

INTERNATIONAL

Six new natural heritage sites

At its 14th Session meeting in Banff, Canada, 7–12 December 1990, the World Heritage Convention added six natural properties to the World Heritage List, bringing the total to 79. The new sites are: Mount Huangshan, China; Bimaraha Nature Reserve, Madagascar; Te Wahipounamu and Tongariro National Park, New Zealand; La Amistad National Park, Panama; and Rio Abiseo National Park, Peru.

Source: *Newsletter of the IUCN Commission on National Parks and Protected Areas*, October 1990–March 1991, 3.

Border park

The US and Mexico are working on a co-operative management agreement for a border park along the Rio Grande. On the US side more than 4050 sq km are already protected, mostly in Big Bend National Park, and Mexico plans a large sanctuary directly across the river in Coahuila State. Several species hard pressed by human development should benefit, including mountain lion *Felis concolor*, black bear *Ursus americanus* and the endangered black-capped vireo *Vireo atricapillus*.

Source: *Newsletter of the IUCN Commission on National Parks and Protected Areas*, October 1990–March 1991, 7.

Japan faces sanctions over turtles

The US Interior and Commerce Departments have formally identified Japan as threatening the endangered hawksbill turtle *Eretmochelys imbricata* by encouraging a lucrative domes-

tic trade in spectacle frames, mirror handles, ornamental combs and other items made from imported turtle shell. Under the Pelly Amendment to the Fishermen's Protective Act, the US President has 60 days to notify Congress of what sanctions, if any, he proposes to take against Japan. A spokesman for the Japanese Embassy in Washington said that the country is working to reduce imports of hawksbill shells but that the industry employs about 2000 people, many of them too old to retrain. From 1981 to 1989 Japan imported at least 234,000 hawksbill shells from 20 countries and in 1990 imported a further 18,000. Sources: Department of the Interior, 20 March 1991; *The Washington Post*, 21 March 1991.

No sanctions: Norway carries on whaling

In October 1990 the US considered imposing economic sanctions on Norway because of its insistence on continuing its research whaling programme despite the fact that the International Whaling Commission did not approve it. In December President Bush announced that the US would not impose sanctions because Norway had improved the design of its research programme and had reduced the take of North Atlantic minke whales *Balaenoptera acutorostrata* from 68 to five. Source: *Los Angeles Times*, 20 December 1990.

GATT must wrestle with dolphin problem

Mexico has filed a formal complaint to the General Agreement on Tariffs and Trade (GATT) against two US regulations that protect dolphins in the eastern tropical Pacific tuna

fishery. The Mexican challenge seeks a ruling from GATT that US restrictions on dolphin-unsafe tuna are violations of GATT's free-trade rules. This could be the first major environmental battle at GATT, which has been criticized for its failure to recognize conservation and pollution regulations. Already Japan, Thailand, Spain and Italy have intervened on Mexico's side. A three-nation panel will hear the complaints and replies and will report in the autumn. A ruling against the US would set a dangerous precedent for other environmental laws, such as the US Pelly Amendment, which allows embargos of fish from nations that undermine international fishery conservation agreements.

Source: *Monitor*, 11 March 1991.

End to industrial waste in the sea

The London Dumping Convention has agreed to end the dumping by ships of industrial waste at sea by 31 December 1995. The measure will be legally binding on all 64 nations that are signatories to the Convention. The provisions also state that wastes currently dumped by ships must not be discharged into the sea by pipelines or into rivers.

Source: *Marine Conservation*, Winter 1990/91, 5.

Mussels, worms and pollution

Indicator species are often used in pollution studies to assess environmental changes but three widely used species have lost much of their value due to complications in taxonomy and identification difficulties. These are the polychaete worms, *Polydora ligni* and *Capitella capitata*, and the mussel *Mytilus*

edulis. It has been found that each actually contains several species and variation within these species complexes will provide different responses to pollution changes.
 Source: *Marine Pollution Bulletin*, March 1991, 101.

EUROPE AND NORTH AFRICA

TBT in the open sea

Pollutants, including tributyltin (TBT) and other toxic metals, are accumulating in the surface microlayer of the North Sea according to a recent report from the UK, which found TBT at up to 20 ng per litre, 10 times the level known to cause imposex in the dog whelk *Nucella lapillus* (see *Oryx*, 20, 217–220). The use of TBT in antifouling paints was banned in 1987 on pleasure boats in the UK but its use is still permitted on larger commercial and navy vessels. Research in the US supports the findings of this study and the implication that toxic compounds are accumulating in open seas throughout the world.

Source: *Marine Pollution Bulletin*, March 1991, 103–104.

Friendship park

Finland and the Soviet Union have agreed to create a protected transfrontier 'Friendship' zone in the northern conifer belt. The Soviet part will be the Kostamuksha, a strict reserve of 480 sq km, while the Finnish part will be made up of five separate protected areas.

Source: *Naturopa Newsletter*, No. 90–10, 4.

Finnish parks

Two new national parks were designated in Finland in 1990:

Kolovesi National Park (2300 ha) in Finnish lakeland and Torronsuo National Park (2500 ha), the largest raised bog in south-west Finland.

Source: *Nature and National Parks*, 1991, 29, 36.

Park road appeal fails

In late February about 60 conservationists attempted to prevent a road being built in the Pallas-Ounastunturi National Park in north-western Finland.

Permission for the road was granted in 1982 and construction started recently to provide work for unemployed people. The Ministry of the Environment is against the road (but is unable to quash official decisions), as is the Finnish Forest Research Institute, which manages the park. After conservationists failed in their appeal to the Ministries of Communications and Labour they chained themselves to excavators. Work was stopped until the Finnish Association for Nature Conservation's appeal to the High Court received a hearing; the Court, however, refused to handle the affair, saying that the Association is not an interested party as defined in Finnish law.

