



Wildlife in Zaïre

Jacques Verschuren

The first part of Dr Verschuren's survey of Zaïre's wildlife, which appeared in the last issue of *Oryx*, April 1975, surveyed the main wildlife areas and described the conservation policy of the Zaïre Government under President Mobutu Sese Seko, one of the most forward-looking and conservation-minded governments in Africa. This second article discusses the status of the major large mammals. The author concludes that, largely because Zaïre has maintained very large areas of forest intact, the wildlife situation on the whole is good. Most encouraging is the fact that the highest authorities in Zaïre appreciate the value of their wildlife heritage. The photographs in this article are by the author.

This survey is limited to the large mammals and based almost exclusively on observations made since 1960. The classification followed is that of Dorst. Maps, including one showing the areas where localised species, such as gorillas and okapi, are found, are on page 27 of the last issue of *Oryx*

Lowland (western) gorilla *Gorilla gorilla*. Although almost certainly extinct in Zaïre, there is a possibility that some individuals from Cabinda and Congo/Brazzaville occasionally cross the frontier in the north of the Mayumbe Forest, where there has been rapid and widespread clearance.

Mountain (eastern) gorilla *Gorilla beringei* and other contestable species or subspecies. Zaïre harbours at least 98 per cent of the total mountain gorilla population, and one can be reasonably optimistic about its present status. A few individuals still survive in Uganda's Impenetrable Forest (so-called), as well as on the slopes of the extinct volcanoes in Rwanda and Uganda, generally in areas adjacent to Zaïre. The high mountain *Hagenia* forest, at about 3000 m., on the extinct volcanoes of the Virunga National Park, probably accounts for about 200 individuals. Some 40 remain on Tsiaberimu and the high ridges dominating Lake Amin (formerly Edward).

**MOUNTAIN
GORILLA** in
Kahuzi-Biega
National Park



There are none on Ruwenzori, where there have never been any signs.

In the Kahuzi-Biega National Park, near Bukavu, 200 individuals live at a 'low' altitude, about 2000 m., in what is now more or less secondary forest, and some groups have become incredibly approachable. They also occur on a large number of the highest slopes of the western rift, from Goma to beyond Uvira (Itombwe); these suffer heavy disturbance from domestic livestock.

However, the mountain, or so-called western gorilla sometimes considered to be a separate subspecies *G. g. graueri*, is still numerous over a very large area of Kivu and Maniema, extending westwards in forested areas from the rift to within less than 200 km. of Kisangani. These vast inaccessible forests, with few human inhabitants, are crossed by valleys but the altitude does not exceed 1500 m. The gorillas seem to like blocks of secondary forest, where they occupy small 'islands' probably with no longer any contact between them. The recently established Maiko National Park protects a few. An estimate of total numbers as 2000 is probably not an exaggeration, but investigation is needed. As in the Kahuzi-Biega, and in contrast to the volcano area, these gorillas are fairly actively hunted by the few local people, who moreover regard them with considerable fear.

Chimpanzee *Pan troglodytes*. Still relatively common in the vast forests on the right bank of the Zaïre river, chimpanzees are often heard, but rarely seen. Their range also includes large areas of riverine forest, sometimes entirely separated from the main forest blocks, where "islands" of relict populations are quite separate from those elsewhere (see also the accounts of Kortlandt and de Bournonville in Guinea and Dupuy in Senegal). Generally very shy, chimpanzees can become extremely tame.

Pygmy chimpanzee *Pan paniscus*. In theory, this species exists in the vast forest expanses of the Zaïre river's left bank, but in practice, very little is known despite some recent scientific expeditions. More a forest species than the ordinary chimpanzee, pygmy chimpanzees certainly occur in the Salonga National Park, also near Lake Inongo, and appear to be particularly abundant in the relatively intact, and very beautiful, forest blocks south of Lisala, near Bosondjo, where they are regularly brought by locals. Dr de Wys has begun an exhaustive study of this rare animal in captivity in its natural habitat. A thorough study of the species, as of *G. g. graueri*, is urgently called for. The pygmy chimp seems to be sought after for its meat, and the local inhabitants make no distinction between it and the other primates (*Colobus*, *Cercopithecus*) which are massacred by the thousand in the accessible parts of the forest.

Lion *Panthera leo*. Common in the national parks, lions undoubtedly occur in reduced numbers in most of the less populated savanna regions that carry antelopes, and have even been seen in the immediate proximity of Nsele, near Kinshasa, in the Bateke plateau area. Where the herbivores have been almost exterminated but the biotope remains intact, as is the case on the lower Semliki flats, south of Lake Mobutu (formerly Albert), they prey mainly on livestock. In the north part of the Kundelungu plateau, outside the park, they fall victim to poisoned carcasses put out by the herdsmen.

Leopard *Panthera pardus*. Formerly found throughout Zaïre, the leopard seems to have maintained itself relatively well in several regions, even some which are fairly densely peopled, although it is hardly ever seen. It seems to be completely extinct in the Kahuzi-Biega park. Almost ubiquitous, leopards occur in dense equatorial forest as well as dry savanna and even above 4200 m. on Ruwenzori, where they feed on the innumerable tree hyraxes. On the volcanoes they have been blamed for the deaths of several gorillas.

