International

World Bank raises environmental profile

The World Bank's new director, Barber Conable, has promised to increase staff involved in environmental issues from 17 to 60 and to give higher priority to environmental protection when reviewing schemes for roads, dams, power plants and agriculture. The Bank will also make an assessment of the most severely threatened environments in developing countries, starting with the advance of deserts in Africa, the destruction of tropical forests and the pollution of the Mediterranean, The Bank has been criticized for many years for supporting environmentally disastrous projects.

New Scientist, 14 May 1987.

95 for World Heritage

Laos, Finland and Burkinsa Faso have joined the World Heritage Convention bringing the total number of Parties to 95.

CNPPA Members Newsletter, 39.

Need for more Ramsar sites

Conservationists appealed to delegates from 47 countries at the Ramsar Convention Meeting in Regina in Canada in June to take more effective action to protect wetlands. Delegates were urged to abandon the policy adopted by some countries-Finland, Japan, Norway, the Netherlands, UK and USA-of listing only sites that were already protected. The conservation groups also pointed to: the serious degredation of Greece's Mikra Prespa National Park by EEC-funded irrigation works, agricultural development and construction of a fish farm; the destruction of Spain's Las Tablas de Daimiel National Park by water extraction for farming; and industrial pollution of UK's largest Ramsar site, Lough Neagh in Northern Ireland. WWF-International Press Release. 3 June 1987.

Whale Conservation Society

The Whale Conservation Society (WCS) was launched in June 1987. The only UK-based organization devoted entirely to the conservation of all species of whales, dolphins and porpoises, its 246

main objectives are to educate people about the need for whale and dolphin conservation, and to keep them up to date with cetacean conservation issues, primarily through its newspaper, *International Whale Bulletin*. The Society's President, Sir Peter Scott, is confident that the WCS will 'play a most useful role in alerting people to the continuing plight of whales and dolphins'. Further information is available from Sean Whyte, WCS, 20 West Lea Road, Weston, Bath BA1 3RL, UK.

Dung beetles in peril

The increasing routine use of an antiparasitic drug, ivermectin, in cattle, horses and sheep is likely to pose a serious threat to the insects dependent on the dung of those animals. In recent experiments, dung from calves treated with ivermectin contained 17 adult dung beetles, 35 dipterous larvae and 44 earthworms after 100 days compared with controls, which had 780 dung beetles, 267 dipterous larvae and 46 earthworms. Although these druginduced effects may vary with the manner by which the drug is administered, as well as with geographical location and climate, the ecological side-effects need extensive study. They have particular implications in Australia where, because the endemic species of dung beetle could not deal with cattle dung, introduced African dung beetles have been established to solve the problem of fouled pasture. It would be disastrous if ivermectin removed them. Wall, R. and Strong, L. 1987. Environmental consequences of treating cattle with the antiparasitic drug ivermectin. Nature, 327, 418-421.

Lion dung essence to protect trees

Lion dung has been found to keep deer away from tree plantations in the UK, USA and Israel. In the USA, deer were scared away not only by the dung of the mountain lion, one of their natural predators, but also by the dung of African lions. Aware of the ecological and commercial potential, scientists at the Zoological Society of London's Institute of Zoology have been collaborating with scientists in a multinational company to investigate the chemical components of lion dung that deter deer. If a synthetic version of the

lion dung odour could be produced it would enhance the survival of all kinds of trees in forestry plantations round the world and would do away with the expense of erecting deer fences and the injuries deer receive when attempting to jump them.

Zoo News (London Zoo and Whipsnade Park), Summer 1987.

Military macaws seized

On 27 January 30 military macaws Ara militaris were seized in Bombay, in transit from Guatemala to Singapore. Eleven birds were dead, five flew away and the rest are being cared for at Jijamata Zoological Park. There were no export documents. On 23 March a further 48 military macaws were seized in the Netherlands en route to Singapore. They were accompanied by incorrect documentation from the country of origin, Mexico. If it is not possible to return them to Mexico they will be placed in captive-breeding centres. These two shipments may reflect attempts by traders to stockpile as many specimens as possible; there would be a total ban on trade if Argentina's proposal to upgrade the military macaw to Appendix I of CITES is accepted at the CITES meeting in Ottawa, Canada in

Traffic Bulletin, 9, 1.

Caiman confiscation

In June 2000 baby spectacled caimans Caiman crocodylus from Venezuela, labelled as turtles from Curacao, were intercepted in the Netherlands on their way to Taiwan. Venezuela requested the return of the animals and they were flown home courtesy of the airline KLM to be released into the wild. Traffic Bulletin, 9, 1.

USSR/US initiative to save forests

Scientists from the USSR and the US have announced a joint initiative to save rain forests, beginning with Madagascar. The Vice-President of the International Society for the Preservation of Tropical Rainforest announced in Los Angeles an agreement made with Soviet scientists in Moscow to call on the US and the USSR to halt forest destruction in Madagascar by demonstrating ways the nation could meet its food and fuel needs without destroying its forest

resources. The joint proposal has the backing of many organizations in both countries, but now needs government support. In the US the Environment Protection Agency and the State Department back the plan and the World Bank has promised funding for a pilot project.

New Scientist, 28 May 1987.

Enormous accidental kill of dolphin

Between 125,000 and 129,000 dolphins died in the international purse fishery for yellowfin tuna in the eastern tropical Pacific in 1986 according to the Inter-American Tropical Tuna Commission (IATTC). The estimates for 1985 and 1984 were 55,000 and 32,000-39,000, respectively. The kill included 15,000-16,000 spinner dolphins Stenella longirostris, endemic to the far eastern Pacific and classified as 'depleted' by the US; the population is believed to have declined by 80 per cent since purse seining began in the area in the 1960s and in 1985 was estimated at 200,000-600,000. The large kill, 25,000-26,000, of common dolphins Delphinus delphis is also of concern. There is little hope for a solution of the problem: there is no internationally based mangement of the dolphins; the IATTC does not set dolphin quotas (although it has made some effort to provide training in dolphin-saving techniques); although the US sets dolphin quotas for its fleet the other nations involved-Costa Rica, Ecuador, El Salvador, Mexico, Panama, Spain, Vanuatu and Venezuela-do not regulate the use of dolphin in the fishery.

Newsletter of the Cetacean Specialist Group, 3.

Europe and North Africa

Quail and snipe extinct in Finland

The recent Finnish Red Data Book (1986) classifies two bird species as extinct in Finland—the quail *Cotumix cotumix* and the great snipe *Gallinago media*. Although excessive hunting pressure is probably to blame in the case of the quail, the great snipe was probably lost because its traditional breed-*Briefly*

ing meadows were turned into arable fields. In the main breeding area the area of meadows was reduced to one-third between 1880 and 1910. Suomen Luonto, **46**, 3.