Source: *Suomen Luonto*, February 1991, 58.

Britain's estuaries being destroyed

Britain's estuaries are being destroyed by unprecedented development pressure, according to a review by the Nature Conservancy Council. The 2-year study investigated 155 estuaries covering 9400 km of coastline. It revealed that 85 per cent of mudflats, salt marshes and sand dunes had been damaged by human activities and that 45 estuaries, 26 of them

important for wildlife internationally, are being degraded by major land reclamation schemes. Protection measures, including those necessary under European legislation, are failing because of the overwhelming pressure of development coupled with a piecemeal system of planning and conservation controls, concludes the review.

Source: *The Observer*, 10 February 1991.

Heathland saved

Britain's environment secretary announced in March that he would revoke permission to build 200 more houses on Canford Heath in Dorset, one of the country's last fragments of lowland heath (See *Oryx*, 25, 66).

Source: *New Scientist*, 23 March 1991, 18.

Wildlife Trust for Europe

The Paris-based European Fund for the Preservation of Nature, set up to preserve wildlife across Europe, has bought its first two areas of land, both in France. The sites are: 323 ha of coastal cliffs, sandy shore, grassland and open water south of Brest in Brittany, which are important breeding grounds for birds and mammals, including the otter; and 45 ha of sand dunes and marsh at Vauville, west of Cherbourg in Normandy, important as a staging area for migratory ducks.

Source: *Newsletter of the IUCN Commission on National Parks and Protected Areas*, October 1990–March 1991, 7.

Inadequate protection for bears

France has given nominal protection to the brown bear *Ursus*

arctos in a large area in the Pyrénées (*Oryx*, 25, 8). However, due to a lack of adequate legal measures, recommendations for the protection of bears have been ignored by local authorities in favour of short-term economic advantages and hunting. Hunters have been staging violent demonstrations against local people who are in favour of protection.
 Source: WWF-France, 5 February 1991.

Bulgaria expands protected area

Three new protected areas are to be established in Bulgaria. A Central Balkan National Park will incorporate nine reserves and cover 70,000 ha, of which 20,000 ha will be strict reserve. A new Rila National Park of 90,000 ha will be designed around six existing reserves, and the Pirin National Park will be extended from 40,000 ha to 55,000 ha by the end of 1991.
 Source: *Newsletter of the IUCN Commission on National Parks and Protected Areas*, October 1990–March 1991, 6.

Bird society sued

The Malta Ornithological Society (MOS) is being sued for £52,000 by a bird-hunting tour company, Sphinx Tours, which



Hunter with turtle doves (ICBP/D. A. C. van den Hoorn).

claims it lost revenue as a result of an MOS anti-hunting campaign launched in 1988 to stop Maltese hunters visiting Egypt and shooting protected species (see *Oryx* 23, 107; 24, 191). The International Council for Bird Preservation is appealing for money to fund the MOS's operation while their assets are frozen, to pay legal fees and to fund further conservation work in Malta.
 Source: ICBP, 12 April 1991.

AFRICA

New Ethiopian shrews

Two new species of shrew have been described from the Haremma Forest in Bale Province, southern Ethiopia, which is still relatively undisturbed and part of it is protected by being included in Bale Mountains National Park. *Crocidura haremma* and *C. bottegoides* bring Ethiopia's total native species of Soricidae to a minimum of 25, eight of which are endemic. The endemics are either confined to remnant montane forest or to isolated moorlands and their patchy distribution makes them very vulnerable to habitat destruction. Two species have not been collected again since their description in 1915 and 1936, respectively.
 Source: Hutterer, R. and Yalden, D.W. 1990. In *Vertebrates in the Tropics* (eds G. Peters and R. Hutterer), pp. 63–72. Museum Alexander Koenig, Bonn.

Elephants killed in Korup

Between September and December 1990 poachers killed 27 elephants in Korup National Park in Cameroon compared with only three killed in the preceding 12 months. A Wildlife Conservation

International researcher working in Korup suggests that because the international ban on ivory trade has caused a fall in the price of ivory, local chiefs in Cameroon and Nigeria are again able to afford to buy tusks for traditional ceremonial purposes.
 Source: *Wildlife Conservation*, March/April 1991.

New park in Mauritania

Mauritania has created the Diawling National Park to protect an important wetland next to the Djoudj World Heritage Site in adjacent Senegal.
 Source: *Newsletter of the IUCN Commission on National Parks and Protected Areas*, October 1990–March 1991, 7.

Trade in chimpanzee skulls

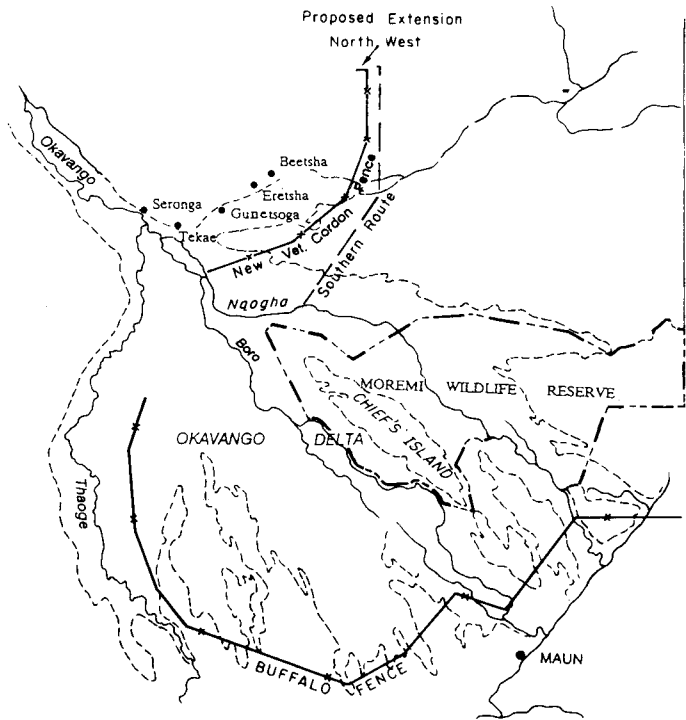
Chimpanzee skulls mounted on wooden carvings of human figures are being sold openly in Kenya for \$700 each, despite the fact that it is illegal. The skulls are reported to come from Zaire, and possibly also from Tanzania and Uganda, and are probably obtained in the process of capturing baby chimpanzees for the pet and pharmaceutical trade. Shopkeepers sell to American and European tourists and, to avoid problems with Customs, airmail the souvenirs in boxes labelled 'wood carvings'. It is also reported that chimpanzee skulls are the basis of 'art objects' sold in Burundi.
 Source: *BBC Wildlife*, April 1991, 289.

