

ORYX

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Notes and News

The world's seas are threatened to an unprecedented extent; parts of the Baltic and the Mediterranean may soon be completely sterile. A dozen cetaceans, nine seals, all coastal crocodiles and marine turtles and some 30 species of seabird and wader are threatened with extinction; no part of the oceans is safe from human pollution. This is the background to the IUCN/WWF 10-million dollar Marine Programme, *The Seas Must Live*. It is divided into three sub-programmes: conservation of critical habitats; regulation of use; and regulation of competing and other destructive habitats. In the endangered species field the more significant projects include the creation of an international system of cetacean sanctuaries, protection of the gray whale breeding lagoons on the Mexican Pacific coast, a reserve and an educational programme to save the Mediterranean monk seal, and the creation of dugong management areas in Papua-New Guinea. Coral reefs are to be studied and preserved in Colombia, Fiji and Sudan, and turtles surveyed and preserved in Brazil, India and Malaysia. This programme is impressive but it is still only a first step. For the pressures are building up, and in the long run only governments, stimulated by world public opinion, can control them and avert disaster.

**Saving
the World's
Marine Life**

A huge loophole has been opened up in the International Whaling Commission's policies by Japan's unilateral decision to grant itself (as it is perfectly entitled to do under the present regulations) a scientific permit to kill no fewer than 240 Bryde's whales *Balaenoptera brydei*, ostensibly for scientific research. The Japanese statement unctuously remarks that 'the whales will not be wasted', for 'they will be made available to a factory ship for processing' – even though they are being taken for scientific research! By a curious coincidence this number of whales, which is far above the maximum sustainable yield for the species in Antarctic waters,

**Japanese
Change
Whale Quota**

will just about compensate Japan for the 94 sei and 132 fin whales cut out of her quotas by the IWC at its annual meeting last June. This is something the other whaling nations will have to take serious notice of at the meeting of the IWC, at Canberra, Australia, this June. Incidentally, the new USA 200-mile fishing limits are likely to have a serious impact on the Japanese and Soviet whaling fleets next season. Last year the Japanese took several hundred sperm whales only just outside the old 12-mile limit near the Hawaiian Islands National Wildlife Refuge, and the Soviet Union hunts whales both in this area and off the northern California coast.

Is it really necessary for fishermen in the Pacific to kill the dolphins that they use as guides to schools of tuna? The Los Angeles *Times* reports that in 1976 three boats accounted for 35 to 40 per cent of all the porpoise kills. A

**Dolphins
and the
'Killer' Boats**

majority of the boats killed less than the average of one dolphin per ton of fish; some crews killed virtually none, while others killed at a rate that could account for 12,000 per boat per season. Normally, after a dolphin is sighted swimming above a school of tuna and is surrounded by a seine net, the crew lower the net at one end so that the animal can get away, and according to one fisherman, spotted dolphins – the species most frequently killed – tend to ‘stay in the net quietly until they can jump over it’ (unlike spinner dolphins, which panic and almost always entangle themselves). The clear implication is that the boats with the high killing rate are not giving the dolphins a chance. Since spinners appear much less often in the nets than spotted (and are easily identifiable), it would be small sacrifice for fishermen to avoid them altogether, and this combined with a weeding out of the ‘bad’ boats might reduce the incidental kill to the ‘level approaching zero’ required by the Marine Mammals Protection Act.

Last March Professor Archie Carr, the world’s ‘master turtler’ as Tom Harrison aptly called him, went to the Gulf coast of Texas to repeat a survey he made sixteen years ago. On that first visit he had spoken freely to the men