Cheetah *Acinonyx jubatus*. The high plateaus of the Kundelungu National Park, where there is an extraordinary abundance of oribis *Ourebia ourebi*, and the surrounding areas, are the only region where the cheetah is known with certainty to survive. In 1972 we saw a female with three young at 1800 m. The Conservator has recently saved several young which had been seized by hunters. It is probable but not certain that it also exists on the Upemba plateaus and in various parts of Shaba, South Kasai and possibly even South Kwango. Prior to 1960 Curry-Lindahl saw cheetah in the Virunga park.

West African manatee *Trichecus senegalensis*. The manatee is still to be found in the mangroves at the mouth of the Zaïre river, in the Banana region. In 1972 several were discovered in another part of the mouth.* Its continued survival is threatened by direct hunting, but even more by the probable destruction of the biotope, as yet intact although under threats, unless a reserve can be set up in the mangroves.

* Verbal communication by Colonel J. Powis de Tenn Bossche.

Elephant *Loxodonta africana*. The suggestion of one author that elephants in



Zaire before 1960 numbered 100,000 is undoubtedly an exaggeration. Elephants have been heavily poached during recent years and Zaire is now one of their last refuges in Africa.

Elephants are not found in lower Zaire or in many of the more populated regions (parts of Kwango, Kasai, Ubangui), but are abundant throughout most of the large intact forest blocks, particularly in the Salonga; in the savanna they maintain themselves with much greater difficulty. However, low-altitude flights over many little frequented regions have revealed typical signs of large troops almost everywhere. These were especially numerous near Kasongo and along the Lupiala, south of Lake Moero. Outside the reserves, elephants are generally nocturnal, sheltering in the marshes or dense vegetation and only revealing their presence by their dung. They are relatively common on the flats of Luama and especially of the upper Lualaba and upper Lufira. The herds in the Upemba and Lufira marshes are among the largest in Africa, according to Professor Grzimek, but highly threatened, especially at the foot of the Kundelungu escarpment. Only a few have been observed on the Shaba plateaus.

The region where elephants thrive best is the relatively inhabited savannas north of the equator extending the length of the frontiers with the Central African Republic and Sudan, and including the Garamba National Park, where troops of 600 have been recorded (other observers say over 1000). The vast expanses of Sudan and Zaire are undoubtedly one of the last regions in Africa where long migrations are possible without major human obstacles, and there are probably elephant migrations between the marshes of the Upper Nile (Bahr-el-Gazal in the Sudan) and the north of the equatorial forest, with the result that numbers in the Garamba park vary enormously from year to year. The unique Gangala na Bodio station, which currently has 12 captive elephants, has been maintained, although its future is somewhat uncertain because both drivers and monitor elephants are growing old. The courage of these drivers in the 1964 rebellion, when they lived isolated for several months in thick bush in order to save the animals, should be remembered.

In the Virunga park it was the elephants that suffered most between 1960 and 1970; over 80 per cent were exterminated. Since 1970 there has been an appreciable but slow improvement. The principal threats come from Uganda. The value of ivory has soared past all belief, and so greatly has the density of humans, and therefore of hunters, increased in the surrounding areas, that it is very difficult to protect the Virunga elephants. Each lodge (Rwindi, Vitshumbi) has its two or three semi-tame "parasitic" elephants. On Karisimbi elephants have been observed at an altitude of 3300 m., but they do not go nearly so high on Ruwenzori. In the Kahuzi-Biega park near to Bukavu, where they were once common, elephants were totally exterminated, but the park is now beginning to be repopulated from the great equatorial forest.

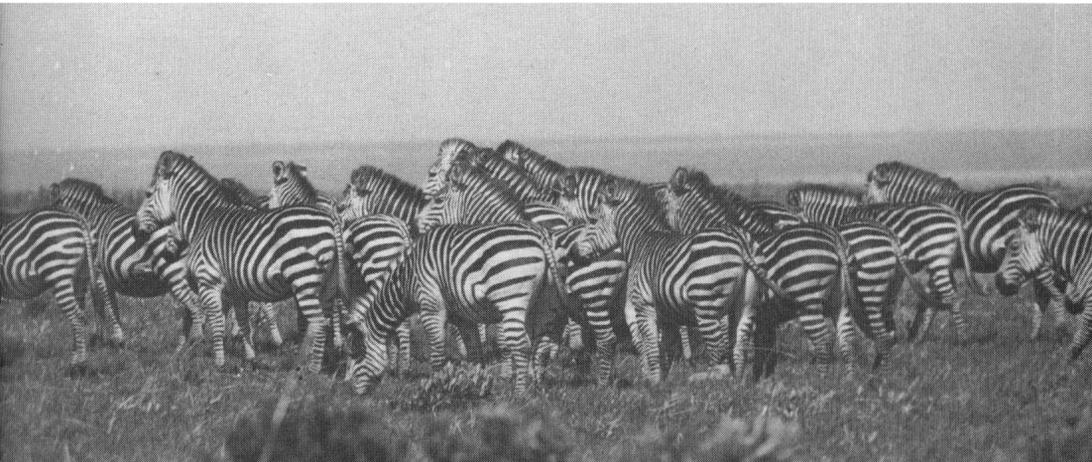
Elephants sometimes do considerable damage in plantations, as their depredations near Rutshuru in the 1973 drought showed, but the extent of the damage is always grossly exaggerated and a number of people build temporary huts on the elephants' routes in order to have an excuse to kill them. In the southern sector of the Virunga park the principal cause of death is toxic natural gases (CO₂ in high concentration), a phenomenon that was studied in detail by the author.

