

Notes and News

The fate of two baby mountain gorillas became a test case for the Survival Service Commission of IUCN last summer, as well as a *cause célèbre* in West Germany. The story began when the Lord Mayor of

**A Lord Mayor
and Two
Baby Gorillas**

Cologne, who is also President of the Cologne Zoo, visited Rwanda and was promised a pair of the rare mountain gorillas. Nothing was known about this until Miss Dian Fossey, studying mountain gorillas in the Parc des Volcans, the Rwanda national park, found an emaciated and sick baby gorilla in a small box in the office of the Conservateur. She was asked to take it and nurse it back to health; shortly afterwards another one arrived. Both animals, she was assured, were captured without killing the parents (as almost invariably happens). She alerted the outside world. Along with other conservation bodies, who protested in telegrams and letters, the FPS cabled the Lord Mayor and the President of Rwanda, and received no replies. Miss Fossey was unable to persuade the authorities to let her keep the gorillas in order to return them to the wild, which she believed could be done, and both were sent (by now in good health) to Cologne. The matter was discussed at the SSC meeting held in Bonn in July, and the action of the Lord Mayor in accepting these two animals of an endangered species, captured in a national park, condemned in a letter sent by the Chairman to the Lord Mayor. Already the incident has encouraged captures of baby gorillas in the Congo which are being peddled for sale. The real lesson of this sorry tale is that the anachronistic practice of heads of state presenting visiting VIPs with rare and endangered animals must be stopped. Inevitably the rarer the animal the more valuable the gift—and the more intolerable.

Natal has led the way in protecting endangered species by an ordinance which puts a complete stop on the handling of all endangered mammals listed by IUCN. The Zoos Control Ordinance 1969 prohibits

**No Trade
in Red Book
Mammals**

anyone from acquiring or possessing any endangered mammal listed in the IUCN Red Data Book. It is an offence to buy, sell or exchange any wild mammal, except by permit; also to establish or maintain a zoo without a registration certificate and a licence that must be renewed every year. The hand of Colonel Jack Vincent, formerly secretary of the SSC, who returned to Natal two

years ago, is clearly to be seen in this straightforward and sensible legislation, and he can be relied on to see that the list of species is kept up to date; this can be done simply by a proclamation signed by the Administrator. Other countries please copy!

A serious decrease in crocodiles in the two main breeding areas in Natal, in the Ndumu and St Lucia game reserves, is shown in a paper published in *Lammergeyer* by Chief Ranger A. C. Pooley of the Natal Parks

**Crocodiles
Decrease in
Natal**

Board. Counts in the most popular crocodile areas in the Ndumu show a steady decline between 1962 and 1967, from 159 to 116 in winter, and from 30 to 18 in summer. Destruction of habitat, due to agricultural development, hunting and trapping, are the main causes, and the summer movement of the crocodiles out of the reserves leads to their destruction. Thanks to a new protection law in Natal crocodiles are now protected throughout the province, but not in neighbouring Mozambique or Swaziland. As in East Africa, monitor lizards are the main predators on the breeding grounds. Bold and determined, they will pick their way among brooding crocodiles to get at one unguarded nest, dig it open, remove an egg, retreat to cover to eat the contents and then return for another. Even if the monitor only takes a few the parent does not attempt to cover the eggs again and most do not hatch. In another paper in the same journal Mr Pooley describes his methods of rearing crocodiles, for, as he says, if they cannot be properly conserved in the wild, captive rearing schemes are their only hope of survival.

A count of the crocodiles in the Blue Nile gorge in Ethiopia was made by the third British Army expedition to Ethiopia, the Great Abbai (Blue Nile) expedition, in 1968. The expedition travelled the length of

**Crocodiles
in Blue Nile
Gorge**

the gorge starting at the river's outlet from Lake Tana, and saw 142 crocodiles in 442 miles, usually singly, occasionally in twos, very rarely in threes. Surprisingly there were none in Lake Tana which seemed suitable; it is possible they had been shot out. In his report Mr C. M. Chapman points out that the crocodile counting was done entirely in the wet season when the river was continually in flood; and it was not possible to make many night counts which are usually more fruitful. The manager of the Tissisat Falls hydroelectric power station told him that in the dry season many crocodiles were to be seen above the Falls lying out on the sandbanks. Local people shoot them and get up to 50 Ethiopian dollars (£8) per skin on the black market. Mr Chapman recommends that if counts made in the dry season do not show considerably more crocodiles, hunting should be stopped and steps taken to prevent poaching, especially from the Sudan. Lake Tana he suggests as a possible site for a crocodile farm. In Ethiopia as a whole crocodiles are being grossly over-exploited and in danger of being wiped out in the next few years. It is good news that Dr Robert Bustard, who is a crocodile expert, is going to Ethiopia to advise on crocodile management and also on the establishment of pilot crocodile farms.

