EAST AFRICAN GAME

By F. C. Selous in The Field When on a visit to British East Africa last year (1909) it was my good fortune to travel from Mombasa to Nairobi in company with the then acting Governor of that territory, the vet-Jackson. It was during the wait at the little railway station situated in the midst of the vast expanse of the Kapiti plains that Mr. Jackson called my attention to some dwarf mimosa bushes, about 2 ft. in height, which are scattered about all over the plains. In the days when rhinoceroses were plentiful in this district these thorny bushes, he told me, formed the chief food of those animals, which browsed them down so closely, eating all the wood of the twigs as well as the leaves, that when the grass was over a foot in height they were entirely hidden from view, and many sportsmen were led to believe that they had actually seen rhinoceroses, eating grass, when in reality the animals they had watched had been browsing on the stunted mimosa bushes, which were covered and hidden by the herbage. Mr. Jackson was emphatically of opinion that the black or noceroses feeding for more than an end of the horn.

After having watched the cow and noceroses feeding for more than an end of the horn. tion had always shown him that when one of these animals appeared to be doing so, it was really feeding on the leaves of certain plants or low thorn bushes growing amongst and hidden by the grass. The late Mr. A. H. Neumann, too, told me shortly before his death that he natter my own too, told me shortly before his death that he had come to the same conclusion, and in this matter my own experience in Southern Africa entirely agrees with that of these two great authorities, for in the last-named portion of the same conclusion, and in this death that he compared to trot with short, high steps, first a few yards in one direction, then in another, evidently not realising exactly where the conclusion. authorities, for in the last-named portion of the continent I always found the black rhinoceros a browsing, never a grazing, animal. It is only fair, however, to state that some sports-

then of great experience hold a contrary

About a month after the date of my conversation with Mr. Jackson at Kapiti station regarding the habits of rhinoceroses I had a very good opportunity of observing two of these animals feeding on an open plain, upon which apparently there was nothing growing but the stubble, only a few inches long, of dry, withered grass. I was then travelling with a friend over the country between Mount Kenia and the Aberdare range. In the morning we had reached the Sungari Rongai River, and after we had pitched camp W., who had been in this district the previous year, rode out to look for oryx, whilst a little later I too went out on foot, taking with me my two Somali gun-bearers and a couple of porters. After having followed the course of the river for about a mile, we were just turning away across the plain to the south, when we saw something lying at the foot of an antheap about 300 yards ahead of us, which Dudy, one of my Somalis, who at the moment was carrying my glasses in his hand, after a careful scrutiny pronounced to be a very young zebra foal. As Dudy had very sharp eyes even unassisted by glasses I felt sure he was right, and so, not wishing to disturb the little creature, which I thought had been left in hiding by its mother, I turned a little to the right, and we were passing the antheap at a distance of about 150 yards when the other Somali said that what Dudy had taken to be a young zebra was, he thought, a leopard. The latter then looked again with the glasses, and said it was a cheeta. Whatever it was, it remained perfectly motionless, and as it was lying flat on the ground and was therefore partially hidden by the short, dry grass, it was really almost impossible to identify it exactly. As I felt sure, however, that it was either a leopard or a cheeta, and expected every instant that it would spring up and dash off, I sat down and fired at it without more ado, and with an uncommonly lucky shot, hit a spotted animal through the shoulders, killing it almost instantly, as it only made one spasmodic leap in the air and fell dead.

