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CRUISE REPORT

FRS "EXPLORER"

20 MAY - 9 JUN 1975

## **OBJECTIVES**

(i) The Farce pre-recruit demersal fish and environmental survey

(ii) The Fair Isle-Munken hydrographic line

(iii) The ICES Base line pollution survey for Farce Bank and Farce plateau areas

The training of the new ASO's in all aspects of the demersal team's (iv) requirements and of general shipboard duties.

## NARRATIVE

On '0.5.75 "Explorer" left Aberdeen for the first hydrographic station but had to be diverted towards Kirk all to land a sick member of the crew. Tragically, before the ship could reach port, another member of the crew died and the ship returned to Aberdeen on the 21st. One replacement joined on the 22nd and the ship sailed short handed.

The Fair Isle-Hunken line was commenced on the 23rd at 1600 hrs and completed at 1400 hrs 24.5.75. Trawling in sub-areas \*A\* & \*C\* was completed and a start made on area E by the 26th. Mr Adams was put ashore by boat at Westmanmhavn to fly to the UK on the 27th and by the 29th sub areas E and F plus 4 stations of Q had been worked. The ship docked at Torshavn at 0900 hrs 30.5.75 for the mid-cruise break and to arrange for the bosta to be admitted into hospital. ship sailed at 0900 hrs 31.5.75 and sub areas \*D\*, \*B\*, \*G\* and \*H\* were completed by 4.6.75 thus completing the pre-recruit trawling survey.

Since time permitted 2 extra hauls were made at the West side of the islands to obtain fish samples for training purposes.

Explorer called at Torshavn on 5.6.75 to pick up the bosum. Mr Adams also rejoined the ship and we sailed as soon as he boarded on the 6.6.75.

The first station of the hydro line was commenced at 2015 hrs and the line was completed at 16.30 hrs 7.6.75. Because of 'main'... engine trouble further work had to be abandoned, and the mip steamed slowly to anchor in Inganess Bay for repairs to be carried out on 8.6.75.

"Explorer" finally dooked in Aberdeen at 2200 hrs 9.6.75.

## RESULTS

All stations of the pre-recruit survey were completed using a 48° Aberdeen trawl and a small mesh cover, forty-seven hauls were made and three stations were repeated because of damage to the small mesh cover. A cod-end of 73 mm was used throughout and all catches were worked up according to standing instructions.

Fishing yielded a good variety of the major commercial species and the results are presented as numbers per sub-areas for 10 hrs fishing. (Table 1) Industrial Species - caught per 10 hrs fishing by sub areas are shown in Table 2. M. poutassou was found to be most abundant in sub-area C, and in addition one of the training hauls made at sub-area "E" near station 35 yielded a small mesh catch of ca 7.000 poutassou for a one hour haul.

Shellfish catches (Table 3) showed that Loligo forbesii were only caught in significant numbers on Faroe Bank, Samples were frozen for analysis and aquarium use. Considerable numbers of Chlanys opercularis were taken and frozen samples were put down for size and maturity studies.

Haddock catches (Table 4) consisted mainly of fish of 3 years + group. The age determination was done during the cruise 1,628 otoliths being read.

Whiting particularly in the lower size ranges were taken in greater numbers than usual, the largest coming from sub-area 'E'. Samples were frozen over the full size range for subsequent length/weight analysis and 1017 otoliths were read during the cruise.

- (ii) Hydrography The Fair Isle Munken line was completed at the beginning and end of the cruise. Temperature, salinity, oxygen, phosphate and silicate samples were taken at 3, 50, 100, 200 300, 400, 500, 600, 700, 800 and bottom. A request made during the trip to work the JONSIS line had to be abandoned owing to engine trouble.
- (iii) Pollution The ICES baseline pollution survey was partially successful.
- Cod The required 10 fish from Faroe Bank and 10 fish from the Faroe plateau of the 1972 year class were taken.

  Plaice No plaice were obtained on Faroe Bank. On the Faroe plateau only 10 fish were obtained of the 20 required from the 1968 year class.

  Halibut A good selection of commercial sizes and a number of small individuals were taken during the cruise. Six fish were sampled from the Faroe Bank and twenty three from the plateau. All samples were sealed separately in bags and deep frozen.
- (iv) Training Throughout the cruise the new ASO's were taken over the shipboard routine in the fish house including clerking, use of sheets and the writing up of the summary of catches. Fish obtained from two extra hauls were worked up under simulated fish market conditions. 1628 Haddock and 1017 Whiting otoliths were mounted and read during the cruise.

Training was given in temperature readings, fixing samples and observing the operation of the reversing bottles during the hydrographic line from the Munken area.

**S D E Devlin** 9•7•75

Seen in draft by Capt D Rattray

TABLE 1

NUMBERS OF MAJOR COMMERCIAL SPECIES CAUGHT PER 10 HOURS FISHING BY FAROE ROUTINE TRAVLING SURVEY AREAS

AREA SPECIES	A	В	C	<b>D</b> .	E	F	· G	H
COD	97	70	678	511	468	1098	354	110
HADDOCK	8957	4806	2928	8741	12600	3425	8100	1500
SAITHE	107	228	1733	74	185	153	78	1050
WHITING	2 .	144.	<b>3</b> 03	364	3344	42	259	670
HALIBUT .	10	· 2	12	77	. 25	25	. 26	20
LEMON SOLE	82	42	295	1312	616	1240	1194	20
PLAICE	-		10	-	39	80	91	. 🛥
ANGLER	13	10	2	19	21	13	. 32 •	•
CATFISH	•	10.	5	8	21	•	<b>5</b>	**
LING	22	. 48	13	***	. 5	<u></u>	4	-
TORSK	3	66	18	8	2	ė.	4	i.

NUMBERS OF INDUSTRIAL SPECIES CAUGHT PER 10 HOURS FISHING BY FAROE ROUTINE TRAWLING SURVEY AREAS

AREA SPECIES		A	В	C	. <b>D</b>	E	F	· G	H
A. SILUS M. POUTASSOU T. ESMARKII T. MINUTUS	6.	92 82 143 33	1036 72 24878	407 7427 4387	39 105 3426	1068 1415 7775	16 360	496 99 4706	30 20 3250

NUMBERS OF SHELLFISH SPECIES CAUGHT PER 10 HOURS FISHING BY FAROE ROUTINE TRAWLING SURVEY AREAS

TABLE 3

AREA SPECIES	. А		C	D	E	F	G	H
LOLIGO CHLAMYS	1397	•	•	••	•	•••	· •	-
OPERCULARIS	7	4	2737	1080	194	276	3371	-

TABLE 4
NUMBERS OF HADDOCK CAUGHT AT EACH AGE PER 10 HOURS FISHING BY FAROE
ROUTINE TRAVLING SURVEY AREAS

AREA AGE		A	В	C	D	E	F	· G	н
1+ 2+ 3+ 4+ 5+ 6+ and		7030 1672 213 3 17	3488 960 340 6 8	1715 962 215 8 7	3987 3677 945 54 19	6035 5386 782 171 102	245 1922 945 156 107	5608 2011 354 49 38	800 220 450 20
older.	•	52	4	22	58	125	49	41	10