Swedish reserve threatened by road

A tourist highway planned to go through Vindelfjällen Nature Reserve in the county of Västerbotten in Sweden is causing uproar. The reserve is sanctuary for several endangered species—wolverine, arctic fox, gyr falcon and golden eagle.

Sveriges Natur, April 1987.

Two new national nature reserves

Ludham Marshes, Norfolk (180 acres, 73 ha) and Gordano Valley, Avon (160 acres, 65 ha) are the two most recent additions to the UK's national nature reserves. Both are wetlands.

NCC Press Releases, 1 June and 2 July 1987.

Wart-biter study

The life-history and habitat needs of the wart-biter Decticus verrucivorus, Britain's most endangered bush cricket, is the subject of a three-year investigation funded by the Nature Conservancy Council. This large insect remains only at a handful of sites in Dorset, Kent, Sussex and Wiltshire, with populations ranging from 20 to 200 adults.

NCC Press Release, 17 July 1987.

Bird sanctuary threatened by pollution

The Galgenschoor, an intertidal area near the mouth of the river Scheldt, north of Antwerp, is seriously threatened by industrial pollution and by plans for building a container terminal. A bird sanctuary there of 45 ha (111 acres), which is managed by the 'Reserves naturelles et ornithologiques de Belgique', will be partly destroyed if the plans go ahead.

naturopa, newsletter-nature, 87-4.

Beaver reintroduction

Czechoslovakia's beavers Castor fiber were wiped out by hunters in the 1850s and now the Government is preparing to import an unspecified number from Norway to help conserve the country's wetlands. The dams that beavers build create an automatic irrigation system, which mitigates the effects of drought or flood and helps maintain a good wildlife habitat. The Norwegian beaver population, which is protected by law, was the last to survive in Europe and since the 1920s beavers have been exported to Sweden and Finland. In Sweden beavers are now regarded as pests and last December the Swedish Government urged people to shoot them for Christmas lunch.

New Scientist, 28 May 1987.

Nuthatch needs help

Recent studies have shown that the endemic Corsican nuthatch Sitta white-headi declined from 3000 pairs at the end of the 1950s to an estimated 2000



A wart-biter, endangered in Britain and subject of a three-year study on its habitat needs and life-history (Valerie Brown).

pairs by 1984. The major cause appears to be loss of suitable breeding holes in Pinus (nigra) laricio, a tree upon which it is entirely dependent. Management of these pine forests, which stretch along the mountain ranges of inland Corsica, should be altered to help the bird: the high altitude forest, where most of the old trees are, should be left unexploited; the middle altitude forest should be exploited for timber but dead trees should be left standing unless they are shorter than 3 m; and in the lower third of the forest, where suitable trees are very scarce, no dead trees should be removed at all.

Brichetti, B. and Capi, C.Di. 1987. Conservation of the Corsican nuthatch Sitta whiteheadi Sharpe, and proposals for habitat management. Biol. Cons. 39, 13–21.

Turkish bird conservation takes off

Bird conservation is the main focus of activity in 1987 for Turkey's most active conservation organization Dogal Hayati Koruma Dernegi (the Society for the Protection of Wildlife). It is producing a recovery action plan for the bald or hermit ibis Geronticus eremita at its last stronghold in Birecik, establishing an ICBP national section and working to produce an inventory of important bird areas. It hopes to produce an illustrated directory of sites and to use it to encourage the Turkish Government to accede to the Ramsar Convention. In 1986 the Society organized the first conference on bird and wetland conservation in Turkey and published 40,000 copies of the first popular bird book in Turkish. World Birdwatch, 9, 2.

Hotel plan for Turkish turtle beach

Controversy is growing over the Turkish Government's decision to go ahead with a plan to build a 600-bed hotel on Dalyan beach, one of the Mediterranean's last remaining turtle nesting beaches and the second largest for loggerheads Caretta caretta in the region. After appeals from international conservation organizations the Turkish Prime Minister has given his assurance that he would personally save the Dalyan turtles. Two species nest on the beach, 248



A hermit ibis at Jersey Wildlife Preservation Trust, which has been running a captive-breeding programme for the species for many years (*Phillip Coffey*).

green Chelonia mydas and loggerhead, and conservationists want the Dalyan Delta to be declared a national park. The Guardian. 5 June 1987.

Military training may mean end for vultures

One of the best wildlife habitats in Spain in threatened by plans to establish a training area for the Spanish airforce. Cabañeros in the Montes de Toledo in central Spain is one of the last remaining wild Mediterranean forests. It supports the second largest colony of black vultures Aegypius monachus in Europe and is home to many other rare and endangered birds-Spanish imperial eagle Aquila heliaca adalberti and black stork Ciconia nigra among them. The Spanish lynx Felis pardina also occurs there; fewer than 400 are left in the world. Use of the area for military training will adversely affect a wide variety of species and it may be necessary to kill the vultures as they would be a threat to aircraft. The establishment of a training area would violate the Bern Convention because many of the species breeding there are included as strictly protected and it would also be against the European Commission Bird Directive and Spanish Protected Species Law. WWF News, 47.

Rescue plan for endangered ibis

The Government of Morocco has recently signed an accord with the Wildlife Preservation Trust Jersey (JWPT) to assist the conservation of the hermit ibis Geronticus eremita Morocco, with fewer than 400 individuals is the stronghold of this species, which was once widely distributed around the Mediterranean, although tiny populations occur in Turkey and Algeria. The JWPT has had a captivebreeding programme for the ibis for many years and there is also a captive colony in the Parc Zoologique at Rabat in Morocco. The agreement provides for the optimum management of the captive populations by establishing an

international breeding consortium whose member institutions will be able to exhibit the ibis as well as contribute towards conservation by providing birds for reintroduction into the wild if possible and when necessary.

Jersey Wildlife Preservation Trust.

Scimitar-horned oryx thriving

The 10 young scimitar-horned oryx Oryx dammah from Marwell and Edinburgh zoos in the UK, which were released into Bou Hedma National Park in Tunisia in December 1985, are thriving and three calves are expected this year. The vegetation in the park is making a dramatic recovery through the efforts of the Tunisian Department of Forests, which has excluded domestic stock and has planted thousands of young trees during the last 10 years. Eight addax Addax nasomaculatus from West Germany and three ostriches Struthio camelus from within Tunisia have also been introduced; at present they are still enclosed in a 10-ha (25acre) enclosure while a perimeter fence round the first zone (1500 ha, 3700 acres) of the park is being built.

Zoo News (London Zoo and Whipsnade Park), Summer 1987.

