

INTERNATIONAL

Japan continues whaling

The Japanese whaling fleet left for the Antarctic in late November 1990 to kill 300 minke whales under the guise of scientific research despite the fact the plan was rejected at the International Whaling Commission earlier in the year. *Source: The Guardian*, 24 November 1990.

Two-thirds of birds declining

The 20th World Conference of the International Council for Bird Preservation, meeting in New Zealand in November 1990, reported that two-thirds of the world's 9000 bird species are in decline and more than 1000 are threatened with extinction. *Source: ICBP*, 28 November 1990.

Airline stops transporting birds

Lufthansa, the world's largest air-freight carrier, announced on 29 November that it would no longer accept shipments of wild birds because of the high rates of mortality. KLM Royal Dutch Airlines, currently the second largest carrier of wild birds, still plans to carry them. *Source: The Animal Welfare Institute Quarterly*, Winter 1990/91, 1 & 13.

Screwworm programme

Following the concern expressed at the IUCN General Assembly in Perth (see p. 63) about the infestation of New World screwworm *Cochliomyia hominivorax* in Libya, the FAO has reported that the initial stages of the programme are

now well established. Fourteen million sterile flies from Mexico were dispersed in Libya in December and more were due. It is still too early to assess the impact of the dispersal but monitoring of flytraps has shown that the flies are well distributed. The main phase of the eradication programme begins in February and will build up to the dispersal of 100 million flies per week between June and December. *Source: Food and Agriculture Organization of the UN.*

EUROPE AND NORTH AFRICA

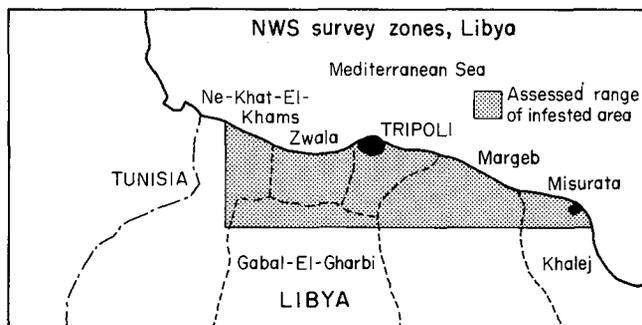
Carnivores in danger in Finland

A draft Act on the wolf *Canis lupus*, bear *Ursus arctos* and lynx *Felis lynx* in Finland, published on 14 December 1990 by the Ministry of Forestry and Agriculture, has brought protests from nature conservation organizations. The new law would not improve protection for the country's large carnivores; the only change on previous legislation gives protection in Uusimaa province, which contains Helsinki and no wolves. Wolves and bears can be hunted without licences in

the hunting season, although there are only 100 and 500 left, respectively. The lynx, of which 500–700 remain, is protected but the Hunting Department of the Ministry of Agriculture grants 200 licences a year for lynx killing. Four Finnish conservation organizations have called for changes to the proposed Act but so far these have not been attended to. *Source: World Society for the Protection of Animals, London; Animalia, Finland, January 1991.*

Heathland lost

Canford Heath in Dorset, an internationally important conservation site and an example of one of Britain's most threatened wildlife habitats, is to be bulldozed following a decision in the High Court in December 1990. The World Wide Fund for Nature took out a lawsuit against Poole Borough Council to force a judicial review of the planning permission the council granted itself to develop 7 ha of prime lowland heath, which is a site of Special Scientific Interest and contains some of Britain's most endangered species—sand lizard, smooth snake, nightjar and Dartford warbler. The outcome of the case makes it clear that



Map showing current boundaries of infestation by the New World screwworm in Libya (FAO/SECNA *New World Screwworm Newsletter*, No. 14, January 1991).

the law is totally inadequate to protect important wildlife sites and to meet Britain's international conservation obligations. Under the Bern Convention and the EC Birds Directive, Britain should protect breeding sites of the endangered species found on Canford Heath.
Source: Habitat, January 1991, 1.

Adder, pearl mussel and shad listed

Britain had added the adder *Vipera berus* to the list of species protected under the Wildlife and Countryside Act 1985, along with the freshwater pearl mussel (*Margaritifera margaritifera*) and the allis shad (*Alosa alosa*). The adder has suffered from modern agricultural methods and persecution; many colonies have too few adults to be viable. The mussel is adversely affected by pollution and over-collecting for pearls. The allis shad is an estuary dweller, but its breeding sites are unknown. Another candidate, the basking shark (*Cetorhinus maximus*), was left off the list while further information is sought on its status. The shark does not breed until it is 6 m long and gestation lasts for 3¹/₂ years. About 100 are caught round Britain each year and their livers used to make high quality oil for aviation instruments.
Source: The Guardian, 4 January 1991.

