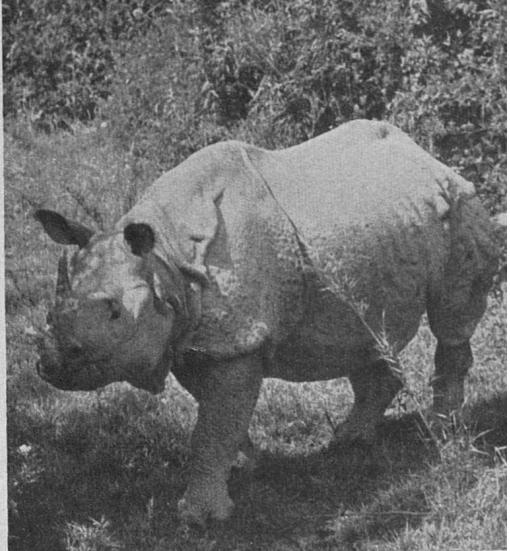
The rhino has his home in the reeds and elephant grass, which grows to a height of 15ft. or more. In fact, when one is on an elephant, it is frequently impossible to see another large animal only a few yards in front. Owing to this heavy cover, one may

suddenly encounter a rhino wallowing in a mud hole, or lying up quietly. The first warning one usually has is the elephant winding him or the sudden rising of the beautiful snow-white cattle egret. These egrets are commonly in attendance on the rhino, and are searching for the ticks and other pests with which the rhino is constantly troubled. The sudden rising of these birds from cover is the sure sign of the presence of rhino, and they greatly assist in the locating of game as they may be seen from a considerable distance.

The best periods of the day for spotting rhino and other game is during the early morning and late evening. Many may then be seen on the edge of the *bheels* grazing, and I have seen no fewer than eleven at one time. Unhappily, however, at both these periods of the day stalking with a camera is a very tricky business, and usually impossible owing to the poor light. During February and March the Forest Department commence the burning of the grass and reeds. As rhino spend most of the day in this cover one has to search out the spots which have been fired. It is here that one has most opportunity of making an exposure. Here again one has continual trouble in making a good picture, owing to the subject being partially obscured by burnt grass and reeds. This rather tends to spoil the picture. Of course, where one is fortunate in encountering a rhino on the edge of a *bheel* a good photograph is assured. Here one has no worries of the subject being spoiled by intervening grasses. If one has a camera fitted with a telephoto lens, really interesting close up shots may be obtained. Such luck was not with us, however, for on the one occasion we spotted rhino on a *bheel*, in perfect light, they gave us no opportunity of making an exposure.

My first glimpse of rhino occurred one evening last March. I was sitting on a pad elephant, in company with my wife, close to the edge of a large *bheel*, when a most unusual noise startled us. It is quite impossible to put in print the call of a rhino, but perhaps some slight idea may be gained from the fact that it is more like the call of a very large bird than a massive beast. On questioning the *mahout* as to the origin of the sound we were told it was "Rhino"!

We had not long to wait before we heard him coming on the *bheel* from our left. The tall grass and reeds were being violently shaken and he at a fast trot, not 60 yards from us. At first he did not appear to have spotted us, but our elephant was somewhat anxious, and suddenly wheeled round to watch him. Immediately the rhino came to a standstill, half turning in our direction and, with his head held well up, he stood gazing at us with his pig-like eyes. Apparently he was not too pleased with the sight, for he swung round and disappeared into the tall grass. We could easily follow his movements as he crashed through the heavy cover, and completing a half circle he came out on the *bheel* again behind us and stood watching. Our elephant, by this time, was extremely restless, in fact this was his first view



