



The items under this title continue the service formerly supplied by the newsletter *Kingfisher*

INTERNATIONAL

The Golden Ark

In addition to the names mentioned on page 27 of the May issue, the following distinguished conservationists were invested with the insignia of the Golden Ark at a special ceremony at Soestdijk Palace at The Hague on May 3: William O. Douglas (USA), Sir Frank Fraser Darling (UK), Laurence Rockefeller (USA), President Mobutu (Zaire), Salim Ali (India), Kai Curry-Lindahl (Sweden), Jean Delacour (France), Sir Julian Huxley (UK), Phyllis Barclay-Smith (UK), Lt. Col. C. L. Boyle (UK), Felipe Benavides (Peru), Finnur Gudmundsson (Iceland), Sir Landsborough Thomson (UK), Prof. V. Puscariu (Rumania), D. L. Serventy (Australia), Col. Jack Vincent (S. Africa), and Lord Hurcomb (UK).

PCB's in the Environment

Polychlorinated biphenyls (PCBs) are now found throughout the world ecosystem in quantities similar to those of DDE, a derivative of DDT. PCBs are known to be toxic to mallard, bobwhite quail, red-winged blackbirds, starlings, cowbirds and grackles to much the same extent that DDT is. PCBs of high chlorine content are more poisonous to birds, those of low chlorine content more poisonous to insects, according to a report from the Patuxent Wildlife Research Center, at Laurel, Maryland.

The Resistant Insect World

Some 240 species of insects, including ticks and mites, are now resistant to DDT and other persistent pesticides. In central California it now takes several hundred times the normal dose to kill mosquitoes, including the encephalitis mosquito. Essentially therefore they are now uncontrollable by chemical means.

In 18 countries of the world lice are now resistant to these pesticides. In some Latin American countries, including Guatemala, and in India, malaria is now worse than before the eradication programmes started. In Sri Lanka (Ceylon) the number of malaria cases increased in five years from 18 to *two million*. Urban malaria is also increasing in both India and Pakistan, and is being spread by a different vector, which is resistant to both DDT and BHC. In parts of Africa there is a similar problem.

Another SST Warning

Water and other chemicals released by SSTs in the upper atmosphere 'may partially destroy the protective shield of stratospheric ozone', according to a special panel convened by the Environmental Studies Board of the National Academy of Sciences. Large fleets of SSTs, the panel warned, could damage the atmosphere so severely that lives would be lost from exposure to ultraviolet radiation.

Orang-utan Captive Breeding

With more than 500 orang-utans in captivity, the world's zoos have a large potential breeding stock. But although the number of births and the apparent birth rate have been increasing, no living orang-utan is the offspring of captive-born parents, according to John Perry and Dana Lee Horsemen in *Zoologica*.

Directory of Ornithologists

Nos. 71/73 of *The Ring*, the well known bird-ringing periodical, take the form of a directory of the world's ornithologists. Though by no means complete—it omits, for instance, both the British ornithological FRS's—*Index Ornithologicorum* is a useful first step towards a register of ornithologists, and can be had from

Sienkiewicza 21, 50–335 Wrocław, Poland, for \$3. (Cheques to Polish Zoological Society).

Norway Joins IUCN

Norway is the 31st sovereign state to become a member of IUCN.

More Whale Import Bans

Canada and Australia have joined the United States and Britain in banning the import of whalemeat and other by-products.

GREAT BRITAIN

Ten New AONBs

The Countryside Commission proposes to schedule ten more Areas of Outstanding Natural Beauty: Scilly Isles, North Pennines, Nidderdale Moors, Clwydian Range, Berwyn Mountains, High Weald, Cornish coast (Rame Head and Camel estuary), Northumberland coast (near Scottish border) and an extension to the existing Dedham Vale AONB in Suffolk. The Secretary of State for Wales has rejected the Commission's proposal for a new national park in mid-Wales.

PCBs in Grey Seals

Further analysis of the tissues of grey seals from various parts of the British coast show higher levels of PCBs than of organochlorines, and North Sea seals show greater concentrations than those from the north and west coasts. Similar differences have also been noted in the organochlorine content of fish from the two coasts.

Poison Poaching of Salmon

Gangs are said to be poaching hundreds of salmon and trout from the Tay and other Scottish rivers, and also from waters in other parts of Britain. They tip cans of cyanide into the water, and often kill many more fish than they can take. In one instance a mile of the River Cothi in Carmarthenshire was poisoned and 120 salmon and trout killed. Despite severe penalties, the poachers are said to be clearing thousands of pounds,

selling the salmon at £5 each by various direct sale techniques.

Gin Traps Finally Outlawed

The gin trap, described by the Scott Henderson Committee as 'a diabolical instrument' is now finally prohibited in all parts of Great Britain. It was already forbidden to use it for any animal in England and Wales, and for any animal except foxes in Scotland, when on April 1, under the provisions of an Act of 1969, it also became illegal to use gin traps, or any other unapproved spring traps, against foxes in Scotland.

Pole Traps Still Used

The pole trap, an extremely cruel device, was prohibited more than sixty years ago. Yet the Royal Society for the Protection of Birds reports that it has found 130 pole traps on estates in Britain during the past two years.

Replacing Laboratory Animals

FRAME (the Fund for the Replacement of Animals in Medical Experiments) has set up an Information Retrieval Service at the National Lending Library for Science and Technology at Boston Spa, Yorks. It is intended to produce a periodical-abstracting journal on alternatives to laboratory animals.

Trust Compensated

Essex Naturalists' Trust has obtained £2500 damages from a farmer whose out-of-control straw-burning fire destroyed 15 acres of its Fingringhoe Wick reserve in September 1972.

