their livers; in Central America fish catches are declining in contaminated estuaries. PAN is urging governments to restrict the export of chemicals banned at home and asking Third World governments and international agencies to adopt safer pest control methods. Many developing countries are trying to set up tougher regulations but an overriding concern is to keep crop yields up and that means keeping pests down. Since 1978 the US has required chemical manufacturers to notify foreign buyers of pesticides banned, restricted or unregistered in the US but the results are not encouraging – no developing country has yet stopped a shipment. British American Tobacco has just stopped supplying aldrin to farmers in Kenya but is replacing it with another organophosphorus pesticide, orthene – only marginally safer than aldrin and still requiring protective gloves, face shields, washing facilities and warnings about breathing the mist – not much of a step.

Turtle Turning Questioned

Research workers often immobilize female turtles taken after egg-laying by turning them on their backs for tagging, weighing and measuring. The same researchers have often wondered why such a small percentage of turtles return to the nesting beach in subsequent years. Tag loss, natural mortality and missed turtles may explain this, but a recent study by Rosskopf and Woerpelin has led Peter Pritchard, in the May issue of the *Marine Turtle Newsletter*, to question this handling technique. Rosskopf and Woerpelin found that the sudden death of a captive female desert tortoise *Gopherus agassizi* was due to peritonitis resulting from ruptured eggs in the body cavity. This, they say, is common in chelonians and is thought to be induced by trauma to the delicate developing ova. They advise researchers to avoid trauma to all female chelonids, especially any activity that may lead to the tortoise turning on its back. Peter Pritchard suggests that present handling of marine turtles may be causing rupture of next season's eggs leading to breeding failure or mortality from egg yolk peritonitis. Not for the first time a scientific research practice may be harming the species being studied.

Who Would Run a National Park?

Riding Mountain National Park in Manitoba, Canada, was designated in 1933, upgrading a reserve after encroaching settlements had already destroyed the buffer forests. Now the 2990-sq-km park is surrounded by agriculture and there is considerable pressure from both landowners and the general public. The farmers see the forest not only as a waste but also as a fire hazard; they would like to use the timber and grazing within the park. They resent the beavers that emigrate from the park and dam the streams causing thousands of dollars worth of damage each year. No compensation is paid, partly because beaver numbers have increased only in the last few years and they are fully protected. The large deer, wapiti *Cervus canadensis*, from the park damage haystacks and crops. Farmers claim that the compensation paid is

inadequate, but they object even more to the damage done by hunters, selected by public draw. The general public clamours for better access and more recreational facilities within the park but Parks Canada is resisting. Embarrassed by the size of the recreational settlement that has grown up over the years, they are prepared to maintain and upgrade the present facilities but not to allow new development within the park. Parks Canada's mandate – to provide for the 'benefit, education and enjoyment of the public' as well as preserve the land base 'so as to leave it unimpaired for future generations' – is so wide open to interpretation that there are bound to be continuing conflicts with the user public. What is beneficial, educational and enjoyable for one group may be anathema to another. And while farmers regard the park simply as a waste of resources and a source of damage to their crops the confrontation will continue.

Kuna Indians Protect Their Forest

One of Panama's last remaining areas of virgin rainforest is soon to be penetrated by an extension of the Pan-American highway to the Atlantic coastal town of Carti in the Comarca, a reservation of the Kuna Indians. The Kuna fear that this will open up the Comarca to wealthy speculators and land-hungry settlers, although it is illegal for non-Kunas to own land there. Already there is uncontrolled colonization along the approaching road; forest has been cleared for several kilometres on either side. The Government has given land titles not to poor farmers, as was intended, but to wealthy speculators. According to the *New Scientist* the Kuna have responded with an imaginative plan to establish their presence in the vicinity of the road by creating a large botanical park, labelling trees with their Kuna, Spanish and scientific names, and prohibiting hunting and clearing. They also want to expand the tourist business they now run on the coast to embrace tourism for scientists in the heart of the rainforest – a scheme that would both bring in income and gather support for any future battles over sovereignty and uncontrolled development. Scientists from Costa Rica's Centre for Tropical Agriculture are making wildlife inventories and studying land use to help the Kuna find the best ways of using the newly accessible forest.

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What Future for Javan Rhinos?

The cause of the recent deaths of five Javan rhinos *Rhinoceros sondaicus* in their last stronghold in western Java remains a mystery. Professor Rudolf Schenkel of Basel University, Switzerland, who investigated the deaths earlier this year, says it was undoubtedly a disease that killed them, possibly anthrax. But the population of between 40 and 60 rhinos is at risk not only from another outbreak but also from changing conditions in the habitat. The vegetation is still changing after the Krakatoa tidal wave devastated the forest in 1883. Dense stands of the palm *Arenga obtusifolia*, which provide no food for rhinos, are increasing. The rhinos appear to be changing their diet in response to food shortages and they may also be having to compete with banteng *Bos*

javanicus, the wild cattle, which are increasing in the absence of predators, such as the Javan tiger, and may be starting to eat plants outside their normal diet. Trials in vegetation management have been carried out to try to improve conditions for the rhinos. Palms are cut down to allow the rhinos' food plants to grow, but this has to be done near the rhinos' existing feeding routes. Eventually some rhinos may have to be translocated to establish a second population, but the ground has to be carefully prepared. Sumatra would be suitable but local people must be prepared. Even if all this were done translocation is only possible if the Udjung Kulon population can be proved to be increasing.