Fence controversy for Okavango

Cattle incursion threatens the north-east Okavango in Botswana. In the south and west this problem has been avoided as an indirect result of

the veterinary cordon fence erected in 1981/82 to prevent disease being transmitted from buffalo to cattle. Although it was condemned by conservationists at the time, the predicted large-scale deaths of wildlife have not occurred. Because the number of people and cattle are now increasing north-east of the delta, the Department of Animal Health has proposed a fence there. Its route has been debated vigorously, with the villagers wanting it as far south as possible and conservationists as far north as possible. Routine aerial surveys have shown no large-scale wildlife migrations but the Kalahari Conservation Society has urged the Department of Wildlife and National Parks to undertake more intensive surveys.

Source: *Kalahari Conservation Society Newsletter*, March 1991, 12.



The proposed new buffalo fence north of the Okavango delta.

Botswana links park with reserve

Botswana's protected area is to be increased by adding Kudiakam Pans to Nxai Pan National Park, joining it to Makgadikgadi Pans Game Reserve.

Source: *Kalahari Conservation Society Newsletter*, March 1991, 11.

Chinese smugglers caught in Zambia

Twenty-one Chinese officials visiting Zambia have been caught trying to leave the country with illegally poached ivory and rhino horns.

Source: *New African*, March 1991.

Great white shark listed

South Africa is introducing conservation measures for the great white shark *Carcharodon*

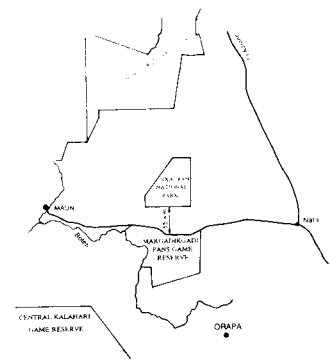
carcharias because of threats from sport fishing and nets. It will be illegal to sell or offer for sale any great white shark or part of product thereof and to catch or kill one except by permit for scientific research.

Source: Ministry of National Education and of Environment Affairs, Cape Town, 11 April 1991.

identified in 1988: reduction in feeding quality, decline of suitable nesting trees and increase in nest disturbance and in 1990 a recovery plan was launched. Initial efforts are concentrating on increasing the availability of food in the short term—providing supplementary feeding (cockroaches) and increasing

Magpie robin: slow progress

For the last decade the population of magpie robin *Copsychus sechellarum* has oscillated between 20 and 26 birds despite a successful cat eradication programme on Fregate, the most easterly of the Seychelles, in 1981/82. Since 1960 this island, which has never been colonized by rats has been the only home of the bird. Factors preventing its recovery were



Map showing Nxai Pan extension.

access to food by digging over fertile soil or splitting rotten trunks—and in the long term by restoring indigenous forest. Source: *World Birdwatch*, March 1991, 10–11.

Seychelles bans turtle catch

The Seychelles Ministry of Agriculture and Fisheries has banned the catching of green and hawksbill turtles (*Chelonia mydas* and *Eretmochelys imbricata*) because the number of hawksbills is declining throughout the archipelago and the green turtle is virtually extinct in the granitic islands (Mahe, Praslin and La Digue) and the Amirantes group, with only a few remaining around the coralline islands.

Traditionally fishermen have been permitted to take a limited number for personal consumption but permits have been abused. The ban will stay in force while the permit system is revised.

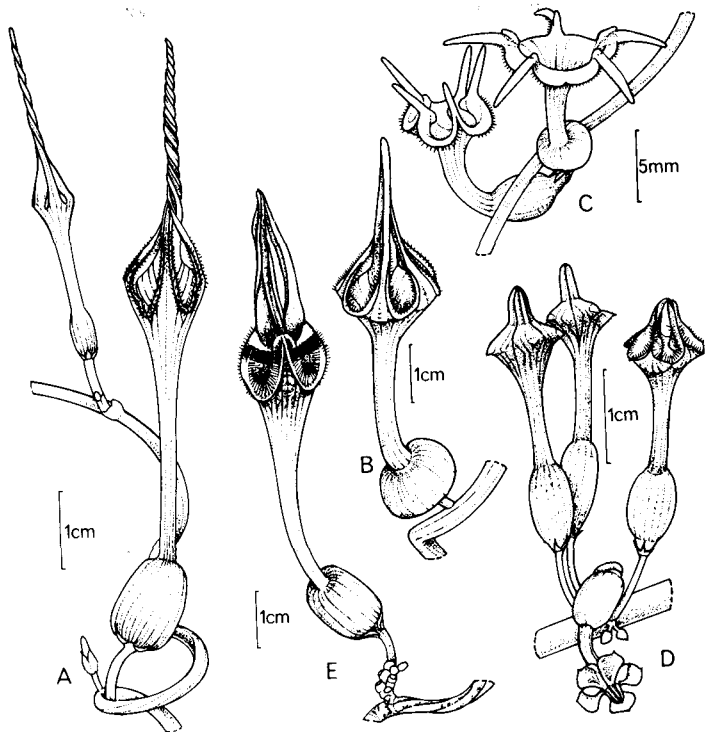
Source: Seychelles Tourist Office, London, 11 February 1991.