Zebra *Equus burchelli*. Never abundant in Zaïre, the zebra is now practically extinct outside the national parks. The total population is probably under 1000, mostly in the northern sector of the Upemba National Park in the Shaba, where fine herds are well protected near the Lusinga station. Individual animals still survive on Kundelungu outside the park, also possibly between Pepa and Moliro (Letiexhe), and perhaps along the Zambian border between lakes Mweru and Tanganyika to the north of Mweru Rantipa (in Zambia); but they are probably gone from the high plateaus of Kibara and Marungu. In the Akagera National Park and adjacent areas in Rwanda, some 200 km. from the Virunga park, they are still numerous.

Black rhinoceros *Diceros bicornis*. It is practically certain that this rhino is completely extinct in Zaïre. The last specimen was killed about 1957 near Kabengele, on the south-west edge of Upemba National Park. Hopeful rumours of survivors in the immense bush of the Shaba, including the south of the park, circulate regularly, but cannot be credited.

Thanks to the initiative of Charles Van der Elst six black rhinos from Karagwe in Tanzania were reintroduced into the Akagera park in Rwanda about 1957. The experiment proved a remarkable success, and numbers have more than doubled.

White rhinoceros *Ceratotherium simum*. If the southern form of this species is very well preserved in South Africa, Zaïre, despite terrible vicissitudes, apparently constitutes the last bastion for the northern form. Censuses in 1963 indicated 1300 individuals; almost all were exterminated in a few months by local rebels or Sudanese mercenaries. Curry-Lindahl estimated their numbers in 1966 at roughly 100. Since 1969 the species has been fiercely protected and a fairly appreciable increase can be noted. Between 150 and 200 animals – including a lot of juveniles or subadults – have been recorded mainly between the Dungu and Garamba rivers and also further north, and 15–20 live permanently outside the park, mainly in the west. For a long time this rhino has not been seen at north Ango, where there were very early records of it. The white rhino's future is in the balance in the Central African Republic, in southern Sudan – where there is no precise information – and in Uganda, about which also little is known. A reserve had been established



in Uganda's West Nile district, and white rhinos were introduced in the north of the Kabalega (Murchison Falls) park. But little is known about the Uganda situation. What happened in Zaïre in the space of a few months in 1964 demonstrates the extreme vulnerability of this species, one of the most threatened in the whole of central Africa.

Hippopotamus *Hippopotamus amphibius*. Although numerous and increasing in the Virunga and Garamba parks, especially the latter where numbers appear to have doubled between 1950 and 1975, the hippo's status elsewhere is far from satisfactory.

In most of the navigable rivers of the equatorial basin hippos have been nearly annihilated, and they are no longer ever seen near the boats making the circuits on the Zaïre and Kasai rivers. When it was set up the Salonga National Park, a vast area of 36,000 km.² (bigger than Belgium) drained by hundreds of rivers, sheltered a total of ten hippos! There may be more in the non-navigable rivers, in some marshes and along some of the savanna rivers where their habits are strictly nocturnal, but they are seldom seen in the upper Lufira and upper Lualaba marshes or on the lakes near Lake Upemba, and they are infrequent on Lake Tanganyika. They do, however, still occur near Bujumbura in Burundi, and, without any doubt, on the Ruzizi river on the Burundi border. They are occasionally seen on the pool near Kinshasa, and some years ago could be seen in the mangrove creeks near Banana, where they may possibly still survive. In Lake Kivu they have been completely exterminated.

In the Virunga National Park hippos are common in the central sector and the eastern side of the lake, and on the upper Semliki, especially near Ishango, but numbers decrease rapidly towards the north beyond Kasindi, although some survive in the forest areas. It is true that in this northern sector of the Virunga park poaching during the rebellion assumed Dantesque proportions, the mercenaries massacring hippos with machine-guns, and recovery has been slow. In the tourist zones, however – Rwindi, Rutshuru – which make such an impression on the visitor, numbers now must be approaching the optimum population. The total for the park area is $\pm 20,000$. In the vicinity of Lake Mobutu, where they were formerly very common, hippos are now rather rare. They have been recorded in very small numbers up to an altitude of over 2000 m. (on Lakes Magera and Mokoto).



Clearly the hippo is a species which, when well protected, maintains its strength easily and even increases fairly fast, but is otherwise very vulnerable. Extreme care is needed before undertaking eventual cropping, and preliminary studies are vital. This possible "hyperpopulation" of hippos on the edge of Lake Amin and the rivers which feed it, especially the Rutshuru, is a phenomenon which is quite unique in the world. The concentrations of hippos in the Virunga park enables some unusual studies to be done on the crucial problems of aggression, and also on natural regulation of population size. From an ecological point of view, habitat deterioration is far from being proved, despite appearances. The so-called "erosion areas" seem to be more of edaphic rather than of biotic origin. Photographs show that they have been "stable" for nearly fifty years.