Gazelle decline in Egypt

Hunting and habitat destruction have caused major reductions in the ranges of Egypt's two gazelle species in the last few years. The slender-horned Gazella leptoceros is almost extinct and will not survive without immediate and intensive conservation efforts, Wadi El Raiyan in the Western Desert where a small population remains, would be relatively easy to protect as a reserve. The dorcas gazelle G. dorcas has also disappeared from vast parts of its former range and is being hunted relentlessly even in the remotest areas. Strict enforcement of existing laws prohibiting gazelle hunting in Egypt is imperative and reserves should be set up before it is too late.

Salen, M.A. 1987. The decline of gazelles in Egypt. Biol. Cons. **39**, 83–95.

Dorstenia gypsophila, a Somalian species threatened by livestock and collectors (drawing by Eleanor Catherine, by kind permission of Royal Botanic Garden, Kew).

Garden, Kew Briefly

Africa

Ivory Coast plans to ban timber exports

The Government of the Ivory Coast has introduced measures to save the country's forests from extinction. Only one million of the 15 million ha (2.5 of the 37 million acres) of forest that existed in 1965 are left. The Government has declared that it would ban timber exports, the country's third biggest foreign exchange earner, if and when the country's budget can bear the loss. It has persuaded donors, including the World Bank and the Commonwealth Development Corporation, to finance the creation of agricultural belts around the remaining forests. They will be owned by farmers who will also act as forest police.

New Scientist, 11 June 1987.

Nigerian wetland conserved

The Government of Nigeria, the ICBP and the RSPB have signed an agree-

ment to conserve one of Nigeria's most important wetland areas, the Hadejia-Nguru wetlands in the Lake Chad Basin. A joint 2–3-year project with the Nigerian Conservation Foundation will explore land-use options for the area and identify those beneficial to both wildlife and human communities. It will include a major public awareness and conservation education campaign. World Birdwatch. 9, 2.

A plant in peril

In rock crevices in the gypsum hills south of the small town of Las Anod in northern Somalia grows a succulent plant *Dorstenia gypsophila*. It was discovered there in 1970 and has been found nowhere else. A live plant was collected in 1981 and is now in cultivation at the Royal Botanic Gardens, Kew, in the UK. It is a local endemic, like many other plants in this area of great botanical interest, and camels, goats and sheep are making an increasing impact. *Dorstenia* and the other succulents of the area are also in danger from collectors and so, although it would be



useful to take them into cultivation, further collections should be made with due consideration for the survival of the species in the wild.

The Kew Magazine, 4, 2.

Kenya bans hunting of hunting dogs

The Directorate of Wildlife in Kenya has imposed an indefinite moratorium on the hunting of African hunting dogs Lycaon pictus, effective from 1 July. The decision was in response to reports from field staff, which showed declines in populations of the species, and also to reports from international organizations that emphasized its plight.

John Fanshawe, Serengeti Hunting Dog Project.

Zambezi diversion scheme

South Africa is reported to be contemplating a plan to divert the Zambezi River in a canal more than 800 miles (1340 km) across Botswana. The scheme, which has been drawn up by Professor Borchert at the University of Hamburg in West Germany, would pump water from the Zambezi as it passes through the Caprivi Strip in Namibia and take it by canal through Bostwana's Chobe National Park and Moremi Wildlife Reserve, south through the eastern Kalahari to the industrial areas of the Transvaal. If the project goes ahead it would have devastating effects on the Zambezi ecosystem and on Botswana's wildlife. It could also drain the Okavango delta, one of the world's greatest freshwater wetlands. The Bostswana authorities say they have taken no decision to negotiate with South Africa in building the canal, but they believe it is worth exploring in theory

Monitor, 18 May 1987.

Hartebeest settle in

A second group of Lichtenstein's hartebeest Alcelaphus lichtensteinii was introduced into the Kruger National Park in South Africa from Malawi in November 1986. The three bulls and 12 cows swell the numbers of the introduced herd to 24. The initial two bulls and four cows, also from Malawi, released in 1985 have produced three calves. These animals were the first of the species to set foot in South Africa since the last of their kind were exter-250

minated there at the beginning of the century.

African Wildlife, 41, 2.

New large reserve in Botswana

Mashatu Game Reserve in Botswana is now the largest (100,000 acres, 40,500 ha) private wildlife sanctuary in southern Africa following an agreement signed by the Bostwana Development Corporation and Safmarine Rennies Holdings. A new luxury safari lodge is being built for 50 guests and an interpretative centre, museum and conference centre are planned. Quaqqa, 17.

Damaging airstrip abandoned

Plans to build an airstrip on Marion Island in the Prince Edward Islands group (see *Oryx*, **21**, 118) have been scrapped by the South African Government because of adverse effects on the fragile island environment.

The Argus (Cape Town), 12 May 1987.

Hatchling giants on Cousin again

For the first time in more than 50 years the giant tortoises *Geochelone gigantea* on Cousin Island in the Seychelles have produced young. Two hatchlings were found in late 1986 and are now in the care of the warden of this ICBP nature reserve.

World Birdwatch, 9, 2.

Asia (excluding Indo-Malaya)

Lebanon's first national park

Despite 12 years of military disruption, Lebanon has declared its first national park at Bentael, 38 km (24 miles) north of Beirut. The park is one of the country's few undisturbed oak-conifer woodlands.

CNPPA Members Newsletter, 39.

Egyptian tortoise needs refuge in Israel

Israel should set up a reserve for the Egyptian tortoise *Testudo kleinmanni* in the northern Negev desert, according to two Israeli scientists. The world distribution of the species covers a coastastrip from eastern Libya, through northern Egypt and Sinai to the northern Negev. In Egypt they have

been legally protected since 1983, but hundreds are sold in Cairo's pet shops. many are killed each year for research at one of Cairo's universities, and others are sold abroad, with official export permits from the Egyptian Nature Conservation Authority. The species's habitat in Israel is being destroyed by army vehicles, agriculture and overgrazing. Crows and dogs, which are not usually present there but which have established around new settlements and army camps, prey on the tortoises. The recommended reserve is between the Agur and Halutza sands near the border with Egypt, where there is a high density of the species. The area is restricted for civilian traffic, military movements are sparse, and the natural vegetation has recovered since the exclusion of Bedouin flocks. A reserve covering 40-50 sq km (15-20 sq miles) could sustain a population of 500-1000 tortoises and it would ensure the continued existence of many other northern Negev species. Mendelsshohn, H. and Geffen, E. 1987. The Egyptian tortoise in Israel. Israel— Land and Nature, 12, 153-157.

