International

New name for IUCN

The International Union for Conservation of Nature and Natural Resources is now to be known by the less cumbersome title, IUCN, The World Conservation Union.

New Ramsar parties

Nepal, Ghana and Uganda have recently become the 46th, 47th, and 48th Contracting Parties to the Convention on Wetlands of International Importance especially as Waterfowl Habitat. Upon joining, Nepal designated the Koshi Toppu Wildlife Reserve for the Ramsar List, while Ghana designated the Owabi Wildlife Sanctuary and Uganda the Lake George Wetland. *Ramsar*, July 1988, 2.

Urgent action needed for small cetaceans

Dolphins, Porpoises and Whales. An Action Plan for the Conservation of Biological Diversity: 1988-1992 has been published by IUCN/SSC. It includes 44 specific priority projects and actions, which would cost in total US\$1 million and which range from \$2000 for an educational campaign to reduce medicinal use of dolphin oil in Nepal to \$100,000 to purchase and operate a patrol vessel to enforce dolphin protective measures in new dolphin refuges on the Yangtze River in China. The plan focuses on small cetaceans, particularly river dolphins, some of which face extinction this century unless present trends are reversed, and coastal dolphins, whose habitats are more restricted and vulnerable than those of pelagic species. Copies of the plan are available from IUCN, Conservation Monitoring Centre, 219c Huntingdon Road, Cambridge CB3 ODL, UK.

The cost of illegal trade

Illegal trade in endangered or protected wildlife now represents an estimated US\$1.5 million annually according to the Convention on International Trade in Endangered Species of Wild Fauna and Flora.

The Wall Street Journal, 12 August 1988.

Briefly

Europe and North Africa

Snow leopards in the USSR

The USSR, which has one of the largest populations of snow remaining leopards Panthera uncia (2000)approximately), has taken steps to ensure their conservation. Hunting, trapping and exporting snow leopards are all now illegal, apart from some trapping for domestic zoos. Research on the snow leopard is under the auspices of several scientific bodies and attention is given to the education of both adults and children. Because most snow leopards in the USSR are found non-Russia Union Republics in (Kazakhstan, Kirgizia, Uzbekistan and Tadzhikstan) snow leopard conservation could be affected by the political changes in the USSR, which might result in greater local control over conservation issues. Also, as the standard of living rises, the expansion of domestic sheep and goat herds on to mountain slopes has been identified as the single most threatening event for the species. Snow Line, Fall 1988, 2-3.

Earthwatch Europe

Earthwatch Europe supports work to preserve the world's endangered habitats and species, to explore the vast heritage of its peoples and to promote international co-operation. It offers men and women of all ages without specialist knowledge the chance to participate in research expeditions for two-week periods. From March to September 1989 these will include studies of volcanoes in Iceland, sea turtles in Cyprus, wetlands in Mallorca and the slender-billed curlew in Yugoslavia and Greece. The cost to participants varies from £500 to £800, which helps fund the research and covers all field expenses. Earthwatch Europe offers subsidies for special cases. For further information contact Earthwatch 29 Coniston Avenue. Europe, Headington, Oxford OX3 0AN.

Toxic algae make massive kills

From mid-May to mid-June 1988 a bloom of phytoplankton *Chrysochromulina polylepis* killed fish, invertebrates and macroalgae over widespread areas off Denmark, Sweden and Norway. The cause for the bloom was probably a combination of eutrophication and meteorological conditions; it is thought that there was a very high runoff of nutrients from countries bordering the North Sea and the Baltic in early 1988.

Marine Pollution Bulletin, August 1988, 348; Ambio, 17, (4), 1

Introduced parasite could wipe out salmon

It is feared that an introduced parasite may wipe out entire populations of Atlantic salmon Salmo salar in some Norwegian rivers. The parasite, a fluke Gurodactulus salaris, alreadu kills salmon on fish farms in the country, but it is fairly easily dealt with there. It was found in the wild in Norway first in 1975 and now 33 rivers are infested. Salmon parr have disappeared from five rivers. Some say the parasite is native and that river pollution has made fish more susceptible to it, but there is strong evidence that the fluke was imported with infected fish from Sweden and has been spread by introducing contaminated fish from fish farms into rivers by anglers. Seven infested rivers have been treated with rotenone, which kills animal life by suffocation, and this has been effective in five cases. Rotenone breaks down quickly into harmless products, invertebrates quickly recolonize and the river can be restocked with fish taken out before the treatment. An alternative would be to pass a law restricting trade in fish between regions but it would be difficult to police. New Scientist, 8 October 1988, 21.

Blue whale comeback

Ten blue whales *Balaenoptera musculus* have been seen off the island of Jan Mayen, 1030 km west of Norway. The whales have been absent from these waters for 30 years and the sighting raises hopes that the endangered species may be returning from the verge of extinction.

Daily Telegraph, 3 August 1988.

Disastrous year for Shetland's birds

Since the early 1980s seabird populations on the Shetland Islands, Scotland, have been declining and 1988



Blue whale (photograph of a painting by William Timym).

was the worst breeding season yet for Arctic terns, kittiwakes and puffins. Some colonies failed completely and few fledglings survived. The cause seems to be a decline of sandeels, a major source of food, but it is not known what part, if any, the commercial sandeel fishery has played in these changes. From a peak of 45,500 tonnes taken in 1982, landings plummeted to around 7000 tonnes in 1987. The situation seems to be more complicated than simply a case of direct overfishing; there is an urgent need for detailed research into the changes that are taking place in Shetland's marine environment.

BTO News, September-October 1988, 1 - 2

Salmon farming harmful to wildlife

The rapid expansion of salmon farming in Scotland could seriously affect wildlife and the fishing industry. There is local pollution from uneaten pelleted food and faeces, and Nuvan, a chemical used to control sea lice, can also damage lobster and crab larvae in some concentrations. Seals, herons, cormorants and shags are attracted to the salmon cages where many are shot or drowned accidentally in predator nets. Approximately 1050 seals, 200 herons and more than 2050 cormorants and 38

shags are killed each year on salmon farms. Disease from the farmed fish may also infect wild salmon, and unwanted smolts from farms (usually a Scottish/Norwegian cross) released into rivers could cross with and weaken wild stock.

Daily Telegraph, 16 May 1988.

Two UK Ramsar sites

The Wash, East Anglia, and Pagham Harbour, Sussex, both in the UK, were designated Wetlands of International Importance under the Ramsar Convention on 30 March 1988.

NCC Topical Issues, July 1988, 14.

Covpu still at large?

The UK Government has sent a team of trappers to search for a suspected covpu Movocastor covpus colony after one of the rodents was found in Norfolk for the first time in more than a year. The Guardian, 20 July 1988.