Tonga and the Humpbacks

When, in 1965, the International Whaling Commission, judging the humpback to be on the threshold of extinction in the Pacific, banned commercial harvesting, Tonga, not a member of the IWC, continued to take a traditional subsistence harvest of 5–15 whales each year. But the Tongan method of throwing harpoons from small sailing boats caught only the weaker whales – lactating females and calves especially – and the population decreased so much that in 1979 the Tongan Government imposed a two-year ban on whaling. A WWF survey by Ronald Keller in 1979-80 showed that only 300 humpbacks were left around Tonga compared with 10,000 at the turn of the century, and few were calves. It became evident that a two-year moratorium was not sufficient since even one year of 15 kills, mostly females and calves, could be disastrous. At the end of 1979 the Whaling Act was amended to require the king's permission to kill a single whale, but whalers wanting to resume the hunt found enough political support recently for the Tongan Government to repeal the amendment. Tonga, now at the end of the moratorium, has to choose between short and long term economics. A compromise would be to impose a ten-year moratorium and continue the surveys on the understanding that the final results might reveal that any harvesting is incompatible with the humpback's survival. In that case new food sources are needed; the Government has already built fish-storage facilities, developed methods of salting and smoking fish, and built up a fleet of boats to increase the catch.

Acronyms and Abbreviations

This list is only intended to cover acronyms used in this issue of *Oryx*.

CoEnCo	Council for Environmental Conservation
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
EEC	European Economic Community
IUCN	International Union for Conservation of Nature and Natural Resources
MAFF	Ministry of Agriculture, Fisheries and Food
NCC	Nature Conservancy Council
RSPCA	Royal Society for the Prevention of Cruelty to Animals
SSSI	Site of Special Scientific Interest
UNEP	United Nations Environment Programme
WWF	World Wildlife Fund

Briefly

INTERNATIONAL

World Conservation Strategy Progress
Since the World Conservation Strategy was launched, in 1980, 38 nations have incorporated, or intend to incorporate, its principles into their national policies.

Everglades National Park
Everglades National Park was officially dedicated as a World Heritage Site on 6 April 1982.

New Ethnobotany Society
The Society of Ethnobotanists (SEBS) was created last year. Details from Central Institute of Medicinal and Aromatic Plants, Lucknow – 226010 (UP), India.

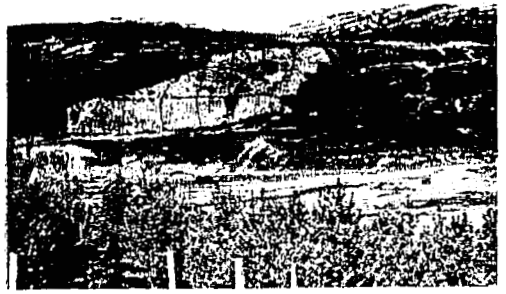
Salmon Watch
A new network for those concerned with conservation of salmon, trout and charr has been set up under the auspices of the IUCN. Salmonid Watch Secretary, Peter S. Maitland, Institute of Terrestrial Ecology, 78 Craighall Road, Edinburgh, Scotland, UK.

Turtle and Tortoise Foundation
The International Turtle and Tortoise Foundation based in the Netherlands has ceased all activities, including the publication of *Chelonologica*, due to financial difficulties.

BRITISH ISLES

Rare Plant Records Rise
Records of over 5000 rare and threatened plants from all over the world are now held on the Wang computer of the Conservation Monitoring Unit at Kew, and nearly as many again are waiting to be added.

Conservation Garden Wins Award
The *Sunday Times* Conservation Garden, designed by Dr Kevin Chambers to attract birds and other wildlife, was awarded a Royal Horticultural Society Flora Silver medal at the Chelsea Flower Show, London this year.



The Forestry Commission's monocultures which blanket hillsides, irrespective of contours, have long been criticized, even on aesthetic grounds. But this scene in Scotland in May 1982 suggests that they are slow to change their ways.

Orchids Plundered
Last summer four flowering lizard orchid spikes *Himantoglossum hircinum* were dug up from one of only six places where it now grows, and in Buckinghamshire two spikes of the very rare military orchid *Orchis militaris*, which grows in only one other county, were also dug up. Both are among the 62 endangered British wild plants given special protection under the Wildlife and Countryside Act 1981, and the offence will carry a £500 fine when the Act comes into force.

Tradescant Trust
The newly formed Tradescant Trust is converting St Mary-at Lambeth Church in London, where the two John Tradescants are buried, into a Museum of Garden History and centre for interests relating to gardens and conservation. The churchyard will be planted with species they collected from all over the world. Details: 7, The Little Boltons, London SW10 9LJ.

Churchyard Plant Survey
Help would be welcomed for a national survey of churchyards and burial grounds to identify sites worth conserving. Survey forms available from the Botanical Society of the British Isles, c/o Dept of Botany, British Museum (Natural History), Cromwell Road, London SW7 5BD.

Where are the Great Crested Newts?
Localities of any ponds containing the great crested newt *Triturus cristatus*, now very rare in Britain, are requested by Dr T. J. C. Beebee, Biology Building, University of Sussex, Falmer, Brighton BN1 9QG, Sussex.