The Kruger in South Africa is another national park which is faced with a problem of rapid increases in the elephant herds, and culling operations have begun—accompanied by public outcry. In 1931 there

**Why the
Kruger Culls
Elephants**

were believed to be about 135 elephants in the park; in 1967 aerial counts showed 6586, over 11 per cent of them calves; by 1968 the figure was 7701. Dr U. de V. Pienaar, Senior Research Officer in the park, has pointed out that some of the influx is due to invaders coming in from the east and north-east as a result of increasing settlement and hunting in the border areas of Mozambique and Rhodesia. There are no signs that the elephants are too numerous for the food supplies or of damage to the habitat; the problem is water. The Kruger has had a succession of drought years, and elephants (and buffaloes) exert their dominance at isolated water-holes. In the competition for water the roan, sable, tsessebe, waterbuck and other animals suffer. The latest aerial survey, says Dr Pienaar, showed that in one large area not one sable calf had survived the dry season. The culling operations are planned as a holding action, to keep the numbers from increasing still further while studies are made to decide the optimum number for the park. Some young elephants have been sold and some exchanged for cheetah which are too few to keep down the numbers of the fast-breeding impala. At the same time the water supplies in the park are being increased, especially in the favoured habitats of the rarer species such as roan, tsessebe, eland and the recently introduced white rhinos, and water is being conserved in the larger rivers which have been drying up in recent years thanks to increased agricultural, industrial and domestic demands coupled with several drought years. The Engelhard dam, mentioned in the last ORYX (page 88) is the first of a series to cope with this situation.

The Somali government's manifesto in July 1968, pledging its support for nature conservation in Somalia and calling for the help and co-operation of international organisations, has been followed by action. A

**Somalia
Tries to Save
Wildlife**

five-year ecological and faunistic survey of Somalia, promoted by the Italian National Council for Scientific Research and the University of Florence, was started this summer by Italian scientists with the full co-operation of the Somali authorities. This will provide the detailed knowledge on which conservation and management plans can be based. Previous surveys (by Professor Bally and Drs Funaioli and Simonetta) have pointed to the terrible devastation Somalia has suffered in recent years, which is confirmed by the latest report, that of an Italian government-appointed mission, led by Professor Pavan. This praises the attitude of the Somali government, but agrees that the situation in the whole country is critical and that the north 'is on the verge of becoming a stark desert'. Between Berbera and Hargeisa, where travellers sixty years ago found a park-like country with herds of elephants and Swayne's hartebeest, wild asses, rhinos and many more, there is today a 'grim wasteland where no elephant could possibly exist'. Excessive numbers of domestic livestock, ruthless

felling and cutting of trees and shrubs, and continuous occupation by man of scarce waterholes have all contributed. In much of the country there are serious problems of erosion, changes in water and climatic conditions and reduced agricultural and forest yields. The report proposes three areas for national parks: Gaan Libah and the Dallo Forest in the north, and in the south the lower Giuba river region, on the Kenya frontier, which, combined with a marine park, they believe has considerable tourist possibilities. The sales of ivory, rhino horn, leopard and cheetah skins in the town of Chisimaio suggest that there are still large mammals there in some numbers and they themselves saw also tracks of lion and antelopes.