Badger bill

The badger Meles meles, although not endangered, has been greatly reduced in numbers in some areas in Britain and has inadequate legal protection. With only a few instances of breeding above ground, ancestral setts are critical for badger survival, and there is good evi-

dence that human disturbance is linked with breeding failure. Yet, while it is an offence to dig for badgers, it is still not illegal to dig in, stop up or otherwise disturb setts. Moves are under way in parliament to rectify this anomalous situation, but only some 10 per cent of members of parliament have so far supported the proposed legal amendments.

M. Hancox, Stroud, Gloucestershire, IIK

Otter project threatened by **PCBs**

An otter Lutra lutra cub killed by a car in Suffolk in eastern England was found to have 62 parts per million of PCBs in its muscle fat and although unweaned had already accumulated PCBs to a concentration that has been shown experimentally to cause breeding failure in mink. There are fears that the project to reintroduce otters in the area may be doomed because the level of PCBs in the rivers may cause reproductive failures in the long term, although so far released otters are breeding well. In Scotland, parts of Wales and in the extreme south-west of England where there are still good colonies, levels of PCBs are very low but eastern England receives fallout from air pollution from the industrial Midlands and from London.

New Scientist, 8 September 1988, 29; 29 September 1988, 101-102.

Large blue brought back

The first stages of a reintroduction project for the large blue butterfly Maculinea arion (Oryx, 18, 47) at a site in southern England have been completed successfully. More than 4500 eggs and 150 adult butterflies were recorded at the site in 1988 and an attempt is to be made to establish six more colonies. The large blue became extinct in Britain in 1979.

The Guardian, 1 October 1988.

Egg collector fined

A collector in the UK who amassed an illegal hoard of 7690 wild birds' eggs was fined £880 in August and ordered to pay £300 costs. If penalized for each egg, he could have faced a fine of £7.3million. The man had been selling

some of the eggs; an alleged price list offered 10 greenshank eggs at £800. The Guardian, 19 August 1988.

Endangered reptiles crushed by development

Hundreds of Britain's rare snakes and lizards are being destroyed as remaining fragments of Dorset's once extensive heathland are being built upon. One volunteer, Doug Mills, is attempting to rescue threatened reptiles in seven development sites, but they are difficult to catch and time is short. All six British reptiles are involved-adder, smooth and grass snakes, slow-worm, and common and sand lizards. The British Herpetological Society and the World Wide Fund for Nature, which are backing the rescue, say the Department of the Environment and the Nature Conservancy Council are ignoring international obligations to protect endangered species and they are taking legal advice on some planning permission that Poole Borough Council gave itself on heathland that it is selling to developers.

The Guardian, 15 August 1988.

Thistle reproduction

The tuberous thistle Cirsium tuberosum became extinct at its only locality in Cambridgeshire, UK, in 1974. Specimens from the University of Cambridge Botanic Garden were planted in 1987 close to the original locality. Watsonia, 17, 149-152.

Fungal decline

The threat to macrofungi is one of the more important problems facing Polish nature conservation; their continuing disappearance from many localities has been observed by both professional and amateur mycologists. Mycologist, 2, 113.

Whales perish in Mediterranean nets

Nets laid for swordfish off the coasts of Sardinia, Sicily and southern Italy threaten whales, dolphins and turtles according to marine biologist Antonio di Natale. He believes that half the whales killed in the Mediterranean

Briefly

perish in nets. The nets, of the same type used by Japanese fishermen in the Pacific, are said to be illegal in other Mediterranean countries. The Italian Ministry for the Merchant Marine has promised to look into the matter, but the swordfish industry involves 700 vessels using equipment bought with the help of government funds. Fishing News International, August

1988.9.

Dalyan saved

Both the German contractors and the Turkish authorities have pulled out of the scheme to develop a huge hotel complex on Dalyan Delta, south-west Turkey (see Oryx, 22, 230). This is a major achievement on the part of DHKD (the Turkish Wildlife Society), in particular its President, Nergis Yazgan, who has worked tirelessly to save Dalyan and who was recently honoured with an environmental award by the Turkish Government.

ICBP European Continental Section News, July 1988.

Monk seal population threatened in Greece

A small population of monk seals Monachus monachus, which lives in the Ithaca Channel, between Kefalonia and Ithaca in Greece, is threatened by tourist development. In March 1988 two biologists from the Ludwig Maximilians University in Munich, West Germany, Professor Jacobs and A. Panou, who have been working in the area for two years on a European Community funded project on the conservation of the species, warned the Greek Ministry of the Environment about plans for building a tourist complex just above a large cave used regularly by monk seals. They feared that building might start before regulations were issued for the Protected Area for Monk Seals in the area. Legislation was due in the summer, but so far has not appeared and bulldozers were already clearing ground in September.

New welfare centre in Greece

A new Animal Welfare Centre is being built in Greece by the Hellenic Animal Welfare Society. It will accept all animals that need help, whether domesticated or wild. Details from Hellenic Animal Welfare Society, 12 Pasteur Str., 11521 Athens, Greece.

Bomb threat averted

The Spanish Government has dropped plans to turn a wilderness area into an aerial bombing range and has thus saved from extinction one of the largest remaining colonies of black vultures Aegypius monachus in Europe (see Oryx, 21, 248).

The Guardian, 14 July 1988.

Portugal passes new law for wolf

Portugal has passed a new law granting more comprehensive protection to the Iberian wolf Canis lupus signatus. The bill proposing the new law was drafted by the Green Party and it gained unanimous support from all parties in the Portuguese Government. It became effective in mid-November 1988. Grupo Lobo Newsletter, July/August, 1988, 1 and September/October 1988. 7 - 8.

Azores whaling

Whaling started again in the Azores in 1987, having ceased in 1984. The Ministry of Fisheries had granted a licence to take five old males and it was reported that the whaling was going to be made a spectacle for tourists. The first whale was killed on 22 August 1987 and this brought many protests from within the Azores and from mainland Portugal. Discussions with whalers led to an apparent agreement to cease whaling while the European Economic Community was approached for funding to develop whale tourism as an alternative. However, two more whales were killed in September and November and it is rumoured that another has been killed since.

International Whale Bulletin, Summer 1988.8.

Africa

New parks for Nigeria

The Cross River State Government in Nigeria has announced that it will set up two new national parks, covering over 2000 sq km and containing some of the

most species-rich rain forest in Africa. The Oban National Park is separated only by a river from Cameroon's Korup National Park. The Boshi/Okwango National Park is on the edge of the Nigerian highlands and is the home of the country's last remaining lowland gorillas. Substantial funds are required to set up these parks and WWF and the Nigerian Conservation Foundation have appealed to international aid agencies.