ASIA (EXCLUDING INDO-MALAYA)

Ceropegias in danger

Of the world's 250 species of *Ceropegia* (family Asclepiadaceae), many of which are cultivated for their beautiful and bizarre flowers, seven grow in Saudi Arabia, including two—*C. arabica* and *C. superba*—that are endemic to the Arabian Peninsula.

Ceropegias were first recorded from Saudi Arabia in 1979 but already many populations have disappeared. All are confined to the south-west in a small area of foothills in the Asir escarpment and on gravelly



Ceropegias in Arabia: A. *C. arabica* var. *arabica*, typical form; B. *C. arabica* var. *arabica*, small form; C. *C. arabica* var. *abbreviata*, form with wide open lobes; D. *C. arabica* var. *abbreviata*, common form with joined lobes; E. *C. superba*. Drawn by Joanna Langhorne after S. Colletette (by kind permission of *Kew Bulletin*).

outcrops of the Tihama plain. Much habitat has been lost to homes and agriculture, while in the hills a drying climate has led to ancient terrace farming being abandoned. *Ceropegias* once flourished among the shrubs clothing the steep ground between terraces; now houses have replaced crops, and sheep and goats have eliminated much of the vegetation. Source: Colletette, S. 1991. *Ceropegias* in Saudi Arabia, *Kew Bulletin*, 8, 24–37.

Atlas of the Breeding Birds of Arabia

This project, launched in 1984, has now collected reports from 200 observers as well as obtaining records from literature and

museum sources. The National Commission for Wildlife Conservation and Development of Saudi Arabia is now sponsoring the Atlas financially and will publish it in due course. Meanwhile *The Phoenix* carries news of progress: the most recent issue covered species of interest, potential reserves and more. Source: Michael C. Jennings, Co-ordinator of the Atlas and Editor of *The Phoenix*, 1 Warners Farm, Warners Drove, Somersham, Cambridgeshire PE17 3HW, UK.

Chinese alligators breeding well

Chinese alligators *Alligator sinensis*, whose wild population

was estimated at 500 10 years ago, are now being bred successfully in captivity at the Anhui Research Centre of Chinese Alligator Reproduction in Xuancheng County, Anhui Province. By 1989 3500 alligators had been raised and now 1000 are raised each year, some being second-generation captive-bred animals.

Source: *Crocodile Specialist Group Newsletter*, October–December 1990, 15–16.

Rare birds of China

The white-eared pheasant *Crossoptilon crossoptilon*, the crested ibis *Nipponia nippon*, and the Taiwan magpie *Urocissa caerulea* were among the birds depicted in a portfolio of 32 prints of rare birds of China from watercolours by J. Fenwick Lansdowne. They were exhibited at the Tryon Gallery in London in June. Rare Birds of China has had the advice and support of the Academia Sinica, the Ornithological Society of China and the Beijing Natural History Museum. The 32 species were selected with the help of Professor Cheng Tso-Hsin, President Emeritus of the Ornithological Society of China and Professor Hsu Weishu of Beijing Natural History Museum.

Japan plans scientific drift-netting

Japan has announced that its fleets would continue drift-net fishing for scientific research purposes after the UN ban comes into effect in 1992.

Source: *Monitor*, 19 February 1991.

Unspoilt island airstrip plan

The isolated subtropical island of Anijima in the Ogasawara

chain about 970 km south of Tokyo has been undisturbed since Japanese soldiers left 46 years ago. Most of its shoreline became a protected zone in a new national park when the US returned the Ogasawaras' 103 islands and islets to Japan in 1968. A plan to build an airstrip to accommodate daily flights to bring tourists to the islands—currently would-be tourists have a 28-h ship ride from Tokyo—has shocked Japanese ecologists, who say it is the only island in the chain where the environment is well preserved and is the closest to a Galápagos that Japan has, harbouring many endemic species. Source: *Los Angeles Times*, 5 February 1991.

INDO-MALAYA

Unexpected boost to captive elephant population

With Nepal's wild elephant population down to 30–50, animals are no longer captured for training but have to be bought from other Asian nations.



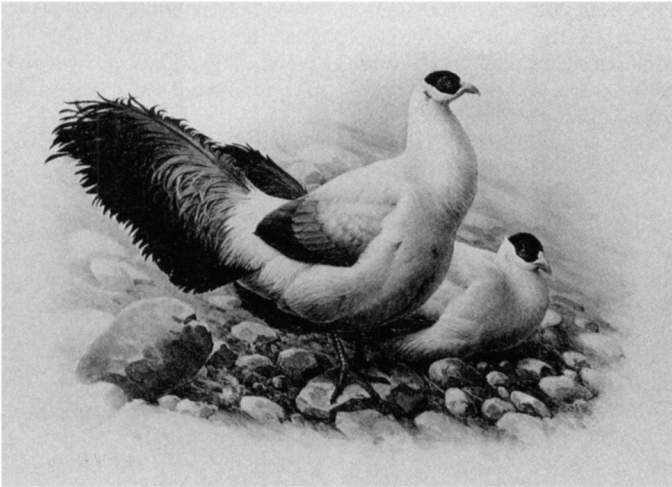
Taiwan magpie: one of the paintings in the Rare Birds of China exhibition at the Tryon Gallery in June 1991

Captive breeding has met with little success and the price of trained elephants is rising rapidly. Nepal has a unique but temporary solution to this problem. A once-captive male elephant, which was released on its owner's death, now roams freely over the Koshi Tappu area. It regularly visits the government elephant training camp there and has sired seven calves, of which five are still alive. While this may produce sufficient elephants for Nepal's immediate needs, there is no guarantee that a similarly released male would provide the same service in future. Nepal's Department of Wildlife is considering alternative solutions.