By comparing a series of aerial surveys of black rhinoceros in the Olduvai Gorge region in Tanzania with the known numbers on the ground, John Goddard has shown that even under the most favourable

**Rhino Spotting
Difficult
from a Plane**

conditions not more than half the animals are in fact spotted from the air. After studying the area for two years and establishing a means of recognising individual animals of this very sedentary species by their horns (see photographs in *ORYX*, December 1965) he knew that there were 69 black rhinos in the area, but only twice was he able to see from the air as many as 34 of them, both times late in the day. Mid-day censuses produced one figure as low as 4.5 per cent. His account of this study is published in the *East African Wildlife Journal*, volume 5. In another paper in the same issue, John Goddard shows that the black rhino population of the Ngorongoro Crater is considerably higher than had been believed and its future prospects seem favourable. He saw 108 individuals he believed to be residents in the crater's 102 square miles—one per 1.2 square miles. The rhinos' sedentary nature has advantages and disadvantages. On the one hand it enables small isolated populations to survive in suitable habitats even though surrounded by cultivation, and they are also not affected, as migratory animals are, by artificial park boundaries, roads, etc; on the other hand some individuals' regular habits make them very vulnerable to poachers.

The FPS has received a call for help for the monkeys of the island of Fernando Po, off the west African coast, and IUCN is investigating. The island belongs to the newly independent Republic of Equatorial Guinea. Unrelenting persecution by local hunters

**Threat
to Monkeys on
Fernando Po**

threatens five of the island's monkeys, all island races, and they fare no better in the national park on the Pico de Sta Isabel which Spain established but where there is now no effective protection. The five monkeys are *Colobus satanas satanas*, *C. badius pennanti*, *Mandrillus sylvicola poensis*, *Cercopithecus cephus erythrolis* and *C. preussi insularis*. Fernando Po is an interesting island for, although small (800 square miles), it has several habitats above 5000 feet; the main mountain mass in the north rises to 10,000 feet and there are two peaks in the south

of 7000 and 5000 respectively. The south has a monsoon climate, the north an equatorial one with constant high humidity. The larger animals include, as well as the monkeys, two duikers, antelopes, a pangolin, several civets, genet and tree hyrax.

An incident that shows (yet again) how valuable an aircraft is in African parks is described by the Director of National Parks in Chad, Mr M. Anna, writing to the World Wildlife Fund about the plane presented

The Plane that Got the Poachers Out by the Fund. The Zakouma park was invaded by nomadic shepherds. This was only discovered from the air, and some 2000 head of cattle were counted in the most inaccessible regions. By circling over the groups of cattle, the aircraft

directed the wardens on the ground to the right places, and within a week the whole lot were cleared out. A dozen giraffe had been lost to the poachers. Dr Anna points out that without the aircraft it might have been weeks before they spotted the invaders, let alone got them out. He also reports that he has sent 42 wardens to the new reserves at Wadi Rimé and Wadi Achim in the north to protect the Sahara antelopes—oryx, addax, dama and dorcas gazelles.

Wildlife in Ghana has been so depleted that the task now is one of wildlife restoration, says Dr Kai Curry-Lindahl in a report to the Government published by IUCN. He is emphatic that this can and should be done, if only because the wildlife could

Ghana Needs Wildlife for Meat be an enormously valuable source of meat in a meat-hungry country, where meat has to be imported although bush-meat is widely preferred.

Ghana still has a wide variety of large game from which to build up stocks—elephant, buffalo, topi, waterbuck, several duikers, bushbuck, reedbuck, sitatunga, oribi, kob, roan, topi, hippos among them—and the increased numbers in the Mole game reserve (recently enlarged from 900 to 1500 square miles) show what protection could do. More than half the country consists of woodland savannas, where destruction has gone so far that they are empty of mammals and even of birds. Some 40,000 square miles of unfarmed savanna woodland could be highly productive if utilised by wildlife, and the poor grazing of the Accra plains could be far better used by antelopes than by cattle, with the added advantage that, unlike the cattle, they would allow the grasslands to regenerate. The forest reserves, where there is no protection for wildlife and human settlement is allowed close to the boundaries, should be made game reserves too, surrounded by buffer zones with no settlement allowed and hunting controlled. Surveys and research are needed to find out where the wildlife is, select areas for reserves, and decide cropping methods when numbers permit. Such a restoration scheme, Dr Curry-Lindahl points out, primarily requires co-operation with nature, and that need not cost much. But it does require a network of reserves and a force of wardens and guards to enforce the law. An FPS member, Mrs Sonia Jeffrey, living close to the Ivory Coast border in western Ghana, writes of the devastating hunting

and trapping that goes on there in defiance of the Ghana Wildlife Preservation Act. She reckons to see on average one black colobus monkey and two Maxwell's duikers being sold for meat *every day*. Soon she fears they will be extinct in her region as they are in most of Ghana.

