

ORYX

Vol. IX No. 5

September 1968

Notes and News

Donations to the FPS/WWF Revolving Fund for urgent conservation projects, in the three months to the end of July, amounted to £1857. They included £1000 from an anonymous member of the FPS, \$1500 from the San Diego Zoo, and £230 from some of our life members; to all these we are immensely grateful. This money will enable another batch of urgent projects to be tackled, first of which comes the Nile crocodile in the Murchison Falls

The Revolving Fund

National Park in Uganda. Dr Hugh Cott's report – see page 330 – shows a serious situation with the poachers on top and the park rangers insufficiently equipped to cope with them. The FPS proposes to allocate money to supply the urgently needed two-way radio sets so that they do not have to rely, as at present, on signalling by fire, thus warning the poachers at the same time. Accounts of work being done on two projects that have been aided by the Revolving Fund – the Ceylon elephant and Javan rhino projects – will be found on pages 364 and 340.

The recently-announced plan to build a hydro-electric power station at the Murchison Falls in Uganda threatens disaster for the national park. The scheme, which is not new, involves a dam across the Nile about a kilometre above the falls, which would divert 90 per cent of the river's flow into an underground power station, reducing the present magnificent falls to 'a medium-size stream'. A thousand men would be employed with, of course, heavy earth-moving and

Power Station at Murchison ?

drilling equipment, over a period of 20 years, and would live in the national park together with their families for whom services would have to be supplied. The disturbance for the wildlife would obviously be immense, and poaching would be an even more serious and difficult problem than it is now. As a wildlife sanctuary and tourist attraction the park would be seriously affected. Tourism is an increasing source of revenue in Uganda, and if the result of the dam was the loss of a substantial portion of the Murchison park visitors this could mean a loss to Uganda of several million dollars a year. There are alternative sites for the power station capable of producing the same amount of power, and the FPS

plans to have an independent examination made of the comparative costs of the alternative sites. We have urged the President of Uganda, who is understood to have given his consent to the plan, to rescind this decision and keep the national park intact.

The proposal to build a 'Treetops' hotel in the Lerai Forest in Tanzania's Ngorongoro Crater brought world-wide protests, and the scheme was withdrawn, we hope permanently. A former Conservator of the Crater, Mr

**Ngorongoro
and a
'Treetops'**

Henry Fosbrooke, suggests that the scheme might not even have achieved its object of providing a wildlife spectacle all year round. In his time as conservator attempts were made to do just this – and always failed. No amount of salt or water would keep the herds in the one place all the time. But if the would-be developers were to succeed in holding the wildlife with pools and salt licks the result could be disastrous for the forest: the animals would stay just as long as it took them to destroy the habitat. Photographs taken 50 years ago show that the few straggly fever trees near Koitoktok springs in the Crater are the remnants of a forest that was as imposing then as Lerai is today, and the evidence is that the destruction has been done by the wildlife. To hold the animals in the forest all the year round, which must be the aim of any Treetops or other kind of hotel built there, would produce the same results. All that this means, of course, is that the Lerai Forest is unsuitable, not that there should not be a Treetops somewhere else in Tanzania. Mr Fosbrooke suggests that a working party, consisting of two scientists and a hotelier, should be sent to prospect for the right site. There could be worse ways of using conservation money than getting this done.

It is encouraging to find a threatened species that is more numerous than was thought. This is the case with the large gannet, Abbott's booby *Sula abbotti*, found only on Christmas Island in the Indian Ocean. In a six-

**Boobies
v.
Phosphate**

month stay on the island last year Dr Bryan Nelson, authority on boobies which he has studied both in Britain and the Galapagos, found that instead of the feared 100 pairs, there were in fact more than 2000. Unfortunately this Australian-owned island is a rich source of phosphate, producing about a million tons a year – expected to be three million in 1970. To extract the phosphate all vegetation has first to be destroyed and the subsoil removed; regeneration is virtually impossible. This threatens disaster to the boobies. But the remarkable fact about the boobies, says Dr Nelson, is that they are oblivious of man and his machines and buildings. One pocket of birds nests near a settlement (there is a large labour force on this island), opposite a noisy school, and close to a road and a railway carrying heavy lorries and horn-blowing diesels hauling huge loads, but the birds are undeterred. In these circumstances he suggests, to save them from disaster, that the mining company should be persuaded to leave unmined and undisturbed small key areas for the boobies, 'tree islands' where they could continue to nest. This seems a

small price to ask a large and successful industry to pay for the survival of an interesting endemic species such as Abbott's booby, and there is every hope that negotiations will be successful.

