INTERNATIONAL

Canadian home for biodiversity convention

Delegates to the second conference of the UN Convention on Biological Diversity in Jakarta, Indonesia, chose Montreal, Canada, over Geneva, Madrid and Nairobi as the new site of the convention's secretariat. Source: New Scientist, 18 November 1995, 13.

Fishing treaty signed

A UN treaty to prevent overfishing of migratory fish was signed by 25 countries in New York, USA, in December 1995. The treaty - the UN Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks will place limits on catches of tuna and swordfish, which migrate through international waters, and stocks of fish, such as flounder and halibut, which straddle the territorial waters. The treaty takes a conservative approach to setting catches and calls for strict enforcement, allowing the arrest of vessels fishing illegally in international waters. Important fishing countries, including Japan, Korea, China and Poland, have yet to sign the treaty. Nations that sign will have up to 2 years to ratify the treaty, which will come into effect when 30 Parties have signed it. Sources: Marine Pollution Bulletin. November 1995, 683; New Scientist, 16 December 1995, 10.

New World Heritage Sites

On 6 December 1995 the UNESCO World Heritage Committee placed Canada's Waterton Lakes National Park and the adjoining Glacier National Park in Montana on the list of World Heritage Sites.

Designated under the name Waterton Glacier International Peace Park, the two parks are now listed with more than 400 other natural and cultural World Heritage Sites. The committee also added the world's first national park, Yellowstone, to its list of World Heritage Sites in Danger. The proposed New World Mine, located 4 km from Yellowstone National Park, straddles three watersheds of the Yellowstone River. Source: Nature Alert, Winter 1996, 5.

Conservation breeding needs boost

For nearly 3000 taxa of birds and mammals, conservation breeding may be the only way to avoid extinction, but fewer than 100 of these have selfsustaining captive populations. Assuming that the *c.* 1000 zoos in the World Zoo Organization can house 300,000 birds and mammals in breeding programmes and that each viable population needs to number 250–500 individuals, there is space for 600-1200 taxa of birds and mammals. Today only 45-90 species are deemed to be self-sufficient in zoos compared with 26 in 1978, so despite advances in captive management and the space available, zoos are a long way from fulfilling their potential in conservation breeding. Only 15 threatened species have established viable wild populations following reintroduction, representing 11 per cent of serious attempts. Source: Ebenhard, T. 1995. Trends in Ecology and Evolution, **10**, 438–443.

Oceans plundered for medicine

In the race to find new drugs 'bioprospectors' working for pharmaceutical companies are taking too many organisms from the oceans without any idea of the consequences, according to an Australian marine biochemist speaking in Sydney at a forum for ecologists and the science media in November. Compounds isolated from two sea squirts, a sponge, a sea moss, a mollusc and an alga are already undergoing clinical or preclinical trials in the USA and Canada. Apparently 98 per cent of samples collected are discarded even before any detailed and pharmacological analysis. A bioprospecting group from the US recently collected 450 kg of the acorn worm Cephalodiscus gilchristi to isolate 1 mg of an anticancer compound and 1600 kg of the sea hare Dolabella auricularia to obtain 10 mg of a peptide, which has some activity against melanoma. In other cases 2400 kg of sponge from the Indo-Pacific were needed to yield 1 mg of an anticancer chemical and 847 kg of moray eel liver were used to isolate 0.35 mg of ciguatoxin for chemical study. Source: New Scientist, 25 November 1995. 5.

Moth watch

In ports of Canada, the USA and UK constant watch is being kept for the Asian gypsy moth. The moth is able to multiply very rapidly and has the potential to devastate large tracts of forest. It is found in the hinterland of Russian Far East ports, especially around Vladivostock, and it is believed that it is attracted by the strong lights on ships where it lays its eggs on containers. Specimens of the moth have been trapped in British Columbia and in London.

Source: Marine Pollution Bulletin, November 1995, 683.

EUROPE

Origin of loggerheads in northern Europe

It has been suggested that the loggerhead turtles Caretta caretta that are occasionally recorded in northern Europe come either from populations in the western Atlantic or eastern Mediterranean. A new study, using the difference in size of mature females from these two areas to identify the probable origin of egg-bearing mature adult females recorded in northern waters, suggests that they come from the western Atlantic. Recent genetic studies have supported the hypothesis that some juvenile loggerheads from the western Atlantic may be carried by currents to the Mediterranean where they mature and breed; now it appears that mature adult females may also be contributing to the gene flow. Source: Hays, G.C. and Clarke, B.T. 1995. Herpetological Journal, 5, 323-324.

Finnish wetland drained

One of Finland's most important wetlands, Liminka Bay in Oulu Province, was partially drained in 1995 by landowners to create more arable land. The site hosts a large number of breeding waterbirds and is used by thousands more as a stop-over on migration. The bay is soon to be declared a Ramsar Site and has been named in the Finnish Wetland Conservation Programme. Despite this, the local authority granted permission for drainage work to be carried out for a month in June. Several kilometres of ditches were emptied before conservation groups raised an outcry. Source: World Birdwatch, 17 (4), 4.

Estonia's wolves safer

Grey wolf Canis lupus numbers have increased in Estonia over the last 5 years. The main causes appear to be a reduction in hunting due to the abolishment of bounties for wolves, rising petrol prices reducing the mobility of hunters, disbandment of wolf-hunting groups in hunters' clubs and mild winters. With higher wolf numbers, damage to livestock has increased and wolf control measures are being demanded. Source: European Wolf Newsletter, September 1995, 6.

Swans create problems for farmers in Denmark

Censuses of wintering swans in Denmark has revealed that they are causing crop damage, especially to winter wheat and oil-seed rape. Reported damage has increased since the early 1980s and reflects the increase in planting of winter-green crops and the eutrophication of natural wetlands. The EU setaside system, under which farmers have to put 10-15 per cent of arable land into nonfood production or leave it fallow, has led to Danish farmers planting more oil-seed rape for fuel and these fields will certainly cause future problems for swans and farmers. Denmark holds 63 per cent of the wintering whooper swan Cygnus cygnus population of the Scandinavian-Russian flyway and it is suggested that the set-aside scheme could provide a way of establishing low-cost reserves for grazing waterfowl.

