

MARINE MAMMALS COMMITTEE

Chairman: Mr F.O. Kapel

Rapporteur: Dr C.F. Summers



1. The Committee met on 29 September and 1 October 1977. The Chairman welcomed members, observers and guests.

2. Administrative Report and list of publications

At the Chairman's request, each country's contribution to the administrative report (C.M.Doc 1977/N:1) was discussed in turn and the following comments were made :

Canada: Citing his own data collected from larger samples, Mansfield thought that differences in the gastrointestinal Nematode burden of Grey seals were unlikely to be useful indicators of migratory activity as suggested in the report by data collected from 18 animals.

A fin-whale was marked with a radio tag in the St Lawrence River and tracked by boat and aircraft for a day. It is not clear whether the whale was lost because the signal failed or because the animal moved out of the search area.

Denmark: Kapel said that legislation has now been implemented to ban all seal hunting in Denmark, initially for one year. In West Greenland, because of poor weather, the Harp seal catch in 1976 had been lower than in previous years, but that in 1977 summer conditions were good and the catch was high.

Observers at oil exploration sites off the West Coast of Greenland report sightings of humpback whales which apparently approach the ships quite closely.

An inter-Scandinavian research programme on the harbour porpoise has made little progress, because funds and manpower have not yet been made available.

During the discussion of the French contribution to the report the plight of the Mediterranean monk seal was considered. Ronald said that the status of the eastern Mediterranean stock had been satisfactorily investigated. To consider appropriate conservation measures, a meeting will be jointly convened by Ronald and Duguay on the Island of Rhodes in April 1978.

Sigurjónsson gave an account of his new study of the minke whale in Iceland. Minke whales are taken by small fishing vessels (ca. 200 in 1977) off the N coast of Iceland for human consumption in Iceland, Japan and Faroes. This has provided the opportunity for systematic collection of the biological material which, together with examination of historical documents, should provide valuable information on stock identity and size.

While no research on marine mammals was carried out in Ireland in 1976, Summers reported that a meeting had taken place in Dublin to discuss joint participation of workers from Ireland and U.K. It is hoped that in 1978 an aerial survey of Grey seals and a boat survey of Common seals will be done.

Netherlands: van Haften reported that the number of Common seals in Dutch waters continued to decline. The 1977 survey counted only 233 animals.

Norway: Ronald pointed out that there was more than one population model for the NW Atlantic Harp seal and the sustainable yield could be much lower than the figure of 210 000 quoted in the report.

Referring to the lack of information from Portugal and Spain, Gambell said that since formal requests from ICES and IWC for information about N Atlantic whaling had failed, (C.Res. 1976/4:24), it might be more fruitful to contact individuals. The Committee asked Cendrero to attempt to do this on his return to Spain.

United Kingdom : Brown said that an analysis of sightings of Humpback whales on the Icelandic whaling grounds was in progress. Work on a streamer design of whale mark is also in progress, and it is hoped to use it in the field in South Africa in 1978.

United States : Winn reported that a marine mammals strandings workshop was held in Athens, Georgia in August 1977. It discussed the practical aspect of dealing with strandings and a report was published.

Gambell attended a workshop on historical whaling records at Boston in September 1977. It considered the possibility that the presumed 1940's stock level of Pacific Sperm whales may not have fully recovered from the intensive hunting pressure of the last century. It was also proposed to investigate bowhead logbooks from the 19th century to determine stock identity and the rate of decline of stock. This is relevant to the recent IWC move to protect the bowhead stock of the Western Arctic which has been traditionally hunted by the Eskimoes.

Winn also reported that a meeting had taken place in Hawaii to discuss the effects of human disturbance of humpback whales.

Work on Sirenia in the USA included censuses by aerial and ground surveys and investigations of the effects of man's activities on Sirenia. Ronald pointed out that a bibliography on the Sirenia was to be published soon.

### 3. Research on marine mammals and their environment

Boddeke presented a paper (C.M. Doc.1977/N:2) on organochlorine residues in a harbour porpoise and Drescher presented his joint paper on pollutants in marine mammals (C.M. Doc. 1977/N:5). Ronald felt that it was important to experimentally determine the role of selenium in relation to mercury pollution. Also, the mechanism by which levels of pollutants in brain tissue are maintained at levels lower than in other organs requires further attention.

