

The White Rhino

JOHN HEPPEES describes an animal which is found nowhere in East Africa outside Uganda and whose future, he believes, is threatened with extinction by encroaching habitation

THE white rhinoceros is found only in Africa and is to-day so limited in numbers that it is generally classified as one of the world's "vanishing species". But, unlike most others thus classified whose decline has steadily progressed over a great period of time, the very existence of this rhino was not known until the last century. We now know that there are two distinct sub-species of white rhino generally referred to as the Northern (*ceratotherium simum cottoni*) and the Southern (*ceratotherium simum simum*).

The Southern race was once fairly large in numbers although its distribution was confined to a relatively limited area. However, the slaughter was so great, both by white hunters and by natives, that within a short time the race was in great danger of dying out. In 1892, Nicolls and Eglinton wrote that there was every reason to suppose that it was then extinct. Bryden also wrote in 1897 that it was practically eradicated and that its last home was reputed to be in a small north-eastern corner of Mashonaland. Later a few more were found in the lower reaches of the Umfolozi river in Zululand, and it is from this small remnant, probably under a dozen, that the southern race is to-day mainly descended. These survivors are now nearly all living in the Umfolozi Game Reserve and are believed to number well over five hundred.

The survival of the Northern race was by no means as dramatic. The first definite proof of the animal's existence was a single horn believed to have been taken from an animal shot by Major A. St. H. Gibbons, near Lado on the White Nile, and exhibited in America in 1900. Nothing further was then heard of the species until Major P. H. G. Powell-Cotton collected a series of skins and skeletons on an expedition into the then Lado Enclave in 1904—1907. The skeletons were examined closely and the race was declared distinct from the southern one, chiefly on the strength of distinctive differences in skull measurements.

Because of the tragedy of this species' near-extinction in the south, the animal was fairly soon placed on the protected list of animals in most of the areas in which it was found; and so fortunately the animal is still in existence in the majority of areas in which it was first discovered 50 years ago. This northern sub-species is found to-day in the north-west of Uganda, in part of the southern Sudan west of the Nile and as far north as the Bar-el-Ghazal Province, in the Garamba National Park in the Belgian Congo, and in the adjoining areas (to the Sudan and the Congo) of French Equatorial Africa.

In Uganda itself, the animal is limited to the areas west of the Nile and north of Lake Albert—the West Nile and West Madi districts. The southern limit of the area is approximately the Ora river; to the west, the Nile valley escarpment generally, with the exception of the Mount Kei and Midigo areas. The eastern boundary is the Nile itself, and in the north the area extends into the Sudan. The areas covered

by the white rhino in Uganda are not the same as those covered by the black, the former being found only west and the latter east of the River Nile. No records have been found of either of them crossing into the other's area, even during the periodical occurrence of the "dry crossing" on the Nile at Nimule.

The fascination this animal has for most people is the complete air of mystery which surrounds it. This is not only due to its sudden discovery and its dramatic fight for survival in the south, but also to its very localised distribution, and even to the name itself. For instance, why should this animal be found only in a comparatively small area of southern Africa, and then be completely unheard of for nearly two thousand miles until it is next encountered in north-west Uganda? Nobody knows. Even within its own territory the rhino is still comparatively localised. You will find a number of them together in one small area, and then a complete absence of their traces and tracks for a great distance, and then another pocket of them in a new area. Again, no one knows why they are so localised.

Even the name itself remains a mystery to this day. They are certainly not white. In fact, it is doubtful if they are any lighter in colour than the black species. Due to their habit of rolling in mud wallows, they often take on different colours from different soil areas, but in general they are a light battleship grey. One explanation, and definitely the most reliable to date, is that the name "white" is derived from the Afrikaans' description "weide monde" or "wide-mouthed". The white species, of course, differs in that, instead of the prehensile lip of the black, it has a wide, square-lipped mouth. In fact, when one gets a head-on view of the white rhino, walking towards one with its enormous "boxed" head held low cropping the grass, it is remarkably like the enormous mouth of the hippo.