Source: Wildfowl, 46, 1995, 8-15.

Peregrines blamed for pigeon deaths

British pigeon keepers are complaining that the growing

population of peregrine falcons Falco peregrinus is taking a heavy toll of racing pigeons and are seeking permission to remove peregrine eggs or nests, to catch and move peregrine falcons and to cull sparrowhawks, activities allowed by licence under the UK Wildlife and Countryside Act 1981. Britain's Department of the Environment has set up a working group to look into the demands. Pigeon fanciers in Belgium and the Netherlands are also losing birds but a study revealed that pigeon losses are due to mismanagement by owners: pigeons are weakened by stress during transport to the start of races. They are not given water and dehydration diminishes their resistance to overheating crowded and badly ventilated lorries. Source: New Scientist, 18 November 1995, 10.

UK smuggling conviction

A retired veterinary surgeon admitted conspiring to import the eggs of protected birds at Swansea Crown Court, UK, recently. He used couriers wearing specially adapted underwear to smuggle the eggs of endangered parrot species from Australia to the UK. He was jailed for 8 months, ordered to pay costs and had £29,000 confiscated. His accomplices received sentences ranging from 2 months imprisonment to 200 hours community service. Two others involved were tried in Australia and jailed for 6 and 18 months, respectively. Source: CITES Newsletter, January 1996, 1.

Operation charm pursues wildlife medicine traders

As a result of raids aimed at illegal wildlife traders, cases

brought by police in the UK resulted in two oriental herbalists being fined a total of £5000 relating to six charges of selling remedies containing parts of endangered animals. In a third case, an acupuncturist was fined £1000 after admitting to two charges of importing such items and displaying them for sale. Four other defendants were given 12 months conditional discharge. Source: IUCN UK Committee Network Notes, November 1995, 3

Wolf comeback in France

Wolves Canis lupus are again living permanently in France, 70 years after they went extinct there. Wolves have been increasing in numbers in Italy and moving into France: in the winter of 1994-95 there was one pack of eight wolves and another of at least two in the Maritime Alps, ranging over 250 sq km of national park land. Sheep owners in the area receive compensation payments for sheep killed by wolves: between January and early June 1995, wolves killed 50 sheep and injured 24. Source: European Wolf Newsletter, September 1995, 3.

French hunters at odds with EU policy

France's 1.6 million hunters want to lengthen the hunting season across Europe, against the recommendations of conservationists. In January 1994 the European Court of Justice ruled that French hunting regulations violated a directive that says the hunting must stop when migratory birds start to return to their nesting grounds. The French season is 7.5 months long, compared with an average of 5.2 months in the rest of Europe. The European Commission, then headed by

France, proposed changing the directive to allow plentiful species to be hunted 20 days after the start of migration. The European Parliament referred the proposal to an environment committee, which has now received a report saying that bird hunting in Europe should cease by the end of January each year. Meanwhile, France has passed a new law lengthening its hunting season. Source New Scientist, 23/30 December 1995, 8.

Botulism kills French waterfowl

Europe's largest outbreak of botulism for decades killed up to 50,000 birds of 30 species on Lake Grand-Lieu south of Nantes near the Atlantic coast of France. The epidemic started in May 1995 and, despite efforts to contain it by collecting and burning corpses, infected birds have been found 40 km away near the Loire estuary. The outbreak, due to warm anaerobic conditions in the lake, whose water level is very low, could last for years. Source: New Scientist, 25 November 1995, 6.

Croatian wolves

The grey wolf *Canis lupus*, which until 1994 was a game species in Croatia, has been given full legal protection in that country by legislation passed in 1995. Any act harming a wolf is now a crime, with fines up to the equivalent of \$US35,000 for transgressors. *Source: European Wolf Newsletter*, September 1995, 2.

NORTH EURASIA

Threat to Caspian sturgeon

Before the collapse of the USSR the Caspian Sea was bordered only by Iran and Russia. The sturgeon fishery for black caviar, most of which was carried out by the USSR, was strictly controlled. Today the Caspian is ringed by five states and two independent regions, which mostly lack fishing controls. The effect has been a two-thirds decline in sturgeon numbers since 1990. As a Soviet republic, Azerbaijan's annual caviar production was restricted to 4 tonnes; as an independent state it plans to produce 30 tonnes. Iran is the only state that has resources to police fishing and there are reports of widespread illicit caviar trade - illegal catches account for some 90 per cent of all sturgeon taken. TRAFFIC is undertaking a comprehensive study to assess the extent of the trade and the problems as a step towards determining how best to help conserve these fish. Source: TRAFFIC Dispatches, September 1995, 1 & 9.

NORTH AFRICA & MIDDLE EAST

Bird killing ban threatened

A bird-shooting ban introduced in Lebanon in January 1995 may be under threat – hunters and ammunition dealers are putting pressure on the government to have it lifted.

Source: World Birdwatch, 17 (4), 5.

Saving the Arabian leopard

Officials and conservationists from Saudi Arabia, Yemen,

Oman and the United Arab Emirates(UAE) have agreed on co-operative efforts to save the few remaining Arabian leopards Panthera pardus nimr. Only 100-200 remain and they are threatened by persecution by livestock owners and hunters. The meeting agreed to form a 'Leopard Group of Arabia' based at the Shariah Natural Heritage Centre in UAE. Each country will prepare an action plan for leopard conservation, review national wildlife legislation, conduct surveys and make proposals for protected areas. Efforts will be directed at increasing natural prey availability, supported by captive breeding programmes, reducing livestock and feral animal numbers in leopard areas and raising public awareness.

Source: Cat News, Autumn 1995, 11–12.

Oryx release successful

The 31 Arabian oryx *Oryx leucoryx* released in three groups in the Uruq Bani Ma'arid Protected Area between March and June 1995 (see *Oryx*, **29** [4], 223) have moved east from the release pens. One male has died but two calves have been born and it is planned to release more animals in 1996.

Source: Reintroduction News, No. 11, December 1995, 8.