On walking up to it I was somewhat disappointed to find that my victim was neither a leopard nor a cheeta, but only a large Serval cat. As, however, it was a fine specimen of its kind and I wished to preserve it whole for setting up, I told one of the porters to carry it back to camp and put it in my tent, that I might skin it carefully myself in the evening. We then walked on to the highest point of ground immediately ahead of us, whence we obtained an extensive view both down the valley of the river we had just left, and over the rolling, grassy plains stretching away to the foot of the Aberdare range. There were no antelopes of any kind in sight, but quite near to where we were standing were six rhinoceroses. Three of these were together about 400 yards to our right, one was alone about the same distance ahead of us, whilst two others, a cow and a half-grown calf, were not more than 150 yards away, just at the foot of the rise on the highest part of which we were standing. All six were out on the bare, open plain. I now sat down, and telling my comto do the same and to keep quiet, I watched for a long time the two rhinoceroses that were nearest to me. They were evidently feeding, and a casual observer would certainly have come to the conclusion that they were cropping the short, dry grass which apparently formed the only vegetation on the plain. Every time they raised their heads I could see through my glasses their jaws working, as they crunched whatever it was they had taken into their mouths. I noticed, however, that they always fed for several minutes on one spot, and then walked slowly on with their noses near the ground for some little distance before stopping to feed again. The habit of the black rhi-

noceros to scatter its droppings is well known to all African sportsmen, and I had a good oprtunity whilst watching the two which were so near me on this occasion of seeing how this was done. As the droppings fell the old cow kicked out backwards with her hind feet and broke them up.

In South Africa, where all the black rhinoceroses I ever met with were always in bush country, I never saw this act performed, and concluded it was done with the nose and horn, as the natives asserted, and as the semi-circular furrows in the ground seemed to indicate. But this surmise was either unwarranted or there is some difference in the habits of black rhinoceroses in this respect in different parts of their range, for in East Africa, where these animals can be watched in open country, the observations of both the late Mr. A. H. Neu-

dently not realising exactly where the sound which had disturbed her came from, nor what it portended. She looked most truculent, but I believe she was really only alarmed, for presently she trotted off, closely followed by her calf

On the following day I came close to this same pair of rhinoceroses again—at least, I think they were the same—and on this occasion they ran off at once on hearing me fire at an oryx, so I do not think the old cow had had any desire on the previous evening to do anvthing but escape from a danger, the nature of which she had, however, not been able to exactly locate, or to fully realise. As soon as the two rhinoceroses were out of the way I walked down to where they had been feeding all the time I had been watching them, and soon satisfied myself that they had not been eating grass. I found scattered all over the plain a kind of fleshy-leaved plant, which grew in dense clusters from 3 ft. to 6 ft. in diameter, and it was undoubtedly on the leaves of this plant that the two rhinoceroses I had been watching had been feeding. In all probability, too it was been feeding. In all probability, too, it was the abundance of this succulent food on this particular plain which attracted the rhinoceroses to it, for I subsequently noticed that some of these animals were always to be seen feeding there, and that everywhere they had cropped the close-growing clusters of juicy leaves I have alluded to down to within a few inches of

On the following day I again found four

rhinoceroses feeding on this same plain, and whilst stalking a herd of oryx had to crawl past one of them within thirty yards, and I saw that he was feeding on the same clusters of fleshy-leaved plants on which I had observed the cow and the calf browsing the previous evening. Whilst' I was watching him ne never ate a single mouthful of grass, but after selecting what he fancied from one patch of leaves walked on to the next before feeding again. On the morning of this day W. and I had made a long round in search of oryx, but had seen none, nor any other game, in fact, with the exception of two elands, a bull and a We were returning towards camp, when about one o'clock we came on a rift in the dry, level country, sparsely covered with small scattered thorn scrub, through which we had been riding. Down this narrow ravine ran a small stream of water, on the banks of which grew some fair-sized trees and a good deal of thick bush, interspersed with little open glades carpeted with short, green grass, in one of which we came on a herd of impala antelopes. After having off-saddled and rested our horse and mule for about an hour we again saddled up, and had reached the height of ground beyond the valley when we saw some animals in the distance, which our glasses showed us were bryx. They were in the grass plain just befor about a mile from where we were standing. As I had come to this part of the country under W.'s guidance with the express object of obtaining specimens of what were said to be Oryx beisa, I now left my friend with the horse and mule and all our native attendants, and set out alone with Dudy, my Somali gun-carrier, to try and get a shot at the oryx. As I left him W. said laughingly, "I won't fire at anything whilst you are away but a lion." I had only got half-way to the oryx when I heard several shots, and learned later that my friend had not only fired at but killed a fine old lion. It was the very hottest time of day, and therefore just the hour when one would least expect to find a lion strolling about, and the explanation, I think, is that Dudy and I muct have walked close past this lion as it lay resting under a thorn bush (though, unfortunately for me, we never saw it), and that as soon as we had passed it got up, and was making its way towards the better covert in the wooded ravine when it walked right on to where W. was sitting with about a dozen natives. My friend saw it slowly approaching through the thin scattered thorn scrub, and when it was evident that it would pass quite near to where he was sitting he