Britain objects to drift-net ban

A ban on drift-net fishing in the Mediterranean, proposed by Italy at the Conference on Security and Co-operation in Europe, was rejected after opposition from Britain. The conference agreed only to 'suggest' that Mediterranean nations 'should not use drift-

nets'. Britain argued against the ban because it might be extended to the North Sea and Atlantic, where it might affect Britain's future fishing plans. British vessels do not use drift-nets now, but France has increased its Atlantic drift-net fleet from 3 to 35 vessels in the past 4 years.
Source: New Scientist, 27 October 1990, 13.

Fish cull

The zander (*Stizostedion lucioperca*), a fish introduced into the Norfolk Broads in Britain in the 1950s has since spread into the Midlands canal system where it is disrupting food chains by eating large numbers of small fish. British Waterways authorities are culling them and selling them for human consumption.
Source: The Observer, 2 December 1990.

Do!phin deaths raise fears for monk seals

More than 400 dead striped dolphins *Stenella coeruleoalba* have been found dead on beaches in Spain, France and Italy since the end of August. Tests on samples from the Spanish animals by Veterinary Research Laboratories in Belfast revealed infection with a morbillivirus. This outbreak raises fears that the virus could infect all types of marine mammals, including whales and the endangered Mediterranean monk seal *Monachus monachus*. Alex Aguilar, a biologist at the University of Barcelona, wants to see a vaccination programme before the virus spreads to the seals' strongholds but a number of marine mammal scientists and conservationists have opposed proposals to immunize the seals because the disturbance could itself endanger them.

Sources: New Scientist, 3 November 1990, 22; BBC Wildlife, January 1991, 5-6.

Romania protects delta

Before the revolution in Romania 1200 sq km of the Danube Delta, Europe's greatest wetland, was scheduled for drainage and by 1989 420 sq km had been converted to agricultural land. Lakes had dried up, dams and canals had altered flooding, erosion and sedimentation patterns, and pollution and the use of heavy machinery were having adverse impacts. The new Romanian president has now declared the delta a Biosphere Reserve and has halted all hydrological and agricultural development. The delta has one of the largest populations of the threatened Dalmatian pelican *Pelecanus crispus* in the world and many other important populations of waterbirds.
Source: World Birdwatch, December 1990, 3.

Plight of Egyptian tortoise and turtles

Mindy and Sherif Baha El Din report that they have become increasingly concerned over the plight of tortoises and sea turtles in Egypt. The Egyptian tortoise *Testudo kleinmanni* suffers from development for agriculture and tourism along the Mediterranean coast and also from collection from the wild for sale as pets. Since the border between Libya and Egypt was opened thousands of tortoises have been imported into Egypt from Libya, which is not a party to CITES. Although Egypt has acceded to both CITES and the Bonn Convention, it has passed no laws to protect tortoises and turtles. Sea turtles are still being captured for food and

tourist souvenirs, although the Red Sea Governate has announced that it will stop these practices. Additional threats come from oil pollution and the planned development of islands that could be important nesting sites.

Source: *Tortoises and Turtles*, October 1990, 9.

AFRICA

Nigeria upgrades reserve

The Ifon Forest Reserve in Nigeria's Ondo State has been upgraded to Game Reserve status. Wildlife is relatively abundant and the State has requested advice on management from IUCN.

Source: *CNPPA Newsletter*, No. 52, 7.

New parks in Namibia

In March 1990 two new national parks were established on the Cuando River in the eastern Caprivi area of Namibia.

Mudumu National Park protects 1000 sq km of woodland and swamp while Mamili is a 400-sq-km wetland.

Source: *CNPPA Newsletter*, No 52, 7.

New game law in Swaziland

Stringent amendments to the Game Act in Swaziland have been acclaimed by conservationists. Courts are no longer allowed to be lenient with poachers and there is a minimum sentence of 5 years in jail for killing 1st Schedule game, for example rhinos and elephant. In addition, compensation, or a further 2 years in prison, is required for all animals poached. Sentences may not be suspended—a new concept in Swazi law—and anyone who solicits poaching shall be

guilty of the same offence as the convicted poacher and subject to the same penalty. The new law is also tough on malpractice by officials who risk jail if they aid or abet or wrongly issue permits. The law is now so severe in terms of its penalties that it is believed it will deter most poachers. Swaziland has lost 17 white rhinos to commercial horn hunters recently and the courts have been extremely lenient on poachers in the past.

Source: T. E. Reilly, Hlane National Park, Swaziland.

The end for Madagascan dugongs?

