

INTERNATIONAL

CITES update

Georgia and Turkey have acceded to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). These accessions entered into force on 12 December and 22 December 1996, respectively. Latvia acceded to the Convention on 11 February and when this comes into force on 12 May Cites will have 135 Parties. *Source:* Jonathan Barzdo, CITES Secretariat, Switzerland.

New heritage sites

New World Heritage Sites announced at UNESCO's World Heritage Convention in December 1996 included: Lake Baikal in the Russian Federation, the world's largest lake; 'W' National Park by the River Niger in West Africa; the volcanoes of Kamchatka in the Russian Far East; the Okapi Faunal Reserve in north-eastern Zaire; the north Swedish Lapponia area; and Belize's 250-km-long barrier reef. *Sources:* BBC Wildlife, February 1997, 60; <http://www.unesco.org>

Protected area boom

The number and extent of protected areas created in 1990-94 exceeded that of any previous 5-year period, according to the World Conservation Monitoring Centre, Cambridge, UK. A total of 224 million hectares were declared as 1431 protected areas, bringing the current world total to 1 billion ha, an area the size of Canada. Much of the increase was due to the creation of a few very large areas in desert regions, including the 64-million-ha Ar-Rub'al-

Khali Wildlife Management Area in Saudi Arabia's Empty Quarter (the world's largest) and the 24.7-million-ha Qiang Tang Nature Reserve in China. *Source:* *Plant Talk*, January 1997, 34.

Sharks in trouble

Many species of shark are at risk of over-exploitation as the trade in their fins, cartilage and liver oil grows, according to a new TRAFFIC report, which highlights the expanding trade networks and increasing availability of shark products throughout the world. In many regions shark fisheries and trade are becoming increasingly important but most are unregulated. If it continues, the unmanaged and widespread catches of shark around the world may result in the collapse of commercial fisheries, local species' extinctions and depletion of migratory stocks. As shark populations decline the balance of marine ecosystems could be upset and other important fish populations affected. The report recommends: the adoption of universal principles and codes of ethical fisheries; more data collection to determine the species of sharks caught; the elimination of bycatch from commercial fisheries; and improved data collection on shark fisheries and trade. *Source:* Rose, D.A. 1996, *An Overview of World Trade in Sharks and other Cartilaginous Fishes*, TRAFFIC, Cambridge, UK.

Map shows forest decline

A map developed by the World Wildlife Fund and the World Conservation Monitoring Centre in Cambridge, UK, is the first ever digital overview showing all of the Earth's remaining forest cover. The

map depicts the 6 per cent of the Earth's forests that are formally protected for conservation. The remaining 94 per cent, 33.6 million sq km, of the world's forests are vulnerable to logging. The data show that in the Brazilian Amazon there has been a 34 per cent increase in deforestation since 1992. In Cambodia and Cameroon, which still have large areas of forest, there are no networks of protected areas to prevent similar forest losses. About 50,000 species are thought to become extinct every year because of the destruction of forest habitat.

Sources: Press release, WWF, 9 September 1996.

Fish decline due to ownership

Recent declines in world oceanic fish stocks may be due to the lack of private property rights over fish. A paper reported in *Marine Pollution Bulletin* claims that where individuals and groups do not have ownership of marine resources there is little incentive to conserve stocks. The paper suggests that property rights may be a solution and that self-regulating fishermen would result in more sustainable fishing. *Source:* *Marine Pollution Bulletin*, December 1996, 833.

EUROPE

New laws to regulate trade

The European Union has adopted tough new legislation to regulate the international trade of endangered animals and plants and their by-products. Council regulation [EC], On the protection of species of wild fauna and flora by regulating trade therein, replaces regulation

3626/82/EEC Implementing CITES in the European Union, enforced in January 1994. From 1 June 1997 all European citizens and professional wildlife traders will have to comply with the law, which applies to products made from protected animals and plants. It will regulate the import and export of 27,000 wild animals and plants that are threatened by international trade. Three per cent of these species and their products are subject to a total ban.

Source: Press Release, WWF, 11 December 1996.

Action plans for birds

BirdLife International has compiled conservation action plans for 23 of Europe's most endangered bird species. Published in October 1996 by the Council of Europe, the action plans define conservation objectives and priority measures needed to restore populations of each species. The birds concerned vary from island endemics, such as the long-toed pigeon *Columba trocaz* of Madeira to widely dispersed species such as the great bustard *Otis tarda*. The plans are the result of extensive consultation between government agencies, NGOs and individual experts across Europe. Source: *Natura 2000*, December 1996, 4–5; *World Birdwatch*, December 1996, 5.

Latvian forests under threat

Forest land in Latvia, confiscated by Stalin in 1940 and returned to Latvian families after the collapse of the Soviet Union, is now under threat from logging. Profits from agriculture have collapsed and logging has become an attractive source of income for farmers. Since privatization, logging has increased by 700

per cent. Indigenous woodland of mainly Scots pine, Norway spruce and birch covers 40 per cent of the Baltic state, while swamp forests grow ash and maple. The forests contain a wealth of species including beaver, wolves and lynx, and one of the last viable populations of black storks *Ciconia nigra* in Europe. The government is setting up a 14,000-ha sustainable forestry pilot project in the Meole area, but forestry rules need to be reformed if the forests are to be saved.

Source: *WWF News*, Winter 1996/7, 15.

Finnish forests win reprieve

A 1-year moratorium on logging has been announced by the state-owned Finnish forestry company, Enso, for an area of almost 2 million ha of forest in Karelia, Finland. The Karelian Greenbelt is one of Europe's most substantial areas of old-growth forest. Enso also plans an inventory of the remaining old-growth areas in Karelia and a national Karelia working group will be formed, including all interested parties, to advise on areas that should be preserved. The Finnish Government has also unveiled plans to protect 200,000 ha of state-owned forests in northern Finland and 14,000 ha of privately owned forests in Kuusamo to fulfil the European Union's Habitat Directive for western taiga areas.

Source: *BBC Wildlife*, December 1996, 56.

Cull to prevent hybrids

A project to cull populations of the ruddy duck *Oxyura jamaicensis* in the UK to prevent them spreading to Spain and hybridizing with the endangered white-headed duck

O. leucocephala is running into problems. Obtaining access for marksmen on private land is proving difficult. In a proposed trial cull of female ducks in the West Midlands, UK, only 45 per cent of lake owners gave permission for the cull.

Source: *BBC Wildlife*, January 1997, 57.

Brown bear translocation

In spring 1996, two brown bears *Ursus arctos* were translocated from the Medved Forest, Slovenia to the Haute-Garonne Forest in the Pyrenees as part of a reintroduction project. The two females were caught in leg-hold snares, anaesthetized and given a full veterinary examination before being transported by road in a specially designed box, which included a video camera to constantly monitor the animals. The first animal was released on 19 May, the second on 6 June 1996, both equipped with radio collars. The bears have moved to an area of forest in Ariege, where bears were present less than 10 years ago. It is hoped that the project will continue this year with plans to translocate a further four bears. About six native animals can still be found further to the west. Source: François Moutou DVM, French Mammal Society (SFPEM), 12 June 1996.

Caviar farmed in France

French scientists at Bordeaux's research and agricultural centre, Cemagref, working with local fish breeders, have succeeded in producing caviar from farmed common sturgeon *Acipenser sturio* in commercial quantities. The stock of this critically endangered species came from Russia in 1975 in exchange for Mediterranean bass *Dicentrarchus labrax*. The

scientists developed techniques to separate the young males from females, which take at least 8 years to produce eggs. To eliminate guesswork about the maturity of the females, they are opened for inspection and sewn up again if the eggs are not ready.

Source: *The Guardian*, 1 January 1997.

Vultures returned to France

The population of griffon vultures *Gyps fulvus* in the Cévennes, south of the Massif Central, France is now more than 200 strong. The species was extirpated there at the beginning of the century and reintroduced in 1981. A project to reintroduce griffon vultures into the Alps started with the release of birds at the end of December 1996. Austria, Switzerland, Italy and France have, since 1986, collaborated to reintroduce bearded vultures *Gypaetus barbatus* to the Alps. The population is now about 60 birds and it is hoped that they will soon breed in the wild. The first chick born in the wild to black vultures *Aegypius monachus*, released in the Cévennes in 1992, left its nest in August 1996. By the end of 1996 the black vulture population totalled 19 individuals.