Action for cormorant

The Socotra cormorant *Phalacorocrax nigrogularis* is endemic to Arabia, with all but one known colony in the Arabian Gulf. With possibly only 11 extant colonies there are grave fears for the species because of continuing persecution and loss of breeding sites due to development. An international effort is being

made by Gulf states to survey the remaining colonies and monitor breeding performance. Source: Ornithological Society of the Middle East Bulletin, Autumn 1995, 50.

SUB-SAHARAN AFRICA

Jackal in danger

The Simien jackal Canis simensis, which is endemic to the Ethiopian Afroalpine ecosystem, is continuing to decline. Fewer than 500 survive in a half-dozen widely scattered mountain pockets and numbers have declined critically in the last few years due to increasing human pressure for highaltitude grazing and agriculture, direct persecution, hybridization with domestic dogs and infectious diseases such as rabies. The Bale Mountains population of 440 adults was down to around 240 by 1992 and and has now fallen to 140, perhaps because of an outbreak of canine distemper among sympatric domestic dogs. Without swift intervention and help from the international community, the Simien jackal may be the next large mammal to go extinct.

Source: Il Licaone, 4 (2), 3-5.

Serengeti lions recover

The severe outbreak of canine distemper, which affected one-third of the Serengeti's 3000 lions and spread to neighbouring Masai Mara, has died out. In one study area the population has increased 15 per cent from its low point in October 1994, when it had sunk 45 per cent in 11 months. About \$100,000 has been raised to start vaccination of dogs in the area, which are a reservoir of

the virus and it is hoped to establish a permanent vaccination programme.

Source: Cat News, Autumn 1995, 9.

Elephant translocation in Kenya

Kenya is in the process of translocating 48 African elephants *Loxodonta africana* from Mwea National Game Reserve to Tsavo East National Park. The elephants were moving out of Mwea and causing significant damage to crops. The elephants are being translocated as entire family units and are being released in the centre of Tsavo East, far from the boundaries and human populations.

Source: Reintroduction News. No.

Source: Reintroduction News, No. 11, December 1995, 23.

Bwindi gorillas – a new subspecies?

New studies of the gorillas in Bwindi Impenetrable National Park, Uganda, suggest that the animals might not be mountain gorillas, despite the results of tests in the early 1990s that indicated that they were the mountain gorilla subspecies Gorilla gorilla beringei. American Museum of Natural History and Zoo Atlanta research found that, compared with the mountain gorillas of the Virunga Mountains, gorillas in Bwindi have several behavioural and morphological differences. The scientists say that more research is needed, however, to determine whether the Bwindi gorillas are eastern lowland gorillas G. g. graueri or a unique subspecies.

Source: African Wildlife Update, November–December 1995, 7.

USA approves dehorning safaris

The US Fish and Wildlife Service has approved the

import from Zimbabwe of black rhino horns taken in dehorning safaris. Zimbabwe adopted dehorning for all its rhinos in 1992 as a way to deter poachers but regrowth of horns means that rhinos need to be dehorned regularly. Americans on dehorning safaris will be allowed to participate in the tracking and location of animals to be dehorned and to shoot the tranquilizer darts to immobilize them temporarily. Fees will be paid directly into the Black Rhino Conservation Fund or to Zimbabwe's Department of National Parks and Wildlife Management, where they can be used for antipoaching activities and translocating rhinos to Intensive Protection Zones. Source: African Wildlife Update, November-December 1995, 1 & 8.

Cheetah reintroduction failure...

An attempt to reintroduce captive-bred cheetahs Acinonyx jubatus into Mthethomusha Game Reserve in South Africa has failed. Of two females released in the hope that they would mate with the single male already in the reserve, one was killed by hyaenas and the other had to be taken back into captivity because it was starving. The exercise demonstrated that female cheetahs do not appear able to adjust to the life in the wild if they have been captive bred and raised. Source: Cat News, Autumn 1995, 16-17.

... cheetah move success

Ten cheetahs Acinonyx jubatus were flown from Namibia to Bophuthatswana and released into protected areas in March 1995. All had been involved in killing livestock on farms and were collected by the Africat

Foundation in Okonjima, Namibia. Three males were released in Madikwe Game Reserve, where four other cheetahs from Namibia had been released in November 1994. A male, four females and five cubs were released in Pilanesburg National Park. All appear to be settling well. Source: Cat News, Autumn 1995, 16.

How many elephants in southern Africa?

Simultaneous surveys in five southern African countries should settle a long-running dispute over the size of the elephant Loxodonta africana population. Aerial surveys in October in Botswana, Namibia, Mozambique, Zimbabwe and Zambia will reveal whether conservation groups are correct in saying that some countries have exaggerated elephant numbers to justify culling and to back calls for a resumption of the ivory trade. One of the difficulties of counting elephants is that some herds roam across borders and may be counted in more than one country. The Southern Elephant Monitoring Project (ELESMAP) will provide accurate, up-todate information on the distribution and numbers of elephants in the region and will provide a baseline for longterm monitoring. Source: New Scientist, 18 November 1995, 7.

South African army behind ivory trade

Between 1978 and 1986 members of the South African Defence Forces (SADF) were involved in smuggling many tonnes of ivory and rhino horn from Angola and Namibia. Most of the illicit trade was sanctioned by the South

African Ministry of Defence and conducted through a 'front company' Frama Inter-trading, set up by SADF in 1980. This is the main finding of a commission set up by President Mandela in 1994. The commission also investigated allegations that a large syndicate based in South Africa continues to smuggle ivory and rhino horn with the collusion of people in high places and little danger of detection but no hard evidence was found for this. The commission pointed out that: the Customs service was understaffed, ill-equipped and unaware of what was going on; that in protected areas authority is split between conservation officials, police and the army; and that there is a lack of commitment to protecting wildlife by local communities, who often feel robbed of natural food resources. Source: New Scientist, 27 January 1996, 9.

South African coastal park completed

The core of the West Coast National Park in South Africa. which was established in 1985, has been consolidated by the purchase of Schrywershoek farm. Although only 30 ha in extent, it occupies a strategic position, forming a corridor between the Langebaan Lagoon and the Atlantic Ocean. The lagoon is considered to be South Africa's most important wetland area for migratory waterfowl. Source: Our Living World, October 995, 5.