The head is much longer, in some specimens as much as a foot, than in the black, and differs greatly in many details. Also, there are differences between the skull measurements of the Northern and Southern white rhinos which led to them being declared separate sub-species. As compared with the black, besides having a broad square upper lip, the white has its anterior horn slightly farther forward so that the front of the horn is level with the upper lip and tends to wear flat at the front of the base. Moreover, the eye is placed entirely behind the line of the second horn, and the structure of the upper cheek teeth is different. Also, the teeth of the black show a "ridged" appearance, whereas the white normally has flat grinding surfaces. The ears are held upright, are sharply pointed at the extremity and heavily fringed, while the lower portion is completely closed for some distance, so as to form a tube.

The white rhino is the second largest land mammal in the world to-day, being exceeded in size by only the elephant. A good bull will stand 6ft. 6in. to 6ft. 8in. at the shoulder, the average being about 6ft. and is reputed to weight anything up to $3\frac{1}{2}$ tons, as against $1\frac{1}{2}$ tons for an average black. In addition to having a much longer head, it also has a more "bulky" appearance and, perhaps for this reason, appears on first glance to be much shorter in the leg. The body has a barrel effect and the animal is remarkably "low-slung". On the nape of the neck there is a fleshy lump, but the skin does not tend to form folds as in the black, although these folds are present to a smaller degree around



A white rhino photographed in West Nile in typical environment (photograph by T. R. H. Owen)

the base of the limbs. There are three toes on each foot, making the spur the same as the black but approximately twice the size. It carries a shortish tail and, when alarmed, will curl it over its back—pig-fashion. The female has only a single pair of mammae on a small udder situated inguinally. The horns are square at the base and are bulkier than those of the smaller black; an average front horn being 30 inches long and weighing 15 to 20 lb. in the male. The horns of the female are, in both species, generally longer and more slender.

The white rhino is a very docile and even-tempered beast. It is a relatively simple matter to approach to within 30 yards and, even when provoked, the rhino will very seldom push home a charge. This, of course, makes the animal an easy prey for poachers—and photographers. When disturbed, it will often appear to “charge” the intruder, but this is merely a gesture and it will always stop about 15 to 20 feet away. The beast generally snorts, shakes its head as though utterly bewildered, and then calmly turns and moves off. It also appears to be on the best of terms with other wild animals, especially elephant and buffalo. In the Nimule Reserve, white rhino have been found lying asleep under the same tree as a small herd of elephant. They have also been seen grazing with buffalo, and they appear to take no notice of the smaller animals. I have never heard of clashes between rhino and lion, although the two are found in the same area.

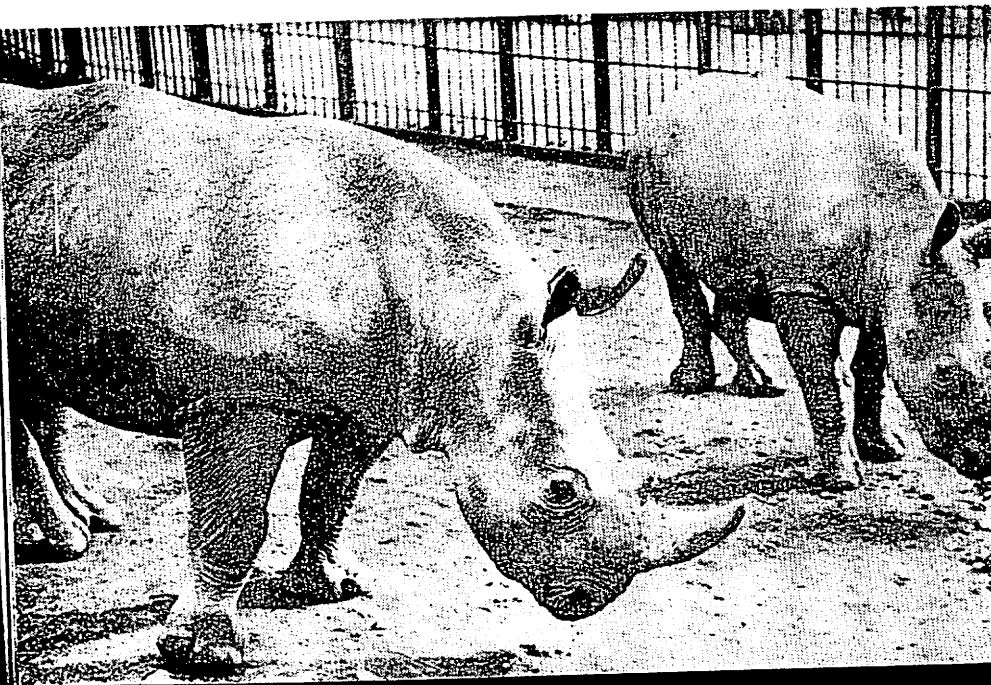
Several white rhino have been captured and kept in captivity. They tame very quickly, readily take to artificial food and, within two months of capture, are docile enough to allow people to ride on their backs around their paddock.

