

INTERNATIONAL

Plant extinctions loom

According to the *IUCN Red List of Threatened Plants* published in April 12.5 per cent of the world's plant species are threatened with extinction. The list of 33,798 species includes 380 that are extinct in the wild and 371 that may be extinct. The list was compiled by the World Conservation Monitoring Centre in collaboration with the Royal Botanic Gardens in Edinburgh and Kew, UK, the IUCN Species Survival Commission and scores of national botanical institutions. Many other threatened species occur that are not on the list, from parts of the world not well-known botanically. Ninety-one per cent of the species listed are endemic to a single country. The next task will be to work out what action needs to be taken to conserve plants; there are many more threatened plants than threatened animals yet for every dollar spent on animal conservation only 10 cents goes towards plants.

Source: World Conservation Monitoring Centre, 25 March 1998.

CITES update

On 13 March 1998 Mauritania became the 144th Party to accede to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). The accession becomes effective on 11 June 1998.

Source: CITES, Geneva, 18 May 1998.

Ramsar News

Bahrain became the 105th Contracting Party to the

Ramsar Convention on Wetlands on 27 February 1998 and has submitted two sites for the Ramsar List of Wetlands. Mongolia became the 106th Contracting Party on 8 April 1998. Its first wetland of international importance is the 2100-sq-km Mongol Daguur near the border with Russia, 200 km north of the city of Choibalsan. Mongol Daguur combines arid steppes and wetlands: the northern part consists of rolling steppes and wetlands on the southern shore of Tari Lake and the southern part encompasses a strip of the Uldz River and its marshy wetlands, with a high density of nesting white-naped cranes *Grus vipio*. The Czech Republic has named its 10th Ramsar site: 350-ha Libechovka and Psovka Brooks, which is important for its plant and invertebrate communities, and a fish species (*Cobitis* sp.), which is new to science. France has announced its 18th Ramsar site, the Baie de Somme on the coast of the Picardie Region in north-east France; its 170 sq km includes the largest remaining natural estuary of the north-western European coast between the Baie du Mont Saint Michel in the west and the Netherlands to the east. On World Wetlands Day on 2 February the UK designated the Avon Valley in the counties of Hampshire and Dorset its 67th Ramsar Site. The valley contains a greater range of habitats, plants and animals than any other chalk valley in the UK.

Sources: *The Ramsar Newsletter*, No. 27, March 1998, 1–2; *English Nature Magazine*, No. 36, March 1998, 2.

Ocean devastation

Bottom trawling, whereby heavily weighted nets are dragged over the ocean floor to

catch fish and crustaceans, is damaging ocean ecosystems in many parts of the world, according to Les Watling of the University of Maine's Darling Marine Center and Elliott Norse of the Marine Conservation Biology Institute. Off Western Australia trawlers in the mid-1960s reduced areas covered by sea sponges, sea fans, sea whips and coral to sand; in the Mediterranean trawlers have ravaged seagrass meadows, which are important nursery grounds for fish. From 1 January the European Union has required bottom trawlers in the Mediterranean to operate outside a 3-nautical-mile coastal zone and in depths of 50 m or greater but this legislation is apparently being ignored. Apart from the damage to the sea bed, between 10 and 95 per cent of the catch is discarded, and the trawling itself leaves clouds of sediment in previously clear water. Once limited to the world's continental shelves, trawlers are searching further afield for under-exploited stocks and threatening deep sea areas.

Source: *BBC Wildlife*, March 1998, 24–25.

Aliens set to increase

Invasions by alien species, already one of the most serious threats to biodiversity, are set to worsen as the world warms, according to an international workshop on invasive species and global change in San Mateo, California, in April. For example, the tropical alga *Caulerpa taxifolia*, which invaded the Mediterranean Sea in the mid-1980s, could move up the Atlantic coast of Europe if ocean temperatures rise.

Source: *New Scientist*, 18 April 1998, 22.

World Commission on Dams

A new World Commission on Dams has been established, chaired by Professor Kader Asmal, South Africa's Minister of Water Affairs and Forestry. The initiative aims to bring a more responsible approach to investments in large dam projects by conducting the first-ever global review of their costs and benefits. The recommendations will be delivered in 2000. The Commission's 12 members include business leaders, environmentalists, social activists, and experts in water and energy resources development.

Source: News Release, IUCN/The World Bank, 16 February 1998.

EUROPE

Algal blooms may be due to pesticides

Algal blooms in lakes have been blamed on phosphates and nitrates in washing powders and fertilisers but a new study in the Netherlands claims that pesticides may be a key factor. The Netherlands reduced levels of phosphate in freshwater by half between 1985 and 1995 but algal blooms persisted. A study by the Netherlands Organization for Applied Research found that the zooplankton that consume the algae in lakes are killed by the relatively low concentration of pesticides found in lakes in the country. Pesticide safety is measured by its effects on the water flea *Daphnia magna*, but this species, which lives in small bodies of water, is more resistant to pesticides than the zooplankton found in large lakes. The researchers warn

that the pesticides on the market may be more ecologically damaging than has been suspected.

Source: *New Scientist*, 28 March 1998, 13.

The Netherlands in court

The Netherlands is being taken to court by the European Community over its management of the western Wadden Sea. Parts of this Ramsar Site of international importance to wading birds, were worked by suction-dredging cockle ships in 1988 and mussel beds were completely removed by fishing in 1989 and 1990 (See *Oryx*, 32 [2], 92), destroying the major sources of food for waders.

Source: *BBC Wildlife*, March 1998, 30–31.

Acid implicated in eggshell thinning

A study by R. Green of the RSPB in Edinburgh has found that shell thickness of four species of thrushes in the UK (blackbird, song thrush, mistle thrush and ring ouzel) declined steadily between 2 and 11 per cent, depending on the species, since 1850, although blackbird eggshells started to become thicker again in the 1960s. Organochlorine pesticides such as DDT, which are known to cause shell thinning in birds of prey, were widely used in UK agriculture only from 1947, so Green thinks that acid rain, caused by sulphur emissions from the burning of fossil fuels is the most likely cause for the thinning found in his study. Acid rain would reduce the calcium content of leaf litter consumed by worms and the abundance of snails, which together make up a large part of the birds' diet. It is possible that blackbird eggshells started to get thicker due to the clear

air legislation of the 1950s.

Source: *Proceedings of the Royal Society B*, 265, 679.

Otter crossings

A reflector system, which has saved the lives of hundreds of kangaroos in Australia, has been introduced in Scotland, UK, in an attempt to reduce the numbers of otters *Lutra lutra* killed on roads. In a pilot scheme on a 32-km stretch of road on the island of Skye, the beams from car headlights will be converted into red walls of light, which will then be flashed into the countryside to warn otters of oncoming cars.

Source: *BBC Wildlife*, March 1998, 26.

Skylark numbers plummet

Skylarks *Alauda arvensis* on British farmland declined by 51 per cent between 1968 and 1995. Intensive farms with monocultures of rape and legumes supported no nesting skylarks at all. Although organically farmed fields and areas of set-aside support higher densities of skylarks, organic farms occupy less than 1 per cent of agricultural land and this is unlikely to be sufficient to reverse the skylark's decline.

Source: *Journal of Applied Ecology*, 34, 1462–1478.

UK to grow more hardwood

An orchard of 300 wild cherry trees *Prunus avium* has been planted in Gloucestershire, UK. The trees represent 17 clones that have been propagated from trees growing in native woodlands and selected for resistance to aphids and canker, speed of growth and straightness of trunk. The orchard will fruit for the first time in 2001 and will take 50–70 years to

reach full maturity. Cherry wood is prized by furniture makers and could replace that of endangered tropical species. At present most cherry trees in the UK are blighted and their wood is no good for carpentry, having been grown from imported strains ill-suited to the British climate. The team responsible, from government-funded Horticultural Research International, hopes to repeat the procedure with oak, ash and walnut to restock UK forests and provide domestic supplies of good quality hardwood.