There are about 33,000 giant tortoises on Aldabra, according to Roger Gaymer, a member of the British Seychelles Expedition of 1964-65, in a paper published in the March *Journal of Zoology*. This large and dense

**Tortoises
on
Aldabra**

population – in some areas there are more than 1200 to the square mile – is all that survives of the once widespread Indian Ocean tortoises, whose history has been 'the usual tale of thoughtless exploitation, vain pleas for protection and rapid extinction'. They have only survived because of the difficult terrain on Aldabra and the fact that there was no permanent human settlement; they are the only large land animals on the atoll apart from a few goats on South Island, unlike conditions in the Galapagos, where the only other giant tortoises in the world have to compete with feral cats, dogs and goats in considerable numbers. There has been no large export of tortoises from Aldabra since the atoll came under British administration (from the Seychelles) over 50 years ago. The tortoises provide one of several strong arguments for preserving Aldabra.

Fewer than a thousand green turtles *Chelonia mydas* nest on Aldabra each year, is the verdict of Dr H. F. Hirth after a survey of the island's 53-mile-long coast; the current annual quota for harvesting for sale is 500.

**Turtles in
the
Seychelles**

During his stay on the island, covering the whole nesting season, he could find only five females to tag, although several men worked all night checking the beaches. He estimated the sex ratios of turtles swimming offshore as five males to every female. 'All the evidence points to the fact that we are at the end of a once great turtle population,' he writes; full protection of the breeding beaches is essential if the turtles are to survive. Of other islands in the group, Assumption was found to have an insignificant breeding population (a large labour force there works the guano deposits), but on Astove which is uninhabited and where there is no quota for harvesting, he found 18 nests in a mile of beach, and many turtles, both male and female, swimming in the shallow water offshore. Cosmoledo has the second largest concentration (and the smallest quota). The one good point is that none of these islands suffers from feral dogs, which in other parts of the world destroy thousands of turtle eggs every year. Dr Hirth strongly urges that Aldabra be declared the permanent nature reserve that all conservationists want it to be for both the turtles and its other interesting fauna. He also wants complete protection for the turtles on Astove, Assumption and Cosmoledo for ten years, or failing that (but very much a second best) that turtle fishing on the four islands be rotated to allow three fallow years for each island. The possession, capture and sale of green turtles and eggs should be prohibited for ten

years in all the Seychelles as the only practicable way of enforcing protection in a group of islands hundreds of miles apart. The latest threat is underwater goggles who spear both male and female turtles indiscriminately. In fact turtle meat is little eaten in the Seychelles, fish being the islands' main protein. To increase the turtle populations he suggests the methods employed in other countries, notably Malaysia, to avoid predators by collecting the eggs, hatching them and releasing the hatchlings in the sea.

Ten whooping crane eggs were taken, one from each of ten nests, in Canada's Wood Buffalo National Park in May this year, in a repeat of last year's successful pickup when six eggs were taken and five healthy birds reared at the Patuxent Research Station of the US Bureau of Sport Fisheries and Wildlife. All ten are now thriving, making a captive flock of 15 from which the sponsors of this joint Canadian and US wildlife services project hope eventually to return

**Success with
Whooping
Cranes Again**

birds to the wild to boost the numbers of the only surviving flock, now about 48 birds. Two adults from the wild flock are known to have come to grief on migration, one shot 'in mistake for a goose'. The fact that somebody with a gun could mistake a crane for a goose suggests, as the Audubon Society says, that more education of hunters is urgently needed. It is worth noting that the pickup programme is being achieved without impairing the numbers reared in the wild. Whooping cranes normally lay two eggs but rear only one young; all the nests from which eggs were taken last year were re-occupied by the adults and the same nests are occupied again this year.