WWF News, July/August, 7.

Banc d'Arguin booklet

The dangerous shallows of the Banc d'Arguin meant that this part of Africa's west coast was one of the last to be charted. In the 1950s huge bird concentrations began to be reported from there and in 1974 the Government of the Islamic Republic Mauritania established the Parc National du Banc d'Arguin. As well as protecting the fisheries of the region it contains one of Africa's last large undisturbed coastal ecosystems and protects immense numbers of migratory birds. This attractive booklet, with its informative text, full-colour photographs and line drawings has been produced in French and English versions, with grants from the French Ministry for International Cooperation and the Fondation Internationale du Banc d'Arguin, which was established in 1986 to promote the development of the park's activities internationally.

Perch not to blame

The Nile perch Lates niloticus, introduced into Lake Victoria 20 years ago, has been blamed for declines in the populations of the lake's small fish species (see Oryx, 20, 138 and 249). Scientists now have evidence that the perch is not wholly responsible for the rapid decline of local fisheries. Two years ago surveys in the Tanzanian part of the lake found unexpectedly large numbers of haplochromines, of which there are 200 species in the lake-all endemic. In 1988 a survey of the Kenyan waters found that in most places there were few haplochromines and many Nile perch, but that in some places there were hundreds of specimens of many species along with large numbers of Nile perch. The latter areas were all reserves, where fishing is banned. The evidence suggests that overfishing with fine-meshed nets is partly to blame for 40



The cover of a booklet on the Banc d'Arguin National Park in Mauritania shows Little Kiaone Island with spoonbills in flight.

the 'ecological disaster' in Lake Victoria. The scientists recommend collecting more reliable data on the fish populations in order to make sensible decisions on how best to save the haplochromines.

New Scientist, 21 July 1988, 34.

Order to shoot

President Daniel Arap Moi of Kenya has ordered game rangers to shoot poachers caught in the country's national parks, and on 21 September it was announced that 33 wildlife officials suspected of collaborating with poachers were being dismissed. *The Guardian*, 15 September 1988; *The New York Times*, 22 September 1988.

Aloes protected

Concern about the over-exploitation of wild Aloe plants in Kenya for medicinal purposes led to a recent declaration by President Moi making all aloes protected species and calling for the establishment of plantations for commercial use.

IOS Bulletin, September 1988, 249.

Battle against poachers intensified

Zimbabwe has intensified its antipoaching operation in all its national

parks to protect the black rhino and is having some success. Since most poachers cross into north Zimbabwe from Zambia, assistance is needed from the Zambian authorities, who have expressed a desire to help but so far have not done so practically. There are only 2000 rhino left in Zimbabwe, the largest population in the world, but over the past four years 427 rhinos have been lost to poachers. Since poaching started in Zimbabwe 43 poachers, some of them Zambian nationals, have been killed by the anti-poaching unit and several have been arrested or imprisoned.

The Herald, 15 July 1988.

Ivory smugglers arrested

Zambia arrested 14 West Africans allegedly attempting to smuggle 20 elephant tusks into Burundi. *The Guardian*, 16 August 1988

Army involved in ivory racket?

South Africa's Defence Minister has ordered an inquiry into allegations that the military have been involved in a huge ivory racket, which has decimated



Aloe volkensii, one of the species of aloe in demand in Kenya for medicinal purposes and recently protected.



Angola's elephant population. The charges were made at a US Congressional hearing on US enforcement of the Convention on International Trade in Endangered Species of Wild Fauna and Flora by Monitor, a consortium of environmental organizations. They included claims that the South African army has been transporting ivory across the border with Namibia and that perhaps 100,000 elephants have been killed to help finance the 12-year-long conflict in Angola. It was claimed that most of the ivory was shipped from South Africa to Taiwan, China, India and probably the United Arab Emirates

The Guardian, 6 September 1988.

World Bank acts environmentally

The World Bank is drawing up a new Environmental Action Plan for Madagascar with the help of the World Wide Fund for Nature. The plan will address broad issues of conservation and the environment in the next two decades and will include programmes to broaden public awareness of environmental issues, to improve the management of existing protected areas and to set up new ones, and to encourage sustainable development. A similar plan is currently being discussed by the World Bank for Brazil, where the Atlantic Forest region in the south-east has top priority for conservation.

New Scientist, 25 August 1988, 27.

Mascarene estuary at risk

The estuary of the Terre Rouge River in Mauritius is perhaps the most important wintering ground for migratory waders in the Mascarene Islands. It is under threat from dredging to provide fill for the development of an industrial complex and building for a fishing port. It also faces serious pollution from an expanding dump on the edge of the river. *World Birdwatch*, April–June 1988, 10.

'Briefly' is compiled by the Editor from numerous sources, including FFPS correspondence.

Contributions are welcome and should be sent to the Editor.

Asia (excluding Indo-Malaya)

Turtle dove traps in Saudi Arabia

More than 100,000 turtle doves Streptopelia turtur are trapped each year at three localities on the Red Sea coast of Saudi Arabia. The birds are taken alive to markets in Jeddah and Gizan or are eaten locally. The growing human population, the increased speed at getting the birds to market using modern transport, and the fact that the dove has recently attained the status of a delicacy are turning a traditional subsistence activity into a commercial venture. Turtle doves are also shot in Jordan, Lebanon, Cyprus and Greece and although the species is not endangered, it is feared that increasing hunting and trapping along the entire migration route will affect the breeding populations in Europe.

Büttiker, W. 1988. Fauna of Saudi Arabia, **9**, 12–18.

China's success with a turtle

More than 21,000 green turtles *Chelonia mydas* have been hatched since the establishment of China's only green turtle reserve, between Daya Bay and Red Sea Bay in Guangdong province. Over the past three years zoologists have prevented and controlled diseases and cared for young turtles before freeing them in the South China Sea. The rate of success in hatching turtle eggs in captivity is said to have reached 93 per cent and experiments on the wintering of young turtles, which started in 1986, have achieved a survival rate of 44 per cent.

Fishing News International, September 1988, 56.

Campaign against Japan

The Asia–Pacific People's Environment Network in collaboration with Sahabat Alam Malaysia launched a global campaign against the role of Japan in the international wildlife trade on 3 July 1988. Japan trades in more endangered species than any other country and its wildlife trade policies directly and often adversely affect the wildlife conservation policies in most Asian countries. As part of the campaign the organizations have published a report, Decimation of World Wildlife—Japan as Number One, which is available from Sahabat Alam Malaysia, 43 Salween Road, 10050 Penang, Malaysia for US\$5 (plus US\$3 for postage by air or US\$1 for surface mail) per copy--minimum payment US\$10.