The Otter Trust

Philip Wayre, owner of the Norfolk Wildlife Park at Great Witchingham, Norfolk, is Hon. Director of the Otter Trust, which he has just founded with the aim of saving the world's 19 species of otter. Although the East Suffolk County Planning Committee approved the Trust's plans to set up a headquarters and otter breeding station on 60 acres at Raydon, near Hadleigh, East Suffolk, the Department of the



Environment has called the application in and has ordered a public inquiry. The Trust has 21 otters of five species waiting to be accommodated there.

Controlling Grey Squirrels

An official order permitting the use of Warfarin to control the introduced grey squirrel, which has become a serious pest of young hardwood plantations in England and Wales, has come into force. The poison bait must be contained in a securely closed hopper, and access to it must be solely through a narrow tunnel of defined dimensions.

More Rare Insects

Following its list of rare and endangered species of British butterflies and moths, the Joint Committee for the Conservation of British Insects has compiled similar lists for the dragonflies (Odonata) and crickets and grasshoppers (Orthoptera). Twelve dragonflies are listed, including the scarce *Ischnura pumilio* and two species which are confined to Norfolk, *Coenagrion armatum* and *Aeshna isosceles*. The ten endangered crickets and grasshoppers include the mole cricket, the field cricket and the wart-biter.

Foxes vs Pheasants

Experiments conducted by the Game Conservancy and the British Field Sports Society have shown that pheasant stocks are not at all affected on shooting days only two days after the drawing of their coverts by foxhounds. Now that the myth that pheasant coverts must on no account ever be disturbed is on the way out—further trials are planned—may we hope that game preservers will come to accept that birdwatchers are even less of a disturbance than a pack of foxhounds?

Bird of Prey Imports

The number of birds of prey and owls imported into Britain in 1971 was 327, and the number taken from the wild in Great Britain under licence was 89,

according to a reply by the Home Office to a parliamentary question by Lord Hurcomb. The birds imported included 72 goshawks, 42 lugger falcons, 29 lanner falcons, 14 kestrels, 13 saker falcons and nine peregrines. The birds taken by licence in Britain included 57 kestrels, 18 sparrowhawks, 11 buzzards and three merlins.

Snowy Owls in Shetland

Britain's only breeding snowy owls made two nests on the Shetland island of Fetlar this year. However there was only one male bird, and he was not able to pay enough attention to the younger female, so that she lost her eggs to crows while away feeding. The older female reared a brood of four.

Golden Eaglet Dies

The only young golden eagle to hatch in England and Wales in 1973 died before fledging, according to the Royal Society for the Protection of Birds. Its parents have nested successfully in the Lake District since 1970.

New Wildfowl Trust Refuges

The revised plans for the Wildfowl Trust's Arundel Wildfowl Refuge, West Sussex, have been approved, and it is hoped to open the grounds to visitors in October 1974. Autumn 1974 is also the target date for opening the Trust's Washington Wildfowl Reserve, Co. Durham.

Wild Geese in Britain

The annual goose census for the 1972/73 winter produced totals of 68,000 greylags and 73,000 pinkfeet in Britain. These were 4000 more greylags and 8000 more pinkfeet than in the previous census. The greylag population has more than doubled since 1960.

New Preservation Trust

The Woodland Trust is a new organisation that aims to halt the loss of broad-leaved trees and woodlands in Britain by acquiring and managing existing woodlands, and creating new woods. It has been formed in Devon,

with the intention of extending into other parts of the West Country and eventually over the whole country. The Trustees include two well known Devon naturalists, H. G. Hurrell and Kenneth Watkins. Inquiries to Butterbrook, Harford, Ivybridge, Devon.

Chillingham Cattle Herd

The herd of wild white cattle at Chillingham Park, Northumberland, now totals 44 (20 male, 24 female), the nine births during 1972 being balanced by ten deaths. The reserve herd in Scotland consists of three calves, which have settled down well in their new home.

Transplanting the Vendace

Several isolated lochs in Galloway are to be used to provide a refuge for the vendace *Coregonus vandesius*, one of Britain's rarest fish. At present vendace are only to be found in Mill Loch, Lochmaben, Dumfriesshire, which is threatened by various kinds of human activity. Fry hatched from eggs derived from Mill Loch fish are now being reared in captivity, and some will eventually be released in Galloway.

EUROPE

Inventory for Europe

The Council for Europe Conference of Environment Ministers, meeting at Vienna in March, included among its recommendations one for the establishment of a European inventory of protected or endangered countryside areas of international importance in the European region.

Threat to North Sea Mudflats

Many industrial plants are being planned or built on the shores of the North Sea in Germany, the effluents of which are liable to be lethal to the fauna of numerous areas listed as of international importance for breeding seabirds. The German Section of ICBP has urged the examination by an independent body of experts of the ecological effects of the whole project, and that absolute priority should be

given to protection of the natural environment from financial interests.

Avocets and the Waddenzee

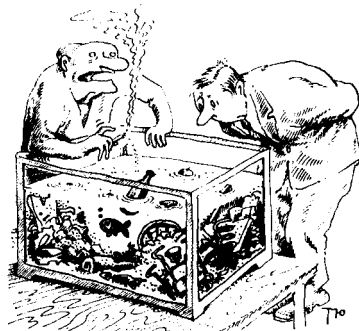
Three-quarters of the European population of the avocet use the Dollard area of the Waddenzee, on the Netherlands coast, as a staging post during summer and autumn migration. Dutch conservationists are pressing their Government to abandon canal works that threaten this area, which qualifies as a wetland of international importance under the Ramsar Convention. They say that in any case the original reasons for building the canal are no longer valid.

