

ICES Resource Management Committee
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Report of the Study Group on Multispecies Assessment in the North Sea [SGMSNS]

By Correspondence

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Contents

1	PARTICIPANTS, AUGUST 2003.....	5
1.1	Future terms of reference.....	5
1.2	Progress in 2004.....	5

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1.1 Future terms of reference

It is requested that there be one further meeting of Study Group on Multispecies Assessment in the North Sea (SGMSNS), to be held in **spring (March) 2005**. This will permit two years of additional data (2002 and 2003) to be incorporated into a revised, and 'definitive', 4M model key-run. By holding the meeting in March, this will also allow findings and recommendations to be considered at the spring meeting of ACFM in 2005.

During the Study Group on Multispecies Assessment in the North Sea (SGMSNS), 2003 the following Terms of References was proposed:

The **Study Group on Multispecies Assessment in the North Sea [SGMSNS]** (Co-Chairs: Morten Vinther, Denmark and Ewen Bell, UK) should meet at ICES Headquarters/ Charlottenlund Castle, Copenhagen for 5 days during March 2005 to:

- a) prepare a 'definitive' and fully revised 4M model key-run, incorporating any revisions in consumption rates or other available data;
- b) re-evaluate the importance of mackerel as an MSVPA predator in the North Sea;
- c) incorporate the biomass data, consumption rates and diet compositions provided by WGSE and WGMME for marine mammals and seabirds. Evaluate the importance of newly introduced predators (e.g. harbour seals), and whether these affect 4M outputs;
- d) re-examine the issue of whether 0-group fish can adequately be modelled using the 4M or other multispecies modelling approaches;
- e) address 'applied' and specific questions posed by ICES;
- f) perform a data fitting exercise using the North Sea 1991 EwE model. The fitting exercise will require input (survey CPUE) and output data (MSVPA estimated biomasses) from the updated 4M key-run (TORa);
- g) examine the need within ICES and develop a strategy for multispecies stock assessment and subsequent multispecies advice on management issues. Consider whether a new ICES study or working group needs to be created and if so, what appropriate terms of reference might be and what geographic area it might focus on;
- h) No major objections have been made against the TOR, which are considered valid for the meeting in 2005. A date has yet to be finalised for the 2005 meeting.

1.2 Progress in 2004

A large focus of multispecies research within European countries in 2004 has been the start up of the EU funded, Framework IV project BECAUSE (Critical Interactions **BE**tween Species and their Implications for a Pre**CA**utionary Fi**SH**eries Management in a variable **E**nvironment - a Modelling Approach). Within this 3-year project there is a case study specifically investigating Multispecies assessment and projection tools for the North Sea and many of the members of this Study Group are participants within the project. Although the case study is focussing on sandeel dominated food webs, it covers all aspects of the upper tropic levels, including seabirds, seals and cetaceans as well as

fish species. The project will also see the further development of the 4M model and a new stochastic multispecies model SMS.

With specific regard to ToR c), the Working Group on Seabird Ecology (WGSE) and the Working Group on Marine Mammal Ecology (WGMME) were asked in their TORs for their 2004 meeting to provide data on consumption of different prey by seabirds and marine mammals. This task is also included in the BECAUSE project, which seems to cause some confusion whether this TOR was still of immediate importance for ICES. The WGSE has not delivered any data but seems happy to work on this TOR intersessionally (ICES CM 2004/C:05). WGMME (ICES CM 2004/ACE:02) has provided a literature overview on the topic and has initiated the data collation of diet data for marine mammals, however no data set is available yet.