

animals can be destroyed by the above-described method, I gave the people permission to drive, with the restriction that the same village should not do so more often than twice a month. But judging by the skill of the net-layers, the wildness of the *paa*, and the fact that these little buck appeared to know all the ropes in the game, I suspected that the natives had in fact not waited for permission either from the German or British Administrations, but had been driving all the time on the sly.

ON CROCODILES

BY C. W. HOBLEY

Discussions are sometimes heard in B.E.A. as to the size attained by the crocodiles which abound in the various lakes and rivers.

The largest authenticated specimens which have come to my notice are the following:—

1. Crocodile shot by the Duke of Mecklenburg at Mwanza on Lake Victoria, in 1905. It was seen by a Uganda railway officer, and it measured 21 feet 6 inches.

2. Crocodile shot by Captain Riddick at Namasagali on Lake Chioga, in 1916, and stated to have measured 26 feet.

Some very large specimens are found in the pools on the Nile below the Murchison Falls.

The largest I have shot myself was 18 feet 6 inches long, and this specimen was killed in the Lower Sondo on Miriu River in Nyakach. The crocodiles in Lake Baringo rarely exceed 9 feet. They are believed to be harmless as regards man; and, judging by the way natives wade about in the lake fishing, it would appear to be correct.

The crocodiles in the Sabaki River, as far as my observations go, do not often exceed 12 feet in length.

The Tana River contains some large crocodiles; but I have never seen any whose length and bulk equalled those of the

Lake Victoria basin. The Juba River crocodiles are very numerous, and very dangerous ; but I have never heard that they were of exceptional size.

Some fifteen years ago, the Deshek Wama Lake, on the west bank of the Juba River, dried up and remained dry for over a year. In the bush around the desiccated bed of the lake there were several thousand crocodiles lying about unable to move. The O.C. troops in Jubaland at the time took out a company of K.A.R., and many hundreds were shot at close quarters.

Crocodiles live mainly on fish, but will seize buck when they come down to drink ; and natives allege that they occasionally succeed in dragging in a buffalo ; there is a well-known case, too, of a rhino being dragged below water by crocodiles. I once saw the bones of a young hippo taken out of a crocodile at Kisumu.

The adult hippo is, however, immune from attack, or he could not inhabit the same river or lake. I once witnessed a difference of opinion between a hippo and a crocodile. A large crocodile was lying on the sandy bank of the Tana, near Tharaka country, and, seeing or hearing my approach, it slid quickly into the river. A school of hippo were blowing in the river just opposite, and apparently the crocodile in his rush collided with one. The hippo in question gave an angry snort and put his head down, and a violent struggle took place ; the water was churned up, and at one moment the back of the crocodile appeared above water, and then the body of the hippo. This went on for a minute or two. The hippo then put his head up and blew the water out of his nostrils as if nothing had happened ; so, presumably, the crocodile was worsted.

There is, I believe, an old classical tale (Is it in Herodotus ?) that a certain plover picks the crocodile's teeth. I have never seen this plover ; but once, on the Nzoia River, near Mumias, I saw a crocodile lying on a rock with its mouth wide open, and a grey wagtail walking about in its mouth, but I could not be sure as to its object ; it was possibly picking off leeches. I awakened the crocodile with a shot in its flank, and it disappeared. Crocodile flesh is tabu to most tribes ; the

Wa-Pokomo of the Tana are the only people I know who openly admit that they eat it.

As the crocodile is not known to walk great distances over dry land, its wide distribution, coupled with the fact that there is only one species, opens up a great field for speculation. For instance, crocodiles are found in many small rivers along the coast which rise only a few miles inland, and only run for a short period every year; during the remainder of the year these rivers consist of a few isolated pools, to which the crocodiles retire during the hot weather.

These rivers, further, are often many miles apart, and separated by arid ridges rising high above the river-beds, and thus there is no chance of their being temporarily connected during periods of flood.

In the Rift Valley, Baringo Lake and the north end of Rudolph Lake abound with crocodiles. Lakes Hannington, Nakuru, and Elementaita contain none; it is true that these are very alkaline, but they are also absent from Naivasha, which is fresh. Probably, therefore, Naivasha was formed after the distribution of this species had taken place; and as Naivasha is practically devoid of fish a crocodile might find it difficult to live, even though there are frogs in myriads.

The crocodiles in Lake Jipe are very numerous and dangerous. During the dry weather, when the water is low, parties of natives, however, occasionally wade across the northern end where the water is shallower; they carry long staves and beat the water, and hit any crocodile, which comes too near, over the head. Lake Jipe drains into the Rufu River.

Just north of Taveta there is a beautiful crater lake called Chala. The natives state that this contains 'crocks'—presumably, they came from the Lumi River, about three-quarters of a mile away; but the precipitous cliffs which surround Chala must have been difficult to negotiate.

I will close these discursive notes with an account of an incident I once observed on the Sabaki, a few miles below the Tsavo junction.

I came down to the river and saw about half a dozen ducks swimming about on its surface, and when I reached the bank

they rose in flight. I shot one, it dropped into the stream, and commenced to float away, and, as the river was very low, I waded in to recover it, and was within about twenty feet of it, when a crocodile's head came up and absorbed the bird. I then hastily retreated to the bank. Now, why did not the crocodile attack the ducks when they were unconcernedly swimming about, a few yards away? In some parts of India, natives catch duck by floating down stream to where they are swimming, and pull them under water by the legs; the fowler has his head above water, but under a calabash, perforated with holes, through which he can see and breathe. If a human being can snipe duck in this way a crocodile certainly could.

EBURRU STEAM-JETS

BY J. H. HERVEY PIRIE, M.D.

Recently, in company with Dr. Thomson, I had an opportunity of visiting Eburru, to see the steam-jets of this region. Many are visible from the train on the hillside south of the station, especially in the early morning, when the steam condenses freely in the cool air, and in the railway cutting a few hundred yards east of the station, you may even get a puff of steam in the carriage window as you pass by.

A plan of the district made by the Survey Department in 1915 shows some 60 jets within the area round the station reserved as a township site; 107 in the 1500 acres lying south and east of this; and 116 in the smaller area lying to the south and west. All these are within the area lying between the railway and the crest of the ridge of hill to the south. On the far side of this ridge, I understand, the jets are even more numerous, and some of larger size. A settler there has harnessed some of them, condensing the steam by allowing it to impinge on metal sheets, thus obtaining a constant supply of water for stock and household uses. Unfortunately we had not time to visit the far side of the range.

Of the jets near the station, many are quite tiny, issuing