Madagascar has signed a treaty with Japan that opens several sensitive dugong *Dugong dugon* habitats to Japanese fisheries. It may spell the end for an already severely depleted dugong stock in the Antongil and Ile Ste. Marie areas of eastern Madagascar.

Source: *Sirenews*, October 1990, 13.

Illegal turtle slaughter in Mauritius

Although green turtles *Chelonia mydas* have been protected by law in Mauritius since 1980, they are still being slaughtered in the remote St Brandon shoals north of Mauritius.

Photographs published in the *Weekend Magazine* of 4 November show turtles being slaughtered on the islet St Raphael where they arrive to nest. Fishermen smuggle them on boats to Mauritius and sell them there. The magazine calls upon the Minister of Agriculture and the Mauritius Fishing Development Company to do something about the illegal slaughter.

Source: *Weekend Magazine* (Mauritius), 4 November 1990.

ASIA (EXCLUDING INDO-MALAYA)

Horses back to Mongolia

Przewalski's horse *Equus przewalskii* is to be reintroduced to Mongolia, where it was last seen in the 1960s. About 1000 animals are in zoos around the world and Mongolian scientists and an international working group are planning to fly six stallions to Mongolia in 1991. They will be monitored in a 100 ha enclosure in the Gobi Altai until 1992, when they will be moved into a 10,000-ha enclosure while a further four stallions and eight mares will be released into the smaller area. The horses will live within fences for 10 years.

Source: *New Scientist*, 12 January 1991, 26.

Black-faced spoonbill slipping away

Formerly considered to be common over its range in eastern Asia, the black-faced spoonbill *Platalea minor* is now known only from one breeding site (on rocky coastal islands in North Korea), three wintering localities (in South China, Taiwan and Vietnam) and a few sites on migration. The total known world population is not more than 285 individuals.

Industrialization threatens the wintering grounds in Taiwan, while those in Vietnam, in Xuan Thuy Reserve, are being converted to aquaculture ponds despite the site's Ramsar status. Source: *Asian Wetland News*, 3 (1), 14–15.

Coral an election issue

In November an election in Okinawa, Japan, unseated a governor, Junji Nishime, committed to building a new air-

port off the southern island of Ishigaki, around which is one of the world's richest colonies of blue coral *Helipora coerulea* (see *Oryx*, 21, 119 and 251). The new governor, a university lecturer, Masahide Ota, campaigned against Nishime by promising to 'reconsider' the Ishigaki project and scraped in by 63 votes.

Source: *New Scientist*, 24 November 1990.

Japan moves to ban TBTs

Proposed voluntary regulations in Japan would require vessels that are dry-docked every year to use only tributyltin-free paints to protect their hulls from fouling, while those dry-docked less frequently would be expected to use them at least on hull bottoms where fouling is not as great as on the submerged sides. These proposals would prevent serious accumulation of tin in inshore waters where its toxic effects are most marked. The move follows regulations in a number of countries including Australia, USA and UK, where concern has mounted over the use of organotin antifouling paints.

Source: *Marine Pollution Bulletin*, October 1990, 460.

INDO-MALAYA

Rhinos electrocuted

At least 58 greater Indian rhinoceroses *Rhinoceros unicornis* were killed in Assam in 1990. Poachers electrocuted at least seven animals using the high voltage wires that run through the Kaziranga National Park and Pobitara Wildlife Sanctuary. Anti-poaching units have now cleared the undergrowth around pylons and patrol the areas regularly, but more guards are needed.

Source: *WWF News*, January 1991, 9.

Cheetah sighting in India

The Asiatic cheetah *Acinonyx jubatus venaticus*, which was believed to be extinct in the wild in India, was seen by Simlipal Project Tiger field director, S. P. Nagar, in the Bulunda forest block on 27 November 1990. This cheetah once ranged widely from south-west Asia to India, but was known certainly to survive only in Iran.

Source: *Indian Express* (Kochi), 1 December 1990.

Adjutant stork survives in Assam

The greater adjutant stork *Leptoptilos dubius* is now one of the world's rarest storks because of habitat destruction. An important population still exists in Assam, India, but little was known of its status until a survey undertaken between 1987 and 1990. A total of 75 active nests in six colonies were found, all outside protected areas. Although protected by law the birds are threatened by destruction of nesting trees and wetland feeding areas as well as by the Santhal tribe from Bihar, who visit Assam in the winter and hunt adults and young. During the survey local people were alerted to the plight of the storks and encouraged to preserve nesting trees. A long-term project to monitor the nests has started.

Source: *Specialist Group on Storks, Ibises and Spoonbills Newsletter*, November 1990, 1-3.

