Mikumi National Park

A Guide

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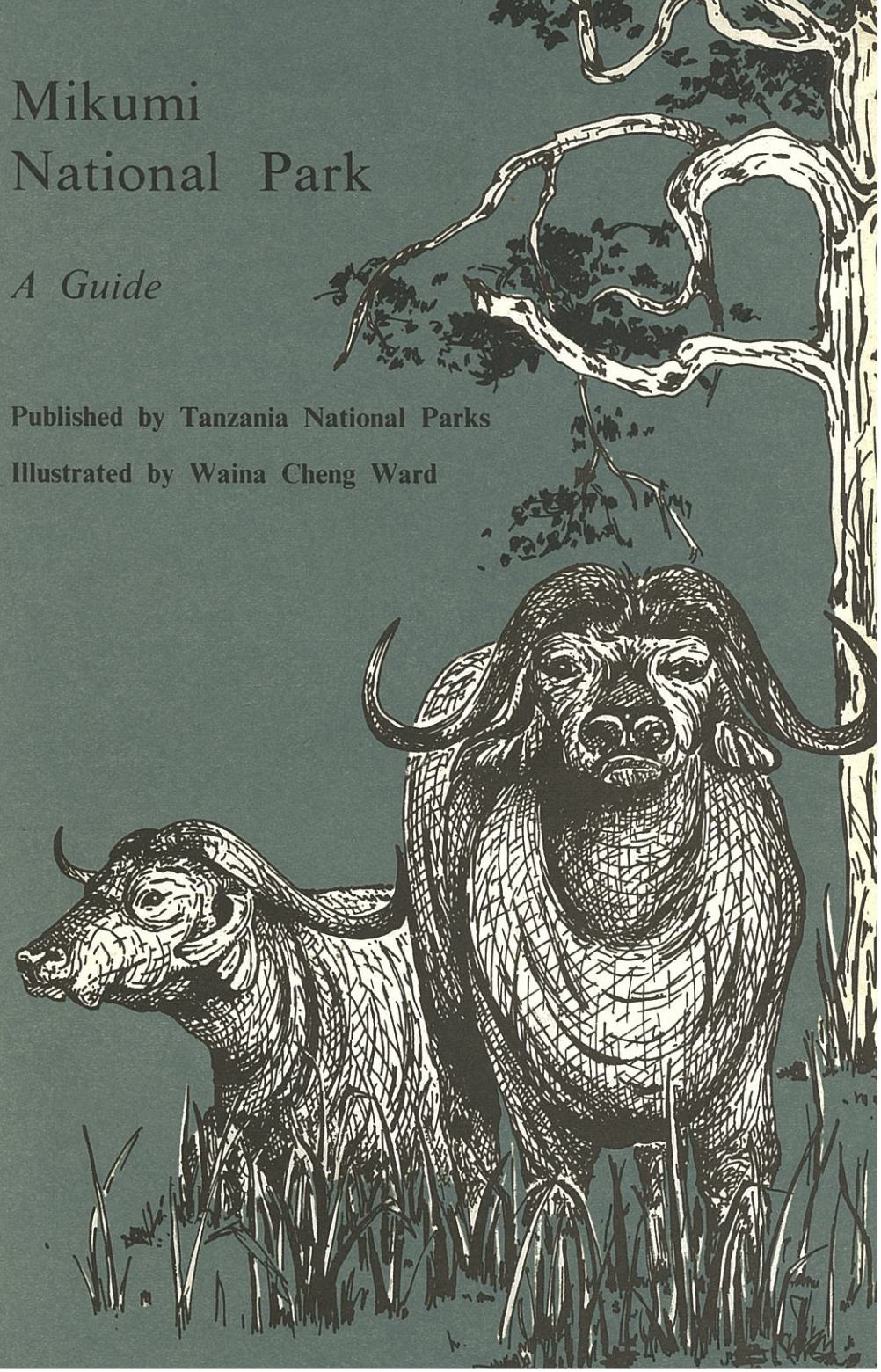


Kees Rookmaaker
27-10-1981

MIKUMI
NATIONAL PARK

—

A guide to your increased enjoyment

Although, at 450 square miles, the Mikumi National Park does not compare in size with the great Serengeti and Ruaha Parks, there is more to be seen in it than can be achieved by a single short visit. For those with only very limited time at their disposal the area round the airstrip and the Hippo Pool offers the best all-round wildlife viewing. If more time is available a trip to Chamgore, a drive along the river or a circuit of the Hill Drive will provide more varied animal viewing as well as a change in the type of terrain and, consequently, vegetation.

Visitors are at liberty to get out of their cars in open areas but should never do so in or near thick cover, as potentially dangerous animals may be hidden close at hand. In any case, never walk far from your vehicle.

Please remember the speed limit of 30m.p.h. and PLEASE do not discard litter in the Park.

Be sure you have enough petrol in your tank before setting off; it is also wise to carry a bottle of drinking water.

AUGUST, 1969

Introduction

In Mikumi, the nearest National Park to Dar es Salaam, the capital of Tanzania, it is possible to see and photograph lions, hippos, elephants and buffaloes, to metion but a few of the creatures which are to be found there.

The country inside the Park varies from flat flood-plains to forested hillsides, from riverine thicket to open savannah. It is named after the settlement of Mikumi which lies just outside the Park's southwestern boundry. The village, in turn, takes its name form the spindle-shaped borassus palm trees *Borassus flabellifer,* which grow in profusion there and are so typical of the area.

Before the opening of the Morogoro-Iringa road, and later the rail line to Mikumi, the area was remote from human activity. Now it is possible to drive to the Park headquarters from Dar es Salaam in about three hours or fly in a light ainrcraft in a little over one hour.

There is much to see in the Park: not only lions and other spectcular species of wildlife, but with luck Sable Antelope, Greater Kudu and Common Waterbuck as well as a great many smaller land creature and a wealth of bird life, the latter especially during the northern winter when the palearctic migrants are in East Africa.

You are strongly advised, when touring in the Park, to drive slowly and generally take your time. There is a speed limit of 30 m.p.h., but you will see a great deal more if you keep to 15 m.p.h. or even less. Those people who rush from one point to another in the Park miss all except the most obvious sights, never seeing anything of unusual interest.

It is hoped that this Guide Booklet will help to increase your pleasure in a visit to the Park by highlighting some of these point of interest and, as a result, allowing you to speak with greater authority of what you have seen.

We wish you a rewarding visit.

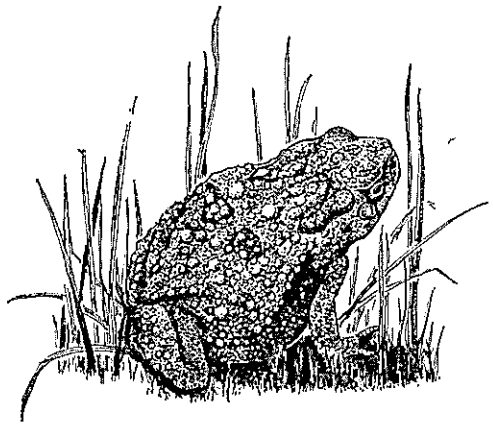
The Park

The Mikumi National Park headquarters lies at an elevation of 1800 ft. above sea level. The Park comprises 450 sq. miles of country lying between the villages of Doma and Mikumi on the main Dar es Salaam-Morogoro-Iringa road and is nearest in shape to being a square than any other geometric figure but, as the boundaries for the most part follow roads or natural drainage lines, the outline is far from regular.

The main road, which bisects the Park from N.E. to S.W., tends to divide the Park ecologically as well as physically. To the east the fan slopes of the Uluguru mountains are covered in deciduous *miombo* woodland, composed mainly of *Brachystegia* species of trees, while to the west the country is open flood plain or tree-dotted savannah as far as the Mkata river, which flows north, more or less paralled to the rail linking Kilosa to Mikumi. To the west of the railway line the country once again rises into hilly and wooded slopes.

The principal features of Mikumi are the Mkata river flood plain, with its hardpan ridges, swamps and black-clay grasslands, the *miombo* woodlands on the hills to east and west, and the rivers with their fringe of tall trees and dense thickets.

Although the Park is 130 miles as the crow flies from the nearest point on the coast, the weather is, even here, patterned by the monsoons of the Indian Ocean; warm northerly winds blow from October to March and cooler, southeasterly winds for the rest of the year. Thus, the short rains, called VULI in Swahili, come in from a notheasterly



direction while the MASIKA, or long rains, drift up from the southeast. It is mainly during these wet seasons that the almost constant croaking of the Common Toad, *Bufo regularis,* forms an accompaniment to the other night sounds of the Park.