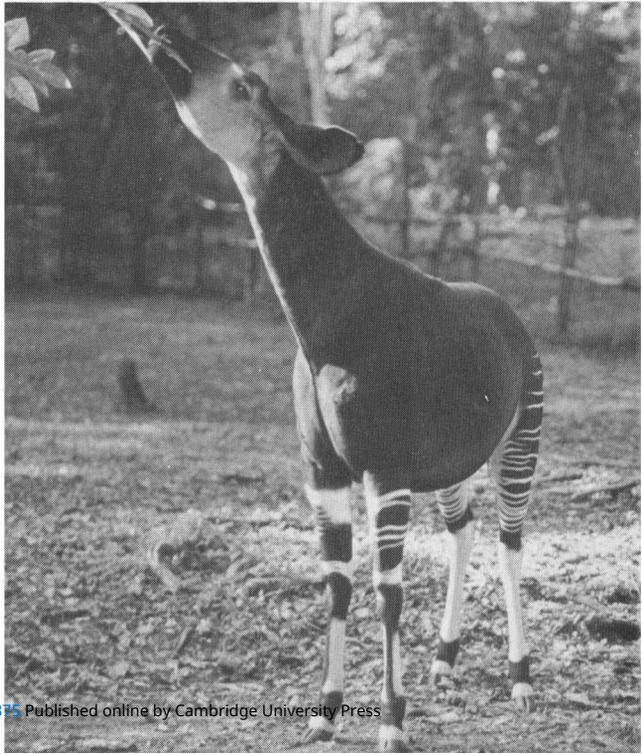
Giant forest hog *Hylochaerus meinertzhageni*. This member of the Suidae is probably much less rare in Zaïre than is usually thought, and can be seen in vast areas of forest. In the Virunga park it has adopted semi-diurnal habits and become relatively tame. It is fairly frequently seen in the savanna.

Giraffe *Giraffa camelopardalis*. Giraffes occur only in the Garamba National Park and the immediate surroundings; in 1948 they had a slightly larger range. They have been heavily poached (not for meat, which is locally taboo) and numbers barely reach 300, a reduction of at least half since 1960. Fortunately the demographic (age-ratio) situation is quite good.

Okapi *Okapia johnstoni*. It goes without saying that the okapi is exclusive to Zaïre. It is probably less rare than is imagined, but being strictly nocturnal and of skulking habits, it is never seen. A typically forest species, equally at home in secondary (for example *Cassia*) forest as primary, its present distribution is irregular – along a huge arc of forest in areas as far apart as Ubangui

SEMI-TAME

OKAPI



and the Abumonbazi forest in the north, and possibly the forest blocks of Kwango in the south; it is absent or rare in the centre of the equatorial basin. The highest population density is probably reached in the north east of Kisan-gani province (now officially termed a "region"), particularly towards Wamba, where okapi skins and meat are regularly put on sale by the local inhabitants. Trapping (in pits) at the Epulu scientific station suggests a high density. Okapis are hunted illegally for meat, which fetches less than a dollar per kilo, whereas the live animal is worth tens of thousands. The creation of a large Okapi National Park, based on the existing small station at Epulu, which keeps a few okapi, is greatly to be desired. Okapi also occur in the extreme north of the Virunga park, and especially in the Maiko National Park whose infrastructure is gradually improving. On Mt Hoyo they are reputed to shelter in caves. On paper the okapi is strictly protected; in practice protection is not enforced.

Lord Derby's Eland *Taurotragus derbianus*. This large antelope, once thought extinct in Zaïre, was rediscovered in 1971 between the rivers Gwane and Mbomu, north of Ango, by a team led by P. Pierret. It was recorded earlier and "classically" in the Garamba National Park where it is no longer to be found except as an "accidental" – migrants from Sudan which have penetrated the small clumps of *Isoberlinia doka*. They must be commoner to the north, for Zaïre is too near the southern edge of its range. In the Ango area, where they have some protection, a national park is urgently needed to protect adequately both this eland and the other abundant fauna in this sector. Possibly it may have been achieved by the time of the IUCN General Assembly.

Eland *Taurotragus oryx*. Precise data for this eland exist only for the Upemba and Kundelungu National Parks, where it is not rare. According to A. Letiexhe it occurred in the remote confines of the Kivu and Shaba near Kalemie (formerly Albertville), and may still occur in the vast expanses of Shaba, Kasai and Kwango. Its status remains to be defined.

Bongo *Boocercus euryceros*. Found in numerous forest areas, particularly in the north-east, including the Virunga park, the bongo's status, like that of the eland is not yet established. It is certain, however, that bongos often associate in little groups, as shown by recent aerial observation near Bunia. It particularly likes open clearings bordering the forest and can even make do with the large galleries such as Kpaika, near Dungu.

Greater kudu *Tragelaphus strepsiceros*. Little is known about its present status, but it occurs on the buttresses of the Kundelungu plateau at Shaba, and in the Upemba National Park near Kiubo; the greatest numbers, however, are in the Mufufie "reserve" north of Likassi, where they are protected by an inaccessible and hostile environment; Letiexhe estimates 200 there. The lesser kudu *T. imberbis* does not occur in Zaïre.

Sitatunga *Tragelaphus spekei*. Although seldom seen, this is in fact one of the commonest antelopes in Zaïre, occurring in all the relatively open swampy habitats but avoiding the solid clumps of papyrus. It is thus especially

numerous – and heavily hunted – in all the flooded forest areas and the damp open river margins (botoka-njoku) in the equatorial basin (Salonga), and is also relatively abundant in the marshes of the upper Lualaba and upper Lufira. Rare and very localised in the Virunga National Park, it can generally be seen in the neighbouring Akagera National Park in Rwanda, where even albino specimens have been recorded.