The Territory of Papua and New Guinea is giving much attention to wildlife conservation, especially of those species that are of economic importance—notably crocodiles, wallabies, deer and the birds of paradise. In 1968 a Wildlife Ecological Section was set up in the Department of Agriculture and an animal ecologist appointed (there are now two); the depleted crocodile populations are one of its major problems. This year, as reported in the last ORYX, regulations were published limiting the size of crocodiles that may be taken (unfortunately so far only in Papua) to allow stocks to build up again. This means a considerable sacrifice for many village people—for some a third of their income, which is hard to accept even in the interests of future gain. A Crocodile Management Station has been established at Lake Murray, in western Papua, in the middle of a 10,000-square-mile swamp, with facilities and equipment (including a cabin cruiser) for survey and research work, and 18 ponds which now hold 800 crocodiles. Aerial surveys are being made of the vast area, where human inhabitants average fewer than one per square mile and the potential for increasing the crocodiles considerable. On the difficult question of the birds of paradise, which are widely hunted and used by the native peoples for the plumes, a practice deeply entrenched in social custom, the Section is engaged in a joint survey of the trade with the Department of Anthropology and Sociology in the University of Papua and New Guinea. This, combined with population studies on the birds, should make it possible to work out a management plan that will take account of both economic and social aspects of their conservation.

'It is a pity that a vigilant campaign of destruction is not waged against wallabies . . . to eliminate this pest from the country entirely', said the 1962 annual report of the New Zealand Rabbit Destruction Council.

Had this been done the white-throated or parma wallaby *Macropus parma* would have become extinct. In its native Australia this wallaby probably is extinct, but about a hundred years ago twelve species of wallaby were introduced into New Zealand, which has no native wallabies, and six became established on Kawaii Island. It was only recently, thanks to a suggestion from Dr W. D. O. Ride, that research scientists, K. Wodzicki and J. E. C. Flux, discovered that one of them was the parma. They found it inhabiting thick scrub, but 'several were seen feeding in the evenings in cottage gardens, whose owners would certainly find it "noxious"'. Of 140 wallaby skulls they found lying on the ground, 40 proved to be of this species, suggesting a considerable population. Unfortunately for the

**Crocodile
Research in
Papua**

**A Wallaby
Saved
but 'Noxious'**

wallabies much of the island's scrub is being cleared for forestry. The land is nearly all privately owned, sheep farming has proved uneconomic, large areas have been planted with exotic pines and more plantings are planned. Because of the damage they do to the tree seedlings, the shooting and poisoning of wallabies has been intensified. However, in January this year, the New Zealand government prohibited the taking and killing of the parma wallaby because of its rarity. There is still strong pressure for its control, and government policy now is to capture as many parma wallabies as possible and hold them with a view to returning them to their original Australian home; a survey being made in Australia should make it possible to establish just where they should go.

Small islands with a distinctive flora and/or fauna—which so many have—are extremely vulnerable if they get caught in the present tourist boom. This is what has happened to Norfolk Island, 850 miles east of Brisbane and famous as the home of descendants of the Bounty mutineers. Only five miles by three, Norfolk has not much room for large mammals; it has a distinctive gecko and a bat and 14 species of endemic birds, but most notable are its plants, for the 174 species include 51 endemics, among them the well known Norfolk Island pine. Trouble began for Norfolk Island with the building of an airfield in the last war. This has enabled the tourist to get there, numbers have increased every year, and now there are demands for developing the island so that still more will come; this threatens to destroy the fauna and flora. The Australian Conservation Foundation has published (in a most attractive illustrated booklet) the report of three biologists sent to look at the conservation implications. They confirm the dangers and make specific recommendations for a national park, nature reserves and protection laws; the islands and islets off the coast and the cliffs should be sanctuaries and nature reserves; at the same time they suggest ways to interest tourists in the natural beauty of the island and its small neighbours: brochures and books, a museum, a botanic garden, and coastal reserves linked by a coastal footpath (*not* a road) to enable them to see the magnificent coast. The small neighbouring Philip Island, home of the delightfully named Philip Island glory pea, now extinct (but just possibly surviving in somebody's greenhouse), they describe as a textbook example of the waste and misuse of land. A precipitous one-square-mile volcanic island, where introduced pigs, goats and rabbits have destroyed almost all the vegetation cover, including the dense forest that clothed the valleys and gentler slopes, it is today just 'a colourful desert'. After rain the sea around is 'stained red with eroded subsoil'—most of the topsoil went long ago. The native gecko has managed to survive, and there are enormous numbers of breeding seabirds. The whole island, says the report, should be declared part of the proposed Norfolk Island national park, and the rabbits exterminated; the recolonisation by plants would provide a valuable ecological experiment of interest to both scientists and tourists. But at present a few hundred rabbits prevent the proper