Massive caiman trade uncovered

The skins of at least 120,000 South American caimans Caiman crocodilus entered Japan with stolen, forged or otherwise illegal documents in violation of CITES between January and July 1988. TRAFFIC Japan investigated the trade when Japanese Customs data showed a sudden and inexplicable increase in caiman skin imports from Thailand. The investigation uncovered a long trail of illegal CITES documents and other ploys involving Thailand, Colombia, Chile, Venezuela and Singapore to mask the illegal origins of the skins. The Japanese authorities accepted the documents without verifying their authenticity with the authorities in the country of origin. Traffic (Japan), Tokyo.

Benign whale research off Japan

The humpback whale population that winters around the Ogasawara Islands, 900 km south-east of Tokyo, is being studied by a team of Canadian and Japanese scientists, funded by WWF-Canada and WWF-Japan. Virtually all Japanese research to date has been done on dead whales and no Japanese scientist has ever investigated a longterm research programme on living animals. The team is using benign methods to assess the populationphotographic identification of individuals and acoustic analysis of the whales' calls. Preliminary findings point to a larger humpback population than expected, clear evidence of breeding and a 'song' that suggests a close link with the population in Hawaii. The Ogasawara population was brought close to extinction by commercial whaling before the species was given total protection by the International Whaling Commission in 1965 and even after that humpbacks continued to be killed by

pirate whalers. As an offshoot of the study the Ogasawara Village Council has contacted one of the Canadian scientists to prepare guidelines for a local whale-watching industry. WWF News, July/August, 2, 7.

Butterfly collector banned

A Japanese butterfly enthusiast, who was caught in the act of collecting butterflies in China and who has been accused of bribing local people, has been barred from the country for five years. The Independent, 15 July 1988.

Indo-Malava

Himalayan elm needs help

The Himalayan elm Ulmus wallichiana is threatened by over-exploitation throughout its range from eastern Nepal to Afghanistan and many populations are apparently reproductively extinct. The trees are lopped and shredded to harvest the shoots and leaves for domestic stock, a practice that prevents flowering and leads to premature death. The trees are susceptible to damage by browsing livestock, in particular ring-barking resulting from cattle tearing away the bark. The bark is used for rope-making and the timber is valued for carpentry. The only naturally reproducing population currently in a protected area is in the Dachigam National Park, Kashmir, which is also the last stronghold of the Kashmir stag Cervus elaphus hunglu. Armed guards protect the deer, but do not prevent illegal grazing and woodcutting. For the perpetuation of the species and its geographical diversity it is important that protected stands should be established to preserve local types and to provide propagation material. The tree is uncommon in cultivation, although a collection of clones exists at the Forest Research Station, Wageningen, The Netherlands.

Maunder, M. 1988. The Kew Magazine, 5, 137–140.

India's snow leopard plan

India's Ministry of Environment and Forests has published a comprehensive conservation plan for the snow leopard Panthera uncia. It is similar to India's



Three of a set of six bird stamps released by Jordan on 1 July 1988.

successful Project Tiger, being aimed at halting the forces of destruction in India's Himalayan ecosystems. The plan lists proposed snow leopard reserves and recommends staffing patterns for the initial three years. The states involved will receive assistance and funding from the central Government in setting up, staffing and equipping these high-altitude reserves. Snow Line, Fall 1988, 3.

Decline of the Irrawaddy dolphin

A survey of Chilka Lake in Orissa, conducted by the Zoological Survey of India, has revealed that the population of Irrawaddy dolphins Orcaella brevirostris, described as extremely abundant in 1915, has declined drastically

since then, to only 20-30 individuals now. Two possible reasons for the decline are exploitation for meat and oil, and agriculture-related siltation of the lake. It has been recommended that the dolphin be considered endangered in India and that it should receive legal protection.

Newsletter of the Cetacean Specialist Group, August 1988, 8.

Bangladesh halts frog trade

Bangladesh banned the export of frog legs for three years from April 1988 because of the high cost of insecticides imported to cope with the fly problem that resulted from fewer frogs. Bangladesh supplied 76 per cent of frog legs consumed in the US in 1987. India and China both have current export bans on frogs, but Taiwan is still exporting legs from frogs bred in captivity.

The Journal of Commerce, 7 July 1988.

To protect the coelacanth

Last year was the 50th anniversary of the discovery of a living coelacanth off the Comoro Islands. This lobe-finned fish belongs to a group that can be traced back in the fossil record to 400 million years ago; it was believed to have died out about 70 million years ago when it disappeared from the fossil record. At least 130 specimens have been caught to date, all off two of the four Comoro Islands-Grand Comoro and Anjouan. Although it is listed on Appendix II of CITES and as Indeterminate by the IUCN, a brisk and largely illegal trade exists. This may threaten the species, which is known to produce only a few large live young. The Coelacanth Conservation Council has initiated an international effort to study the animal. Membership details from: Professor M. N. Bruton, J. L. B. Smith Institute of Ichthyology, Private Bag 1015, 6140 Grahamstown, South Africa; Professor E. K. Balon, Department of Zoology, Group for the Advancement of Fish Studies, University of Guelph, Guelph, Ontario N1G 2W1, Canada; Professor H. Fricke, Max Planck-Institut für Verhaltensphysiologie, 8131 Seewiesen, Federal Republic of Germany; Dr P. H. Greenwood, Fish Section, British Museum (Natural History), Cromwell Road, London SW7 5BD, England.



The coelacanth—are too many being caught?

New hope for kouprey

At an international 'Workshop on the Kouprey Conservation Programme' hosted by the Vietnam Government in January 1988, Dr Le Vu Khoi of the University of Hanoi announced that he had seen a kouprey Bos sauveli in dense forest in Vietnam near the Laotian border. There had been several reports of sightings from villagers, hunters and soldiers, but no scientist had seen the animal for 30 years, although there had been several surveys since 1986, when Vietnam, Laos and Kampuchea signed a co-operative conservation agreement for the species. The workshop was successful in formulating a Kouprey Survival Plan, whose first objective is to save the kouprey in the wild by establishing trans-frontier reserves. Another high priority is to capture 20 individuals for a captive breeding programme. The plan is ambitious and will be technically difficult, but it was hoped to start field work in November. WWF News, March-April 1988, 1, 6; IUCN Bulletin, April/June 1988, 9.

Call for ban on Sarawak's timber

In July 1988 the European Parliament passed a resolution for all member nations to suspend temporarily the imports of tropical hardwood from Sarawak following an international outcry over the damaging social and environmental effects of the Sarawak Government's logging policies (see Oryx, **22**, 117). The resolution also demanded a bilateral timber agreement between the European Community Briefly and Malaysia, which specifies that timber imports into the Community must come from concessions shown to be ecologically and socially acceptable. The European Commission did not support the resolution.

