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## CRUISE REPORT

F.R.S. "SCOTIA"

3rd-21st March 1964

The cruise fell into two parts, 10 days of steady working in good weather and 9 days of storm with no possibility of working. A brief call was made at Stavanger, Norway on the 7th to land a greaser with a badly damaged finger. The cruise terminated 1½ days late due to continued bad weather which prevented an earlier return.

### Hydrography

Research into surface and bottom currents was continued by liberations of drift bottles (19 positions), dhan buoys (4 positions) and bottom current markers (4 positions). Throughout the cruise, water temperatures were invariably uniform from surface to bottom and eastwards along 58°N (approx.) the temperature varied from 7.2°C near the east Scottish coast to 7.4°C at 1°30'W and 6.1°C at 4°00'E. The warmest water found was at 61°01'N 00°35'E where 8.6°C was reached.

Samples were taken for salinity, oxygen, phosphate, nitrate, nitrite and ammonia.

### Plankton

The collections taken were as follow:

Gulf III (60 mesh), oblique .....	24
1 m. silk tow-nets (26 mesh), horizontal 0, 20 m. and near bottom .....	4
1 m. silk tow-nets (26 mesh), oblique .....	6
Standard net (180 mesh), vertical, 50 m. ....	5

There was no indication anywhere of the commencement of the spring phytoplankton bloom.

### Bottom sampling

At 5 positions near 61°34'N 02°04'E (about 390 m.) samples of bottom sediment were taken using a mud bucket. Portions were kept in the refrigerator for dispatch to Professor Sir Alister Hardy.

### Trawl survey

In all 23 trawls were attempted and all except one were successful. The fish catch was predominantly of haddock (25-30 cm) and a lesser quantity of whiting (22-31 cm).

#### Haddock

The total haddock catch was 119 baskets for 22 hauls of 1 hour duration. Only a few isolated haddock, size 15-19 cm, were recorded in contrast to several baskets per haul on the corresponding cruise last year.

The best catches of the larger fish were 33 baskets (E19d), 20 baskets (D19c), and almost 12 baskets (F21d).

#### Whiting

The total catch for the 22 hauls was 25 baskets with the best catches amounting to 3 or 4 baskets.

### Cod

Only a few isolated fish were taken; the larger fish were in spawning condition.

Small gadoids were scarce and only 4 hauls yielded more than 100 T. esmarkii per haul. In F21d, 300 small Argentina sp. were noted.

### Dogfish

About 1000 dogfish were caught in C16d; elsewhere numbers were small.

Herring formed the main bulk of the haul of 17 baskets in C15a; the remaining 21 hauls yielded only 600 fish.

### Shellfish

About 150 Nephrops norvegicus were taken in C16d and 800 pandalids in F14a. No edible crabs or lobsters were caught.

### Echosounder

The echosounder was in operation continuously except in bad weather. Few traces were observed.

R. JOHNSTON  
26th March 1964