

## Editorial, News and Views

At the time of going to print with the spring issue of Volume 13, the situation in the UK on the review of dolphinarium has still not been finalized. Existing collections have been given a further twelve months to continue 'commercial display', but the report by the Steering Committee on the detailed recommendations of standards has not yet been printed. The Department of the Environment state that they hope the report will be circulated by the spring of this year.

Many collections keeping polar bears (*Thalarctos maritimus*) have problems over the skin and pelage of these beasts, and an interesting paper was given at the 28th International Symposium on Diseases of Zoo Animals, held in Rostock in 1986, and organized, as usual, by Professor Ippen from the East Berlin Academy of Sciences. The author—Mr R. A. Kock from Whippsnade—pointed out that most supplementation with Vitamin A of polar bear diets was insufficient, and reported on levels varying from 1–5 million international units per day. The article is illustrated by photographs of the improvement in the coats, together with histological sections, and skin biopsies taken at the time. Further details of the paper can be obtained direct from the author.

**Report from International Oceanaria Development Company Pty Ltd.** Up-date on the situation in Australia as requested by the Marine Mammal Interest Group.

Rod Abel is now willing to report that the tide is finally turning in Australia and the links created with overseas organizations and the special interest groups have played a major role in turning back the overwhelming tide of opposition to cetaceans being kept in captivity. A Committee for public interest has now been formed, and the Victorian government, as well as the Senate Committee, agreed that should research demonstrate unequivocally that cetacea could be kept in captivity without suffering, then they would be willing to review their position. They are only willing to accept evidence from the 'relevant' scientific community, and are asking that any recent research material specifically related to keeping in captivity should be forwarded either to the Prime Minister in Canberra; the Hon J. Cain, Premier in Parliament House, Melbourne; Senator Brownhill, Parliament House in Canberra, or the New South Wales Premier, the Hon Mr B. Unsworth. Marineworld Victoria Ltd have now been granted an administrative appeal, which will be set down to commence on the 2nd March 1987, and any scientist who is planning to be in Australia at about that time, please contact Rod Abel at International Oceanaria Development Company Pty Ltd, 79 Nepean Highway, Aspendale, Victoria 3195, Australia—telephone 03-5800841.

There is an interesting article by Shannon Brownlee in 'Pacific Discovery' for October–December 1986, putting the case for and against the keeping of dolphins and other cetacea in captivity. The arguments for keeping them are set out quite dispassionately, and the reasons on the other side are equally clearly labelled. It is interesting to look at, perhaps, three points of the anti-dolphin brigade. Firstly, that the catching of dolphins is causing wild populations to be depleted. This is very well countered, and amongst a number of interesting figures, in the response, it was noted, in 1983, that 32% of all captive bottlenose dolphins were born in captivity compared with 18% in 1979. The second charge of the reduced longevity of animals in captivity is dealt with by pointing out that a number of animals have not yet been in captivity long enough to exceed, let alone, reach wild longevity records. The contention of the animal rightists movement that captivity is cruel and painful is dealt with in great detail, as it is admitted to be the most troublesome contention to counter. It is pointed out that, of course, life in the wild is not necessarily as beautiful as many people imagine it, and captivity highlights the ability of animals to make the public fully appreciative of their adaptations to life. In summary, it is perhaps worthwhile quoting Ken Norris, who points out that 'we are as a species, very busy trying to find out where we sit in relation to nature. Our perception' he says, 'cannot grow if it is filtered through the media, the real thing is the living, breathing animal. The ethics start when a child comes up to a window and the dolphin swims down to open his mouth and goggle his eyes at him. The animal orients to him, and there is a reaching out to the animals that must occur to no better that the planet is populated by other creatures as marvellous as ourselves, and some form of direct contact is precious. Our whole ethic depends upon it'

**The January 1987 issue of 'Oryx'**, Volume 21 contains an editorial on the IWC together with comments on the nations still with a whaling programme. It would seem that the United States threat to withdraw fishing rights, as a sanction, against those countries still operating whaling stations may be beginning to take effect. It does not appear as though the ban on commercial whaling in 1990 will come to fruition. Another article deals with pilot whaling in the Faeroe Islands, and points out that conservationists are attempting to organize a boycott of Faeroese fish products in both the United Kingdom and the United States, which would have disastrous effects on the Faeroese economy as fish exports to these two countries constitute 99% of the Faeroese economy.