Source: François Moutou DVM, 21 January 1997, from WWF-France, and Fonds d'International pour les Rapaces.

Italian reintroductions

An environmental improvement programme in the 'Monte Velino' Natural Oriented Reserve in the Abruzzo region, Italy, has included the restoration of some of the original fauna to the area, including the griffon vulture *Gyps fulvus* and raven *Corvus corax*. Griffon vultures were extirpated from most of

Italy in the 17th century by hunting and poisoning and the raven disappeared from the north and central Appennines mountain range in the 1960s because of human disturbance and poisoning. Six griffons were released in July 1994 and a further 14 in the summer of 1995. The current total population in the reserve is 18 griffons with 36 vultures due to be released between 1996 and 1998. In total, 47 ravens have been released since 1991 and about 25 individuals can be found in the region. In the spring of 1995 three young fledglings were observed, marking the first successful reproductive effort.

Source: *Re-introduction News*, September 1996, 6–7.

Saving the brown bear

The survival of the brown bear *Ursus arctos* in the Cantabrian Mountains of Spain is threatened by habitat loss as the area is opened up by roads, forestry tracks, winter sports infrastructure and hydro dams. Bears are also killed by poachers, and by traps and poisons meant for other animals. The construction of the Leon-Oviedo motorway has had devastating effects, splitting the population in two. Only 50–65 bears survive to the west of the road and 20–25 to the east. A species recovery plan was adopted in 1990/91 by the four regions covering the mountains, and a project launched in 1992 aiming to increase populations, to unite eastern and western populations, to protect habitat and carry out research and monitoring. Twenty-four rangers are now employed to patrol the region and hunting permits are issued to local people in exchange for a commitment to responsible hunting. There are plans to

afforest tunnels across the motorway to encourage bears to cross. After two seasons of low breeding the population is showing signs of recovery, with at least eight cubs born in 1995. Source: *Natura 2000*, December 1996, 4–5.

Hunting ban for wetland

The regional administration covering the El Hondo wetland in Spain has agreed to ban hunting in the area. El Hondo is a vitally important site for the endangered marbled teal *Marmaronetta angustirostris* and white-headed duck *Oxyura leucocephala*. BirdLife International recommended a hunting ban for these species in action plans published in 1996. In 1996 the wetland held 30 per cent of the European marbled teal population – over 500 individuals – and 10 per cent of the Spanish population of white-headed ducks – about 60 birds. Source: *World Birdwatch*, December 1996, 2.

New hunting laws

The government of Malta plans to increase the bird-hunting season by one week; it will extend from the last week of March to 22 May. The additional week occurs at a time when many birds of prey migrate over the islands. Trapping is to be extended from 2 to 12 weeks, from 1 March to 22 May, and hunting from seacraft will be allowed from October to February, an increase of 2 months. Maltese hunters are already responsible for trapping and killing an estimated 6 million migratory birds every year. Source: *BBC Wildlife*, December 1996, 58.

NORTH EURASIA

Forest code rejected

The fate of Russia's forests has yet to be determined following the rejection of a new edition of the Forest Code of Russia by the Council of the Federation in July 1996. This was the third attempt to pass a forest law in 18 months. Much of Russia's forests are boreal coniferous (taiga) with relatively few tree species dominating, while the forests of the Russian Far East are more diverse with rare wildlife such as the Amur tiger *Panthera tigris altaica* the Himalayan black bear *Ursus thibetanus* and the raccoon dog *Nyctereutes procyonoides*. The debate has been resumed. *Source: Russian Conservation News*, Fall 1996, 11–15.

European beavers translocated

The release of Eurasian beavers *Castor fiber* into the Lapland National Reserve in the Kolski peninsula in Russian Lapland has been proposed to ensure the survival of the small population. Four to five pairs of beavers from Norway will be released over 2 to 3 years and research will be undertaken to establish the best sites for release. The Eurasian beaver was extirpated from the entire region, with the exception of Norway, by the end of the century. Reintroductions into the Lapland National Reserve in the past have had limited success, with low survival rates, owing to poor food and water supply, long periods of snow cover and human activity. The current population is low and urgent measures are needed to save this population. It is hoped that Norwegian and Russian specialists will work

together on this project.

Source: Re-introduction News, September 1996, 20.

Siberian wilderness protected

The President of the Russian Republic of Yakutia (the Sakha Republic) on the southern shores of the Arctic Ocean, Siberia, has pledged to protect an area of 700,000 sq km by the year 2000, as a boreal forest and tundra reserve covering a quarter of its territory. The area has a rich wildlife, which is threatened by pollution from mining and industry, and by uncontrolled logging. Several indigenous species are endangered here including the brown bear *Ursus arctos*. *Sources: Arborvitae*, November 1996, 4; *WWF News*, Winter 1996, 2.

Breeding grounds of Siberian cranes located

The migration route and breeding grounds of a small flock of Siberian or great white cranes *Grus leucogeranus* are being studied using satellite tracking equipment. The birds winter on the Caspian lowlands of northern Iran and over the last decade the population has remained at only 9 or 10 individuals. Satellite radios were attached to a single wild male and two captive-reared cranes from the US. The captive-reared birds failed to join the wild population and migrate, but the wild crane was tracked west across the Caspian lowlands, Azerbaijan, Chechnya, resting at the delta of the Volga and finally migrating to a presumed breeding area east of the Ural Mountains and north-west of the city of Tyumen. A family of breeding Siberian cranes was located from a helicopter. It is hoped that the

newly charted migration route and the location of the breeding grounds will encourage the conservation and recovery of this remnant flock.

Source: The ICF Bugle, November 1996, 2–3.

Amur tiger increase

A survey of the Amur tiger *Panthera tigris altaica*, more thorough and covering a larger area than ever before, has estimated a population almost twice as large as previous estimates in the 1980s. The area between the Amur river and Russian Pacific coast in the provinces of Primorski and Khabarovski is now thought to provide a home for 415–475 tigers. In 1986 a survey estimated only 240–250 animals. This is the only significant population left in the wild and the species remains in grave danger of extinction. The population is still under threat from hunting and at least 50 tigers are shot illegally every year, mainly for Chinese traditional medicine. *Sources: Press Release*, WWF, 21 November, 1996; *New Scientist*, 30 November 1996, 5; *BBC Wildlife* January 1997, 27.

Logging threatens tribal life

The traditional lifestyle of the Udeghe tribe of the Bikin Valley, north of Vladivostok in the Russian Far East, is being threatened by logging companies. The Udeghe people live by hunting sable, mink, fox and bear in the winter, selling skins in the spring and preserving meat for the summer. The rights to the formerly inaccessible lands where they hunt are being signed over to companies planning large-scale forest clearance and willing to invest large sums of money in building roads into the remote

area. The South Korean company, Hyundai, which has a poor environmental track record, has already signed a \$US40 million deal.

Source: *The Guardian*, 11 January 1997.

NORTH AFRICA & MIDDLE EAST

Mujib River to be diverted

Plans to extract water from the River Mujib for development along the Dead Sea will affect the Mujib Nature Reserve in Jordan. The reserve was established in 1987 and covers 2215 sq km of mountain and wadis, encompassing most of the catchment of the Mujib River, one of the least disturbed river systems in Jordan. It supports over 400 plant species, several of which are rare and endangered, and animals including the grey wolf *Canis lupus*, Egyptian mongoose *Herpestes ichneumon* and Blanford's fox *Vulpes cana*. A diversion weir is planned to channel river water to developments such as hotels, expansion of the Dead Sea Potash Works and irrigated agriculture in Ghor Safi. It is feared that the riverbed will be dry 80 per cent of the year downstream from the weir, destroying communities of animals and plants. Construction work will also damage sensitive and endangered species. The reserve is already under pressure from over-grazing by sheep and goats, disturbance caused by tourism, and hunting. An environmental impact assessment is to be carried out and it is hoped that an acceptable solution can be found.