Death of an Estuary

The estuary of the Arno, the river which flows through Florence, is so heavily polluted that no life survives in it at all. The Pisa health office has ordered riparian landowners to install effluent treatment plant, and are threatening to withdraw the licences of more than 300 restaurants if they do not act soon.

New Swedish Anti-Pollution Law

A new Act to control products that may endanger health and the environment, involving stricter regulations than in the past, was approved in Sweden in April. A special body will scrutinise all new chemicals, and the National Environmental Protection Board will ensure that the law is enforced.



'I've made its conditions as natural as possible!'
From *Pitroda*, 11 (1972).



Poisons in Baltic Seals

Environmental poisons now represent the greatest threat to the declining stocks of grey seals in the Baltic. Hunting and disturbance by pleasure boats are no longer the greatest dangers. A grey seal found recently on the south coast of Sweden had exceptionally high concentrations: 4.600 ppm DDT (the previous highest in a seal, in California, was 1000) and 2000 ppm PCBs.

Moving a Marsh

To preserve an important marshland biotope and at the same time enable the Zürich airport to expand, a marsh has been moved a distance of more than 300 metres by the Geobotanical Institute of the Eidgenössische Technische Hochschule. The new site was excavated to a depth of 3.50 m, lined with loam and filled with peat. A special engine then moved 2,500 m² of topsoil with vegetation, including 25 orchids and 125 other rare plants.

Spring Hunting Banned

Spring hunting of wildfowl and waterfowl has been banned throughout the Soviet Union, and all spring hunting has been banned in the Ukraine, Byelorussia, Kazakhstan, Uzbekistan, Georgia and parts of the Russian Federation. As from 1973, the shooting of woodcock in spring has been forbidden in Denmark. The protection of the brent goose has also been extended until 1977.

Boycott of Italy

More than a million people in Europe have signed a declaration that they will boycott Italian holiday resorts as long as the laws of Italy permit the catching of song-birds.

Eagles and DDE

Chemical studies have shown that DDE, a derivative of DDT, is most probably the main factor responsible for the severe decline in the reproductive success of the white-tailed sea eagle in Schleswig-Holstein, where only one bird was reared in each of the years 1969–71.

Birds Burned by Radio Transmitters

Observations in both Britain and Norway show that birds are liable to suffer severe burns in certain circumstances at high-power high-frequency (short-wave) transmitting stations. The injuries occur when the birds approach the feeder lines with their legs extended preparatory to alighting. An arc is then drawn from the feeder and burns the bird's legs. At some of these stations the staff make systematic searches to find the birds and either treat them or destroy them.

Shooting Bewick's Swans

Although Bewick's swan is totally protected throughout Europe, X-ray examination of those caught at Slimbridge shows that 31 per cent are carrying shot in some part of their bodies. (Dr Geoffrey Matthews, Scientific Director of the Wildfowl Trust, at a recent meeting of the International Wildfowl Research Bureau).

Respite for the Coto

The Spanish Government has agreed, following representations by WWF, to route a proposed tourist road not along the coastal side of the Coto Doñana reserve, but making a wide detour to the east of the reserve. It has also agreed to halt tourist development in the neighbourhood of the reserve.

Threat to Historic Site

The Crown Park, Uppsala, probably the first nature reserve in Sweden—it was protected in 1773—is threatened by a motorway 40 m wide. It contains a magnificent stand of old Scots pine trees, and it was here that Linnaeus described the Scots pine *Pinus sylvestris*, Norway spruce *Picea abies* and juniper *Juniperus communis*.

Italy Afire

Fire destroys some 125,000 acres of forest in Italy every year. This is twice as much as is being afforested or reforested each year. In 1971 nearly 200,000 acres were burned. A similar problem affects most Mediterranean countries.

Elk in Moscow

The number of elk and other wild animals has considerably increased in the Moscow region in recent years. Elk are protected and have lost their fear of man, so that they often wander into the city from nearby forests. One day early in May an elk calf was browsing a shrubbery in a front garden near a Moscow metro station, and another visited the surrounds of a high-rise building on the river embankment near the city centre. Both animals were taken back to the forest by lorry.

Birds of Prey in Finland

Latest estimates of bird of prey stocks in Finland are peregrine 28 pairs, osprey 900–1000 pairs, golden eagle 23 pairs. Peregrine and golden eagle are still declining, or at least not increasing. The goshawk population is still relatively strong, despite considerable persecution.

Brown Bears in Finland

The present range of the brown bear in Finland covers a narrow zone on the eastern frontier in North Karelia and Kainuu, together with eastern and central Lapland. Total numbers were estimated in 1970–71 at some 150–200.

Wolves and Wolverines in the Far North

Only seven wolves and 40 wolverines survive in the wild in Finland, according to the Director of the Helsinki Zoo. A census in northern Sweden in spring 1972 found no wolves and only 75 wolverines. Both species have been fully protected in Sweden for years.

Lynx in Switzerland

Tracks of at least two lynx cubs have recently been seen in the Obwald canton in Switzerland, where two pairs of adult lynx were released in 1970 with the aid of a WWF grant. Warnings from hunters of a feared decimation of local roe deer have been proved wrong.

Sea Eagles and Peregrines in Sweden

A survey of white-tailed sea-eagles in Sweden in 1972 estimated 49 pairs, which managed to produce only eight fledged young between them. No fewer than 24 pairs attempted to breed but failed. The peregrine falcon census in Sweden in 1972 showed only 14–15 pairs. Of these, 11–12 nested successfully, several pairs as a result of their nests being guarded by naturalists.