made a move to intercept it. The lion then saw him and trotted off, but he disabled it with his first shot and soon killed it. This was a very large old male lion, as large as lions grow,

I think, but it had not very much mane.

After hearing W's shots I went on after the oryx, and presently found that they were quite 500 yeards beyond the farthest edge of the thorn scrub, on a perfectly bare, openplain. The chances of getting within shot seemed very remote and Dudy said I could never do it, and wanted me to fire some long shots from where we were; but as I am always very adverse to firing long shots at game I determined to try to crawl to them, and I eventually got within 200 years of six of them, passing the rhinoceros on the way, as I have said before. Of these oryx one was as I have said before. Of these oryx one was evidently a bull, but his horns were so excessively short—I do not think they could have been much over 20 in long—that his head would not have been worth keeping as a trophy, so I picked the one amongst the other five with the best horns and dropped it on the spot with a shot high through the shoulders. Fearing that it would get up again and go off, I ran up as quickly as possible and despatched it with a second bullet through the heart. It was, as I knew, a female, a beautiful creature, though very much smaller, and ful creature, though very much smaller, and with very inferior horns to its near relative, the gemsbuck of Western South Africa.

Directly I fired the five oryx which had been feeding near the one which fell to my shot dashed off without a moment's hesitation and joined some others at a little distance, when they all galloped off together. The rhinoceros I had passed so closely at once followed them, and, though only going at a trot, kept quite near them. They soon ran right on to another rhinoceros, which then trotted off in front of them, whilst a cow and calf-the same, I feel sure, which I had watched the previous afternoon-also joined in the stampede and ran off in the same direction, but a hundred yards to one side.

A few days after this experience I shot a good bull oryx, and W. also shot two others in the same locality. I therefore had the opportunity of examining carefully four animals of this local race. Now I am sure that these oryx found on the Sungarirongai river and in the adjacent country are not true Oryx beisa. They much more nearly resemble the fringe-eared Oryx callotis; indeed, in their face markings, except that the dark patch be-neath the horns is joined by a narrow band of the same color to the dark patch on the nose, as in Oryx callous by Messrs Thomas and Sclater in their book on the African antelopes. They have also very much shorter, horns on the average than the true Oryx besia, and in this respect again more nearly resemble Oryx Callotis. Their ears, too, are longer and narrower than in the former species, and though in the specimens which came under my notice none were so fully tufted as in the typical fringe-eared species, they were all tufted to a certain extent, and in the case of the female which I shot, the fringe at the end of the ears was quite well developed. In general ground color they are not so red as in the typical Oryx callotis, though here again they vary, as in the same specimen shot by myself, in which the ears are well fringed; the ground color of the face is of a pinky