Protecting a pitta's forest

A project is under way to protect Khao Noi Chuchi, the last 20 sq km of pristine lowland rain forest in peninsular

Thailand and the best area for the threatened Gurney's pitta *Pitta gurneyi*. The plans include upgrading the existing non-hunting status to that of forest reserve, promoting non-destructive farming practices in the area and a conservation education programme.

Villagers are keen to participate and are being offered saplings, grown from fruits collected in the forest, to plant on their land. Although settlers have cleared some more forest since the project started, guard stations being built at the most troublesome spots should prevent this happening in future.

Source: *World Birdwatch*, December 1990, 4.

First captive breeding for terrapin

In 1990 six giant Asian river terrapins *Batagur baska* hatched at the Bronx Zoo in New York, USA—the first captive breeding for this endangered species.

The female parent had been in captivity for 30 years and her mate was one of seven males received as 4-year-olds in 1985 from the Department of Wildlife and National Parks, Peninsular Malaysia.

Source: *Tortoises and Turtles*, October 1990, 13.

Foundation for orang-utans

The critical situation facing orang-utans and their tropical forest habitats has led to the establishment of the Orangutan Foundation to support the study, understanding and conservation of these animals in Indonesia. The Foundation currently supports the Orangutan Research and Conservation Project in Tanjung Puting National Park as well as other activities. Details from Orangutan Foundation, 822 S Wellesley Ave, Los Angeles, CA

90049, USA or Ashley Leiman, Orangutan Foundation, 7 Kent Terrace, London NW1 4RP, UK.

Orang-utans threatened by trade

Young orang-utans *Pongo pygmaeus* are being smuggled into Taiwan on fishing boats for sale at £2000–£6000 each. The animals are captured in Indonesia after their mothers are killed and their skulls sold to tourists. Much of the blame for the flourishing trade can be attributed to the rapid destruction of habitat by mining and logging industries.

Source: IUCN General Assembly Resolutions, Perth, December 1990.

Singapore withdraws crocodile reservations

With effect from 31 August 1990 Singapore withdrew its reservations on CITES Appendix I listings of *Crocodylus porosus* and *C. novaeguineae novaeguineae*, and registered four captive-breeding operations for *C. porosus*. Source: *Crocodile Specialist Group Newsletter*, July–September 1990, 12–13.

NORTH AMERICA

Bison reprieve

The world's largest bison herd will not be eradicated after all (see *Oryx*, 25, 12). The Canadian Government rejected the advice of its own environmental assessment panel, which had recommended killing the bison in Woods Buffalo National Park, Alberta, because some were infected with brucellosis and tuberculosis. The announcement came days after an internal memorandum drafted by employees

of Parks Canada, the responsible federal agency within the Department of the Environment, was leaked to the press. The memo pointed out that killing all the bison would be impossible, that it was poorly reasoned and that it would harm the integrity of Canada's national park system. Source: *BBC Wildlife*, December 1990, 843.

Beluga park at last

The Canadian federal and Quebec provincial governments signed an agreement in April 1990 for the creation of a marine park at the confluence of the Saguenay and St Lawrence Rivers, which is the home of an endangered stock of beluga whales *Delphinapterus leucas*. The project was unveiled in June 1988 (see *Oryx*, 23, 44) but has been bogged down by jurisdictional disputes. Hunting, fishing, damming and dredging will be strictly regulated in the 80-sq-km park. The belugas in the St Lawrence numbered 5000 in 1985 but now only 450–500 remain due to past hunting and current pollution. Source: *Marine Pollution Bulletin*, October 1990, 464.

Endangered species battle being lost

Since 1980 17 plant and 17 animal species have disappeared from the US because the US Fish and Wildlife Service is not able to enforce the law, according to a report by the US Interior Department, which says that a further 600 endangered or threatened species are getting little or no protection. The Endangered Species Program has more work than it can handle with current resources: 3600 species await consideration for endangered

species status and the necessary work to list each costs about \$60,000. To develop recovery plans for them all would cost \$5 billion and recovery plan implementation would shut down considerable agricultural, land development and recreational activity, and generate fierce public resentment. Some conservationists fear that the situation may call for choices where 'desirable' species are protected and 'insignificant' ones are let go.

Sources: *New Scientist*, 3 November 1990, 23; *Outdoor News Bulletin*, 23 November 1990, 1.