Source: *Tiger Paper*, October–December 1990, 1–5.

Wildlife trade in Thailand one of world's worst

Thailand's Wild Animals Reservation and Protection Act is 30 years old but its antiquated regulations and lack of enforcement make the country one of the world's worst as far as trade in wildlife is concerned. A recent survey showed that 75 per cent of all bird species offered for sale in a market only 3 km from the headquarters of the Wildlife Conservation Division were in violation of the law. Pet shops and restaurants specializing in the sale of wildlife abound. The law allows anyone to own two animals of any species other than nine 'nationally reserved animals', although they may not be captured from the wild or traded. This possession loophole renders the law almost meaningless. There are no proposals to do away with this loophole and the Wildlife Division is proposing to allow many wildlife species to be kept in captivity and bred for



White-eared pheasant from Rare Birds of China, an exhibition at the Tryon Gallery, London.

sale by private citizens. The Bangkok Bird Club is calling for a complete overhaul of the wildlife legislation by a forum on which both government bodies and non-governmental organizations are represented. *Source: Bangkok Bird Club Bulletin*, March 1991, 11–12.

Dam threat on Mekong

With the prospect of peace in the troubled region of the Mekong River comes also the prospect of development. Four potential sites for a large dam are being studied in Laos and along the stretch of river that separates Laos and Thailand. Demand for energy in Thailand is growing fast and Laos could earn badly needed revenue by selling power to its neighbours, says Chuck Lankester, head of the Interim Mekong Committee, which was set up in 1957 to co-ordinate development of the lower Mekong River basin with Vietnam, Thailand, Laos and Cambodia as members. Environmentalists and residents who have seen the destruction wrought by the construction of large dams in

Thailand are not convinced. They point to deforestation, slaughter of wildlife and serious disruption of village life. *Source: Los Angeles Times*, 24 February 1991.

NORTH AMERICA

Aftermath of Exxon Valdez

Nearly 2 years after the grounded tanker *Exxon Valdez* spilled 11 million gallons of crude oil into Alaska's Prince William Sound, studies have found evidence of long-term damage to marine life. Some colonies of murrens *Uria* spp. have suffered total breeding failure as a consequence of the spill, resulting in the loss of several hundred thousand chicks. Federal scientists estimate that some seabird colonies may require up to 70 years to recover. In March Exxon Corporation agreed to pay a \$100 million fine for violating federal environment law and will also pay \$900 million over the next 10 years to settle civil litigation being prepared by the State of Alaska and the Federal

Government.

Sources: The Washington Post, 21 February 1991; *The New York Times*, 17 March 1991.

Hot-water treatment damaging

Cleaning beaches contaminated by the *Exxon Valdez* oil spill in Alaska with pressurized hot water may have done more harm than good according to new studies. The hot water sterilized beaches and altered their structure while the oily runoff collected in tidal pools where it damaged sensitive marine life. Flora and fauna on oiled beaches that received no special treatment now resemble beaches that escaped the oil, whereas beaches treated with hot water will not recover for several years. One treatment, adding fertilizer to encourage the bacteria that degrade oil, may have accelerated recovery fivefold.

Source: New Scientist, 20 April 1991, 14.

Otter market closed

Alaskan natives will no longer be allowed to kill sea otters *Enhydra lutris* to make and sell handicrafts and clothing under the native exemption section of the Marine Mammal Protection Act (MMPA). The ruling, by the US Fish and Wildlife Service, was made because articles made from otter skins were not commonly produced before 21 December 1972 when the MMPA came into effect. *Source: Traffic USA*, October 1990, 13.

Marbled murrelet court action

The Western Canada Wilderness Committee filed an action in the Federal Court of Canada last November request-

ing a federal assessment of the threat posed by logging to the marbled murrelet *Brachyramphus marmoratus*. This seabird nests only in old-growth coastal forests from California to Alaska. An estimated 45,000 murrelets live along British Columbia's coast but last April the species was designated as threatened because of the rapid removal of old-growth nesting habitat. The Wilderness Committee wants a review of existing and proposed logging in the upper Carmanah Valley and adjoining Walbran Valley on Vancouver Island. Although the world population of marbled murrelets is estimated at 160,000 birds, fewer than 20 nests have been found, only one of these in Canada, in the Walbran Valley. Forestry officials are proposing to set aside a small reserve at this site.
Source: Vancouver Sun, 6 & 17 November, 1990.

Depleted salmon run

The winter run of chinook salmon *Onchorhynchus tshawytscha* in the Sacramento River, California, was listed as threatened on 30 November 1990. The run declined from 84,414 fish in 1968 to 550 in 1989 and the preliminary estimate for 1990 was 441. Factors responsible for the fall are the Red Bluff Diversion Dam, other human activities that have modified and eliminated spawning and rearing habitat, and drought.
Source: Endangered Species Technical Bulletin, XV (12), 7–8.