Cyanide leak kills fish

More than 50 tons of fish were killed in 25 miles (40 km) of the Meijiang river in southern Guangdong province in China when cyanide leaked from the Municipal Chemical Textile complex in Maoming City on 5 April. Fish in the river estuary were also poisoned and the health of local residents and animals was threatened.

New York Times, 10 May 1987.

Serious forest fire in China

In May 1987 a massive fire in the forests of Manchuria in China wiped out more than 3.7 million ha, killing hundreds of people and leaving thousands homeless. At one point Huzhong Nature Reserve, the third largest in China, looked threatened but three weeks of constant effort, 50,000 firefighters and clouds with rain-making seeding chemicals eventually brought the fire under control. The stands of larch north and west of the reserve took the brunt of the fire and although there were certainly wildlife losses it is unlikely that any species was exterminated. But the devastating loss of trees to China will lead to enormous pressure for at least some felling in the nature reserves. A

Manchurian tiger Panthera tigris altaica, of which fewer than 100 exist in the wild, needs 20 sq km of forest to survive. Even the present area of forest reserve may be insufficient to ensure the survival of a viable population.

The Guardian (London), 5 June 1987.

Przewalski's horse to be free in Mongolia

Preparations are under way to release some Przewalski's horses into a semi-wild reserve in the People's Republic of Mongolia in 1988 and eventually into a completely wild site by 1990–91. *Gazella*, 13.

Blue coral a national monument?

Friends of the Earth Japan is petitioning for the blue coral *Helipora corulea* colony at Shiraho (see *Oryx*, **21**, 119) to be designated a national monument as part of its campaign to protect it. It is still threatened with landfilling and the construction of an airport.

Friends of the Earth Japan, 8 May, 1987.

The rare blue coral at Shiraho reef, photographed by the Su-Moguri Diving Association, which has joined the battle to save the reef.

Indo-Malaya

Pakistan restores blackbuck

Nine male and two female blackbuck Antilope cervicapra have been released into Kalabagh Natural Park in Pakistan as part of WWF—Pakistan's continuing efforts to re-establish the species. The animals were donated by Denmark and Pakistan International Airlines provided free transport. This is the second release; some time ago a few blackbuck were imported from the US to Lal Suhanra National Park. Indiscriminate hunting in the past almost exterminated the species from Pakistan.

WWF-Pakistan Newsletter, 6, 1.

Conservation plan for Himalayan salamander

The largest known population of Himalayan salamander *Tylototriton verrucosus* is threatened because one of the two major pools they inhabit in Jorepokhri in Darjeeling, West Bengal, has been drained. Jorepokhri is the only place where it is found in reliable numbers. It has also been recorded from other places in Darjeeling district, from Sikkim, from Lohit district of Arunchal Pradesh and from Manipur, but its abundance and exact distribution are not known. Dr Lahiri, Director of the

Padmaja Naidu Hulamalayan Zoological Park, Darjeeling, has proposed a conservation plan for the salamander. *Hamadryad*, **12**, 1.

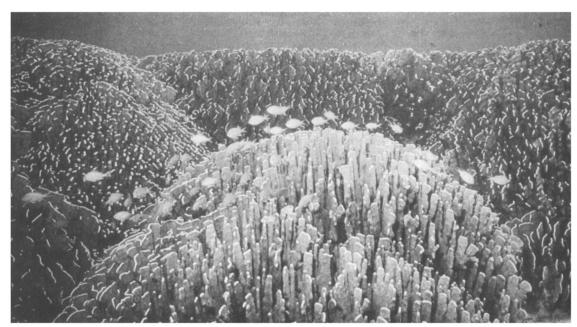
Frogs' legs export ban

The Indian Government, having failed to persuade the European Economic Community to stop importing frogs' legs, banned the commercial killing of frogs and the export of their legs on 5 March following conclusive evidence that frogs are important in the control of agricultural pests and mosquitoes. Bangladesh and Indonesia are now left as the two major exporters of frogs' legs to Europe and North America.

Hamadryad, **12**, 1; BBC Wildlife, May 1987; Traffic Bulletin, **9**, 1.

A problem with corpses

The rapid decline in freshwater turtles in the Ganges—through pollution, dams and irrigation projects, and growing demand for their meat—has created another pollution problem. The turtles used to eat the partly burnt human corpses that were swept downriver after being consigned to the Ganges at Varanasi, but now there are too few turtles left to cope with the remains, which are decomposing. In an attempt to solve the problem, the Indian



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Government is setting up turtle breeding farms to restock the river; it hopes to have released 25,000 scavenger turtles of five species by 1994. BBC Wildlife, July 1987.

Protecting livestock from snow leopards

As a result of a report to the Fifth International Snow Leopard Symposium in 1986 that snow leopards Panthera uncia were being killed after entering sheep and goat pens that had become dilapidated, the Wildlife Department of Jammu and Kashmir is providing sturdy pens for the livestock of the village concerned.

Snow Line, 12.

Bird confiscation in Thailand

Thai wildlife officials confiscated more than 1118 birds of protected species on a train bound for Malaysia. The birds included 998 hill mynahs *Gracula religiosa* and 120 white-crested laughing thrushes *Garrulax leucolophus*, which were probably destined for export to Singapore and Japan. *Traffic Bulletin*, 9, 1.

Turtle sanctuary in Malaysia

The Trengganu State Government of Malaysia is planning to gazette a 19-km (12-mile) stretch of beach in Rantau Abang, about 110 km (68 miles) from Kota Trengganu as a turtle sanctuary under the State Park Act this year Visitors will be barred, but facilities will be provided to enable the 50,000 tourists a year to watch the turtles lay their eggs.

Malayan Naturalist, 40, 3 and 4.

A long wait for a park

The Endau-Rompin National Park, proposed in 1945 and included under the Third Malaysia Plan, has not yet been gazetted despite the fact that a management plan was drawn up in 1980, which envisages a park of 870 sq km (348 sq miles) covering areas in Pahang and Johore in Peninsular Malaysia. Although the State Governments have agreed to the park in principle, in 252

December 1986 Johore announced that it would surrender only half the area required and logging is occurring in the core area of the Pahang section. The Malayan Nature Society, which ended a one-year expedition in Endau-Rompin with a scientific symposium in December 1986, is planning to press for the establishment of the park and is trying to persuade the authorities to stop any logging in the proposed area. The expedition's findings in this previously little-known area included 30 new or endemic species. The forests are possibly one of the last few refuges for the Peninsular's last breeding population of Sumatran rhinoceros Dicerorhinus sumatrensis.

Malayan Naturalist, 40, 3 and 4.

