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## CRUISE REPORT

FRS "EXPLORER"

26.11.75-17.12.75

## OBJECTIVES:

1. Combined North Sea and west coast pre recruit demersal fish and environmental survey.
2. To train new ASO's in all aspects of the demersal team's requirements and of general shipboard duties.

## NARRATIVE:

"Explorer" sailed at 1630 hrs on 26 November 1975 to commence the North Sea part of the survey. Severe weather was encountered almost continuously with stations only completed during brief lulls. Fifteen stations were carried out before breaking off and proceeding to Stornoway on 9 December. Crew changes were made and Mr Smail left the ship. Whilst in port a stoker reported sick and the ship did not sail until am 11 December.

After completing two stations in the N. Minch area the ship had to return to Stornoway with engine trouble on the 12th and left am 13th for the Minches. A lull came, in the severe forecasts and three of the Outer Hebrides and one of the Butt of Lewis area stations were completed before the weather broke down again. In all eleven stations of the west coast were completed.

"Explorer" docked at Stornoway pm 16 December.

## RESULTS:

Trawling. Fifteen stations of the North Sea survey and eleven stations of the W. Coast survey were completed using a 48' Aberdeen trawl and small mesh cover. A cod-end of 79.5 mm was used throughout and all catches were worked up according to standing instructions. Fishing yielded good numbers of haddock and whiting and are presented as numbers per area for 10 hrs fishing Table 1 and Table 2.

A good haul of 32 baskets (421 fish) of cod was made at Station 5 in the Moray Firth. Large numbers of dogfish were encountered in the catches from the Inner Hebrides and South Minch stations. Stomachs were taken from selected hauls.

Environmental sampling

Productivity: 26 samples from the pumped non-toxic supply were taken for Chlorophyll A analysis and in addition at least 2 samples per day were taken for carbon analysis.

Plankton: 26 oblique hauls from near bottom to surface were made with a high speed Loch Ewe net and the 68 $\mu$  and 250 $\mu$  fractions were deep frozen separately for dry weight analysis.

Fish diseases

Samples of blood, body weights and otoliths from 249 cod were taken during the North Sea part of the trip by Mr Smail.

Training

Throughout the cruise the new ASO's were taken over shipboard routine in the fish house and in the methods of environmental sampling.

S D E Devlin  
4 February 1976.

Seen in draft - Capt F Orr