New sites protected

Recent purchases of conservation sites by The Nature Conservancy in the US include: 405 ha of peat fen at High Creek, Colorado; 1906 ha at

Cheyenne Bottoms in Kansas, which is at the heart of North America's Central Flyway and whose pools and mudflats attract millions of migratory birds; 233 ha along the Platte River, extending the feeding area for an estimated 7–9 million ducks and geese; 4304 ha for the Roanoke River National Wildlife Refuge in North Carolina; 608 ha towards the creation of the Black Mesa Nature Preserve in Oklahoma; and 729 ha of wetland at Mortensen Lake, where the Wyoming toad was rediscovered in 1987.
Source: Nature Conservancy, March–April 1991, 29–31.

California plants in lawsuit

Environmentalists sued the US Fish and Wildlife Service in January in an effort to have 159 rare California plants added to the US list of threatened and endangered species. The California Native Plant Society said that the Service had acknowledged that the plants met their criteria for protected status as long as 14 years ago, but lacked the resources to proceed quickly enough to save them.
Source: Los Angeles Times, 14 January 1991.

Protection for pinkroot

The gentian pinkroot *Spigelia gertianoides* is a perennial herb with a historical range in north-west Florida. Today only three small populations are known, the result of conversion of forests to farmland and pulpwood plantations, and suppression of natural fires. Logging and replanting could affect the largest population (30 plants), although the landowner has been attempting to minimize site disturbance, and all the populations are vulnerable to

collection by botanists or people interested in medicinal plants. The pinkroot was listed as endangered on 26 November 1990.

Source: Endangered Species Technical Bulletin, XV (12), 7.

Longliners wound endangered seals

Eight Hawaiian monk seals *Monachus schauinslandi* were found injured in the French Frigate Shoals area early in 1991, all apparently wounded in conflicts with the longline fishing industry. The problem first arose in 1990 when longliners began targeting the swordfish that migrate close to the north-western Hawaiian Islands in winter. To help protect the monk seal the Western Pacific Regional Fishery Management Council wants top federal officials to close waters to longliners within 32 km of the Shoals in the winter. Only about 1200 Hawaiian monk seals remain.
Source: The Honolulu Advertiser, 1 February 1991.

CENTRAL AMERICA

Mexican forest initiative

In one of the largest private debt-for-nature exchanges yet negotiated, Mexico has accepted an agreement that would reduce its foreign debt in return for specific commitments to help preserve the country's tropical rain forests. The agreement was negotiated by US-based Conservation International, which will buy \$4 million of Mexico's debt at a discount from its international creditors and then forgive the full amount in return for the Mexican Government spending \$2.6 million's worth of Mexican pesos on environmental pro-

jects. The primary focus of the conservation efforts will be the Lacandona rain forest, which is home to some 3000 species of plants, 306 species of birds, 84 species of reptiles and 700 species of butterflies.

Source: *The New York Times*, 26 February 1991.

Hawk study questions minimum viable population hypothesis

The red-tailed hawk *Buteo jamaicensis socorroensis* of Socorro, the largest of the four Revillagigedo Islands in the Mexican tropical Pacific, appears to have had a stable population of 15–20 pairs at least from 1953 to 1990 and possibly for longer. This calls into question the widely accepted concept of a minimum population size of 50 reproducing pairs required for short-term survival and maintenance of genetic variability; it certainly seems to invalidate the long-term survival threshold number of 500 breeding pairs. In 123 years since the discovery of the island population some 41 hawk generations have successfully maintained it. The bird's large size, its longevity and low predation rate may have provided buffers against extinction; inbreeding must occur but has had no fitness-reducing effects so far. This small viable population deserves serious attention from genetic, demographic, behavioural and ecological viewpoints.

Source: *Conservation Biology*, 4 (4), 441–443.

Belize volunteers protect turtles

Northern Ambergris Cay is the largest nesting site for sea turtles in Belize, but in 1988 poachers disturbed a large percentage of nests despite the fact

that taking turtle eggs is illegal. In 1989 and 1990 the Belize Audubon Society organized volunteers to patrol the beaches between May and August. The effort has almost eliminated poaching and volunteers have also released many hatchlings trapped in nests by roots and grass.

Source: Belize Audubon Society, 20 February 1991.

Jamaican iguana rediscovered

The Jamaican iguana *Cyclura collei* was rediscovered in June 1990 by a hunter in the Hellshire Hills on Jamaica's south coast. Subsequent surveys discovered evidence that the species still survives there—but only just. The hills are under extreme pressure: charcoal burners have intruded deep into the forests and there are plans for roads and houses in the heartland of the iguana's range. The last iguana previously recorded was one killed by a hunter's dog in 1969. During World War II, when the Jamaican iguana was believed to survive only on Goat Island and the US planned to build a naval base there, 22 iguanas were captured in an effort to save the species, but all died without offspring and the remaining population became extinct. Now a breeding and conservation programme is being developed.

Source: *On The Edge*, December 1990, 1.

SOUTH AMERICA

Cocha antshrike refound

The Cocha antshrike *Thamnophilus praecox* has been rediscovered in north-eastern Ecuador where it was described in 1937 from the only

other individual recorded. A team from the Academy of Natural Sciences of Philadelphia found three pairs in 1990 on the shores of Imuya Cocha in the Rio Lagarto drainage. Its habitat, tangled thickets bordering the semipermanently flooded blackwater *varzea* forest, appears fairly secure; it has limited agricultural potential and all the known range of the species is about to be proclaimed as the Zancudo Multiple-Use Reserve. This initiative by Fundación FECODES and Metropolitan Touring (Ecuador's leading tourism agency), will encompass 800 sq km of humid lowland tropical habitats.

Source: *World Birdwatch*, March 1991, 4.

Corridor gift

A 673-ha forest corridor between two sections of the Una Biological Reserve, south-eastern Bahia, Brazil, has been purchased by Fundacao Biodiversitas and given to the Brazilian governmental conservation agency (IBAMA). Money for the purchase was donated by WWF-US and the Jersey Wildlife Preservation Trust. The area is part of the Atlantic Forest, one of the highest priority areas in the world for tropical forest conservation. Source: Jersey Wildlife Preservation Trust, 13 March 1991.

