

CRUISE REPORT

F.R.S. "SCOTIA"

April, 1954.

"Scotia" left Aberdeen at 7.0 a.m. on Saturday, 10th April, to proceed to the Butt of Lewis. Continuously severe gale conditions north of Scotland which had already been operating for three to four days previously, necessitated sheltering in Loch Eriboll from 11th-16th April. Eight stations on the Butt of Lewis-Faroe Bank hydrographic section were completed when increasingly heavy weather again interrupted work. "Scotia" remained in the vicinity of the bank for twelve hours, but with no prospect of early improvement in the weather finally proceeded to Fuglefjord, Faroe, on 18th April. The Enniberg hydrographic line was completed on 21st April and the Nolsó, Faroe to Flugga, Shetland line on 22nd-23rd April. The northern part of the N.W.-herring larvae survey was overtaken before proceeding to Lerwick on 24th April. The survey was resumed west of the Shetland-Orkney passages on the following day and continued southward to the region between Cape Wrath and the Pentland Firth until the evening of 27th April. An otter trawl haul in the Dog Hole to capture live haddock was made in the early morning of 28th April before berthing in Aberdeen at 8 a.m.

HYDROGRAPHY

Thermal conditions on the Continental Shelf north-west of the Butt of Lewis were practically uniform at under 8°C. Contact with the Atlantic Current on the Continental Edge was signified by temperatures greater than 9°C to over 100 metres depth, increasing to almost 9½°C in mid Current, but diminishing to about 9°C over the Wyville Thomson Ridge.

On the Enniberg hydrographic line, the East Icelandic Arctic Current was encountered at latitude 63°45'N where upper water temperatures of 3½° to 3¾° diminished to zero at 400 metres depth and subzero temperatures at greater depths. Within 15 miles southward surface and subsurface temperature to 100 metres was in excess of 7°C to over 7½°C, but not reaching 8°C on nearer approach to Faroe.

Between Faroe and Shetland the upper waters registered less than 8°C over more than half the section, maximum temperature of 8.5° to 8.8°C occurring near the Continental Slope towards Shetland.

In the region of the N.W. larvae survey temperatures generally were fairly constant between about 7½°C and 8½°C, except towards Cape Wrath where the 9°C isotherm was exceeded.

PLANKTON

The samples taken in oceanic waters consisted mainly of Calanus, but contained also such organisms as Diacria, Clione, Physophora, Beroe, Tomopteris, Galetta, Aglantha, Cosmetira, Chelophyes, Hippopodius, Laodicea, Turris, various Chaetognaths, e.g. S. serratodentata, S. elegans, S. maxima and Eukrohnia, various fish eggs and young fish.

Good bathypelagic samples were taken containing deep sea Copepods, Euphausiids, Fish, Prawns, Hyperiid and jellyfish (Pelagia perla).

Quantities of brown diatomaceous slime were encountered west of Orkney and Shetland and this was composed mainly of masses of Thalassiosira with a little Thalassiothrix present. Occasional masses of Halosphaera were also encountered.

Herring larvae appeared in a sample taken just north of the Faroes and in most of the samples taken in the area between Orkney-Fair Isle and the longitude of the Butt of Lewis.

/TRAWLING

TRAWLING

Large numbers of dog-fish were taken in the catches in XX16d and YY17c. The best catch of haddock, comprising 3 baskets, was taken in ZZ18b while a good whiting catch was recorded in YY17c. The Butt of Lewis haul (XX16d) was the most comprehensive in species, and included plaice, lemon sole, megrim, skate, long rough dab, Callionymus and Argentina.

A few line haddock and whiting were brought into the Laboratory for the aquarium from off Aberdeen.

J. B. TAIT.

10th May, 1954.

CIRCULATION

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Mr. Graham	Captain McLaren	Mr. McIntyre
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Mr. Rose	Mr. J. Smith	Mr. Steele
Captain Champness	Mr. T. C. Jones	Mr. Burns
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Mr. K. M. Rae	Dr. Lucas	Mr. Livingstone
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Dr. Tåning	Dr. Tait	Circulation
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