**Atlantic
Ridley Turtle
Crash**

of the Port Isabel shrimping fleet, the biggest shrimping exercise in the world. Every crewman he spoke to then knew the Atlantic ridley turtle well. They said it was the only abundant sea turtle in the area, and they deplored the damage it did to the shrimps in their trawls. At that time, when the price of shrimps was one-eighth of what it is today, ridleys were being caught abundantly not just off Texas and Mexico, but in Florida waters and northward all along the Atlantic coast. But in 1977 almost none of the shrimpers Archie Carr spoke to even knew of the existence of ridleys. Few ridleys are caught anywhere now, because few remain. Figures of arrivals at the nesting beaches at Rancho Nuevo in north-eastern Mexico show this graphically. The famous *arribadas*, when countless turtles used to arrive to nest on a few miles of beaches, have dwindled dramatically. In 1947

there were 40,000, in 1970 2500 and in 1974 a mere 1200. The total mature population is similarly estimated to have fallen from over 160,000 in 1947 to less than 5000 today. The writing is clearly on the wall for *Lepidochelys kempfi*. By 1980 it may well be extinct.

'Addax, scimitar-horned oryx and dama gazelle are now extinct throughout most of their original range', reports David Jones after a recent visit to Chad, in particular the Ouadi Rime-Ouadi Achim Reserve, which probably

harbours the only large surviving populations, and is the only reserve for Saharan and Sahelian fauna. (It was also harbouring rebel troops at the time.) John Newby, the biologist in the reserve, supported by WWF, believes there are about 2500 oryx there (at least half the total population), and about 800 addax. Political troubles make protection very difficult, and the sinking of permanent wells around the reserve perimeter means that the nomads and their herds tend to stay near them for long periods, grazing (and overgrazing) the vegetation within a 30-mile radius of each well. However, this also concentrates the poachers, and, by policing the wells, John Newby has been able to reduce poaching considerably; FPS has made him an Oryx 100% Fund grant to provide fuel and parts for his vehicle, lack of which were seriously limiting the anti-poaching work. But the best hope for conserving the oryx and addax is that they should be utilised for food on a sustained yield basis – as the nomads have always used them, particularly at the end of the dry season when there is little else for them to eat. These wild animals, which are, as David Jones says, 'superbly adapted to the harsh desert climate', could be far more efficient meat producers in this climate than domestic stock.

Elephant numbers in two Uganda national parks, Kabalega Falls and Rwenzori, have shown drastic falls since 1973. Counts by Dr Keith Eltringham and R. C. Malpas in 1975 showed unprecedented drops of 85 per cent

in the first park and 65 per cent in the second over the two years, as reported in *Oryx*, July 1976. Last September they repeated the aerial censuses and found no significant change in Kabalega but another substantial drop in Rwenzori – from 1047 (total count) to 704; this was a drop of one-third, bringing the total number of elephants to only a quarter of what they were three years ago. The numbers of recently dead elephants showed that the poaching continued, as the wardens' observations bear out. At this rate soon no elephants will be left in Rwenzori. The cause is undoubtedly the rise in the price of ivory, most of which apparently goes eventually to China and India. International action to control the trade is clearly the first and urgent need – Uganda is not the only country with this problem – but in Uganda itself they urge the need for helicopter patrols, the only efficient way of controlling poaching, and a ban or at least a moratorium on all exports of ivory. Unfortunately indiscriminate slaughter of this nature

**Grim Fate
for Uganda's
Elephants**

does not simply reduce numbers; it breaks up the elephant families and destroys the herd structure. It is the matriarch, the leader, who has the largest tusks and is the poachers' first target; without her the leaderless families tend to congregate, so that local density is high and damage to the vegetation inevitable. Last year Dr Eltringham and Mr Malpas described the future for Uganda's elephants as 'grim'; it is even grimmer today.

Tanzania is one of the greatest reservoirs of elephants in Africa, with a large concentration in the huge Selous Game Reserve and surrounding areas in the south – over 110,000 were counted there in the dry season, says a preliminary report of the Survival Service Commission (SSC)

**Elephant
Poaching in
East Africa**

Elephant Group. Moreover, the Tanzanian Government has a strong policy on conservation. But there is considerable poaching in the north of the country, as there is in Kenya, where it has received world-wide publicity, and

Uganda – a map showing elephant distribution is published on pages 24 and 25. The main cause of all the poaching is of course the ivory, and the size of the problem is reflected in the figures put out by TRAFFIC (Trade Records Analysis of Fauna and Flora in Commerce, another SSC group) for Hong Kong ivory imports: 512,955 kg in 1975, the equivalent of 35,000 elephants and possibly as many as 50,000. The SSC Elephant Group, which has African and Asian sub-groups, is making surveys to find out where and to what extent elephants are threatened or endangered and make recommendations for conserving them. The co-chairmen of the Africa group are Dr Iain Douglas-Hamilton and Dr Harvey Croze.