Four animals and two plants listed

During June 1990 the US Fish and Wildlife Service listed four animals and two plants as threatened or endangered. The northern spotted owl *Strix occidentalis caurina* was listed as threatened throughout its range from south-western British Columbia to north-western California. The total population is believed to be 3000–5000 pairs and timber harvest of old growth forests is the main threat. The Lower Keys rabbit *Sylvilagus palustris hefneri* was listed as endangered because only 200–300 remain in the Lower Florida Keys, having declined because of land drainage. The Squirrel Chimney cave shrimp *Palaemonetes cummingsi* was listed as endangered; its only site is threatened by potential residential development. The once widespread fanshell mussel *Cyprogenia stegaria* now breeds in only three rivers in Kentucky, Tennessee and Virginia and it was deemed endangered because of threats from potential oil and coal operations and collectors. The two plants listed were: the

Michigan monkey-flower *Mimulus glabratus* var. *michiganensis*, restricted to streamsides and lakeshores in northern Michigan where it is endangered because of recreational and residential development; and Virginia spiraea *Spiraea virginiana*, which was listed as threatened because, although widespread geographically, it is confined to scoured banks of high gradient streams or braided features of lower stream reaches.

Source: *Endangered Species Technical Bulletin*, July 1990, 1 & 46.

Pearl mussel trade

Pearl mussels (family Unionidae) harvested in the US are virtually the sole source of the shell beads made in Japan for implanting into pearl oysters as nuclei for cultured pearls. The export trade, which has averaged 5000–6000 tonnes a year since 1985, may be threatening populations locally. Of 297 species in the family in North America, 13 are extinct, 35 endangered and further 55 are, or have been, candidates for listing under the Endangered Species Act. Although only a few common species are deliberately harvested, incidental take may include threatened species. Non-specific collecting methods mean that perhaps 15 tonnes of mussels may yield only 1 tonne of commercial export value.

Source: *IUCN Bulletin*, December 1990, 15–16.

Black-footed ferret update

There are now 184 black-footed ferrets *Mustela nigripes* in captivity, including 66 born in 1990. Barring catastrophe, the first experimental reintroduction, of 50 animals, will occur in Wyoming this year. Much work

has been done to identify and prepare reintroduction sites and negotiate with landowners. The problems of habitat fragmentation remain as does the persistent campaign, largely subsidized by the US government, to poison prairie dogs (the ferrets' main prey), whose adverse effects on livestock are greatly exaggerated.

Source: *Re-introduction News*, November 1990, 5–6.

Beetles protected on beach

The north-eastern beach tiger beetle *Cicindela dorsalis dorsalis* and the puritan tiger beetle *C. puritana* have been listed as threatened. Both occur in various coastal habitats in the north-eastern USA where they face a variety of threats — pedestrian and vehicular traffic, oil spills, pollution and collectors.

Source: *Endangered Species Technical Bulletin*, September 1990, 6.

Warbler numbers highest for 29 years

The 1990 census of Kirtland's warblers *Dendroica kirtlandii*, which breeds only in Michigan, found 265 singing males, the highest number since 1961.

Source: *Endangered Species Technical Bulletin*, August 1990, 3.

Cassava relative rediscovered

Walker's manioc *Manihot walkerae*, which is closely related to the important food crop, cassava *M. esculenta*, was rediscovered in Texas in dense thorny bush scrub near La Joya in May 1990, having been last seen in the State when it was described in 1940 from a specimen collected in Hidalgo County. The shrub is endemic to the lower

Rio Grande valley of southern Texas and northern Mexico. The US Fish and Wildlife Service is considering the possibility of establishing colonies of Walker's manioc on nearby refuge lands.

Source: *Endangered Species Technical Bulletin*, August 1990, 2.

Developers fined for destroying mouse site

The Gentry-Pierce Business Park near Suisun City, California, has been fined \$50,000 for violating the Endangered Species Act by destroying a 64-ha site known to support the salt marsh harvest mouse *Reithrodontomys raviventris*.

Source: *Endangered Species Technical Bulletin*, August 1990, 2.

Reintroduction of Bolson tortoise

The Bolson tortoise *Gopherus flavomarginatus* is rare today and confined to the Chihuahuan Desert in Mexico. There is evidence, however, that this, or a very similar, species once occurred as far north as the Big Bend National Park in Texas where they are believed to have been exterminated by early man.

Agreements have now been established to reintroduce the Bolson tortoise to the Big Bend area and 200–250 tortoises are being imported from Mexico in 1991.

Source: *Tortoises and Turtles*, October 1990, 6.

Turtle headstarting to continue

An independent review of the Kemp's Ridley Headstart Program in Texas, in which eggs of Kemp's ridley turtles

Lepidochelys kempii are hatched artificially and the hatchlings released a year later, recommended that the programme be continued for 10 years, but not expanded. The review panel found that, while headstarted turtles can adapt and grow in the wild, it is currently impossible to tell if they go on to breed because the mortality rate of Kemp's ridleys in the wild is so high that few reach sexual maturity. Because a significant portion of this mortality is due to shrimp trawls the panel felt that the programme should be evaluated after the full implementation of turtle excluder devices.