Source: *New Scientist*, 18 April 1998, 17.

Grouse and fences

Collisions with fences erected to protect regenerating forests from deer are a major cause of death among red grouse *Lagopus lagopus scoticus*, black grouse *Tetrao tetrix* and capercaillie *Tetrao urogallus*, according to a study by the Game Conservancy Trust for Scottish Natural Heritage. The fences may cause the number of capercaillie in Scotland to fall from 2200 in 1994 to 200 in 2003. The solution would be to design grouse-friendly fences and cull more deer.

Source: *New Scientist*, 7 March 1998, 5.

UK protects more species

The UK Government has given protection to another 11 animal and 17 plant species under the Wildlife and Countryside Act 1981. A further four animals already protected under the Act have been given increased cover, including the pearl mussel *Margaritifera margaritifera*. The new species include the basking shark *Cetorhinus maximus* and the water vole *Arvicola terrestris*.

Protection was removed from the Vipers bugloss moth *Hadena irregularis* because it is believed to be extinct in Britain. Source: UK Department of the Environment, Transport and the Regions, 26 March 1998.

Ladybirds by mail

The city of Caen, Normandy, France, is posting 12,000 ladybird eggs to garden centres around France to be sold as an alternative to chemical pesticides. Caen has been distributing the beetles, which consume aphids and other plant pests, to local gardeners since the late 1970s and the city council hopes that the rest of France will adopt the practice. Source: *New Scientist*, 2 May 1998, 5.

New Austrian park

On 26 October 1997 the Federal State of Lower Austria signed a contract with the Republic of Austria for the creation of the Thayatal National Park, which will ensure the conservation of the Thaya Valley on the Austrian/Czech border near Hardegg. On the other side of the river the Podyji National Park (established in 1991) already protects the Czech side of the valley. The Thayatal is one of the last near-natural valley landscapes in central Europe and is home to black storks *Ciconia nigra*, otters *Lutra lutra* and 14 species of bats. As well as protecting species and habitats the park should bring local economic benefits in the form of income from tourism. Source: *Nature and National Parks* (European Bulletin), 1998, 36, No. 135, 30.

Ungulates damage forests

The decline of Alpine forests over recent decades has been

blamed mostly on atmospheric pollution but Italian and Swiss scientists have found that much of the damage is done by ibex, deer and chamois, all of which are protected. Tree ring studies and 4-yearly surveys of ungulates in the Gran Bosco di Salbertrand National Park in Piedmont, Italy, demonstrated that damage to trees fell when annual culling of ungulates began in 1982, rising when the cull was abandoned in 1988 and 1989, and falling again when it was resumed. The study also found that the forests were failing to regenerate because the animals ate the shoots of young saplings. Source: *New Scientist*, 11 April 1998, 22.

Chamois spread

A reintroduction project for the Abruzzo chamois *Rupicapra pyrenaica ornata* in central Italy has resulted in new populations in two new national parks, the Maiella and Gran Sasso in the Abruzzo region. Once this endemic subspecies inhabited most of the central and southern Apennines but hunting almost completely wiped it out by the beginning of the 20th century and the last remaining population was saved by the establishment of the Abruzzo National Park in 1923. The chamois released in these two areas between 1991 and 1996 are breeding but are not yet self-sustaining so more releases will follow. The total population of chamois is now 600 compared with a low of 20 individuals between the two world wars. Source: *Natura* 2000, February 1998, No. 5, 4–5.

Spain's bears

One of Spain's two populations of brown bears *Ursus arctos* is in

danger of extinction because it has been isolated from other bears for several decades. Spain has fewer than 100 brown bears, compared with several hundred last century, all in the Cantábrica mountains in the north. In 1847 a road was built through their habitat and since then a railway, a major highway and a ski resort have been built. The larger population of 70 bears is still genetically diverse but the smaller population of 17 is less varied and has been declining in numbers for years.

Source: New Scientist, 18 April 1998, 21.

Satellite tracking helps avoid eagle electrocution

Spanish scientists, using satellite technology to track young imperial eagles *Aquila adalberti* from their nests in central Spain, found that the young birds fly up to 400 km south to dispersion zones where they stay for 5 years until returning to their place of origin when sexually mature. Many failed to return, however, because they were killed when flying into or landing on electricity wires in the dispersion zones. Now local authorities have moved the wires and the mortality rate from electrocution has fallen from 60 to 10 per cent.

Source: New Scientist, 7 March 1998, 25.

Doñana in trouble

In April a breach in a dam holding back waste from a open-pit mine at Los Frailes, near Seville in Spain, released 4 million cu m of acidic water and silt into the Agrío River, which flows into Doñana National Park. Frantic bulldozing diverted the flood into the Gaudalquivir River

and the Atlantic, saving Doñana. The water still flooded 2000 ha of land, depositing unknown quantities of silt bearing cadmium, mercury, arsenic and other heavy metals. Runoff from the contaminated land will ultimately reach Doñana wetland downstream and enter the food chain. The mine is owned by the Swedish-Canadian firm Boliden, which produced 180,000 tonnes of zinc, lead, copper and silver from 4 million tonnes of ore in 1997, its first year of operation. The waste was dumped into a settling pond of another mine that was abandoned in 1996 after 19 years of operation. In 1995 a local environmental group launched a court case maintaining that the dam holding the pond was unsafe. The case is still pending.

Source: New Scientist, 2 May 1998, 12.

NORTH EURASIA

Wildlife refuge wins over timber

Most of the coniferous forest on Sakhalin Island in the Russian Far East has been destroyed to feed the Japanese-owned paper and pulp mills. The forest that remains, in the watershed of the Pursh-Pursh and Vengeri Rivers, covers 700 sq km, less than 1 per cent of the island, and provides refuge for 33 per cent of its plant species and 65 per cent of its terrestrial animal species, including Sakhalin musk deer, caribou, grouse, mandarin duck, osprey, marbled murrelet and golden eagle. A battle to protect the area appeared to be failing and by late 1997 Russian logging companies had cleared 3.5 sq km. Then, taking advantage of a reorganization of the forestry

department in which all lease agreements were annulled, the Governor of Sakhalin requested the preparation of a draft decree to create the Vostochny Wildlife Refuge to protect the watershed.

Source: Russian Conservation News, Winter 1998, No. 14, 23-24.

Bison restoration

Efforts to restore European bison *Bison bonasus* in the former Soviet Union after World War II resulted in 25 free ranging populations totalling 1477 individuals by 1991, when the Soviet Union was disbanded. Russia had 11 populations, Belarus four, Ukraine 12, Lithuania two, and Kirghizia and Azerbaijan each had one. After 1991 the financial crisis in nature protection resulted in losses of bison: four populations were lost in Russia and the 1997 census revealed that the total population in Russia has fallen by 37.9 per cent, from 552 to 343 animals. Now the outlook is brighter, with plans to create several large groups of European bison in the Russian federation. The development of a National Strategy on Bison Conservation was started at the end of 1997 within a Global Environmental Facility Project and there are plans to reconstruct the Central Bison Breeding Center in 1998.

Source: Russian Conservation News, Winter 1998, No. 14, 18.