Karro plants protected

Anysberg Nature Reserve in Little Karroo, South Africa, has been expanded by more than 25 per cent through the purchase of Touwsfontein, a 100-sq-km

farm, from its conservationconscious owners. Protection of the area, from which 500 plant species have been recorded, was considered to be vital in conserving the plants of the Karroo. The number of endemic plant species known to have become extinct increased from three in 1985 to 13 by 1993 and the number of species that qualified for inclusion in the Red Data Book almost doubled, from 183 to 350. Source: Our Living World, October 1995, 4.

Green radio launched

In November 1995 Radio Safari. Africa's first 'green' radio station, went on air in South Africa. The brainchild of Andre Waters and three of South Africa's conservation organizations - the Endangered Wildlife Trust, World Wide Fund for Nature-South Africa and the Wildlife Society of South Africa, it will be on air for 12 hours a day, offering drama, documentary and magazine programmes, ranging from the breeding habitats of lions and dung beetles to recycling and the greenhouse effect, as well as dealing with controversial issues such as culling, and land and water rights. Source: New Scientist, 18 November 1995, 10.

Frog recordings

The Southern African Frog Atlas Project commissioned a CD of the calls of South Africa's frogs to encourage the public to help collect data on the country's frogs. Many frog sites have been destroyed and the project wants to discover whether the decline in frogs has local causes or is part of the global trend in decline in frog numbers. Participants receive an instruction book with the

CD and site report forms. *Source: New Scientist*, 25 November 1995, 11.

Mate sought for diademed sifaka

Two years ago a team from Duke University in North Carolina, USA, captured three endangered diademed sifakas Propithecus diadema, the largest of the 32 extant species of lemur. However, only one survived and another expedition is being sent out to find a mate for the surviving male as well as a second breeding pair. The main threat to the sifaka is habitat destruction and hunting and the team from Duke is working with the Malagasy Department of Water and Forestry to establish breeding colonies to keep the species alive until the Malagasy Government can protect its forest habitat effectively. Source: New Scientist, 18 November 1995, 13.

SOUTH AND SOUTH EAST ASIA

Asiatic lion census

A census of Asiatic lions Panthera leo persica in their last refuge in the Kathiawar peninsula of western India in May 1995 found a total of 304 individuals, compared with 284 in the last census in 1990. All except 12 were in the Gir Lion Sanctuary and surrounding forests.

Source: Cat News, Autumn 1995, 10.

Crocodile restocking complete

The Tadoba Crocodile Breeding Centre, which was set up in

1977 to restore marsh crocodile Crocodylus palustris numbers in Tadoba National Park in Maharashtra state, India, has been successful. Since 1977 it has reared 434 crocodiles and successfully released 126 into nine wetlands. The wetlands now have viable crocodile populations and breeding at the centre has been stopped; it is expected that the last crocodiles will be released in 1977. There are plans to breed other threatened reptiles at the centre.

Source: TigerPaper, 22 (3), 15-16.

Concern continues over Manas Tiger Reserve

Bodo tribal dissidents still occupy parts of Manas National Park, making its effective protection difficult. A rapid 3-day survey in the Banasbari range of the park found the habitat to be in good condition but no signs of rhino or tiger were seen. However, there are reports of logging and large-scale disturbance in the other two ranges of the park. Only 19 of the 43 guard camps are manned; the rest are abandoned because of militant occupation. Few patrols are being carried out, morale is low and arms and radios have been withdrawn in case they are stolen by Bodo rebels. To ensure the future for Manas every attempt should be made to support and strengthen the activities of Wildlife Department staff. Source: Cat News, Autumn 1995, 7-8.

Rhino poachers exploit conflicts

The Indian rhinoceros *Rhinoceros unicornis* is threatened by an upsurge in poaching for its horn, which can fetch up to 10 times as much in price as African horn.

The population is believed to have fallen to around 2000. Poaching is particularly heavy in parts of India where rebels are active. Since 1992 poachers have killed 123 rhinos in Assam's Kaziranga National Park, which is home to the largest population (1164 animals). In the north-east, rebels fighting for independence trade horn for weapons. Poachers have also raided other sanctuaries in Jaldapara. Gorumara, Pabitora, Orang in Assam and Manas. These have small and very vulnerable populations of rhinos, which could be wiped out if poaching continues. Little of the money allocated to conservation reaches the park, and the guards are often unpaid for long periods. Source: New Scientist, 3 February 1996, 7.

India's biggest ivory bust

Wildlife authorities in the northern Indian city of Varanasi, Uttar Pradesh, have seized 35 kg of ivory, probably India's largest ever confiscation. Consisting of 402 carved and semi-carved items and valued at nearly £335,000, the ivory was in a shop next to a five-star hotel. Officials believe the ivory originated in the neighbouring states of Bihar and Orissa. Only about 15,000 elephants survive in the wild in India, which banned all trade in ivory in 1992. Source: BBC Wildlife, February 1996, 57.

India grassroots move to save tiger

Leading wildlife groups in India launched a new campaign in October 1995 to save the tiger. Tiger Link called on the prime minister to set up a tiger task force to co-ordinate immediate field action following disclosures about largescale losses of forest habitat and a dramatic increase in poaching. The new campaign, with the slogan 'Save the Tiger, Save the Jungle, Save India', brings together grassroots activists and conservationists and aims to be 'truly a people's movement' that recognizes the 'ecological wisdom of forest people'.

Source: BBC Wildlife, December 1995, 63.

Politicians sell Cambodia's forests

By November 1995, the Cambodian Government had cut illegal exports of timber to Thailand to less than a fraction of their level 6 months previously. However, the government is handing out 42,200 sq km of new logging concessions on top of the 22,440 sq km already given to foreign timber companies. This puts one-third of the country's land area and its entire commercially viable forest estate in the hands of loggers. The finance ministry is desperate to get the timber trade under control, but senior politicians and officials in Cambodia and Thailand are making millions of dollars out of the trade. Cambodia's two prime ministers and the minister of agriculture are handing out new concessions in secrecy, without reference to the environment ministry, the finance ministry, the provincial authorities or the national assembly, as required by the constitution. Source: BBC Wildlife, February 1996, 60-61.

