arid conditions obtain their maximum development and only essentially desert dwellers are found within the borders of that inhospitable region. But in Joreh and Biskaya there are a very few zebra closely akin to the *E. Burchelli Granti*. I was unable to obtain a sufficient number of specimens to be satisfied that the differences I noted were constant, or were due merely to individual variation or peculiarity.

I include the table on p. 120, which may be of interest.

In conclusion, I may say that the giraffe (G. reticulata) occurs in astonishing numbers, elephants are fairly plentiful, but buffalo, rhino, and lion are extremely scarce. Topi, oryx, and lesser kudu are to be met with frequently in Joreh or Biskaya, and gerenuk and dik dik are common enough throughout Jubaland. In all the larger antelopes, however, except at Lorian, the effects of scanty grazing and the severe physical conditions of the country they inhabit are shown in their small bodily size and horn measurement, and this is especially noticeable in the topi and the oryx.

SOME NOTES ON FISHES IN BRITISH EAST AFRICA AND UGANDA

By F. G. AFLALO, F.R.G.S.

Looking at the fishes of the two Protectorates from the angling, and not the museum, standpoint, the traveller is certain to be amazed by at once (apart from those of the coast, which are for the most part travellers themselves) the remarkable lack of variety of type and the excellent sport which they afford.

Of the koli-koli, nguru, and other kinds to be found at Mombasa, Mr. R. J. Cuninghame has already written most instructively in these pages, and I gladly endorse his remarks, with the rider that, treating his subject perhaps intentionally from a somewhat academic standpoint, he did not, if memory serves me (and it must be nearly three months since I read

his contributions) lay anything like due stress on the wonderful chances which that port offers to the sea angler.

I enjoyed rather unusual luck there, since, on my first visit. in January, I was so fortunate, in only a few outings with Dr. Small and other residents, as to catch koli-koli of sixty-four, fifty-five (this one on my first day) and thirty-eight lbs., and nguru up to twenty-four. Both of these fishes—the former. the 'bayardo' of Port Sudan and the 'kokara' of Bombay waters, and the latter strongly suggestive of the Indian seergive good sport, the koli-koli being instantly recognisable, long before it is actually seen, by its curious habit of first fighting in circles, like a boxer revolving about an antagonist, and then boring headlong like our pollack. These fish are taken in deep water at the back of the reef, trolling with natural or artificial bait, and going five or six knots, but, curiously enough, the largest and most powerful fish of all that I hooked—our relations terminated a few moments later—was what, from earlier memories, I assume to have been a monster barracouta that took a spoon inside the reef, a little north of Mombasa harbour and in only a very few feet of water. At any rate, it ran out close on a hundred and fifty yards of tarpon line, heading straight for the coral barrier with tremendous splashing and seemingly dashing along the surface. As there was some little delay in getting down the sail (and we were running at the time before a strong breeze), it was quite impossible to save so heavy a fish. I never remember a barracouta, of which I have caught scores elsewhere, behaving in this fashion, but it must be borne in mind that the manœuvring of a big fish hooked in shallow water is always in marked contrast from its tactics in the greater freedom of sufficient depth to 'sound' in. Further effort on the part of those interested in sea-fishing will probably reveal the occurrence, at any rate at intervals, of tuna and albicore, with other game fishes, at Mombasa, but at present the catches on rod and line appear to have been limited to the three aforementioned, with the addition of the dolphin (Coruphæna) or 'filussi.'

Turning to the rivers and lakes, the angler (whose interests, and not those of the curator, are being considered in these few notes) has the choice of only a very few fishes, though

these few give first-rate sport. Passing mention must be made of the imported trout in the river Gura, which have already flourished in the third generation so remarkably in their adopted home that they are almost entitled to rank as natives. Unfortunately, as I found on a recent safari to the Aberdares, they have increased only too well, since few people fish for them and they have equally few natural enemies, with the result that there are far more trout in the river than it can support; and in proof of their poor condition I need only quote the fact that a fish of nineteen inches that I caught on a coachman' weighed only 2 lbs. 2 ozs., and that I returned to the river a score of equally lean kine over the twelve-inch limit. With a little attention, this should be a beautiful trout stream and a boon to future officials on short leave.

Apart from these settlers, the only fresh-water fish that can seriously engage the angler appears to be a type of barbel, found, as I understand, in a score or so of more or less well-defined species, sub-species and what not, but, for the angler, like the primrose by the river, it is just a barbel that takes a spoon, or even a red palmer and sundry other flies.

My only personal acquaintance with any form of this permeating barbel was at the Ripon Falls, Jinja, which takes us into Uganda, where, not being familiar with the local casting reel that I borrowed for the occasion from Dr. van Somerer, I caught only eight fish weighing in all 70 lbs. There were apparently two kinds, the one dark green and the other bronze, but how far either of these is entitled to specific distinction from Barbus Radcliffi I did not investigate. I should not accord these barbel at Jinja very high praise, for it is apparent that it is the weight of water below the Fall, rather than the efforts of the fish, which bends the rod. Still, having caught nothing better than two of 11½ lbs. and two more of 11 lbs., I am, perhaps, hardly entitled to return a verdict.

So far as Lake Victoria goes, between Kisumu and the Uganda ports, the angler need not lose very much time, as all the best fish seem to be of siluroid type, otherwise cat-fish, which give about the same sport as eels, and behave, indeed, very similarly when hooked.

At Namsagali and Kakindu, which are on the same bank

of the Nile fifty miles or so north of Jinja, good sport may be had with barbel and other silvery fishes, both trolling with spoon and baiting float tackle with bread.

The best fishing, however, in this part of Uganda is on Lake Albert, at Butiaba. I could spare only two days, but I contrived, again trolling with a spoon to secure Nile perch—the 'punda' of the local natives, and the 'baggara' of the Sudanese'—of 49 and 30½ lbs. and another very game fish, which I understand to be called 'tiger fish,' of 10 lbs. Of the last named, which has formidable teeth and the adipose fin more commonly associated with the Salmonidæ, I caught nearly two-score pounders from the wharf on a salmon-fly. The ten-pounder leapt in the air several times like a trout, but the perch had another trick that vividly recalled the last moments of some of my Florida tarpon. This consisted in standing, as it were, upright on the tail, and opening its enormous mouth to its fullest gape in an effort to shake out the spoon.

I only knew the tarpon (and not even all of them) try this at the last ditch, when close to the boat, but the Nile perch does it immediately on being hooked, first running out fifty to eighty yards of line, and several times before coming to the gaff. My own visit to Lake Albert was too brief and too imperfectly organised to admit of much success, but I have great hopes that Sir Frederick Jackson, K.C.M.G., who followed a week later, will have secured some really worthy specimens.

TWO RARE EAST AFRICAN ANIMALS

BY H. J. ALLEN TURNER

The last two months, October and November 1913, I have spent collecting natural history specimens along the southern edge and round the scattered areas of the Kakumega forest.

Perhaps the most remarkable of the little known animals

¹ These names, of which the first means donkey, and the second, cow, doubtless refer to the great bulk and somewhat clumsy build of the fish.