Society sanctuary with government support

On 20 June the Selangor State Government, Malaysia, gave the Malayan Nature Society US\$38,000 to turn 500 acres (200 ha) of degraded mangroves into the Kuala Selangor Nature Park. Although bunds built in earlier years have interfered with tidal influences it is still a nationally important wildlife area. The endangered Nordmann's greenshank Tringa guttifer has been seen there and lesser adjutant storks Leptoptilos javanicus are regular visitors. Educational materials, hides and other facilities are planned. This is the first such venture between any conservation body and the Malaysian Government. Malayan Nature Society, PO Box 10750, Kuala Lumpur, Malaysia.

Tribal people stop the loggers

Tribal people (mainly Penan) inhabiting forest in Sarawak near the border with Brunei have brought commercial logging almost to a standstill by setting up road blocks. The protest has upset Malaysia's Federal Government and exposed close links between logging firms and Sarawak's politicians. Independent (London), 2 July 1987.

North America

Reserve for marmots

The Vancouver Island marmot Marmota vancouverensis, an endemic endangered species, has a new reserve.

Donated by McMillan Bloedel, a company that still owns the surrounding land, the Haley Lake Reserve protects 15–20 marmots on 93 ha (230 acres) of subalpine meadow on a ridge 30 km (19 miles) south-west of Nanaimo. The marmot also uses land outside the reserve and the British Columbian Government is working towards a management plan with the company to ensure that activity in the surrounding area does not harm the marmot. The total population of the species is estimated at 300.

Nature Canada, Canadian Nature Federation Almanac, **16**, 3.

Famous cactus disappears and is found

Most Saguaro cacti Carnegiea gigantea grow as single trunks for the first 70 vears then branch like candelabras. One in 200,000, however, fails to branch normally and the apex of the plant becomes fan-shaped. The best known of these crested saguaros and the largest of all, at least 150 years old and 14 ft (4 m) tall, grows—or rather grew— in Arizona where it was well known to cactus enthusiasts as 'Old Grandad'. It was reported missing in January 1986 and was eventually tracked down to a nursery in Las Vegas where it was on sale for \$15,000. It bore Arizona tags attesting to its legality, but since these are issued to collectors who must limit their takes to specified areas, usually where land development is about to take place, and since 'Old Grandad' was so distinctive, investigations established that it had been stolen. Glen and Karen Clontz were sentenced to two years in jail and five years probation, respectively, under the Lacey Act, which makes it a federal crime to transport across state lines animal and plant specimens collected in violation of state law. The Saguaro has been replanted at the Phoenix Desert Botanical Gardens. Audubon, July 1987.

Record number of whoopers

At least 110 whooping cranes *Grus americana*, including 20 chicks, wintered at Aransas National Wildlife Refuge in Texas in 1986/87. This is the first time that more than 100 whoopers have been recorded there. Grus Americana, **26**, 2.

British Columbia fails to protect Lyell Island

Negotiations for the South Moresby National Park in the Queen Charlotte Islands have broken down. British Columbia wanted \$176–196 million to cover park development and compensation for logging companies against the Federal Government's offer of \$100 million. British Columbia has announced that it will proceed with plans for a much smaller provincial park, which will not include Lyell Island where the Haida Indians have been trying to stop logging (see Oryx, 20, 191).

Toronto Globe and Mail, 16 June 1987.

Bringing the nets ashore

A disposal scheme set up at Newport, Oregon, US, to receive old nets and other marine refuse potentially harmful to wildlife is being well supported by Newport-based vessels, and the project may be duplicated at other ports.

Fishing News International, July 1987.

Loon programme success

Once found breeding from the Arctic as far south as Pennsylvania, Indiana, lowa and California in the US, the common loon or great northern diver Gavia immer is declining. The species now nests no further south than New York, Michigan, Wisconsin, Minnesota, North Dakota, Wyoming and Washington. It has been classified as threatened in Michigan where only 350 pairs breed. and in Vermont, Massachusetts and New York it has suffered major reductions. Many organizations and agencies are involved in protection efforts and most of the northern states have local loon groups. In Michigan the 'Loon Registry Program' began in 1986 and volunteers educate others about loons. monitor them on local lakes and help safeguard nests as well as identify particular threats.

The Nature Conservancy News. 37. 3.

Parks all too small

Nearly all western North America's national parks have lost some mammal species because they are too small according to William Newmark at the University of Michigan. In 14 parks he found that 42 species have disappeared altogether.

Nature, 29 January 1987.

Briefly

State acts to prevent wetland development

The Governor of New Jersey, USA, has ordered an immediate 18-month moratorium on development in the State's 300,000 acres (120,000 ha) of unprotected wetlands because development interests had blocked progress by the New Jersey Legislature on a wetlands protection bill. The order affects about 600 projects awaiting approval from the State's Department of Environmental Protection.

Outdoor News Bulletin, 41, 14.

Santa Cruz recovery

By 1870 Santa Cruz, an island lying 24 miles (39 km) from the Californian coast, was severely over-grazed by sheep. Now, more than 100 years later, 90 per cent of it is owned by the US Nature Conservancy, which has been clearing the feral sheep since 1978 with the result that the rich natural vegetation is recovering dramatically, including endemic species once on the brink of extinction.

The Nature Conservancy News, 37, 3.

Martin house towers over Gimli

Gimli, a small lakeside town in Manitoba, Canada, has become home of the second-largest purple martin *Progne subis* house in the world. A 50-foot (15-m) tower holds 32 aluminium martin houses, each with 12 holes, and



The common loon, or great northern diver, which is believed to be suffering from the effects of acid rain, is depicted on a new Canadian one-dollar coin, which was issued in July.

three 24-room 'castles' are attached to the top. Many Gimli business people purchased houses to help fund the project and the tower was donated by Winnipeg Hydro and the town. The house is the most dramatic accommodation for martins in the province, but each year the Manitoba Purple Martin Club donates smaller purple martin houses to senior citizen homes. The bird is declining over parts of its breeding range in North America and in January 1987 massive die-offs were reported in Brazil, apparently due to pesticide poisoning.

Nature Canada, 16, 3.



Gimli's martin house (photography by kind permission of Nature Canada).

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Regulations for TEDs issued

In June the US Commerce Department issued the final regulations requiring the use of TEDs (Turtle Excluder Devices) on all shrimp boats operating in offshore waters in areas of the Gulf of Mexico and south-east Atlantic coasts within two years. Inshore shrimp boats will be exempted from using TEDs if they limit their tow times to less than 90 minutes, the period in which a drowning turtle can be resuscitated.

Monitor, 29 June 1987.

Reintroducing the red wolf

Red wolves Canis rufus were due to be reintroduced into Alligator River National Wildlife Refuge, North Carolina, in June 1987. Four mated pairs of captive-bred red wolves have been living in pens at the refuge since November 1986 and have gradually become accustomed to their new surroundings and to catching live prey. The species, once abundant in the southeastern US, was declared extinct in the wild in 1977. Two years earlier the US Fish and Wildlife Service had been able to find only 19 pure-bred red wolves in Louisiana and Texas to start a captive breeding programme. Today there are about 80 captive individuals. The Nature Conservancy News, 37, 3.