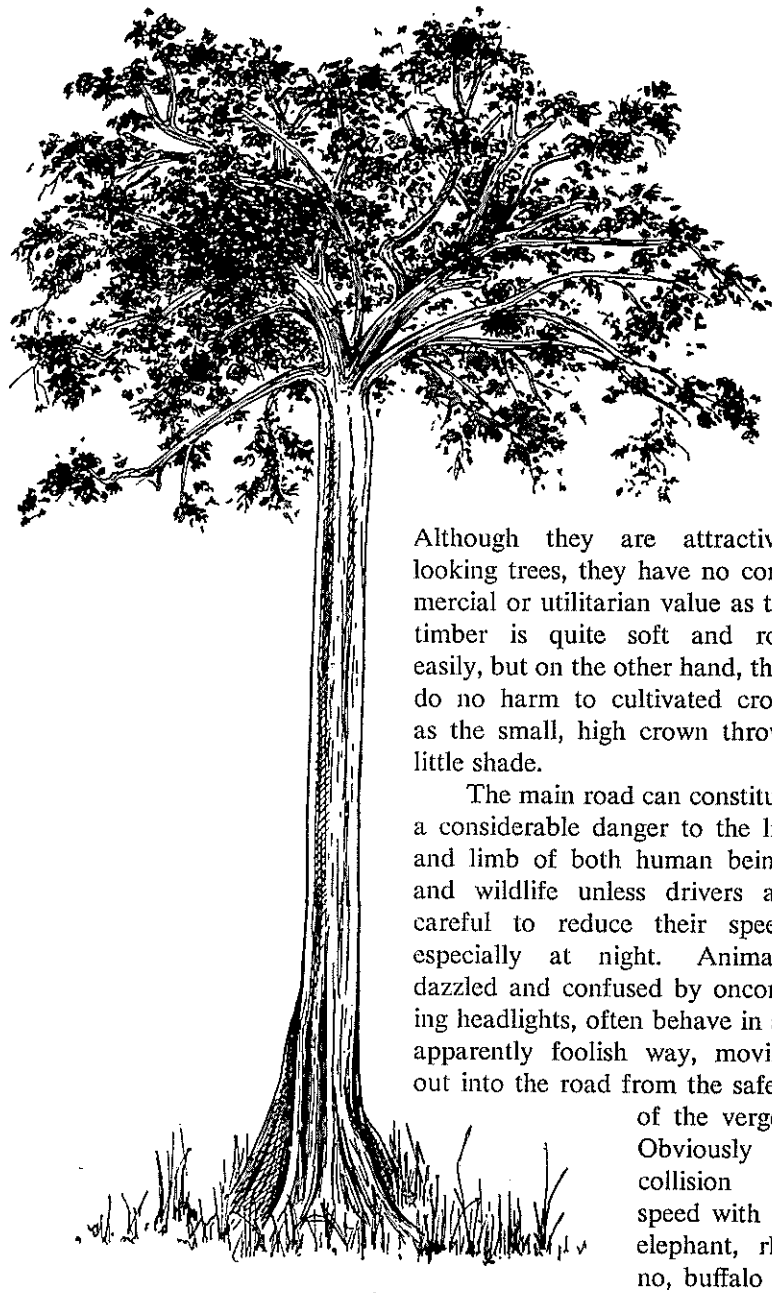
Rainfall varies throughout the Park in the different zones. At the Park headquarters the average is 20″ per annum, while at Chamgore, 15 miles north, it is only 25″. In the hills it is as high as 42″.

The short rains usually fall during November and December and the long rains from March through May, with all temporary surface water thoroughly dried up by mid-August. From August to October the wildlife must drink at either the Hippo Pool, the water holes, the main river, or at the spring below the hotel.

Mikumi lies on the rain-shadow side of the Uluguru mountains, the countryside generally being drier the farther it is from the Park's eastern fringe of hills.

Travellers along the main road may notice that some of the valleys have been cultivated in the recent past. Before the area was made a National Park a small number of people grew maize, tobacco, bananas, cotton and other crops in the only fertile places in the whole piece of country: in the valleys. When the Mikumi Park was declared, the cultivators were compensated and moved into a new settlement area. Meantime, the indigenous vegetation is gradually re-establishing itself.

For some reason the tall, round-crowned, white trunked MIGUDE trees, *Sterculia appendiculata,* were rarely felled when the valleys were cleared for cultivation, and they are still very obvious in the area.



Although they are attractive-looking trees, they have no commercial or utilitarian value as the timber is quite soft and rots easily, but on the other hand, they do no harm to cultivated crops as the small, high crown throws little shade.

The main road can constitute a considerable danger to the life and limb of both human beings and wildlife unless drivers are careful to reduce their speed, especially at night. Animals, dazzled and confused by oncoming headlights, often behave in an apparently foolish way, moving out into the road from the safety of the verges. Obviously a collision at speed with an elephant, rhino, buffalo or

giraffe is likely to prove fatal to all concerned, but it must be realised that even small animals can do serious damage to a vehicle under the same circumstances.

We particularly ask drivers to reduce their speed and to keep a sharp lookout for wildlife which, either at night or when the vegetation is lush during the rainly periods, may be difficult to see in good time.

Trains on the Kilosa-Mikumi line also take their toll of wildlife, especially at night.

History

The Mkata river flood plain, part of which is now the Mikumi National Park, always had the reputation for being the home of large numbers of wild animals. Before the construction of the present Morogoro-Iringa road was begun in 1951, the area was little known except to the few cultivators who had settled in the Doma, Kikoboga and Mgoda valleys where they were able to obtain a subsistence living from the land. These people, mainly mountain dwellers who left the highlands because of land pressure, killed small numbers of animals and game birds and also trapped fish in the Mkata river but, because of their small numbers and their lack of modern firearms, the damage they did to wildlife was insignificant.

With the opening of the new road, however, conditions changed rapidly. Well-armed hunters from as far afield as Dar es Salaam 'discovered' the area and came in large numbers to shoot for sport. Even before the road was officially opened in 1954 a great deal of wildlife had been killed and it was found necessary at this time to declare a Game Controlled Area.

In 1958, at the start of discussions as to how the area should best be managed from a wildlife point of view, agricultural experts described the land as generally unfit for farming and advised that the wildlife/tourist potential should be looked into.

Meantime, in 1960, the railway line linking Kilosa to Mikumi was constructed, opening up the country even further to hunters.

It was now apparent that, if the wildlife was to be saved, the area must have National Park status, so in 1963 the cultivators were compensated and resettled elsewhere and Tanzania National Park staff took over control.

The Park was finally gazetted under the name of Mikumi in August, 1964.

Since being taken over as a Park the area has been developed as rapidly as funds permit. Roads, culverts, bridges, staff housing, an airstrip, a tented camp and, most recently, a 100-bed hotel have all been constructed.

The Flood Plain

The Flood Plain of the Mkata river occupies the centre of the Park north and west of the main road yet east of the river itself. It is composed of a number of hardpan ridges separated by narrower depressions of 'black cotton' soil which remain swampy for most of the year in the north, but form slow-running watercourses draining into the Mkata river in the south.

'Black cotton' is the term applied to a very heavy clay soil, common in Africa which, when dry, cracks in a mosaic pattern of fissures often six or more feet deep. With the coming of the rains it rapidly absorbs a large quantity of water, but once saturated expands and becomes very sticky.

Although cotton is not generally grown on this type of soil in Tanzania, it is much used for this purpose in the Sudan, where the crop is grown under irrigation from the river Nile.

'Black cotton' soils are notorious for the difficulty they present to the road-maker. In the dry season roads made through this clay are rough and very dusty, while in wet weather they become an impassable morass.

Because they are food of wallowing, buffalo, *Syncerus caffer,* are often found near the 'black cotton' swamps in depressions on the hardpan ridges from October to June, when the wallows finally dry up. Frequently numbers of old bulls, too advanced in years for active life in the herd, spend the remainder of their time in small bachelor groups. They are often massive animals with heavily bossed which may measure as much as 40″ along the outer curve.

Buffalo, MBOGO or NYATI in Swahili, are entirely grazers and need to drink regularly. In Mikumi they spend much of their time on the treeless grassland, but sometimes leave the open country during the height of the dry season for the wooded hills, where shade and water are available.

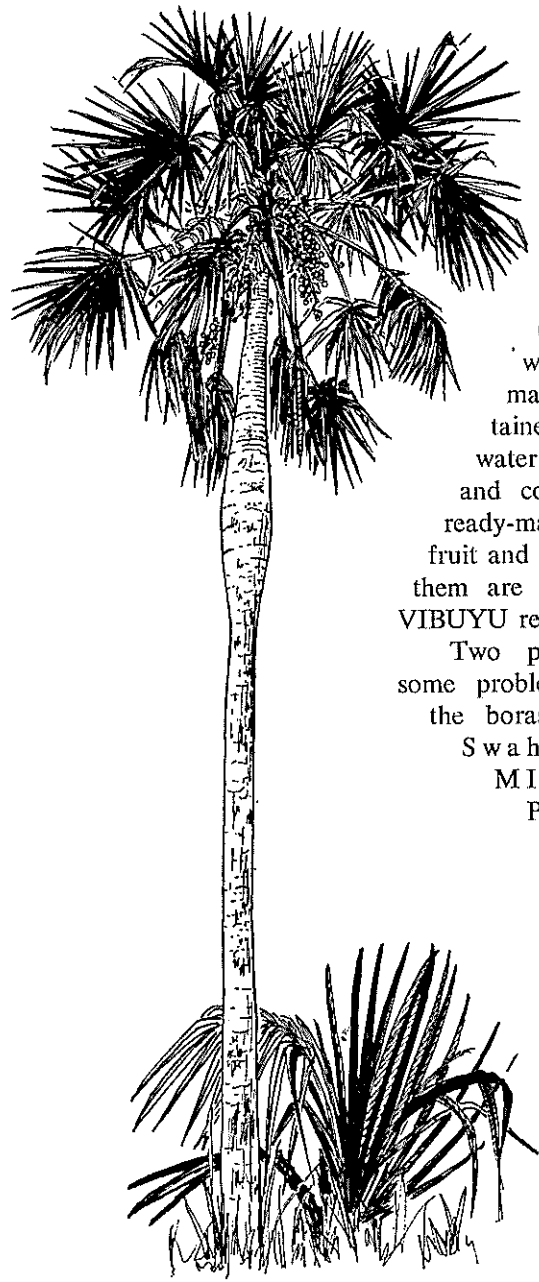
Apart from the small all-male groups, the Park contains nearly two and a half thousand buffalo in the form of large breeding herds of males in the prime of life, females and young of both sexes. Whereas the bulls stand about 5 feet at the shoulder the females are a couple of inches shorter and weigh considerably less than the 1600 to 1800 lbs. of the male, with more slender horns.

Although lions will occasionally kill buffalo they are usually careful to choose a female, a young one or old male whose powers are failing. An adult male in good condition will chase lions away without difficulty. If lions are bold enough to attack a large herd, the males form a ring with the cows and calves in the centre.

Oxpeckers, *Buphagus africanus*, are almost always in attendance on buffalo, clinging on to the great beasts even when they canter away from an approaching car. The oxpeckers live in symbiosis with their hosts, performing the service of keeping their skin clear of parasites such as ticks and biting flies, and also provide warning of approaching danger. They do, however, tend to keep wounds open which, left alone, might quickly heal.

The hardpans, which are such a feature of the central part of the Park, consist of slightly raised ridges composed of relatively impervious soils which drain into swamps or watercourses. They are either entirely open or have a very sparse tree population of *Acacia clavigera*, tamarind and, near the edges, baobab, hyphaene and borassus palms.

The tamarind tree, *Tamarindus indica*, known as MKWAJU in Swahili, is often found growing out from an old termite mound and can be recognized by its round crown of feathery leaves and its reddish-brown, edible bean-like seed-pods. Baobab trees, *Adansonia digitata*, will be immediately known by their strangely corpulent shape and grey bark, like elephant hide.