use of an island of great potential value. The writers of the report call the situation 'farcical'—and they do not mean funny.

The Ecuadorian Government has issued a very welcome decree banning the export of any species of flora and fauna which may be in danger of extinction, and expressly instancing the giant tortoises of the Galapagos:

**Hands Off the
Galapagos
Tortoises**

regulations listing the species affected are promised. Poaching is still a serious threat to the tortoises. The remains of eleven animals killed for meat and oil were found on the east side of Santa Cruz this year, representing a significant proportion of the surviving population on that side of the island. Another decree refers to the projected road from the airport on Baltra Island, across the narrow South Channel to Santa Cruz Island which it will cross from north to south, to reach Academy Bay, site of the Charles Darwin Research Station. This decree makes all the area to the east of the road a Special Natural Reserve where the Minister of Agriculture, acting through the Forestry Service, will take over the protection of the fauna and flora. The protected area includes the cliffs on the north-east corner of the island which is one of the few firm sites for the highly endangered Galapagos fur seal. Here the seals, no doubt with a long memory of persecution and slaughter, have chosen their site well, where the waves break ceaselessly over an expanse of vast boulders, backed by fearsome cliffs that make it inaccessible to man by any method short of a helicopter.

The plight of the world's turtles is well known to readers of ORYX. Thanks entirely to human greed, numbers are dwindling yearly, when they could be harvested on a sustained yield basis and become a valuable natural resource. A venture designed to do just this for the green turtle *Chelonia mydas* has been started in Grand Cayman Island, in the

**Farming
the
Green Turtle**

West Indies, by Dr Robert E. Schroeder. Five years of intensive turtle research in Florida convinced him and his wife that the green turtle was doomed without some such initiative, and he has started Mariculture Ltd as a commercial marine-farming concern, financed by British and American investors, to demonstrate the practicability of restoring the turtle populations by farming methods. A contract with Costa Rica permits the firm to collect 15,000 eggs from the rookery beach at Tortuguero, in return for which they will return 250 yearling turtles of ten pounds weight to be released into the sea off the rookery beach. A similar contract has been negotiated with Ascension Island. The figure of 250 is calculated as being more than ten times as many yearlings as could be expected if the eggs were left to hatch naturally. (How these young hatchlings will behave when returned to the rookery beach after a year, however, is quite unknown.). The eggs are flown in foam plastic boxes to Grand Cayman and incubation completed indoors. Of the 15,031 taken from Ascension Island this year, 10,573 hatched successfully; at the end of

the first month mortality was only 1.6 per cent. The hatchlings are reared in floating pens in a calm bay. Dr Schroeder agrees with Dr Archie Carr, doyen of turtle conservationists, that 'turtle farming has got to demonstrate its ability to produce eggs from captive breeding stock' and not continue to take eggs from the nesting grounds; this he expects to achieve in three years. Dr Carr, while supporting the idea of turtle farming, put forward some of the dangers he foresaw in a paper read at a symposium on Caribbean resources in Curaçao last year. One is the inevitable spread of the farming idea; this in turn could stimulate the demand for turtle products before the farms are able to satisfy it, thus encouraging illegal hunting. He suggests that only those operators who have proved their ability to breed turtles in enclosures from their own stock should be permitted to operate commercially, and that operators should not be allowed to release turtles far from their native waters and mix up species. But if the proper controls can be applied farming does seem the obvious way of saving the turtles. 'The green turtle is the only organism that can turn sea grass into edible protein', says Dr Schroeder. 'It seems a pity to let it go by default.' It is more than that: it is incredibly stupid.

