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Cruise Report

FRS "Explorer"

8 February - 2 March 1977

Objectives

- 1) To take part in the International Young Herring and Gadoid Pre-recruit Survey in the North Sea
- 2) To examine freshly caught fish for parasites.

Narrative

"Explorer" sailed from Aberdeen during the afternoon of 8 February 1977 and headed for the Bladen area to commence the survey. Work had to be stopped in the morning of 10 February because of a boiler defect and "Explorer" steamed for Esbjerg in worsening weather and docked there on 11 February. The scientific staff took part in the discussion and visits between the research ships assembled in Esbjerg on 12 and 13 February. "Explorer" had intended to sail in the afternoon of 13 February but was delayed by fog until the morning of 14 February. Work proceeded without incident off the Danish coast and onto the Dogger Bank till the evening of 17 February when, because of a gale warning and worsening conditions, it was decided to omit four offshore stations in the Dogger area and move inshore. The stations off Flamborough Head and off Whitby were completed and "Explorer" moved up to the Firth of Forth and completed the stations off there and up towards Tod Head before going into Leith on the evening of 20 February. While "Explorer" was in Leith there was more trouble with the boiler and sailing was delayed till the morning of 24 February. The stations outside the Moray Firth, around Shetland, and in the Moray Firth were completed with two exceptions before "Explorer" tied up in Aberdeen on the morning of 2 March.

Results

Trawling

Herring were caught in 38 of the 45 valid hauls but mostly in small numbers. The most dense concentration of herring was found in the inner Moray Firth, with smaller concentrations off the Danish Coast and off the north east coast of England. Most of the herring caught in these areas and off the east coast of Scotland measured less than 20 cm. Herring greater than 20 cm supplied most of the catches off Orkney and around Shetland.

Sprats were common in all areas except around Shetland. The modal size was between 10 and 12 cm.

Whiting was the most abundant commercial species in the southern part of the area and most of these were less than 20 cm. Haddock of all sizes were very scarce in the southern area. In the northern part of the survey haddock were more abundant than whiting and many of them measured more than 20 cm.

The Isaac Kidd trawl was used on 30 occasions and the catches generally were large. Up to 300 small sprats were caught in some hauls and up to 100 post-larval herring. Euphausiids supplied most of the plankton caught.

Parasitology

Nearly 600 plaice were examined for parasites.

George McPherson
19 May 1977

Seen in draft - Capt J W Gillon