Arctic park study

The largest European tracts of pristine taiga forests are found in the Archangelsk Oblast region of north-west Russia, and Russian conservation organizations and regional authorities have been moving to establish a national park

there, Onezhskoje Pomorje, covering 5000 sq km on the Onega peninsula in the White Sea. A team of 30 experts visited the proposed park in 1997 and concluded that the area merits the designation of national park by international standards. It contains important terrestrial and marine habitats as well as supporting traditional human culture. It could become a model for sustainable development based on traditional resource use. *Source: Nature and National Parks (European Bulletin), 1998, 36, No. 135, 39.*

Ginseng decline

Wild oriental ginseng *Panax ginseng*, a plant widely recognized for its pharmaceutical value, appears to be in trouble in the Russian Far East, China and Korea. In the Russian province of Primorye, roots collected under permit declined in quantity and quality in recent decades. In China, wild ginseng now occurs only in the Changbai mountains and the amount obtained from registered collectors decreased from 500 kg in the 1930s to 150 kg in 1950 and to 3.5 kg in 1991. On the Korea peninsula the species's wild populations are near extinction. *Panax ginseng* is listed in the Russian Red Data Book, and extraction and trade in wild plants is banned except for a few local permitted schemes, and in China the species is also totally protected. Only American ginseng *Panax quinquefolius* is listed under CITES, Appendix II, which means that its trade is regulated. But, while the Russian Federation, China and South Korea ban the export of *P. ginseng* roots and seed, the difficulty of distinguishing the species of *Panax* makes enforcement difficult. Illegal

harvest and trade are increasing and antipoaching teams in Primorye confiscate roots regularly. Illegally collected ginseng is being imported into Europe but the amounts are unknown and an investigation is needed.

Source: Medicinal Plant Conservation, 4, 11–13.

Russian forest leased to Malaysian loggers

In December 1997 the Khabarovsk regional administration leased 3050 sq km of Sukpai watershed forest to the Malaysian company Rimbunan Hijau International. The lease cost \$US450,000 and will last for 48 years with an allowable cut of 550,000 cu m. The forests of the Sukpai watershed in the Sikhote-Alin mountain range in southern Khabarovsk provide habitat for Siberian tigers *Panthera tigris altaica* among other species. Rimbunan Hijau plans to build a road from the town of Sukpai to the port of Nelma to export the timber and this has been opposed by environmental groups because the road would bisect the Samarga River watershed, which contains 8000 sq km of roadless ancient forests. Local environmentalists are demanding a strict environmental impact review of logging plans to ensure that they comply with Russian law and ecologically sustainable logging practices. *Source: Taiga News, Issue 23, January 1998, 1.*

NORTH AFRICA & MIDDLE EAST

Bankoualé palm needs help

The Bankoualé palm *Livistona carinensis* occurs only in three very restricted but disparate

areas – in Yemen, Somalia and Djibouti. It is a tall and elegant species of fan palm much valued locally for its long, straight trunk, which is ideal for roofing timbers. A survey of the palm's stronghold in Yemen in March 1998 found a total of 1357 palms, including three at a new site 60 km from the known stands. The palms are all healthy but very young, with almost no trees taller than 10 m (a mature tree can grow to 26 m or more). Disturbingly, the survey also counted 1936 cut stumps, demonstrating extensive local exploitation and explaining the even-age structure of the Yemen population. Surveys in Djibouti and Somalia have also shown a decline, with just 38 trees left in Somalia and around 400 in Djibouti. A suggested conservation strategy for the species is being developed. *Source: Hilary and Geof Welch, Minsmere Reserve, Westleton, Saxmundam, Suffolk IP17 3BY, UK.*

Jordan wetland restored

Azraq Wetland Reserve in Jordan is being restored with funds from the UNDP/GEF. This oasis, which once supported abundant wildlife, including 21 species of waterbirds and the endemic Azraq killifish *Aphanius sirhani*, has been drying out as a result of excessive extraction of water from the underground aquifer that fed it. Underground fires spread in the dried peat soil. In 1994 work started to restore the wetlands; staff were recruited to control fires and illegal grazing, and water was pumped to the site from a government well. Two relic pools were dredged and enlarged and now there are plans to restore open water and low marsh communities. A visitors' centre

is due to open later this year.
Source: Ramsar Forum, 14
 February 1998.

SUB-SAHARAN AFRICA

Sharks threatened in Guinea Bissau

Sharks in the Bijagos archipelago of Guinea Bissau, which was declared a Biosphere Reserve in April 1996, have never been fished by indigenous fishermen. The growth of the shark fin market in the region for export to the Far East, however, has prompted fishermen from neighbouring countries to fish in the archipelago. Large numbers of shark carcasses with their fins removed have been found on beaches. A preliminary survey indicated that shark populations are declining and it has been estimated that c. 250 tonnes of dried fins a year worth \$US16 million are being exported from the archipelago. Mauritania is also witnessing increased pressure on sharks, and IUCN Guinea Bissau and the Fondation Nationale du Banc d'Arguin in Mauritania is initiating a 3-year research programme for the monitoring of the shark populations in the Banc d'Arguin National Park and the Bijagos archipelago Biosphere Reserve.
Source: Shark News, No. 10,
 January 1998, 4.

Plant conservation in Cabo Verde

The native vegetation of the 17 islands of the Republic of Cabo Verde, which lies 600 km west of Senegal, West Africa, has been reduced to fragments as a result of human activities. Of the 240 indigenous plant species recorded, 84 are

endemic and over 25 per cent are threatened. A nature conservation project set up in 1993 by the German Agency for Technical Co-operation has identified 20 sites for protection. The key sites comprise the surviving stands of the formerly dominant shrubby spurge *Euphorbia tuckeyana* and intact coastal habitats, which are also important breeding sites for marine turtles. The project has also run an education campaign for the islanders. The next phase of the project is to establish a 75-sq-km protected area on Fogo Island, which has the highest number of endemic species but whose vegetation is threatened by clearance for firewood, pasture, gathering of fodder and plantations of castor oil plants.
Source: Plant Talk, April 1998,
 24–26.

Deforestation overestimated?

Estimates of forest decline in West Africa since 1900 may be only one-third of the figures currently cited in international scientific literature, according to a new report. Its authors claim that, while analyses of current vegetation cover and of change over the last decade are increasingly precise, the same cannot be said for the assessments of past forest cover with which these analyses are compared. When investigating past cover, forest loss assessments have either used historical sources uncritically or have not used historical data at all, instead making suppositions concerning the nature and extent of earlier vegetation or to make uncritical reference to other studies that do this. The authors claim that exaggerated estimates of deforestation have several consequences: among other things they mislead

climatic modelling and unjustly support Draconian environmental policies that further impoverish people in what is already a poor region.
Source: Fairhead, J. and Leach, M. 1998. Reconsidering the extent of deforestation in twentieth century West Africa. Unasylva 192, 49, 38–46.

Protecting Africa's trees

Pests and diseases are increasingly hindering forestry and agroforestry programmes in Africa. Accidentally introduced alien aphids, for example, can kill plantation trees or damage them so badly that their growth is stunted, and may also have an impact on native tree species. Invasive weeds, however, are the greatest threat to native forest and can prevent forest regeneration. Biological control programmes are under way for some widespread pests, such as the cypress aphid *Cinara cupressi*, which damages exotic and native trees in at least seven eastern and southern African countries. There is a need for a co-ordinated regional approach to solving the problems and work has started on this.
Source: Murphy, S.T. 1998. Protecting Africa's trees. Unasylva 192, 49, 57–61.

Liberian mongoose in Côte d'Ivoire

The Liberian mongoose *Liberiictis kuhni*, known until recently only from seven localities in Liberia (but suspected at others as well as in Sierra Leone, southern Guinea and western Côte d'Ivoire), has been confirmed as present in Taï National Park in Côte d'Ivoire. A dead individual was found on 19 March 1997 during research to identify the natural

reservoir of the Ebola virus in the country.

