The Gulf War: impact of the oil spills

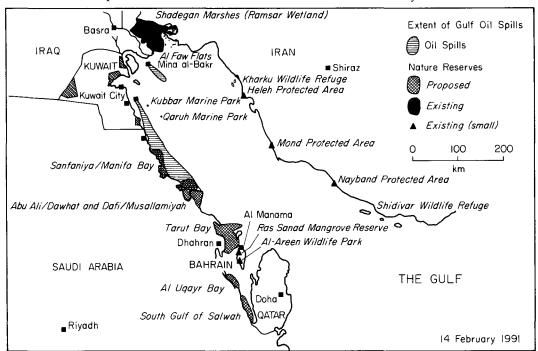
While the human tragedy and suffering resulting from the Gulf conflict is painful, the damage that is being done to the environment has also already proved to be devastating. Sir Shridath Ramphal, newly elected President of IUCN–The World Conservation Union, appealed on 30 January for all concerned to bring hostilities to an end and appealed to them to avoid wantonly destroying the natural heritage of the region and blighting the future of coming generations.

As we go to press hostilities continue and the world has seen the devastation already taking place in the sea. The land environment is also undoubtedly suffering severe damage, but the extent of that is difficult to estimate at present.

Of immediate concern are the effects of oil pollution on marine life. An oil slick of some 11.5 million barrels, more than three times the size of any previous spill, is now creeping down the Saudi Arabian coast. There have been at least four spills in the Gulf so far and

the main slick, which is the focus of an international clean-up operation, originating from the discharge from the Mina al Ahmad terminal in Kuwait, now extends some 280 km from its source and in some places extends up to 20 km offshore.

The slick will have serious effects on all kinds of marine life. The coral reefs in the area are subtidal and may escape the worst effects of coating by surface oil but will be impacted as the weathered oil sinks. Seagrass beds, in the sheltered shallow waters of Manifa Bay, Musallamiyah, Tarut Bay and the Gulf of Bahrain, support rich communities of shellfish, shrimps and finfish, which are of significant economic value. The seagrass is also of great importance for grazing turtles and dugong. Mangroves in the same area are key spawning and nursery grounds for fish. Several mudflats and salt marshes, many of which support large numbers of birds, have been affected already or are at risk, particularly the proposed Khawr al Mufattah Nature Reserve in southern Kuwait, around Al Khafji, Al Mishab and Manifa Bay.



Map of the Gulf showing the extent of the oil spills on 14 February 1991 (*World Conservation Monitoring Centre*).

As far as species are concerned, the oil could cause the deaths of sea turtles between April and September when nesting takes place and the key breeding island of Karan has been surrounded by a boom to try to keep oil off the beaches. No dugong mortalities have been reported yet but the 3500 animals in and around the Gulf of Bahrain and Musallamiyah must be at risk, especially from ingesting oiled seagrass. Birds have been the most obvious casualties so far: numbers of deaths could already be as high as 10,000-20,000. Some 1500 birds were counted on an 8-km stretch of coast around Manifa: 80 per cent were oiled and 15 per cent were dead. Many millions of passage migrants will be passing through the area in the spring, stopping to feed on the inter-tidal mudflats, which are very vulnerable to oiling.

Predictions by the World Conservation Monitoring Centre suggest that the slick would contaminate the key ecological sites around Musallamiyah and Abu Ali by the third week in February and would reach Al Jubail, the world's largest desalination plant, by 25 February. By mid-March the seagrass beds, mangroves and mudflats of Tarut Bay will be polluted, with Bahrain and the Gulf of Bahrain affected by the end of March.

Source: World Conservation Monitoring Centre, 14 February 1991.
Editor.

IUCN General Assembly, 18th Session

Almost 1600 people attended IUCN's General Assembly in Perth, Australia, 28 November–5 December 1990 under the title 'Conservation in a Changing World'. An enormous range of issues, some vigorously debated, were examined in 12 workshops and 11 plenary sessions as well as in a host of less formal meetings.

