

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

CRUISE REPORT

FRS EXPLORER

30 November - 22 December 1971

The "Explorer's" sailing was delayed until 1030 hrs on 1 December due to crewing problems. The first two days were spent on work in the Moray Firth and from there she steamed to stations off the North Coast. In this area only one trawl haul was possible before bad weather stopped work and continual bad weather eventually forced "Explorer" to run to the more sheltered Minch where four stations were worked over the next six days. Only one trawl was shot west of the Hebrides.

On the 10th the ship attempted work in the south Minch where three trawl stations were completed over the next two days. In the Clyde, "Explorer" worked two trawl stations before docking in Greenock at 8 pm on the 12 Dec. Mr Nicoll was replaced by Mr Burns on the 13th.

"Explorer" left Greenock on the 14 December but unfortunately, continued bad weather forced her to anchor in Campbeltown Loch. On the 16th, "Explorer" left Campbeltown and proceeded north, picking up a few plankton stations on the way as the weather remained too rough for trawling. Five more trawls were completed on the way to the Moray Firth.

Winds gusting over fifty knots forced the abandonment of the last station. "Explorer" then made for Aberdeen where she docked in the afternoon of 21 December.

TRAWLING

Hauls of an hour's duration were made with the 48 ft trawl and small mesh cover at 21 of the 40 stations on the list. The positions occupied covered the sea areas Moray Firth, North Coast, North and South Minches and the Clyde, together with a single station in the Outer Hebrides. Catches varied from 1 to 38 baskets with an average of 14 per haul.

Haddock was the best represented of the commercial species and occurred in fair numbers in all hauls in the Moray Firth, over the North Coast and in the single haul in the Outer Hebrides, the best of the catches being one of 8379 individuals (12-43 cm) in the Moray Firth and another 1782 fish (15-47 cm) off the North Coast.

Whiting, the next most prominent species taken in the trawls occurred in the largest numbers in the Moray Firth, 650 fish (17-48 cm) and in the Clyde, 980 fish (9-35 cm) and in fair numbers in all the hauls made within the Minches.

Very small numbers of Cod were taken in most of the hauls, the two best being 17 individuals (22-46 cm) in the Moray Firth and one of 20 fish (39-96 cm) off the North Coast.

Among the flat fishes common dab, lemon sole and plaice occurred mainly in the Moray Firth and on the North Coast, the best catches of each species (in order) being 378 (10-33 cm), 86 (15-37 cm) and 17 (29-51 cm). Long rough dab and witches were prominent in catches in the Minches where 113 (10-24 cm) and 97 (14-38 cm) were the best of each species. In two hauls in the Clyde the only "flats" were long rough dabs where 837 (9-22 cm) were recorded.

Herring and sprat were taken in very small numbers in a few of the hauls in the Moray Firth and the Minches. The largest catch from the Moray Firth was 496 herring (12-24 cm) and 13 sprat (5-9 cm).

Industrial species were best represented in all 9 hauls made in the two Minches, the largest samples being 2983 (9-19 cm) and 3837 (9-19 cm) of Norway Pout (Trisopterus esmarkii), 395 (9-18 cm) and 311 (9-19 cm) of T. minutus and 44 (8-12 cm) of Gadiculus argenteus.

PLANKTON

Duplicate Gulf III samples were taken at all stations worked. One sample was preserved in formalin and the other deep frozen for dry weight estimation. Plankton Indicators were towed at all night stations and, in addition, at several extra stations in the Minch for the Edinburgh Laboratory of IMER. Surface chlorophyll samples were taken.

PARASITOLOGY

Using a WP3 tow-net, plankton hauls were taken for the collection of Euphausiids for the parasitology section. Fish catches were examined for nematode infestation.

POLLUTION

Of the twelve stations selected for detailed pollution sampling, eight stations were worked. Fish fillets, plankton and grab samples were taken. Extra fish pollution samples were taken for Mr Holden of the Pitlochry laboratory.

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