Gibbon is a much more plaintive call and daily they serenade the dawn at Kuala Tahan.

The common Brown Monkey (Kera) and Leaf Monkey (Lotong) may be seen in numbers in the vicinity of most rivers and are a pleasure to watch. Those on the river Tembeling have become so accustomed to an outboard motor that they remain seated at the waters edge without alarm while the boat goes roaring by at close quarters.

Game Birds and Others.—The Argus Pheasant and Crested Green Wood Quail are common. The former may be heard daily in numbers but is far too wary to be observed, while the Wood Quail is often flushed on a jungle path. Flights of Imperial Pigeon (Pergam) and Greater Thick-billed Green Pigeon (Berkok) may frequently be seen, also four different species of Hornbills with their peculiar intermittent flight.

The many species of birds to be found in the Park are far too numerous to list but are fully representative of Malayan Avifauna. It is interesting to note that the Tree Sparrow has not yet been recorded in the Park and that for the first time the Yellow Vented Bulbul and Spotted Dove were observed during the year.

Note.—Since going to Press a letter has been received from Mr. A. H. Fetherstonhaugh, Chief Game Warden, Federation of Malaya, that the situation at the end of 1950 in the King George V National Park was substantially the same as in the above report. Some progress in rehabilitation and field observation was made.—ED.

UGANDA

(From the 1949 Report of the Game Department)

GAME RESERVES AND SANCTUARIES

Bunyoro and Gulu.—On the whole this reserve continues to be well stocked particularly in the vicinity of the River Nile. That parts of it are still poached is unquestionable, but it is a moot point whether a conspicuous, local shortage of kob and hartebeest is due to poaching or to the depredations of lions. Baboons in the Murchison Falls Nile region have shown an astonishing increase in recent years which is almost certainly attributable to the widespread harrying to which the skin-valuable leopard has been subjected. Hippopotamus poaching in the Nile has by no means ceased, and the remote control which is only possible cannot be really effective. Authentic reports have been received of several buffaloes having been killed by lions.

On one launch trip to the Falls a lion was seen feeding on a buffalo which it had killed. The vessel's crew landed and, quite irregularly, deprived the poor old lion of its hard earned meal. The disappointed creature withdrew to some high ground and gazed wistfully at the robbing of its spoils. One wonders whether the intruders had the decency to leave even a small portion for the hungry lion.

The recently opened Anaka–Pakwach road is providing a most interesting spectacle of wild life, and kob in particular are abundant at the roadside. Elephants in the vicinity of the Nile section of the road are apt to be a nuisance by refusing to give way to the traveller by car. Lions at night are frightening the residents in the maintenance camps to such an extent that it has been necessary to resort to shooting a few to dissuade them from their unwelcome activities. These maintenance camps are apt to indulge in a great deal of poaching but it is believed that the situation is well in hand as a result of the action taken to suppress this irregularity. It would be the greatest pity if poaching was to deprive the passer-by of the spectacle of all manner of unsuspicious wild life.

There have been few excursions by elephants and other crop raiders northerly into the settled areas of East Madi from the extensive closed sleeping sickness area and elephant sanctuary lying to the north of the Gulu portion of the reserve. There is reason to believe that this large closed area is wellstocked with game, and that in parts of it interesting and rarer species such as the giraffe, black rhinoceros, and roan antelope are common.

Toro (or Semliki).—There is little fresh to report from this somewhat inaccessible reserve, which contains a few small elephant herds, many buffaloes, considerable quantities of kob, and smaller numbers of waterbuck and hartebeest. It still supports an unduly large lion population. The shore line of this reserve is frequented by Lake Albert fish poachers from the Congo.

Lake George.—This reserve, traversed as it is by main motor thoroughfares, is becoming more and more popular as a showground for wild life. Visibility is never obstructed by long grass, and after the seasonal burning all manner of wild life congregates on the lawn-short grassy plains, at which time the graceful kob in its handsome rufous pelage can be seen grazing in large concentrations. It is quite ridiculous to see groups of buffaloes,

that villain of ill-reputed ferocity, peacefully grazing at the very roadside or lying down contentedly chewing the cud not deigning to pay the slightest attention to passing vehicles.