Some of the questions considered—for example, can tropical forests be used sustainably and what principles and practices should guide the use of wildlife—attracted such widely divergent views that it was remarkable that consensus was achieved at all. A considerable amount of time was devoted to the draft Caring for the World: A Strategy for

Sustainability, companion and successor to the World Conservation Strategy, to be launched late in 1991, and to examining, amending and finally approving the 228-page IUCN Programme for the next triennium.

Around 95 resolutions were considered. Some were far-reaching, covering the entire range of IUCN's work, including positions on Antarctica and on human population, and major issues such as driftnet fishing, tropical deforestation, global climate change, environmental law, and sustainable use of forests and wildlife. Others were narrower, focusing on the conservation of individual species or of specific sites. As to be expected from the location of the meeting there was a bias towards sites and species of Australasian and South East Asian concern.

Some resolutions were adopted with little discussion while others were hotly debated. The Resolutions Committee, chaired by Mark Collins (FFPS Council Member) had many late-night sittings before the wording of some motions had been amended to suit all parties, an important achievement if one of the objectives of the General Assembly is to unite the world's conservation bodies with a single voice. Some resolutions were changed significantly. One, originally calling on all States to cease importing tropical timbers Sarawak and Sabah in East Malaysia until the rights of indigenous peoples had been respected, was amended to urge all timber-importing countries to encourage the import of only timbers from sustainable sources and to discourage the import of timbers from unsustainable sources. The resolution on the conservation of wildlife through wise use as a renewable resource was also adopted after several amendments that made it at last acceptable to welfare-orientated groups, some of which appear to object to wildlife utilization of any kind. The resolution on Antarctica, urging the continent to be protected to the extent of permanently excluding mineral exploration and exploitation, was passed without a vote, although Norway, UK and US all said that if a vote had been taken they would have had to have abstained because, although they were in favour of protection, they did not wish to

commit themselves to a particular course of action at this time. A resolution on the conservation of insects and other invertebrates, submitted jointly by the Royal Entomological Society of London and the FFPS and recommending a range of measures for this neglected group of animals, was adopted without debate.

Although the majority of resolutions was circulated in advance of the meeting, some resolutions were formulated as a result of the meeting of the Species Survival Commission, which took place on the 3 days preceding the General Assembly (see pp. 115-116). Notable among them was one concerning the orangutan Pongo pygmaeus. This arose from concern about a significant increase in the illegal trade in these animals, which are taken as infants after their mothers are killed at timber concessions in Kalimantan and transported by sea to Taiwan where they are bought by wealthy Taiwanese as pets and by amusement parks and restaurants as public attractions. Attempts have also been made to ship orang-utans through Thailand and Singapore. The resolution called upon the Government of Thailand and Singapore to comply with CITES regulations, the Government of Taiwan to enforce its national laws conforming to CITES, the Government of Indonesia to enforce more strongly wildlife laws and timbering regulations so that selectively logged forests retain some value for conservation, and to extend the protected area network and include dispersion corridors for orang-utans. The FFPS co-sponsored another late resolution relating to the very grave consequences for the domestic stock and wildlife of the Mediterranean basin, and even for the whole of continental Africa, of the continued presence in Libya of the New World screwworm Cochliomyia hominivorax. It called for the governments of developed countries and other donors to seriously heed the call by FAO for funds to eradicate this introduced parasite (see p. 66). Another resolution submitted was in response to a feeling by some commission members that ex situ conservation projects were sometimes undertaken more readily than in situ projects because it was easier to attract funding for them. This resolution, while acknowledging that *ex situ* programmes may be an integral component of the conservation programme for many species and essential for some species, said they should not be considered a substitute for *in situ* conservation, and urged all agencies concerned with species conservation to give priority to funding for field conservation.

The IUCN continues to grow in strength. It now has as members: 64 states; 111 government agencies; 39 international NGOs, 415 national NGOs; and 37 affiliates (non-voting), making a total of 660 members representing 118 countries. While membership increases in breadth year by year and now embraces a great diversity of organizations, there are some groups whose membership is opposed on the grounds that conservation objectives are not their main concern. The Forestry Commission of Tasmania and the Fur Institute of Canada both applied to join and both failed when put to the ballot.