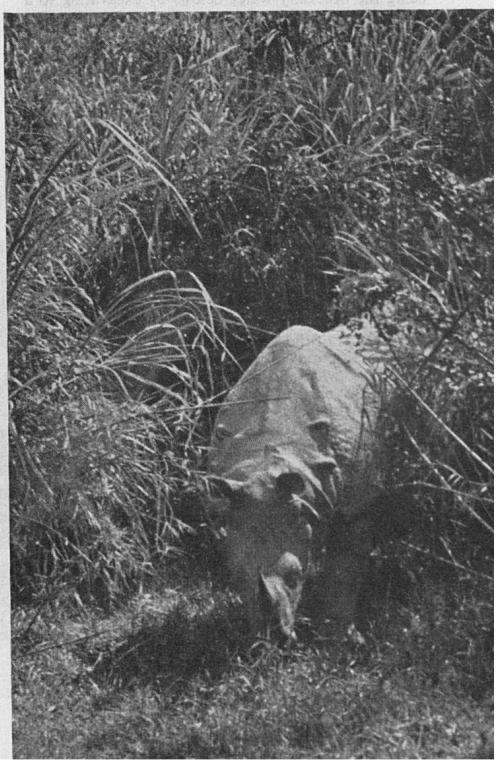
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of rhino, and it was only the steady hand of the *mahout* that saved us from an exciting dash across country. (This we were to experience two days later!) The rhino, a fine bull, did not stay long and quickly turned back into cover. Apparently he had been seen on a number of occasions in company with a cow, and no doubt the two had become separated, most probably owing to our arrival.

Not unnaturally the rhino is usually considered to be a very short tempered animal, and if one is foolish enough to excite him unnecessarily, a more dangerous beast would be hard to find. However, when one is quietly stalking on an elephant they behave quite well. It is only when a cow has a calf at heel that any great degree of caution is necessary.

I have referred to the call of the rhino being similar to that of a large bird. There is another peculiar sound that I have heard when they have been suddenly disturbed or made angry. This is a loud blowing, not unlike a long series of snorts. It is extremely alarming when heard at close quarters.

During our visit we frequently came across cows with young calves at heel, and it was one of these particularly jealous mothers that put our elephant to flight. I never realised an elephant could move so fast, and was not very happy when I realised the



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rhino was gaining on us! However, fortunately she gave up the chase and, after a few hundred yards, the *mahout* brought our elephant to a halt. We did not again attempt to approach this particular cow!

We were given information of a lone bull that had apparently been driven out of the sanctuary by his

and went back along the track. It was then that my wife pointed to a very deep gash running across his right hind-quarter which appeared to be quite fresh. It was still bleeding and was covered in flies. He went into heavy cover and, by gentle persuasion, we managed to manoeuvre him out on to an open

younger and more active associates. This bull was now living in thick scrub jungle on the edge of the paddy fields adjoining the sanctuary. He had frequently been seen by the village herders as he grazed peacefully alongside the cattle.

After a lengthy search during which we disturbed a fine tiger, we located him in thick cover adjoining a wide game path. The first warning we had of the old fellow was at a distance of approximately ten yards! Quite unexpectedly upon rounding a bend in the track, we came upon him standing facing us. We were fortunate in being on a fine tusker elephant who was no stranger to rhino, and we consequently made no move to withdraw. He did not attempt to charge or move off, nor did he show any sign of annoyance at our intrusion. I made several exposures before he slowly turned

patch of jungle where I was able to make still more exposures.

By now he appeared somewhat restless, and gave a loud blowing or snorting sound, to which I have already referred, which was not taken to be of a friendly nature. He came slowly towards us, snorting as he did so, then lowering his head, he advanced more quickly, giving us the impression that our presence was no longer tolerated. We waited to see no more and quickly withdrew, and were relieved to see him turn off into the high grass apparently satisfied with his effort.

It is a well known fact that when an animal becomes old or wounded and is driven from his associates, being forced to live a solitary life, not unnaturally it becomes ill-tempered and aggressive, frequently earning the right to be called a "rogue." That this particular animal had been turned out from his fellows there is no doubt. In addition he had a very nasty wound which must have been greatly aggravated by the swarms of flies. Yet he appeared quite docile, and not until he was twice driven from cover did he show signs of charging. I personally have a great regard for the old fellow, for no matter what his reputation may be amongst his brethren, I was given the opportunity of recording close-up shots of one of India's most precious fauna.

The world's fauna is to-day at a very low ebb, but if sanctuaries are opened where the slaughter of game is prohibited and the surrounding country governed by a strict closed season, there is no reason why sport cannot be enjoyed. Not, perhaps, as of old, but definitely on a far greater scale than is possible to-day. The rhino, of Assam, is a shining example of what game preservation can do, and it is to be hoped that the Indian Government, and all other governments who have valuable fauna to protect, will open still more sanctuaries, thereby ensuring the preservation of rare and beautiful animals for posterity.