New Low for Dutch Storks

The Netherlands white stork population plummeted to a new low in 1972. There were only six nests, rearing 15 young, compared with 12 and 29 in 1971.

Tortoises in France

About half a million tortoises are sold as pets every year in France, according to a leading trader. This compares with 185,000 imported into Britain in 1971, the last available year.

NORTH AMERICA

Nixon Slashes Wildlife Budget

At least 26 units of the national wildlife refuge system in 15 states face major reductions in staffing and maintenance during 1973–74, under the budget cuts proposed by the Nixon administration. Several of the refuges thus scheduled for moth-balling provide habitat for endangered species, including the peregrine falcon, southern bald eagle and alligator. Twenty-six national wildlife refuges had to be closed in 1973 because the US Government failed to provide adequate funds.

Death of a River?

A hydroelectric scheme threatens the destruction of Manitoba's last great river, the Churchill, before its potential value for recreation, habitation or enjoyment of wildlife and wilderness are assessed, realised or even understood. The scheme would also remove the traditional independent livelihood of local communities engaged in trapping and fishing.



California Seabird Breeding Failures

During the 1973 breeding season, several species of seabird failed to breed, in greater or less degree, in the Gulf of California. Brown pelicans nested at only 5–20 per cent of their earlier numbers, and of those which did nest, 50–95 per cent abandoned their nests or young at various stages. Western gulls were only at 30–50 per cent of their normal numbers, and Heermann's gulls failed to produce more than nest scrapes. Elegant terns, Brandt's cormorants and Craveri's murrelet were also affected.

Whistling Swan Research

Sparked off by an accident in which 17 passengers lost their lives when their aircraft collided with a migrating flock of whistling swans at 6000 ft over Maryland, ecologists at Johns Hopkins University have embarked on a large-scale study of swan movements. Swans are marked with coloured plastic neck collars, with letter and number combinations large enough to be read easily with a telescope. Sightings to Dr W. J. L. Sladen, Johns Hopkins University, 615 North Wolfe St., Baltimore, Md, 21205.

Wildlife Food Sources Contaminated

Motor-car exhausts and wastes are contaminating important wildlife food sources along highways, according to the Patuxent Wildlife Research Center in Maryland. Large amounts of lead, zinc, nickel and cadmium have been found in earthworms collected near heavily travelled roads around Washington, D.C. Zinc comes from lubricating oil, lead from petrol and cadmium from tyres.

Endangered Species in Illinois

A new law in Illinois prohibits the importation of endangered species, including many of the cats, all crocodilians, wolves and kit foxes, vicuña, polar bears, and some sea turtles. Offenders face a year in gaol and \$1000 fines. A nine-member board, six of them naturalists, will oversee the list, which includes all federally protected species.

New Endangered Species

Eight more animals are being added by the Department of the Interior to the list of endangered native wildlife: Utah prairie dog, northern Rocky Mountain wolf, eastern cougar, Mississippi sandhill crane, Puerto Rico whip-poor-will, Santa Barbara song sparrow, desert slender salamander and Okaloosa darter. The eastern cougar was until recently believed extinct, but has now been sighted on numerous occasions throughout the Appalachians.

Kentucky's Endangered Species Act

The State of Kentucky has passed its own Endangered Species Act, adding 39 species rare in Kentucky to the federal list of endangered animals.

Hunting from the Air

Despite a new federal law which prohibits the use of aircraft to shoot wolves, the Alaska Department of Fish and Game has indicated that it intends to continue to issue permits for aerial wolf-hunting 'on a limited basis'. This practice is widely reprehended both by conservation groups and by a large segment of the general public.

Alaska Hunting Bans

Since December 21, 1972, it has been illegal under the Marine Mammal Protection Act to hunt polar bear or walrus in Alaska.

British Columbia and Falcons

In 1972 eight peregrine falcons were among 16 birds of prey taken in British Columbia for breeding for falconry purposes. In the ensuing uproar it emerged that the BC Conservation Department had never heard of the International Council for Bird Preservation, let alone its resolution on the peregrine. Later the Minister, who happens to be the son of a famous American bird painter, rescinded the regulations under which the birds had been taken.

Canada Bans Whaling

Declining whale stocks in the north-west Atlantic have resulted in an immediate ban on whaling off the east coast of Canada, announced by the Canadian Environment Minister on December 20, 1972. Two whaling stations in Newfoundland and one in Nova Scotia are affected. The two main species in the shore-based whale fishery were fin and sei, for which record low quotas of 143 and 70 respectively had been allocated. The ban does not affect the catching of pilot, minke and other small whales by local residents for their own consumption. Canada is also to step up research on whaling.

Golden eagles trapped

At least 200 golden eagles were killed last winter in traps set for bobcats and coyotes in White Pine County, Nevada. A bill has been introduced into the state legislature to enable trapping to be regulated so as to prevent this happening again.

Wolf Bounty Almost Ended

With the abolition of the wolf bounty in Ontario last year, the Northwest Territories are the only Canadian province still to use this outdated and discredited method of predator control.

Snowmobiles Banned

Michigan has zoned 16 state parks and recreation areas for silent recreational purposes only. Snowmobiles and all other off-road vehicles are banned. The hundred American companies manufacturing snowmobiles six years ago are now reduced to 40, and there may soon be many fewer. Lower profits due to the cost of meeting safety and noise regulations are blamed.

New Fur Seal Colony

A hitherto unknown colony of 150 northern fur seals has been found off Point Conception in Southern California. The rookery located four years ago on San Miguel Island is thriving.

Bald Eagle Reward

The National Wildlife Federation offers

a \$500 reward for verified claims of information that is of substantial assistance in obtaining a conviction for shooting a bald eagle. Claims to N W F, 1412 16th St, NW, Washington, DC 20036.