Flycatcher rediscoveries

The Caerulean paradiseflycatcher *Eutrichomyias rowleyi* was feared extinct because of extensive conversion of its forest habitat to nutmeg and coconut plantations on the island of Sangihe, its only home. A joint University of Sam Ratulangi/University of York Expedition saw a single female in secondary scrub on the island in September 1995. Also in 1995 ornithologists found the Lompobattang flycatcher *Ficedula bonthaina* in south Sulawesi. It is only known from Lompobattang mountain and had not been seen since 1931.

Source: World Birdwatch, 17 (4), 3.

Threats to tortoises and freshwater turtles

Trade in tortoises and freshwater turtles in South East Asia has escalated and changed dramatically in recent years, according to a TRAFFIC report. Traditionally these animals were captured mainly for subsistence but the current take is to supply international demand, predominantly in East Asia, particularly China. The report followed extensive fieldwork to assess the distribution, status and exploitation of 41 species in seven countries: Cambodia, Lao PDR, Indonesia, Malaysia, Myanmar, Thailand and Vietnam. Many of the animals are destined for use in traditional Chinese medicine; in Vietnam up to 90 per cent of the trade was destined for China. Up to 300,000 kg of live animals are traded annually, with a value of at least \$US1 million. The report calls for possible listing under CITES of at least five heavily exploited species.

Source: TRAFFIC Dispatches, September 1995, 2.

Saving the world's smallest fish

The sinarapan, a goby, *Mistichthys luzonensis*, which is

found only in Lake Buhi in southern Luzon, the Philippines, and, at 7-10 mm long, is believed to be the smallest fish in th world, faces extinction. Until 1960 this tiny fish, which is considered a delicacy, was found in large numbers but its commercial exploitation using nets attached to motorized boats depleted stocks. New regulations prohibit the operation of these boats in the lake and the government and the private sector are making efforts to save the fish.

Source: Philippine Journal, 16 January 1996, 16.

EAST ASIA

China nets falcon poachers

Forest police in western China have seized 925 falcon poachers, many of them foreigners, and rescued more than 400 rare birds. The official Zinhua news agency said that many of the smugglers were from an unspecified neighbouring country, entering on tourist or business visas. The poachers transport the falcons to the Middle East where they command up to £33,000 each. Most of the poachers were released after their prey was

The Times, 29 January 1996.

Nagara Dam protest lost

The gates of the dam at the mouth of the Nagara River in Japan have been shut despite vigorous protest. The Nagara, which rises in the mountains of central Japan and winds through the Nobi Plain to emerge at Ise Bay close to Nagoya, was the country's last major free-flowing river. Now it is

slowly dying. The Nagara is home to 69 species of freshwater fish and is particularly renowned for satsukimasu (May salmon), which breeds nowhere else, and ayu, a national delicacy. Both species migrate between sea and river so their survival is threatened by the dam. Reiko Amano, a writer who led the protest and went on hunger strike twice to try to prevent the dam, has not given up hope and is still trying to persuade the government to reopen the gates.

Source: New Scientist, 18 November 1995, 43-45.

NORTH AMERICA

Goose continues to recover

The Aleutian Canada goose Branta canadensis leucopareia continues to recover. In 1995 173 geese were translocated to Yunaska and Skagul Islands in the Aleutians. Improvements in handling geese resulted in no losses despite the 48-hour holding time between capture and release. A survey of the Alaid/Nizki Islands in summer 1995 produced an estimate of 124 nests - a fourfold increase from the 1992 estimate, indicating that the islands' nesting population is self-sustaining. Source: Endangered Species Bulletin, November/December 1995, 27.

British Columbia's new park

In November 1995, the British Columbia provincial government created a 1070-sq-km national park in the Stein Valley, the largest untouched watershed in the heavily populated south-west portion of the province. The park will

be managed co-operatively by the provincial government and the Lytton First Nation, which claims the land as its traditional territory. Creation of the park is balanced with the development of a local land-use plan to ensure long-term sustainability for the region and its inhabitants.

Source: Arborvitae, January 1996, 2.

Owls and jobs

In early 1995 Weyerhaeuser Company and the US Fish and Wildlife Service agreed to a Habitat Conservation Plan (HCP) to protect the threatened northern spotted owl Strix occidentalis caurina on the company's land near Coos Bay Oregon. Under the HCP, which initially is legally binding for 50 years, Weyerhaeuser will protect all existing habitat around the most viable owl sites, protect 28 ha around all owl site centres and manage its entire tree farm to maintain suitable habitat for dispersal for spotted owls. As well as protecting owls the HCP reduces risks to forest investments and the jobs associated with them. Source: Endangered Species Bulletin, November/December

1995, 10-11.

Isle Royale wolves rebound

The grey wolves Canis lupus of Michigan's Isle Royale National Park, which for the last decade have hovered around a dozen animals, appear to be recovering. They are having larger litters and a fourth pack may have established. Source: Audubon, November-December 1995, 22.

DDT decreases in sea lions

In the early 1970s extraordinarily high levels of DDT were found in California sea-

lions Zalophus californianus californianus on the central California coast. A new study has found a decrease in DDT levels of over two orders of magnitude between 1970 and 1992, the largest decline recorded in any wildlife population. As with brown pelicans Pelecanus occidentalis, this is associated with the cessation of the release of DDT residues by the Montrose Chemical Corporation. The study also found a significant increase in the population during the same time but a cause-effect link has not yet been established unequivocally. Source: Lieberg-Clark, P. et al. 1995. Marine Pollution Bulletin, 30, 744-745.

Tiger beetle reintroduction

In 1994 approximately 600 north-eastern tiger beetle Cicindela dorsalis dorsalis larvae were released at two sites on the Sandy Hook unit of Gateway National Recreation Area in New Jersey, USA. A 1995 survey found 50 adult beetles and active larvae, showing that the beetles were breeding. The success of the first year's reintroduction exceeded expectations and another release of larvae is scheduled to take place. The beetle was once found in great swarms along New Jersey's beaches but disappeared from the state by the 1970s. Source: Endangered Species Bulletin, November/December 1995, 27.