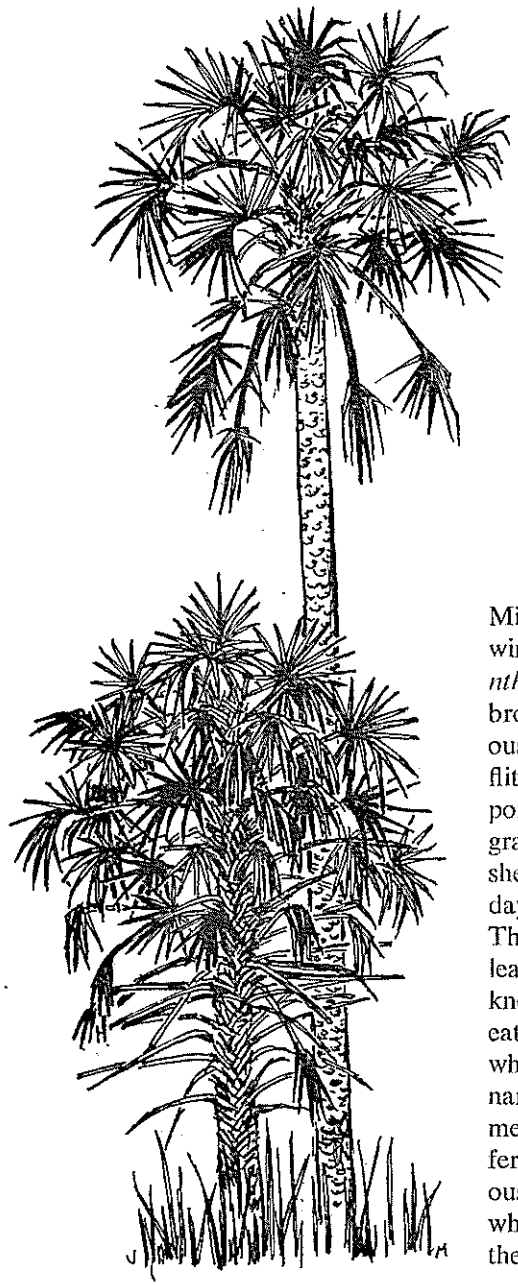


They grow to a great age and provide resting places for a variety of ghosts and spirits which are said to reside in their trunks, which are frequently hollow. They are known as MBUYU in Swahili.

The fruit of these ungainly-looking trees, when dried and hollowed, make handy household containers, being used for dipping water and beer. On the lakes and coast they provide almost ready-made canoe bailers. The fruit and the vessels fashioned from them are called MABUYU and VIBUYU respectively in Swahili.

Two palms which may cause some problems of identification are the borassus, *Borassus flabellifer*, Swahili MKUMI (plural MIKUMI, from which the Park gets its name) and MKOCHE, the unbranched hyphaene, *Hyphaene ventricosa*.

The borassus may be recognised by its straight but spindle-shaped pale grey trunk which can be compared to that of the hyphaene which is often crooked, not swollen, and dark grey to black in colour.

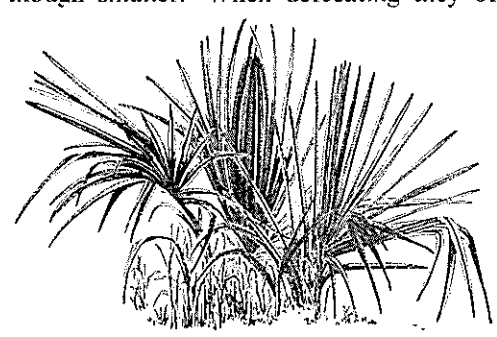


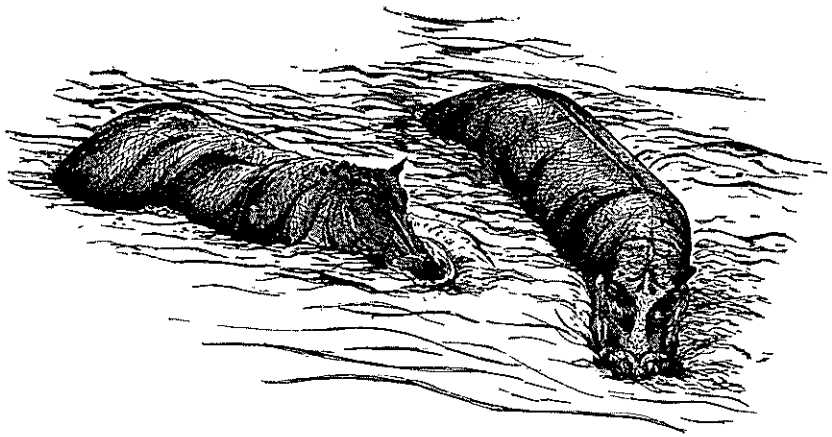
Young hyphaenes, often stunted by fire, grow close to the ground in a trunkless clump, where their strong fronds are easily available to basket and mat-makers. When growing in this way, the palm has, surprisingly, a separate Swahili name from the mature tree, being called MLALA. The fronds of the borassus are not used for weaving.

A frequent visitor to Mikumi during the northern winter is the wheatear, *Oenanthe oenanthe,* a small, grey-brown bird with a conspicuous white rump usually seen flitting from one low vantage point to another in open grassland, but often taking shelter from the heat of the day under a tree or bush. The name wheatear is misleading unless its origin is known, as these birds neither eat nor resemble ears of wheat. The derivation of the name is from *Whiteeres,* meaning white-arsed, and refers to their most conspicuous characteristic, easily seen when in flight. Apart from the migrants, there are other

resident African wheatears in Mikumi. They live on insects, small molluscs and occasionally small seeds. The wheatears belong to the same large family of *Turdidae* which includes, among others, thrushes, robins and night-ingales.

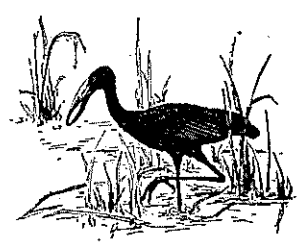
At the Hippo Pool, 3½ miles from the tented camp, lives a family of *Hippopotamus amphibius,* KIBOKO (plural VIBOKO) in Swahili. The hippos spend most of the daylight hours submerged in the pool, coming up to breathe and blow through their nostrils every three or four minutes. Being larger animals their bodies overheat easily and need to be cooled in the water. Buffaloes and rhinos wallow in muddy pools for the same reason and elephants although they lower their body temperature by squirting water over their backs and even submerge entirely in lakes and rivers, rely mainly on fanning themselves with their punkah-like ears. At night, and occasionally on wet or overcast days, hippos leave the water to crop the vegetation for a considerable distance from the pool, their food consisting entirely of grasses and herbs, but not of aquatic plants such as 'Nile cabbage' and water lilies. Hippos' droppings are similar in appearance to those of elephants, though smaller. When defecating they break up and scatter the dung with vigorous wagging movements of their strong, short tails, often spreading it over the surrounding herbage. It is quite safe to stand on the bank to watch hippos as they laze in the water, but they should be approached with caution, from the safety of a vehicle, if found on land. They are usually fairly placid creatures but can become very aggressive if an intruder gets between them and their pool. Hippo are occasionally poached for the ivory of their tusks, which being softer than that of elephant, is much liked by





carvers, and in the past for their hide from which the famous 'sjambok' or hippo-hide trek whip was made.

Often seen at certain seasons, usually early in the year, roosting in the trees which surround the Hippo Pool are large numbers of Open-bill storks, *Anastomas lamelligerus.* These wholly black birds have a curious open bill, like a pair of nutcrakers, used for crushing fresh-water molluscus, which are their main food. They are migratory within the African continent and seem to breed mainly in the southern areas from June to August. There is no recorded call for these birds. Open-bills are capable of some spectacular aerobatics, diving almost perpendicularly from a great height, only to climb steeply again at the last moment.



Elephants, *Loxodonta africana,* either TEMBO or NDOVU in Swahili, are to be seen throughout the Park and are frequent visitors to the Park headquarters area, seeming to enjoy human company and the proximity of human activity just so long as it is not too close.

The Asiatic elephant, despite its scientific name of *Elephas maximus,* is in fact smaller than the African elephant and has a rounded back and generally more dumpy appearance. Its ears are said to look like a map of India and while it is true to say that the African elephant's ears resemble the shape of the African continent, it would be unwise to base one's geography on this, as the ears of all wild elephants often become badly tattered and torn during the course of their long lives.

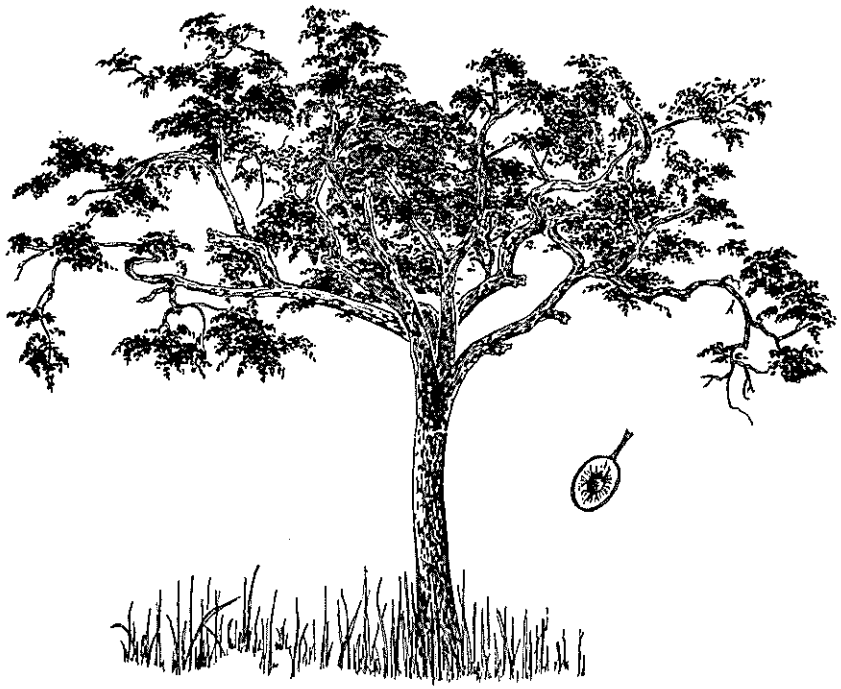
Another significant difference is that the tip of the Asian elephant's trunk has only one projection, used for gripping, compared to two in his African cousin.