Source: *Al Reem*, November 1996, 4–11.

Survey locates gazelles

A 3-month survey to investigate the presence of gazelles within Wadi 'Araba, Jordan, has established that dorcas gazelles *Gazella dorcas* are present in Dana and four other areas within the Wadi 'Araba depression. Major limiting factors in distribution were identified as habitat encroachment, illegal hunting and development. This gazelle is one of Jordan's most endangered species. Recommendations include an auxiliary ranger service to patrol core sites, the extension of the Dana Nature Reserve to include a portion of the Wadi 'Araba zone and greater control of grazing, wood collection and other land uses.

Source: *Gnusletter*, 1996, 19–20.

Breeding sites threatened by tourism...

Hula Valley, one of the most important wetland areas in Israel for breeding waterbirds, is under threat from developers. The area includes populations of marbled teal *Marmaronetta angustirostris* and large populations of migratory and wintering pelicans, wildfowl, storks and birds of prey, including 28 species of raptor – such as the globally threatened imperial eagle *Aquila heliaca* and spotted eagle *A. clanga* – and large flocks of common crane *Grus grus*. The developers plan to increase tourism in the area, with proposed boating and commercial activities including the construction of recreational villages.

Source: *World Birdwatch*, December 1996, 2.

... and ostrich farming

The only breeding site for Dunn's lark *Eremalauda dunnii*

in the Western Palearctic, an area north of Eilat, Israel, is under threat from conversion into an ostrich farm. A third of this important bird area has already been lost to agricultural developments.

Source: *World Birdwatch*, December 1996, 5.

Urgent measures for Acacia gazelle

In October 1996 the total population of the acacia gazelle *Gazella gazella acaciae* was estimated at only 10 individuals. This endangered subspecies is found only in Israel's Southern Arava Valley and the population has been in decline since development in the late 1940s. Poaching and desiccation of the valley have also taken their toll. Three factors have been identified that prevent renewal of the population: overly arid conditions, competition between *G. g. acaciae* and *G. dorcas*, and predation and other accidental events. A decision was made to capture the remaining population, but attempts to drive the animals into a net trap were unsuccessful and work was suspended during the rainy season.

Source: *Gnusletter*, 1996, 7–9.

SUB-SAHARAN AFRICA

Two species of African elephants?

Genetic research carried out on African elephants *Loxodonta africana* by Dr Nicholas Georgiadis of Washington University has concluded that forest elephants comprise a divergent and genealogically separate lineage to savannah elephants. The degree of divergence is far greater than anticipated and could be

enough for divergence at the species level. The data suggest that forest and savannah elephants should receive separate conservation status and the findings may have important consequences for future management policies. *Source: African Wildlife Update*, December 1996, 5.

Logging ban in Côte d'Ivoire

All felling of timber on the edge of the savannah zone has been banned by a new directive from the government of the Côte d'Ivoire. Those who illegally fell trees will be prosecuted. Plantation operators who have not started replanting schemes were given until October 1996 to comply or face a logging ban. *Source: Arborvitae*, November 1996, 2.

Elephants translocated

Plans in Kenya to translocate African elephants *Loxodonta africana* from Mwea National Game Reserve to Tsavo East National Park (*Oryx*, 30 [2], 94) have been realized. The Mwea reserve is surrounded by farms and human settlements, which prevent natural migration. The elephant population was threatening the safety of local people and causing damage to crops. The translocation aimed to halve the population from 48 elephants by translocating a family herd to Tsavo East National Park. Tsavo covers an area of 21,000 sq km and has a population of about 8000, five times less than it supported in the early 1970s when poaching depleted its numbers. Between September 1995 and June 1996, 16 elephants were successfully translocated in five operations. Unfortunately five elephants died, three after darting and two a few days later due to changes

in physiological conditions. *Source: Pachyderm*, 1996, 61–65.

Kori bustard to be tracked

A study of the movement of the kori bustard *Ardeotis kori* using satellite transmitters is planned as a collaboration between the National Avian Research Centre of the United Arab Emirates and the National Museums of Kenya. It is hoped that the study will help Kenyan ecologists make recommendations for the protection of these birds. East Africa is home to several species of bustards, some of which are in decline. It is feared that the populations of kori bustards in Kenya are becoming increasingly fragmented. *Source: Swara*, July/August 1996, 11.

Lake Victoria clean-up

The World Bank, through the Global Environmental Facility, has allocated \$US35 million to help Kenya, Tanzania and Uganda conserve Lake Victoria's biodiversity and genetic resources, generate food and provide safe water. *Source: Plant Conservation News*, September 1996, 4.

Tortoises moved to safety

The relocation in Tanzania of 84 endangered Aldabra giant tortoises *Geochelone gigantea* from Changuu island to Zanzibar aims to protect the group from poachers. A population of about 50 adult tortoises has lived on Changuu since the early 19th century. In 3 years, however, most of the population has been stolen and illegally exported for the exotic pet trade. By June 1996 ten adults remained, only three of which were female. Eighty-four young tortoises have been

safely transported to Zanzibar where they will remain until a safe enclosure has been constructed on Changuu. Plans are under way to insert a microchip under the skin of each animal in order to trace the movement of stolen tortoises. *Source: Animals International*, Winter 1996, 5.

Indigenous people claim parkland

A land claim is in preparation over a large area of South Africa's Kalahari Gemsbok National Park. A group of about 200 San people is hoping for land-ownership rights outside the park and land-use rights within the park, including a concession for a game lodge and permission for the collection of medicinal plants. It is expected that the claim will be settled amicably. *Source: African Wildlife Update*, December 1996, 4.

Contraception for elephants

Elephants *Loxodonta africana* in South Africa's Kruger National Park are undergoing advanced field tests of a contraceptive in an attempt to find an alternative to culling elephants in overcrowded game reserves. Scientists sedate the elephant cows, scan them with ultrasound to ensure that they are not pregnant then inject them with pig zona pellucida (pZP) protein. The cows will produce antibodies that block sperm-binding sites on the surface of their eggs. The cows will not be permanently sterilized. The experiments have been criticized by local conservation groups and rural communities who believe that the best form of elephant control is to allow some hunting. Elephant contraception is expensive and so likely to be viable only in

the small national parks. The park board is also moving herds to new reserves and giving the animals more space by taking down the fence separating Kruger from game reserves in Mozambique.

Source: *New Scientist*, 30 November 1996, 9.

Knysna elephants extirpated

In February 1996, only three female elephants *Loxodonta africana* remained in 150 sq km of indigenous forest at Knysna in the Southern Cape area of South Africa, one from the remnant population and two introduced from Kruger National Park. The translocation of juvenile female elephants from Kruger was a failure and the elephants did not establish social bonds with the remaining resident animal. The survival of any elephant population in the Knysna forest is now unlikely and the population may be considered functionally extinct. It is feared that other small, isolated elephant populations, in the Guinea rain forest region and elsewhere in Africa may face a similar future.

Source: *Pachyderm*, 1996, 6.

Man-made nests a success

An experiment to create artificial nesting holes for blue swallows *Hirundo atrocaerulea* has proved a success. The blue swallow, one of South Africa's most vulnerable birds, breeds in deep holes in the ground, most of which are of natural origin. Sink holes are ideal, but are decreasing as their grassland habitat becomes surrounded by maturing timber plantations, and antbear *Orycteropus afer* burrows are also used but are less secure against predators and are becoming scarce as antbears

become rarer. Three man-made nest-holes were dug in areas of suitable foraging habitat known to be visited by swallows. Two were used by the birds. Hole-digging is regarded as a temporary measure until natural hole-creation processes are restored. The final solution to the blue swallow's problem would be the restoration of mistbelt grassland. A moratorium on further timber planting is suggested and the restoration of former grassland as timber is felled.

Source: *Lammergeyer*, September 1996, 46–49.

... Mining a swallow breeding site

The largest colony of the blue swallow *Hirundo atrocaerulea* is under threat from a proposal to open up an old gold mine at Kaapschehoop in the mountains of Mpumalanga (formerly Eastern Transvaal). Twelve of South Africa's 60 pairs of this bird breed there on 500 ha set-aside for them by the forestry quango, SAFCOL. Source: *BBC Wildlife*, February 1997, 59.