The IUCN members under their new President, Sir Shridath Ramphal, left Perth to embark on their conservation efforts for the next 3 years extremely well equipped with ideas and, it is hoped, full of enthusiasm for translating those ideas into action. Conservation is now an increasingly complex task. Solutions will have to address, among other things, how best to prevent the predicted one-quarter of the world's species disappearing in the next decade, how best to stabilize the human population as near as possible to current levels and how to ensure that the prices of commodities on the world's markets reflect the true environmental costs. They are not easy tasks. Editor.

Threatened parks

With the addition of 16 parks and reserves this year, the IUCN Register of Threatened Protected Areas of the World, now lists 107 parks from 64 countries. Sites added are suffering from a range of stresses including: proposed hydroelectric plants; military, skiing, road and railway developments; acid rain; cocaine production, and mining.

Eight of the threatened parks are in Indo-Malaya. The Himchari National Park in Bangladesh, once one of the species-rich remnants in the Chittagong Hills, has been devastated by illegal removal of timber and forest guards are rarely seen in the area. In India the Kaziranga National Park is threatened by a proposal to build an oil refinery upstream and the increasing flood levels on the Brahamaputra River, which caused 38 rhinos to drown in 1988 and which are believed to be exacerbated by expanding human activities in the watershed. Also in India the Gulf of Kutch Marine National Park is deteriorating through excess harvesting of mangroves, overgrazing by camels and harmful fishing methods, increasing ship traffic and industrialization in the gulf. Nepal's Royal Chitwan National Park is threatened by an irrigation project, which will use 75 per cent of the base flow of the East Rapti River on the park's northern boundary. Although work has only just begun, the project was initiated as long ago as 1976 when Environmental Impact Assessments were not required. The Asian Development Bank and the Government of Nepal are reviewing the project in response to an intervention from the World Heritage Committee.

In Pakistan 20,000 people now live in the Kirthar National Park, most of them refugees from India. Their grazing animals include 30,000 cattle plus sheep, goats and camels, and law enforcement and management resources are lacking. A once pristine reef, Tubbataha National Marine Park in the Philippines, has lost one-half of its coral in the past 5 years through destructive fishing methods. In Thailand the Doi Inthanon National Park's resident hill tribe population has increased from 1657 in 1972 to c. 4000. Cultivation of opium poppies has resulted in the clearance of 15 per cent of the park's area and the fauna has been depleted through hunting. Heavy doses of DDT are used by farmers resident in the central 'agricultural development' zone. Thailand's largest remaining marshes are contained in Khao Sam Roi Yot National Park, but one-fifth has been appropriated for aquaculture. The Irrigation Department has constructed a public road through the park and it is also being viewed as a potential shrimp farming area.

In Natal, South Africa, a private company has applied to dredge-mine titanium and other heavy metals in dunes between Lake St Lucia and the sea. The Government announced in 1990 that this state-owned land would be incorporated in the St Lucia Wetland Park but the mining company has been granted prospecting rights. Dredge-mining would involve stripping the dune vegetation and flooding the dunes, using floating dredgers to separate the metal from the sand slurry.

Five sites in the Palaearctic are at risk. Bulgaria's Pirin National Park, which was taken off the list when ski development plans were controlled, is on the list again because of a new threat in the form of diversion of water from the Mesta River, which would affect the aquatic systems of the park. A French-Czechoslovak company is planning to build two new hotels and five new ski lifts in the core area of Low Tatra National Park in Czechoslovakia; forestry operations already occur in 80 per cent of the park and a cellulose plant nearby is causing major air pollution. In neighbouring Poland, Ojcow National Park near Krakow is the worst affected of the country's nine parks that are suffering from air pollution. Some 200 industries have a direct impact on Ojcow as well as upstream dairy farms. Over the past 90 years 43 plant species have disappeared, while 35 per cent of current species are endangered.

