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#### CRUISE REPORT

F.R.S. "SCOTIA"

## 13th October-1st November, 1958.

# Objectives

A herring larval survey between 57°50'N and 55°00'N.

## General

"Scotia" left Aberdeen at 1200 hours on 14th October having been held up by adverse weather for one day. After completing three stations, warnings of sever® gales made it necessary to go to anchor in Peterhead Bay, where "Scotia" remained until 0700 hours on 18th October. Forty-eight stations were then completed in good weather until it was necessary to go in for water to Leith on 23rd October. The Nephrops stations were worked on the way in. After collecting water a further sixty-five stations were completed before the end of the cruise, again in excellent weather. "Scotia" docked at 0400 hours on 1st November at Leith. The entire survey had been completed once and forty-one stations had been done twice.

## Hydrography

The hydrography was completed according to the cruise programme. The modification of a weight to the stirrup of the P.N. bottles does not appear to help maintain the wire in a vertical position in a strong wind. It also makes the bottle rather more difficult to manage when the ship is rolling.

#### Plankton

Most sampling was done with the Gulf III high speed net. Large hauls of salps were made in the north-west corner of the grid where metre nets were used.

Clupeoid larvae were found spread over most of the area in numbers ranging from 70 to none per haul. The largest numbers were to the north and west of the grid particularly in squares C12, C13, C14, D11, D12, D13, E13 and E14. Larvae were found east of 1°E. There were no apparent high concentrations of larvae. This was consistent with their size range, which was mainly between 15 and 20 mm.

Hauls were made at each station with a plankton indicator. The discs have been sent to the S.M.B.A., Leith, for analysis.

### Trawling

The four Nephrops stations were carried out successfully, all Nephrops being sexed and measured. The catches averaged about one basket of Nephrops per haul.

Twenty cod were examined for nematodes in the muscle tissue but only one case of infection was found. Haddock were preserved for analysis of their gall bladders.

# Echo-sounding

The sounder was run as long as it would function adequately. It appears, however, to become inefficient after a long period of use. There seemed to be little sign of traces except scattering layers. These were found particularly inshore off the Aberdeenshire coast.

J. H. S. BLAXTER 25th November, 1958.