Mansfield presented a paper (C.M. Doc.1977/E:26) on the effect of crude oil pollution on marine organisms in an experimental situation. He concluded that crude oil pollution did not constitute a serious threat to seal populations and that even in the special circumstances of a spill under fast ice only a small number of individuals would be affected.

Finally, Mansfield drew the attention of the Committee to a recent publication by Engelhart et al on the uptake of hydrocarbons by seal and the Chairman referred the Committee to the paper by Hyland et al (C.M. Doc. 1977/E:64).

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Ronald presented his joint paper (C.M. Doc.1977/N:7) on the effect of boat noise on the vocal activity of Harp seals. He concluded that noise pollution could seriously affect the behaviour of marine mammals. Winn, however, felt that it was possible that the response could have been due to a change in the level of ship noise.

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Duguy presented his paper on causes of mortality in stranded cetaceans (C.M. Doc. 1977/N:12). He identified storms, disease (particularly in old animals), pollutants, encounters with man, mechanical accidents and disturbance of the echolocating sense as the principal causes.

Mansfield presented a paper by Brodie (C.M. Doc.1977/N:15) on the use of whales as indicators of marine protection. Gambell pointed out that the Japanese had used differences in food availability to estimate whale stocks.

4. Research on the biology of marine mammals

Ronald introduced his paper (C.M. Doc.1977/N:8) which described a simulation programme for heat balance applicable to seals and whales, but said that it contained a number of untested assumptions. Work by Galivan indicated that evaporative heat loss, a parameter not considered by the model, was probably negligible in the Harp seal. Further development of this work will involve experiments with seals in a swim-mill at the University of Guelph. Mansfield presented a paper (C.M. Doc.1977/N:21) by Ackman et al.

The ability of seals and man to cope with high levels of decosenoic acid, without sustaining characteristic myocardial lesions found in rats fed on this fatty acid, raised the question of the suitability of the rat as a study animal in medical research.

Mansfield's paper (C.M. Doc.1977/N:6) on growth rates in the Grey seal showed that the Canadian form is bigger than its East Atlantic counterpart.

Levels of Nematode infestation in the gut of Common seals in Iceland appear to be correlated with diet (C.M. Doc.1977/N:20). Summers pointed out that work on gut Nematodes of British Grey seals did not show this correlation, but that there was a decrease in burden during moulting and breeding. Drescher and Ronald emphasised the importance of investigating the whole gut for evidence of food remains and parasites.

5. Research on distribution and status of stocks of marine mammals

In discussion of papers on the status of Common seals in the British Isles (C.M.Doc. 1977/N:18 and 10), Summers said that there was a methodological problem of obtaining assessments more accurate than minimum estimates of pup production and population size. Drescher said that the proportion of pups in the population studied by Nairn was, on average, the same as that determined by aerial survey of the Wadden Sea stock.

From a very small number of tag returns, it appears that the Common seal, in its first year, disperses from breeding localities in south-east Iceland (C.M. Doc.1977/N:22) just as occurs in the Wash and the Wadden Sea. Efforts are now being made in Iceland to collect samples from adult seals (C.M. Doc.1977/N:19) a few hundred of which are shot for pelts each year.

Mansfield supported the views put forward by Christiansen (C.M. Doc. 1977/N:16 and 17) that it is predominantly young ringed seals which move out of areas of heavy ice in winter while adults are more sedentary. Young animals tagged at East Baffin Island had been recovered in the Bering Sea area. Furthermore, the large catches of young ringed seals, in areas of Canada which support only small breeding populations, suggested that these dispersals occur on a large scale. Although the Grey seal is now virtually extinct in the United States, (C.M. Doc.1977/N:14) in former times it was more abundant, or at least more important in aboriginal economies, than the Common seal.

Drescher said that this had also been the case on the north coast of Europe in the area of the Wadden Sea.

The existence of a "sub-stock" of Humpback whales which uses a route from Iceland to the West Indies (C.M. Doc.1977/N:13) is unlikely to be confirmed on the evidence of recent population increases alone. To find out if animals sighted on the Icelandic breeding grounds remain in the area throughout the year, Winn felt that photographs of flukes should be collected to recognise individual whales. He drew attention to a photographic catalogue of identified individuals edited by Kraus and Katona. Ronald thought that biopsy samples taken for sex determination and PCB analysis should be subject to biochemical investigation to determine stock relationships.