In the UK, the Ministry of Defence is proposing to build a radar transmitter in the Pembrokeshire Coast National Park, which would be visually intrusive and is raising fears among local people about health risks from high frequency radio waves. Egypt's Ras Mohammed Marine National Park has been listed because of damage by uncontrolled tourism, waste dumping and oil pollution.

In the Neotropics, Mexico's Montes Azules Biosphere Reserve, which protects the remnants of the Selva Lacandona rain forest, is being invaded by farmers, cattle ranchers and oil exploration teams. Many parks in Latin America are used by illegal cocoa growers but Tingo Maria National Park in Peru has been

swamped by growers and drug traffickers. Forest has been cleared, herbicides and toxic chemicals used to make cocaine powder are discarded at random and the park authorities are unable to control the situation. the IUCN's Commission on National Parks and Protected Areas is working to press for corrective actions for all these areas. *Editor.*

Javan rhino: captive-breeding concern

WWF-International and other conservation agencies are very concerned about a proposal, originating from the Captive Breeding Specialist Group (CBSG) of IUCN to remove 18-26 Javan rhinos Rhinoceros sondaicus from Ujong Kulon National Park to establish captive-breeding programmes. There are only two populations of Javan rhino in the world, both in protected areas: approximately 60 rhinos in Ujung Kulon National Park in Indonesia and 5-15 animals in Nam Cat Tien reserve in southern Vietnam. The Indonesian population has increased in numbers with better protection of the park. Ujung Kulon is one of the finest and best protected parks within Indonesia. It protects one of the last remaining fragments of lowland rain forest in Java and is an important centre for biodiversity. Apart from the Javan rhino, the park protects other endangered species such as banteng Bos javanicus, wild dog Cuon alpinus, three endemic primates namely, the Javan gibbon Hylobates moloch, silvered leaf monkey Trachypithecus auratus, and Javan leaf monkey Presbytis comata, as well as 259 species of birds (half the Javan bird list), crocodiles and nesting beaches of marine turtles. Concern has also been expressed over plans by government agencies to move rhinos from the Ujung Kulon peninsula to a captive-breeding scheme on the island of Panaitan, adjacent to tourist facilities. Kathy MacKinnon, Senior Conservation Advisor, WWF-Indonesia Programme, PO Box 133, Bogor, Indonesia.

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Resolutions from the ICBP XX World Conference

The XX World Conference of the International Council for Bird Preservation held in Hamilton, New Zealand, 21–27 November 1990, adopted 13 resolutions. Four dealt with problems arising from fisheries and another noted that the ICBP is developing a programme to eradicate introduced animals from islands of global importance to seabirds and called for the UK, France, Mexico, Ecuador and Chile to help with this on particular sites under their jurisdiction.

Spix's macaw Cyanopsitta spixii and the slender-billed curlew Numenius tenuirostris were subjects of separate resolutions. Both species are in imminent danger of extinction. Although the Brazilian Government has established a committee to save Spix's macaw it will need determined efforts in protecting and restoring habitat, in protecting the sole wild bird and in managing all the remaining birds in captivity and in the wild as a single breeding entity if the species is to be saved. The saving of the slender-billed curlew, down to 100-400 birds, will require the co-operation of all 12 of the full and potential range states in protecting the bird from hunting and its habitat from further losses.

Some resolutions were site-specific: one urged the New Zealand Government to build on conservation successes achieved in the Chatham Islands; one commended Vietnam for proposing 87 protected areas and called for international and national agencies to help develop the system; another congratulated the Romanian Government for halting reclamation work in the Danube Delta and declaring it as a Biosphere Reserve but urged it to pass the relevant bill and to organize the reserve. Another focused on the endangered forests, of the Atlantic Coast of Brazil where existing reserves will not be sufficient to guarantee the survival of the region's biological diversity. Resolutions 12 and 13, respectively, asked Japan to enforce the law banning the use of mist nets and Cyprus to enforce the law banning all spring shooting of migrating birds. Editor.