As opposed to the black rhino, which is normally found singly, the white rhino is gregarious and is usually found in family parties of two to five animals, while herds of up to 24 animals have been seen in the Waka area. The animal is, of course, a grazer and is generally found

in short grass country which has a scattering of small bushes. The usual method of feeding is to walk slowly forwards with the head held very low, the horn often ploughing a furrow in front, and the jaws munching off the grass fairly shortly. In general it feeds during the cool hours of the morning, say up to 9.0 or 9.30, and then selects a suitable resting place. A peculiarity of this is that the rhino will often rest under a very small thorn tree giving little shade, so that the whole of the beast is often not even under the available cover. It will, remarkably enough, often choose these inadequate shade trees when there are larger and shadier trees in the immediate vicinity. From this, one assumes that the rhino does not feel the heat greatly, and also that it has no great fears and does not think it necessary to find a place of concealment for its rest, as is usual with most other animals. When it finds a suitable tree, the animal usually stands in the shade for about half an hour before lying down to sleep. Its method of lying down is rather odd. Unlike most animals, it gets down hindquarters first into a sitting position, and then draws its front legs under its body.

Unless it is molested, it will stay asleep until about 3.30 to 4.0, when it will rise and, once again, stand quietly under the tree for at least half an hour before moving off to feed again. Feeding at this time of day is generally in the direction of water, which it normally reaches between dusk and midnight. Each family group appears to have a definite watering spot to which the members regularly return. They seem to have no particular preference for either static or slow-running water but, although they often use the Nile swamps, they tend to avoid the river itself. In fact, they seem to have a fear of any large expanse of water and, although they have been seen wading across rivers about a foot deep—and even on one occasion when alarmed crossing through water about 4 feet deep—in general, they tend to avoid the deeper and swifter-flowing streams. After watering, the rhino loves nothing more

A pair of white rhino at London Zoo. These were caught in West Nile by Mr. John Seago. (photo by B. G. Kinloch)



than a good roll in a mud wallow and the resulting coat of mud is responsible for the complete variation of skin colour in different soil areas.