Source: *Small Carnivore Conservation*, No. 18, April 1998, 12–14.

Tree trouble in arid lands

Two species of *Prosopis*, trees from South America that were introduced in the early 1980s in the Lake Turkana area of Kenya as fodderplants and for desert afforestation, are causing problems. The trees have thrived and spread but have provided a breeding area for tree locusts *Anacridium melanorhodon arabafrum*, which were not a problem in the area before. The pods of the plant, attractive as fodder for goats, cattle and camels, and also liked by people, appear to have become poisonous. People have reported serious stomach problems and livestock have died after eating the pods. The plants' rapid spread and dense thorny growth make them difficult to control.

Source: *National Museums of Kenya Horizons*, No. 1, November 1997, 14.

Colobus monkey in peril

A rare subspecies of the Angola black-and-white colobus monkey, *Colobus angolensis palliatus*, which lives in forest fragments in the Diani area of Kenya's south coast is under threat. A survey found 165 individuals but they were widely scattered, with around half inhabiting isolated forest patches that can barely support one group. Well over half the groups live in hotel and residential areas where continued forest clearance threatens their survival. Busy roads and electricity supply lines make movements difficult and many monkeys have been killed. The Wakaluzu Friends of the

Colobus Trust is installing colobus bridges across roads to try to reduce mortality.

Source: *National Museums of Kenya Horizons*, No. 1, November 1997, 14–15.

Saintpaulia needs help

The genus *Saintpaulia* (African violets) has been promoted as a botanical 'panda', symbolizing the decline of the tropical moist forests of the Eastern Arc mountains of East Africa. Although horticultural cultivars are common in homes all over the world, some of the 21 wild species are on the brink of extinction in Tanzania and Kenya. The greatest threat is habitat loss or degradation. In the Usambara Mountains, the centre of *Saintpaulia* diversity, only 58 per cent of the original tropical forest remains above 600 m and only 15 per cent of coastal forest is left. Many species are known from only a few fragmented populations, which, coupled with their restricted distribution makes them Critically Endangered. The fundamental conservation priority is to establish a series of viable protected areas in Kenya and Tanzania. It is likely that some populations need *in-situ* management linked with *ex-situ* cultivation in the countries of origin. The genus *Saintpaulia* is a classic example of an East African natural resource that has been developed commercially in Europe and North America with no financial return from the multi-million dollar trade to the countries or areas of origin.

Source: *Curtis's Botanical Magazine*, 15 (1), 49–62.

Sustainable harvest of devil's claw

The secondary storage roots of *Harpagophytum procumbens*,

locally known as devil's claw or grapple, are used in many European countries to treat rheumatic problems. The plants grow in the Kalahari desert in Namibia and in parts of adjacent South Africa, Botswana and Zimbabwe, and can only be found in the short rainy season. Traditional collectors dig up the plants to collect the tubers, destroying the plant in the process. A sustainable harvesting method was developed and tested on a farm in southern Namibia at the foot of the Schwarzrand mountains. It involves using a 4-year rotation, collecting the tubers but reburying the primary roots and fruits. Because the roots are often damaged during excavation, the rate of regrowth is only about 50 per cent but if the primary root dies, seedlings, which are normally suppressed by root competition, can establish.

Source: *Medicinal Plant Conservation*, 4, 7–9.

Giant sable survives

A ground survey in Luando Reserve in Angola in November 1997 found 253 giant sable *Hippotragus niger variani* and all indications were that there were more. It was feared that the subspecies may have disappeared from both Luando Reserve and Kangandala National Park because both protected areas were occupied repeatedly by rival armies during Angola's long civil war.

Source: *Gnusletter*, 16 (2), 7–8.

Bovine TB free zone

Bovine tuberculosis, a major threat to buffalo *Syncerus caffer* populations in the Hluhluwe–Umfolozi game reserve complex in KwaZulu/Natal, South Africa, is being tackled

by a coalition of conservationists, ranchers and veterinarians. The KwaZulu/Natal Nature Conservation Board will supply the Natal Game Ranchers Association with 100 TB-free buffalo a year for the next 7 years. The animals will be allocated to private farms for game viewing and will provide an opportunity to establish TB-free buffalo in the infected areas of the country.
 Source: Conservation Corporation Africa, 27 January 1998.

Table Mountain to be a national park

Table Mountain, which covers 300 sq km on Cape Peninsula in South Africa, is to become a national park in 1998. The spectacular flora is dominated by the families Proteaceae, Ericaceae and Restionaceae. Six other families are endemic to this vegetation formation (fynbos). The South African Red Data List includes 122 plant taxa from the mountain.
 Source: *Plant Talk*, April 1998, 12.

Endangered cycads propagated

Four endangered South African cycad species – *Encephalartos cycadifolius*, *E. dyerianus*, *E. ferox* and *E. natalensis* – have been micropropagated using small pieces of embryo tissue. Attempts to propagate *E. woodii*, possibly the rarest plant in the world, have not yet been successful. Only males are known, all offspring of a single individual found at the end of last century and planted in Durban Botanic Gardens. Tissue culture using young leaf material has so far produced only masses of undifferentiated cells.
 Source: *Veld & Flora*, 83 (4), 113.

New park in Madagascar

The new Masoala National Park in Madagascar, which was signed into law on 18 October 1997, encompasses 2176 sq km of white-sand beaches, hardwood forests and steep hills. Among the species that will benefit are the serpent eagle *Eutriorchis astur*, Madagascar red owl *Tyto soumagnei* and the tomato frog *Dyscophus antongilii*.
 Source: *Wildlife Conservation*, March/April 1998, 29–35.

540 Mauritius kestrels

The Mauritius kestrel *Falco punctatus*, of which only four individuals were known in the wild in 1974, now numbers 540 in the wild thanks to a restoration programme started by Jersey Wildlife Preservation Trust in co-operation with many other organizations. The last captive reared kestrel (no. 333) was released in 1994 and monitoring of the population since then has confirmed that the species needs no more management or assistance.
 Source: *On the Edge*, No. 81, February 1998, 1–2.

SOUTH & SOUTH EAST ASIA

Chagos sharks decline

Comparisons of sharks counted in diving expeditions to the Chagos archipelago in the 1970s and 1996 has revealed declines in numbers. The shark sighting rate for the period 1975–79 was *c.* 4.2 sharks per dive while in 1996 it was 0.6 sharks per dive. This suggests that shark numbers in 1996 had been reduced to about one-seventh of their numbers in the 1970s, probably as a result of

overfishing. Before the 1980s there was very little fishing in the Chagos but since then an agreement between the governments of UK and Mauritius (which has a political claim on the Chagos) has allowed Mauritian fishermen to visit the Chagos. While their main target is fin fish, they probably also catch sharks. In addition, Sri Lankan fishermen fish there illegally, specifically for sharks.
 Source: *Shark News*, No. 10, January 1998, 1–3.

Dam stopped

The Madhya Pradesh state government has halted construction on the controversial Maheshwar hydroelectric dam in the Narmada Valley in central India until a review of its social and environmental impacts has been made.
 Source: *BBC Wildlife*, March 1998, 28.

Turtles in Orissa

On 23 March 1998 3000–4000 female olive ridley turtles *Lepidochelys olivacea* emerged to nest at the Indian state of Orissa's second major nesting site, a 2-km-long beach north of the Rushikulya River. A large number of trawlers were working nearby and efforts were being made to urge the Indian Coast guard to protect the area. It is thought that *c.* 30,000 turtles nested there in 1997 but no turtles have been recorded at Gahirmatha, Orissa's major turtle nesting beach for the second consecutive year.
 Source: Wildlife Protection Society of India, 26 March 1998.

