has been achieved for one stock after another, as the IWC's inadequate conservation measures limped after the commercial drive towards maximisation of profit. Clearly, maximisation of profit, the prime motive of free enterprise economics, just cannot coexist with the exploitation of a natural population, any more than a fox can coexist with a hen-house.

The unreality of the IWC's whale-management policy, based as it has been for some years past on the concept of maximum sustained yield, has become increasingly apparent as at each successive meeting additional whale stocks have had to be protected by being withdrawn from exploitation. Yet the Colin Clark syndrome has driven the Commission on each year to approve quotas that next year proved to be too high. In 1977 the syndrome began to reach its climax, for we are within sight of the extinction of another major whale fishery, that for the North Pacific sperm whales. A few hundred females and a zero quota for males are all that have been approved for the next whaling season. After the Special Meeting of the Scientific Committee, in November 1977, it could be that the whole fishery will have to be suspended, as it was for blue and fin whales in the Antarctic. The impact of this on Japan can be imagined. In terms of invested capital suddenly rendered useless, it is catastrophic. But the catastrophe could easily have been foreseen. Why did Japan make an investment that was almost bound to be rendered useless by the impact of economic upon natural biological forces?



Otters in Britain

1977 might be called the Year of the Otter in Britain, so great was the activity concerned with its conservation. For the otter is now rare or even extinct in much of the Midlands and south-east England. This was shown by the 1969 and 1974 reports of the Mammal Society published in Oryx (May 1969 and June 1974) and confirmed by the recently published report, Otters 1977*, of the Joint Otter Group set up in 1976 by the Nature Conservancy Council and the Society for Promotion of Nature Conservation. The otter's status in England and Wales 'gives cause for great concern', says the Report. Unfortunately it goes on to recommend that the otter should not be added to Schedule I of the Conservation of Wild Creatures and Wild Plants Act 1975 (which would give it full protection) 'until the results of research and survey produce more information'. Instead it suggests a 'short-term legislative measure', either as an amendment to the 1975 Act, or as a separate Otter Bill. However, the NCC is fortunately less pusillanimous than its committee and recommended to the Minister for the Environment that the otter be added to Schedule I of the 1975 Act. As Oryx goes to press we learn this has been done.

* Free from the NCC, 19/20 Belgrave Square, London SW1

The report calls for research so that appropriate conservation measures can be planned, and as a result three two-year surveys of otter distribution in England, Wales and Scotland were started in the summer (1977); these will complement the Mammal Society's five-year otter survey scheme started in 1973. The England survey is funded by the NCC and the Scottish one by the Vincent Wildlife Trust and the Otter Trust. The Welsh one employs three surveyors under the Government's Job Creation Programme. The Report also asks for a 'voluntary ban on hunting', makes useful suggestions for river management in the interests of otters by both public and private owners and states emphatically that 'the importance of practical conservation measures, especially maintenance of undisturbed habitat, cannot be too strongly recommended'.

Otter Havens

As a way of promoting such practical measures the Fauna Preservation Society and the Vincent Wildlife Trust have launched an Otter Haven project to protect habitat and minimise disturbance by means of informal agreements with landowners, water authorities, waterway users and naturalists' trusts, This project is funded by the Vincent Wildlife Trust, and two naturalists, Angela King and Angela Potter, have been appointed to carry out the programme.

Describing the project Angela King and Angela Potter write: 'An otter haven is an area of river, lake or coast where the otters' requirements are given priority and human disturbance is prohibited or restricted. Two types of haven are envisaged: a 'Maximum Protection' haven, where access will be completely prohibited except to the landowner, known breeding holts and lying-up places will be protected and the planting of additional cover encouraged; and a 'Protection' haven, where human disturbance will be minimised as much as possible; ideally a protection haven would surround, or be adjacent to, a maximum protection haven. In both types of haven, management proposals submitted by water authorities will be scrutinised to ensure that the otters' requirements are considered, and the otter hunts banned.