Roan and Sable antelope *Hippotragus equinus* and *niger*. Information on these two large antelopes outside the national parks is inadequate. The roan occurs locally in small numbers in the Garamba, in the north-east (about 100), and similarly in Rwanda's Akagera park, and especially on the high plateaus of the Shaba's two national parks: the Upemba, where they are fairly numerous in the northern sector, and Kundelungu, in the centre of which they are fairly numerous and breeding. We have no other up-to-date information. Roan may possibly survive in the vast areas of the south, on the Angola border, possibly even in Lower Zaïre. The sable situation is very similar except that sable usually avoid the high plateaus and are common (where not exterminated) in the Shaba *Brachystegia* forest. Sightings on the slopes of Lufira and the buttresses of Kundelungu, where they seem, like the roan, to be increasing, are fairly frequent.

Uganda kob and Puku *Kobus (Adenota) kob thomasi* and *K. vardoni*. Without any doubt the Uganda kob is Zaïre's commonest savanna antelope at low altitudes. Especially frequent on the sometimes flooded flats of the northern savanna rivers – Mbomu, Gwane, all the rivers of the Garamba, even sometimes on "islands" of savanna surrounded by forest, as near Gombari – it is more abundant in the Virunga park's northern sector than in the southern. It is much rarer on the Semliki flats, near Lake Mobutu, in Zaïre than on the Uganda side. Only 10 kilometres from the Rutshuru post, south of the May ya Kwenda, in the hunting zone, one can see the most southerly individuals of the *thomasi* form. Further south puku are found on the Luama flats (but decreasing), and a few are also to be found in the lower regions of the Upemba park, recently evacuated by "illegal populations".

Lechwe *Kobus (Adenota) leche*. This is in fact a "rediscovered" species in Zaïre. The red lechwe was formerly recorded on the upper river in the Bukama region, but for many years there has been no record. It is true that few zoologists have visited the region for a long time, deterred by the insalubrious climate and the arrogance of the local people. But numerous aerial surveys between 1970 and 1974 convinced us that red lechwe are still abundant, although very local, in the Kabengele area – north of Bukama, and on the flats and lakes of Lualaba. They move with the changes in the water levels, but their concentration in a single area of not more than 100 sq. km. is interesting. They are not shy, and we have seen them near cultivation by the river. Although difficult to count, 5000 is a minimum, and there may be two or three times that number. They are heavily poached by commercial hunters, who sell the meat to the mines, and by the military, who take it out by river. Unfortunately their range does not extend into the Upemba park as at present delimited – the guards content themselves with controlling the main access

roads of this distant region – and a revision of the park boundaries appears to be a high priority.

The black lechwe *smithemani* does not seem to occur in the narrow strip of Zaïre which in theory joins Lake Bangweulu.

Other antelopes Topi and hartebeest *Alcelaphus* and *Damaliscus*, occur but almost nothing is known of their distribution outside the national parks. Topi *D. korrigum* are not found north of Lake Amin, but maintained stable numbers for 35 years on the plains south of the lake, especially near the Ishasha river; there has been no spectacular increase like that in Uganda's Ruwenzori (formerly Queen Elizabeth) park. The hartebeest is very common on the crests of the Garamba park, and also occurs in the Shaba national parks in fairly restricted numbers. Tsessebe *D. lunatus* are very likely extinct in the heavily poached "Sakania boot", in the extreme south of the country. Wildebeest and gazelles, *Connochaetes* and *Gazella* do not occur, and impala *Aepyceros* sp., so abundant in the Akagera in neighbouring Rwanda but absent in the Virunga, is found in a form said to come from Katanga (Shaba), but recent data suggests it has been exterminated. One conservator is said to have rediscovered it recently near the Upemba park.

The *Cephalophidae*, like the *Tragulidae* and the dwarf antelopes *Neotragus*, are still very abundant in many of Zaïre's forest blocks, sometimes even in the large areas of gallery forest.

Intensively poached, with metal traps, they (with certain monkeys) form the basic game meat sold illegally in the Kinshasa markets and other large towns. The blue duiker, favourite prey of the pygmies and found throughout is the dominant species even in the most ravaged forests and close to the capital. The vastness of Zaïre's forested areas assures at least for the moment, the future of these little antelopes. The bushbuck *Tragelaphus scriptus*, however, in view of its relative increase, is one of the few mammals living in areas cleared by man but not totally occupied. Its ecological role in Africa is comparable with that of the roedeer *Capreolus* in Europe.

The exact present distribution of the oribi *Ourebia ourebi* outside the national parks needs to be determined. It is uncommon in the Garamba and absent from the Virunga park. Curiously, it is frequent in the north of the Upemba park but very rare in the south, the river Lufira possibly being the obstacle. The Kundelungu park, where it is extremely common, has without doubt the highest density of oribi in Africa. Research is needed to establish its status in other areas, and the same is true for the klipspringer *Oreotragus*, which is fairly common on the slopes in the Upemba park but no longer found in the Virunga. Waterbuck *Kobus defassa* and reedbuck *Redunca* occur in several areas. The local form of *Redunca* is by far the commonest antelope in the Upemba.