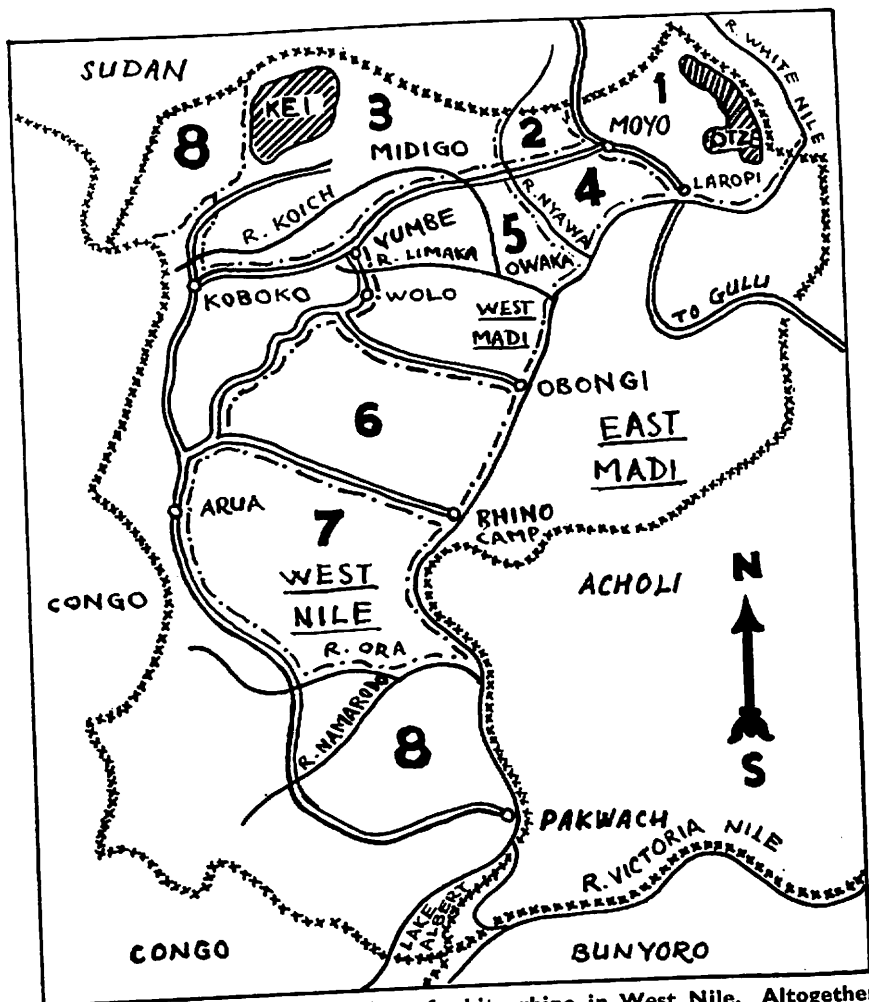
The white rhino is not attracted to fires in the night, as is the black rhino, nor does it appear to be particularly alarmed at camp fires. I have known one to pass between a camp fire and my tent at night, the fire being about 10 yards from the tent. It seemed to show no alarm either at the fire or at the presence of man. The animal was obviously on its recognised path to water and, after drinking at the stream below the camp, it again returned and passed close by the tent.

These animals are essentially creatures of habit. Each family group has its own grazing area and its own distinct watering place. The paths between the two areas, which are generally between two and three miles apart, are used with such regularity that they become deeply grooved. In addition, the rhino is very regular about its toilet habits and returns every day to selected dung heaps, which are generally by the side of the path to its watering place; unlike the black, however, the white rhino does not scatter its dung with its horn.

Seasonal movements appear to be only those of necessity during the rains, when the animals move off the black cotton flats and onto the harder and rockier hills. At the end of the rains the animals generally return to their own particular dry weather areas. If a white rhino is in the habit of using certain paths and tracks, there is not much that will make it deviate from its normal habits—for example, the rhino that continued to use its usual watering track although it passed through the middle of a safari camp. If the animal should be chased or alarmed it gallops off and, once running, will go in a dead straight line and cannot be diverted. Small ant hills and bushes are no obstacle and the rhino will run straight over or through them. This run or gallop is rather peculiar. The front legs work independently while the two hind legs gallop together. This gives the appearance of the animal being about to fall on its nose the whole time, as the hind legs seem to push and the front legs appear to have difficulty keeping up! In fact the whole animal is a mixture of the awesome and the ludicrous. Viewed from the front, with its enormous mouth, cavernous jaws and massive bulk the rhino looks a formidable animal. But its gallop, viewed from the side, or, perhaps even more so, its rear-end view with its two enormously round buttocks, short dumpy legs, and with its curly pig tail looped over its back, is generally enough to send people into convulsive laughter.






Another peculiarity is that, although in general white rhino are very docile and even-tempered animals, they appear during the mating season to be extremely ferocious among themselves. Most of the adult bulls carry large scars which are probably marks of fighting during the mating season. Although this fighting of the bulls among themselves is normal in the animal kingdom, even the cows seem imbued with a pugnacious spirit at this season. On being approached by a bull, a cow will often charge it and inflict serious damage on the bull's flank and belly with her long, slender front horn.