The square-lipped (white) rhino in the Garamba National Park in Zaire appear to be recovering their numbers after the disastrous slaughter between 1963 and 1966, when the park was occupied by armed soldiers or rebels. In

**White Rhino
Increase
in Zaire**

1966/67 Dr Kai Curry-Lindahl estimated that numbers of *Ceratotherium simum cottoni* had fallen from about 1200 to about 100 (*Oryx*, January 1972, page 263). Last year three members of the Kenya Wildlife Management Project, Drs J. M. Savidge, Michael Woodford and

Harvey Croze, in the course of aerial surveys for the Zaire Conservation of Nature and the Environment Project, estimated the population at over 400; moreover, the large number of calves suggest that it is a healthy and expanding population. Because white rhino thrive in heavily utilised grasslands – and there are 'massive' buffalo and hippo populations as well – they believe that numbers could build up considerably. The park is largely fire-climax grassland, being annually burned by 'hot' fires, i.e. late in the dry season – in marked contrast to the surrounding areas. But the moisture in the soil is sufficient to ensure a vigorous regrowth of grass after the burns, and thus, at the height of the dry season, when food would otherwise be scarce, the rank unpalatable stands of grass normally to be expected have been burned

off and replaced with a 'palatable sward'. As the process involves no loss of nutrients, productivity is increased, and Garamba can be thought of as a 'forest' of large herbivores instead of trees – an interesting result of park management.

The mysterious decline of Britain's large blue butterfly *Maculinea arion* can be blamed largely on myxomatosis, according to research by Dr Jeremy Thomas of the Nature Conservancy Council's (NCC) Terrestrial Ecology

Unit. The link is a small brown ant *Myrmica sabuleti*, which carries the butterfly's larva from its birthplace, the thyme flower, to its own nest, and allows it, in exchange for a sugary excretion, to feed on ant grubs, and to hibernate and pupate. The indispensable *sabuleti*, however, only occurs on arid slopes where grass is kept shorter than three centimetres, something the rabbits did. If the grass gets higher, two other species of small brown ant take over, one of which is occasionally used by the butterfly, but the other never. Conservation efforts have misfired because thyme was thought to be the critical ingredient of the butterfly's life cycle, and no attention was paid to either grass height or the resident ant species. Dr Thomas's research appears to answer most questions about the decline of the blue, but one other is inevitably raised: is the butterfly itself an exotic species which only appeared after the Normans had introduced rabbits? Or did deer keep the grass short in prehistoric England?

In thickly populated countries large wild animals tend to get eliminated. The largest surviving wild carnivore in Britain is the badger, which is harmless and even beneficial. There was thus widespread alarm in 1971 when the Ministry of Agriculture wanted to kill badgers alleged to be infecting dairy cows with TB; many thought it was a put-up job. But it was not. In a very few areas some badgers had bovine TB – whether they infected the cattle or the cattle infected them was immaterial – and no naturalist or animal lover would wish this very serious disease to spread through the wild badger population – or any other animal, wild or domestic. It became clear, in fact, that in some areas badgers had to be eradicated, and the Ministry is to be congratulated for having made the best of a bad job, by conducting thorough research, taking advice from conservationists, reassuring farmers outside the South-west that their badgers were harmless, being as selective and humane as possible and following the letter of existing legislation, which allows for local eradication programmes in case of epidemics. *Bovine Tuberculosis in Badgers* (free from Ministry of Agriculture, Fisheries and Food) describes the situation and the operations so far. In a few places these are now nearly complete, and it is hoped badgers will be able to rebuild disease-free populations in some formerly infected areas. Meanwhile there is no justification whatever for killing badgers outside a few, mostly very limited, areas in South-west England.

