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IN CONFIDENCE: NOT TO BE QUOTED WITHOUT REFERENCE TO THE LABORATORY
CRUISE REPORT

FRS "EXPLORER"

1 OCTOBER - 31 OCTOBER 1974

OBJECTIVES:

To undertake a pre-recruit survey of the North Sea fish stocks.

NARRATIVE:

Problems with "Explorer's" main generator meant that the ship did not sail until 9 October and had to return early to Aberdeen on the morning of 23 October.

There were also difficulties in obtaining replacement crew at short notice and the ship was forced to work short handed.

RESULTS:

Trawling

14 trawls in northern 'A' area, 17 trawls in North Central 'A' area and 2 trawls in the Orkney area were completed. No other areas were visited due to the sudden curtailment of the cruise. 33 trawls of one hours duration were made with the 48' Aberdeen trawl fitted with a small mesh cover. A cod-end mesh size of 74.4 mm was used for all hauls.

Trawl catches varied from $3\frac{1}{2}$ - $4\frac{1}{2}$ baskets, the average per haul being 12 baskets.

The largest catches of haddock were taken from inshore grounds. They were from D15d, (4,302 fish) and B16b (4,230 fish). Catches of over 1100 haddock were recorded in most hauls. The majority of these fish belonged to the 1974 and 1973 year classes.

The largest catches of whiting were also taken from inshore grounds. They were from C16b (2,849 fish), D15d (2,349 fish) and C16d (1,452 fish). The majority of these fish were from the 1974 and 1972 year classes.

Stomachs from selected cod and haddock were brought back for examination.

Parasite studies

Blood smears of cod were collected for Plymouth Polytechnic from various stations in the North Sea.

Samples of young gadoids from the northern North Sea were preserved for examination for larval nematodes.

Species of the monogenean, Dictyocotyle coeliaca were collected from the visceral cavities of skate and preserved for future use. 0+ group herring were preserved in Bouin's Fluid for histological examination of skin in connection with a biological tag project.

Environmental sampling

Thirty four hauls were taken with the Dutch Gulf III high speed sampler for dry weight determination.

Fourteen phytoplankton samples were obtained from standard net hauls.

Chlorophyll and carbon samples were taken at thirty four stations from the pumped non-toxic sea water supply.

Surface and bottom temperatures and salinity samples were also taken at these stations and the results have still to be evaluated.

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9 November 1974