'It is hoped, therefore, that otter havens will not only provide protection for otters but also act as a means of extending their distribution. Havens will be created where otters are known to exist to see if the haven treatment keeps them there, and also in areas where otters are no longer present but have occurred recently, to see if a haven will bring them back. If possible, a number of havens will be created along a river system to see if otters can be led back along this chain to uninhabited areas. Artificial holts will be experimented with in some places. All havens will be monitored regularly so that their effectiveness can be gauged.

'Although the Otter Haven Project is initially concentrating on Wessex and East Anglia, the Project would welcome approaches from sympathetic landowners wishing to set up otter havens on their land in any part of Britain'.

In the spring Lord Cranbrook introduced an Otter Hunting Regulation Bill which received its third reading in the House of Lords but got no further owing to lack of parliamentary time. This Bill proposed to allow hunters to follow the scent or drag of an otter but to make it illegal to kill the animal. The Bill was opposed by conservation bodies owing to the amount of disturbance hunts cause to otters when following them and the difficulty in calling off hounds to avoid a kill.

The addition of the otter to Schedule I of the 1975 Act does not protect otters in Scotland, where the populations are probably the only healthy ones in Europe. To protect them *before* they become endangered the Friends of the Earth Otter Campaign proposes a Wildlife Conservation (Amendment) Bill to amend the 1975 CWCWP Act, which would make disturbance within a wildlife haven an offence.

Otters are difficult animals to study, being both shy and nocturnal; and records are compiled on evidence of spraints (droppings), footprints, and other signs on river banks. Dr Paul Chanin is studying mortality patterns in Britain this century, in collaboration with Dr D. J. Jefferies of the NCC, and would welcome any records of otter deaths as well as occasions of otters seen, dead or alive, or their tracks in recent years. Dr Paul Chanin, Cornwall Technical College, Poole, Redruth, Cornwall.

International Zoo Yearbook

Captive breeding is the overall theme of International Zoo Yearbook 1977, edited by P. J. S. Olney (Zoological Society of London, £12, \$24), which publishes 23 papers presented at the Second Conference on Captive Breeding of Endangered Species, co-sponsored by FPS and ZSL in London in July 1976. The papers range from E. M. Lang's introductory note on the definition of endangered species to Lord Zuckerman's summary questioning conservationist priorities. Species discussed include hutia, saiga, snow leopard, large blue and swallowtail butterflies, Przewalski's horse, lion tamarin, manatee, Galapagos giant tortoise, amphibians, cranes and birds of prey; the economics of breeding, veterinary problems, genetic management, the marooning technique, demographic models, computer analysis and behavioural studies are surveyed.

Other sections include one on conservation, with world registers of golden lion tamarin, Przewalski's horse and Père David's deer. The reference section is a comprehensive guide to species of wild animals bred in captivity in 1975.

For Dr Paul Leyhausen's report on the Conference, see Oryx 13, 5, February 1977, 427.

Norfolk in Trust

Norfolk is in many ways the premier British wildlife county. Certainly few others could sustain such an analysis as is provided by a score of authors in this excellent symposium, on the occasion of the Norfolk Naturalists' Trust's Jubilee, *Nature in Norfolk* (Jarrold, £3.60). Four chapters on the physical characteristics of the county, and the history of its wildlife precede nine chapters on its various habitats, and six on man's impact, including an account of the lingering death of the county's most famous feature, the Broads, for these creations of the medieval peat-diggers are now being destroyed by 20th-century human polluters.

Birds in Europe

Stanley Cramp's *Bird Conservation in Europe* (HMSO, £2.25) prepared for the Environment and Consumer Protection Service of the Commission of the European Communities, summarises the status of European birds, reasons for recent population changes, and methods of conservation, and is illustrated with photographs by Eric Hosking, the late Niall Rankin and Richard Porter.