Poisoning the Sunderbans

Poachers are using the lethal poison RIBCOT in the

Sunderbans, India, to catch crabs and shrimps. When the poison is sprayed on to the water, crustaceans crawl out of the water where they can be captured, but it is reported that the poison is killing fish, crocodiles and other aquatic animals.

Source: *IUCN/SSC Crocodile Specialist Group Newsletter*, October–December 1997, 16 (4), 5.

Forest owlet rediscovered

The forest owlet *Athene blewitti* was rediscovered in degraded remnant foothill forest in the Indian state of Maharashtra in November 1997 by a team from the USA. All that was known of this Indian endemic was from seven specimens collected between 1872 and 1884.

Source: *World Birdwatch*, March 1998, 20 (1), 3.

Indian rhinos continue to be lost

In 1997 Assam, which harbours 75 per cent of Indian rhinoceroses *Rhinoceros unicornis*, lost 24 rhinos to poachers: 12 in Kaziranga National Park, three in Pabitora Wildlife Sanctuary and nine in Orang Wildlife Sanctuary. The state budget for Kaziranga National Park was cut drastically but non-governmental organizations were able to assist financially, and were it not for the dedicated staff, poachers may have claimed more rhinos. Three poachers were killed in Kaziranga in November 1997.

Source: Bibhab Kumar Talukdar, Samanwoy Path (Survey), PO Beltola, Guwahati 781 028, Assam, India.

Gharials in Bangladesh

Gharials *Gavialis gangeticus* were seen in October 1997 in

the lower reaches of the River Padma in Bangladesh, 6 years after the last official record of the species in the country, when two young gharials were caught by fishermen in the Teesta River and given to Dhaka Zoo.

Source: *IUCN/SSC Crocodile Specialist Group Newsletter*, October–December 1997, 16 (4), 5.

Pollution in Nepalese park

The Naryani, one of Nepal's major rivers, flows through the Royal Chitwan National Park and eventually into the Ganges in India. A recently constructed paper mill above the park is drawing water from the river at the rate of 250 cu m/minute; 5 per cent is consumed and the rest is released into the river as dark brown, foul-smelling effluent. The director of Chitwan is concerned about the potential threat to the park as well as the possible effects of small factories, and a major brewery and distillery also being built. A Nepalese/USA team is monitoring the pollution and the results will be presented to the Nepalese Government in the hope that conservation and anti-pollution measures will be implemented before irreparable damage is done.

Source: *Centre for Reproduction of Endangered Species Report*, Spring 1998, 1–2.

Giant catfish demise

Spawning adults of the Mekong giant catfish *Pangasius gigas* migrate up the Mekong River from southern Vietnam north through Kampuchea and to Thailand. It now occurs in appreciable numbers only in Chiang Khong, Thailand, where it is still fished despite declining numbers. In 1983 the Thai Government started an

artificial breeding programme to boost numbers, rearing hatchlings from sperm and eggs extracted from wild fish. The young fish are sold commercially or released into reservoirs and rivers throughout Thailand but there is no evidence that the artificially reared fish have ever bred. It is thought that the fish could become extinct in the wild within 20 years.

Source: *Wildlife Conservation*, April 1998, 12.

Smugglers occupy Thai park

Talay Bun National Park was created in 1980 in virgin forest in the Ta Nao Sri mountain range in southern Thailand on the border with Malaysia. Angry villagers, protesting about delays in granting documents regarding farming rights on the land they occupied when the park was declared, attacked the national park office on 19 February and set fire to tourist lodges, staff living quarters and a working area for the Queen of Thailand. The unrest is believed to be encouraged by gangs who want to maintain smuggling routes for drugs, to continue illegal logging and to lay claim to land for money laundering investments. Parts of the forest are dominated by armed Mujahideen terrorists, hampering officials in survey work to establish land rights. Source: *Bangkok Post*, 22 March 1998, 1 & 3.

Tackling illegal logging in Thailand

The discovery of large-scale illegal logging in Mae Hong Son along the Salween River in Thailand prompted the formation of a special army task force to protect the forests.

The order came from the prime minister after he visited the area and blamed the Mae Hong Son governor for not having discovered the problem. Felled logs were found throughout the Salween National Park and Wildlife Sanctuary and thousands were tied together as rafts in the Salween River. Illegal loggers apparently move the logs into the river and claim that they have come from Burmese forests. The forestry department deputy chief is under investigation for taking a bribe from a logging tycoon to help launder illegally cut logs from the park.

Source: *Bangkok Post*, 16 & 26 February, & 3 March 1998.

Park plundered

Bokor National Park in Cambodia has been invaded by armed loggers who have cut hundreds of hectares of forest. The 140,000-ha park received funding from the European Commission 18 months ago but the 15 EC-funded rangers are no match for the loggers. Aerial surveys suggest that probably 80 per cent of the park is affected by logging, with perhaps only the steep slopes untouched.

Source: *BBC Wildlife*, March 1998, 26.

New muntjac described

The Truong Son muntjac (see *Oryx*, 32 [1], 24), discovered last year in central Vietnam, has been described from 17 skulls and two tails obtained from hunters. Named *Muntiacus truongsongensis*, it is smaller than the common muntjac and black in colour. Three other species of muntjac from the same area, the Annamite mountain range, await description. Surveys are far from complete in this area and other isolated montane

blocks may yield yet more new species.

Source: Giao *et al.*, 1998. *Animal Conservation*, 1, 61–68.

Still only 14 Bali starlings

Despite conservation action since the 1980s, only 14 Bali starlings *Leucopsar rothschildi* survive on the Indonesian island of Bali. Reducing poaching is critical to this species's continued survival and the idea of installing alarms on nesting trees is being considered. Poachers should also be prosecuted successfully, which is not happening at present.

Source: *World Birdwatch*, March 1998, 20 (1), 4.

New rail

A new species of *Gymnocrex rail* has been discovered in the Talaud Islands of Indonesia in the Sangihe and Talaud Endemic Bird Area.

Source: *World Birdwatch*, March 1988, 20 (1), 3.

EAST ASIA

Chinese forensic wildlife laboratory

China has opened its first wildlife forensic laboratory in Shanghai to combat the illegal trade in endangered species.

Without forensic techniques it is impossible to identify parts of rare species that have been used in traditional medicines.

Source: *New Scientist*, 18 April 1998, 5.

Jacana threatened

The pheasant-tailed jacana *Hydrophasianus chirurgus* in Tainan County, Taiwan, is facing extinction there because

of the proposed destruction of its remaining marshland habitat to provide a high-speed rail route. The species used to occur throughout Taiwan but agricultural development has resulted in its habitat shrinking. The bird is now concentrated in Tainan County and its total population is believed to number only 50. Conservation groups are calling for an alternative route and for the authorities to upgrading the classification of the jacana from 'Rare and Valuable' to 'Endangered'.

Source: *International Conservation Newsletter*, December 1997, 5 (4), 6.

New whale shark fishery in Taiwan

A new market has developed in Taiwan for the whale shark *Rhincodon typus*, the world's largest fish – it grows to a length of 18 m or more and weighs up to 40 tonnes. Little is known of its biology and it is listed as Data Deficient in the 1996 IUCN Red List of Threatened Animals. Referred to as the tofu shark because of its soft white flesh, it is now considered a delicacy and high prices are paid for it. There is increasing concern that trade may be depleting stocks and research is needed to form the basis of a whale shark management plan.

Source: TRAFFIC Press Release, 28 November 1997.