Almost daily about 11 a.m. it can be guaranteed that a herd of elephants six to a dozen strong will cross the main road within half a mile of the prosperous Katwe fishing settlement. Visitors are accustomed to park their cars in the vicinity of this crossing point and to await the opportunity of taking wonderful pictures at point blank range. The elephants usually put in an appearance at least two hours before they cross and in extremely leisurely fashion browse their way towards the road. Then the great moment comes and the huge beasts with a certain amount of diffidence, as if somewhat apprehensive of the masses of silent onlookers, shamble across the highway, and throwing off all caution, drink and disport themselves in Lake Edward a few hundred yards distant at a place where there is not a vestige of Seldom in Africa can the sightseer witness so extracover. ordinary a spectacle of the normally timid wild elephant at its ease, absolutely regardless of man and his noises and scent, and of the motor traffic which with blaring horns roars along the road often at only a few yards' distance.

Lake Edward.—Owing to an oversight no reference to this reserve was made in last year's Report. It still constitutes a reservoir of well-endowed tuskers which occasionally emerge to their own detriment but to the considerable benefit of some lucky licence-holder. Buffaloes are abundant, while waterbuck, hartebeest, and kob are not uncommon.

It has been agreed that when the Rwensama fishing settlement is ready for opening on the Lake Edward shore a suitable area will have to be excised from this game reserve in order to ensure satisfactory development.

White Rhinoceros Sanctuaries.—In April the Game Warden visited the white rhinoceros sanctuary in the Mt. Kei Crown Forest Reserve in Aringa County of the Lugbara in West Nile. It was estimated that there are probably about two dozen white rhinos in this sanctuary. Unfortunately lack of time prevented a visit to the Mt. Otze Crown Forest Sanctuary, in West Madi, which is said to contain a larger stock of these big creatures. But it is in the Era Crown Forest Reserve in West Madi which has not yet been created a sanctuary that the white rhinoceros is most plentiful.

Gorilla Sanctuary.—From all accounts gorillas are fairly plentiful in and above the elevated forests on the Birunga Mountains in south-west Kigezi. Bird Sanctuaries.—An additional and exceedingly valuable bird sanctuary has been proclaimed at Lake Chahafi in southwest Kigezi. Great crested grebes, the lesser grebe or dabchick, coots, purple coots, moorhens, lily-trotters, pigmy lilytrotters, black crakes, yellow-wattled plovers, white-backed diving ducks, hottentot teal, and yellow-billed duck all breed here, as well as many species of small birds. Crested cranes, various herons, African pochard, pigmy cormorants, snipe, francolins, quail, crows, birds of prey, and a host of other species also occur.

Area of Game Reserves and Sanctuaries.—Below are tabulated the areas of the various game reserves and sanctuaries :—

					Sq. miles.
	Bunyoro and Gulu Game Reserve				1,750
(ii)	Toro (Semliki) Game Reserve .				202
(iii)	Lake George Game Reserve .				523
(iv)	Lake Edward Game Reserve .				538
	Gorilla Sanctuary (S.W. Kigezi)				17
	Ankole Reserve				121
	White Rhinoceros Sanctuaries :	•	•	•	
()	(a) Otze Crown Forest (West Ma	di)			80
	(b) Mount Kei Crown Forest (We		le)	÷	170
(viii)	Bird Sanctuary at Old Entebbe app				4
	Lake Chahafi Bird Sanctuary—less			•	1
	Bulamagi Dam Bird Sanctuary	oucui	•	•	(a few acres)
(x)	Dulamagi Dam Bird Sanctuary	•	•	•	(a lew acres)
	m				0.400
	Tota	L	•	•	3,406

NOTES ON THE FAUNA

A Baby Elephant.—The Game Ranger at Hoima caught a baby elephant about six months old, which after it had been in captivity a short while started browsing on its own, so it had possibly been partially weaned prior to capture. It was a young bull which almost immediately became remarkably tame and was very friendly with everyone. Within four hours of capture he climbed into and out of a truck by himself.

He became greatly attached to his African keeper and it was interesting to see how the young animal was prevented from straying as by day he was left absolutely free in a small unfenced garden to wander as he chose. His keeper used to hang his coat on a shady tree and then introduced the elephant to the coat. The young animal smelt it and agreed that it was his keeper and stayed contentedly there until the African returned to take over his charge. No doubt in the wild state the cow elephant when browsing makes her offspring stay put by rubbing herself against a tree, making the youngster smell it telling it "That's mother, and don't you dare move from there !"

It was fed on double strength dried milk and a certain amount of cow's milk when available. It drank voraciously frequently consuming 40 bottles a day. It also drank with relish a claretcoloured concoction prepared from a local tree the bark of which the Africans alleged the elephants consume.

One ear was slightly damaged near the orifice, and evidently very tender as the young fellow complained in no uncertain noisy fashion if it was touched. He soothed the injury with water or mud, and sometimes with the porridge he was given to eat. There was no direct approach to the wound but he used to bring his little trunk over his head and then gently administer the soothing medium. He delighted in a shallow bath which had been dug for him, and frequently lay down in it for long periods.