There is controversy in Alaska over the future of the muskox. Re-introduced on Nunivak Island in the 1930s, muskoxen have increased from 34 animals to over 700, and any further increase, it is thought, would damage the range. There are also 8000–10,000 reindeer on Nunivak. The Alaska Game and Fish Department has drug-darted and moved 23 muskoxen – eight last year and 15 this spring – to Nelson Island, a site chosen because it was

**Alaska's
Problem with
Muskoxen**

near and funds were insufficient to take the animals to their former and more distant native range, which all agree would be desirable. According to David Klein, writing in the *Alaska Conservation Review*, to keep Nunivak muskoxen down to 700 will mean cropping about 100 animals a year. To achieve this a bill was passed in the State legislature permitting the Fish and Game Department to licence sport hunting at \$1000 for non-residents and \$500 for residents. By this means the surplus bulls, which are turned out of the herds by young bulls, would have been cropped, at the same time bringing in revenue for the department and a substantial income to the only village on the island, Mekoryuk, where it is badly needed. But the Governor vetoed the bill, one reason being that hunting was unsporting – because of the muskoxen's well-known tactics of forming a tight un-moving circle to defend themselves. But in fact the animals to be shot

would be the old bulls outside the herds, which either run away or (occasionally) attack the hunter. The wool of the muskox, known as quiviut, is valuable and a domestication project is under way at the University of Alaska to produce by selective breeding a domestic animal that can live on natural forage, and be the basis for a local industry in the villages of the Bering Sea and the Arctic coast; for some reason this was another argument against hunting. The problem now is what to do with the surplus muskoxen before they begin the familiar story of eating themselves out of house and home. The arguments against controlled hunting seem to be particularly thin, and unless funds are forthcoming to transport large numbers to their former range it appears to be the only sensible solution.

In an account of the cougar (or panther) in north-eastern Canada, Bruce S. Wright points out that in the last 65 years one of these believed-to-be-extinct animals is known to have been killed every two years on average.

**Hunters
Chief Threat
to Cougar**

To illustrate just how elusive and secretive this mountain lion can be he tells of one that lived for a time on a ridge running through a university campus in California, its presence a well-kept secret of the zoology department until it left. It is now known that the cougar is to be found over the whole continent east of the Mississippi between Florida and the Laurentians, but very thinly spread. Excluding Florida, where it has complete protection, there may be fewer than 100. In the east the campaign to get it protected is an uphill struggle, and it was not helped when in 1967 a car company produced a Cougar car, with press and TV advertising of a fierce and frightening animal. The greatest danger to the cougar, however, says Bruce Wright, is the deer-hunters' 'shoot it to prove it' attitude, coupled with the invention of the ski-doo, which enables hunters to penetrate into the most remote country. With a light plane overhead and a radio-equipped ski-doo on the ground what chance has even a mountain lion?

The Jersey Zoo intends to concentrate on threatened animals in future, eliminating all the commoner animals in the zoo and replacing them with rarer ones; and being an island zoo Gerald Durrell, the Director, also

**Zoos Help
the
Endangered**

proposes to concentrate largely on island faunas, all of which being so vulnerable are threatened in one way or another. The recently founded Federation of Zoological Gardens has this year appointed a Conservation and Breeding Committee, chaired by Philip Wayre, to keep a register of all rare, especially endangered, species in member zoos and to act as a sort of marriage bureau by helping zoos to find mates for unpaired animals. The Federation reports that its member zoos have between them 93 species of endangered mammals (on the IUCN Red Book list) and 32 of birds, of which 90 per cent are already kept in pairs and 34 per cent were bred in member zoos.

An enquiry by the Frankfurt Zoo about the smuggling of orang-utans from Borneo into Japan brought the reply from the Japanese Association of Zoological Gardens and Aquariums that five animals had been imported illegally between June 1967 and March

**Japanese Zoos
and
Orang-utans**

1968, all brought by sailors. All were confiscated by the Japanese customs and have been housed in zoos nearest to the port of entry until the government decides what should be done with them. By a law passed in June 1967 orang-utans are a restricted import in Japan. The JAZGA, which has demanded that the shipping companies should stop sailors importing these animals, has passed some strict rules about oranges, including a prohibition on their purchase, the registration of all oranges in Japanese zoos, a demand that animal dealers should cooperate, and a request to medical authorities not to use oranges for experiments; it has also given the customs officials guidance in identifying oranges.

The Natal Parks Board is running a crocodile breeding farm in the Ndumu Game Reserve in northern Zululand, with the aim of restocking game reserves where numbers are depleted; this has now been done both

**Crocodile
Farm
in Natal**

in Lake Lucia and the Ndumu reserve itself. In the wild, even under favourable conditions, scarcely 2 per cent of crocodiles reach maturity, The farm collects the eggs from the nests, after marking them on the upper side to ensure that they are incubated in the same position, and takes them away to rear in safety.