Last dusky sparrow dies

The last known dusky seaside sparrow Ammodramus maritimus nigrescens has died in Florida. Some of its tissue has been frozen at the University of Georgia in the hope that future technology might allow a pure strain of dusky sparrow to be resurrected through genetic cloning.

Independent (London), 18 June 1987; GNUS, 11 and 18 June 1987.

Thin edge of wedge in Florida

A 1982 amendment to the US Endangered Species Act may allow developers to build on Key Largo in Florida, which conservationists and the State want to purchase as a reserve for the American crocodile Crocodylus acutus, the Schaus swallowtail butterfly Papilio aristodemus ponceanus, the Key Largo wood rat Neotoma floridana smalli, and the cotton mouse Peromyscus gossypinus allapaticola, all on the US Endangered Species List. The amendment 254

authorizes private development in an endangered species's habitat if the developer comes up with a plan that ensures the survival of the species even if it means relocation or death of some individuals. Conservationists say that building would damage the fragile island habitat and threaten the adjacent coral reefs in John Pennekamp Coral Reef State Park and the Key Largo Federal Marine Sanctuary. If the developers win, the way will be open for proposals in other habitats of endangered species and it will also push the price of such land to a level beyond the reach of conservation groups.

The New York Times, 14 June 1987.

Underpasses for panthers

The US Government has agreed to include 36 underpasses in Interstate 75, a highway that will cut through the heart of Florida panther Felis concolor coryi habitat. Fences will also be erected to stop panthers wandering on to the road. Only a few dozen panthers are believed to survive in Florida and many are in poor physical condition. Antibodies to feline panleukopenia virus—a highly contagious devastating disease of all felids—were found in 12 of 14 panthers and antibodies to calicivirus, and respiratory pathogen, were found in 7 of 14 panthers.

IUCN Bulletin, 18, 4-6.

Central America

Guatemala's new wildlife department

Guatemala has shifted reponsibility for its eight protected areas from the National Forestry Institute to the new Department of Protected Areas and Wildlife.

CNPPA Members Newsletter, 39.

Coca-Cola sets conservation example in Belize

Coca-Cola Foods met the Belize Audubon Society in March to try to resolve some of the questions raised by the international conservation community about the development of the company's 196,000-acre (79,000-ha) holding in Belize (see *Oryx*, **21**, 123). Coca-Cola Foods explained that it is genuinely concerned about possible adverse environmental impacts of its

citrus project. It is prepared to fund an environmental impact assessment of the area to be cultivated and has agreed to involve Belize Audubon Society in all stages of the assessment. It will also consider setting aside an undisturbed parcel of land for wildlife.

Belize Audubon Society, 10 April 1987.

Panama bans tree felling

At least 70 per cent of the 1300-sq-mile (3400-sq-km) basin that provides the Panama Canal with fresh water has been deforested in the last 70 years. Warnings that further loss of trees could leave the canal short of water led Panama to ban the destruction of any tree older than a few years until 1992. Since the decree took effect on 6 April the Government has reported arresting five farmers and fining 44 businessmen \$1000-5000 each. The timber industry is being allowed to import wood to keep sawmills and furniture factories running and farmers are to be given food and paid to plant trees. Stanley Heckadon Moreno, a Planning Ministry researcher and Panama's most vocal environmentalist says farmers should be reeducated to practise agro-forestry. Los Angeles Times, 3 June 1987.

Humpback whale sanctuary in Caribbean

The Dominican Republic has designated Silver Bank in the Caribbean as a humpback Megaptera novaeangliae whale sanctuary, the first of its kind. Thousands of humpbacks mate and calve in Silver Bank each year. International Whale Bulletin, 1.

Parrot numbers up on St Lucia

A survey by David Jeggo, Jersey Wildlife Preservation Trust, of the endangered St Lucia parrot Amazona versicolor population in October 1986 found 200-250 birds. Overall the parrot population appears to have increased by at least 100 per cent in 10 years. The Caribbean island is experiencing problems associated with forest clearance, erosion, flooding and water shortages. A proposed dam may threaten the parrots in two areas, but this may be offset by the subsequent protection that would be given to forests within the water catchment. On the Edge, 32.

South America

Hunting ban on scarlet ibis

The new Government of Trinidad and Tobago has protected its national bird, the scarlet ibis *Eudocimus ruber*, by ceasing to issue hunting licences for the species.

World Birdwatch, 9, 2.

New park in Venezuela

Venezuela's new national park, Cinaruco-Capanaparo, named for the tributary rivers of the Orinoco on its southern and northern borders, is being established in Los Llanos by the country's Ministry of the Environment and BIOMA, a private conservation organization. Its 1.45 million acres (0.59 million ha) are habitat for 300 species of birds as well as crocodiles, ocelots and capybara. The dry plains are dotted with clumps of Moriche palms, which form humid oases in the dry season for birds and deer.

The Nature Conservancy News, 37, 3.

Iguana repatriation success

When feral dogs invaded the colony of land iguanas Conolophus subcristatus on Cerro Cartago, Isabela Island in the Galapagos 10 years ago, the survivors were taken for captive-breeding at the Darwin Station. Dogs were eliminated in the area and 245 young iguanas have been released over the years. In 1986, scientists found 70 healthy iguanas—all of which are marked individuallyalthough the rugged terrain could conceal many more. They also found remnants of the original population, which had somehow eluded the dogs. Cats are still present and eat the young iguanas, but generally the situation has improved beyond expectations. Noticias de Galapagos, 45.

Replanting on San Cristobal

San Cristobal is the only island in the Galapagos that has permanent streams, but these, with their unique fauna and flora, are threatened by vegetation destruction in some areas of the water catchment that lie outside the national park. Forests of endemic evergreen sunflower trees Scalesia pedunculata have been felled in the highlands, and the Briefly

endemic shrub Miconia robinsoniana and tree fern Cyathea wetherbyana communities have been destroyed by grazing. The local authorities and the Darwin Station have embarked on a project to restore vegetation, initially at La Toma using S. pedunculata and M. robinsoniana in an area dominated by cattle pasture and introduced guava trees Psidium quajara.

Noticias de Galapagos, 45.

Timber crisis in Galapagos

The village of Puerto Ayora on Santa Cruz in the Galapagos has expanded since the establishment of the Darwin Station and with the development of tourism. The increased demand for wood for building and fuel was threatening the national park so the Park Service and the Darwin Station have established tree nurseries and five farmers are now planting trees, chiefly the native Piscidia cartagenensis, but also Tectona grandis, a useful tree introduced in 1937, which shows no tendency to spread naturally and compete with endemic species. Noticias de Galapagos, 45.