Source: *Marine Turtle Newsletter*, October 1990, 26–27

Red wolves doing well

The red wolf *Canis rufus* re-introduction project at Alligator River National Wildlife Refuge in North Carolina is progressing well. There are now at least 10 free-ranging wolves. Private landowners have provided access to 20,000 ha adjacent to the refuge and the project now covers 106,000 ha of federal and private land, which should be sufficient to support 40–50 wolves within 5–10 years.

Source: *Re-introduction News*, November 1990, 6.

Last ditch effort for panther

The US Fish and Wildlife Service is proposing to take up to six young Florida panthers *Felis concolor coryi* from the wild each year for the next 3–6 years for captive breeding. The kittens would be selected for the greatest degree of genetic variability possible and older animals (up to four in the first year and one each year in subsequent years) would be used to fill the genetic gaps. Only 30–50 animals are left in their sole

range—the Big Cypress Swamp/Everglades area.

Source: *Endangered Species Technical Bulletin*, July 1990, 7.

Cactus controller becomes a pest

In 1925 the cactus moth *Cactoblastis cactorum* was introduced into Australia to control an exotic *Opuntia*. It was successful and the moth has since been introduced to several other places to cope with the same problem, including the Leeward Islands of the West Indies in 1957. From there the moth has gradually spread northwards through the Caribbean and arrived in the Florida Keys in 1989 where it has been recorded as damaging *Opuntia stricta* and the rare *O. triacantha*. Because the 12 remaining individuals of the semaphore cactus *O. spinosissima* in Florida grow on one island in the Keys (the only other wild population is in Jamaica) these are also threatened by the moth. The cactus is being cultivated at Fairchild Tropical Garden and screened enclosures have been placed over several of the wild plants. With 16 species of *Opuntia* currently under review for addition to the US List of Endangered Species, the possibility of the moth spreading further into North America gives cause for concern.

Source: *Plant Conservation*, Summer 1990, 3.

Florida strengthens manatee protection

A newly strengthened Florida Manatee Sanctuary Act expands the State's authority to protect manatee *Trichechus manatus* habitat, adopt rules to protect manatees from harassment and designate areas as manatee sanctuaries. Over \$730,000 from



Introduced *Opuntia* can be controlled by an introduced moth, but in some places where rare *Opuntia* grow the moth is causing problems (Sybil Sassoon).

boat registration revenues will be earmarked for the Save the Manatee Trust Fund compared with \$250,000 formerly allocated. The manatee population in Florida has been declining for many years, due in large part to boat collisions, and it is hoped that the new law will help reverse the decline. In June 1990 a boater caught speeding in a manatee protection zone was sentenced to 32 hours of shouting warnings to other speeding boaters along the Withlacoochee River.

Sources: *Endangered Species Technical Bulletin*, August 1990, 7; *Sirenews*, October 1990, 7.

Snapper excluders in the offing

The US shrimp trawl fishery, which now has to equip its nets with turtle excluder devices, may next be required to use devices that also exclude fish. Every year millions of finfish, including 12 million red snappers, *Lutjanus* sp., are killed

and discarded by indiscriminate trawling for shrimp. In response to the problem the Gulf of Mexico Fishery Management Council has proposed new regulations to conserve the red snapper, reducing commercial and recreational catches and restricting shrimp trawling to cut the bycatch of juvenile snappers. Gulf waters would be closed to shrimping from 1 May to 31 July starting in 1991 and trawl gear modifications would be required by 1993. Red snapper stocks in the Gulf are so reduced that the population could collapse. *Source: Marine Turtle Newsletter, October 1990, 6–7.*

Disease in green turtles

Fibropapilloma, a disease that causes large tumours and eventual death, has reached epidemic proportions in the green turtle *Chelonia mydas* population off Molokai in the Hawaiian islands. George H. Balazs diagnosed the disease, which was first seen in the area in October 1985, in one-third of turtles captured in a survey in July 1990. Little is known about the disease, which has also reached epidemic proportions in sites in Florida. It is believed to be rare elsewhere, although three cases were reported in San Diego Bay, California, in 1990. *Source: Marine Turtle Newsletter, October 1990, 6–10.*

CENTRAL AMERICA

Caribbean plants protected

Pelos del Diablo *Aristida portoricensis*, a grass species endemic to serpentine slopes and red clay soils in southwestern Puerto Rico, is today known from only two privately owned areas where residential

development threatens the plants. It was listed as endangered on 7 August 1990. The higo chumbo *Harrisia portoricensis*, a slender columnar cactus was listed as threatened on 8 August. It has been eliminated from Puerto Rico and remains only on the islands of Mona, Monito and Desecheo. The Mona population—the largest—is threatened by potential development projects and by feral goats and pigs. Goats also threaten the Desecheo plants.