To the Australian sheep farmer, kangaroos are a pest; recent research has shown how mistaken this view may be. Writing about the red kangaroo in the Australian Conservation Foundation's *Newsletter*, Dr H. J. Frith,

**Kangaroo v.
Sheep
Controversy**

Chief of the CSIRO (Commonwealth Scientific and Industrial Research Organisation) Wildlife Research Division, says it has a very real place in the land use of the inland, quite apart from the fact that at the height of the recent severe drought a large kangaroo sold for \$2.50 while a sheep was worth only 40 cents. Research has shown that to some extent kangaroos and sheep are complementary in their grazing, the kangaroos preferring some grasses the sheep do not touch, so that to reduce the number of kangaroos on a piece of land may not increase the forage for the sheep; but it will decrease the amount of protein produced by that land, especially as a kangaroo, which is 52 per cent meat, is a better converter of grass to meat than a sheep, which is only 27 per cent meat. Moreover kangaroos do not destroy the range; in drought they regulate their own numbers by ceasing to breed and by migrating, whereas an increase in sheep numbers may mean destruction of the range and with it the destruction of both kangaroos and stock. 'There is little doubt' says Dr Frith, 'that the maximum productivity would be achieved in the long term by grazing some kangaroos with the stock.' In semi-arid New South

Wales the number of sheep has declined from about 13 million in the early days of settlement to about seven million today, but the protein of the missing six million sheep is still present in the form of kangaroos that can be harvested. What is needed, says Dr Frith, is a realisation that domestic stock is not the only use for many large areas. A husbandry that includes kangaroos will be both more permanent and more productive than one that does not.

There is evidence that the number of badger litters born in Britain in the last few years has decreased, and it is feared that the reason may be pesticides of the organochlorine type, which are absorbed by earthworms, which in turn are eaten by badgers. It is known that earthworms collect these substances in their tissues without themselves being affected, and earthworms are by far the most important badger food. The Mammal Society has asked badger watchers to report on sets that they know (to Dr Ernest Neal, Taunton School, Somerset) and also to send any dead badgers found in good condition.

**Are there
Fewer
Badger Cubs?**

Figures showing a steady decline in the number of otters found by hunts each year, and an even greater fall in the number actually killed (from 250 in 1959 to 65 in 1966) are published by Jeremy Harris in the April issue of *Animals*, and appear to reinforce the widespread opinion that otters have decreased in many parts of the country. The number of days' hunting for each otter killed has increased from 2½ to 8. An enquiry into the status of the otter is being made by the Mammal Society at the request of the FPS and the Council for Nature, and the help of riparian owners and any others who can give information on the status of the otter in their region is asked for: forms from Professor H. R. Hewer, Imperial College, London SW7.

**Hunts Find
Fewer
Otters**

The Kenya Government has established two marine national parks to protect the wonderful fish and other marine life of the coastal waters, and in so doing is the first government to implement the resolution adopted at IUCN's Seattle conference on national parks in 1962. The new Malindi park covers about 2½ square miles and the Watamu about 4½ square miles. They will be delineated with buoys and have special markers to show the areas of the coral gardens for which the coast is famous. At the same time two much larger areas of water adjacent to the two marine parks have been declared reserves: the Malindi (70 square miles) and the Watamu (the whole of Mida Creek below high water mark) Marine National Reserves. A marine biologist to work in the parks will be appointed thanks to a large gift from the Frankfurt Zoological Society from money collected by Dr Grzimek.

**Marine Parks
for
Kenya**

The division of Nigeria in April this year into 12 states instead of the previous four regions means that wildlife now comes under 12 ministries, and it is feared that there will be neither the money nor the trained men to run them effectively. David Happold, FPS correspondent in

**News
From
Nigeria**

Nigeria, writes that he has not yet heard of any state outlining its attitude towards its natural resources. The effects of the war on the wildlife can be guessed at, with the serious food shortage, huge numbers of arms and general destruction. However, a new game reserve is being formed on the shores of Lake Chad, in the north-east, where there are elephants, hippos, crocodiles, otters, red-fronted gazelle and numerous water birds. In the Yankari reserve, animals are said to be increasing. A survey of primates in western Nigeria, which David Happold has made for IUCN, suggests that the outlook for them is 'not good'. Like all other large animals they have declined and will probably continue to do so in this densely populated area (600-700 per square mile). Game laws are difficult to enforce and inadequate anyway, and there is little local interest in the fauna (except as food). The best hope is in the new game reserves, Upper Oger and Borgu, and the forest reserves, provided they are adequately protected; outside the reserves there are no natural undisturbed areas left.