NORTH AMERICA

Canada in court

Environmental groups are taking the Canadian federal government to court after cabinet approved an open-pit coal mine in a Critical Wildlife

Area adjacent to Jasper National Park. The Cheviot coal mine was approved even though it was noted that the project would have significant adverse effects on grizzly bears, wolves, wolverines, cougars and migratory birds.

Source: *Canadian Nature Federation Nature Alert*, 8 (1), 1.

Good news for Yukon's wolves

In December 1997 Yukon's Minister of Renewable Resources announced that there would be no more wolf control programmes during his government's term (nearly 3 more years). The Yukon government of Canada sanctioned the killing of over 450 wolves in 7 years in the Finlayson area because some people argued that the wolves were responsible for reducing the caribou population. Over 150 other wolves were killed in the more recent Aishihik wolf kill programme, which ended in the winter of 1996/97. The minister said that future management of caribou, moose and sheep and their habitat in Yukon must have the objective that populations are not allowed to reach levels where wolf reduction might be considered necessary.

Source: *Canadian Nature Federation Nature Alert*, 8 (2), 3.

Grassland protection

In February the government of British Columbia, Canada, announced the purchase of 110 sq km of grassland in the Churn Creek area, one of the most important grassland ecosystems of the country. The purchase of Empire Valley ranch will protect a rare bunchgrass ecosystem, which provides habitat for vulnerable and threatened species

including California bighorn sheep *Ovis canadensis californica* and long-billed curlews *Numenius americanus*.

Source: *Canadian Nature Federation Nature Alert*, 8 (2), 1.

Swordfish off the menu

Twenty-seven leading chefs along the eastern seaboard of the USA have taken North Atlantic swordfish *Xiphias gladius* off their menus in 1998 in response to the finding that the fishery has crashed. The fishery has fallen to about 5 per cent of historical levels, a result of overfishing since the early 1960s.

Source: *Wildlife Conservation*, March / April 1998, 20.

Cranberry demand causes pressure on bogs

Cranberries *Vaccinium oxycoccus* have become so popular in North America that as growers in Wisconsin, which produces more of the berries than any other state, work to meet the rising demand, environmental groups worry about the expansion of cranberry bogs into the state's wetlands. In the past year three Wisconsin cranberry growers were cited by the Environmental Protection Agency for expanding into sensitive wetland sedge meadows without obtaining the permits required by the Clean Water Act.

Source: *Audubon*, March–April 1998, 100 (2), 16.

Lamprey control

The Atlantic sea lamprey *Petromyzon marinus*, which was first found in the Great Lakes of the USA in 1921 and is believed to have invaded through the Erie canal system, is still present in northern Michigan's

St Marys River and causing problems for lake trout in Lake Michigan and Lake Huron, although it has been controlled elsewhere by chemicals, barriers and traps. In a new attempt to control it, this year 20,000 sterilized male lampreys will be released into St Marys River to compete with local fertile males, which should result in the fertilization of fewer eggs.

Source: *Audubon*, March–April 1998, 100 (2), 16.

Aversion therapy for bears

Bears that raid campsites and garbage cans in the USA are being captured, then released at the raid site. Rubber bullets, bear dogs straining at their leashes and baying, as well as people shouting give the animal an unpleasant experience associated with the site and, as the bears move away, they find they are safe. In Yosemite National Park six black bears *Ursus americanus* that habitually raided campsites have been reformed, while in Glacier National Park 14 bears that fed on spring growth along a road have been trained to move into cover when vehicles approach. The previous method used included destroying the bears or relocating them, but in the latter case they either found their way back or found new campgrounds to raid.

Source: *Wildlife Conservation*, March / April 1998, 15.

Bison kill

Last year 1100 bison *Bison bison*, almost one-third of the population in Yellowstone National Park, were either shot or shipped to slaughter when they crossed the park boundary, in an attempt by Montana officials to prevent the

transmission of brucellosis to cattle. In December the US National Research Council said that the chances of cattle catching the disease from bison were very small and a US District Judge ordered Yellowstone to provide supplementary food to the bison, contrary to the park's policy of natural regulation. He ruled that no more than 100 animals could be shot or shipped to slaughter in the 1997/98 winter but that he might raise that threshold if the 2400 that survived last winter embarked on a mass exodus from the park.

Source: *Audubon*, March–April 1998, 100 (2), 20.

New records for whooping cranes

On 31 December 1997, when the world's whooping cranes *Grus americana* were counted, new records were revealed; 181 birds had arrived in Texas from their breeding range in Canada, 29 of them young of the year. Both the total and the number of young were new records for this population. At the end of the previous year there were 158 in this flock. The overall total including captive birds was also up, from 337 a year previously to 364.

Source: *Grus Americana*, April 1998, 1.

Record number of terns

Record numbers of terns nested on island sanctuaries in the Gulf of Maine in 1997 thanks to conservation efforts since the early 1980s. One of the controversial measures was to kill gulls, which prey on terns and can have a devastating effect when tern colonies are small. Now 10 islands out of 240 or so are gull free and it is these that have healthy tern

populations. In the summer students drive away gulls that seek to nest on the tern islands. Last year 7100 pairs of common terns *Sterna hirundo*, 4000 pairs of arctic terns *S. paradisaea* and 237 pairs of roseate terns *S. dougallii* nested on the islands and together fledged some 10,000 chicks. The nestings marked an increase of as much as 47 per cent over the previous year.

Source: *Wildlife Conservation*, January/February 1998, 15.

Salmon listing proposal

A proposal to list 13 populations of Pacific salmon *Oncorhynchus* spp. under the US Endangered Species Act could have severe economic impacts. Water managers might have to extract less water from rivers in California and there might have to be restrictions on logging and urban expansion in Washington. There will be a series of public hearings throughout the region before a decision is taken.

Source: *New Scientist*, 7 March 1998, 13.

Centre for oil spill victims

The California Department of Fish and Game has opened the largest facility in the world for the cleaning and care of birds and mammals injured by oil spills at sea. Built in Santa Cruz with funds from tanker fleets and pipeline operators, the facility can handle 125 sea otters and 100 birds at a time.

Source: *Wildlife Conservation*, March/April 1998, 15.

A fly to catch an ant

Tiny parasitic phorid flies from Brazil are being released in Florida, USA, in an attempt to control fire ants, also from Brazil. The fire ants attack

people and livestock, and have displaced native ants in many areas of Texas, Oklahoma, Florida and North Carolina. Source: *Wildlife Conservation*, March/April 1998, 19.

Coral killer identified

A pathogen that has been killing coral off the coast of Florida, USA, since 1995 has been identified as a new species of *Sphingomonas*, a bacterial genus first described in 1990. The disease was first recorded in 1995 and 17 species of coral have been affected.

Source: *Nature*, 392, 557–558.

Manatees move

The US Fish and Wildlife Service Manatee Rescue-Rehabilitation Program is to send some of its captive manatees *Trichechus manatus* to new homes outside Florida, for the first time in the programme's history. Currently more than 50 manatees are being cared for at six Florida facilities; this number includes some of the 20–30 manatees rescued each year. The move will free space for critical care of orphaned and sick manatees, and will provide an excellent educational opportunity for the programme.

Source: *Endangered Species Bulletin*, January/February 1998, XXIII (1), 25.

Wood partridge refund

A population of the Critically Endangered bearded wood-partridge *Dendrortyx barbatus* has been rediscovered in cloud forest at Hidalgo, Mexico, at a site where the species was last seen in 1986.

Source: *World Birdwatch*, March 1998, 20 (1), 3.