GERALD B. EASTMURE

WATERCRESS, scientifically grown, is one of the finest sources of health-giving vitamins and mineral salts of any food throughout the winter months. It has a high content of iron, calcium, potash and vitamin "C" and can be eaten without the risk of cooking diminishing this content.

The watercress grown by experts in the Alresford district is almost solely grown from pure water obtained from "boreholes" or artesian wells, varying in depth from 100ft. to 350ft. This water has, from the grower's point of view, the tremendous advantage that the temperature only varies two degrees winter and summer. This not only allows the crop to grow evenly, but also makes it more pleasant to harvest it during the months from December to April, or even well into May.

The "beds" are constructed (subject to there being the necessary water below) by excavating to a depth where gravel is found, and then levelling that off in order to give the necessary run of water so that it flows continually at a given speed. This run or fall varies according to the grower's own theories, but it can be taken that one inch in six yards is generally considered about right. Most boreholes are 8ins. in diameter, and their delivery varies from 10,000 gallons per hour to 25,000 gallons, mostly governed by requirements and depth of bore. The beds are usually 10 yards wide, but lengths greatly vary as there must be a stream or river to take away the exhaust water, and this may be as short as 40 yards or as long as 250 yards from the bore, dependent upon the width of the valley where the beds are made.

The heads of the beds are at the borehole end, and a concrete wall about 6ins. wide and 9ins. high is built with openings in it—the number of openings per bed is a matter of individual taste—with a sliding hatch to control the amount of water entering each bed. The divisions between beds are also walled, and the bottoms have walls with a varying number of outlets. These are also with hatches. The control of these inlet and outlet hatches is one of the secrets of growing watercress, for it is absolutely essential to know when to allow the cress more water, and just how much to give it. A crop may easily be ruined by giving it

HAMPSHIRE WATERCRESS

too much or too little water, by giving it at the wrong time, or by allowing too much to enter through the inlets and not enough to escape through the outlets.

If too much water is allowed to remain in the beds, the water "backs," become cold, and the crop will go off in a very short time. But the crop's greatest enemy is frost, and when one realises that the harvest months are the winter's coldest, it can be seen that there is a good deal of experience required to grow the cress.

As the water, in winter, is comparatively warm, it is essential that the cress should be kept under it during sharp weather. Here again, considerable skill is called for, as frost may come in a period when the cress is not in a fit condition to be given more water. This difficulty is overcome by "knocking it down," either with special rollers, or by hand with birch or heather brooms. Many growers will not tolerate a roller at any price, and insist on use of brooms; others use both, but only use the roller in cases of emergency. The advantage of a roller is its ability to cover a bigger area in a shorter time than could be covered by men with brooms.



PREPARING ONE OF THE BEDS FOR SOWING

Watercress likes a lot of light and, in its growing season, will grow more during light nights than when there is no moon. Obviously it also likes rain, and during a mild, drizzly spell such as we usually get in January, it grows too fast, and it is then something of a great problem to keep it back. It must not be allowed to get too high because February inevitably brings bitter winds, which will cut it down and turn it yellow.

The cress is pulled up by the roots, the roots are cut off in the bed, and the cress is taken to the packing shed. Once there, it is bunched in rubber bands—some is packed loose—and three dozen bunches are packed in a chip. This chip weighs approximately nine pounds when wet so as to be sure of there being a generous seven pounds on arrival at the markets all over England.

When the season commences, special trucks are used, and in many cases these go to their destination without transhipment. There are upwards of half a million chips per season despatched from the Alresford district alone.

Watercress cannot be grown everywhere. It has been tried in many places, but there are only about six districts where the mineral content of the water is suitable. The initial cost of installing cress beds is comparatively high. In most cases to purchase suitable land, excavate, level, bore, build walls, packing sheds and so on works out at anything up to £1,000 per acre. Unfortunately, since Alresford is famous for its cress, there is practically no more land in the district suitable for extensions.

Nevertheless, once the fairly considerable initial problems have been overcome, a watercress farm can be kept going without undue risk. The beds are replanted from early July onwards, specially grown plants being used which have to be laid in the beds, head to the bottom, with the water level so low that the bed is little more than damp. About a month after planting, the bed may be thinned, and the plants obtained put in another bed.

Several varieties are grown but "brown" and "green" cress are the most popular sorts, with a slight preference for the "brown." This requires less brush work, weighs heavier, travels better, and the flavour is more pronounced.

SPRINGVALE