The Rainforest Times, Summer 1988.

Turtle protection effort

Nesting leatherback turtles *Dermochelys coriacea* at Rantau Abang, Terengganu, Malaysia, have declined dramatically over the last 30 years. There were 1800 nesting females in the late 1950s compared with 100 currently. The state authorities are now intensifying their efforts to protect the turtles by buying all the eggs from licensed egg collectors for incubation in beach hatcheries, by establishing sanctuaries, and by controlling fishing to reduce incidental captures. There will also be an education programme. *Marine Turtle Newsletter*, June 1988, 4.

Giant clam spawns in captivity

In a year-long experiment researchers at the Silliman University Marine Laboratory in the Philippines report that they have successfully induced the China giant clam Hippopus porcellanus to spawn. The species is endangered by its great demand by shell collectors. and the Sulu Sea in the Philippines is one of the few areas where it occurs. The Marine Laboratory has been taking part in a co-operative research programme with the Australian Centre for International Agricultural Research on culturing giant clams for food and restocking reefs. Since 1984, and before the latest achievement, they had already induced spawning in three of the other seven species of giant clam. Fish Farming International, July 1988, 36.

Hong Kong controls ivory imports

On 29 July 1988 the Hong Kong Gov-



A leatherback turtle; efforts are being made to stem the massive decline in numbers of the species in Terengganu, Malaysia (Oliver Milton).

ernment announced strict import controls on all carved ivory entering the Territory. Former legislation banned the import of raw ivory into Hong Kong, but allowed ivory to be imported without restriction. The new law requires that all worked ivory entering the Territory be accompanied by proper CITES export permits. It closes the loophole in the previous law by which Hong Kong traders set up carving factories in Dubai, where there are no restrictions on trade in ivory, and were thus able to import illegally obtained worked ivory to Hong Kong. The move followed pressure from the WWF in Hong Kong, the UK and the US and of vital importance was the ban imposed by the US in April on imports of ivory from Burundi (see Oryx, 22, 231), a major entrepot for illegal poached ivory. The US imports 90 per cent of its worked ivory from Hong Kong and the old legislation made it probable that some of this came from Burundi; unless Hong Kong had changed its legislation, the US would have totally banned ivory imports from Hong Kong. WWF News, July/August 1988, 1.

Death of Tolo Harbour

Since the beginning of 1988 there has been a persistent bloom of the alga Gonyaulax polygramma in Tolo Harbour, Hong Kong, which is suffering from severe pollution from sewage. Many parts of the bay are discoloured brown with floating algal scums, there is a foul smell along much of the shoreline and the bottom waters have become virtually anoxic. Massive kills of fish and benthos have been reported.

Marine Pollution Bulletin, July 1988, 305.

North America

Belugas need help

The population of beluga or white whales Delphinapterus leucas that lives at the mouth of the St Lawrence River in Canada numbered about 5000 at the turn of the century, but now is down to 300-500, reduced first by overhunting and then by pollution. The St Lawrence is one of the most polluted waterways in the world, receiving 100,000 tonnes of industrial waste each year, and each spring at least a dozen whales wash 44

ashore. The carcasses are so contaminated that the government treats them as toxic waste and scientists say the whales are dying from myriad diseases. The Canadian Government has announced a \$6 million programme to save the whales, which includes establishing a marine park, and restricting the development of marinas and the traffic of power boats, but some conservationists say that it is more important to get the polluters to stop dumping toxins

The Guardian, 24 August 1988, 26 September 1988; Monitor, August 1988.

Harbour porpoise decline

A study on harbour porpoises Phocoena phocoena caught incidentally by groundfish gill nets in the south-western Bay of Fundy in 1986 (around 105 animals) yielded information suggesting that the population may be in the initial stages of a decline similar to those that heralded the collapse of populations in the Baltic Sea and the Black Sea. The gill-net fishery has been operating for 10-15 years in the area. Read, A.J. and Gaskin, D.E. 1988, J. wildl. Management, 52, 517-523.

Wetland site may be sold off

British Columbia's Provincial Government appears unreceptive to the idea of designating some government-owned greenbelt land 25 km south-east of Vancouver as a Ramsar site, as first proposed in 1986 by the Canadian Wildlife Service. Instead there are government plans to privatize more than 120 ha along the shoreline of Boundary Bay and adjoining Mud Bay on the Fraser delta. The land is too important for migratory birds to revert to private



A common porpoise; is the Bay of Fundy population on the verge of collapse? (Mark Tasker/ICCE).

ownership; about 40,000 diving ducks and similar numbers of dabbling ducks use the bay each autumn and over 10,000 brent geese pass through in spring. Of the 1.4 million birds that pass through the Fraser delta on autumn migration, about 35 per cent may be found on or near Boundary Bay. A proposal has been made to the British Columbia Premier to create a wildlife management area jointly administered by federal, provincial and local governments.

Vancouver Sun, 6 June 1988.

South Moresby formally declared

The South Moresby region of the Queen Charlotte Islands, British Columbia, Canada, was formally declared a national park reserve by British Columbia and Canada on 12 July 1988, one year after the memorandum of understanding on creating the 1470-sqkm park was signed. There are still unresolved issues regarding the park's future, among them the amount of compensation to be awarded to companies with timber rights in the area, 130 valid mineral rights claims for 110 sq km, and the long-standing issue of aboriginal claims.

The Globe and Mail, 13 July 1988.

Act reauthorized

The US Endangered Species Act (ESA) was reauthorized by the Senate on 28 July 1988. The act expired in September 1985, but was propped up by Congressional appropriations while new legislation was disputed. The law has been strengthened to improve protection of endangered plants on private as well as public land, to enhance monitoring of species awaiting listing and to include a five-year state-federal monitoring programme for species recovered and delisted. It allows spending to rise from \$39 million to \$60 million by 1992, and includes stiffer penalties for violation and a new conservation fund. A dispute over whether to force shrimpers to use turtle excluder devices in their nets was resolved in a compromise that delayed requirements for the devices.

Outdoor News Bulletin, 12 August 1988, 1-2; The Washington Post, 29 July 1988.



A beluga, or white whale. The population in the St Lawrence River is to get much needed help (drawn by Shona Grant).