**Rabbits,
Ants and the
Large Blue**

**Where Badgers
Had
to Be Killed**

Arguably South-east Asia is the most endangered major region in the world today, if accelerating destruction of natural resources is taken as the key factor. IUCN has done well, therefore, to make a survey of the resource-conservation needs a top priority, and has published in its January *Bulletin*, an outline action programme for the region that stretches from Burma in the north-west to Papua-New Guinea in the south-east, and takes in the whole of Thailand, Malaysia, Indochina, Indonesia and the Philippines. Logging in the tropical rain forests is the major threat, for the lowland forests of the region are almost all at least committed to logging, and the mere handful of forests supposedly protected in reserves and national parks are in practice far from secure. More than 25,000 species of flowering plant are in danger, and a high proportion of all the animals of the region are at risk. Orang-utan, tiger, clouded leopard, kouprey and monkey-eating eagle are among those for which special projects are recommended by the two IUCN consultants, FPS Vice-President Ian Grimwood, and Dr Tim Whitmore of the British Museum (Natural History). Attention is also paid to such major reserves as Ujung Kulon in Java and Gunung Leuser in Sumatra, homes of the rare Javan and Sumatran rhinos respectively, and to the need for surveys to determine the basic minimum of habitat that must be saved from the logger and developer. IUCN is certainly to be congratulated for this important initiative, but financing it is clearly far beyond the united resources of WWF and IUCN, and calls for massive funds from UN agencies such as UNEP, FAO and UNESCO, and from the aid programmes of the developed nations.

The Abbott's booby population is currently healthy, reports Dr Bryan Nelson after his 1976/77 visit to Christmas Island in the Indian Ocean. This is the bird's only known breeding ground in the world (though he suggests that Enganno Island should be investigated), but phosphate mining has destroyed much of their habitat. However, most of the tree clearing for grade A phosphate is done (the boobies also unfortunately like the grade A areas and are very tenacious of their favourite sites). Dr Nelson thinks that the policy of selective clearing, leaving the trees actually occupied by boobies, in which the British Phosphate Company has cooperated, should safeguard the population if the areas recommended for preserving are also accepted. His tentative estimate for the population is that it may exceed 8000, with 650 breeding pairs in any one year (they only breed biennially), but the vital point is that the population must be large enough to withstand the marked fluctuations that result from 'good' and 'bad' monsoon seasons (December-February). In a bad year – and the evidence seems to be that bad years are more numerous than good ones – the mortality among fully grown but still dependent young birds may be 80 to over 90 per cent, mainly due to starvation or nests being blown away by high winds. So it

**Effects of
Weather on
Boobies**

could be that the boobies might appear to be conspicuously common in certain areas and yet for the population as a whole to be seriously declining.

The USA's Endangered Species Act, which banned the import of exotic cat fur, has been a catastrophe for some native cats, especially the bobcat *Lynx rufa*. The price for bobcat pelts has soared from \$5 fifteen years ago to

**It was Bad
News
for Bobcats**

between \$200 and \$400. Since the bobcat is entirely unprotected in most of the Northwest, is incurably naive about steel traps, and can easily be hunted on a snowmobile or tracked by dogs, its numbers are crashing as its value soars. Even kittens are fair game – the pelt of one weighing four pounds (smaller than an average house cat) was reportedly sold for \$75, while an eight pounder fetched \$115. Bobcat coats (often labelled 'lynx') sell for as much as \$8000 in Europe, to which 90 per cent of the pelts are exported. Though listed in Appendix II of the Endangered Species Convention, bobcat pelts are not usually licensed or otherwise monitored by European customs authorities, who are busy looking out for striped or spotted fur.