During the mating season, an adult bull has been seen to approach an under-half-grown cow and bull. The adult bull ran up to the young male and, without warning, horned the youngster between the hind legs, lifting him into a completely vertical position. The young one gave an agonising squeal and limped off. The adult bull then turned



A map showing the distribution of white rhino in West Nile. Altogether there are believed to be 335 in the District, made up as follows:

- Area 1—north of the Laropi/Moyo road and east of the Moyo/Kajo Kaji road, 30;
- Area 2—north of the Moyo/Arua road and east of the Nyawa river 15;
- Area 3—north of the Moyo/Yumbe/Koboko road and west of the Nyawa river (Kei 8, Midigo 5, near Nyawa 17), 30;
- Area 4—south of the Laropi/Moyo/Arua road and north of the Nyawa river (Palorinya 50, Rede 25, Laufori 10), 85;
- Area 5—south of the Nyawa river and north of the Obongi/Wolo road and east of the Wolo/Yumbe road, 100;
- Area 6—south of the Obongi/Wolo road and north of the Rhino Camp/Arua road and east of Yumbe/Arua road, 20;
- Area 7—south of the Rhino Camp/Arua road and north of the Ora river (Inde 30, others 15), 45;
- Area 8—south of the Ora river and other areas, 10.

	R. LIMAKA	RIVERS
		ROADS
		WHITE RHINO SANCTUARIES
		BOUNDARY OF AREAS
		DISTRICT BOUNDARY

and chased the cow into some thick bush, so that further observations were out of the question. It would seem that white rhino start to breed fairly early in life, the female probably first coming on heat at about three years of age. Often an adult cow is seen accompanied by two calves, one three-quarter grown and the other a youngster. This probably means that a cow will mate not more than once every three to four years, maybe even every five years. Signs of mating are generally found between February and May, and very young calves between August and December, which will give the animals an approximate 17 months' gestation period. Twin calves have never been seen or heard of.

The white rhino does not appear to suffer much from natural disease. During a rinderpest outbreak in 1953/54 they did not appear to be affected and, although they suffer from continual anthrax, this probably only accounts for a very small percentage of their deaths. Their main enemy is of course man—the poacher. Their sight is quite weak and, although their sense of hearing and smell seems to be quite good, their docility allows their being approached and even speared without any undue danger. They are naturally of great profit to a poacher as, in addition to a mountain of meat, the skin itself can be used or sold, and a good price can be obtained for the horn from illegal sources. The majority of this horn is shipped to the Far East where it is generally believed to be a strong aphrodisiac and, as the black market price recently went up to Sh. 85/- a lb. in Arua, one can only assume that despite the spread of communism in the Far East its potency is still unquestioned. A dealer in the North of England has been advertising recently for rhino horn in large quantities—but he gives no clue as to why he wants it!

Although increased patrolling of its areas by Game Department staff has lessened the amount of poaching to a considerable degree, this menace can never be completely eradicated and, together with certain other factors, makes the position of the white rhino still fairly precarious. In actual numbers the distribution in Uganda is believed to be as in the caption to the map.

Although the total of 335 shows a considerable increase over the figure of 190 given in the Game and Fisheries Department's annual report for 1949, certain other conditions have recently arisen which make the situation less hopeful. The two sanctuaries that are set aside for white rhino at present are in most unsuitable forest reserves where the conditions are not favourable for them and where, in fact, there are very few rhino at all. Of the estimated 300 to 350 white rhino in Uganda, probably not more than 35 actually live in sanctuaries, and in the Mount Kei sanctuary the number of rhino has been steadily decreasing over the past years and is now down to eight animals.

The main areas which do contain rhino at present are now threatened with habitation. Probably the only answer to the question of the preservation of this species is a reserve—or reserves—very strongly patrolled by game preservation staff. These reserves would, of course, have to be situated in areas suitable to the animals and not, as generally happens, in areas which are not required for native habitation or any other purpose. Uganda probably has a higher concentration of white rhino per square mile than anywhere else in Africa and it seems a pity to lose this unique animal while it can still be protected.