Survey highlights plight of Aders' duiker

A population survey of Aders' duiker *Cephalophus adersi*, the Zanzibar blue duiker *C. monticola* and the suni *Neotragus moschatus*, conducted on Zanzibar island, found 288 animals, but only 14 were Aders' duiker. These low numbers reflect the general deteriorating status of the species because of habitat loss and over-hunting. It is likely that, unless conservation measures are taken, the Aders' duiker will become Critically Endangered. The blue duiker has less specific habitat requirements and so has not

suffered such a decline. The suni population is stable.

Source: *Gnusletter*, 1996, 6–7.

Breeding programme for fossa

The fossa *Cryptoprocta ferox*, Madagascar's largest native carnivore, is found over the entire island but numbers are declining rapidly in response to habitat loss and hunting. A captive breeding programme, initiated at Duisberg Zoo in Germany in 1994, to maintain a genetically viable population in captivity, has led to the establishment of potential breeding pairs at several European zoos. Conservation is also being supported in Madagascar with a research project and plans to establish fossa at Parc Tsimbaaza in Madagascar.

Source: *Small Carnivore Conservation*, October 1996, 1–2.

New lemur population

An expedition to south-eastern rain-forest areas in Madagascar has resulted in the discovery of a new population of the greater bamboo lemur *Haplemur simus*. Only a few populations of this endangered species are known to still exist. The new population, found in cultivated land with sparse, fragmented bamboo habitat, was threatened by habitat loss, hunting and insufficient food resources, so a decision was made to capture five lemurs to begin a captive breeding programme at the Ivoloina Zoological Park. Source: *On the Edge*, 1995/1996, 14–15.

Briefly is compiled by Catharine Baden-Daintree, who welcomes contributions by letter, fax or e-mail: info@ffint.org

SOUTH & SOUTH EAST ASIA

Shrimp farms closed

All of India's large, intensive shrimp farms were ordered closed by the Supreme Court in December 1996. The farms are causing severe damage to the coastal environment. Justice Kuldip Singh has also ordered the government to establish a regulatory coastal authority to protect ecologically fragile coastal areas. Shrimp farming is a growing industry in India taking up more than 80,000 ha of coastal land. One report suggests that shrimp farms caused the destruction of bird sanctuaries on wetlands at Pulicat in Tamil Nadu. Flamingo populations fell from 10,000 in 1993 to 1000 in 1994 because their feeding grounds were polluted by farm effluent. *Source: New Scientist*, 21/28 December 1996, 8.

Indian logging ban

India's Supreme Court has banned commercial logging in the country's natural forests. Logging will be allowed only in private plantations or where felling has been approved by the government. The UN Food and Agriculture Organization says that India lost 0.6 per cent of its forest cover every year during the 1980s. Most of the losses were in old-growth forests where biodiversity is high, while commercial plantations have increased. *Source: New Scientist*, 11 January 1997, 11.

Unprotected rhinos decreasing

A survey of the greater one-horned rhinoceros *Rhinoceros unicornis* population outside

the protected areas in Assam, India, has shown serious declines, due mainly to poaching for rhino horn. Only two areas were identified in which rhinoceros are likely to flourish again: Burhachapori, where three to four rhinos are frequently sighted, and Pani-Dihing, where two individuals are found. Burhachapori has been declared as a wildlife sanctuary and there is a proposal to develop Pani-Dihing as a sanctuary for waterbirds. Stray animals were sighted at numerous localities but are difficult to protect because they cover large distances. *Source: Pachyderm*, 1996, 7–9.

New sightings of marten

The Nilgiri marten *Martes gwatkinsi* is a rare mustelid that is endemic to forested areas of the Western Ghats mountain range in India. Sightings have been few and it is listed by the IUCN/SSC Mustelid, Viverrid and Procyonid Specialist Group as a threatened species requiring conservation action. Recent observations include the first-ever records of the species in Peppara Wildlife Sanctuary and the Silent Valley National Park. The animal is well known to local people and the Kani tribal people avoid eating the marten believing its meat to be poisonous. The sightings suggest that the animal is adaptable to a wide range of habitats from high-altitude shola grassland to tropical deciduous forest at low elevations. *Source: Small Carnivore Conservation*, October 1996, 3–4.

Amphibian decline

A preliminary report on the status of amphibians in Bangladesh states that of the 22 species recorded, two species are rare (*Nyctophryne kempfi* and

Uperodon globolosum), two species are commercially threatened (*Rana hexadactyla* and *R. tigerina*) and three are in decline (*Rana hexadactyla*, *R. tytleri* and *Racophorus leucomystax*). A further two are possibly in decline (*Rana limnocharis* and *R. tigerina*). Threats to amphibians in Bangladesh include illegal capture for the frog-leg trade, habitat destruction and deforestation. In some districts fishermen capture *R. tigerina* as food for captive otters. *Source: Froglog*, November 1996, 2.

Shrimp farm may affect national park

A proposal to build a shrimp farm in southern Sri Lanka may affect a nearby national park. The shrimp farm will consist of 525 ponds on a 405-ha site in close proximity to the Bundala National Park. Environmentalists are concerned that the development will have a drastic effect on water birds that feed on the wetland's fish and shrimp. A seawater inlet is planned to run through and beside the wildlife reserve, and it is feared that this will have a detrimental effect on the surrounding area. The developers, the Rhumu Aquaculture Development Company, claim that an environmental impact assessment has been carried out which has yet to be published. *Source: Marine Pollution Bulletin*, October 1996, 695.

Hope for Sri Lanka's turtles

Egg collection is probably the greatest threat to the turtles of Sri Lanka. In the past 20 years almost 100 per cent of the turtle nests dug on the south-west coast of Sri Lanka have had their eggs removed, despite

legislation that affords full protection to all of Sri Lanka's turtle species. In May 1996, after several years of negotiation, the Turtle Conservation Project was granted permission from the Department of Wildlife and Conservation to begin an *in situ* turtle nest protection and research programme at Rekawa, Sri Lanka. It is hoped that this year will see the first hatchlings on the beach for 20 years.

Source: *Animals International*, Winter 1996, 18–19.

New bear sanctuary

The Thai bear sanctuary, opened on 28 September 1996, to give refuge to Asiatic black bears *Ursus thibetanus* and sun bears *Helarctus malayanus* rescued from illegal trade. It will also assist the Thai Royal Forestry Department in its work to combat the illegal poaching and trade of the country's wild bears. The government of South Korea has issued a statement (yet to be verified) that it is to ban the trade in bears and bear parts. Much of the trade in bears is directed towards Korea.

Source: *Animals International*, Winter 1996, 4.

New Vietnamese fish species

A new freshwater fish species of the genus *Crossocheilus* has been identified in Vu Quang Nature Reserve, Vietnam. It appears to be common, known locally as *co* and is caught for food. Vietnam has a total of about 500 freshwater fish species.

Source: Press release, WWF, 27 September 1996.

Cambodia wildlife surveys

Extensive ground surveys for wildlife have been carried out for the first time in Cambodia

as a result of collaboration between FFI, WWF, IUCN and two Cambodia government departments: Wildlife Protection Office, Department of Forestry; and Department of Natural Protection and Conservation, Ministry of Environment. The surveys, in two eastern provinces between March and June 1996, recorded five 'first' mammal records for the country, including the recently described giant muntjak *Megamuntiacus vuquangensis*. Significant records of endangered birds included giant ibis *Pseudibis gigantea* and green peafowl *Pavo muticus*. The results of the study have been published and the report contains recommendations for the next phase of the fieldwork in 1997.

Source: Desai, A.A. and Lic Vuthy, 1996. *Status and Distribution of Large Mammals in Eastern Cambodia: Results of the First Foot Surveys in Mondulkiri and Tattanakiri Provinces*. IUCN/FFI/WWF Large Mammal Conservation Project, Phnom Penh, Cambodia.

Hornbill sighted

A flock of at least six wrinkled hornbills *Aceros corrugatus* was observed in Taman Negara in the Malay Peninsula. The sighting confirms the species's presence in one of few areas where a healthy population can be sustained.