After a month at Hoima the little creature was sent to Tanganyika where several weeks later it died from an unknown cause. It is believed that it had become so attached to its African keeper that after his departure from Tanganyika it just pined away. However, while at Hoima it had exhibited signs of enteritis which is a particularly deadly malady amongst very young wild animals when kept in captivity, and due principally to incorrect feeding or some deficiency.

REPRODUCTIVE CYCLE OF THE AFRICAN ELEPHANT

The main points about the reproductive cycle are that breeding begins at a very early age, probably 10 to 12 years, and goes on until extreme old age. Not only is the elephant's total reproductive life of great length, but during it there is little evidence of the reproductive organs getting any rest—resting periods probably do intervene in some cases, but none showed in my material, and in general it may be said that an elephant from the age of about 12—say 7 ft. 6 in. at the withers—is very likely to be either pregnant or lactating . . . the general rule is for gestation and lactation to overlap—a pregnancy of about 22 months followed by parturition, lactation, and, after something just over a year, another conception. The suckling calf of course will not be weaned for perhaps another year, and the new foctus will be very small relative to the size of the mother until more than half-way through pregnancy.

Gorilla.—Although seldom seen, gorillas are more than holding their own in the gorilla sanctuary in south-west Kigezi and in the Kayonza Forest: in fact during the past twenty years there has probably been a fifty per cent increase.

Despite strict protection accidents will happen and in August an old male gorilla met an untimely end in the Gombolola of Nyasusiza in south-west Kigezi. He had evidently wandered down to cultivation some two miles outside the gorilla sanctuary where he became involved in an organized pig hunt and was speared by mistake in dense undergrowth.

A prospector in the Kayonza Forest in Kigezi had the rare good fortune to watch a large male gorilla for an hour and a half, from 10 a.m. to 11.30 a.m., as it fed in the open at distances varying from 30 to 50 yards from him. He estimated its height to be from six feet to six feet eight inches and its back to be over 84 inches. He described its colour as being lustrous velvet black all over the body with a "kettle-black" face and a patch in the middle of the back almost as pure white as a colobus. His description of the movements of this gorilla are quoted here :---

"He came on all fours from the edge of the tree ferns right into the middle of an old potato patch. He was very nearly parallel to the ground moving on the knuckles of his hands. hind toes digging in, no raised arch at all: as he moved the forearms gave at wrists and elbows. Neither sinuous, undulant, nor serpentine describes it properly, but a suggestion of all three. There was a tendency to pace, with leg and arm on each side moving forward together. On crossing a fallen log his chest crushed heavily all the mosses and creepers thereon as he dragged himself over. When he had dug up some roots and potatoes he clutched his spoils with one hand and forearm and moved 10 yards to a big standing tree. Against this he leant his back and squatting on his hams ate at ease. This he did three times returning to the same tree after his foray. On moving he again went almost flat. After some time he went to the tree ferns at the edge of the clearing and began to feed on the young shoots and creepers. Whilst tearing and devouring these his torso was erect but he only partially straightened his legs when reaching high, and pulled rather than raised himself up. When moving on all fours the head was held at such a backward angle as enabled him by movement of the eyes alone to watch both the ground and to a distance. He seemed to stiffen slightly when he focussed me but made no demonstration".

An officer of the Administration who climbed Mt. Sabinio in August reported finding signs of gorilla at 11,800 feet and a definite trail leading down to the bamboos of Ruanda. As some of the ridges are extremely steep, narrow, and exposed, it says much for the gorilla's capabilities as a hill climber and scrambler.

Chimpanzee.—This ape continues to be reasonably plentiful in various parts of western Uganda and Game Rangers report that they are more numerous in the Budongo Forest in Bunyoro and in the Toro forests than is generally supposed : though not often seen they are frequently heard.

Lion.—A Medical Officer, accompanied by a Nursing Sister, had a nerve-wracking experience near Moroto, Karamoja, when called out in the middle of the night. On the way they came upon three lions sitting in the moonlight beside the road and only a hundred yards on a tyre went flat. The Doctor got out and changed the wheel while the Nursing Sister kept guard over him, armed only with an electric torch. It is understood that the wheel was changed in record time !

Leopard.—In some localities there appears at last to have been a slow but definite increase in the leopard population as a result of the protection afforded since 1945. Reports have been received of leopards being seen and heard in areas from which they had vanished some time ago as a result of being persecuted for their skins. The high price offered for the latter, however, in an ever ready market, still causes many to be killed illegally and a number also have had to be destroyed in defence of live stock.