Wildlife loses out in drought

Conservation Reserve Programme (CRP) lands in more than 200 counties of 13 states in the US were opened to hay-making in 1988 due to severe drought conditions after pressure on the US Department of Agriculture (USDA). Tens of thousands of waterfowl, pheasant and songbird nests were destroyed as a result. The CRP pays farmers to retire erodible land and strips along streams and around lakes from crop production for 10 years and to plant it with vegetation that controls soil erosion and provides habitat for wildlife. The action angered conservationists who see the USDA as having broken faith with taxpavers, who abide the tremendous cost of farm subsidies because they believe they are getting some wildlife protection in return. Conservationists were also disappointed that the Drought Assistance Act of 1988 gave financial aid to affected farmers but did little to ensure improvement of wildlife habitat.

Outdoor News Bulletin, 1 July 1988, 1 and 9 September 1988, 1.

US supports elephants

In July 1988 the US Fish and Wildlife Service committed \$50,000 as the first donation in a national effort to raise \$4 Briefly million a year for three years to support conservation programmes for the African elephant. The WWF-US has pledged to match up to \$2 million donated by federal agencies. The US support will include direct financial aid to wildlife agencies of ivory-producing nations, provision of equipment and technical assistance and strengthening anti-poaching units.

Department of the Interior News Release, 14 July 1988.

Porpoise figures falsified

Three federal observers, who travelled on US fishing boats to monitor the loss of porpoises in purse seine nets set for tuna, have admitted, in signed affidavits given to Earth Island Institute, that they minimized porpoise mortality figures, after having been intimidated by fishermen. The co-director of the Institute says the numbers of porpoises killed may be twice as high as official government figures suggest. The Marine Mammal Protection Act requires the US tuna fisheries kill no more than 20,500 porpoises a year; the National Audubon Society and the Earth Island Institute are supporting an amendment to the Act that would reduce the quota to zero in four years.

Audubon, September 1988, 16.

Island wolf population in trouble

The wolf population on Isle Royale National Park in Lake Superior, USA, declined to 12 individuals in 1988. The National Park Service has now reversed its 30-year policy of no intervention and has begun an investigation into the causes of the decline. Three possible reasons are: the current scarcity of very old and very young moose, the wolves' main prey; infiltration of a new disease; and the lack of new genetic stock during the 40 years that the current population has inhabited the island.

National Parks, July/August 1988, 9.

Six species newly protected

A freshwater mussel and five plants were listed by the US Fish and Wildlife Service as Threatened or Endangered in February. The Louisiana pearlshell *Margaritifera hembeli* is endemic to the Bayou Boeuf in Louisiana where reservoir construction, pollution and siltation have reduced its range to a few headwater streams. The Aleutian shieldfem *Polystichum aleuticum* is restricted to two mountain sites in the Aleutian Islands of Alaska and only one population of six plants is known.

The baricao Trichilia triacantha is a small evergreen tree native to semi-deciduous forests in Puerto Rico, where 18 individuals are known from five sites, all in ravines where they are vulnerable to flash floods. Three small aquatic plants —black-spored quillwort *Isoetes melanospora*, mat-forming quillwort *I. tegeti-formans* and little amphianthus Amphianthus pusillus—all are endemic to pools on granite outcrops in Georgia, Alabama and South Carolina, which are subject to quarrying, heavy recreational use and dumping.

Endangered Species Technical Bulletin, XIII (3), 5.

Ferret baby boom

In 1988 the known world population of North America's rarest mammal more than doubled. The second breeding season of captive black-footed ferrets *Mustela nigripes* produced 38 pups. The previous season saw eight baby ferrets (of which seven survived) born to two females. Now the captive population is over 60 and reintroduction into the wild in Wyoming looks likely in the early 1990s.

On the Edge, Summer 1988, 2.

Inferno in Yellowstone

In summer 1988 Yellowstone National Park suffered the most serious fires in its 116-year history. Blazes threatened one quarter of the park's 8900 sq km. Since 1972 it has been park policy to allow spontaneous fires to burn unimpeded as part of a natural cycle, unless they seriously threaten lives or property. However, the unusual drought and heat of 1988, as well as the drought of the preceding two years transformed small fires into huge conflagrations and despite a huge fire-fighting effort involving 9500 fire fighters from all over the US, no one expected the fire to die out until the autumn brought rain or snow. The National Park Service (NPS) has been criticized for allowing lightning fires to burn for a month until they got out of control in late July and local Congressmen are seeking dismissals. The NPS is saying that the fires will prove ecological beneficial in the long term, reinvigorating the forest and the species that inhabit it.

The Guardian, 30 August, 9 and 10 September 1988.



American alligators were hunted again in 1988, for the first time in 25 years (Graham Gale/ICCE).

Prairie growth

The Fermilab prairie restoration project, directed by Robert Betz, a biology professor at Northeastern Illinois University in Chicago, completed its fourteenth year in 1988. The attempt to recreate a tallgrass prairie ecosystem on government-owned land around a physics laboratory near Chicago started in 1974 with 3.9 ha planted by volunteers using seeds collected from 11.5 sq km of prairie remnants, all that remains of the state's original 103,560 sq km. The planting now covers 203 ha and the eventual aim is to have the lab's full 2750 ha restored. It is already the richest prairie in Illinois in terms of the wildlife it supports. Many species of prairie birds and mammals have arrived, but few prairie insects, and there are plans for a programme of insect reintroductions.

Audubon, July 1988, 40-47.

Marshland oiled

In April 1988 almost 680,000 litres of crude oil leaked from a storage tank to contaminate marshland near the Carquinez Straits in San Francisco Bay, California. The oil slick spread over approximately 20 km of the estuary at its fullest extent and although 90–95 per cent of the oil has been cleaned up, the remaining fraction will be hard to recover in the marshland. It is estimated that over 110 birds, 38 mammals and 25 turtles were killed. The impact on wildlife would have been much worse had the spill coincided with the period of heavy bird migration.

Marine Pollution Bulletin, July 1988, 306.

Judgement for woodpecker

A US District Judge has ordered an injunction against the Forest Service prohibiting further clear cutting within the range of the red-cockaded woodpecker Picoides borealis. It is estimated that the acreage of mature pines used by the birds has decreased by 60 per cent in the last 40 years as a result of intensive timber harvesting and shorter rotation cycles. The Forest Service owns most of the remaining blocks of old growth pinewoods where approximately 70 per cent of all red-cockaded woodpeckers are found. The court ruling centres on two national forests in Texas, the Sabine and Angelina, where woodpeckers have declined by 76 and 41 per cent, respectively, since 1983. The judge ordered several changes in forestry practice designed to conserve the species's habitat.

Outdoor News Bulletin, 12 August 1988, 2.

No forest large enough for woodpecker

The US Fish and Wildlife Service's recovery plan for the red-cockaded woodpecker *Picoides borealis* may be inadequate to ensure long-term viability, according to recent calculations.