Source: *The Malayan Naturalist*, October 1996, 28–29.

EAST ASIA

New dangers for snow leopards

Snow leopards *Panthera uncia* are coming under more pressure from poachers supplying bones for the Chinese traditional medicine trade as tigers *P. tigris*

decline in numbers and efforts to protect them increase. Reports of snow leopard killings are becoming more frequent. Despite its protected status, policing is minimal in most parts of its wide range and millions of new Chinese settlers have moved into Tibet, the heart of its territory, in the last two decades.

Source: *BBC Wildlife*, February 1997, 54.

NORTH AMERICA

Canada's first IBA

Long Point, Ontario, has been declared Canada's first Globally Important Bird Area. The bay and marshes on the Lake Erie shoreline provide resting and feeding areas for migrating waterfowl and act as a vital stop-over area for many migratory songbirds.

Source: *World Birdwatch*, December 1996, 3.

New Canadian Ramsar sites

Two new Canadian Wetlands of International Importance were officially recognized on 31 October 1996 by the Ramsar Convention. Minesing Swamp near Midhurst and the Matchedash Bay Provincial Wildlife Area on Lake Huron, both in the province of Ontario, together comprise 7840 ha. Minesing Swamp is a network of swamps, fens, bogs and marshes, providing habitat for many rare species. Over 206 bird species inhabit the swamp including at least 114 breeders. White-tailed deer *Odocoileus virginianus* and the rare wood turtle *Clemmys insculpta*, spotted turtle *C. guttata* and Blanding's turtle *Emydoidea blandingii* are also found here. Matchedash Bay consists of

emergent floodplains and freshwater lake margins with dense cattail marsh, coniferous wetland forest and small fens. Open water areas contain beds of submerged aquatic plants such as wild celery, wild rice and Eurasian water milfoil, and the area has a great diversity of 17 species of reptiles, such as Blanding's turtle and the five-lined skink *Eumeces fasciatus*.
 Source: Press Release, Ramsar/Canadian Wildlife Service, 19 November 1996.

Slow recovery for cod

A moratorium on cod fishing in Eastern Canada in 1993 and 1994 has done little to allow stocks to recover. Fishing restrictions were initially introduced in 1974 after years of overexploitation but stocks continued to decrease throughout the 1970s. Erroneous stock estimate calculations led to inadequate protection and continued exploitation, and by 1990 the Atlantic cod-fishery had collapsed. Incidental catches continue to hamper recovery, and the fishing of capelin and herring, which are a source of food for cod, may also inhibit population growth. The effects of the harp seal population and ocean currents are also being studied. Accurate stock assessment and further research are required for stocks to become healthy enough for sustainable harvests to be maintained.
 Source: IUCN–The World Conservation Union, October 1996, 7–8.

Law may not protect wildlife

A proposed law to protect Canada's wildlife may protect only about 40 per cent of 276 endangered animals, according to environmentalists. The new wildlife protection bill does

little to protect the habitats of these species and decisions about the listing of wildlife will be under the control of politicians and not scientists. The law applies only to species living on federally controlled lands, except for the Yukon and Northwest Territories. Protection for species living on private or provincial government owned land is vague and will depend on the action of provincial government: only four of ten provincial governments have laws of this nature. Many species that range across the US–Canada border will be at risk on entering Canada. Animals such as the cougar *Felis concolor* and the woodland caribou *Rangifer tarandus*, protected under the US Federal Endangered Species Act, will be at risk on entering Canadian territory.
 Sources: BBC Wildlife, January 1997, 60–61; *New Scientist*, 11 January 1997, 9.

Clayquot Sound proposed as reserve

The World Conservation Union has endorsed a resolution supporting the designation of Clayquot Sound as a Biosphere Reserve. The proposal aims to increase protection for the most ecologically valuable areas and create opportunities for sustainable community development. If all parties involved can agree, the ancient rain forests may be saved. It is now feared that, having logged most of Vancouver Island's forests, British Columbia's coastal rain forest is now at risk. The Eilerslie/Ingram-Mooto Lakes region is of particular concern, providing homes for bears, marbled murrelets *Brachyramphus marmoratus* and eagles, and providing breeding grounds for salmon. The logging company Western Forest

Products is due to start road-building here this year.
 Source: BBC Wildlife, December 1996, 59.

Declines due to pesticide

Declines in amphibian population in the Great Lakes basin of North America may have been caused by pesticide contamination. A survey of parks and wildlife reserves along the north shore of Lake Erie found a relationship between local extinctions of amphibians and the degree of site contamination with chlorinated pesticides. At Point Pelee National Park, Canada, DDT was frequently applied until 1967 for mosquito control. Since 1972, Blanchard's cricket frog *Acris crepitans blanchardi*, eastern grey treefrog *Hyla versicolor* and bullfrog *Rana catesbeiana* have become extirpated at Point Pelee. The last observation of Fowler's toad, *Bufo woodhousii fowleri* in the park coincides closely with the inception of DDT application. Currently only five amphibian species remain in the park. Amphibians here were found to still contain DDE, the primary breakdown product of DDT, in relatively large amounts.
 Source: *Froglog*, November 1996, 1.

Action over embargo

The World Trade Organisation (WTO) may take action over the US Government's 1995 embargo of shrimp imports from countries that do not implement turtle exclusion devices. Four of 40 countries embargoed – India, Malaysia, Pakistan and Thailand – say that WTO provisions have been violated. The US may be forced to change its Endangered Species Act, under which the embargo was imposed, or pay

compensation to the four countries. An estimated 200,000 sea turtles are killed annually by shrimp fisheries world-wide. *Source: BBC Wildlife*, December 1996, 58.

Sea birds deterred from fishing lines

Fishermen are supporting measures to reduce the number of seabirds killed by longline fishing, estimated at 80,000 birds every year. The North Pacific Longline Association is backing a proposal by wildlife groups put to the World Conservation Union, IUCN. The fishermen, who work off the coast of Alaska, will be encouraged to adopt techniques to deter sea birds. These include setting nets at night, sinking baited hooks with weights and using streamer lines to decoy birds. *Source: New Scientist*, 26 October 1996, 12.

Mine threatens watershed

The Canadian Crandon Mining Company has proposed a new zinc and copper mine at the Wolf River headwaters. The mine would generate huge amounts of waste and acid drainage that would threaten the integrity of the Wolf River. The river in north-eastern Wisconsin, US, supports rainbow trout, osprey, lake sturgeon and wild rice. *Source: Wildlife Conservation*, December 1996, 14.

Birds scared from mine

Noise-making machines, firecrackers and rifles were used by biologists and mine officials to scare away more than 1000 waterfowl from a flooded copper mine during spring 1996. In the previous year, 342 snow geese *Anser caerulescens* died from

suspected heavy metal poisoning at the mine in Butte, Montana. Test results from the dead birds indicated high levels of copper, zinc and manganese in their internal organs. It was concluded that the birds died from swimming in and ingesting the toxic water. The site is 1.6 km wide and holds 20 billion gallons of poisonous water. The mine owners may be prosecuted because snow geese are protected by the Migratory Bird Act, which carries a penalty of \$5000 for each accidental taking of migratory birds. *Source: Wildlife Conservation*, December 1996, 12.

More condors in the wild

Six young California condors *Gymnogyps californianus* were released in northern Arizona, USA, on 12 December 1996, the first of the species to be seen in the state for more than 70 years. A 4-ha area around the release site at Vermilion Cliffs was closed to the public for several weeks to allow the birds to disperse. This is the second group of parent-reared, rather than hand-reared, condors to be released. The first group of four was released in California's Los Padres National Forest in February 1996. The birds will be monitored by radio transmitters and wing markers. *Sources: BBC Wildlife*, February 1997, 56; *Endangered Species Bulletin*, November/December 1996, 16–17.

... but releases meet opposition

The planned release of Californian condors into the wild in spring 1996 was opposed by San Juan County, Utah, in the US. Local people fear that the presence of an

endangered species will restrict their land use and limit activities such as commercial sight-seeing by air, and recreation and mining on federal land. The release was postponed and a review published by the US Fish and Wildlife Service in September. It was hoped that the dispute would be settled by December and that the birds would then be released. *Source: Audubon*, November–December 1996, 20 and 22.