In the latest **IUCN Bulletin**, it is rather sad to realize that despite promises from the Norwegian government to stop whaling, they have not, in fact, done so, although they have certainly scaled down their quota to 400 in 1986. However, the Minke whale population has fallen so low that the 400 quota could not be reached, and only 379 were harvested. It is also tragic that Iceland, like Norway, is carrying on the business of whaling, planning to kill 120 whales in 1986 for a population of a quarter of a million, who consume less than 200 tonnes of whale meat per year. The proposed slaughter would probably result in 1800 tonnes of whale products, which therefore, must be fed to mink and other domestic animals.

A. Jacob Dijkstra of Villefranche in France, who publishes a '**Marine Mammals and Whaling Chronicle**' reports in number seven of this year, the satellite tracking of dolphins, seals, penguins and polar bears. Unfortunately, it looks as though man is using this tracking to identify schools of fish so that deep-sea trawlers may be directed to the spot, and improve their own catches. In the same number of the Chronicle, there is a report that a video-film archive relating to whales and whaling is compiled by Xavier Kruetili in Baar, Switzerland. The Editor has the address if readers are interested. A number of organizations interested in the future of marine mammals have been working towards the establishment of a sanctuary for Hump-back whales (*Megaptera novaangliae*) off the coasts of the Hawaiian Islands. Details of the project may be obtained from the Office of Coastal Zone Management, National Marine Sanctuaries Program, 3300 Whitehaven Street, NW Washington DC, 20006, United States of America.

The '**New Scientist**' of December 1986 published an interesting article on how the aerial surveys of Florida's power stations in the States are proving useful for keeping an eye on the numbers of manatees, a vulnerable species. It would seem that manatees are lovers of warmth, and avoid water colder than 20°C so are attracted to the water discharged from power stations that may be as much as 11°C warmer than the ambient.

A Report in the '**New Scientist**' in December highlights the Dutch study carried out by Peter Reijnders of the Texel Research Institute for Nature Management showing a causal relationship between pollutants found in the real world, and the health of sea mammals. The dramatic decline in the number of seals in the North Sea is related to polychlorinated biphenyls in the fish on which the animals feed. In the Dutch study, two groups of animals were fed a diet containing different levels of pollutants. The first group were fed fish caught in the Western part of the Wadden Sea—a highly polluted North Sea coastal inlet—and the second group were fed on fish from the North-east Atlantic. The average daily intake of PCB's was 1.5 mg for the first group, and only 0.22 for the second. Despite alternating males between the two groups, only four females of the twelve animals in group one became pregnant, as compared with ten in the second group. All the animals had, incidentally, ovulated. In summary, the Report concludes that between 1950 and 1975, the population of common seals in the Dutch sector of the Wadden Sea dropped from 3000 animals to 500. It quotes Peter Reijnders that 'the available epidemiological experimental data on effects and levels of PCB's in seals fed on fish from this area suggest that these organo-chlorines are the main cause of this failure'.