Curiously enough, this undetermined race of East African oryx, which far more nearly resembles the fringe-eared species than the true beisa, is separated from the nearest point of the former's range by some hundreds of miles of country, in which there are no oryx at all, whilst northwards from the Sungarironga river to the west of Mount Kenia, where obtained my specimens, oryx are met with continuously all along the Gwasa-narok and the Gwasa- nyiro, and from thence, without a break in their range, to Lake Rudolph, Abyssinia, and Somaliland. In these latter countries there is only one species of oryx, and that is the true beisa, and it would be interesting to determine how far south this true species is found without any trace of admixture with the fringe-eared Oryx callotis, whose true habitat is far to the south and east of Mount Kenia. It would certainly seem that at some not very distant time a certain number of fringe-eared oryx must have wandered northwards beyond their usual habitat until they reached the most southerly country range over by Oryx beisa, on the confines of which the two species now interbreed. In the most southerly herds the animals are still preponderatingly Oryx callotis, but grade gradually into the pure Oryx beisa to the north.

As my experience has been so very limited I am perhaps scarcely justified in putting forward speculations concerning the origin of this somewhat puzzling race of antelopes, but their near approximation in several particulars to the fringe-eared oryx and their presence on the southerly confines of the range of the true beisa, which is far removed from the nearest habitat of the true callotis, are matters of great interest to the naturalist, which I must plead as my excuse for making any suggestions on the subject.

THE DRUMMING OF THE RUFFLED GROUSE

(By H. E. Tuttle.)

In May of 1909 an unexpected opportunity offered to me the chance to photograph a wild cock grouse in the act of drumming. I had often sneaked up on the wary bird hoping

to catch a glimpse of him as he rolled forth his thundering call (?), but at the last moment he had seen me and flushed with a roar of

Once I spent the better part of an afternoon stalking a ruffed grouse that was drumming at intervals in a birch thicket on the outskirts of a grove of pines. I had approached near enough to hear the vibrant hiss of the air through its wings at the end of the opening drum-beats. A wide swinging hemlock bough shadowed the bird and the indistinct something that stood erect behind the hemlock bough might well have been a stub of the prostrate log, had I not seen vaguely the blur of wings and heard the throbbing wing-beat. I tried to crawl nearer, but the partridge, wary as always, ceased its drum-ming and with ruffs extended and tail spread strutted slowly to the end of the log, whistling the querulous, threaty "quit, quit" of alarm. A moment later he became thoroughly scared, and leaving the drum log, sprinted for the shelter of the low branches.

I lay on the soft brown leaves and felt yaguely that I had unconsciously stumbled on a serial story and had arrived at the unset.

on a serial story and had arrived at the unsatisfying catchwords, "To be continued in our

The Small Boy Assists

Weeks later a small boy came to tell me that there was a partridge back of his cabin that "Sat on a log beating himself with his wings like anything." My eager questions surprised him, but he was quite certain of what he had seen and offered me the use of his cabin. I conferred with one who had often followed the trail with the camera and we made our plans. With the boy's generous permission to sleep in his cabin we were not

long in getting started. We found the drum log easily. It was distinguished from the other fallen logs in the vicinity by a few feathers and other signs of usage. The fact that an old kerosene can, several tin pots and scrap timber lay near, rather detracted from the romantic idea of an ideal trysting place. These weather-stained relics, however, helped greatly in converting the cameras and their tripods into inconspicuous features of the landscape. The tripods were set up within a ten-foot radius and the cameras arranged to sweep the log. We then focused by the aid of a lighted match, as by this time it was quite dark, adjusted the cords to their triggers and finally covered cameras and tripods with twigs, leaves and a rusty tin cup! (We later found that this elaborate concealment was wholly unnecessary.) Before turning in that night we speculated, as was natural, as to whether "our bird" would drum under the new conditions. We had little hope that he would.

