

CRUISE REPORTF.R.S. "SCOTIA"August 9-September 2, 1964Narrative

F.R.S. "Scotia" sailed from Aberdeen at 0030 hours on 9th August and the ship proceeded to the Turbot Bank where drift indicators, bottom current markers and drift bottles were released at 0630 hours.

The Fladen-Rattray line was commenced on the afternoon of the same day and successfully completed 24 hours later. Having landed Mr. McIntyre at Peterhead with live material, the ship proceeded to 57°29'N 01°19'W where silk discs were suspended at various depths (0-50 metres) from a dahn. The ship stayed by the dahn for a 24 hour period at the end of which the discs were successfully recovered. Light-meter readings were obtained at hourly intervals during this period. On completion of this experiment the ship went to release current indicators off Wick, the last current indicator station having been occupied by 0100 on 12th August, when a zooplankton survey was started to determine the strength of an inflow of salps that had been observed earlier during the cruise. The survey was completed by 2100 hours; the ship then proceeded to Aberdeen where she docked at 0600 hours on 13th August.

After a change of scientific staff "Scotia" sailed from Aberdeen at 0930 on 16th August, having been delayed by accidents to several crew members. Fishing commenced on the same day 30 miles SE Aberdeen. Strong winds for the next three days confined working to the Firth of Forth area but when these winds abated the ship worked South and East on to the Dogger Bank. Fishing was very poor in the latter region but good catches of whiting were taken to the east of the Dogger Bank. On the 24th the ship put into Esbjerg for water and fuel. Trawling recommenced on the 26th and the ship worked northwards, successive days being spent on the Great Fisher and Ling Banks, where good catches of haddock were taken at Dusk. Gale force winds prevented working on the 29th but on the 30th fishing began again off Aukerry. A day was spent in the Moray Firth and the last morning of the cruise was occupied with fishing off Cruden Skares. The ship docked at Aberdeen at 2130 on the 2nd September.

Results

Trawling. 3086 fish were tagged during the cruise. Of these 246 were cod (132 large spaghetti tags, 114 yellow flags on nylon), 1926 were haddock (1086 with yellow flags on nylon, 840 with yellow hydrostatic tags) and 914 were whiting (all tagged with small spaghetti tags).

Seven whiting gall bladder samples were taken and these samples, each of 50 whiting, were preserved for the parasitology section.

Any cod that were unsuitable for tagging were examined for the presence of nematode worms in their flesh. Only one fish was found to be infected.

Live fish were brought back to Aberdeen for the aquarium.

Hydrography and Chemistry. Serial t°C and salinity samples were taken at suitable stations throughout the cruise. Surface samples for phosphate, nitrate and silicate were taken 2-3 times daily.

Plankton. The most marked feature of the zooplankton was the large numbers of Salpa fusiformis in the region from Orkney to the area of the Aberdeenshire coast. Pleurobrachia pileus was also abundant in this area. Salps were absent from the rest of the area surveyed. Calanus was abundant east of 1°W and north of 58°N.

General

Due to the inflow of salps and the associated scarcity of Calanus only one zooplankton feeding experiment was done during Part I.

Trials with the Furuno depth telemeter had to be cancelled due to a delay in the supply of the new depressor and receiver.

Indicator samples were obtained for the S.M.B.A. Edinburgh.

Phytoplankton was preserved in alcohol for Dr. Mowat.

JOHN R. G. HISLOP

JAMES A. ADAMS

11th September, 1964.