Tamarin ownership transferred

Ownership of approximately 500 golden lion tamarins *Leontopithecus rosalia* held in zoos outside Brazil was transferred to the government of Brazil on 25 February. The transfer was arranged by the Golden Lion Tamarin Management Committee,

which was established in 1981 by scientists at zoos and primate breeding centres in an effort to prevent the disappearance of the monkey. Captive-breeding and conservation efforts in Brazil have resulted in a world population of nearly 1000 animals and, although only 2 per cent of the tamarin's original habitat remains, many have been reintroduced into protected areas. The new arrangements will not result in any immediate changes in the management of the species. *Source: Golden Lion Tamarin Conservation Program and International Cooperative Research and Management Committee, 25 February 1991.*

Reduced felling in Amazonia

The number of trees felled in the Amazon region in 1990 was 27 per cent less than in 1989, according to Brazil's Space Research Institute (INPE). Satellite pictures showed 13,818 sq km cleared, bringing total deforestation in the last 40 years to 410,421 sq km, 8.4 per cent of the total area. Professor Jose Goldenberg, Secretary for Science and Technology, said the reduction was due to the government's increased control and the cancellation of tax incentives for cattle ranchers. Deputy Fabio Feldman, president of the Congressional Committee on the Environment, was more cautious, saying that much of the reduction could have been caused by unusually heavy rains and the economic recession. *Source: The Guardian, 22 March 1991.*

Argentinian forest saved

The purchase of 4050 ha of rain forest in Misiones Province,

north-east Argentina, is under way by an environmental charity, The Earth. It was on the verge of being sold to a logging company when the son of the owner alerted Fundacion Vida Silvestre Argentina (FVSA), the leading conservation body in the country, to its fate. When purchase is complete the reserve will be managed by the newly formed Mission Rainforest Foundation composed of experts from FVSA, International Council for Bird Preservation and The Earth. The forest supports at least three threatened species of birds: solitary tinnamou *Tinamous solitarius*, black-fronted piping guan *Pipile jacutinga* and azure jay *Cyanocorax caeruleus*. *Source: World Birdwatch, March 1991, 5.*

Debt-for-nature swap in Argentina

In the first debt-for-nature swap to be negotiated in Argentina, the US-based Nature Conservancy bought more than \$0.5 million of Argentine debt. The debt will be converted into local currency to fund conservation efforts in the Patagonian Andes. *Source: Nature Conservancy, March/April 1991, 31.*

AUSTRALASIA/ ANTARCTICA

Search for gold bad for bats

Following the destruction of roosting caves of the ghost bat *Macroderma gigas* at Mount Etna, Queensland (*Oryx, 24, 46*), Australia's known population of this endangered species is 4000–6000, 1500 of which roost in the Kohinoor gold mine at Pine Creek, Northern Territory. The mine, which

dates from the 1800s, is also a breeding site. Over the past 30 years the Pine Creek area has again been mined and local ecologists believe that Kohinoor is a refuge for bats expelled from other roosts as a result of mining activity. The Pine Creek Goldfields Co. plans an extensive exploration programme but has agreed to postpone it until the bats' breeding season is over and has also agreed to fund research and monitor the likely impacts of the exploration. Conservationists say any mining near Kohinoor poses an unacceptable risk and are not confident that the state government will make the area a reserve, free from further exploration and mining, should gold be found. *Source: Conservation News, December 1990, 6.*

Office building on last moth sites

The silver-topped wallaby grass moth *Synemon plana* remains in viable populations in only two sites, both of which are earmarked for building. One is on Capitol Hill, adjacent to Parliament House in Canberra, Australia. The wallaby grass (*Danthonia carthoides* and *D. auriculata*) association on which the moth depends has largely disappeared due to pasture improvement and urban development. *Source: Conservation News, November 1990, 4.*

Possum forest to be felled

Leadbeater's possum *Gymnobelideus leadbeateri* is in trouble again (see *Oryx, 24, 75*). This tiny mammal, which is the faunal emblem of Victoria State, Australia, is confined to a 100-sq-km forest of old-growth alpine ash, which is marked for

clearfelling. Loggers argue that they have put aside areas for conservation, such as stream-sides, steep and rocky ground, but ecologists say that possums avoid such sites for the same reasons as loggers—they are dangerous and there is little of the preferred alpine ash. A new study found that the felling would result in a possum population decline of 90 per cent and a severe shortage of nesting hollows for at least 100 years.

Source: *Conservation News*, November 1990, 4.

Beech ban about turn

At the end of 1990 New Zealand's newly elected National government announced a further 12 years beech forest clearfelling in Southland, although its election manifesto had promised an end to the clearfelling of native forest. Just 6 months earlier the Labour government had ended the Japanese forest industry's 19-year onslaught on New Zealand's rain forests by banning the export of native woodchips. The new decision will result in the clearfelling of up to 3000 ha of Southland beech forest.

Source: *Forest & Bird Conservation News*, January 1991.

Fur market collapse worsens possum problem

With the slump in the international fur market numbers of the introduced brush-tailed possum *Trichosurus vulpecula* are becoming of even more serious concern in New Zealand. The Department of Conservation is attempting control with poison to complement the efforts of contract possum hunters. About 70 million possums are estimated to live

in New Zealand. They spread bovine tuberculosis and giardia, degrade vast areas of forest and deplete native bird populations. Possum furs may still be sold in New Zealand and the Dunedin-based Taimex Trading Company is doing its best to keep the possum fur trade alive.

Source: *Forest & Bird Conservation News*, January 1991.