A Woodland Reveille

The night passed quickly. I do not think either of us slept very well. And at five in the morning I heard the seemingly muffled drum-beat, "Thump, thump," and then the roar of wings ending with a staccato whirr. That bird must be well down the valley," I thought, sleepily. A moment later when I looked out of the window I needed no field glass to pick out the stiff, erect form on the drum log, barely hidden by a chestnut sapling

Successful Photographs on the First Trial The woods were very still and the sun had not yet broken the gray light of early morning. Crows cawed and flopped overhead, unafraid. The cock grouse on the log stood erect, his crest and ruffs extended, and his broad tail braced across the log. Suddenly he seemed to stiffen perceptibly, his neck and breast swelled, then his wings flashed out and fell limply at his sides. The throb of the preliminary wing-beat boomed out. A moment later it was impossible to follow the wings as the bird blurred with the effort of the thundering drum-like roar. I forgot all about the camera man, asleep in the bunk. I forgot everything except the bird on the log. It was fascinating to watch him. The wings seemed merely to flash out at his sides and then drop loosely. He rarely changed his position, standing motionless after he had finished and seeming to be listening intently. Then I remembered the camera man and woke him with a

"He's there-on the log." He watched the bird for some time and then decided to spring the cameras. One exposure was made while the bird stood listening. I waited until I saw his wings flash and a moment later I pulled the cord. The bird never stopped drumming. He never so much as turned his head.

We rejoiced and planned whole series of pictures which, unfortunately, never were taken. It was now about seven o'clock and the sun well up. We removed the cameras, the bird having flown almost as soon as we left the cabin.

There was a good deal of suspense in the darkroom until the "fixing" was over and we could hold a rather weak negative to the light. The pictures were a decided success. Later in the week we were at work on a partridge's nest found within a hundred yards of the drum log in some thick oak second growth. Mr. Starbuck, the camera man, secured several pictures of the sitting bird. My attempts failed utterly, owing to a faulty shutter. The hen was very courageous and allowed us to approach within two two or three feet of where she sat deep in last vear's oak leaves. As the cock grouse was scared off during the



Sportsman's Calendar

JULY

Trout, Salmon, Grilse, Bass. One of the two best months for seatrout fishing in the estuaries and inlets.

week we were unable to get any more pictures. Two of the three pictures of the drumming grouse have been retouched. The large one, however, was merely darkened to counteract the effects of a stain on the negative. Because of a bad stain on the other negative was necessary to retouch the bird's tail, a difficult and unsatisfactory job, especially on a 4 x 5 negative.

How is the Drumming Produced? It is impossible for me to explain how the booming roar of the grouse's drumming is produced, but it is not difficult to destroy the last remnants of the old illusions. That the bird does not strike the log with its wings has been pretty well established as a fact. It is inconceivable to me how the bird could strike the log with its wings, yet this theory was long regarded as a likely one. All of the logs on which the grouse were in the habit of drumming and which came under my notice were solid, not hollow, though some were rotting away in decay. In drummnig the wings neither touch the body, nor are they thrown forward so as to touch in front. This observation is thoroughly substantiated by the camera, which shows the wing at the full swing of the preliminary "thumps." I also noticed that the upper breast and throat appeared to be swelled with air so that the bird's outline before making the first wing-beats was somewhat that of a pouter pigeon. What effect, if any, this swelling of the breast has in producing the drum call, I cannot say. To watch the grouse at the drumming is at the same time a mystery and a revelation. A mystery because after having seen numerous performances I am as much in the dark as ever as to just how the noise is produced. A revelation from the mere fact that the act of drumming is totally unlike anything I have seen before and not at all as I had pictured.

The grouse roosted quite near the log if not occasionally on it. Perhaps one of the most interesting features of the drumming was to see the change in the bird's attitude from a skulking shadow to a miniature turkey cock in all its glory. From the moment the bird mounted the log till he left it to sneak away his stiff, erect attitude never left him. I have never seen a cock grouse spread his tail erect, or peacock fashion, though this feature of the strut is made much of by other observers. The hen grouse in protecting her

young will often assume this pose. As for Calling Grouse by Imitating Their Drumming

It has been stated that ruffed grouse can be called by imitating their drum note. I do not doubt it, but should like to see it done. I have often tried it myself and as often have failed. I think that it would be exceedingly difficult to imitate the drumming closely enough to fool a grouse, yet the bird may want to be fooled or again it may be curious However, I have had no experience in this direction. The statement that the "whirr" produced by the grouse in drumming is essentially the same as that caused by the bird in "flight" is to me the easiest explanation of that thundering reveille, the mystery of the spring woods.-Recreation.

