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Charter vessel *Solstice*

CRUISE REPORT

Cruise 0994H

12-21 July 1994

Personnel

F G O'Neill	SO (Scientist in charge)
R J Kynoch	SO
M Breen	SO

Objective

To investigate the effect of an increase of mesh size of the small mesh cod-end cover on selectivity parameters.

Narrative

Staff and equipment joined the vessel at Macduff on 12 July. Covered cod-end selectivity trials were thereafter carried out with 40 mm, 50 mm and 60 mm mesh hooped covers on a 100 mm mesh cod-end with 100 open meshes in circumference. The grounds fished were in an area eight miles north east of Fraserburgh. Haddock was found in sufficient quantities in every haul and whiting in most.

Of the twenty-nine hauls carried out twenty three were considered valid. The cruise ended at Macduff on 21 July and staff and equipment returned to Aberdeen.

Results

Preliminary analysis indicates that the selectivity parameters estimated for the 100 mm mesh cod-end used do not change with an increase in cover mesh size from 40 mm to 60 mm. This suggests that there is not significant loss of smaller fish when employing a 60 mm mesh cover. There may be operational difficulties, however, using the larger mesh cover as in a number of hauls there was considerable meshing of herring in the 60 mm cover.

It was also noted that an increase of total catch in the cod-end, which were in the range 100 kg-400 kg, led to an increase of the 50% retention length.

A fuller statistical treatment will clarify these points.

F G O'Neill

29 September 1994