Buffalo *Syncerus caffer*. The geographical distribution of the buffalo is very irregular in Zaïre. A distinction has been made between the little red forest buffalo (typical, for example, in the extreme north of the Virunga park) and the large black savanna buffalo, and all the intermediate stages are to be seen in Zaïre. The forest buffalo's distribution is irregular and little known.

In the Garamba park the black buffalo has increased considerably – between 1950 and 1973 numbers went up from 300 by 400 per cent; doubtless



RED FOREST BUFFALOS near Irumu

there were increases too in many of the northern savannas. On the lower Semliki flats, and also near the Luama and the upper Lualaba rivers, buffalo have been almost completely exterminated. Very low numbers are found on the high plateaus in the Upemba, near Lusinga. In the Virunga, numbers seem to have gone down between 1960 and 1975 (Comte Cornet); in the north they were almost totally exterminated at the time of the rebellion, but they appear to be recovering quite quickly. Buffaloes have been recorded up to 4000 m. on the extinct volcanoes. The savanna buffalo cannot thrive except where it is protected by an inaccessible habitat, such as the large marshy savannas of Ngiri, north of Mbandaka; then it is fairly common. The status of Simpson's buffalo, *Syncerus caffer simpsoni*, endemic in Kwango, is precarious. This area borders on Angola, and being operational for the army, has been heavily poached; according to Conservator Mankoto, the fauna of Kwango has been almost exterminated in three years. Let us hope that a reserve may be established in the South Kwango, if only to preserve this unique buffalo.

Birds

If the ostrich has always gone by default in Zaïre, large birds, such as the birds of prey, large waders, hornbills, etc., are still very numerous indeed, for they are hardly hunted. However, familiar bird species have become rare in the large towns, especially Kinshasa, on account of the intensive use of toxic pesticides which are dispersed from special lorries and aeroplanes, and a great reduction has been noted in birds on the pool near Kinshasa between 1948 and 1974. In the Virunga park pink pelicans are on the increase, also grey pelicans and marabous (which nest there in large numbers), as a result of the development of fisheries there. The Semliki delta, even though it has been destroyed for mammals, remains an ornithological paradise. The status of the Congo peafowl *Afropavro* needs investigation; it seems to be common enough in the Maiko National Park. In several places, including the Virunga park, vultures are declining markedly due to the practice of putting out poisoned carcasses. The shoebill stork *Balaeniceps rex* is commoner than expected. It has been observed frequently in Virunga and Upemba parks, and is especially common in the Akagera (Rwanda).

Crocodile *Crocodylus niloticus*. Opinions differ widely on its status; we consider that in many parts of Zaïre it is declining rapidly, even disappearing, but Boller

and other authors are less pessimistic. Accidents involving humans have been reported fairly regularly in recent years: near the Dungu ferry, in the Garamba park, on the banks of Lake Tanganyika, between Bujumbura and Uivra, and even in the immediate vicinity of Kinshasa, on the Zaïre river. Crocodiles are totally absent from Lakes Kivu and Idi Amin, and nothing remains of the gigantic concentrations in the Semliki delta on Lake Mobutu, which at one time were comparable with those of the Kabalega Falls National Park. Poaching has been intense, and it is still extremely difficult to protect the few dozen animals in the extreme north of the Virunga National Park.

Conclusions and Recommendations

What conclusions can be drawn from this brief study of the wildlife situation in Zaïre?

1. On the whole the situation is good. This is due more than anything else to the maintenance intact of gigantic forest tracts and to the existence of the national parks.
2. It is a matter of urgency that hunting should be brought under tighter control by the game department, whose powers need to be reinforced. The hunting regulations should be brought up to date, and people informed about them through a propaganda campaign.
3. Plans should be made for more rational wildlife utilisation outside the national parks as a protein source for the human population. Local people, who have no love for the foreign commercial hunters, should be the first beneficiaries.
4. New national parks, extension of the existing ones and true hunting reserves are urgently needed.
5. Properly controlled sport-hunting which could bring in foreign currency for a negligible outlay, should be started again. Such hunting would not have the ultra-sophisticated character of that in East Africa.
6. Strict surveillance in the present seven national parks should not be relaxed in any way; we have already seen how vulnerable some species are – white rhinos and gorillas, for example. All management needs great care, if only not to discourage the 1000 guards who understand strict preservation but are not prepared for management.
7. A general survey to appraise the points raised in this short paper and make concrete proposals should be made. Data are lacking for huge areas. Plans for bilateral or multilateral co-operation do exist, or are being drawn up.

In summary, if the national parks of Zaïre are without doubt among the best run on the planet, the situation in areas not currently enjoying protection could certainly be improved, and many places could be made (or restored) into wildlife paradises.

The salient factor is that the highest authorities in the country are aware of the problems and are conscious of the value of this real heritage of the Republic of Zaïre. This is very comforting when one compares the situation with some other countries where to “talk wildlife” is something unknown.

So this brief account ends on a relatively optimistic note. If the conservation plans are realised, experts, Zaïrois in the first instance, and eventually foreigners too, can continue to devote themselves to their task. In the field of wildlife conservation, as indeed in others, Zaïre might become the undisputed leader of the African continent.

Acknowledgment

It is impossible to list all the people and organisations, both Zaïrois and foreign, who have made this paper possible, but I wish to thank them all.