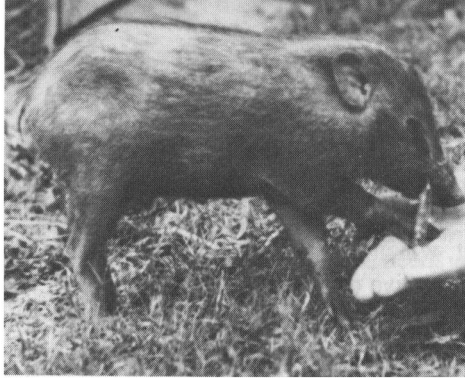
The range of the Cuban solenodon *Solenodon cubanus* is not as restricted as had been feared, although it is still rare, reports Dr Luis S. Varona, FPS Consultant in Cuba. A survey made after three had been captured in 1974 and 1975 in two areas in Oriente Province, at the eastern end of Cuba, showed that the animal still occurs in a third area to the west, around Bayamo, where the first specimens were obtained in the 19th century, and also 'in many other

**Cuban
Solenodon
Surveyed**

places with suitable conditions in central and western Oriente'. But it is rare everywhere. Its principal enemies are feral cats and dogs. Local farmers always knew where solenodons could be found, although until recently they had not tried to capture them, partly because the meat is not edible and partly because the habitat is difficult to penetrate. (It is of course a protected species.) 'But recently', says Sr Varona, 'they have been trying to capture them in order to see their names and photographs on television and in newspapers and magazines'. Money also talks. However, when a female was captured last September, orders were given to take it back and release it in the place where it was found.

HAITIAN
SOLENDON
Michael Lyster
Zoological
Society of London





PYGMY HOG

The Jersey Wildlife Preservation Trust has been allowed a pair of the rare pygmy hogs *Sus salvanius* in order to start a captive breeding population in Europe. Jeremy Mallinson, who brought the pair, which are proved breeders, from Assam (aided by a travel grant from the Oryx 100% Fund), points out that such is the human encroachment on the pygmy hog's habitat (in the Himalayan foothills) that a field survey is urgently needed to find out as much as possible about distribution, habitat and numbers.

**Captive
Breeding for
Pygmy Hogs**

Obviously, preserving the habitat is the best line for conservation, but if that fails he urges more captive breeding. The pygmy hog was only rediscovered by scientists in 1971 (see *Oryx*, September 1971, page 103), and among the first to see specimens were the members of the FPS Indian tour – who were firmly told by their leader that the pygmy hog was extinct! Jeremy Mallinson thinks they may survive in some numbers but in a restricted and decreasing area – hence the need for a survey. He has been able to study the captive animals in Assam and believes that the guidelines for captive breeding can now be established and results improved.

Krill Harvesting

It is estimated that 50 million tonnes of krill (the prawn-like Antarctic crustacean rich in protein) could be harvested every year for human food. But krill *Euphausia superba* is a link in the complex Antarctic food chain; 31 species of fish are known to feed on it, as well as the great whales, and very little is known about the factors controlling numbers, spawning, life span, migration, populations, predators and other important biological facts. However, several countries are already harvesting it on an experimental scale. At its meeting last August, SCAR (the Scientific Committee on Antarctic Research) decided to inaugurate research, and launched the BIOMASS Programme (Biological Investigation of Marine Antarctic Systems and Stocks). The main thing delaying krill exploitation is lack of an economic means of turning it into palatable food, and the job of BIOMASS is to research the biology before the engineers come up with the technology. Meanwhile, it is to be hoped that the 12 Antarctic Treaty nations will not become another IWC, paying lip service to the scientists while destroying the resource. Antarctica, once regarded as a wasteland, is now seen as a virgin source of minerals, energy, food and even – as stored in icebergs – fresh water. Whether, how, how much and by whom these resources should be exploited will be the main concern of a conference of the Treaty nations to be held in London in September. There is already a growing schism within the twelve about territorial claims, while other countries oppose the whole idea of a 12-nation hegemony. Unless the London conference can invent a system of enforceable controls based on scientific research, there could easily be a free-for-all, which would do irreparable damage to Antarctic life.