Researchers at North Carolina State University, using published criteria for maintenance of genetic variability, have established that a red-cockaded woodpecker population must contain 509 breeding pairs to be viable. No existing population appears to contain as many. A viable population would also need at least 25,450 ha of old growth pine forest, which is incompatible with forest practices in the southeastern US and which is larger than that allowed for in the recovery plan for the species. Given that it is difficult to preserve huge tracts of habitat the researchers say that cross-breeding between populations could maintain genetic variability. However, moving adults has been unsuccessful and transferring eggs or nestlings has yet to be attempted.

Reed, J.M., Doerr, P.D. and Walters, J.R. 1988. J. Wildl. Management, **52**, 385–391.



The red-cockaded woodpecker, subject of research and litigation in the USA, is featured in *Rare Birds of the World*, a Collins/ICBP Handbook, by Guy Mountfort with illustrations by Norman Arlott, published by Collins, London, 1988 at £12.95.

Out with the new, in with the old

Many of Florida's native ecosystems are swamped with exotic species. Jupiter Island is no exception. A 46-ha Briefly sanctuary there - Blowing Rocks Preserve - had become so invaded with exotic plants that its owner, the US Nature Conservancy, had to act. As well as a beach that attracts one of the densest gatherings of nesting turtles on the Atlantic coast, the reserve has four native plant communities: mangroves, coastal dunes, tropical hardwood hammock and palmetto-dominated coastal strand. Australian pines were felled in 1985 and in 1985 planting started using field-grown native species. By 1988 the task of removing exotics and replanting natives was complete on the ocean side of the reserve. There will be ongoing maintenance needed - helped by the Palm Beach Native Plant Society. The Nature Conservancy Magazine, July/August 1988, 25-26.

Alligator hunt resumed

In September 1988, with the American alligator Alligator mississippiensis having been removed from the US List of Endangered Species, Florida held its first alligator hunt for 25 years. About 5800 people applied for 230 permits and each hunter will be allowed to kill 15 animals each by trap or harpoon. The Washington Times, 25 July 1988.

Central America

Sueing to save Salt River Bay

The Virgin Islands Conservation Society has gone to court to try to stop a massive resort development at Salt River Bay, St Croix, which is the largest undisturbed mangrove and salt lagoon system in the US Virgin Islands and which provides vital habitat for sea turtles and migratory waterfowl. The resort would include a 157-slip marina, a 288-unit hotel/convention centre and 300 condominiums. Besides disrupting the mangrove ecosystem, the resort would discharge brine from a desalinization plant and expose marine organisms to highly toxic metals used in boat paints. The decision to sue was made after exhausting all administrative appeals in an effort to revoke construction permits granted by the Virgin Islands Coastal Zone Management Commission.

International Wildlife, July-August 1988, 26.

Cats and pigs plague Socorro's birds

The entire landbird fauna of Socorro. one of the four Revillagigedos Islands, which lie about 380 km south of the tip of Baja California, Mexico, is endemic - and most of the species are in trouble. Feral cats were introduced in 1958 and are believed to have seriously endangered the Socorro mockingbird Mimodes graysoni – only a single bird was seen in a survey in 1984. A visit in 1988, however, revealed several individuals, including three pairs, in one small area. Pigs are also a problem, rooting up burrows of Townsend's shearwater Puffinus auricularis (endemic to the four islands), and sheep are seriously affecting the vegetation. Apart from captive breeding efforts for the Socorro dove Zenaida graysoni, which became extinct in the wild between 1951 and 1978, no attempt has been made to preserve the islands' wildlife, which also includes endemic reptiles.

-World Birdwatch, April–June 1988, 9.

Guatemala's new law for protected areas

Guatemala is in the process of passing a new law to create 29 new reserves to cover representative areas of all the country's ecosystems. The new reserves will cover about 15,390 sq km, bringing the total protected area to over 16,200 sq km.

South America

Reducing accidental dolphin kills

Efforts by the Inter-American Tropical Tuna Commission (IATTC) and international adverse publicity and pressure are becoming effective in reducing accidental kills of dolphins in the non-US tuna fleet in the eastern Pacific. More countries are now co-operating in the IATTC's dolphin rescue programme, requiring vessels to use dolphin-saving gear and procedures to reduce mortality, and training boat captains and crew. Mexico, for example, enacted a new law in 1987 that requires the use of small mesh dolphin safety panels in purse seine nets and other procedures. The six-vessel Vanuatu

fleet operating from Ecuador has been working closely with IATTC and its mortality reduction programme will involve introducing marine mammal protective legislation. Venezuela has also been co-operating and a government resolution on protective measures to reduce dolphin mortality to its lowest possible level was expected in July. *Newsletter of the Cetacean Specialist Group*, August 1988, 2–3.

Wood-quail rediscovery

The gorgeted wood-quail Odontophorus strophium was known to science only from eight museum specimens, the last collected in 1981, when Michael Brooke of Cambridge University went to look for it in its last recorded locality in March 1988. With the help of a local farmer, who was able to whistle the shy bird into sight, he found at least nine groups of the birds in the Virolin area, some 200 km north-east of Bogota, Colombia. Virolin is at the southern end of a continuous block of oak forest some 50 km by 25 km in extent and it is likely that the rest of the forest holds similar densities of woodquail. Faunal diversity is very high and the woods contain several threatened species. Although forest clearance is widespread in Colombia, the human population of this area is low, having suffered great losses in the 1948–1957 civil war, from which it has yet to recover. There is a good chance that the Colombian Institute of Land Reform, which owns some of the land, will agree to a reserve being established if it is assured that a conservation project will go ahead.

World Birdwatch, April-June 1988, 4.

Oil spill in Galápagos

The Galápagos Islands suffered their first large oil spill in June when an Ecuadorian supply ship, *Iguana*, hit a reef and sank, discharging 50,000 gallons of diesel fuel into Academy Bay, Santa Cruz. Large numbers of small organisms, hermit crabs and chitons for example, died, and many larger ones, sea urchins, squid and octopus, were found dead or dying. The Ecuadorian authorities and the Charles Darwin Research Station are monitoring the frigatebirds and pelicans that feed in the area.

BBC Wildlife, August 1988, 440–441. 48

Peruvian fishery threatens dolphins

A large, growing and unregulated fishery is probably threatening small cetaceans in Peruvian waters, although the populations involved have not been assessed. In 1985 the total kill was estimated at about 10,000, mainly dusky dolphins Lagenorhynchus obscurus, and data for 1987 showed that large numbers of common dolphins Delphinus delphis were being taken for the first time. Preliminary data for 1988 suggest that the industry is still growing. Small cetaceans have been taken incidentally by Peruvian coastal fisheries for years, but now the take is deliberate, probably due in part to the collapse of the anchovy fisheries in the 1970s. The government monitors landings, by weight, but does not regulate the catch. Of particular concern are the dusky dolphin and Burmeister's porpoise Phocoena spinipinnis. The Cetacean Specialist Group of the IUCN/SSC is calling on the Peruvian Government to begin to collect landing statistics for all ports by species, a programme of population assessment, and to ban the landing of live dolphins and the use of dynamite.