Source: Endangered Species Technical Bulletin, September 1990, 6.

Belize sets aside land for jaguars

In November Belize set aside 405 sq km, nearly 2 per cent of its land area, for the protection of jaguars *Panthera onca*. *Source: The Guardian, 7 November 1990.*

SOUTH AMERICA

Orinoco crocodile

At least two important populations of the Orinoco crocodile *Crocodylus intermedius* still exist in the wild in Venezuela, each with more than 200 non-hatchlings, as well as some smaller populations, some of which have not been censused. Of the two major populations, that on the relatively pristine Capanaparo River is scattered along more than 200 km, while that on the polluted Cojedes River is concentrated in 10 km. As part of the recovery programme since 1987 eggs and hatchlings have been collected from the Cojedes River, reared in captivity and released into Caño Guaritico Wildlife Refuge. *Source: Crocodile Specialist Group*

Newsletter, July–September 1990, 16–18.

Peru adds to protected area

On 17 February 1990 Peru decreed the formation of the Tambopata-Candamo Reserve, which covers 14,800 sq km ranging from 200 to 3000 m. It adjoins the north, west and south sides of the 1202-sq-km Pampas del Heath National Sanctuary. *Source: CNPPA Newsletter, No 52, 7.*

Dolphin-tooth jewellery

Silver and turquoise jewellery that incorporates dolphin teeth has been appearing in the US retail market. The teeth are mostly from dusky dolphins *Lagenorhynchus obscurus*, which are captured for human consumption in Peru. The jewellery imports are illegal under CITES and the US Marine Mammal Protection Act and it is important to stem this new use of dolphin parts in commerce before it becomes an important local industry that may increase the take of dolphins. *Source: Newsletter of the Cetacean Specialist Group, 6 October 1990, 14.*

Decree for Atlantic Forest

A new presidential decree in July 1990 prohibited further destruction of Brazil's Atlantic Forest, of which only 2 per cent remains. The fragments contain at least 95 endangered species, 45 of which are endemic. In addition to the decree IBAMA (the Brazilian Environment Institute) earmarked \$US25 million for protection of the forest. However, at a meeting of the International Tropical Timber Council in Japan in November, plans were approved for timber projects in

6075 sq km of Atlantic Forest. Council funding worth £2.5 million will be provided by member governments. The Brazilian Government claims that the logging will be sustainable.

Source: *WWF News*, November–December 1990, 8; *The Observer*, 25 November 1990.

Kew's new project in Brazil

Projeto Nordeste—Local Plants for Local People is a new multidisciplinary research programme between the Royal Botanic Gardens, Kew, UK and Brazil. Planned to continue for at least 10 years in north-east Brazil, the research will synthesise information on regional plant diversity and discover which indigenous plants can be used for rehabilitating degraded forest ecosystems, marginal non-forest land and multipurpose crops.

Source: Royal Botanic Gardens, Kew, Surrey, UK, 24 October 1990.

Paraguay bans crocodile

The Paraguayan president signed a decree on 19 June 1990 prohibiting import of Nile crocodiles *Crocodylus niloticus* and restricting import of other non-native crocodiles. The preamble to the decree states that the reason for the prohibition is the need to protect the rich indigenous fauna from the possible negative biological impacts on non-native crocodiles that might escape into the wild. The move came after members of the IUCN/SSC Crocodile Specialist Group expressed concern about the introduction of Nile crocodiles to Brazil (*Oryx*, 24, 198–199) and signed a declaration asking governments of the region to prohibit future introductions of the species.

Source: *Crocodile Specialist Group Newsletter*, July–September 1990, 15–16.

AUSTRALIA/ANTARCTICA

Helping the reef

Sugar-cane farmers in Queensland, Australia, have agreed to work with the Great Barrier Reef Marine Park Authority to reduce the amount of fertilizers leaching on to the reef from the land. Research at James Cook University in Townsville has shown that the fertilizers and other chemicals stunt the growth of corals and predispose them to damage.

Source: *New Scientist*, 3 November 1990, 23.

Waychincup National Park—progress

Two new areas of national park have been gazetted in the Waychincup area near Albany in southern Western Australia. Together with the existing Mount Manypeaks and Arpenteur nature reserves, they complete stage one of the Waychincup National Park, which now extends from Normans Beach to Cheynes Beach. The next stage is to extend the park inland to the South Coast Highway. The park will eventually cover 140 sq km and contains several rare plants. Its fauna includes the noisy scrub bird *Atrichornis clamosus*, which was discovered in Two Peoples Bay in 1973 and which has responded well to conservation measures.