Elephants are to be seen in either cow-calf groupings or in all-male herds, the two coming together only when a female is 'in season'. Normally the bull groups are quieter than the cow-calf family units as the senior matron of such a group can be very aggressive, especially if there are very young animals at heel.

When putting on a threat display the ears are spread out and the head shaken violently from side to side. This is sometimes followed by a dummy charge, accompanied by trumpeting and squealing, which, if it fails in its object of scaring off an intruder, may lead to a charge in earnest. It is inadvisable to wait to determine the intesity of the threat.

The babies, which at 80 cm. in height at birth are able to run right under their dams' bellies, are protected with extreme possessiveness by their mothers and all adult females of the herd. When a female is giving birth the 'aunties' become very agitated and it is unwise to go too close. The udders of the cow elephant are situated between the forelegs.

The Mikumi elephants are mainly grazers, eating the tall *Hyparhennia* grasses on the swamp fringes, and do not damage trees to any extent, as is the case in many other elephant areas. So far there can be said to be no 'elephant problem' in the Mikumi National Park. It is true that they sometimes push over the odd *Acacia clavigera* tree and occasionally strip the bark from the *Stirculia quinqueloba,* but for the most part they confine their interest in trees to the fruit of the



MNONGO, *Sclerocarya caffra,* which they obtain by vigorously shaking the trunks of the smaller trees. When overripe and slightly fermented, the plum-like fruit is said to make the elephants slightly drunk if eaten in large quantities.

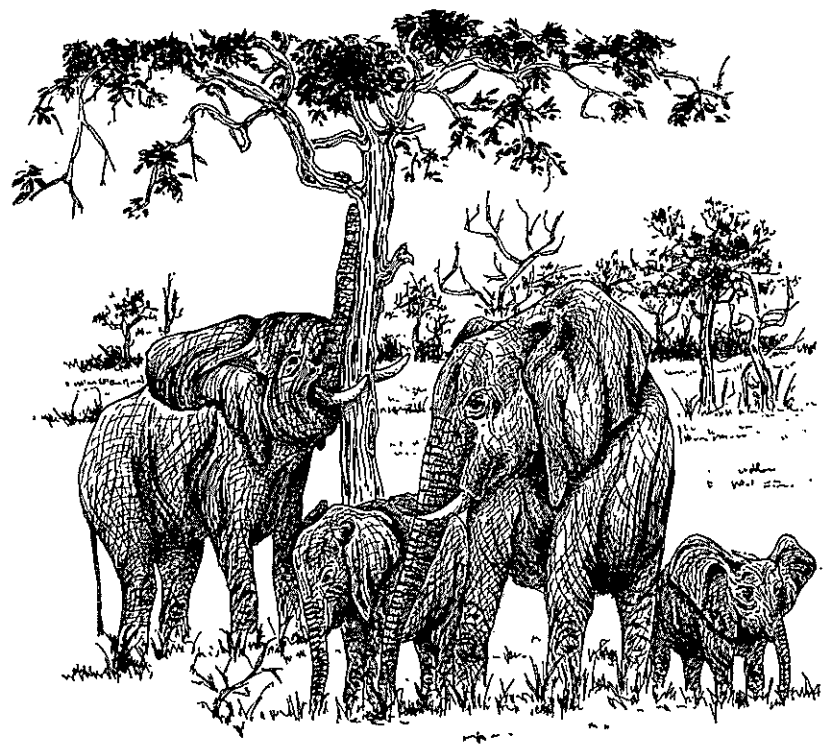
Despite their weight, which may be as much as 4 to 6 tons, elephants are capable of travelling very fast and very quietly. They have an excellent eye for a well-graded path when they head into the hilly country at certain times of year and will cover enormous distances in 24 hours.

Although the African elephant has not been domesticated and trained for work to any appreciable extent, it is said that Hannibal used them for his famous crossing of the Alps. In more recent years elephants have been trained in Central Africa, but in these days of tractors and bulldozers it is unlikely that their services as a beast of burden will ever be needed by man. The elephant usually seen in circuses is the Asiatic.

In the Far East Elephants played an important part in the ceremonial life of the people, but in Africa they have, for the

most part, remained wild, hunted for their meat and ivory it is true, but still free.

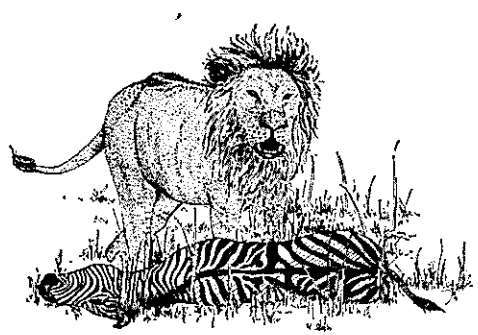
There is no truth in the early hunters' and explorers' tales of 'elephants' graveyards'. Probably in the days before communications were as developed as they are today, when ivory was of little use to anyone who did not live on or near the Arab trade routes, quantities of ivory could lie ignored in the bush from year to year, to be stumbled upon one day by an explorer or trader. Even nowadays elephant skeletons are occasionally seen, often from the air, with the tusks intact and, as far as it is possible to tell, death has been from natural causes.



Very fine herds of eland, *Taurotragus oryx,* called POFU in Swahili, are to be seen on the flood plain. Eland are the largest and heaviest of the East African antelopes, weighing as much as 2000 lbs.

for a mature bull and measuring nearly six feet to the top of the hump. The horns, which are present in both sexes, usually grow straight back from the head in line with the muzzle and are strongly spiralled at the base, becoming smooth and pointed at the tip. In colour the eland is a reddish fawn, with pale stripes on the flank. Old bulls are easily recognized as they are very solidly built and greyer in colour. A prominent feature of eland is the tufted dewlap below the throat.

Even in National Parks eland seldom become as confiding as other antelopes, soon showing signs of alarm if approached too closely This may be due in part to the fact that they have always been heavily hunted in the past, especially for their meat, which is said to be as good as beef. Experiments have been carried out with a view to the domestication of eland in certain parts of Africa, on the assumption that they would be better able to utilize poor rangelands on which cattle do not flourish. As even mature animals are extremely good jumpers, being able to clear an eight-foot stockade with apparent impunity, the fencing of domesticated or semi-domesticated eland has proved a difficult problem. On one occasion, on the Mkata Ranch not far from the Park, an adult eland was seen to allow himself to be gently herded, along with 50 or 60 cattle, into a thorn BOMA or stockade. When the herdsman closed the gap and the eland realized that he was penned inside, he nonchalantly leaped out and trotted away!



Although SIMBA the lion does not usually choose to rest after a kill in wet, low-lying areas, he hunts his prey wherever he can get it most easily and is therefore likely to be seen throughout the Park. The lions in Mikumi usually kill wildebeest and zebra, but occasionally take an eland or buffalo. Hunting is carried out by the pride as a concerted effort, but the dominant male seems to play a very limited part, leaving most of the work to the lionesses. As soon as the prey is within reach the females make a dash for it and, if successful, catch it by the throat in a strangulation hold,

Panthera leo, as the lion is known scientifically, is an extremely indolent creature, spending as much as 19 hours a day either asleep or dozing. It is for this reason that they are so often accessible to visitors, who may safely approach in a car to within a distance of only a few yards of them. A fully-grown male lion may weigh about 400lbs. and can be distinguished, even though he does not have a well-developed mane by, among other characteristics, the ruff of yellowish fur which grows on the cheeks and is not found in females. Young lions are generally 'hammermarked' on the flanks, but these spots disappear as maturity approaches.

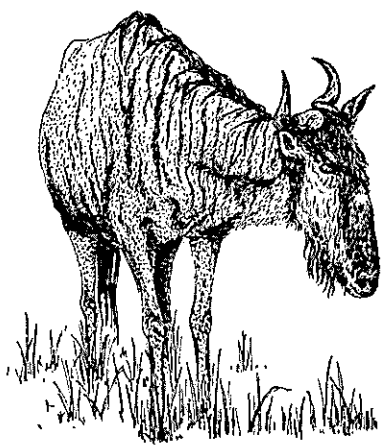
Lionesses usually give birth to from 2 to 4 cubs every two years, unless they lose their offspring earlier. At first the tiny cubs are hidden in a clump of tall grass where they are guarded by their mother and other lionesses of the pride, but by the third month they begin to venture forth, especially to join the adults on the kill. They are not entirely able to fend for themselves until they are about 18 months old. Young lions have a great deal to learn if they are to survive; they must be familiar with the movement and habits of prey species and which of them they are likely to be able to pull down and which are going to prove too powerful for them. Although their life often appears to the human observer to be all 'cakes and ale', they frequently get badly hurt when, driven by hunger, they attempt to kill a prey species or individual animal which is too strong for them to cope with.

Lions have a strange keratinous spike hidden in the tuft of the tail. What its purpose is, nobody knows, but the ancient Egyptians believed that, by thrashing their tails, these great cats were able to work themselves up into a frenzy of rage which made them more than a match for any creature bold enough to attack them.

The Riverine Areas

Much of the wildlife which inhabits the well-wooded watercourses also comes out into the plain from time to time, but if you take the 'River Drive' from near the Hippo Pool towards the main road you are likely to see, in particular, wildebeest and zebra in large numbers.

The wildebeest, or gnu, *Gorgon taurinus,* is the 'Nyasa blue' which differs considerably from the 'white bearded' race seen in the northern Parks of Tanzania. Although in general appearance very much the same, the 'Nyasa blue' is unbearded and is much paler in body colour, with the result that its stripes show up very clearly. A small percentage have a white 'chevron' across the muzzle a few inches below the eyes.



Both races, known as NYUMBU in Swahili, are rather ungainly looking creatures much given to frolicking about, especially when excited. A mature male weighs about 500 lbs. and measures 52 inches at the shoulder. The calves, for the first few months of their lives, are a light fawn, while the adults are a brownish-grey with dark streaks and stripes across the back. Their legs are a dark tan. Wildebeest are entirely grazers but are not afraid to venture into sparsely wooded areas in search of succulent grass. They are very gregarious animals, often associating in large herds in common with zebra.