The twelve Antarctic Treaty governments have agreed on a voluntary system for the control of pelagic sealing in Antarctic waters south of latitude 60°S until their international convention comes into force, thus for the first time applying the Agreed Measures for the Conservation of Antarctic Fauna and Flora to pack ice outside territorial waters. Three species are fully protected: Ross seals, southern fur seals, still recovering from the disastrous hunting of the 18th and 19th century sealers, and southern elephant seals because they are best cropped at the breeding grounds and are uncommon in the pack ice. Maximum annual catch figures fixed for three other seals were based on a conservative estimate of the populations because so little is known about them: crabeater, 200,000; leopard 10,000, and Weddell, 10,000, with a closed season from March to August 31, and the taking of Weddell seals, other than pups, prohibited in the breeding season. Six sealing zones are designated, one to be closed each season in rotation, thus protecting each year about one-sixth of the total pelagic seal population, and three areas are declared seal reserves. All governments are urged to collect and transmit statistical information on all seals killed in order to build up information about the populations. The twelve governments have also agreed in the light of experience to revise the boundaries of one Specially Protected Area—a test of the machinery which shows that it works—and the British Government has put this into effect for British nationals by an Order in Council. An article on the conservation aspects of the Antarctic Treaty by Brian Roberts was published in *ORYX*, April 1966. The twelve signatories of the Treaty are Argentina, Australia, Belgium, Chile, France, Japan, New Zealand, Norway, South Africa, USSR, United Kingdom and the USA.

**Seal
Protection in
Antarctic**

Peru Bans Vicuña Trade

In August this year Peru and Bolivia signed an agreement banning all hunting of vicuña and all trade in vicuña wool and skins for ten years. In September Peru gave effect to this with a decree law that imposes heavy penalties on offenders. This is the law for which the FPS in particular has been waiting in order to press the British government to ban the import of the luxury vicuña wool (£100 a yard has been asked), a large proportion of which comes to Britain. It is this trade in the wool that threatens the seriously endangered vicuña, now almost confined to Peru, and Señor Felipe Benavides, of Peru, who has been tireless in his fight to get the trade stopped, assures us that a British ban on imports would be a major step in saving the vicuña. All the wool that comes to Britain is the result of poaching, and the poachers kill the animals to get it. The decree law also means that, by the Lacey Act, imports into the United States are automatically banned.

Mrs Gandhi Urges Protection

The Prime Minister of India, Mrs Gandhi, has written to the Chief Ministers of all Indian states urging them to establish Wildlife Departments (or strengthen existing ones), stop the 'lucrative profession' of poaching and all commercial traffic in game meat, survey their wildlife resources, and consider the possibility of protecting wildlife outside the forest areas by means of district wildlife boards and honorary wildlife wardens. She gets to the heart of India's wildlife problem when she writes, 'Grazing and forestry operations should be minimised, if not altogether eliminated, in sanctuaries and parks'.

New Red Book Mammals

Ten mammals have been added to the IUCN* Red Data Book of endangered species, one, the Formosan clouded leopard, on a red sheet signifying imminent danger of extinction. Another, the Juan Fernandez fur seal, not seen since the 1890s and presumed extinct, was discovered on the Juan Fernandez islands by Kenneth S. Norris and William N. McFarland in November 1968. The other eight are: Barnard's hairy-nosed wombat (Australia), spotted bat (USA), Brazilian three-toed sloth and three-banded armadillo, Menzies's marmot (central Asia), eastern and western Asiatic wild dogs, Cameroun clawless otter, and Turkmenian caracal lynx.

Harp Seal Harvest

The provisional minimum estimate of harp seals taken by Canadian and Norwegian sealers from the Gulf and Front herds off eastern Canada and Newfoundland in 1969 was 253,000, of which 210,000 were juveniles. (The figure for 1968 was 190,000 and for 1967 331,000). The scientists advising ICNAF (International Commission for Northwest Atlantic Fisheries) have stated that catches in the last few years have been too high and are reducing the stocks; they recommend a maximum total catch of 175,000 pups, 35,000 less than the number taken in 1969. They also recommend that sealing be confined to the period between March 7 and April 25 in order to ensure an adequate stock of mature females.

* International Union for Conservation of Nature.