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IN CONFIDENCE - NOT TO BE QUOTED WITHOUT REFERENCE TO THE LABORATORY

FRV EXPLORER

2EP82

CRUISE 2/82

REPORT:

5-25 Februar # 1982

OBJECTIVES

To take part in the ICES Young Fish Survey in the North Sea.

NARRATIVE

'Explorer' was due to sail at 1400 hours on Friday, 5 February, but her departure was delayed until Saturday morning owing to the necessity of waiting for the replacement of a sick crew member.

Trawl stations were started off Arbroath and thence in the Firth of Forth. Taking advantage of the settled weather 'Explorer' proceeded east and worked at her alloted stations on the Dogger Bank and in the German Bight. 'Explorer' docked in Ebsjerg on the night of 12th and during the following day information and scientific samples were exchanged with the Danish Fisheries Institute and the French research vessel 'Thalassa'. 'Explorer' left Ebsjerg at 0800 on the 14th and worked stations off the Danish coast before proceeding to the Fair Isle grounds. Work continued around the Shetland Isles until SE gales forced the vessel to steam to more sheltered stations off the North coast of Scotland. Continuing gales forced 'Explorer' to anchor in the Orkneys until work could resume east of the Orkneys and in the Moray Firth. Finally, stations were worked off the Aberdeenshire coast before docking in Aberdeen on 25 February 1982.

RESULTS

Bottom trawling was carried out using a GOV trawl fitted with rubber discs for stations east of 2 E and fitted with rubber bobbins for all trawling stations west of the Greenwich meridian. The wings were flown on all occassions. A total of 39 hauls were made in 33 different squares; each haul was of 1 hour's duration and Table 1 provides a summary of the principal species (below a length selected as a probable upper delimiter of 1+ fish) occurring in each square sampled. Where more than 1 haul was made in a particular square the results were averaged to produce a 'per hour' figure.

Using the Issac-Kidd midwater trawl (IKMT), 2 night hauls for pre-metamorphosis herring larvae were made in 28 of the statistical squares in which bottom trawling took place. Malfunctioning equipment prevented the IKMT being used in all the squares trawled by 'Explorer'.

During the cruise 1764 cod, haddock, whiting and saithe were sexed and aged.

Preliminary data was exchanged with 'Tridens' on a regular basis during the duration of the cruise.

A.W. NEWTON 4 March 1982

TABLE 1

Catches in numbers per hour

	Square	Herring <20 cms	Cod <25 cms	Haddock <20 cms	Whiting <20 cms	N.Pout <15 cms
<u>Dogger Bank</u>	41F2 40F2 39F2 40F3 41F3 41F4 40F4	12 201 896 51 117 35	4 11 2 4 3 0	646 23 1 4 6 0	142 36 115 83 30 54	134 80 0 0 6 1
German Bight	39F6 38F6 38F7 39F7	5536 1950 134 208	10 11 3 4	3 2 0 0	562 17 13 18	0 0
<u>Shetland</u>	47E9 48E9 49E9 50E9 51E9 51E8 50E8	0 0 0 0 0	0 0 0 3 0 0	230 727 416 425 338 263 23	1 20 4 10 0 0	242 1056 4109 37 33078 7207 2746
<u>Örknev</u>	46E6 46E7 47E7	26 35 0	0 1 3	2 239 35	28 48 18	279 0 0
Moray Firth	45E6 45E7 44E7 44E6	667 3 75 139	0 0 0	2 16 52 2	11 23 157 215	1 1 136 47
East Coast (Scotland)	43E8 43E9 42E7 42E8 41E7 41E8 41E9	- 6 84 634 31 27 91 29	0 0 7 0 1 0	8 32 8 6 417 45 21	- 0 18 2068 19 489 138 15	12 47 978 32 4 671 22



