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#### CRUISE REPORT

#### F.R.S. "EXPLORER"

24th August-8th September 1966

### Narrative

"Explorer" left Aberdeen at 1845 on 24th August. Weather was good and 29 stations were completed by the morning of 1st September when one of the crew fell sick. "Explorer" returned to Aberdeen to land him, arriving at 7.30 a.m. on 2nd September. On leaving Aberdeen on the 3rd, the weather deteriorated rapidly and strong to gale SW to W winds persisted and severely curtailed the trawling and hydrographic work in the remainder of the cruise. "Explorer" docked at Leith at 1800 hrs on 7th September. The scientific staff returned to Aberdeen by train on the 8th.

### Trawling

One-hour hauls were made with the French trawl with small meshed extension piece and codend. Most of the hauls were to the south and east of the Dogger Bank and, in general, catches were small. All fish were treated according to standing instructions.

# Herring

No large concentrations were found, the best catch of 3,120 fish being made in square J9. Catches containing more than a 1,000 fish were made in squares J7, G7 and L9; most of the other hauls contained less than 100 fish. The length ranges of most samples were between 20 and 32 cm. Nine samples were examined racially.

## Sprats

Sprats were taken in several hauls with catches of 1,161 fish in square G7 and 888 fish in D9.

### Whiting

Whiting were common with the best catches coming from square G7 (5 and 7 baskets). Eight samples were examined racially. Of particular interest was the sample from square K13 where the mean vertebral count and also the mean lengths of the 1 and 2 year olds (1965 and 1964 year classes respectively) were much higher than in other samples.

## Cod

Sixty-eight lively cod were tagged and 96 were examined for the occurrence of nematodes in the flesh. Two samples of gall bladders were preserved.

# Haddock

Very few haddock were caught, the largest catch of 149 fish being made in the relatively deep water (69 metres) in square K13.

#### Other fish

Good catches of mackerel were made in squares F8 (7 baskets) G7 (4 baskets) and H7 (2 baskets). Catches of flatfish were very poor.

# Hydrography

Temperature and salinity samples from the surface and bottom were taken at 30 stations. Surface temperatures were lowest at stations nearest the British coast and highest in the German Bight. In the shallow water on and around the Dogger Bank there was little difference between the surface and bottom temperatures.

## Plankton

Oblique hauls were made at 15 stations with the Gulf III net and at 6 stations with the 1 m (26 mesh) net. Sedimentation samples from 10 metres and standard hauls were taken at 4 stations.

D. J. Symonds 6th October, 1966.