Source: *Landscape*, Spring 1990, 6.

Thylacine sightings double

The thylacine or Tasmanian tiger *Thylacinus cynocephalus*, classified as probably extinct, may be not only still alive,

according to some scientists, but may be making a comeback. Sightings have doubled in the past year to 13, three of which were classified by the Tasmanian Parks Wildlife and Heritage Authority as 'very good'. Dr Bob Green, who has spent 30 years studying the thylacine, says that there is no conclusive proof such as carcasses or unequivocal photographs, but that he has been sent samples of dung and footprints by experienced bushmen and there are new reports of tiger yelpings and of sheep being attacked by the animals.

Source: *The Observer*, 23 December 1990.

Fishing depletes gene pool

The populations of orange roughly *Hoplostethus atlanticus* around New Zealand, whose catches have been reduced in response to overfishing (see *Oryx*, 25, 15), have lost a great deal of genetic variability because of stock depletion. Scientists in the New Zealand Ministry of Agriculture and Fisheries studied genetic variation in three stocks of orange roughly, in 1982, when the fishery started, and in 1988, when the biomass had shrunk by around 60–70 per cent. They found a marked decrease in heterozygosity in the 5 years. They suggest that other heavily exploited species have suffered similar losses but for most species it would be impossible to measure this because there are no virgin populations left with which to make the comparison.

Source: *New Scientist*, 1 December 1990, 31.

Kermadec—a marine reserve

The Kermadec Islands, 930 km off northern New Zealand,

have been gazetted as a marine reserve. The protected area is 7350 sq km and the remoteness of the islands has meant that they have so far escaped commercial fishing. The reserve will protect 112 fish species, including the black-spotted grouper (*Epinephelus daemeli*).
Source: Forest and Bird Conservation News, November 1990.

Sea lion decline in Falklands

A WWF-funded survey of southern sea lions *Otaria flavescens* in the Falkland Islands has discovered serious declines since the last census 25 years ago. While 30,000 animals, including 6000 pups, were counted in 1965, the 1990 survey estimates 3385 animals including 613 pups. The sea lion has been protected since 1965 and the reasons for the decline are a mystery.
Source: WWF News, January 1991, 9.

Antarctica's future still uncertain

The nations of the Antarctic Treaty, meeting in Chile in December 1990, agreed to temporarily ban mineral exploration on the continent. Britain was the only country to insist that mining in Antarctica should not be banned permanently. The Convention for the Regulation of Antarctic Mineral Resources (CRAMRA) was effectively abandoned after Australia, France and New Zealand refused to ratify it; Britain says that CRAMRA is needed to prevent nations prospecting and mining as they like. Some progress was made instead towards an environmental treaty, to be written as a protocol to the existing Antarctic Treaty, and this will

be discussed further in April 1991.

Source: New Scientist, 15 December 1990, 8.

OCEANIA

New bandicoot

A new spiny bandicoot *Echymipera echinista* has been described by Dr James Menzies of the University of Papua New Guinea. Only two specimens have been collected, 300 km apart, in the Western Province, and the species differs from the rest of the genus in being extremely spiny with a bold facial pattern and pale ears.
Source: BBC Wildlife, January 1991, 12.

Fiji bans turtle-shell exports

Fiji banned the export of raw, unworked turtle shell from 1 January, and prohibited the sale of turtle eggs at all times and the sale of turtle meat during the closed season. The government also endorsed further research to justify a total ban on the commercial exploitation of

turtles within 2 years. In 1989 Fiji exported 2 tonnes of shells from about 2000 adult hawks-bill turtles *Eretmochelys imbricata* to Japan. The Solomon Islands is now the only Pacific country still exporting turtle shell, with more than 4 tonnes being sent to Japan in 1989.
Source: Marine Turtle Newsletter, January 1991, 1.

PEOPLE

Dr Emil Salim, Indonesia's Minister of State for Population and the Environment, was the 1990 recipient of the J. Paul Getty Wildlife Conservation Prize worth \$US50,000. Throughout his career Dr Salim has promoted the use of environmental impact assessments for development projects and in 1982 he set up an elephant translocation programme to alleviate crop-raiding problems. He was instrumental in the passage of Indonesia's Environmental Act through parliament and is a leading spokesman for developing countries on the issues of deforestation and global warming.



Sea lions are declining in the Falklands, but the cause is unknown (*Ian Strange*).