There is a slight racial difference also between the Burchell's zebra found in Mikumi and those seen, for example, in the Serengeti National Park in northern Tanzania. The Mikumi animals have slightly narrower black stripes than those found in the north. The most northerly zebra species of all, the Grevy's, has extremely narrow stripes, but it is, of course, a different species, not merely a separate race, and is, in habits, an entirely dissimilar animal.

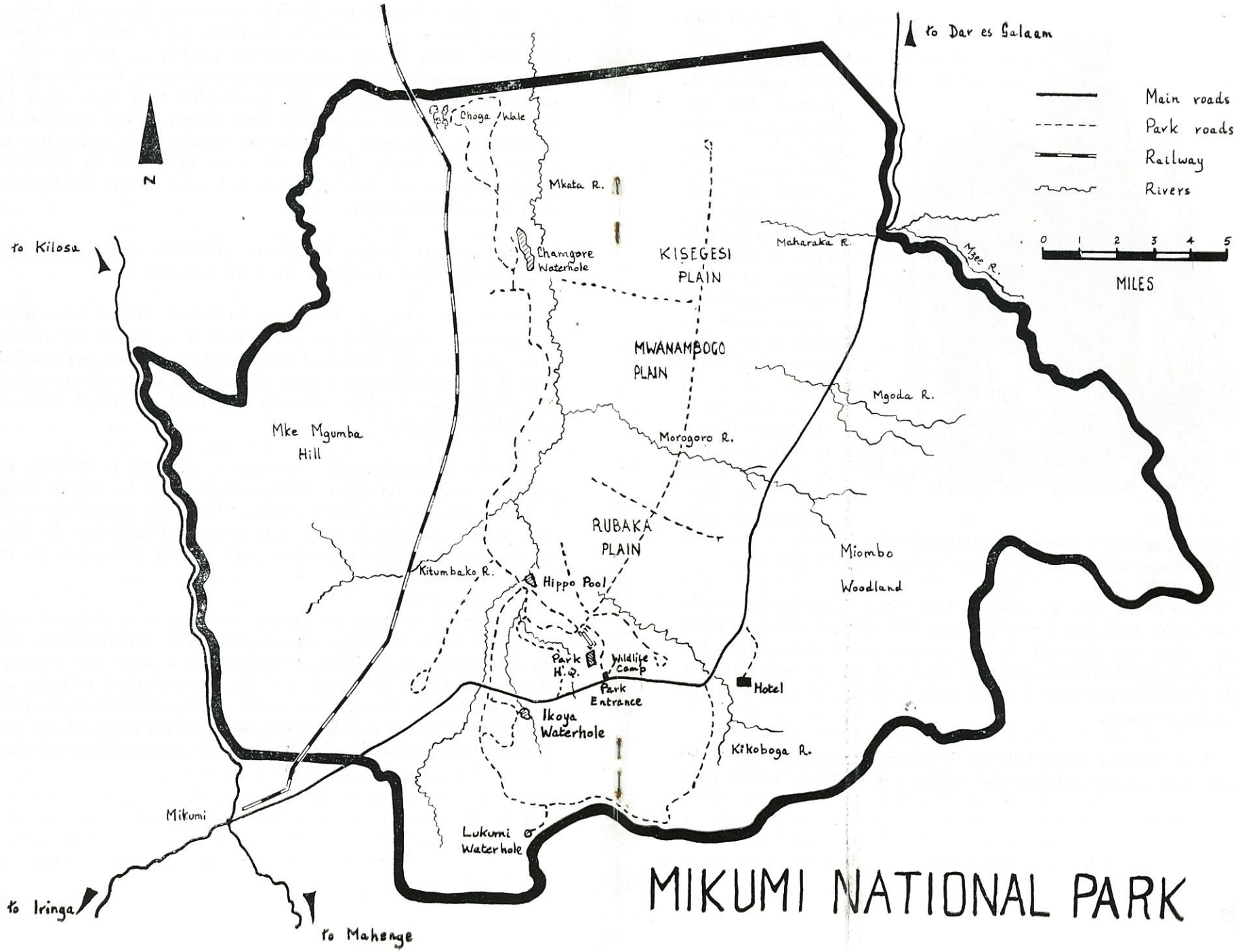
Burchell's zebra, *Equus burchelli,* appears to the casual observer to move about in large homogeneous herds, but in reality is divided into family groups of up to a dozen animals, led by a dominant stallion. As the young males reach maturity they break away from the family until such time as they are able to establish their own, either by enticing young mares away from other groups or, on occasion, by taking over a ready-made unit either by conquest or as replacement of a stallion which has become too old or has been taken by predators. A zebra stallion may stand 12 hands and weigh around 600 lbs.; the females are slightly bigger.

Young zebra, looking for all the world like stuffed toys, have brownish-red stripes for the first few months of their lives.

In Swahili zebra are known as PUNDA MILIA, meaning 'striped donkey', but they have seldom been trained to do any 'donkey work'. It is said that when used as beasts of burden they lack stamina, even if fed on concentrated food. Zebroids (a cross between zebras and horses) have, on the other hand, proved of limited value as domesticated animals.

Yellow baboons, *Papio cynocephalus,* NYANI in Swahili, are commonly seen near the river banks as they fed in the trees or forage in the grassland for roots, insects, grubs and palatable vegetable material. This baboon species is lighter in both colour and build than the Olive baboon, seen in northern Tanzania, and has less bushy hair on the cheeks and shoulders.

Troupes of baboons are usually controlled by a dominant male with, next in the hierarchy, three or four fully mature animals, also males, who keep on the fringes of the group as it moves across country in search of food. The young, as is the case with most primates, are rather helpless for the first few weeks of life and are carried under their mothers' chests and cling to the fur, but later often ride on their mothers' backs, perched rather far back like a man riding a donkey.


to Dar es Salaam
Main roads
Park roads
Railway
Rivers
0 1 2 3 4 5
MILES
N
Choga Wale
Mkata R.
Changare Waterhole
KISEGESI PLAIN
Maharaka R.
Mzee R.
to Kilosa
MWANAMBOGO PLAIN
Mgoda R.
Mke Mgumba Hill
Morogoro R.
RUBAKA PLAIN
Miombo Woodland
Kitumbako R.
Hippo Pool
Park H.Q.
Wildlife Camp
Park Entrance
Hotel
Ikoya Waterhole
Kikoboga R.
Mikumi
Lukumi Waterhole
to Iringa
to Mahenge
MIKUMI NATIONAL PARK

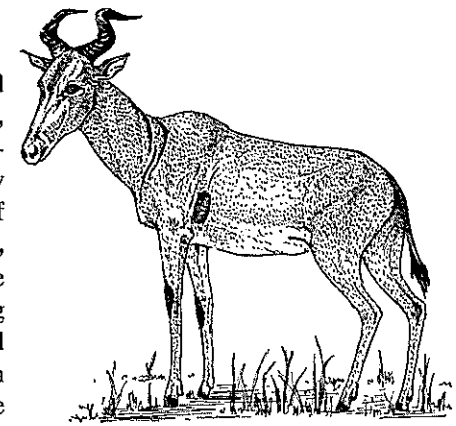
A baboon troupe is rarely silent except when fully engrossed in feeding. The sub-adults seem to obtain great pleasure from teasing those younger and smaller than themselves, and it is a common sight to see some young cretuare, screaming pitifully, hanging at the extreme tip of a flimsy tree limb while another tries to shake him loose. Should the dominant male be nearby, however, he is likely to cuff both offender and offended indiscriminately, causing a further outbreak of frightened screaming, as the troupe leaders are, or attempt to be, great disciplinarians.

Seen in this area, as elsewhere in the Park, is the Bateleur eagle, *Terathopius ecaudatus,* a very distinctive bird of prey with long, broad wings and a very short tail. At close quarters, as when stooping to kill, the black and chestnut body and the black red bill can easily be noted. When seen on the wing it seems entirely black and appears nearly half-moon shaped.

The Bateleur eagle indugles in some extraordinary aerobatics and, when stooping seriously, does so with a noise like an express train.

The Road to Chamgore

As you drive northward up the road to Chamgore you enter an area of *Combretum* woodland with, between the bushes, tall *hyparhennia* grass.



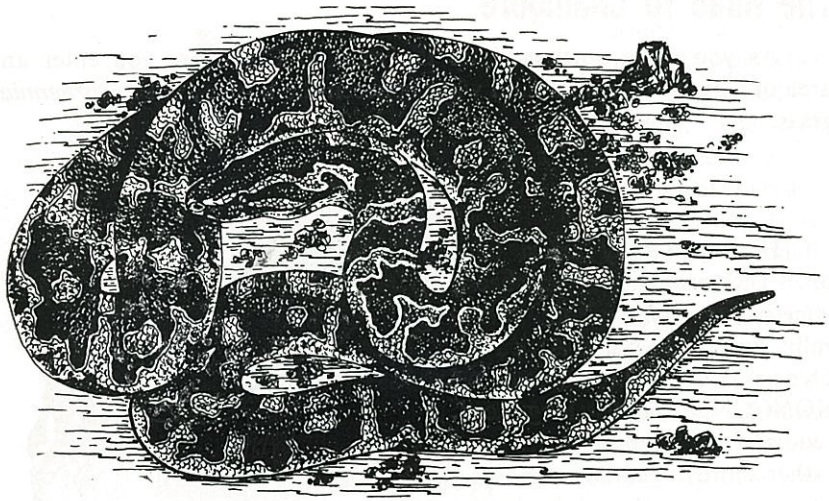
Here you may see a herd of Lichtenstein's hartebeest, *Alcelaphus lichtensteinii,* generally known in East Africa by their Swahili name of KONGONI. These long-faced, reddish-fawn antelopes have rather short ridged horns growing outward, upward and backward from a short bony pedicle which is situated at the back of the head. The horn tips turn back in Lichtenstein's hartebeest, not upwards as in Coke's, the Kongoni of the northern Parks.

Kongoni are entirely grazers and it is said that when feeding they post as sentry a mature female to keep watch for predators, to which they are very susceptible, especially lion and hunting dog.

Lichtenstein's hartebeest differs also from the Coke's hartebeest of the Serengeti in that body colour is darker and more rufous. There are also dark patches below the shoulders, brown elongated saddle markings and black markings on the legs of Lichtenstein's not found in Coke's.

