THE SUDAN'S SOUTHERN NATIONAL PARK

By A. B. ANDERSON

Formerly Assistant Game Warden, Southern Sudan. Photographs by the Author.



HE Southern National Park is best reached from Juba, which is the head of navigation for the mail boats which run fortnightly from Khartoum to connect up with the Kenya and Uganda Railway's services. There is a hotel (the only one in the Southern Sudan) and also an excellent aerodrome.

From Juba to Yambio there is an all-weather road and also from Juba to Wau via Tonj. Both these roads are good, but not tarred. Northwards from Yambio there is an all-season road for about 135 miles. From there onwards to Tonj there is a motor track which

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YAMBIO

BELGIAN CONGO

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YAMBIO

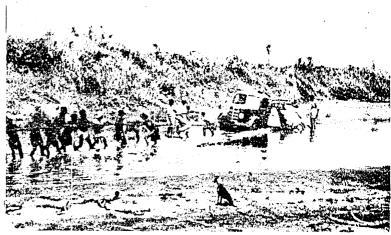
SOUTHERN NATIONAL PARK

YAMBIO

BELGIAN CONGO

is maintained by the Game Department. This track was traversed for the first time by a car in 1948 and it runs mostly through fairly thick bush country - chiefly Terminalia -and is cleared once a year by a gang of Natives who walk along it and burn off the long grass and cut out any trees that may have appeared. This is done early in January when the little swampy streams have dried out sufficiently to allow a motor lorry to cross. The track remains passable till about the end of March, after which date the River Ibba is liable to be swollen by the early rains and to be unfordable.

The park is inhabited by a few park guards and only a handful of white people have ever visited it—probably not more than 20 in the last 20 years. The Native park-guards lead a very isolated life in



Crossing the Ibba. The truck has broken through the crust of the vlei and sunk up to the axle.

small villages of about eight families, and only see a white man at the time of the annual clearing of the track. They have to grow their own food, and so live much as do the Natives outside the Park. Their duties are to ensure that no Native from outside penetrates for any purpose except the annual clearing of the track. There is of course good hunting, fishing and so on and quite a lot of wild honey to be collected. But the areas round the park are not densely populated and there is probably little poaching going on. The game is about as "tame" as it is in the Kruger Park.

Grass 15 ft. High

The entire area of about 7,800 square miles is covered with long grass which, at the height of the wet season, may be 15 feet high. This is burnt every year when a new crop springs up almost immediately. Near the streams there is grazing a week after the "burn." This is an important factor in maintaining the numbers of the animals. It is fortunate that there are three big rivers, the Sue on the west, the Gel on the east and the Ibba in the centre. Of these the Sue (pronounced to rhyme with coee) is the only one that has a definite channel long after it has left the park to the north; it reaches as far as a navigable affluent of the Nile.

It was down the Sue that the Frenchman, Colonel Marchand, steamed in his launch in which he had ascended the Congo and its tributaries to the Congo-Nile divide. At the divide he dismantled the craft and had it carried over on to the headwaters of the Sue whence he descended to Fashoda and from there defied Kitchener, who had just gained the victory of Omdurman. The other two rivers, the Gel and the Ibba, after passing through the park, lose



Ngaringba Rest House.

their identity in the vast flooded areas between the Nile and the Bahr el Ghazal.

The hard whitish clay soil, which covers most of the park, makes an excellent natural motor track once the vegetation has been removed. The vleis unfortunately are more sandy, and when wet, one is likely to break through the crust and sink immediately up to the axle. As the whole area is "fly country" no animal transport is possible and it is necessary to rely on one's feet or on motor lorries.

One hundred and thirty-five miles north of Yambio lies the last Native village. There is a mud and grass rest-house and firewood and water are obtainable, but that is all! Yambio is the last place before Tonj where any petrol or eatables can be bought. About 30 miles north of the Native village one crosses the border of the park at a stream called the Kidi. There is a rock pool with a quantity of fish in it (mostly Tilapia) and excellent drinking water. The Natives reckon that it still has one or more crocodiles and are rather scared when drawing water.

Regulations Unnecessary

From there on it is about 60 miles to Ngaringba Rest House, which is on the lbba not very far from the southern boundary of the park. The rest house is a mud and grass structure with three rooms, an outside rondavel kitchen and boy's hut. There is no attendant, as the park guards find it impossible to cultivate there owing to the number of baboons and other predators. However, the camp is right on the bank of the stream and there is plenty of wood about. It is a very pleasant place in which to pass a few days. Owing to the small number of visitors it has not been necessary to

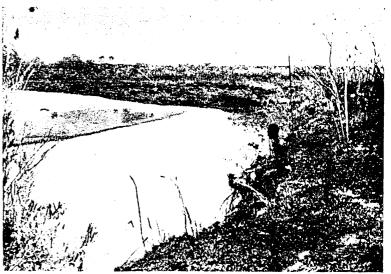
apply regulations such as are needed in the Kruger National Park. Approved visitors can walk or trek about as they wish.

