

Living Resources Committee

ICES CM 1998/G:14

Ref. ACFM

D/O



REPORT OF THE
**WORKING GROUP ON MACKEREL AND HORSE MACKEREL
EGG SURVEYS**

By Correspondence

This report is not to be quoted without prior consultation with the General Secretary. The document is a report of an expert group under the auspices of the International Council for the Exploration of the Sea and does not necessarily represent the views of the Council.

International Council for the Exploration of the Sea
Conseil International pour l'Exploration de la Mer

Palægade 2-4 DK-1261 Copenhagen K Denmark

<https://doi.org/10.17895/ices.pub.9685>

The Working Group on Mackerel and Horse mackerel Egg Surveys has met by correspondence during 1998.

During January and February modifications had to be made to the survey plans for the triennial egg surveys of the western and southern areas which had been agreed at the planning meeting in February 1997 (ICES CM 1997/H:4). Available research vessel time was reduced and the plan to have seven survey periods had to be modified to six. As a consequence the survey timing and area allocation to some countries was changed. Details of the sampling requirements, for the adult parameters, by country were also finalised during January and February.

The surveys began on 12 January in the southern area and were completed on 7 July in the western area. Regular communication was maintained between vessels surveying concurrently. The survey co-ordinator was also kept fully informed of progress and problems throughout the survey period. In this way the research vessel effort was maximised and the problems generated by poor weather conditions were minimised. Plankton samples were fully sorted and analysed during the survey on some vessels, whilst on others only rough counts were made to assist survey planning. A complete picture of the egg production of mackerel and horse mackerel for the 1998 season is not yet available. Analysis of the samples, collected during the surveys, for the required adult parameters, will not be completed until early in 1999. A preliminary estimate of the SSB of mackerel and horse mackerel will not be available for either the next meeting of the Mackerel, Horse Mackerel, Sardine and Anchovy Working Group, or the October meeting of the ACFM.

The Working Group will next meet, as previously planned, in Hamburg, Germany from 13 – 19 April 1999. There are no proposed changes to the terms of reference detailed at the 1997 Annual Science Conference which were as follows

- a) analyse and evaluate the results of the 1998 mackerel and horse mackerel egg surveys of the western and southern areas including the comparisons of egg staging;
- b) calculate the total seasonal stage I egg production estimates for mackerel and horse mackerel separately for the western and southern areas;
- c) analyse and evaluate the results of the mackerel and horse mackerel fecundity and atresia sampling in the western and southern areas and provide estimates of fecundity, corrected for atresia, separately for each area;
- d) investigate the possibilities of combining the mackerel fecundity estimates, corrected for atresia, from the western and southern areas;
- e) analyse and evaluate the results of the sampling for mackerel and horse mackerel maturity in the western and southern areas and produce maturity ogives for 1998 for each area;
- f) provide estimates of the spawning stock biomass of mackerel and horse mackerel, using the stage I egg production estimates and the estimates of fecundity and atresia, separately for the western and southern areas;
- g) provide an estimate of the spawning stock biomass of the North-East Atlantic mackerel by combining the estimates from the western and southern areas;
- h) use the new estimates of the spawning stock biomass from the egg surveys to re-tune the VPA estimates of stock size for North-east Atlantic mackerel, western horse mackerel and southern horse mackerel and produce a report for the ACFM meeting in May 1999 (relevant assessment biologists to carry out this task). WGMEGS will report to the Living Resources and Resource Management Committees at the 1998 Annual Science Conference and to the WGMHSA.