Exotic Fish take over in Florida

The black acara *Cichlasoma bimaculatum*, escaped from home aquariums and fish farm dumps, now competes so successfully with native fish that it makes up 80 per cent of the fish biomass in some Florida canals. The African blue tilapia, *Tilapia aurea*, introduced to control aquatic vegetation, has similarly replaced native fish to the extent of 98 per cent of the fish biomass in some eutrophic lakes in Florida. The walking catfish has taken over many alligator holes. The pike killi fish *Belonesox belizanus* preys on the mosquito fish which is useful for mosquito control and has virtually eliminated it in many canals.

Talking Turkey

The National Wild Turkey Federation has been organised to promote wild turkey conservation nationwide. It includes sportsmen, conservationists and game biologists, and will publish the *Turkey Call Magazine*. Inquiries to 112 Pender St, Fredericksburg, Va 22401.

Bird Mortality since Pesticides

An analysis of population trends among North American birds has shown lower recruitment rates among brown pelicans, ospreys, and Cooper's, red-shouldered and sparrow hawks. In a Wildlife Research Report for the Department of the Interior, Charles J. Henny showed that this reduced reproductive success was found among birds feeding on birds, reptiles, amphibians or fish, but not in those feeding primarily on mammals. The lowered reproductive success was also accompanied by a decrease in eggshell thickness, a phenomenon generally attributed to the side effects of pesticide residues.

Fences Kill Pronghorns

Fences erected by users of public



land, federal land management agencies and highway departments result in the deaths of thousands of pronghorn antelopes each winter on public lands in the west. In Wyoming, for instance, 2900 pronghorn, representing more than half the entire herd in the Chain Lakes area northwest of Rawlins, died in the winter of 1971/72. Winter mortality in a heavily fenced area is four times that in a fence-free area. The animals get entangled in woven wire fences, which are often put up to contain cattle.

Monk Parakeets in the US

Populations of the monk parakeet *Myiopsittacus monachus*, an agricultural pest in southern South America, have become established in and around New York. Some 200–300 are believed to be living wild there. Sightings are also reported from 21 other states, from Maine to Arizona. Some of these birds are believed to originate from deliberate mass releases. Since 1972 their import into the United States has been forbidden for health reasons.

LATIN AMERICA

Colombia's New Law

A new law in Colombia establishes a close season for non-human primates, monkeys and marmosets, and prohibits any commercial trade in them. Inderena, the Colombian wildlife authority, may only license the capture of monkeys and marmosets if they are destined either for scientific investigations or for museums and zoos, and they must satisfy themselves that the wild stocks are not being endangered.

Chile's Threatened Mammals

A survey of the endangered wildlife of Chile, by workers under Professor Richard Taber of the University of Washington, Seattle, shows that many mammals are severely reduced in population. These include the huemul deer, which appears on Chile's national crest, now down to a few hundred; the guanaco, which is widely persecuted and much reduced, largely because of its

supposed competition with sheep; and the chinchilla, which is seriously threatened with extinction. The rhea is also severely reduced in numbers.

Vandalism in Brazil

The Parque Municipal do Gama in the Federal District in Central Brazil was almost inaccessible 12 or 15 years ago, but is now almost completely destroyed by crowds of bathers and picnickers. From ignorance people have ripped rare gesneriads from its sandstone cliffs to wear in their hair, and lit fires with the branches of endemic or little-known shrubs. Such a botanically valuable site should never have been designated a public recreation area. Elsewhere in Brazil botanically valuable limestone outcrops are being destroyed to make cement.

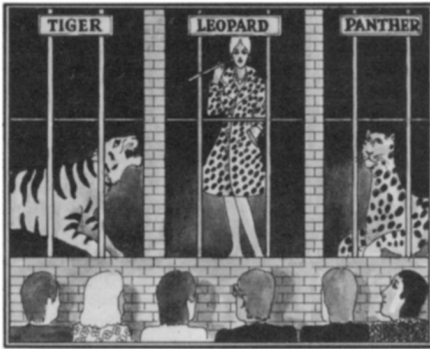
American 'Sportsmen' and Mexican Wildlife

So-called sportsmen from the United States continue to violate the game laws of Mexico. Agents of the U.S. Government recently apprehended 125 people on charges of illegal hunting in north-eastern Mexico. Most cases were of trying to import whitewing and mourning doves in excess of limits. Others were for taking doves and quail out of season in the Rio Grande Valley.

AFRICA

The Dam and the Canal

The flow of water in the Suez Canal may have been changed, perhaps permanently, by the construction of the Aswan Dam. Egyptian oceanographers believe. The dam holds back great quantities of water that would normally flow into the Mediterranean. Instead of flowing strongly northwards for half the year and less strongly southwards for the other half, the current in the Canal now appears to flow weakly northwards for the whole year. Already a species of plankton, *Ceratium egyptiacum*, which used to be confined to the Red Sea, is migrating northwards towards the Mediterranean.



Pollution in Zambia

Industrial pollution is by no means confined to the developed countries, but is particularly bad in, for instance, Zambia, where there is no effective control of effluent into either the air or the rivers, including municipal water supplies. There is a large-scale escape of particles of copper, sulphur and cement into the atmosphere. Firms are establishing factories in undeveloped countries in order to escape environmental controls at home.

Meeting in Portuguese Africa

In November 1972 more than a hundred delegates from Angola, Mozambique and Portugal met at Sa da Bandeiro, Angola, for the first conference for the study of wildlife and nature conservation problems in Portuguese overseas territories. It was unanimously agreed to expel all illegal squatters from Quicama National Park, Angola, to establish a special reserve for gorilla and chimpanzee in Cabinda, Angola, and to create both marine parks and autonomous wildlife departments in both Angola and Mozambique.