For our European subscribers, I can only recommend contact with Vancouver to be able to appreciate some of the fantastic alterations that have recently been carried out there to form a marine mammals centre. The most noteworthy, of course, is the new killer whale pool which adds 630 000 litres (166 000 gallons) to the existing 1 832 000 litre (484 000 gallon) pool. In this area, water depth varies from a few centimetres to 6.7 metres (21 feet), and as well as the beaching areas has rubbing rocks, tunnels and channels with a background, which to the average visitor appears 'naturalistic'. Under these conditions, they are able to display not only their 20 year old male killer whale 'Hyak', but two nine year old females 'Fina' and 'Bjssa'. The total surface area reaches 715 square metres (7700 square feet), and the total water area is 3 785 000 litres (1 000 000 gallons). There are three beach areas, totalling 46.5 square metres (500 square feet) which are incorporated into the rocky shoreline. There is an underwater observation room, and two underwater observation laboratories, recessed hydrophone wells and underwater lights are provided, and the pools may be split up into three areas, if required, by hydraulically operated stainless steel gates rising from the floor. The concrete pool walls are a minimum of 38 cms (15 inches) thick with a 46 cms (18 inch) thick pool base. The filters have a combined area of 430 square metres (4628 square feet). The rock work back-drop extends approximately 55 metres (180 feet) around the exhibit, varying in height from 1.22 metres (4 feet) to 6.7 metres (22 feet) in height. The total water volume is capable of being changed every 150 minutes. The Editor can only recommend that all those interested in marine life pay a visit to Vancouver when they are in the area.

At the **American Association of Zoo Veterinarians Symposium** held from 2–6 November 1986 in Chicago, Illinois a number of papers interesting to our members were read. These included 'Water Quality Maintenance within a Marine Zoological Park' by Lanny H. Cornell and Brian E. Joseph; 'Marine Mammal Transport' by the same authors; 'The Zoonotic Aspects of Handling Marine Mammals' by Neylan A. Vedros and Lynn Suer; 'Skin Problems in Pinnipeds' by Laurie J. Gage; 'The Californian Marine Mammal Center' by the same author; 'Capture, Transport and Acclimatization of Beluga Whales' by Michael K. Stoskopf and J. Lawrence Dunn; 'Diagnosis and Treatment of Pneumonia in an Amazon River Dolphin in a Wild Captive Environment' by

Scott Ansell; 'Haematologic Findings in a Small Group of Amazon River Dolphins' by the same author, and 'Apecoectomy in a Polar Bear' by Jim Jensen *et al.*

**Marine Mammal Science**, Volume 2, No. 4 of October 1986 contains articles on adrenocortico function in Pinniped hyponatremia, Whale Reactions to Human Activities in Cape Cod Waters, the Earliest Sirenian from the Eastern Pacific Ocean, and the Fossil Whale (*Balaenoptera davidsonii*) with a review of other neogene species of Balaenoptera. There are also notes on the distribution of *Phocoena sinus*, and an incidence of twinning in *Euhydra lutris*—the sea otter, Prey Consumption on Land by the Californian Sea Otter, a Fatal Shark Attack on a Hawaiian Monk Seal, Pre 1980 sightings of Bow-head Whales from the Spitsbergen stock, and the Occurrence of Potentially Pathogenic Vibrios in Marine Mammals. The cost for subscribers in the United States for the journal is \$60.00, and for other countries, \$65.00 with an addition of \$15.00 should you require the journal by airmail.

**The US National Marine Fisheries Service** of the National Oceanic and Atmospheric Administration has developed an audio-visual programme for use with US Pacific Coast fishermen, and groups in Japan, Taiwan and South Korea, in an attempt to obtain the collaboration of fishermen in curbing the increasing pollution of the sea by debris of all kinds. It is interesting that the Marine Pollution Bulletin, Number 17, Issue 8 showed that a study revealed Polar Bear tissue, taken by a native hunter in the Canadian Arctic, to contain traces of polychlorinated biphenyls, Hexachlorobenzene, Hexachlorocyclohexane, and the pesticides DDT, Chlordane, Dieldrin and Toxaphene. It is assumed that these pollutants originate in North America, and are airborne. The US National Marine Fisheries Service has designated a critical habitat effective 30th May, 1986 for the endangered Monk Seal. The designated area includes all beaches, lagoons and ocean waters out to a depth of 10 fathoms around the North-western islands. A Report from Australia reveals that the number of Dugong in the *Torres Strait—north of Australia—are declining. It was hoped that a protected area could be established, and more research would then be carried out on this threatened species.*