Ecuador's backward step for turtles

Two turtle-processing plants have been reopened at Manta in Ecuador and turtle product exports to Mexico have apparently been authorized by the Ecuadorean Minister of Industry. The authorization is in open violation of the Ecuadorean ban on fishing and trade in turtles, a legally binding measure taken jointly by the Ministries of Industry and of Agriculture at an earlier date. Marine Turtle Newsletter, 40.

Oil exploration threatens Ecuadorean park

Yasuni National Park, 750,000 ha (1,850,000 acres) of primary rain forest in eastern Ecuador, is threatened by oildrilling operations scheduled to begin close to its boundaries in mid-1987. The proposed drilling site is on a tributary of the Tiputini River, which flows into the park and which would be polluted by drilling chemicals and petroleum products. Oil exploratory operations have already reduced the number of large mammals in the area, through seismic explosions, hunting and deforestation, and these kinds of disturbances will in-

crease as human settlements associated with the oil drilling encroach upon the park. There is already a great deal of hunting pressure from military personnel in this frontier area because of political tension between Ecuador and Peru.

Rainforest Action Network, April 1987.

Bolivia swaps debt for reserve

An environmental group, Conservation International, has agreed to pay a \$650,000 debt owed by Bolivia to Citicorp Investment Bank in the US in return for a 1.2-million-ha (3-million-acre) reserve in the Beni Biophere Region in northern Bolivia. Conservation International and Bolivian environment officers will manage the region jointly with the objectives of developing fisheries and forestry while preserving as much territory as possible in a pristine state.

New Scientist, 16 July 1987.

Guano diggers a threat to penguins

In order to protect Peru's most important Humboldt penguin Spheniscus humboldti breeding colony, the Peruvian authorities agreed that g and collecting should be done only at times when disturbance to the birds would be minimal. Despite this, a guano harvest started in January, six weeks earlier than agreed and at a time when the penguins are vulnerable to the hunting and egg-collecting activities of the guanodiggers.

World Birdwatch, 9, 2.

Brazil's turtle protection plan

The Brazilian Marine Turtle Preservation Project has been assessing the status of marine turtles along the coast of Brazil and its oceanic islands since 1980. It has identified eight important nesting areas and has discovered that five species nest in Brazil—loggerhead Caretta caretta, hawksbill Eretmochelys imbricata, olive ridley Lepidochelys leatherback Dermochelys olivacea, coriacea and green Chelonia mydas. A tagging programme has been set up, eggs have been relocated where necessary and education programmes have been developed in local communities to gain support for turtle conservation. Marine Turtle Newsletter, 40.

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Smelters in the forest criticized

Brazil has approved the construction of 20 iron smelters in the eastern Amazon Basin. They will be fuelled by charcoal, gained by massive destruction of primary forest. More forest will be destroyed by a new 1000-mile (1600km) long railway, which is expected to bring settlers, land speculators and cattle ranchers in its wake. The projects have drawn strong criticism from environmental groups in Brazil who say that although the Government has included environmental concerns in official statements in recent years the approval of the smelters and railway shows that environmental considerations are not allowed to stand in the way of most development plans. The New York Times, 28 May 1987.

Rare woodpecker sighting

The helmeted woodpecker Dryocopus galeatus has been reliably spotted for the first time in decades. Researcher Edwin Willis saw one female in February in western Sāo Paulo, Brazil. There have also been reports of sightings in eastern Paraguay, but the species is considered to be very sparsely distributed and severely threatened. World Birdwatch, 9, 2.

Toxic chemical spill into Amazon tributaries

Three tributaries of the Amazon—the Tiaraju, Alalau and Jauaperi—became heavily polluted with toxic chemicals, including mercury, when a dam holding mining residues collapsed on 3 May. The Taboca Mining Company denied that there was any danger to the region's inhabitants, including 1.5 million people in Manaus. The Brazilian Forest Development Institute sent a team to assess the damage. Monitor (Earthtrust X* Press), 12 May

Brazil freezes some damaging projects

Facing a collapsing economy, the Brazilian Government has suspended projects costing \$33 billion. The frozen projects include railways and ports in the Amazon region and several dams on Amazon tributaries. In addition, funds from the Inter-American Development Bank for the Amazon penetration road 256

through the state of Acre have been suspended because of lack of protection for the forest and the native Indian population.

Monitor, 15 June and 6 July 1987.

Spix's macaw fledglings saved

Two young Spix's macaws Cvanopsitta spixii taken from the nest in February in north-east Brazil by a man who bribed a park quard, were seized in Paraguay by the Director of TRAFFIC (South America) and the country's Director of National Parks and Wildlife. The action was possible because a Swiss dealer asked Swiss authorities whether he was allowed to import them and the papers were discovered to be fraudulent. The birds were returned to Brazil and are now in São Paulo Zoo, which has three other individuals. There are believed to be only three or four adults left in the wild and of the estimated 60 in captivity. two-thirds were illegally obtained.

IUCN Bulletin, 18, 4-6.

Marine mammal centre in Chile

A new international marine mammal centre opened in Valdivia, Chile, in March 1987 with the goals of developing scientific investigations towards rational management, utilization and conservation of marine mammals in the south-eastern Pacific. Details from Jorge A. Oporto, CIMMA, c/o Centro Invest, Marinas, Universidad Austral de Chile, Casilla 567, Valdivia, Chile. Newsletter of the Cetacean Specialist Group, 3.

Australia/Antarctica

Cassowary problem

The southern cassowary Casuarius casuarius, now restricted to the tropical rain forests of north-east Queensland, Australia, is in trouble. Logging has destroyed many of the large fruitbearing trees that the species depends upon, and roads through the forests mean that these large flightless birds are sometimes killed by cars. The shrinking habitat also provides insufficient space for young birds to establish territories. In February 1986 Cyclone Winifred destroyed many rain forest fruit trees around Innisfail and cassowaries were forced to seek food outside. The local people set up feeding stations to prevent

the birds starving, but now there is a danger that the birds could become dependent on food provided by humans.

Australian Conservation Foundation Newsletter, **19.** 4.

A parrot that needs goosefoot

For a long time it has been assumed that the decline of the orange-bellied parrot Neophema chrysogaster was due mainly to destruction of saltmarsh and their food plants in one of the major wintering grounds. Port Phillip Bay near Melbourne, South Australia. However, for several weeks each winter most of the 100 or so remaining parrots are to be seen at a Melbourne sewage farm where a recent study has shown that they feed almost exclusively on the seeds of glaucous goosefoot Chenopodium glaucum. This plant is being replaced by an introduced orache Atriplex prostrata, except in the filtration paddocks, and it may be that the increasing scarcity of the goosefoot is contributing to the parrot's decline. Now the Melbourne Metropolitan Board of Works, which funded the year-long study, is planning to control the competing orache.