Tourist Devastation in SW Africa

A tarred road has brought an 'avalanche of visitors' to the hitherto remote and unspoiled Namib Desert and West Coast of South West Africa, according to Bernabé de la Vat, the territory's Director of Nature Conservation and Tourism. Poachers decimated the huge herds of gemsbok,

springbok and ostrich, and collectors and traders ruthlessly dug up rare plants. The tremendous flocks of migratory birds at Sandwich Harbour were disturbed, spawning fish were netted, and the seal reserve at Cape Cross interfered with. Many newborn seal pups fled into the sea before they could swim and were drowned.

A Giant Reserve

The world's largest nature reserve, straddling three countries, will be created shortly, according to a statement by the Portuguese authorities in Mozambique. It will consist of the Kruger National Park in the Transvaal, South Africa (1,817,000 ha), the Gorongosa National Park in Mozambique (553,000 ha), and Gona-re-zhou Game Reserve in Rhodesia (149,600 ha).

Black Rhinos to Rhodesia

The 81 black rhinoceroses translocated from the Zambesi valley, where they were threatened by poachers, to the Gona-re-Zhou Game Reserve in Rhodesia, now appear to have established themselves. Most animals did not move more than about 18 kilometres from their release point. At least seven calves have been born. 66 Lichtenstein's hartebeeste from Mozambique have also been translocated to Gona-re-Zhou.

Right Whales not Yet Right

There are estimated to be about 180 southern right whales off the South African coast, and perhaps 1000 in the whole southern hemisphere. This, after nearly forty years of protection, indicates how low the stock had fallen when whaling ceased in 1935.

Rarest Reptile

The Madagascan tortoise *Testudo yniphora* may be the world's rarest reptile. Only 10 individuals are believed to survive in the wild, according to Dr. C. P. Blanc of Montpellier, all in the Soalala-Baly Bay area. An unknown number are in captivity, since local folklore credits the animal with the power to keep



chickens disease-free. Dr Blanc, who has just finished a survey sponsored by IUCN/WWF, calls for the urgent creation of a reserve at Cape Soalala, to which animals found in captivity could be transferred.

Red Hot Pokers Endangered

Several species of red hot poker *Kniphofia*, plants of the Lily Family endemic to South Africa, are currently threatened by loss of habitat. *K. pauciflora* may already be extinct, as its two original known sites are completely built up. *K. rooperi*, once common along the coast near East London, is now restricted to a narrow zone a few miles wide. *K. splendida* is protected in a special reservé in the Transvaal, at Vertroosting near Sabie.

ASIA

A Yenisei Pipeline

An oil pipeline is being built across the bed of the River Yenisei, to bring oil from the recently discovered deposits in western Siberia to the industrial East. The bureaucrats manage things more easily in Russia!

Javan Rhinos Increase

The latest estimate of the Javan rhino population of the Udjung Kulon reserve in western Java, the animal's sole remaining known locality, is 40–48, including at least one very small calf. This represents a great increase from the estimate of under 30 only a few years ago.



Pygmy hog, reared by Mrs Robin Wrangham in Assam, the first of this rare species known to have been raised in captivity

Exports from Indonesia

New regulations in Indonesia forbid the catching, owning, transporting or export of rhinoceroses, orang-utans, tapirs, Komodo dragons and birds of paradise except under permit from the Minister of Agriculture. Permits for other kinds of protected animals are granted by the Director of Forestry.

Poaching Rhino in Nepal

Seven men have each been sentenced to three years in gaol for attempting to kill a rhino in the Chitawan National Park, Nepal. The reward of 2000 Rs paid to the informer who told the authorities of this incident came from a small grant from the Fauna Preservation Society to the Nepal Game Department.

Tamaraws Increase

Since the Tamaraw Conservation Program was set up in the Philippines in 1969, the number of animals in the three tamaraw reserves has increased by about one-third, and now stands at 173. There are still some animals outside the reserves, but their number is unknown.

Wild Ass Studbook

The studbook for Asian wild asses *Equus hemionus* kept by the East Berlin Zoo shows that there are at present in zoos world-wide 141 kulans from USSR and 99 onagers from Iran. Onagers are held by nine North American zoos and kulans by four, including a pair at Havana.

Oldest Trees

With Sri Lanka's excellent record of wildlife conservation, it is not surprising to find there the world's oldest trees with a recorded history. These are the great bodhi *Ficus religiosa* trees, which were planted in the 3rd century B.C., at the time when King Devanampiyatissa was converted to Buddhism. The actual trees survive at Kataragama, Mihintale and Isurumuniya, and are still greatly venerated by Buddhists.

Tiger Still Under Threat

Despite the great fillip given to the cause of saving the tiger by the launching of Operation Tiger (see page 164), it is still possible to find a letter in the *Calcutta Statesman* (Dec 28) referring to 'a tremendous increase in the poisoning of tigers, to which fur shops with huge quantities of fresh tiger skins bear ample testimony. A new feature of these shops is the skins of tiger cubs'.

Sable Census in Siberia

The USSR is to census the sables of the Siberian tundra over the next two years, as a first step to gauging the threat to this fur-bearing mustelid from poaching and black-market dealings.

Conservation Moves in USSR

Large-scale work to improve the natural environment is under way in the Soviet Union, including measures to prevent the pollution of the Caspian and the Volga and Ural river basins, and for the conservation and rational use of Lake Baikal. Many steps to conserve water and reduce atmospheric pollution have also been taken. A scientific and technical council on problems of environmental protection and rational use of natural resources has been set up under the USSR Committee for Science and Technology, to oversee this whole field.