The experience of a party including two ladies, which climbed the Ruwenzori in December appears to indicate that high altitudes affect leopards in a peculiar manner! Whilst camped at Bigo at 11,000 feet the party were having supper near a fire about ten yards from their two tents and when one of the ladies went to her small tent to collect some sugar she backed out to find a leopard had been regarding her with considerable interest. She ran to the rest of the party who switched on their torches and observed a small light coloured leopard with its front half in the tent. The animal was chased away but half an hour later the other lady, on going to her tent, observed a second, darker coloured leopard, in the light of her torch, which slunk away into the bush where it sat and watched her. She then discovered that her sleeping bag had been dragged some four yards from her tent and the party decided to sit up over the sleeping bag and await the animals' return. They did not appear again, however, and it was finally discovered that a number of articles were missing from the tent. A camera in a well-chewed leather case was found twenty yards down a path. A collecting bag which had been removed was never traced and as it contained formalin the leopard's stomachs may have been well and truly pickled ! It is interesting to note that the party considered that

the leopards must have paid at least five visits to the tents to remove all the articles they took.

Hunting Dog.—This year these bold and destructive animals appeared in the Lake George Game Reserve in large numbers in June. In April a Ranger reported seeing a pack in East Madi which crossed the main Laropi-Atiak road in front of his vehicle. They did not appear to be the least afraid and stood by the roadside to watch the car pass.

Another pack, apparently in the middle of a hunt, was observed in May crossing the main Kampala-Hoima road at mile 100, in Singo County, Buganda.

Unconfirmed reports in November stated that hunting dogs had taken to stock-raiding in Bulemezi County, Buganda.

An extraordinary incident was observed, early one morning, by a European staying at Katwe Rest Camp on the shores of Lake Edward. Below him he saw a full-grown hippo being set upon by a pack of hunting dogs. The dogs which were silent were all round the hippo which was endeavouring to get to the water. Some were actually worrying the big beast by jumping at its chest and legs. The intervention of the onlooker made the dogs desist from their attack, but having left the hippo they formed a semicircle round two elephants who were obviously scared and trumpeted loudly through raised trunks at the same time retreating backwards. It is most unusual for hunting dogs to attack an animal as large as a hippopotamus.

Spotted Hyaena.—This normally cowardly animal can at times become surprisingly bold and aggressive. On three occasions, near Moroto, in Karamoja, a hyaena attacked people sleeping in their poorly-built huts. One child was killed, a woman mauled, and another child badly injured.

Also in Karamoja a Veterinary Officer on tour at Nabilatuk had an unpleasant experience with what is believed to have been a hyaena. He woke up at night to find his mosquito net untucked and a furry head actually inside. A well-aimed kick sent it away.

In Busoga, although lion and leopard were the culprits in some cases, the majority of over 400 domestic animals killed has been the work of hyaenas.

Buffalo.—Two Africans went hunting buffalo in the Toro Game Reserve in August. One of them speared a buffalo which charged and killed him. The second man, frightened of being accused of murdering his friend if he said nothing, reported the incident and was arrested for poaching in the reserve !

Bush Pig.—Unfortunately there is never anything good to write about the bush pig which, of all animals, as a source of constant, serious damage to cultivation must be regarded as Public Enemy No. 1. An unsolicited testimonial to a Game Ranger in which he is described as having "a heart as black as charcoal" is perhaps more applicable to the bush pig.

Hippopotamus.—The hippopotamus is as numerous as ever and even in arid Karamoja the three that arrived at the Longorokipi dam early last year have been joined by others, making a total of seven.

An unusual incident took place in the Kazinga Channel when the Game Warden was out in a launch. The body of a hippopotamus was seen lying tucked into the bank, partially screened by overhanging vegetation and the launch was taken up for a closer inspection. With the launch almost touching the body it appeared that the hippo could only recently have died. The body was left and the launch moved on. Later a return visit was made to the spot and when the boat was almost on it the corpse came to life and a very frightened hippo rose under the bows, blundered into the bank, crashed through some reeds, and plunged to the safety of the water, luckily hitting the launch only a glancing blow as it went. An extract from an African fish guard's report on the episode reads "it fiercely rushed out towards the launch and nearly crashed it. Here the incident turned out fun and laughters !"