Résumé français

L'assemblée générale de l'UICN se tient à Kinshasa, Zaïre, en septembre 1975. A cette occasion, le Dr J. Verschuren, Biologiste des Parcs Nationaux de ce pays depuis 1948 et Directeur Général de 1969 à 1974, fait 'le point' de la situation de la 'grande faune' du Zaïre. Toutes les informations sont récentes.

Le Zaïre est un des pays à l'avant-plan de toute l'Afrique pour la Conservation de la Nature, principalement dans les Parcs Nationaux. Le Chef de l'Etat, le Président Mobutu Sese Seko, a déclaré officiellement en 1972, que des mesures devaient être prises pour que 12 à 15% du territoire national soient érigés prochainement en réserves naturelles.

On examine d'abord, dans ce travail, la situation des principales zones giboyeuses du Zaïre et, en suite, le statut des grandes espèces de vertébrés.

Le Zaïre – 2.400.000 km² – inclut pratiquement la majorité des biotopes du continent africain et l'altitude varie du niveau de la mer à 5115 m. (sommet du Ruwenzori).

Approximativement la moitié du Zaïre est recouverte d'une forêt ombrophile dense. Cette sylvie est en beaucoup meilleur état qu'on ne pouvait l'imaginer (sauf au Muyumbe, Bas-Zaïre): la forêt équatoriale Zaïroise constitue encore un des grands "poumons" de la planète. La localisation des principaux blocs forestiers apparaît sur la carte p. 1 (*Oryx*, XIII, 1, 26). Les Parcs Nationaux de la Salonga et de la Maïko sont essentiellement forestiers. La grande faune est rare ou complètement absente le long des routes et des cours d'eau navigables, beaucoup plus abondant dès qu'on s'écarte de 25 km. de ceux-ci, et également en forêt orientale de basse montagne, au relief tourmenté. Eléphants, sitatungas et localement okapis et gorilles sont encore nombreux.

Les immenses savanes entourant la grande forêt équatoriale sont habitées par une grande faune très irrégulièrement répartie. On examine (carte 2), les principales régions intéressantes. C'est probablement dans le nord, le long des frontières de RCA et du Soudan que la faune s'est le mieux maintenue. La savane/forêt claire à *Brachystegia* du Shaba n'est pas très riche tandis que les savanes d'altitude du Sud, bien protégées, abritent encore de nombreux ongulés.

Une mention toute spéciale doit être faite de la région extrêmement variée de l'est, mosaïque de hauts-plateaux, souvent cultivés, de hautes montagnes, de volcans et de plaines basses. C'est le domaine, par excellence, du Parc National de Virunga, qui se continue vers le nord par le Mont Hoyô et ses célèbres grottes et par la remarquable plaine du lac Mobutu, entrecoupée de falaises 'lunaires', milieux qui, tous, bénéficieront sans doute d'une préservation officielle.

Quelles sont les causes de la réduction de la faune, en dehors des Parcs Nationaux? Les viandeurs qui ravitaillent certaines villes, de même que les braconniers vivant en frontière, donc souvent les étrangers, sont les responsables principaux. L'administration est heureusement de plus en plus sensibilisée au problème de la répression du braconnage de même que l'armée.

Signalons incidemment que les mille gardes des parcs sont tous équipés d'un fusil, élément indispensable (rappelons que 30 d'entre eux ont donné leur vie pour préserver la nature). À très peu d'exceptions près, la gestion de la réserve est entièrement entre les mains de nationaux, pleins d'enthousiasme. Dans les parcs nationaux, la recherche scientifique a été récemment relancée (écologie de l'hippopotame, éthologie de *Hylochaerus*, station de baguement d'oiseaux, etc.) (voir carte 3, pour les limites des parcs nationaux). La carte 4, page 29, schématise certains éléments de la seconde partie: le statut des grandes espèces.

Si le gorille de plaine, *Gorilla gorilla*, du Mayumbe est probablement éteint, plusieurs milliers de gorilles (représentant diverses formes de moyenne et haute altitude, *Gorilla beringei* et al.) subsistent dans l'est du pays. Les gorilles les plus orientaux sont bien protégés dans les réserves, mais beaucoup vivent encore dans de vastes régions presque inhabitées entre le Kivu et l'est du fleuve Zaïre, où ils sont occasionnellement chassés. Les chimpanzés *Pan troglodytes* sont dispersés dans toutes les régions relativement 'fermées', tandis que les chimpanzés nains (Bonobos) *Pan paniscus*, qui constituent une exclusivité du Zaïre, ne sont trouvés que sur la rive gauche du fleuve.

Les lions *Panthera leo* sont présents, très irrégulièrement, dans toute les savanes, parfois même à proximité immédiate de la Nsele, (Kinshasa)! Le léopard, *P. pardus*, ubiquiste, paraît se maintenir mieux que dans d'autres pays et est surtout commun aux très hautes altitudes. Le guépard reste une grande rareté et n'est connu, avec certitude, que du Shaba (Parc des Kundelungus).

Le lamantin *Trichechus senegalensis* existe encore dans la mangrove du bas-Zaïre, mais le biotope est fort menacé. Le Zaïre constitue, une des toutes dernières places fortes de l'éléphant *Loxodonta africana* en Afrique, même si, comme partout, on observe récemment une terrible recrudescence du braconnage. Il est surtout abondant dans les savanes du nord et aussi dans les blocs forestiers inhabités par l'homme (p.e. Salonga). Des herdes de 500 et plus ont été observées dans les régions de la Garamba et du lac Upemba; par ailleurs, des migrations se maintiennent sans doute encore entre la forêt équatoriale et les marais du Haut-Nil. La station de Gangala na Bodio, dans le Haut-Uélé, unique au monde avec ses éléphants africains domestiqués, poursuit ses activités.