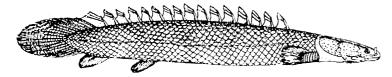
About an hour's walk north of Ngaringba there is a salt lick used by buffalo, giraffe and Giant Eland (Taurotragus Derbianus). Because there is no one living permanently at this rest house the game is in the habit of feeding right up to it. There are quite a lot of elephants in the whole area but they keep continually on the move. About an hour's walk south of the rest house there is another salt lick. Here one generally sees waterbuck, kob, hartebeeste, buffalo, giraffe and possibly oribi or reedbuck and Giant Eland. Lions are also present.

All this country is bushveld and one might be near Pretorius Kop as the general physiognomy of the vegetation is the same. A granite koppie about five miles from the camp has a curious gallery forest near it. This is true rain forest and contains true forest animals, such as colobus monkeys and possibly the giant forest hog (Hylochoerus meinertzhageni) and these are separated by more than 100 miles from others of their kind. This forest is unexplored and has scarcely been entered by any white man.

Lemurs Found In Forest Another curious type of forest occurs on some laterite plateaus where the dominant tree is the Anogeissus. This looks rather like a blue gum, its wood is rather similar in kind, being hard and resistant to termites. This tree seems to require a very well drained soil and is seldom seen after crossing the Congo-Nile border into the Belgian Congo. In the Anogeissus forests one finds one of the

Fish pool at a bend in the Ibba. The high bank allows good observation of the unusual species of fish.





Polypterus bichir (Lung fish). The peculiar sub-division of the dorsal fin is one of the most distinctive characteristics of polypterus.

After L. Agassiz in Dean. Copied by G. E. Laurence.

quick lemurs (also known as "bush-baby") Galago Senegalensis.

About 35 miles north of Ngaringha as the crow flies, but about 50 by the motor track is another rest house on the Ibba River. This has not yet been given a name but is situated on the edge of a vlei, where there is always game to be seen. In addition to the animals mentioned, as occurring at the first rest house, warthog, and the Bastard Hartebeest (Damaliscus Korrigum) may be seen. It is a most interesting place as so many species can be found there. In the pools of the little stream, strange cel-like forms of fish of archaic types exist, such as Polypterus Bichir and Gymnarchus Niloticus.

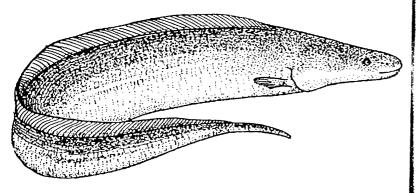
As the pools dry out, marabou storks and pelicans assemble and wait patiently for days on their banks for the water to fall sufficiently for them to wade in to the kill.

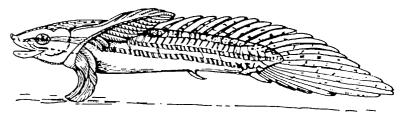
Interesting Fish Life
The fish life in the pools of the Ibba is interesting too. The pools

generally occur at a bend in the river and a high vertical bank allows one to watch the denizens, cat-fishes and so on, basking just below the surface of the water. The cat-fishes run up to about three feet in length and they afford food for many crocodiles which may be seen lying about on the sand banks. The crocodiles do not eat these fishes under water or put them to mature after capture in a "Croc's parlour," but take them out immediately on to a sand bank. There they rip off the flesh from the still living fish but they

Gymnarchus niloticus. The pelvic, anal and caudal fins disappear giving the fish an eel-like shape; the resemblance to the eel is accentuated by the thick glandular skin which even covers the head.

After Cambridge Nat. Hist. Copied by G. E. Laurence.





Larva of Polypterus. Note the external gills.

After Budgett. Trans. Zool. Soc. Copied by G. E. Laurence.

only take the flesh off the back and tail, leaving the belly intact.

The crocodiles then slip back into the water and the fish which is still alive wriggles weakly on the sand. Its next enemy is a bird of some kind, probably a scavenging hawk. And finally if there are any Natives about, tardy man will come to take any of the bits left that the crocodiles have disdained.

There are a few white rhino (no black as far as is known), but only a few pairs—perhaps five. This species seems to prefer to live along the banks of the Nile in the Sudan and is scarce in this area.