At its Tokyo meeting in June the International Whaling Commission agreed an Antarctic quota for 1968-69 of 3200 blue whale units (BWU's), which is 200 below the Scientific Committee's estimated sustainable yield of 34000 BWUs. The FPS was represented at the

**Realistic
Quota for
Whales**

meeting by General Charles A. Lindbergh, who on the Society's behalf welcomed this realistic Antarctic quota; he also urged a revision of the BWU system and pressed for a quota agreement between Russia and Japan for the North Pacific, where indications are that the Antarctic whaling story of rapidly declining stocks may be repeated. Total protection for the blue, humpback and right whales, the most seriously endangered species, is to continue.

Subscriptions in India

ARRANGEMENTS have now been made for members of the FPS who live in India and are unable to send money abroad to pay their annual subscriptions into a special FPS account in Bombay which has been opened on the Society's behalf by the Bombay Natural History Society. These accumulated subscriptions of Indian members will be used to pay for wildlife conservation projects in India, and Indian members will have the satisfaction of knowing that their subscriptions will directly benefit the wildlife of their own country. Please send subscriptions to the Hon Secretary, Bombay Natural History Society, Hornbill House, Apollo Street, Bombay 1, B.R., clearly marked FAUNA PRESERVATION SOCIETY.

White Rhinos in Uganda

News from the Murchison Falls Park, Uganda, is that the white rhinos, of which 12 were introduced between 1961 and 1964, now number 18.

New York Zoo Aids Pollution Research

WITHIN hours of the sinking of the *Torrey Canyon* last year, the President of the New York Zoological Society, Dr Fairfield Osborn, who is also a Vice-President of FPS, was on the telephone from New York to the FPS office in London with an offer of £200 to be used in any way the Society deemed fit. The money has now been used, together with a further generous gift of £175 from the New York Zoological Society, for a survey of the as yet unpolluted marine fauna of Bantry Bay, in south-west Ireland, where a large oil terminal is to be built. Comparison of the rich and varied marine life of the bay before the first oil ship arrives with conditions once the terminal is functioning will provide information on the effects of oil pollution which will be especially valuable when future disasters have to be coped with. The FPS is very grateful to the New York Zoological Society for this practical help.

Italian Wildlife Refuge

THE Italian National Appeal of the WWF has established a refuge for wildlife at Lake Burano in Tuscany, which it has rented for six years; it will spend £4000 a year on the refuge. Scientists will be able to study the wildlife at an observation centre to be built there, and the public will be admitted twice a week. Lake Burano is one of the last remnants of the immense marshes of the Maremma. The mammals include the now very rare otter; it has a rich insect fauna, and a rare butterfly *Laelia coenosa* has been discovered there. This is the second link (the first was Bolgheri), in the chain of refuges which the Italian WWF plans along the Tyrrhenian and Adriatic coast, an important bird migration route.

Second Sanctuary in Pakistan

THE Government of West Pakistan has established a second wildlife sanctuary at the Khabbaki Lake following the discovery that this lake harbours a large wintering flock, probably half the world population, of the rare white-headed duck, as well as other wildfowl in large numbers, including flamingos. The discovery was made by Christopher Savage in the course of his wildfowl survey of south-west Asia (partly financed by WWF). The first sanctuary in West Pakistan was the Kalabagh Wildlife Reserve to protect a rare wild sheep, the Punjab urial, described in *ORYX*, December 1967, page 184.

Orang-utan Study in Sabah

A TWO-YEAR research project on the behaviour and ecology of the orang-utan in the rain forest of north Borneo was started this year by the Sabah Primate Expedition led by David Agee Horr, senior research assistant in primatology at Harvard and FPS member. He is studying intensively an uninhabited area of primary rain forest where he thinks there may be quite a large population. In a preliminary survey along a four-mile stretch of river he saw ten different animals, including one 'family' of three and a female with a month-old infant. His intention is also to collect information of immediate use for the current conservation work of the Game Branch of the Sabah Forest Department, described briefly by Mrs Barbara Harrison in the May issue of *ORYX*, page 256.

Early FPS Journals Wanted

A reader is anxious to obtain copies of early numbers of the Society's Journal now out of print. They are numbers 1-24, published in the years 1903-1935. Can any member help with any of these?