Bird Protection in Israel

The Israel Nature Reserves Authority has completely prohibited the netting of migratory quail along the seashores of northern Sinai, and has also forbidden the shooting of duck, except for mallard, teal, garganey, shoveler, pochard and tufted duck. To help hunters recognise the ducks they are allowed to shoot, a special colour poster has been produced.

Cleaning the Caspian

The pollution of the Caspian Sea continues to be a source of grave concern to Soviet ecologists. Large amounts of petroleum products, phenols, copper, zinc and other metals, and untreated sewage are still finding their way into it

despite the construction of 670 new purification plants in the past five years. Now a new Government Resolution aims at the total elimination of untreated sewage in the Volga and its tributaries by 1980, and a huge new purification plant is planned at the West Caspian oil centre of Neftyanoye Kamni.

ANTIPODES

New Wildlife Authority Urged

A Select Committee of the House of Representatives has urged that the Commonwealth Government should establish a national wildlife conservation authority in Australia. Among its functions would be to monitor the status of endangered species, and to develop uniform policies on the commercial exploitation of wildlife. The Committee also urged that the Great Barrier Reef should be set aside as a marine national park and safeguarded against mineral exploitation.

Endangered Australian Plants

In four out of the six Australian states (New South Wales, Queensland, Victoria and Western Australia), 26 native plant species are extinct, 82 endangered, and 826 rare or extremely localised, nearly half of which are known only from the original collection.

Mangrove Conservation Call

In the seventh of its Viewpoint pamphlets, *Mangroves and Man*, (10c, from P.O.Box 142, Carlton, Victoria, 3053), the Australian Conservation Foundation draws attention to the lack of knowledge of mangrove ecology, and calls for urgent surveying of and research into Australian mangrove swamps, with a view to their proper conservation. Already mangroves have disappeared from many parts of the Australian coast.

Takahe Rescue Plan

Alarmed by the continuing decline in the takahe, a bird once believed extinct, New Zealand scientists are to attempt to establish a colony on an



offshore island. When it was refound in 1948, there were an estimated 250–260 pairs in its isolated high-altitude valley in the Southern Alps, but by 1970 numbers were down to between 84 and 110 pairs.

Beetle Invades Samoa

A beetle which is a major pest of palms, *Brontispa longissima*, has recently been found to be infesting five miles of the coastline of American Samoa. It is believed to have been introduced from Tahiti on an oil tanker. It is hoped to undertake biological control by obtaining parasites from Indonesia or the Philippines.

Antarctic 'Wolf' Pack?

In the March *Audubon* Dr Roger Tory Peterson draws attention to the possible danger of a 'wolf' pack becoming established in Antarctica, as a result of husky dogs escaping. More than one instance is known of huskies living through the Antarctic winter in a feral state, and naturalists have a nightmare of a breeding stock of these dogs becoming established and exterminating the penguin colonies on which they would have to feed. Huskies, it is felt, are a dangerous anachronism in the modern Antarctic.

Thought for the Day

Grandfather raises sheep
The son raises goats
The grandson raises nothing.
(Ibn-e-Khuldun)

THE OCEANS

International Ocean Institute

As a result of the *Pacem in Maribus* meetings in Malta, the International Ocean Institute has been set up at the Royal University of Malta. It aims to promote international co-operation in ocean exploration and monitoring, with trans-national management of ocean resources and uses. It will not itself conduct research, but will develop facilities for visiting scientists. It will also provide an information service on ocean policy research and ocean use trends and developments.

Dumping in the Atlantic

Two controversial permits to dump 120 million tons of sulphuric acid wastes and 75 million gallons of sewage sludge off the coast of Delaware were issued by the Environmental Protection Agency on April 23, the day before the permit system of the 1972 Marine Protection Act came into force. These permits allow the E.I. du Pont de Nemours Company and the City of Philadelphia to continue dumping their respective wastes into the Atlantic.

Atlantic Salmon Agreement

The Danish Parliament, after lengthy debate, has ratified the ICNAF regulation which embodies the agreement between Denmark and the United States to phase out the high-seas Greenland fishery for Atlantic salmon by 1976. The agreement also limits the catch by Greenlanders inside their territorial water to 1100 metric tons a year.

NEW NATIONAL PARKS

The second national park of West Germany will be an area of 1400 km² just south of the Danish border, to be known as the North Frisian Waddensee National Park. It contains many fine dune areas and important seabird colonies.

Hungary is to create a national park for the surviving 52,000 acres of the puszta, the Hungarian steppe.

Venezuela's newest national park is the Archipelago Los Roques, a series of islands and coral reefs in the Caribbean.

Zambia has declared its 18th national park, the 45,000-acre former Blue Lagoon cattle ranch, in the Kafue Flats on the north side of the Kafue river. It has a large population of the local antelope *Kobus lechwe kafuensis*.

NEW NATURE RESERVES

The Nature Conservancy is to establish Chaddesley Woods, largely oakwood

but with a section planted to conifers, as a national nature reserve. The woods cover 246 acres and lie between Broms-grove and Kidderminster, Worcester-shire.

North Meadow, Cricklade, Wilts is the Nature Conservancy's first national nature reserve for meadow grassland. The 86 acres of old pasture are noted for the abundance of fritillaries.

The Conservancy has also added 59 acres of intertidal mudflats to its Walberswick national nature reserve in Suffolk.