From this rest house on the Ibba it is about 30 miles to the next water hole called Damonga. Here is another very primitive rest house as well as a park guard post. This part of the park is without water and little game is to be seen. From there it is about another 30 miles to the main road from Juba to Wau and Tonj is not far, where petrol but no European stores may be obtained.

Buffalo in Thousands

The dominant animal is the buffalo.

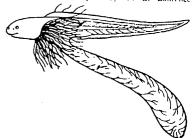
Indeed in all the long grass areas of
the Southern Sudan, as in Uganda, Buffalo are most numerous—
(there are thousands and thousands of them). The cattle diseases,
such as rinderpest, which they spread provide the game conservationist with many problems.

There are many other problems waiting to be solved. One of them is the fact that though the park is large and isolated and it has many species of animals, including white rhino and Giant Eland, yet the total number of individuals is not high. The causes

of this have not yet been established. In the case of Giant Eland, disease, notably rinderpest, is undoubtedly important. The water supply at the height of the dry season is deficient and there are few water holes. The three big rivers always contain water all the year

the fine external gills and the extraordinary large yolk-sac. Budgett. Copied by G. E. Laurence.

Larva of Gymnarchus niloticus. Note



(Concluded on page 55)

full-grown, had not yet reached the colouring of an adult. On examination of the crop and stomach I found the following: Two ground squirrels and the remains of a snake, of which I could not determine the species.

The fourth bird came from Ventersburg and also had not yet reached an adult age. On opening this bird the contents of the stomach and crop were three meerkats, two snakes and one lizard.

Building Their Nest The writer also discovered a nest being built on a koppie in the Bainsvlei area.

The work was done by the female, although the male bird assisted by bringing along the necessary sticks. Most of the building was done in the afternoon, the morning being spent hunting.

The writer lost no fewer than five of his best leghorns in two days, due to the ravages of these birds, one of which was so defiant that the writer's wife approached to within five paces before he flew away. The fowls were all destroyed with claws and none were killed with the beaks. This same fact was particularly noticeable with regard to the hares and ground squirrels whose remains were in the nests mentioned earlier. None of the skulls had been damaged.

The building of the nest took three weeks. Two weeks later the first egg was laid, and two days later the second one. The eggs were about the size of a goose egg, chalk white in colour with brown speckles. The nest was in a thorn tree about 13 feet from the ground, in a very awkward position to photograph. The hatching period was 27 days when one egg hatched out and the second egg two days later. Two days after this one young disappeared. The other young grew rapidly and was beginning to feather when Natives wantonly destroyed it.

Varied Morning Feed The food that had been brought to the young bird was very varied, such as a fowl, a ground squirrel and a snake for one morning feed. The food left by the young bird was invariably consumed by the mother-bird. On no occasion did I see the mother- and father-bird on the nest.

Compartive measurements with those of Dr. Roberts are given below:

	Adult	Adult	Young	Young	
	Female	Malc	Female	Male	Dr. Roberts
Length	940	888	912	860	785-815
Wing	630	590	620	600	575-665
<u>T</u> ail	360	330	350	350	275-320
Tarsus	115	110	112	110	97-120
Culmen	55	50	50	52	40.5- 49
Height of Maxilla .	26	22	23	22	21- 24
Hind Claw	50	48	50	49	44- 57

I would particularly stress that in the course of my observations

I found no indication by flesh or bones that these birds wilfully destroyed lambs or small buck. The whole intention of this article is to make an earnest appeal for the protection of the Martial Eagles, unique to South Africa, and prevent them being finally wiped out.

She Finds It Quiet Up Here



"A Broody Wagtail"—A photograph entered by Dr. V. A. Wager, Durban North, which received a special commendation in our competition. It was taken high up in a pine tree with an ordinary camera. A string was attached to the shutter.

THE SUDAN'S SOUTHERN NATIONAL PARK (Continued)

round; but away from them it is dry. There seems to be sufficient vlei grazing during the dry season and as soon as the rains fall the whole country is covered with excellent grass. But this grass is reedlike stuff when it gets big, and is unfit for animal food for several months of the year, especially at the height of the rainy season. It is possible that this is a cause contributing to the paucity of animals, experiments are required in controlling the grazing.

There are several other areas in the Southern Sudan where there are greater concentrations of animals and where it would be possible to establish parks. The Sudan is a poor country with little revenue and it is with difficulty that the Game Department, which pays all expenses in the park, balances its budget. The money which is spent on this park each year might perhaps be spent to better effect elsewhere because the park produces no revenue whatsoever as it is too far away to attract visitors.