Catfish banned

In September 1990 2200 channel catfish *Ictalurus punctatus* were destroyed at a Ministry of Agriculture and Fisheries quarantine centre in New Zealand. It was the culmination of a long campaign by anglers and conservationists concerned about the ecological effects of importing these fish for an aquaculture venture. The Ministry was heavily criticized for procedural impropriety and irregularities surrounding the importation and eventually the Prime Minister demanded that the matter be examined. An independent review concluded that the catfish posed an unacceptable risk to the environment. This is the first time that imported species have been destroyed on ecological grounds. Meanwhile questions have been raised about the potential impacts on the environment of marron crayfish and chinchilla, both imported into New Zealand in recent years.

Source: *Forest & Bird*, February 1991, 37–40.

Weka breeding plan

There is a new initiative for reintroducing the North Island weka *Gallirallus australis greyi* to selected parts of North Island, New Zealand, where it has suffered precipitous declines this

century. It occurs as a natural population only in Poverty Bay, and as introduced populations at Rawhiti, Kawaii Island, Mokoia Island and Arid Island. This year a captive-breeding programme is being started to produce a pool of young adults for release. This will avoid taking excessive numbers of wild birds from an already stressed population and young non-territorial birds will be more suitable to liberate in new habitat. Surveys will determine population levels before capturing weka pairs for distribution to approved breeders.

Source: *Forest & Bird*, February 1991, 14–15.

Yellow-eyed penguin plummets

Despite tremendous efforts by conservationists numbers of yellow-eyed penguins *Megadyptes antipodes* on mainland New Zealand continue to plummet. The latest census shows that only 167 breeding pairs are left on South Island—a 50 per cent drop from the year before and the lowest ever recorded. The Yellow-Eyed Penguin Trust, boosted by an annual grant of \$65,000 from a dairy company (Mainland Products), is carrying out fencing and replanting work, trapping predators and running an education programme to alert people to the hazards of dogs attacking penguins and the dumping of unwanted cats.

Source: *Forest & Bird*, February 1991, 4.

Campbell Island sheep-free

The New Zealand Department of Conservation has destroyed the last 900 wild sheep on subantarctic Campbell Island. Sheep were farmed there from 1895 to the 1930s, when the abandoned animals formed a

feral population. Over the years they have severely damaged the island's vegetation and caused population declines in several bird species.

Source: *Forest & Bird Conservation News*, January, 1991.

Mining ban in Antarctica

A draft Environmental Protocol to the Antarctic Treaty, which includes a 50-year moratorium on mining and prospecting unless the 26 Parties agree unanimously to review it, was agreed at a meeting in Madrid in April. The protocol also carries four annexes, which set out tough laws to deal with marine pollution, conservation of wildlife, waste disposal and environmental impact assessments. It is expected that all 26 voting members of the Antarctic Treaty will sign the protocol in late June.

Source: *New Scientist*, 18 May 1991, 17.

OCEANIA

No hope for crocodiles in Vanuatu

A survey has found that, although good habitat is extensive, only a few estuarine crocodiles *Crocodylus porosus* remain on Vanua Lava, the only island in Vanuatu that once had a breeding population, and no young crocodiles have been seen for several years. The population was decimated by a cyclone in 1972 and some survivors were subsequently shot. There is a belief in Vanua Lava that the crocodiles were introduced accidentally in the mid-nineteenth century, but there is no independent evidence for this. Because the crocodiles eat domestic animals and have attacked humans, they are not

popular with the islanders. This together with the fact that conservation measures would be difficult and expensive, led the researchers to recommend that nothing should be done to attempt to save the crocodile from probable extinction. Vanuatu is the easternmost limit of the range of this endangered species.

Source: *Environment Newsletter*, South Pacific Regional Environment Programme, April 1989–September 1990, 7–8.

Solomons' environmental policy

The Western Province Assembly of the Solomon Islands has passed an environmental policy that will have far-reaching effects on future development by requiring development proposals that utilize natural resources to undertake environmental impact assessments. The policy gives specific guidance in the management of coral reefs, mangroves, marine species, flora and fauna, water and minerals, as well as guidelines to avoid and minimize pollution.

Source: *Environment Newsletter*, South Pacific Regional Environment Programme, April 1989–September 1990, 10.

PUBLICATIONS

Micropropagation newsletter

The 1st and 2nd issues of *Botanic Gardens Micropropagation Newsletter* were published in June and December, 1990, respectively. The publication came into being because of the absence of a suitable journal for papers relating to micropropagation of rare and endangered plants.

The editor is Dr Michael F. Fay, Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AB, UK.

Conservation book awards

Jonathan Kingdon's *Island Africa* (Collins, 1990), which was reviewed in *Oryx* (24, 170–171) was awarded the Sir Peter Kent Conservation Book Prize (£2500) on 12 February at The Royal Society, London. Hilary Thomas and Shirley Thompson won the £1000 Highly Commended prize for *The Conservation Project Book*. Both prizes, which are sponsored by BP Exploration and organized by the Book Trust, were presented by David Bellamy.

MEETINGS

Endangered species conference

An Endangered Species Conference is to be held in May 1991 at the Jersey Wildlife Preservation Trust. Papers are invited. For information contact JWPT, Les Augres Manor, Trinity, Jersey. Telephone: 0534 61949, Fax: 0535 65161.

OBITUARY

Helmut Sick

Helmut Sick, one of the world's leading ornithologists, died in Brazil, his adopted country, on 5 March 1991. With the help of native Indian tribes, Sick recorded 1580 bird species in Brazil, discovering 12 new species. Appointed as the first Director of the Ornithology Department at the National Museum in Rio, he published a definitive book on the birds of Brazil as well as many monographs.