

**REPORT OF THE NAMMCO WORKING GROUP ON
MARINE MAMMALS AND FISHERIES IN THE NORTH ATLANTIC:
ESTIMATING CONSUMPTION AND MODELLING INTERACTIONS**
Reykjavik, Iceland, 15-17 April 2009

I. OPENING REMARKS

Chair Wallace welcomed the participants (Section 5.8) to the meeting.

By way of background in 1996 a Working Group (WG) looked at the feeding ecology of minke whales, harp and hooded seals and found that there were many uncertainties involved in estimating consumption by these species (NAMMCO 1998). It also considered the use of multi-species models to assess species interactions in the Barents Sea and Central North Atlantic. The Scientific Committee, based on the results from the WG, concluded that minke whales, harp seals and hooded seals in the North Atlantic might have substantial direct and / or indirect effects on commercial fish stocks.

In 1997, the Council requested the Scientific Committee to pay special attention to studies related to competition and the economic aspects of marine mammal-fisheries interactions. The Scientific Committee, in response, constituted a WG on the Economic Aspects of Marine Mammal - Fisheries Interactions (NAMMCO 1999). This WG considered bio-economic models of varying complexity and associated ecosystem models, and concluded that "many of the analyses were in a preliminary stage and should only be taken as first indications". They further concluded that, despite the preliminary nature of the results, the emerging cost-benefit figures warranted serious consideration, as the overall costs to the fishing, whaling and sealing industries incurred by not whaling and/or not sealing could be quite considerable, and that the effects due to predation could be an important part of the overall picture.

At its 8th meeting in Oslo, September 1998, the NAMMCO Council tasked the Scientific Committee with providing advice on the following:

1. to identify the most important sources of uncertainty and gaps in knowledge with respect to the economic evaluation of harvesting marine mammals in different areas;
2. to advise on research required to fill such gaps, both in terms of refinement of ecological and economic models, and collection of basic biological and economic data required as inputs for the models;
3. to discuss specific areas where the present state of knowledge may allow quantification of the economic aspects of marine mammal-fisheries interaction:
 - a) what could be the economic consequences of a total stop in harp seal exploitation, versus different levels of continued sustainable harvest?
 - b) what could be the economic consequences of different levels of sustainable harvest vs. no exploitation of minke whales?