On the road close to the Lake Edward shore between Katwe and Kabatoro, which is crossed nightly by hundreds of hippopotamuses proceeding to their feeding grounds, a lorry hit one of these animals after dark. The hippo was under the vehicle and the driver pressed hard on his accelerator to try and get clear. He did not realize, however, that the back axle was resting on the animal's back and that the rear wheels were clear of the ground. The more he accelerated his engine, the more did the unfortunate creature struggle, probably being well and truly burnt by the exhaust, the vehicle meanwhile remaining stationary. Eventually the two parted company, no doubt to the mutual relief of hippopotamus and driver.

White Rhinocerus.—As a result of strict protection the white rhinocerus is thriving and it is believed that during the past twenty years there has been a fifty per cent increase.

A survey carried out by a Game Ranger in West Madi and the northern part of West Nile District as far south as the Arua-Rhino Camp road, indicates a total of between 150 and 200.

West Madi-					
Metu–Dufile–Leya Valley area		30			
Kale–Waka–Liwa area		70			
Laufori–Moyo area , , ,		25			
West Nile					
Aringa county : Kei–Midigo area		25			
Balala swamp : Bulakatoni-Rhino Camp-Rigbo		20			
Various places : individuals and small groups					
Total	•	190			

During a three days' tour at the end of May an Administrative Officer saw in the Kale-Waka-Liwa area at least 20 family groups of white rhinocerus.

Although normally quiet and inoffensive these great beasts on rare occasions become aggressive. A game guard on patrol near Laufori in West Madi came on a white rhinocerus cow which had shortly before given birth to a calf. She not unnaturally resented his intrusion and chased him into a river. A tragedy occurred at Rigbo to a man who was cultivating his shamba. He had started work when he saw two white rhinocerus under a nearby tree. He began to run for his house and the cow rhino gave chase, gaining rapidly. Realizing that he was being overtaken the man turned round and hit the rhino over the head with his hoe. This failed to turn the animal which gored him, causing fatal injuries.

At Kale, West Madi, a white rhino was killed in a snare set for buffalo. The poacher concerned was prosecuted and fined in the District Court.

Siberian Ringed Plover.—On the evening of 6th May at Entebbe an unfortunate ringed plover was found on the foreshore absolutely crippled and helpless with a gigantic waterbug, about three inches long and more than one inch broad, fastened to the bird's body under one wing. The poor little bird, which could not be induced to feed, was still alive at noon the next day, but as it was evidently severely injured it was killed and examined when it was discovered that the bug had been feeding on its victim's liver which it had pierced with its long, sharp proboscis. It was truly a most formidable and repulsive insect, which will also attack small, disabled fish, and has been identified by the Senior Entomologist as Hydrocyrius columbi α , of the family Belastomid α .

Black-and-White Casqued Hornbill.—This bird has very curious nesting habits for having selected a suitable hole in a lofty tree the male closes the hole with mud and feeds the female through a small slit in her prison wall. The female remains shut up throughout the incubation period and until her brood is ready to fly, and during her incarceration goes through a complete moult. Towards the end of the year a pair of these birds selected a hole in a tall tree in the Botanical Gardens and had got as far as the walling in process when an interloper appeared on the scene and after a day of fierce fights stole the affections of the fickle female. Thereafter the jilted male for weeks came daily to the abandoned nesthole peering disconsolately into it and groaning and sobbing most mournfully.

THE INDIAN LION

(From a Report on the Lions of the Gir Forest by M. A. Wynter-Blyth.)

The Gir Forest in Kathiawar is the last home of the Asiatic lion. Up to the beginning of the last century the lion inhabited all suitable parts of north and central India, but the introduction of modern firearms and the spread of population led to its disappearance by 1884 from everywhere except Kathiawar. Even within Kathiawar the lions retired to the protection of the Gir Forest, except for irregular visits as far afield as the Barda Hills. This forest in southern Kathiawar in 1878 covered 1,200 square miles, but its area is now reduced by half. Much of it is thick forest of the mixed deciduous type, with teak predominating, but the undergrowth is fairly thin, allowing grazing of cattle and buffaloes throughout most of the area. In the eastern Gir there is grassland and scrubby bushes, including several kinds of acacia.

The Indian Lion differs little in appearance or size from the African, but is more shaggy and has a long tuft of hair at the end of the tail and on the elbow joints. The mane is scantier and varies in colour from tawny to grey.

The animals which form part of the lions' food include Chital, Four-horned Antelope, Wild Pig, Chinkara, Nilgai, and a few Sambar, but game is scarce and the lions seem to feed chiefly on cattle and buffaloes. Leopards are abundant and important in that they feed on many of the animals included in the lions' diet. Having little fear of man, it is not unusual for the lions to enter villages at night and kill cattle that are poorly secured. By day they lie up in the shade, especially of banyan trees or near waterholes. During the monsoon many lions leave