Botulism linked to bacteria

The avian botulism responsible for the deaths of thousands of pelican and other wildfowl at Salton Sea, California, last year (*Oryx*, 31 [1], 25) may have been traced to fish carrying a deadly bacterial infection. *Tilapia* sp., an African fish introduced to the area, were found to be infected with *Vibrio alginolyticus*, which caused massive kills of the fish. A link with the botulism toxin produced by the bacterium *Clostridium botulinum* has not been proved, but scientists suspect that the bacterial disease produces conditions that allow botulism spores to germinate and produce toxin in the intestinal tract. The dying fish are easy prey for fish-eating birds who ingest fatal amounts of toxin. Salton Sea fish will be monitored in the future to determine whether the *Vibrio* outbreak is a chronic problem. *Source: Endangered Species Bulletin*, November/December 1996, 14–15.

Predators cause amphibian decline

A study of amphibians in California's Great Central Valley using current field survey results compared with historic records, has shown that

there is an overall pattern of decline. The counties of Sacramento and San Joaquin Valley were most affected while the California red-legged frog *Rana aurora* and the western toad *Bufo boreas* were the species most affected.

Introduced predators (mosquito fish, bullfrogs and other fish) have been identified as a major threat. These predators are found at lower elevations than native species and data indicate that some native species are now restricted to higher elevations when compared with their past, broader distributions.

Source: *Conservation Biology*, October 1996, 1387–1397.

Recovery for Torreya

The Georgia Plant Conservation Alliance is undertaking a species recovery programme for the Florida torrey *Torreya tazifolia*, one of the rarest trees in the US. Only 1500 trees remain along a 20-km stretch of the Apalachicola River on the Florida–Georgia border. All of these are shoots from stump bases, which are too immature to produce seed. Numbers of this conifer have decreased since the 1950s, probably due to a fungus that becomes pathogenic under conditions of aridity, which have been caused by the logging of old-growth pines.

Source: *Plant Talk*, January 1997, 14.

Pronghorn at risk from military

Pilots of the US Marines may be jeopardizing the future for the Sonoran pronghorn antelope *Antilocapra americana sonoriensis* in Arizona's Sonoran Desert in the US. The desert is home to fewer than 100 antelopes with a further

300 in Mexico, on the other side of a road rarely crossed by the animals. The US Air Force and Marines train pilots nearby at the Yuma Training Range Complex and the noise of the planes is thought to upset the animals, causing fawns to be separated from mothers in the panic. An environmental group has issued a law suit to stop the Marines from flying over the pronghorn's range and last year sued in an attempt to stop the dropping of bombs on the area. The case has yet to come to court. The antelope is protected under the Endangered Species Act, but the military obtained exemption from the US Fish and Wildlife Service. Source: *New Scientist*, 14 December 1996, 5.

New US protected area

In September 1996, President Clinton signed over 1.7 million acres (6880 sq km) of federal land in Utah, USA, as the Grand Staircase-Escalante National Monument, protecting the area from mining and other development. It contains juniper woodland, salt desert and semi-desert, uplands with Ponderosa pine forests and deep canyons. At least one endangered plant species, Kodachrome bladderpod *Lesquerella tumulosa*, is endemic to the protected area and more than 30 other southern-Utah endemics occur within its boundaries.

Source: *Plant Talk*, January 1997, 35.

Opposition to Mexican wolf

Proposals to re-establish the Mexican wolf *Canis lupus baileyi* in the US have met with opposition from local ranchers, politicians and Apache Native Americans. Two or three breeding pairs are planned to be released at two sites in New

Mexico and the project aims to establish a wild population of 100 wolves. The wolf is believed to be extinct in the wild with a captive-bred total of about 140.

Source: *BBC Wildlife*, December 1996, 61.

Border plants at risk

Some of the rarest plants in the US are at risk from the activities of Mexican immigrants and the US Border Patrol on Otay Mountain. A new border fence has increased immigrants trekking over the mountain, resulting in greater border patrol activity and the construction of a network of roads for the patrols. The mountain is home to many endangered species including the only known American populations of the Mexican flannelbush *Fremontodendron mexicanum*, the Tay Mountain lotus *Lotus crassifolius* var. *otayensis* and the Cedros Island oak *Quercus cedrosensis*. It is under consideration for listing as a federally designated Wilderness Area.

Source: *New Scientist*, 4 January 1997, 6.

Crocodile recovering

American crocodile *Crocodylus acutus* populations in the central Pacific region of Mexico, which have suffered dramatic reductions in the past, are now showing signs of recovery. In Colima state, two significant stocks have been identified, with 410 individuals sighted in one night at El Potrero in the north of the state and densities estimated at 45 crocodiles per km at Lake Amela in the south-east. Other healthy populations are expected to be reported in the region. The crocodiles and their habitat are still threatened and it is hoped that Colima will be

used as a model state for a crocodile ranching programme. *Source: Crocodile Specialist Group Newsletter, July–September 1996, 12–13.*

CENTRAL AMERICA & CARIBBEAN

Freshwater habitats at risk

An analysis of freshwater ecosystems in Latin America and the Caribbean has revealed that of 111 freshwater regions, 97 are at risk. It identified the main problems as deforestation, erosion and sedimentation within drainage basins, damming and channelization of rivers and wetlands, and pollution from residential and industrial sewage treatment plants. The World Wildlife Fund's Programme Director for Latin America and the Caribbean is calling on governments to develop action plans that incorporate the protection of water systems. *Source: Press Release, WWF, 6 December 1996.*

Cartilage demand increases shark trade

Since 1991 Costa Rica has been the main producer of shark cartilage pills, claimed to help cure cancer and other ailments. Shark catches have grown steadily since the late 1980s and the average size of sharks caught is decreasing, suggesting over-fishing. Fishermen now have to travel farther and spend longer fishing to land less than half of their previous catches. Costa Rican fishermen may also be taking sharks illegally from the Galapagos Marine Resources Reserve. Fins are exported to Hong Kong, Taiwan, Singapore and the US, torsos are sold directly to

supermarkets and seafood shops, and spinal columns and heads are sold to cartilage processors. The processed cartilage is destined for the US, Canada, Europe, Australia and other countries. It is estimated that Costa Rica's largest cartilage processor processes more than 2.8 million sharks per year. Shark cartilage does not drive the shark industry but it is increasing the overall value of each shark caught and it may be leading to higher fishing pressure. Shark fisheries are unregulated in Costa Rica. *Source: Shark News, December 1996, 12–13.*

Maya Indian forest land threatened

A new road into Toledo district in southern Belize, which is being co-ordinated by the Inter-American Development Bank (IDB) and funded by western donor governments, is threatening Central America's largest area of intact rain forest. The IDB says the road will bring economic and social benefits but the Maya people who live there do not want their customary lands to be invaded by speculators and commercial farmers. *Source: The Guardian, 2 December 1996.*

Project for Cuban parakeet

A project aims to determine the status and distribution of the Cuban parakeet or conure *Aratinga euops* in order to develop an effective conservation programme for this species. The bird was once widespread in Cuba and the Isla de la Juventud but is now found only in small isolated populations in Cuba. It is considered rare throughout its range and is continuing to decline. The main cause of its decline has been destruction of habitat,

although capture for cage birds has contributed.

Source: Psitta scene, November 1996, 10.

New Cuban frog

A new frog, recently discovered in Cuba, has been named as a species of the genus *Eleutherodactylus*. It was found at an altitude of 600 m on Monte Iberia in eastern Cuba and is one of the world's smallest tetrapods. The frog lays a single egg that hatches into a tiny fully formed frog. *Source: New Scientist, 7 December 1996, 6.*

Government approves development

The government of Bermuda has given approval for the first stages of a development to be undertaken near Castle Harbour in Bermuda (*Oryx*, 30 [4], 246). The golf and tourist complex will threaten 25 species of endangered invertebrates. The development is hoped to revive the island's tourist industry. *Source: BBC Wildlife, January 1997, 57.*

SOUTH AMERICA

Condors killed in vendetta

Four reintroduced Andean condors *Vultur gryphus* have been shot in western Venezuela. The mayor of Mucuchies has been accused of instigating the shooting as part of his vendetta against protected areas and the Ministry of Environment; he is actively campaigning for development rights in the Paramo de la Culata Park and Sierra Nevada National Park. The future for Venezuela's condor reintroduction programme, which started in

1993 and has released 10 birds, is in jeopardy: emergency funds donated by a Venezuelan airline are almost exhausted and the six surviving condors are at risk because no one has been charged with the killings of the other four.