Moins de 1000 zèbres, *Equus burchelli*, subsistent encore au Zaïre. Si le rhinocéros noir *Diceros bicornis* est plus que probablement éteint (dernière observation: 1957, près de l'Upemba, le rhinocéros blanc, *Ceratotherium simum cottoni*, est parvenu à survivre après des terribles massacres; 150 à 200 au Parc National de la Garamba et environs immédiats, mais la vulnérabilité de la sous-espèce reste évidente. Quant à l'hippopotame *Hippopotamus amphibius*, s'il est très abondant au Parc National des Virungas et en augmentation au Parc National de la Garamba, ses effectifs sont en voie de réduction ailleurs et il est devenu particulièrement rare dans les rivières de la forêt équatoriale. Les fameuses 'plaques d'érosion', si typiques le long de la rivière Rutshuru sont, semble-t-il, d'origine plus édaphique que biotique: elles manifestent une remarquable stabilité depuis 50 ans, d'après des photos périodiques; les savanes environnantes paraissent supporter aisément cette lourde charge en herbivores.

L'hylochère *Hylochaerus meinertzhageni* est fort commun et a même adopté un comportement semi-diurne. Tandis que la girafe *Giraffa camelopardalis* est trouvée exclusivement au Parc National de la Garamba, l'okapi,

Okapia johnstoni, reste la toute grande exclusivité du Zaïre, où il est moins rare qu'on ne l'imagine. Il est surtout commun dans les forêts du nord-est du pays.

Examinant rapidement les antilopes, on constate la redécouverte de l'eland de Derby *Taurotragus derbianus* dans l'extrême nord du pays, en frontière de RCA. Le statut de l'eland commun *Taurotragus oryx*, commun au Shaba, reste imprécis tandis que la bongo *Boocercus euryceros* n'est pas rare dans la majorité des régions boisées, surtout dans le nord-est. Le grand kudu *Tragelaphus strepsiceros* semble exister uniquement en bordure des Parcs du Shaba et dans la réserve de la Mufufie (environ 200 individus). La sitatunga *Tragelaphus spekei* constitue sans doute l'antilope 'moyenne' la plus abondante du Zaïre et est fréquente partout en forêt marécageuse. Les informations sont relativement contradictoires pour les deux *Hippotragus*. L'antilope rouanne, découverte il y a quelques années au Parc de la Garamba, est surtout typique des hauts plateaux du Shaba, les pentes boisées étant occupées par l'antilope noire. Mais leur dispersion est sans doute bien plus vaste. Le cob *Kobus (Adenota) kob* est localement très abondant.

Le lechwe *Kobus (Adenota) leche* constitue une "redécouverte", au Zaïre et 5000 à 10.000 vivent sur les 'flats' du haut Lualaba, au Shaba, près du Parc de l'Upemba. Les topis, et les bubales *Damaliscus* et *Alcelaphus* sont principalement localisés dans les parcs et plutôt en régression. Il est possible que la forme 'katangaise' de l'impala (*Aepyceros* sp.) ne soit pas éteinte, comme c'est malheureusement probablement le cas pour le sassaby *Damaliscus lunatus* qui vivait dans l'extrême sud. Les *Cephalophidae* et les *Tragulidae* sont encore extrêmement communs dans les régions forestière malgré la chasse intense dont ils sont l'objet. Le guib *Tragelaphus scriptus* est remarquablement adapté à la présence humaine. L'oribi *Ourebia oribi* atteint une densité de population exceptionnellement élevée au Parc National des Kundelungus.

La distribution géographique du buffle *Syncerus caffer* est irrégulière. Son augmentation n'est pas évidente, sauf au Parc National de la Garamba, la forme locale du Kwango, *simpsoni*, est extrêmement menacée.

On examine très rapidement le statut de quelques oiseaux; la situation est normale, car ils sont peu chassés. Signalons que le *Balaeniceps rex* est bien moins rare qu'on ne le suppose. En revanche, les crocodiles sont en voie de disparition le long de beaucoup de rivières, en particulier dans le delta de la Semliki.

Conclusions

Quelques conclusions sont à tirer de ce travail:

1. La situation de la faune du Zaïre est probablement une des meilleures d'Afrique, surtout grâce à l'existence des parcs (actuels et futurs) très bien protégés et au maintien d'un gigantesque bloc forestier central peu entamé. La chasse pourrait être plus surveillée dans les 'zones libres'.
2. Une enquête approfondie s'impose dès que possible pour faire le point de la situation, en particulier des espèces rares ou 'endémiques' au Zaïre.

En définitive, le Zaïre constitue, sans nul doute, dans certaines régions, un des derniers paradis de la faune africaine. L'intérêt des hautes autorités et le dynamisme des responsables font augurer avec un optimisme réel de l'avenir.

Adresse actuelle: Jacques VERSCHUREN, Institut Royal des Sciences Naturelles de Belgique, 31, rue Vautier, BRUXELLES 1040, Belgique.