The Chairman drew the Committee's attention to C.M. Doc.1977/N:3 and 23 which list strandings of cetaceans in France and Spain respectively and to C.M. Doc.1977/F:27, a theoretical paper on the sensitivity of populations to fluctuations in environmental parameters.

#### 6. Reports of international meetings

The Chairman drew the attention of the Committee to reports of international meetings in C.M. Doc.1977/Gen:1.

Ronald said that the final drafts of manuscripts had been called for by the steering Committee of the FAO/ACMRR meeting in Bergen last year.

Mansfield reported that while ICNAF will discuss matters relating to Harp and Hooded seal management this year in future the Canadian Atlantic Fisheries Scientific Advisory Committee (CAFSAC) would be in existence to discuss such matters.

The future structure of inter-Governmental coordination has yet to be determined.

Papers on marine mammals submitted to the CIESM meeting in Split in 1976 will be published.

Drescher attended the Symposium on the conservation of Baltic seals at Helsinki in April 1977. All species of seals in the Baltic have declined dramatically during recent years. A resolution was passed requesting Government agencies involved with the ecology of the Baltic to implement conservation measures. The proceedings of the Symposium are to be published.

Sahrhage informed the Committee that following a meeting at Woods Hole of the SCAR/SCOR group of specialists on the living resources of the Southern Ocean (SCOR Working Group 54) the research proposals of a Biological Investigation of Marine Antarctic Systems and Stocks (BIOMASS) are available from the Royal Society in London.

Summer presented the report of the ICES Working Group on Grey seals (C.M. Doc.1977/N:11) and referred to the same

time to C.M. Doc. 1977/M:14 which had been available to the Group as a working paper. It was agreed that biochemical studies had to be developed further before they became useful as a research tool in stock identity problems. Black and white photography was adequate for censusing British Grey seal breeding assemblies but on the Canadian ice ultra-violet photography is useful. Ronald thought that *Contracaecum* might be important in British seals because seagulls, an intermediate host for this species, congregate at breeding assemblies. Disturbance during culls at breeding assemblies could redistribute the stock, but in itself, disturbance is not an effective method of reducing stock size. Ronald said that bounties paid to prevent fishery damage might attract adverse criticism from animal welfare societies. Jonsgaard informed the Committee that Norway had decided to cull grey seals to protect fisheries and to provide samples for scientific investigations. The Committee received the report and recommended that it should be adopted by the Council.

The Group will continue to work by correspondence during the coming year, and a progress report will be presented to the next Statutory Meeting.

#### 7. Recommendations

Notwithstanding C.Res.1975/4:24 there is still insufficient information available about the monk seal stock from the western Sahara area. While the Committee appreciated the difficulties created by hostilities there, it felt that further delay in implementing protective measures would bring about the extinction of the stock. While Greece has acted swiftly to sponsor the first international meeting on the monk seal and set up reserves and park areas to protect the species, similar action is needed in other countries with known populations of monk seals (Islamic State of Mauritania, Spain, Algeria, Morocco) and in countries having suitable habitats (Libya, Tunisia, Syria, Lebanon, Israel, Turkey, Romania, Albania, Yugoslavia, USSR, Italy, France, especially Corsica, Portugal). A resolution was drafted for submission to the Council.

#### 8. Other business

The Chairman reminded the Committee of C.Res. 1976/4:1 in which the Council recommended that all scientific papers to Statutory and Scientific Meetings be prefaced by abstracts in French and English.

The Committee asked to be allotted three half-day sessions at the next Statutory Meeting.

A complete list of the contributions will be published in Procès-Verbal de la Réunion 1977.

The Marine Mammals Committee recommends that :

IV(1) in view of the fact that the Mediterranean monk seal Monachus;monachus has been given highest priority in the list of marine mammals requiring protection, and that this may be the last opportunity for successful action towards the preservation of this species, the Council should, as a matter of urgency, transmit the need for immediate action in setting up reserves and parks around this highly endangered species to those countries concerned with

- 1) the western Sahara monk seal colony,
- 2) other suitable habitats in the Mediterranean area.

to the member countries concerned, the CIESM and to the CECAF.