Sources: *BBC Wildlife*, February 1997, 56; *World Birdwatch*, December 1996, 4.

New area for muriqui

A population of muriqui *Brachyteles arachnoides* has been discovered in a new location in the Serra da Mantiqueira in São Paulo, Brazil. Only a few small, fragmented populations of this endemic species still remain in the Atlantic Forest of Brazil because of large-scale habitat destruction. Twenty-two individuals were counted at one sighting.

Source: *Neotropical Primates*, September 1996, 84.

Loggers from the East move in to Brazil

Logging companies from Malaysia and China are buying up small local logging companies in Brazil and using their existing forest management plans (PMFs) already approved by IBAMA (the government environment agency) to log and export timber. Rules for sustainable management are being violated and IBAMA, with only 650 staff on patrols, is finding it hard to control illegal logging. Nevertheless, a Malaysian and a Chinese company have been fined recently for exporting timber illegally, and IBAMA is now conducting a massive audit of PMFs, weeding out corrupt employees and using satellite technology to identify illegal activities.

Source: *The Guardian*, 1 January 1997.

Situation worsens in Sangay

Well-organized poaching of white-tailed deer *Odocoileus virginianus* and mountain tapirs *Tapirus pinchaque* in Sangay National Park, Ecuador, is an increasing problem, as well as extensive dry-season burning of the uplands to produce pasture for cattle, which is destroying cloud forest. In November 1996, Craig C. Downer and T. H. Bassett visited the park and found evidence of several hunters' camps and a well-worn trail used by pack-horses to take poached animals out of the park. Apparently tourist guides regularly hunt tapirs and deer in their spare time and hunters come in from elsewhere, particularly just before the major public holidays. Two of the park's dwindling number of mountain tapirs were reported to have been killed and taken out of the park in the 3 weeks before the visit.

Source: C. C. Downer (IUCN/SSC Tapir Specialist Group and T. H. Bassett (FFI Member), 16 November 1996.

Ecuador fails to protect coastal forest

The Ecuadorian government has opened the way for commercial logging in the coastal forests of the Mache-Chindul mountains. The forests, in the north-east of the country, contain many threatened species, including jaguar *Panthera onca* and giant anteater *Myrmecophaga tridactyla*. Ecuadorian conservationists had asked INEFAN (the Ministry of Parks and Conservation) to set aside 20,234 ha of the region as a national park but only a fraction of this has been protected because INEFAN's budget is too small to buy the land titles. This has left the way clear for

loggers to buy land rights from indigenous communities and local landowners.

Source: *BBC Wildlife*, February 1997, 55.

Patagonian forest to be logged

The Patagonian provincial government in Argentina has authorized Trillium Inc., a US company, to fell over 150,000 ha of lenga *Nothofagus pumilio* deciduous forest without an ecological impact assessment. It is expected that the timber will be exported as woodchips to Japan.

Source: *Plant Conservation News*, September 1996, 4.

New Peruvian national park

An area of 325,000 ha extending eastwards from the Tambopata River to the River Heath along the border with Bolivia has been declared a national park. The Bahnaja-Sonene National Park incorporates the Rio Heath National Sanctuary, the only area of tropical grassland in Peru. The area covers about one-third of the area originally proposed as a national park. It excludes an area allocated for oil and gas exploration to Mobil Oil Inc. but includes a proviso that this area could be added to the park eventually. Across the border the Bolivian government declared the Madidi National Park covering 1.7 million ha. The combined area of these parks forms one of the largest protected regions of tropical rain forest in the world.

Source: *TReeS News*, September 1996, 1.

Monkey puzzle trees at risk

Two small populations are all that remain of southern Chile's once vast monkey puzzle tree *Araucaria araucana* forests after

a century of logging. One population remains along the coastal mountains and a second spans the border between Chile and Argentina. The trees are sacred to the Pehaenche Indians of south-central Chile who have been fighting for years to protect their forests.

Source: *People & the Planet*, 15, (4), 18.

New wetlands listed for Chile

Chile has named six new sites for the Ramsar list of wetlands of international importance. Five of these sites are high-altitude sites in the Puna (high Andean) region and include mainly 'salares', the saltwater wetlands of the Puna region. This area includes a nesting site for James' flamingo *Phoenicopterus jamesi*.

Source: <http://www.iucn.org>

AUSTRALIA/NEW ZEALAND/ANTARCTICA

Captive bred honeyeaters

The 1995/96 breeding season for helmeted honeyeaters *Lichenostomus melanops cassidix* was a success for the captive population at Healesville Sanctuary in Victoria, Australia. This was the first year that the captive group contained several birds of reproductive age and the group began breeding well. The captive management of this bird began in 1989 but suffered the accidental mortality of most of the birds in 1992. It has been rebuilt since by foster-raising birds from wild-laid eggs by Gippsland yellow-tufted honeyeaters *L. melanops gippslandicus*. A captive-raised pair and its offspring were also successfully

reintroduced into the surrounding area this season. The wild population is now restricted to one population of about 100 birds along 5 km of remnant streamside habitat in southern Victoria.

Source: *Re-introduction News* September 1996, 3-5.

Rock rats trapped

A number of central rock rats *Zyzomys pedunculatus* have been trapped during a faunal survey in the West Macdonnell Ranges in the Northern Territory of Australia. Only five of these animals have been captured this century, the last in 1960. Little is known about their biology, behaviour and diet, and specific reasons for the species's decline are unknown. Two males were taken to Alice Springs Desert Park where a field and captive research study of the species is to be carried out. It is hoped that a female will soon be caught to enable a captive-breeding programme to be initiated.

Source: *International Zoo News*, December 1996, 583.

Tree rediscovered

Until 3 years ago an undescribed species of *Elaeocarpus*, known only from herbarium specimens collected in 1936 from the Minyon Falls area, north of Lismore in northern New South Wales, Australia, was feared extinct. But in 1993 a small tree of this species was found on the banks of Rocky Creek Dam, and in October 1995 a new population of 30 individuals was found in Whian Whian State Forest on the eastern side of the dam close to logging operations. Since then, another 246 individuals have been found in the same area and a further 234 15 km to the north in Nullum

State Forest. The greatest threat to the species is unsurveyed forestry operations. Seeds have been distributed to nurseries and botanic gardens for propagation.

Source: *Plant Talk*, January 1997, 30-31.

Boost to juvenile kiwis

Zoos in New Zealand are participating in the New Zealand Department of Conservation's National Kiwi Recovery Project by artificially incubating and rearing chicks from wild-collected eggs. Wild kiwi numbers are declining at a rate of about 6 per cent every year and juvenile mortality is as high as 100 per cent in some areas. Auckland zoo is working with a population of six pairs of North Island brown kiwi *Apteryx australis mantelli* found north of Auckland in an area of intensive farming. Juvenile mortality is high here with an average survival time of 14 days for chicks. Introduced predators such as stoats and feral cats pose the greatest threat. As many eggs as possible are taken from the wild for incubation and hand-rearing before release back to their place of origin at about 8 months. Trials have had very good results with nearly 100 per cent survival rates for released juveniles. The project is expected to continue until effective predator control methods are perfected.

Source: *International Zoo News*, December 1996, 583-584.

Lizards protected

Four native lizards in New Zealand are to join the other 55 lizard species in receiving the protection of the Wildlife Act. The two species of skink and two geckos will now receive

safeguards from unregulated trade and collection. Inconsistency in past protection had caused confusion, allowing a thriving trade in specimens taken from the wild.

Source: *Forest & Bird Conservation News*, November 1996, 4.