Bird conservationist faces smuggling charges

Tony Silva, who gained an international reputation as a protector of rare parrots, faces charges in Chicago, USA, of running an illegal bird-smuggling ring to supply private

collectors around the world. According to the US Fish and Wildlife Service Silva smuggled \$1.3 million-worth of endangered species between 1985 and 1992. Among the smuggled birds were at least 186 hyacinth macaws Anodorhynchus hyacinthinus. Source: The Times, 8 January 1996.

CENTRAL AMERICA & CARIBBEAN

Belize protected areas bill gazetted

A bill proposing the establishment of a Protected Areas Conservation Trust (PACT) in Belize was gazetted on 30 September 1995 and was expected to pass in to law in the near future. The PACT is an innovative mechanism for sustainable support of the country's protected areas and will be based on a departure tax for non-Belizeans and other sources of funds generated within Belize. It was proposed partly because of the decline in funds donated by conservation organizations outside Belize. Source: Belize Audubon Society News, 27 (3), 9.

Manatees being illegally killed in Belize

Fishermen in Port Honduras in southern Belize are killing manatees *Trichechus manatus* in large numbers according to the Belize Centre for Environmental Studies. In 1994, when four manatee skeletons were found in the Deep Creek area in the Toledo District, it was suspected that some opportunistic killing was taking place. In September 1995 aerial surveys found only four manatees near

Port Honduras, despite abundant excellent habitat, and boat surveys with local fishermen found 11 butchering sites, at least two of which had been used within the previous month. The remains of at least 35 manatee were found. No manatee meat was observed in Belizean markets but there are rumours that the meat can occasionally be bought in neighbouring Guatemala. Manatees are protected in Belize and Guatemala but the law is poorly enforced. Source: Sirenews, October 1995, 7.

SOUTH AMERICA

Planet's richest park

A new national park has been declared in northern La Paz Department, Bolivia, which may hold the highest diversity of bird species in any protected area in the world. The 19,000-sq-km Parque Nacional Madidi encompasses a range of habitats; tropical lowland and montane forest, lowland grassland, and inter-Andean dry tropical forest.

Source: World Birdwatch, 17 (4), 3.

Pole bridges for primates – a sequel

Pole bridges built to allow primates to cross roads (see *Oryx*, **29** [4], 240) may have drawbacks. The bridges may expose primates, particularly callitrichids, to raptors and in open areas it would be necessary to provide a shelter in the form of a roof or web of ropes, which could be disguised by encouraging the growth of vines, although not in such a way to provide hiding places for predatory snakes. The bridges should also be

designed to discourage raptors from nesting on them. While bridges are of great potential use in conserving populations of endangered primates in fragmented habitats, it is essential that their effectiveness is evaluated.

Source: Neotropical Primates, September 1995, 74-75.

Environment agency calls on army for help

The Brazilian environment agency IBAMA is owed the equivalent of £267 million in unpaid fines by logging companies and has a backlog of 123,000 cases for breaches of environmental laws held up in the courts. The President of IBAMA has contracted 2000 lawyers to call in the fines on a no-pay-no-fee basis and has signed an agreement with the army that will make 28,000 soldiers, 1000 boats and 80 aircraft available for logistical support. Source: BBC Wildlife, December

New population of Lear's macaw

1995, 63.

In June 1995 researchers working for the World Parrot Trust in Brazil located a second population of Lear's macaw Anodorhynchus leari several hundred kilometres away from the previously known single population. It appears that bird trappers knew about this population, which is believed to number 22 birds, but stay away for fear of being shot by marihuana growers in the region. Trappers have removed 20 of the 117 birds of the wellknown population at Toca in the last 2-3 years. The researchers have now received several unconfirmed reports about other isolated and widely scattered populations of this

spectacular macaw. Source: Psitta scene, November 1995, 1-3.

White-winged nightjar first record for Paraguay

A population of white-winged nightjar Caprimulgus candicans, which has only been recorded at two sites in recent years, has been found in Paraguay, the first confirmed record of the species in the country. The find is one of a number by an Anglo-Paraguayan team, winner of the 1995 BP Conservation Expedition Award, administered by BirdLife International and Fauna & Flora International. However, the black-fronted piping guan or vacutinga Pipile jacutinga (from which the expedition took its name) was found at only one site and habitat degradation in the area is proceeding rapidly. Source: World Birdwatch, 17 (4), 5.

PACIFIC

Alleged corruption in Solomon Islands logging

Three cabinet ministers and several senior government officials of the Solomon Islands are alleged to have accepted more the £1 million over 2 years from a logging company, Intergraded Forest Industry of Malaysia. Prime Minister Solomon Mamaloni, who owns interests in part of a logging company, has claimed that he has no power to sack the ministers. The total volume cut by all the country's logging companies in 1995 was around 700,000 cu m compared with the estimated sustainable rate of 275,000 cu m. Source: BBC Wildlife, February 1996, 62.

AUSTRALIA/NEW ZEALAND/ANTARCTICA

Plight of Australia's birds

Up to half of Australia's bird species are declining as native forests continue to be cleared, according to Harry Recher at the University of New England, New South Wales. Censuses by the Royal Australasian Ornithologists Union support this view: since 1989 they have found that nearly half of the country's songbirds have declined dramatically and that habitat loss is a major cause. Source: BBC Wildlife, December 1995, 64-65.

Tougher on the trafficker

As the result of an overhaul of the 1982 Wildlife Protection Act, Australians bringing exotic wildlife into the country face extra penalties if they have also broken another country's laws. Australian wildlife laws were already rated as among the world's toughest, with a maximum of 10 years in jail or a £50,000 fine for illegal import or export. Source: BBC Wildlife, January

1995, 55.

Accidental release of virus pleases farmers

The rabbit calicivirus accidentally released from an experiment on Wardang Island off South Australia (see Oryx, **30** [1], 21) is killing up to 90 per cent of the rabbits in the populations it infects. It has swept through South Australia, travelling as fast as 8 km a day. It has reached New South Wales and is heading towards Queensland. Farmers are reported to be paying large sums for an infected rabbit. A task force has been set up to

recommend measures that should be taken as a result of the decline in rabbit numbers. New South Wales has already stepped up the use of poisonous baits to kill foxes, feral cats and wild dogs, which are likely to turn to native animals when deprived of rabbit prey. Source: New Scientist, 9 December 1995, 3 & 4.