Newsletter of the Cetacean Specialist Group, August 1988, 1–2.

Amazon fires beyond control

A top official of Brazil's Forest Defence Service has admitted that there is not enough money, men or equipment to stop the deliberate burning of Amazon rain forest. Brazil's Space Research Institute, which began monitoring forest fires in 1987, found that in that year 200,000 sq km were burnt, about half of which was virgin forest. The Institute estimates that there could be a 30 per cent increase in the area of the Amazon burnt in 1988. The Forest Defence Service's general secretary said the practice of burning the forest is a direct result of the Government's policy of occupation in the 1970s, which benefits companies and land speculators. Burning is also increasing because the Government, under its new land reforms, does not confiscate productive land, so owners are burning forest and installing cows to avoid losing land. The Guardian, 1 September 1988.

Emas National Park burns

Fire swept through Emas National Park in Brazil in August, burning two-thirds of its 1320 sq km and killing an incalculable number of animals. The park, in Goias state's plateau grassland, which is characterized by 25 million termite mounds, is one of the few refuges for giant anteaters, maned wolf and pampas deer. The park's three employees tried to combat the blaze with palm branches until a fire engine arrived, four days after the fire started. The park director said he needed 30 park rangers, two water trucks and a bulldozer to look after the park, which is surrounded by soy plantations and cattle ranches where land is burned for grazing. Another blaze destroyed 365 sq km of the Serra da Canastra National Park, also in central Brazil.

The Independent, 16 August 1988; The Guardian, 27 August 1988.

Australia/Antarctica

Hope for wombats

Only 60 northern hairy-nosed wombats Lasiorhinus krefftii are left. This large animal is now found only in Epping Forest National Park in central Queensland, two other populations, in New South Wales and in southern Queensland, having disappeared by 1910 under the onslaught of European settlement. To protect the wombats' pasture the Epping Forest National Park was fenced against cattle in 1981 and firebreaks were cut. Research is still going on to find out how best to manage the habitat, but the species is breeding well and now that all its known habitat is protected and grazing competition has been removed there is hope that the species will survive.

Wildlife Australia, March 1988, 8–11.

Shrubby threat to Kakadu

A prickly shrub *Mimosa pigra* from Central America is invading the wetlands of northern Australia. The plant caused few problems until the 1950s, when it became established near the township of Adelaide River. By the late 1970s huge herds of feral Asian water buffalo *Bubalus bubalis* had overgrazed the flood plains of the Adelaide River and the churned up earth pro-



vided the right conditions for the unpalatable invader to spread. Mimosa thickets spread steadily across the plains, drying out small lakes and invading the swamp forests at the plains' fringes. Kakadu National Park is at risk and four full-time staff patrol the park, destroving any mimosa they find. Herbicides are used to help keep the plant away from the boundaries and research is being done to try to find an agent for biological control.

New Scientist, 15 October 1988, 52-55.

Devastation in the Kimberley region

The pastoral industry in Western Australia has left 1300 sq km of the Kimberleys so severely eroded that grass can only return if the area is ploughed and seeded. The subsoil is so hard that ploughs cracked during revegetation projects being carried out by the Western Australia Department of Agriculture.

Wildlife Management, March 1988, 30.

Concern for Hector's dolphin

The status of Hector's dolphin Cephalorhynchus hectori, which is endemic to New Zealand's coastal waters, is causing concern. The total population may number only 3000-4000 individuals and incidental mortality in Brieflu

gillnets in the Banks Peninsula area is estimated to be equal to or greater than the number of young born each year. There is a need to improve the estimate of population size, to monitor the species and to obtain accurate data on incidental mortality throughout the range.

Newsletter of the Cetacean Specialist Group, August 1988, 9

Antarctica's new insect

The midge Eretmoptera murphyi has successfully invaded the Antarctic, with a little unwitting help from scientists. In so doing, it has increased the winged insect fauna of the Antarctic by 100 per cent. It was first discovered on Signy Island in the South Orknevs in 1967 when scientists transplanted samples of tussock grass from the Falkland Islands as an experiment. It escaped the confines of the experiment and survived the rigours of its new colder home; its larvae can survive being frozen. The Guardian, 16 August 1988.

Oceania

Guam birds to Rota

While the introduced brown tree snake drove three of Guam's endemic birds to extinction (see Oryx, 21, 210-211), 19 Guam rails Rallus owstoni and 31 Micronesian kingfishers Halcyon c. cinnamomina - also endemics - were rescued in 1984 before they fell victim to the predator. Both species bred well in captivity and by the beginning of 1988 there were more than 55 kingfishers in six US zoos and more than 125 Guam rails in zoos and in captivity on Guam. Ridding Guam of the snake is a distant dream, so an experimental release of Guam rails is to be made on Rota, 48 km to the north. National Wildlife, August-September 1988.15.

Obituary

Four stamps issued by

Papua New Guinea on 19

September 1988 show

Queen

Alexandra's

birdwing

butterfly at

various stages

Ralph Schreiber, head of the Bird and Mammal Section of Los Angeles County Natural History Museum, leading seabird biologist and Chairman of ICPB's Seabird Specialist Group from 1984 to 1987, died on 29 March 1988 at the age of 45. His most notable research was on the effects of DDT on brown pelicans, which contributed to the ban on its use in the USA and Central America.

People

On World Environment Day, 5 June 1988, one of FFPS's Vice-Presidents, Gerald Durrell, Founder and Honorary Director of Jersey Wildlife Preservation Trust, was elected to the Global 500 Roll of Honour of the United Nations Environment Programme. The award was made in recognition of outstanding practical achievements in the protection and improvement of the environment. For 30 years Gerald Durrell has been one of the world's leading conservationists, promoting the conservation of wildlife through his books and television films. The JWPT is noted for its exemplary work in captive breeding of endangered species. On 18 August the JWPT itself received the Society for Conservation Biology's Distinguished Achievement Award for its pioneering work in captive propagation and in training citizens of tropical nations in this approach to conservation.

Dr Mike Moser has been appointed to succeed Professor Geoffrey Matthews as Director of the International Waterfowl and Wetlands Research Bureau at Slimbridge, UK. Professor Matthews, who had been a Director of IWRB since 1969 and supervised the establishment of a section of the Ramsar Bureau there, retired in June 1988.