Eco-timber in New Zealand

Greenpeace and New Zealand tropical timber importers, united in the Imported Tropical Timber group (ITTG), launched sustainably managed Eco-timber on the New Zealand market in November 1996. The project evolved from concern over the Solomon Islands losing its forests to Malaysian and Korean companies and from the desire of New Zealand timber importers to move away from destructively logged timber. The ITTG sponsored a 3-year project in the Solomons to provide sustainable sources of timber that offer local employment and an economic future for the islanders.

Source: *Habitat*, January 1997, 6.

South Georgia's future to be decided

The UK Foreign Secretary is soon to decide the fate of South Georgia, on the edge of Antarctica. In recent years conservation on the island has been managed from the UK as a dependent territory.

However, there is concern that the island should be properly protected because it is home to a great abundance of wildlife. South Georgia lies just within the Atlantic Convergence where upwellings of nutrients have created one of the richest seas in the world. Krill are carried here by the currents and whales follow a migratory route here to feed. There are

also southern elephant seals, Antarctic fur seals and a wealth of birdlife, including wandering albatrosses and most of the world's macaroni penguins. Whale numbers in the area have never recovered from the devastating whale industry that was based in South Georgia, and recent over-fishing and increased numbers of visitors to the island have put pressure on the wildlife. The British Antarctic Survey has a research station on the island, but is unlikely to take on the management of the island without extra funding. It is believed that commercial interests should not be allowed to take priority in the island's management.

Source: *BBC Wildlife*, January 1997, 57.

PUBLICATIONS

An Annotated Checklist of the Birds of the Oriental Region

This checklist includes every species recorded in the region covered by the Oriental Bird Club. Written by Tim Inskipp, Nigel Linsey and William Duckworth and published in November 1996, it is available from the Oriental Bird Club c/o The Lodge, Sandy, Bedfordshire SG19 2DL, UK.

International Legal Protection of Wild Fauna and Flora

A study by Dr P. van Heijnsbergen, member of the Commission on Environmental Law of the IUCN, has been published concerning international laws that deal with the protection of wild fauna and flora. It can be obtained from IOS Press, Van

Diementstraat 94, 1013 CN Amsterdam, The Netherlands.

News from KWT

The first edition of *News from KWT*, the Journal of the Kenya Wildlife Trust, was published in October 1996. For further information contact KWT at Raitt Orr & Associates, 34 Buckingham Palace Road, London SW1W 0RE, UK; Tel: +44 (0)171 828 5961; Fax: +44 (0)171 630 9750.

OPPORTUNITIES

Volunteers for sea turtle work

The Sea Turtle Society of Greece needs volunteers for monitoring and public awareness work on Zakynthos, Crete and Peloponnesus during the 1997 nesting season, and all year at the Sea Turtle Rescue Centre near Athens. Contact: Sea Turtle Protection Society of Greece, 35 Solomou St., GR-106 82 Athens, Greece. Tel/Fax: +30 1 3844146, e-mail: stps@hol.gr

Wildlife Conservation Research Unit needs volunteers.

Volunteer fieldworkers are required for a study of the ecology and behaviour of badgers in the Cotswold District of the UK. Contact: Frank Tuytens, Field Cottage, Upper Wick, Near Dursley, Glos. GL11 6DG, UK. Other WildCRU projects may also require the assistance of volunteers. Contact: Heather Booth, WildCRU, Department of Zoology, University of Oxford, South Parks Road, Oxford OX1 3PS, UK.

MEETINGS

The Regulation of International Trade in Endangered Species under CITES. 12–13 May 1997, Nottingham University Centre for Environmental Law, UK. *Contact:* M. Welch-Dolynskiy, Department of Law, Nottingham University, Nottingham NG7 2RD, UK. Tel: +44 (0)115 951 5700; Fax: +44 (0)115951 5696; e-mail: Law@nottingham.ac.uk

Conservation and Compromise: Marwell Preservation Trust and the University of Southampton Seminar. 31 May 1997, Marwell Zoological Park, Hampshire, UK. *Contact:* Marwell Zoological Park. Tel: +44 (0)1962 777407; Fax: +44 (0)1962 777511.

Symposium on Marine Conservation Biology. 6–9 June, 1997, University of Victoria, British Columbia, Canada. *Contact:* Dr Elliot Norse, President, Marine Conservation Biology Institute, 15806 NE 47th Court, Redmond, WA 9805, USA. Fax: +1 (206) 883 3017; e-mail: enorse@u.washington.edu

Tenth Meeting of the Conference of the Parties to CITES. 9–20 June 1997, Victoria Falls, Zimbabwe. *Contact:* CITES Secretariat, 15 Chemin des Anémones, CP 456, 1219 Châtelaine, Genève, Switzerland. Tel: +41 22 979 9139/40; Fax: +41 22 797 3417; e-mail: cites@unep.ch

1997 Meeting of the American Society of Primatologists. 27 June–1 July 1997, San Diego, California, USA. *Contact:* Nancy Caine, Psychology Department, California State University, San Marcos, CA

92096, USA. Tel: (619) 752 4145; Fax: (619) 752 4111; e-mail: nancy_caine@csusm.edu

Third World Congress of Herpetology. 2–10 August 1997, Prague, Czech Republic. *Contact:* Zbynek Rocek, Congress Director, Department of Paleontology, Geological Institute, Academy of Sciences, Rozvojova 135, 165 00 Praha 6 - Suchdol, Czech Republic. Tel: +42 (2) 24311421; Fax: +42 (2)24311578; e-mail: rocek@gli.cas.cz

First European Ornithological Union Congress. 28–30 August 1997, Bologna, Italy. *Contact:* Dr Fernando Spina, Istituto Nazionale per la Fauna Selvatica, Via Ca 'Fornacetta 9, 40064 Ozzano Emilia (BO), Italy. Tel: +39 51 65 12 111; Fax: +39 51 79 66 28.

Entomology 1997. 10–12 September 1997, Newcastle University, UK. *Contact:* The Registrar, Royal Entomological Society, 41 Queen's Gate, London SW1 5HR, UK. Tel: +44 (0)171 584 8361, Fax: +44 (0)171 581 8505; e-mail: reg@royensoc.demon.co.uk

Third International Conference on Great Apes. 4–7 November 1997, Sarawak, Malaysia. *Contact:* Orangutan Foundation International, 822 S. Wellesley Ave., Los Angeles, CA 90049, USA.

Has the panda had its day? Future priorities for the conservation of mammalian biodiversity: Fauna & Flora International/Mammal Society Symposium. 14–15 November 1997, Zoological Society of London, UK. *Contact:* Dr Abigail Entwistle, FFI, Great Eastern House, Tenison Road, Cambridge CB1 2DT, UK. Tel: +44 (0)1223 571 000; e-mail: inf@ffint.org

International Conference on Medicinal Plants. 16–20 February 1998, Bangalore, India. *Contact:* Foundation for Revitalization of Local Health Traditions, No. 50, 2nd Stage, MSH Layout Ariandnagar, Bangalore 560024, India. Tel: +91 80 3336909/0348; Fax: +91 80 353 4167; e-mail: root@frlht.ernet.in

Seventh International Congress of Ecology. 19–25 July 1998, Florence, Italy. *Contact:* Almo Farina, Secretariat VII International Congress of Ecology, c/o Lunigiana Museum of Natural History, Fortezza della Brunella, 54011 Aulla, Italy.

Fifth World Conference on Birds of Prey and Owls. 4–11 August 1998, Johannesburg, South Africa. *Contact:* Mr Robin Chancellor, Hon. Secretary of the World Working Group on Birds of Prey and Owls, 15b Bolton Gardens, London SW5 OAL, UK. Fax: +44 (0)171 3701896.

CORRECTIONS

Giant elephants

The 'Giant elephants' (*Oryx*, 31 [1], 21) occur in south-west Nepal in the Terai zone along the border with India – a tropical environment – not in the forests of northern Nepal as per the report of *The Times*.
John Henshaw.

Congo bay owl

The Congo bay owl (*Oryx*, 31 [1], 18) was sighted in 1970 and also in 1989 according to M. Everett in Burton, John A. 1992. *Owls of the World*, Peter Lowe (Eurobook Ltd), London.
John A. Burton.