Concern over pollutants

A study of organic pollutants in marine sediments and common mussell Mytilus edulis from coastal waters around Perth, Western Australia, found that levels of tributyltin (TBT) were among the highest in Australia and were a cause for major concern, given the known toxicity of this compound for marine animals. The study also found a high frequency of imposex (imposed male sexual characteristics), which interferes with reproduction and is linked with high levels of TBT, in the neogastropod Thais orbita. Source: Burt, J.S. and Ebell, G.F. 1995. Marine Pollution Bulletin, 30, 723-732.

Tuatara release

Fifty 4-6-year-old captivehatched tuataras Sphenodon guntheri and 420 adults have been released on a 30-ha ratfree island in Cook Strait, New Zealand in an attempt to establish a second population of this reptile. The animals came from nearby 4-ha North Brother Island, the only place in the world where these reptiles survived the introduced predators that devastated New Zealand's wildlife. The colonists will be monitored and the results used to design further release programmes for S. guntheri and the other extant species of tuatara, S. punctatus, which lives on about 30 islands, all of which

are off-limit to the public. If all goes well conservationists will soon establish 'tourist' population so the public will finally be able to view these reptiles in the wild.

Source: New Scientist, 25 November 1995, 8.

Reducing seabird mortality on long-lines

Since the late 1980s there has been an alarming decline in populations of wandering albatross Diomedea exulans due to these birds being hooked on long-lines for tuna. Other bird species are also being affected. The long-line fishery for Patagonian toothfish Dissostichus eleginoides, which has developed rapidly since the mid-1980s around South Georgia and the Kerguelen islands of the Southern Ocean, became a cause for concern because it operates in important breeding areas for albatrosses and petrels. A study there found that piping coarsely chopped fish heads, tails and guts on the other side of the boat when baited longlines are set greatly reduced the incidental capture of seabirds. The study's authors recommend that setting of long-lines should always be done with the simultaneous release of homogenized offal. Source: Cherel, Y., Weimerskirch, H. and Duhamel, G. 1996. Biological Conservation, 75, 63 - 70.

Seal entanglement

A study in South Georgia in 1988/89, which found that thousands of Antarctic fur seals Arctocephalus gazella were being entangled in artificial material originating from fishing vessels, led to a campaign to ensure vessels complied with regulations governing disposal

of waste and that any material that was discarded unavoidably should be cut to avoid entanglement of marine mammals. Five subsequent years of recording found that entanglement is still a problem, although its incidence has halved. This may be partly due to the fact that fishing activity around South Georgia has declined substantially, but all packing bands found washed ashore in the last 2 years have been cut, which does suggest an improvement in wastedisposal practices. Source: Arnould, J.P.Y. and Croxall, J.P. 1995. Marine Pollution Bulletin, 30, 707-712.

REQUESTS

Wildlife *Information*Network manual

The Wildlife Information Network, Royal Veterinary College, London, is compiling a comprehensive, computerized veterinary husbandry information manual dealing specifically with wild animals. This 'electronic manual' will be developed in modules, the first dealing with carnivores. If you are a wildlife veterinary surgeon, a zoo director or curator, a field biologist or zoologist, a vet with a significant exotics practise or any other wild animal professional with use of a 386, 4MB RAM, or better, computer and would like to be considered for the field-testing of the electronic manual, please send brief professional details to: The Information Officer, Wildlife Information Network, Royal Veterinary College, Royal College Street, London NW1 0TU. Tel: +44 (0)171 388 7003; Fax: +44 (0)171 388 7110; e-mail: sboardma@rvc.ac.uk

Nocturnal mammals

A group undertaking long-term research on nocturnal primates in Africa is seeking help from volunteers who have tape-recordings of bushbabies or who may be in a position to record their local species. Hair samples (from pet animals or road kills) with precise localities of origin are also welcome.

Contact: Simon Bearder, School of Social Sciences, Oxford Brookes University, Oxford OX3 0BP, UK.

NEW GROUPS

Cat Conservation Information Centre

The IUCN/SSC Cat Specialist Group is establishing a Cat Conservation Information Centre (CCIC), which is intended to become a major international source of material on all wild cats and related subjects for group members and subscribers. Source: Cat News, Autumn 1995,

PUBLICATIONS

Wild cats

27.

Wild Cats: Status Survey and Conservation Action Plan, compiled and edited by Kristin Nowell and Peter Jackson, IUCN, Gland, Switzerland (ISBN 2 8317 0045 0), \$US40/£26.75) can be ordered from IUCN Publications Service Unit, 29 Huntingdon Road, Cambridge CB3 0DL, UK. Tel: +44 (0)1223 277 894; fax: +44 (0)1223 277 175, or

Island Press, Box 7 Covelo, CA 95428, USA. Tel: 800 828 1302 (toll free in USA), +1 (707) 983 6432 (outside USA and Canada); Fax: +1 (707) 983 6414.

Action plan for partridges and related taxa

Partridges, Quails, Francolins, Snowcocks and Guineafowl: Status Survey and Conservation Action Plan 1995-1999, compiled by P. J. K. McGowan, S. D. Dowell, J. P. Carroll, N. J. Aebischer and the WPA/BirdLife/SSC Partridge, Quails and Francolin Specialist Group, has been published by IUCN, Gland, Switzerland (ISBN 2831702690; 101 pp.). Details from IUCN Publications Unit, World Conservation Monitoring Centre, 219 Huntingdon Road, Cambridge CB3 0DL, UK.

OPPORTUNITIES

Volunteers needed for sea turtle work

The Sea Turtle Protection Society of Greece (STPS) needs volunteers for monitoring and public awareness work on Crete, Peloponnesus and Zakynthos from mid-May to the end of October. Volunteers will stay on free basic camp sites and receive field training by experienced project members. The STPS is also looking for volunteers throughout the year at the newly established Sea Turtle Rescue Centre in Glyfada near Athens. Accommodation will be provided. Candidates for both projects are expected to have a strong team spirit, communicate in English, share all aspects of demanding work and pay for travel and food. Minimum

participation is 4 weeks. *Contact:* Sea Turtle Protection Society of Greece, 35 Solomou st, GR-106 82, Athens, Greece. Tel/Fax +30 1 38 44 146.