Wildlife Australia, 24, 1.

Meeting

Cracids—Second International Symposium

This symposium will be held from 28 February to 6 March 1988 in Caracas, Venezuela. Topics will be concentrated on the conservation status, field and captive studies, management of captive and wild populations, and conservation problems of the Cracidae. The meeting will include poster and oral presentations, round-table discussions and working groups. An action plan for this endangered family will be developed. Contact: Stuart Strahl, Univ. Simon Bolivar, Dpto Biol. Organismos, Apdo. 80659, Caracas 1080-A, Venezuela.

People

Sir Peter Scott has returned Iceland's Order of the Falcon, which was awarded to him for his services to conservation, because of Iceland's defiance of the IWC moratorium on commercial whaling by continuing to take whales under its own scientific permits.

Dr Robin A. Pellew has been appointed Director of the IUCN Conservation Monitoring Centre at Cambridge and Kew, UK.

Dr Richard M. Laws CBE FRS retired as Director of the British Antarctic Survey in April 1987. A tribute to his work appeared in *Polar Record* (23, 146, 508–510). Dr David J. Drewry replaced him in May, having served as Director of the Scott Polar Research Institute since January 1984.

Robert Tei, Warden of Tai National Park in the Ivory Coast, who was seriously wounded in an exchange with armed poachers, was presented with the IUCN Valour Award on 7 May in Yanoussourro.

CNPPA Members Newsletter, 39.

Obituaries

Horace Albright, Co-Founder and second Director of the US National Park Service, has died aged 97. He began his career in the US Department of the Interior in 1913.

Dr Salim Ali, the doyen of India's ornithologists and conservationists, who died in June, aged 91, will be chiefly remembered for his predominant part in the ten-volume Handbook of the Birds of India and Pakistan, which he produced with the assistance of Dr Dillon Ripley between 1968 and 1974. At the time of his death he was still working on Volume 6 of a revised edition. Born in Bombay in 1896, he worked for virtually the whole of his adult life as an ornithologist, making numerous expeditions to all parts of the subcontinent. This extensive field work was the basis of his many books, not only on the birds of regions such as Kerala and Sikkim, but also of his pioneer field guide, A Book of Indian Birds (1941). supplemented by Indian Hill Birds (1949). He was for many years a pillar of the Bombay Natural History Society. the leading such society in Asia, and finally its President. Among many other achievements, he played a key part in saving the world-famous Bharatpur Sanctuary in Rajastan.

He was much honoured in his own country, especially by being made Padma Bhushan for distinguished service to Indian ornithology, and later a member of the Rajya Sabha, the upper legislative chamber. His many inter-Briefly

national honours and awards included the John C. Phillips Medal of the International Union for Conservation of Nature and Natural Resources in 1969. the Insignia of Officer in the Netherlands Order of the Golden Ark in 1973, and the J. P. Getty International Prize for Wildlife Conservation in 1976. He was particularly proud of being the first non-British recipient of the Union Medal of the British Ornithologists' Union in 1967. Indeed, in his most readable autobiography, The Fall of a Sparrow (1985), he was able to list 18 awards. 'to prove to Doubting Thomases like some of my late lamented elders that even such a seemingly futile occupation as birdwatching is not entirely barren of rewards if pursued with persistence and dedication'. This was typical of his wryly humorous approach to life.

Dr Archie Fairly Carr Jr, a Florida zoologist devoted to research in and conservation of marine turtles, died on 21 May 1987 aged 77. He was Technical Director of the Caribbean Conservation Corporation and Graduate Research Professor of Zoology at the University of Florida. He was interested in all species, but gave most attention to the green turtle. The tagging project that he started in 1954 in Costa Rica, and which is still operating, is the longest running of its kind in the world. He established that some sea turtles migrate thousands of miles between feeding grounds and nesting beaches, and discovered that young turtles ride and feed on rafts of sargassum. A native of Mobile, Alabama, he first went to the University of Florida to study English but was diverted to biology by a professor who recognized his student's love for nature. In 1937 he gained the University's first doctorate in biology. One of his greatest attributes was his ability to translate science into literature, and this talent brought the world's attention to the precipitous decline of the sea turtles he studied for more than 40 years. Several of his books won top awards. In 1952 his Handbook for Turtles won the Daniel Giraud Elliott Medal from the National Academy of Sciences, High Jungle and Low (1953) won the 1955 John Burroughs Medal for exemplary nature writing. His most widely acclaimed popular book The Windward Road inspired the formation in 1959 of the Caribbean Conservation Corporation, a group dedicated to studying and saving turtles from extinction. Dr Carr's graduate students are among the most renowned and respected sea turtle scientists working today.

Imre de Borovicnezy, Chairman of the Spanish Section of the International Council for Bird Preservation, died suddenly at the beginning of April. A journalist and photographer by profession, he was a driving force of Spanish conservation and a fierce defender of the Cota Doñana. He founded the Federacion Co-ordinadora para la Defensa de las Aves (CODA) in 1980 to co-ordinate bird conservation work in Spain. Under his leadership CODA organized projects for bustards, cranes and important bird areas. He was also a leading force in ICBP's efforts to promote European co-operation in bird conservation.

World Birdwatch, 9, 2.

Game Ranger Benjamin Manyisa was killed by a poacher in Swaziland's Hlane Nature Reserve in December 1986. His death has led to pressure for Swaziland's minor penalties for poaching to be increased.

On 28 December 1986 bandits stormed Lamai Ranger Post in northern Serengeti National Park. They murdered Ranger George Jeremiah, his wife Mariam, and Ranger Kibinza Makona, and seriously wounded Ranger William Mwita. The culprits have not been apprehended. Battles with poachers are not uncommon in remote parts of western and northern Serengeti, but until last year no one had been killed since Marwa Nyahure was murdered by poachers in 1978. Marwa is remembered, along with five others—Michael Grzimek, Gadie Matley, Theophil Reginald, Jonathan Nnko and Ellias Lasheri-with a monument on top of Ngrorongoro Crater.

John Fanshawe, Serengeti Research Institute.

Emmanuel Rwelekana, a member of staff at the Karisoke Research Centre established by the late Dian Fossey, has died in prison. He was arrested with four colleagues after the murder of Dian Fossey and imprisoned without any charges being laid. He had been with the Research Centre for 15 years, carrying out his various duties with immense dedication and courage.

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