INSTRUCTION IN HONESTY

A few years ago there was a shiftless colored boy named Ransom Blake, who, after being caught in a number of petty delinquencies, was at last sentenced to a short term in the penitentiary, where he was sent to learn a trade. On the day of his return home he met a friendly white acquaintance who asked:

"Well, what did they put you at in the prison, Ranse?" "Dey started in, to make an honest boy out'n me, sah."

"That's good, Ranse, and I hope they suc-"They did, sah."

"And how did they teach you to be honest?" "Dey done put me in the shoe shop, sah, nailin' pasteboard onter shoes fo' leather soles, sah."—Chicago News.

"So you are a bill collector," said the person who is careless about debts.

"Well, you shouldn't be short or discourteous. If it weren't for people like me you'd have been out of a job sang ago."—Washing-

How often as we sta heaving mass do we de ance. What knowledge have we? We do not ev why the density of salt : of the oceans than in ot to clearly perceive your work as I do with a brigh ing forth a very Niagara Fritz, my assistant, th

knowledge-seeking mood

from my examination of asking "Are all the ani use?" Here was a pretty professors propounded on the beach of a lonely both sides of the question of thought that cleaves c Book argues that they a in its wide field of disco Look at the sea before u that live therein has Man ed or controlled save by living organism into a great herds of sea elephan in the Antarctic are almo The mightiest forms that great Sea Lizard famil things with strong-clawed er than your whole body, China's painted Dragon, ar human race by some imp an odd backbone—by the of those backbones susper and it alone was longer t What does Man know brates that inhabit the dar thousand fathom line. This drag that reaches brings u tions. There is no doub woven into the sea-serpen tions of low forms, ell or have been taken. Many have seen some huge thing, eyes. How many of the roam or have roamed the ea subdued? As far as my lit I perceive that each order below until invisibility is for Man in the sequence, sa gather for food. Man does in a million from the ann seas even though there are men now upon the earth. trade wind that daily starts time. See the beneficent four times a day washes as sand thousand strands, note tables that stand on all the firs a hundred yards high tha and hold and distribute the rivers; a thousand streams Straits of Juan de Fuca, guar by mountainous ranges, pla lift, and remember that they in formation the ranges t of the Straits of Messina. I Man in her plans when she mation along these southern seemed to be the only anima in her toils. I think, lad, we great deal too seriously. great Creator's plan has its thing has control of all. "And what is a Mermaid

Fritz for the third time. I and returned to the object I is only a catchword applied t the Skate, but a truly wonde Just similar to those of some this odd parchment, boatlike that it may float readily, but the egg inside that it floats d The female that gave birth boats, as we may call them, tant, flapping her great leather bottom of the sea like some bird of prey-a fish of prey s case drifts along near shore shallows, the heat gradually odd shaped, curious looking Once the young skate is large open the rear hatch, to yet li the stiffly pliant parchment soon we have another free

We were approaching the I of the great salmon trap that long straggling fence a full ha shore. The two watchmen v in, and they were much asto told them of our having seen first outer inclosure of the heart-yesterday. We had w mammal-for a true mamm; suckling its young as does th -rising and falling, swimmin ly examining this new grove plants it had got among. It turn in the trap so it adopted of sounding and turning its when its great head was on th sixty feet below surface. It trap that it did this and ther out, for driven as are these gre they call "piles" and good an as these Douglas firs are ,they withstood the rush of the gr creatures once it had room to

What wondrous evolution in the great ocean; what s sends its living, gleaming str fish seeking new feeding grou Straits of Fuca the shad and