Two new national nature reserves in Scotland: Gualinn in Sutherland, 6232 acres of mountain and bog alongside the River Dionard, including the northeast cliffs and spurs of Foinaven; and Morrone Birk-Wood, Aberdeenshire, 225 acres of birch and juniper woodland near Braemar.

BBONT (Berks, Bucks & Oxon Naturalists' Trust) is negotiating for a new reserve at Hook Norton, in North Oxon. It will consist of 20 acres of disused railway cutting, whose banks include both limestone grassland and young oakwood.

Four new woodland reserves are being negotiated by the Brecknock County Naturalists' Trust: Nant Sere, 42 acres on the northern slopes of the Brecon Beacons; Cwm Oergwm, 20 acres in a parallel valley; Pwll-y-Wrach, 20 acres in a deep dingle in the Enig valley near Talgarth; and Llwyn Barried, eight acres on the Old Red Sandstone near Llanigon.

The addition of 480 acres, by agreement with the owners, to the Scottish Wildlife Trust's Loch Fleet reserve on the east coast of Sutherland brings its acreage to 1750, which, combined with the adjacent Mount Alderwoods national nature reserve, makes the whole area one of the most important reserves on the east coast of Scotland.

Two new reserves of the Wiltshire Trust: Red Lodge, a small portion of the deciduous Red Lodge Wood, five

miles north of Swindon; and Morgans Mill, 3½ miles north of Devizes, a downland site famous for its orchids, including the marsh helleborine in its only known downland habitat in Britain.

Treswell Wood, 118 acres of oak ash near Retford, is the Notts Trust's first wholly owned reserve.

The latest acquisitions of the Swedish Nature Conservancy Fund are Fågeludden, close to the important waterfowl lake of Hornborgasjön, and Sippmanne, a stretch of unspoiled sandstone beach of geological interest at the southern end of Gotland.

The 1450-acre Big Creek Marsh on Lake Erie, near Port Rowan, Ontario, has been bought by the Canadian Government as a new national wildlife area. It is a well known wildfowl resort.

A forest products company has presented the US Nature Conservancy with its largest gift ever, 50,000 acres of the Great Dismal Swamp in Virginia and North Carolina. This represents one-fifth of the whole swamp area.

New nature reserves in Venezuela: Santa Ana Mountain, an isolated mountain in the north-west; Cuare, a wildlife refuge for flamingos and roseate spoonbills, on the north-east coast; and the Island of Birds, with important seabird and green turtle breeding populations.

Burma has declared four new wildlife sanctuaries. The two most important are Kyatthin in the Upper Chindwin Forest Division, which contains a small group of Sumatran rhino, and Kyauk-pan-daung in the Chin Hills FD, with serow and goral (cf. *Oryx* III, p. 97).

The municipality of Bombay is to designate the Mahim Creek, situated within its boundaries, as a bird sanctuary.

Three islands in the north-west of the



Marquesas group, Eiao, Ile de Sable and Hatutaa have been protected by France under the Islands for Science programme. Hatutaa is the only sizeable island still undisturbed in the central Pacific dry zone.

Four nature reserves are proposed in the New Hebrides: Reef Island, the only coral atoll in the archipelago; Duck Lake, an important wetland on Efate; a kauri forest sanctuary on Erromango, for some fine stands of the endemic kauri *Agathis obtusa* and three acres at Malapoa Point on Efate, where a botanical and ornithological garden will be laid out.

PERSONALIA

Dr Jan Cerovsky, Executive Officer of the IUCN Education Commission, has returned to Czechoslovakia, where he formerly occupied leading conservation posts.

Jean Dorst, President of next year's International Ornithological Congress, and a Vice-Chairman of the Survival Service Commission of IUCN, has been elected a member of the Académie des Sciences in Paris.

On being elected President of the National Rifle Association, Dr C. R. ('Pink') Gutermuth has retired as President of the US National Appeal of WWF, and been elected Hon. Life President.

Barbara Harrisson has been awarded an honorary DSc by Tulane University, New Orleans, 'in recognition of her pioneering and continued effort to promote the conservation of non-human primates in their natural habitats'. Mrs Harrisson also won one of the ten American Motors conservation awards presented to non-professional conservationists in 1973.

Ambassador Frank L. Kellogg has been elected President of WWF USA, in succession to C. R. ('Pink') Gutermuth.

Anthony J. Mence, Principal of the Mweka College of African Wildlife Management in Tanzania and a former head of the Tanganyika Game Department, has been appointed Executive Officer of the IUCN Survival Service Commission, in succession to Miss Moira Warland, who resigned.

Ronald T. Reuther, formerly Director of San Francisco Zoo, has become Director of Philadelphia Zoo, and also Chairman of the Legislative Committee of the American Association of Zoological Parks and Aquariums.

Changes at the Wildfowl Trust: Brigadier 'Tim' Sparrow retired in April after 12 years as Controller, and is succeeded by Brigadier Stephen Goodall, lately Commandant of the Royal School of Military Engineering. 'Tommy' Johnstone retired at the end of 1972 after 26 years with the Trust, most of them as Curator.

OBITUARY

Edgar Barclay, leading British authority on the deer of the world, died on March 17.

Lord Howick of Glendale, best known as Governor of Kenya during the Mau-Mau period of the 1950s, but latterly Chairman of the Nature Conservancy, died as a result of an accident in March. He was also President of the British Trust for Conservation Volunteers.

Ivan T. Sanderson, the well known naturalist and author of 15 books about wildlife, has died.

Alexander Sprunt Jr, well-known ornithologist and conservationist, who was a lecturer and naturalist for the National Audubon Society for 27 years, died at his home at Charleston, SC, on January 3. His son, Alexander Sprunt IV, is NAS's present Research Director.