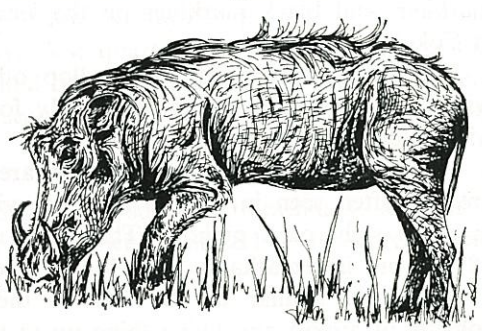
When alarmed, hartebeest gallop off at a deceptively fast rate, with their heads and necks held stiffly forward. They often associate with wildebeest and zebra.

Surprisingly enough, because there are many of them about, snakes are not often seen in East Africa, but visitors may be lucky enough to catch sight of a python. This huge reptile grows to a length of 18 feet but is remarkably agile for its size. It is non-venomous, being a constrictor similar to the Boa of the New World. Prey, which consists of almost any living thing up to the size of a calf, is knocked down with a heavy blow and immediately encircled in the constricting



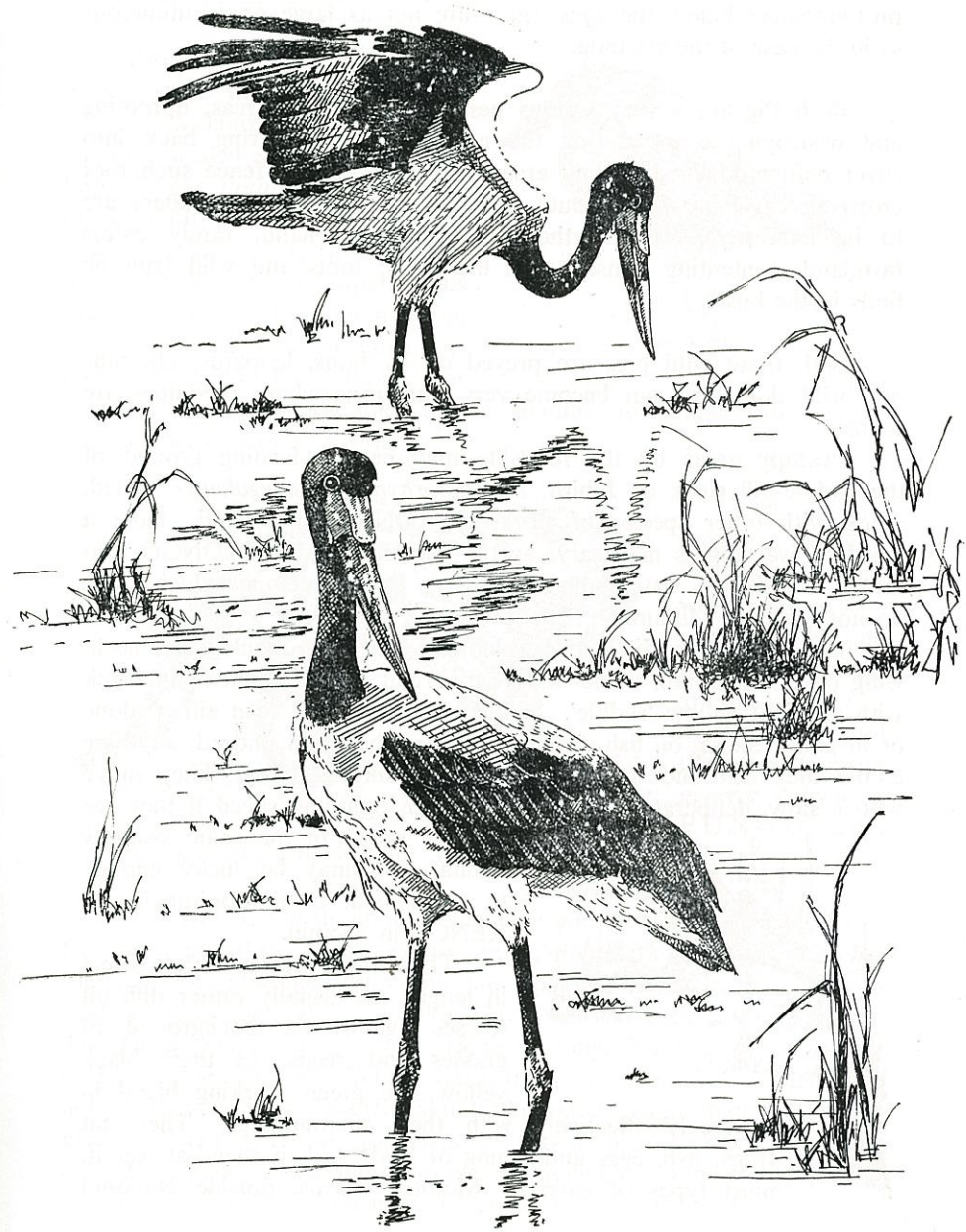
coils of the snake's body. Once the victim is dead the python swallows it whole, lining itself up and creeping over it with its jaws extended to accommodate the bulk. After eating, the python lies up in a secluded spot to digest its meal, during which time it is rather torpid.

They are particularly fond of the flesh of domestic dogs. In some areas the local people have devised an ingenious method of trapping pythons. Live 'bait' is placed in a strongly-constructed enclosure which is furnished with only one circular entrance made to the average circumstance of an unfed python. Once the snake has entered and swallowed the 'bait', it is unable to return through the hole.



Warthog are often seen in this area, as throughout the Park and occasionally, because they are nocturnal in habits, a glimpse may be obtained of a Bush Pig.

The Warthog, *Phacochoerus aethiopicus,* NGIRI in Swahili, can be easily distinguished from NGURUWE the Bush Pig, *Potamochoerus porcus,* by the very much



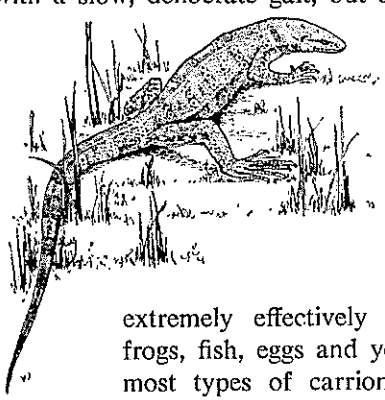
larger tusks and less elongated muzzle as well as by the fact that only the warthog runs with his tail erect. Although the Bush Pig has protuberances below the eyes, these are not as large or as numerous as in the case of the warthog.

Bush Pig are a very serious pest in agricultural areas, uprooting and destroying crops during the night and disappearing back into cover before dawn. In many areas it is necessary to fence such root crops as cassava with a tout, pig-proof stockade if any tubers are to be harvested. The warthog, on the other hand, rarely enters farmland, contenting himself with the grass, roots and wild fruit he finds in the bush.

Both these wild pigs are preyed on by lions, leopards, cheetahs and wild dogs and can become very numerous where predators are scarce

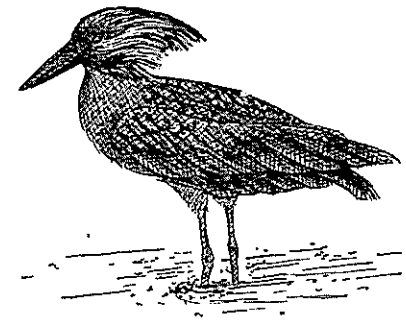
Swampy areas by the roadside may be the feeding ground of the Saddle-bill stork or Jabiru, *Ephippiorhynchus senegalensis,* called, along with other species of stork, KORONGO in Swahili. Here a word of warning is necessary, as the Swahili word KORONGO also means a valley or watercourse as well as Roan antelope, which latter do not occur in Mikumi.

The Jabiru is a distinguished-looking bird with black head, neck, wing coverts and tail, white body and bright red bill banded in black with a bright yellow 'saddle'. Saddle-bills are to be seen either alone or in pairs feeding on fish, frogs, small mammals and, indeed, anything edible they can find in their swampy feeding grounds. They move with a slow, deliberate gait, but strike with lightning speed if they see suitable prey. In the same swampy habitat you may be lucky enough to catch sight of a monitor lizard, KENGE in Swahili.

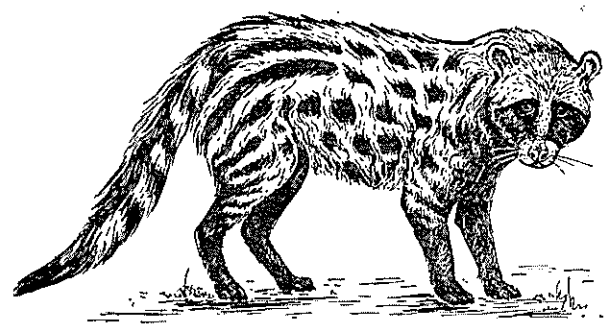


These huge reptiles, often 6 feet in length, are usually rather difficult to see against the background of grasses and ,reeds, as their black yellow and green marking blend in extremely effectively with their surroundings. They eat frogs, fish, eggs and young of birds and, if they can get it, most types of carrion. Monitor lizards, outside National

Parks and Reserves, are trapped and shot for their skin, which is used for making purses and the smaller types of drum.

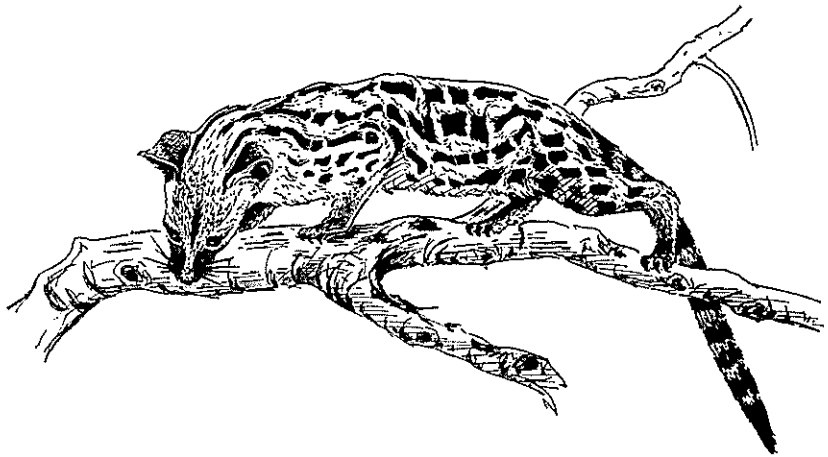


Also a frog-eater, and found in the same marshy environment as the Monitor lizard, is the hammer-headed stork or hammer-kop, *Scopus umbretta.* This bird, brown with dark bill and feet, is easily recognized by its typically hammer-shaped head. Superstitious beliefs surround the hammerkop, and in most parts of Tanzania it is considered bad luck to kill one. For this reason and because they are unpalatable to humans, they enjoy a wide measure of protection.