New turtle

A new species of mud turtle has been found in the south-western lowlands bordering Mexico's Pacific coast. It has been named *Kinosternon chimalhuaca* after a tribe of native Americans thought to have lived in the area before the Spanish Conquest. The species is characterized by a reduced plastron (the part of the shell under the body).
Source: *Chelonian Conservation and Biology*, 2, 329–337.

CENTRAL AMERICA & CARIBBEAN**Honduras dam**

The proposed Patuca 2 dam on the River Patuca in Honduras would flood tens of thousands of hectares of species-rich rain forest if it goes ahead. The associated building of new roads and the subsequent influx of people would add further threats to the forest that separates the Mosquito Coast from inland Honduras and would ruin the chances for establishing the Mosquito Forest as an intact biological corridor. It would also destroy plans that the Tawahka people, who live along the river, have for setting up the 233,142-ha Tawahka Asangni Biosphere Reserve, which links the Platano Biosphere Reserve in the north with the Bosawas Reserve to the south. The Tawahka are lobbying the Honduras Government to set up the reserve, which needs legal status to protect the area and its native people.
Source: *Plant Talk*, April 1998, 13.

SOUTH AMERICA**Brazil's Atlantic Forest under attack**

Foz do Iguaçu National Park, which encompasses 1750 sq km of subtropical Atlantic rain forest in southern Brazil, contains more than 488 species of birds, including the harpy eagle *Harpia harpyja*. The core of the reserve is threatened by a road and although action by Brazilian environmentalists eventually blocked the road, there is strong political pressure to reopen it.
Source: *Wildlife Conservation*, March/April 1998, 17.

Argentina's grassland birds threatened

Native grasslands of Corrientes Province in north-east Argentina are threatened by the rapid expansion of pine and *Eucalyptus* plantations to meet the demand for cheap paper, particularly tissue paper. The Campos grasslands, which originally covered 12,000 sq km, host seven globally threatened species, including the endangered ochre-breasted pipit *Anthus nattereri* and saffron-cowled blackbird *Xanthospiza flavus*. Over 18,000 ha were converted to plantations in 1997 and no grassland reserves exist.
Source: *World Birdwatch*, March 1998, 20 (1), 4.

Hybrid birds

Two intergeneric hybrids between the yellow cardinal *Gubernatrix cristata* and the common diuca finch *Diuca diuca minor* were captured in an area of sympatry between the two species in eastern Rio Negro Province, Argentina. Other hybrid specimens have

been reported from localities in south-east La Pampa, south Buenos Aires. It is believed that the hybridization occurred because of the capture of more male than female *G. cristata* for the illegal pet trade. The hybrids are viable but the degree of fertility is unknown. *Gubernatrix cristata* is threatened and it is important to discover the effects of the hybridization on this species.
Source: Bertonatti, C. and Guerra, A.L. 1997. *Hornero*, 14, 235–242.

PACIFIC**Jellyfish discovery**

An enormous species of scyphozoan jellyfish has been described from the eastern Pacific. With a smooth, purple-black bell 1 m in diameter and pale pink tentacles 6 m long, the jellyfish is much bigger than other species of the genus. It has been named *Chrysaora achlyos*. The jellyfish was seen in large numbers off southern California and Mexico in 1989 but only four specimens were collected. Although it has appeared at least twice before this century – photographs unlabelled or incorrectly identified were published in 1926 and 1965 – it has not been seen since 1989.
Source: *Biological Bulletin*, 193, 8–13.

AUSTRALIA/NEW ZEALAND/ANTARCTICA**Crocodile kill sanctioned but now on hold**

Saltwater crocodiles *Crocodylus porosus* in Australia's Northern Territory were hunted legally in

September 1997 for the first time since their protection in 1971. The trial hunt was part of a training and management programme for Aboriginal landowners of the Maningrida community in Arnhem Land 400 km east of Darwin. The landowners were permitted to kill six crocodiles from four river systems and sell the skins internationally. However, Australia's protectionist environmental movement opposes the territory's commercial use of wildlife and is fighting the government's expansion of these programmes. The Maningrida trial harvest and training programme has now been placed on hold.
Source: IUCN/SSC Crocodile Specialist Group News, October–December 1997, 16 (4), 6–7.

Sea lions a step nearer extinction

Conservationists are angry about the New Zealand government sanctioning the killing of 63 New Zealand sea lions *Phocartos hookeri* in fishing industry trawl nets in the 1998 season just after the population of this threatened species was severely knocked back by a mystery disease. The disease in the main breeding colonies killed at least 60 per cent of the pups and 20–60 per cent of the adults. Conservationists have been urging the government to establish a 100-km marine mammal sanctuary around the Auckland Islands to protect the sea lions since 1991.
Source: Forest & Bird Conservation News, No. 108, March 1998, 2.

Campaign against lead

Forest & Bird, a New Zealand conservation organization, has

launched a campaign to protect wetlands from lead contamination. Every year shooters leave behind millions of spent lead shotgun pellets, which poison waterfowl foraging for food or grit. Lead levels in New Zealand are high by international standards. A study of the Kaikorai lagoon in Otago found an average of 387,500 lead pellets per ha, and a 1992 study in the Waikato showed that 14 per cent of waterfowl had lead shot in their gizzards. Fishing weights are another source of lead contamination; a survey found that 4000 kg of lead had been sold in a year by fishing retailers in Taupo.
Source: Forest & Bird Conservation News, No. 108, March 1998, 3.

Legislation for forest

The 2171-ha Waitutu Forest in New Zealand is to be managed as if it were an integral part of a national park by its 800 Maori owners as a result of new legislation. The owners have been compensated for the loss of logging rights. The forest lies around Te Waewae Bay in Southland and is one of the very few unmodified forests left in the country. The outstanding bird life includes the threatened yellowhead *Mohoua ocreocephala* and kaka *Nestor meridionalis*.
Source: Forest & Bird, No. 287, February 1998, 6.

Alien seaweed causes concern

Conservationists are concerned about permission being granted to farm alien seaweeds, *Undaria* spp., in Mahanga Bay near Seatoun, Wellington, New Zealand. The seaweeds are likely to have a long-term impact on the only rocky reef communities and replace native

seaweeds. The Asian seaweeds were first recorded in Wellington Harbour in 1987, believed to have arrived from Japan on ships, and have since spread throughout New Zealand. *Undaria* spp. are a popular food in Japan, where they are known as wakame and used in miso soup and noodle dishes. The New Zealand Department of Conservation is currently trying to eradicate the species from Stewart Island.
Source: Forest & Bird, No. 287, February 1998, 5.

New Zealand alpine reserve

The New Zealand government has purchased a new 6000-ha reserve at Porter's Pass, North Canterbury. Adjacent to Lake Lyndon, the reserve includes alpine grasslands, shrublands and forest. The reserve contains 33 species of alpine plants and will protect many native bird species. It is hoped that the reserve will become part of a new Torlesse Conservation Park, which would also include existing conservation land to the north along Torlesse Ridge and to the west on the Craigieburn Range.
Source: Forest & Bird, No. 287, February 1998, 5.

Alien moth eradicated

Two years after the white-spotted tussock moth was first found in Auckland's eastern suburbs it appears that an eradication programme using aerial spraying has been successful. To test the effectiveness of the spraying, 7000 pheromone-baited traps were placed in Auckland properties last year to trap the male moths and none has been caught. High-density trapping will continue until mid-1988 in case an undetected population

has survived. The moth was a serious threat to native forest.
Source: Forest & Bird Conservation News, No. 108, March 1998, 1 & 4.

New snipe

In November 1997 staff from New Zealand's Department of Conservation found what is likely to be a new subspecies of snipe *Coenocorypha aucklandica* on Jacquemart Island, in the subantarctic Campbell Island group. It appears to be restricted to the 19-ha islet where there is a minimum population of 10 birds. The closest population of snipes is that on Auckland Islands nearly 400 km to the north-west. Snipe were once found throughout New Zealand but are now confined to rat-free islands.