MEETINGS

23rd Annual Conference on Ecosystems Restoration and Creation. 16–17 May 1996, Florida, USA. Contact: Frederick Webb, Hillsborough Community College, Plant City Campus, 1206 N. Park Road, Plant City, FL 33566, USA. Tel: (813) 757 2104.

The 1996 World Congress on Coastal and Marine Tourism. 19–22 June 1996, Honolulu, Hawaii. Contact: CMT96, c/o Oregon Sea Grant, Oregon State University, 500 Administrative Services, Corvallis, OR 973321-2131, USA. Tel: (541) 737 5130; Fax: (541) 737-2392. On WWW http://seagrant.orst.edu/cmtc on.html

8th International Coral Reef Symposium. 24–27 June 1996. Panama City, Republic of Panama. Contact: STRI Unit 0948, APO AA 34002-0948, USA. Tel: (507) 28 4022; Fax: (507) 28 0970.

Plants for Food and Medicine. 1-6 July 1996, London, UK. Contact: The Linnean Society,

Burlington House, Piccadilly, London WIV 0LQ, UK. Tel: +44 (0)171 434 4479; Fax: +44 (0) 171 287 9364; e-mail: marquita@linnean.demon.co.uk

4th International Conference on Fertility Control for Wildlife Management. 8–11 July 1996, Queensland,

Australia. *Contact:* c/o ACTS, GPO Box 2200, Canberra, ACT 2601, Australia. Fax: +61 6257 3256.

Zoo Animal Behaviour and Welfare: Summer School. 15–26 July 1996, Edinburgh, UK. Contact: Hamish Macandrew, UnivEd Technologies Ltd, Abden House, 1 Marchhall Crescent, Edinburgh EH16 5HP. Tel: +44 (0)131 650 3474.

International Conference on Systems Approach to Conservation of Tropical Biodiversity. 1–4 September 1996, Kerala, India. Contact: Tropical Botanic Garden and Research Institute, Thiruvananthapuram 695 562, Kerala, India.

5th International Congress of Ethnobiology. 2–6 September 1996, Nairobi, Kenya. *Contact*: Christine Kabuye, National Museums of Kenya, PO Box 45166 Nairobi, Kenya. Fax: +254 2 741424.

World Heritage Tropical Forests: Science for Better Conservation Management Conference. 2–6 September 1996. Contact: Conference Secretariat. Tel: +07 369 0477; Fax: +07 369 1512.

Third International Penguin Conference. 2–6 September 1996, Cape Town, South Africa. Contact: John Cooper, African Seabirds Group, PO Box 34113, Rhodes Gift 7707, South Africa.

2nd International Symposium of Butterfly Conservation. 6–8 September 1996, Warwick, UK. Contact: Andrew Pullin. Dept of Biological Sciences, Keele University, Staffs ST5 5BG, UK. Fax: +44 1782 630007; e-mail: A.S. Pullin@keele.ac.uk 5th INTECOL International Wetlands Conference. 22–28 September 1996, Perth, Australia. Contact: Dr Jenny Davis, School of Biological Sciences, Murdock University, Murdock, Western Australia 6150. Tel: +61 9 360 2939.

IUCN World Conservation Congress. 14–23 October 1996, Montreal, Canada. Contact: John Burke, Director of Communications, IUCN-The World Conservation Union, 28 rue Mauverney, 1196 Gland, Switzerland. Tel: +41 22 999 0123.

The 2nd International Symposium on Coexistence of Large Carnivores with Man. 15–19 October 1996, Omiya, Japan. Contact: Ecosystem Conservation Society–Japan, 305 Ando Bldg. 2–11–9 Ikebukuro, Toshima-ku, Tokyo 171, Japan. Tel: +81 3 59510244; Fax: +81 3 59512974.

Third International Conference on the Marine Biology of the South China Sea. 21–25 October 1996, Hong Kong. Contact: Secretary, Third ICMBSCS, The Swire Institute of Marine Science, The University of Hong Kong, Cape d'Aguilar, Shek O, Hong Kong. Tel: (852) 28092179; Fax: (852) 28092197; e-mail: swireml@hkucc.hku.hk

Biodiversity, Conservation and Management at the Beni Biosphere Reserve, Bolivia.
3–6 December 1996, La Paz, Bolivia. Contact: Carmen Miranda, Academia Nacional de Ciencias de Bolivia, Av. 16 de Julio, Casilla 5829, La Paz, Bolivia. Tel/Fax: (591) 2 350612. e-mail: cmiranda@ebb.bo or Francisco Dallmeier, Smithsonian/MAB Biodiversity Program, 1100 Jefferson Drive SW, Suite 3123, Washington,

DC 20560, USA. Tel: (202) 357 4793; Fax: (202) 786 2557; e-mail: icfgd@ic.si.edu

Tenth CITES Meeting. 9–20 June 1997, Victoria Falls, Zimbabwe. Contact: CITES Secretariat, 15 Chemin des Anémones, Case Postale 456, CH-1219, Chátelaine - Genève, Switzerland. Tel: +41 22 979 9139/40; Fax: +41 22 797 3471.

Euro-American Mammal Congress: Challenges in Holarctic Mammalogy. July 1998, Santiago de Compostela, Spain. Contact: Dr Fernando Palacios, Museo Nacional de Ciencias Naturales, CSIC, Iose Gutierrez Abascal, 2, Madrid 28006, Spain; e-mail: fernan@pinar1.csic.es; Fax: (34) 1 564 5078; or Dr Luis Ruedas, Museum of Southwestern Biology, Department of Biology, University of New Mexico, Albuquerque, NM 87131-1091, USA: e-mail: lruedas@sevilleta.unm.edu; Fax: (1) 505 277 0304.

CORRECTION

Pacific Centre for International Studies

We have been advised that the Pacific Centre for International Studies does not exist and that the William (C.) Burns responsible for the published notices (see *Oryx*, 30 [1], 22 and 23) is not to be confused with Professor William Burns of the Department of Zoology, University of Wisconsin, Madison, USA.