Two cat-like creatures of about the same size which may be seen occassionally on the road at night are the civet, *Civetticts civetta,* and the genet, *Genetta genetta* known as FUNGO and KANU respectively in Swahili. Both are very nocturnal.

The civet stands about 15 inches high and measures around 3½ feet from nose to tail-tip. It has rather coarse, wiry dark grey fur, becoming black on the abdomen, legs and tail tip. The body is marked with dark blotches and the tail with black vertical stripes at the side. The back, which has a dorsal ridge of long, black hair, is usually carried rather arched. When alarmed or as a means of defensive action, they emit a powerful skunk-like odour from their anal scent glands. Perfumiers take advantage of this to use the basic 'musk' as a fixative for scent, having a course eliminated the unpleasant-smelling element. The fixative is known as 'civet' in the perfume trade.



The genet appears more lithe and cat-like, with its narrow, pointed face, conical ears and short drab-grey fur. Its tail is heavily ringed with dark brown and it has white patches below the eyes.

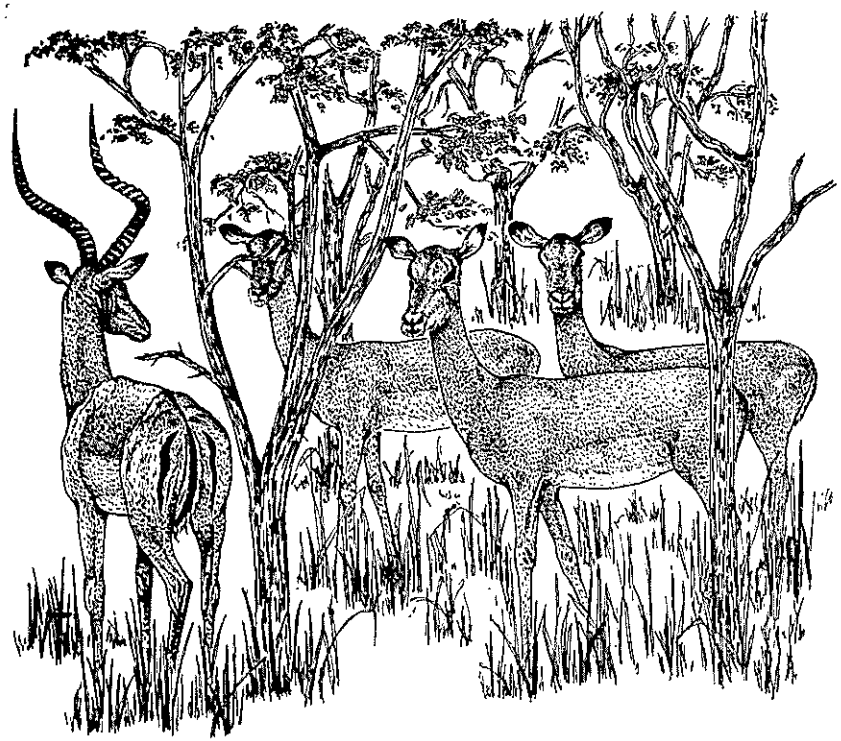
Both civets and genets are more or less omnivorous, preying on small mammals, birds, reptiles and insects. They also eat wild fruit and, if they can find it, carrion.

Genets are more likely to be seen in trees than civets, being semi-arboreal, especially when resting during daylight hours.

Chamgore

In the Chamgore area, 15 miles from the Park headquarters, live large herds of Impala, one of the most graceful of East Africa's antelopes. They will be seen in either all-male herds of sexually mature animals or in breeding herds of females and juveniles of both sexes dominated by a single fine male in the prime of life.

Impala, *Aepyceros melampus,* of which there are between three and four thousand in the Park, are both browsers and grazers. They are called SWALA PALA in Swahili. The females are hornless, but the males carry beautifully shaped lyrate horns which, in a good specimen, may measure up to 33 inches along the curve. These horns are far from being purely ornamental; when a buck from an all-male group challenges the master of the harem, very serious fights take place.

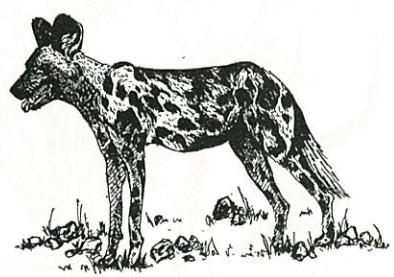


If the challenger wins he takes over mastery of the herd and chases the original male away. If he is defeated he returns to the all-male group from which he came or takes to a solitary life until, once again, he feels able to pit his strength against the herd male.

Impala have scent glands concealed in the 'stifle', where flank meets thigh, and also in tufts of black, wiry hair which grow just above the heel of the hind leg.

For its size there is probably no better jumper than the impala, and it is a fine sight to see them leaping away with effortless ease. They are said to be capable of clearing a height of ten feet and a distance of over thirty.

Because they are prey of many predatory animals, impala are constantly on the alert for danger. Nonetheless, they are often killed by wild dogs, sometimes called African Hunting Dogs, and it is not unusual for an impala to be brought to bay at a stretch of water, such as the Hippo Pool, into which the terrified animal tries to avoid its persecutors by plunging in up to the neck.



The African Hunting Dog differs from the domestic species in that it lacks the dewclaw, but otherwise somewhat resembles a lean, rangy, large-eared Alsatian with a rather blunt muzzle. In Swahili they are known as MBWA MWITU, which simply means 'wild dog'. Their scientific name *Lycaon pictus* draws attention to the fact that they are separate from the *Canis* genus, such as jackals.

Hunting is carried out by the whole pack in silence and at great speed. As soon as the leading dog reaches the prey it grabs hold and hangs on while the others, as they come up get a grip where they can. Usually one dog holds the victim by the muzzle, causing it to pull back, while the other dogs rip the creature open from the flanks and rear. If pups old enough to join in the chase are present, they are given precedence at the kill, the adult dogs lying around while they satisfy their hunger. On the other hand if the puppies are too young to hunt

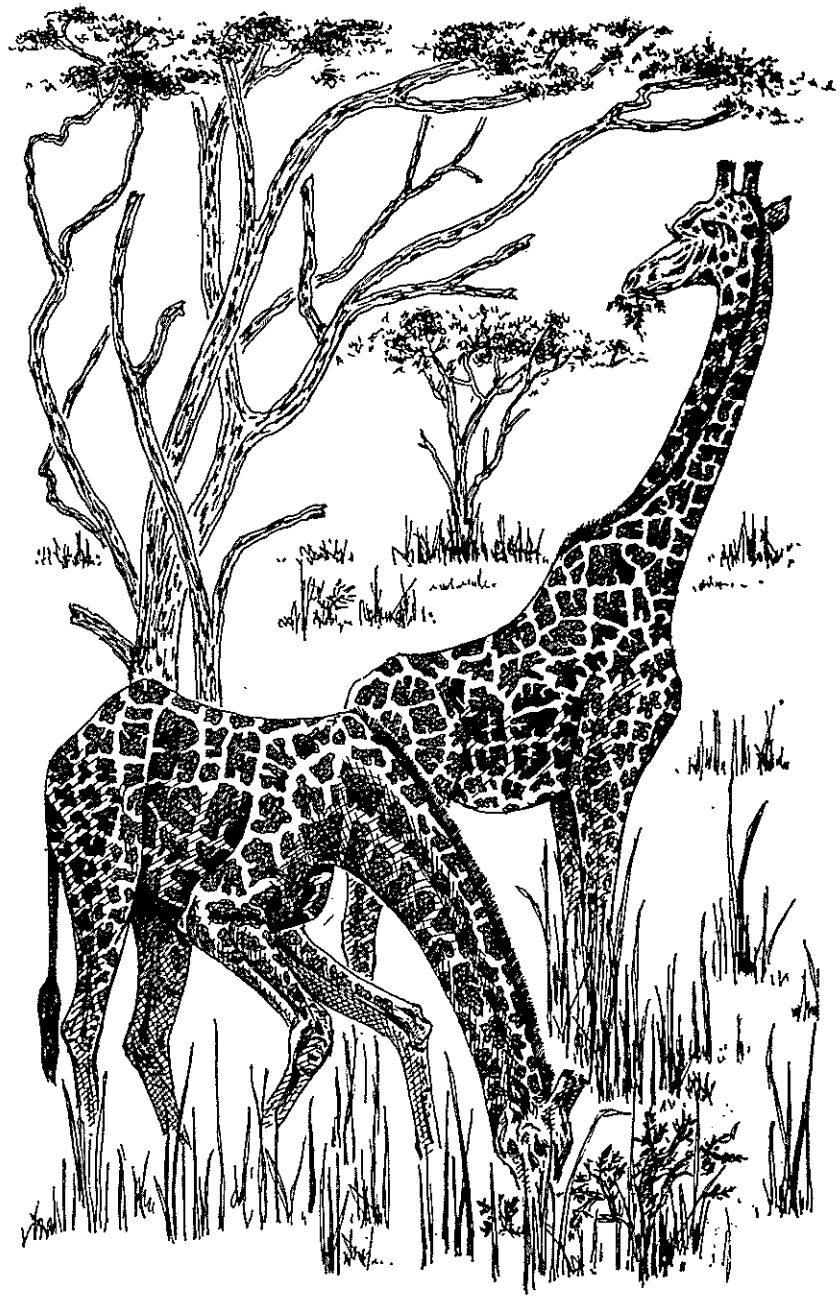
they remain in the earth and are fed on regurgitated meat by the returning adults. A ritualized form of this behaviour pattern is also used in the greeting ceremony between two mature dogs.