Source: Forest & Bird, No. 287, February 1998, 10.

PEOPLE

Conservationists honoured by being made Officers of the Order of the British Empire in the Queen's 1998 New Year's Honours List included: **Jeremy Mallinson**, Director of Jersey Wildlife Preservation Trust, for his services to conservation; **Georgina Mace** of the Zoological Society of London, for her services to endangered species; and **Oliver Rackham**, one of the UK's foremost authorities on woodlands, for his services to nature conservation. Environmentalist **Norman Myers** was made a Companion of the order of St Michael and St George.

Ghillean Prance, Director of the Royal Botanic Gardens, Kew, UK, received the Botanical Research Institute of

Texas's fourth International Award of Excellence on 10 March 1988. The award was made in recognition of his efforts to save the world's plant diversity and with projects that seek to improve people's lives.

Marc G. M. van Roosmalen of the National Institute for Amazon Research (INPA) in Manaus received the order of the Golden Ark from His Royal Highness Prince Bernhard of the Netherlands on 29 November 1997. The award was in recognition of his conservation efforts to identify priority areas for protection and the discovery of several species new to science.

OBITUARY

Jorge Anhalzer, 1935–1998

Jorge Anhalzer, who died in the Air France crash in Bogota on 29 April, was the first Ecuadorian president of the Charles Darwin Foundation, the international organization that runs the Charles Darwin Research Station in the Galápagos and advises the Ecuadorian government on the conservation of the islands. Jorge was not a scientist but a bringer-together of people, a quiet and unassuming man who was deeply involved in, and played a vital role in the recent successful campaign to have the Ecuadorian Congress pass the new Galápagos Law, which is so important to the future preservation of those very special islands. Needless to say Jorge played down his role, but without him I suspect we might have failed. Jorge will be very hard to replace, and yet he arrived in Ecuador almost by chance; he was born in Hungary and his parents fled

the troubles in Europe in 1938, taking the first ship they could, which happened to be going to Ecuador. How fortunate we were, His death is a major blow to the conservation effort in Galápagos.

Julian Fitter, 25 May 1998.

NEW GROUPS

Red panda group

The Zoo Outreach Organization/CBSG India has started a Red Panda Special Interest Group for specialists and enthusiasts with an interest in the conservation and management of the red panda in India. Members will be expected to contribute and disseminate information, promote awareness of the need for special conservation measures and organize educational activities.

Contact: Red Panda SIG, c/o ZOO/CBSG, India, PO Box 1683, Coimbatore 641 004, India.

Gorilla veterinary group

Following a Population and Habitat Viability Analysis on the mountain gorilla *Gorilla gorilla beringei*, held in Uganda, 8–12 December 1997, a small group of veterinarians formed a Mountain Gorilla Health Network. Its purpose is to provide a forum for communication and exchange of information concerning the health and diseases of the mountain gorilla.

Contact: John E. Cooper, Jersey Wildlife Preservation Trust, Les Augrès Manor, Trinity, Jersey JE3 5BP, Channel Islands, UK

OPPORTUNITIES

Field assistant needed for Ethiopian Wolf Conservation Programme

Experienced field biologist (mountain trekking, horse-riding, previous African experience and tolerance for rainy-cold weather a must) required to monitor endangered Ethiopian wolf population in the Bale Mountains from October to March. Salary and expenses paid. Future opportunities. Write with CV to Dr Claudio Sillero, WildCRU, Zoology Department, South Parks Road, Oxford OX1 3PS. E-mail: claudio.sillero@zoo.ac.uk

MEETINGS

Ecological Exchanges Between Major Ecosystems. 2–6 August 1998, Baltimore, Maryland, USA. *Contact:* Fred Wagner, ESA Program Chair, Ecology Center, Utah State University, Logan, UT 84322-5205, USA. Tel +1 (801) 797 2555; E-mail: fwagner@cc.usu.edu.

Integrated Tools for Natural Resources Inventories in the 21st Century – Inventory and Monitoring of Forested Ecosystems. 16–20 August 1998, Boise, Idaho, USA. *Contact:* Mark Hansen, USDA Forest Service, North Central Forest Experiment Station, 1992 Folwell Avenue, St Paul, MN 55108, USA. Fax: +1 (612) 649 5285; E-mail: hanse034@maroon.tc.umn.edu.

Round Table Discussion on Bird Reintroductions to be held during the XXII International Ornithological Congress. 16–22 August 1998,

Durban, South Africa. *Contact:* Dr Philip Seddon (IOC RTD), NWRC, PO Box 1086, Taif, Saudi Arabia. Tel +966 2 7455188; Fax: + 966 2 7455176; E-mail: nwrc@compuserve.com.

Making Connections: The Society for Ecological Restoration's International Conference. 28–30 September 1998, University of Texas, Austin, Texas, USA. *Contact:* Society for Ecological Restoration, 1207 Seminole Avenue, Suite B, Madison WI 53711, USA. Tel: +1 (608) 262 9547; Fax: +1 (608) 265 8557; E-mail: ser@vms2.macc.wisc.edu.

Boreal Forests of the World IV: Integrating Cultural Values in Local and Global Forest Protection. 7–10 October 1998, Tartu, Estonia. *Contact:* Taime Puura, Conference Co-ordinator, Estonian Green Movement, PO Box 318, Tartu, EE2400, Estonia. Tel: +372 7 422 598; fax: +372 7 422 084; E-mail: for-est@erl.tartu.ee.

2nd International Conference on Wetlands and Development. 8–14 November 1998, Dakar, Senegal. *Contact:* Maria Pierce, Wetlands International, Marijkeweg 11, PO Box 7002, 6700 CA Wageningen, the Netherlands. Tel: +31 317 474711; Fax: +31 317 474712; E-mail: post@wetlands.agro.nl.

International Conference on Conservation of Tropical Species, Communities and Ecosystems. 3–6 December 1998, Thiruvananthapuram, Kerala, India. *Contact:* Dr K. Narayanan Nair, Tropical Botanic Garden and Research Institute, Pacha-Palode, Thiruvananthapuram, Kerala, India.

People and Wetlands: the Vital Link. 7th Meeting of the Conference of the Parties to the Ramsar Convention. 10–18 May 1999, San José, Costa Rica. *Contact:* Ramsar Bureau, rue Mauverney 28, CH-1196, Gland, Switzerland.

XVI International Botanical Congress. 1–7 August 1999, St Louis, Missouri, USA. *Contact:* Secretary General, XVI IBC, Missouri Botanical Garden, PO Box 299, St Louis, MO 63166-0299, USA. Tel: +1 (314) 577 5175; fax: +1 (314) 577 9589; E-mail: ibc16@mobot.org; http://www.ibc99.org.

CORRECTION

Giant ibis in Dong Khanthung

In reference to the short piece in Briefly (*Oryx*, 32 [1], 24–25) entitled 'Giant ibis found in wetland', it should be noted that Dong Khanthung has not been designated as a National Biodiversity Conservation Area. The proposed protected area of lowland forest and seasonal wetlands in southwest Laos has yet to receive official recognition or protection. To rectify this, and in recognition of the extreme conservation value of the area indicated thus far, further surveys are being planned by the Wildlife Conservation Society and IUCN. As a significant contribution to these efforts a team of graduates from Cambridge University will survey the area for giant ibis and other globally threatened waterbirds and mammals in 1998. For further information on this project contact Ian Burfield at the Department of Zoology (ijb20@cam.ac.uk).