International Council for the Exploration of the Sea

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REVISED

C.M. 1980/A:13* Consultative Committee

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JOINT SESSION OF THE MARINE ENVIRONMENTAL QUALITY COMMITTEE AND THE MARINE MAMMALS COMMITTEE

> Chairmen: Dr A.D. McIntyre Dr R. Duguy

Rapporteur: Dr J.F. Pawlak

- Four papers on the concentrations of contaminants in various species of marine mammals were presented at the Joint Session (C.M.1980/E:32, E:41, E:42 and E:55). They resulted in considerable discussion which centered on three main themes :
 (1) the effects of the contaminant body burdens on marine mammals, especially on reproduction and survival, (2) the possibility of using marine mammals to monitor pollution, and (3) human health aspects in areas where marine mammals are consumed by man.
- 2. As had been reflected at the 1979 Statutory Meeting, there was a considerable difference of opinion on the effects of high body burdens of contaminants, especially organochlorine residues, on marine mammals. In certain areas, such as the Baltic, the Dutch Wadden Sea and the coast of California, high concentrations of PCBs in seals or sea lions were accompanied by a high rate of reproductive failure. In some seals in the Baltic, this failure could be traced to pathological changes in female reproductive organs, whereas no such changes were recorded in seals in the Danish Wadden Sea or the Gulf of St Lawrence, although their PCB levels were as high or higher than those in the Baltic specimens. One factor which may account for these differences was that different species of seals were studied in the various areas. Other relevant factors are the influences of different environmental conditions and food habits, the occurrence of parasites or diseases, and possible differences in effects of different PCB components.
- 3. Considering the possible use of marine mammals in monitoring pollution levels, several participants pointed out that seals may indicate areas of pollution on a broad scale, but they are slow to show trends in concentrations. Among other problems mentioned were the great variation in concentrations of contaminants between different species and the need to ascertain that the animals reside in a fairly limited geographical area. Finally, it was noted that human health problems due to the consumption of contaminated marine mammals can arise. This is being studied in the countries concerned.
- 4. In summing up the discussion, it was agreed that this topic should be taken up in a joint session at next year's Statutory Meeting, at which selected speakers would be invited to provide an overview of the main issues. The discussion at that meeting could possibly lay the

foundation for a more comprehensive consideration later, perhaps for a half-day session in 1982 or even for a Mini-Symposium which could include coverage of the food chain aspect of pollutant transfer from invertebrates and fish up to marine mamals.

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5. Finally, the joint session discussed sea-bed charts and both Committees expressed support for the project.

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