Despite the abundance of prey, wild dogs are never very common in East Africa. The young are susceptible to canine distemper disease, and many pups are drowned in the earths which are often, surprisingly, situated in places that flood water can reach. At one time these predators were shot on sight by well-meaning conservationists, working on the principle that as the dogs killed a great many antelope, their absence would allow the herbivores to increase in numbers. What was not realized at the time was the fact that many species need the checking influence of predators to prevent them from over-running their habitat and eventually going into a species decline. Probably the high mortality rate among the dogs themselves is a built-in check on over population. Under the rigorous conditions of their lives only the fittest survive to perpetuate the species.

The giraffe found in Mikumi is the Masai or Common giraffe, *Giraffa camelopardalis*. These differ from the reticulated animals in that they have irregular blotchy markings, as opposed to the strong 'wire netting' effect to be seen on the reticulated species, which does not occur at all in Tanzania. Both are known as TWIGA in Swahili.

There are enormous colour variations within the race, and it is not uncommon to see very pale animals consorting with much darker ones. In Mikumi giraffes are to be seen in almost all parts of the Park except the densest forest and may be watched drinking at the Chamgore water hole, which they do by splaying out their forelegs so as to bring their heads down to water level. In northern Tanzania, where *Acacia tortilis* grows freely, the giraffes live almost exclusively on their tender leaves, but in Mikumi they have more catholic tastes. They may often be seen in open areas browsing off the tender shoots of low-growing trees which have been prevented from attaining normal development by just this kind of attention, not only from giraffes but also from all the browsing animals. At first sight, these trees appear to be young seedlings, but an examination of the root system shows that, left alone, they would already have become full-sized trees.

The common giraffe normally has two horns, thought to be the



relics of antlers, similar to those of mordern deer, which their forebears carried in the distant past.

A giraffe walks in the same way as a camel, both limbs on the same side moving forward together. Despite their extemely long necks (which have only seven vertebrae, as in man) giraffe can and do lie down on the ground to rest. It is said that when doing so they post a 'sentry' who remains on his feet, but this is by no means certain.

An adult giraffe has comparatively little to fear from predators, but lions are not unknown to attack them, especially if found in open country. The young, on the other hand, are killed from time to time by any of the larger carnivores. The giraffe is the National Emblem of Tanzania.

The Hill Drive

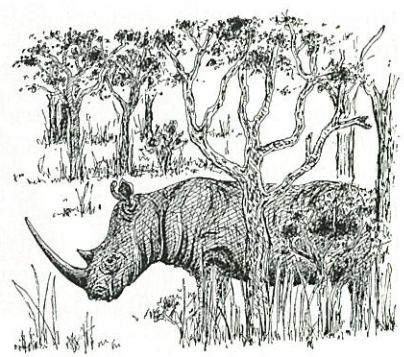
The Hill Drive of 15 miles, takes you into the fan slopes of the Uluguru mountains and into an entirely different ecological region from the Mkata river flood plain.

Here in *Miombo, Brachystegia spp.,* woodland the African ebony, *Dalbergia melanoxylon,* MPINGU, grows intermittently. This is an exceptionally dark, hard wood which is exported in small quantities from Tanzania to Europe and America for making clarinets and other musical instruments. It has been used in its rough-hewn form for the pillars in the gatehouse museum at Kikoboga and is commonly seen in the form of carved curios.

Miombo forest, unlike the acacias and allied trees which grow in the flood plain, is deciduous, shedding its rather broad leaves annually, and putting on new leaves just before the rains break in November. To visitors from temperate areas of the world the red, russet and copper colours of the young foliage seem more autumnal than vernal, although some tree species do produce the typically tender green leaves of spring.

An interesting bird of this woodland is Shelley's double-collared sunbird, *Cinnyris shelleyi,* which is similar in colour and shape to the Mariqua sunbird, except that in the male there is a broad crimson band across the breast. For a detailed description of this decorative little bird it is advisable to consult a recognized book on the subject, as space prohibits a full account here. Like all sunbirds, Shelley's lives on nectar and small insects which it extracts with its long, thin bill from flowers, especially the red-flowered *Loranthus* which grows as a parasite in *Brachystegia* trees.

As you travel along the Hill Drive, especially in the evening, you will be rewarded with some superb views across the Park to the mountains in the west, which can be extremely beautiful against the backdrop of a flaming sunset. These woodlands are the home of the Black rhino, *Diceros bicornis,* called KIFARU (plural VIFARU) in Swahili. In fact, this rhino species is not blacker than his cousin the white rhino. The adjective 'white' was never intended, being a corruption of the word 'wide' which describes the broad muzzle of this creature, not found at all in Tanzania, which is exclusively a grazer, not a browser. The black rhino browses leaves and twigs from low-growing bushes and shrubs, having a rather pointed, prehensile upper lip for the purpose.



A fully-grown black rhino weighs about two tons and carries horns, present in both sexes, which are composed of a fibrous keratinous material rather like compressed hair, and do not fuse with the skull as in bonyhorned creatures but rest in a hollow base from which they occasionally become detached. In this case, the horn starts to grow again immediately at an approximate rate of three inches a year.

Rhinoceros have poor eyesight but very keen senses of hearing and scent. When an intruder approaches too closely, rhino usually make a feint or dummy charge, not always in exactly the right direction, in order to cause telltale movement which enables

them to locate the cause of the disturbance. Although they occasionally run at cars they rarely put their whole weight behind the charge and only very superficial damage to the vehicle's body-work ensues.

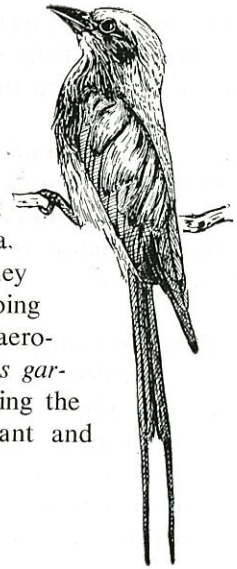
Rhinos have, since time immemorial, been hunted for their horns, which are said to have aphrodisiac properties. Their tempers are often very crusty, and it is advisable to give them a reasonably wide berth. In fact, of course, rhino horns contain no more aphrodisiac properties than finger-nail parings.

In the woodlands live troupes of Pangani black-and-white colobus monkeys, *Colobus angolensis,* called MBEGA in Swahili. These beautiful creatures are almost entirely arboreal, living on the leaves of trees, but very occasionally may be observed on the ground. Their white fur 'cape', which streams out when they leap from branch to branch, seems almost to support them in the air. The main anatomical difference from other monkey species is the absence of a thumb.

Leopard, *Panthera pardus,* CHUI in Swahili, live in the *Miombo* woodland as well as elsewhere in the Park where there is sufficient cover. Leopards are usually seen either entirely alone or as small groups of mother and cubs. The male only associates with the female when she is 'in season', spending the rest of the time in solitude. Prey species consist of most small mammals and some of the bigger birds such as KANGA, the guinea fowl, *Numida mitrata,* which are found in certain areas of the Park. Leopards frequently carry their kill into the branches of a tree where it is fed off and stored away from the attentions of lions, hyenas, jackals and, to a lesser extent, vultures and Marabou storks.

A full grown male animal weighs about 110 lbs. and measures just over two feet at the shoulder.

Leopards do not roar like lions, but 'grunt', 'cough', or make a noise like timber being cut with a hand saw.



A common and beautiful bird throughout the Park, often seen perching on a dead tree, is the Lilac-breasted roller, *Coracias caudata.* Rollers are rather shy if approached too closely, as they are hunted for food and for their bright plumage in some parts of East Africa. They live mainly on insects which they will take on the wing, and when doing so are capable of some remarkable aerobatics. The European roller, *Coracias garrulus,* is also present in Mikumi during the northern winter, as a passage migrant and visitor.

Poaching

Poaching, while not as severe in Mikumi National Park as, for example, in the Serengeti, has constantly to be kept in check if the wildlife is to survive. Illegal hunting with bows and arrows, spears, snares and firearms, ranging from home-made muzzle-loading muskets to modern rifles and shot-guns, is carried out for meat, skins and saleable trophies. Honey-gathering, in itself fairly innocuous, has also to be prevented because the fires which the gatherers light to smoke out the wild bees are usually left untended and can sweep through hundreds of square miles of country during the dry season, causing serious and unsightly damage to the natural vegetation.

Conclusion

This booklet is merely an ntroduction to the wildlife of the Mikumi National Park and by no means pretends to be exhaustive. Although you will surely see more of interest than is outlined here, you will have done well enough, on a short visit, if you have been able to identify the birds and beasts that are described or mentioned.

Remember that a good observer is never in a hurry. If you rush from place to place you turn a potentially unique experience into a dull and dusty drive.

Distances

Mikumi Park Gate to:—

Arusha	570 miles
Arusha (via Moshi)	462 "
Arusha National Park	590 "
Arusha National Park (via Moshi)	457 "
Chamgore (direct)	15 "
Dar es Salam (direct)	180 "
Dodoma (direct)	248 "
Dodoma (via Iringa)	297 "
Iringa (direct)	133 "
Lake Manyara National Park	543 "
Lake Manyara National Park (via Moshi) ...	535 "
Mikumi village (direct)	14 "
Morogoro (direct)	60 "
Ngorongoro Crater	580 "
Ngorongoro Crater (via Moshi)	572 "
Ruaha National Park (direct)	203 "
Serengeti National Park, Seronera	668 "
Serengeti National Park, Seronera (via Moshi) ...	660 "
Tarangire National Park	514 "

All distances are by road and, unless otherwise stated, via Dodoma.

OTHER PUBLICATIONS

For those with more than a passing interest in birds and animals, we suggest the following:

"Animals of East Africa" by C. T. Astley Maberly, published by D. A. Hawkins Ltd., Nairobi;

"Birds of Eastern and North Eastern Africa" by Praed and Grant, two volumes, published by Longmans;

"The Birds of East and Central Africa" by J. G. Williams, published by Collins;

"Serengeti Shall Not Die" by Bernhard and Michael Grzimek, published in English by Collins;

Uniform with this booklet:

"Serengeti National Park — A Guide";

"Lake Manyara National Park — A Guide";

"Ngurdoto Crater National Park — Nature Trail";

Published by, and obtainable through, Tanzania National Parks.

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Notes