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CRUISE REPORT

F.R.S. "Explorer"

28th April to 15th May 1966.

"Explorer" sailed from Aberdeen at 1930 hrs B.S.T. on 28th April in fine weather but with gales forecast. By the time Cape Wrath was reached it was clearly too rough for work and shelter was sought off Tolsta. It was not until the morning of 2nd May that work was begun off the Butt of Lewis, the hydrographic line to Faroe Bank was completed about mid-day on the 4th and trawling commenced. After four trawls on the Bank strong winds and gales intervened and continued with only brief quiet periods until the end of the trip. Only twenty trawls in all were achieved despite efforts under severe conditions. By the 13th it was too rough for trawling and as winds SE 6-8, possibly 9 or 10 were forecast work at Faroe on the 14th seemed unlikely. The Nolsø-Flugga line was begun but south-easterly winds 7-9 soon made hydrographic work impossible in shelf waters. There was no improvement further east over the deep water so work was abandoned and after a slow passage into gale-force headwinds the Orkneys were reached on the 14th. "Explorer" docked at Aberdeen at 1000 hrs B.S.T. on Sunday 15th.

Hydrography

Temperatures on the Butt-Faroe line were normal at all depths; salinity results are not yet available. Over the Faroe plateau the water column was everywhere virtually homothermal with temperatures between 8°C in the SW and 7°C in the NE.

Plankton

Collections were made at each station on the line from Butt of Lewis to Faroe Bank and off Nolsø. Copepods were scarce except at the terminal stations where Calanus finmarchicus was common. Euchaeta norvegica and Calanus hyperboreus occurred in small quantities to the north.

The main centre of abundance of adult Meganocyttiphanes norvegica was around WW18, while the furcilia of this species was common north of the Butt of Lewis. Thysanoessa longicaudata was found in relatively small numbers over the same area as the adults of the latter species, but more widely spread north and south. A few Thysanoessa inermis were collected just east of Faroe. Nematobranhion boopis, Nematoscelis megalops, and Stylochiron longicorne were found in the deeper samples.

Lensia conoidea was found in quantity at the more central stations, Physophora hydrostatica similarly, a few at a time. Other coelenterates were poorly represented.

Sagitta elegans was found only at the most northern and southern positions, between which Eukrohnia hamata was sampled in quantity and a few Sagitta maxima, and S. zetesios at depth.

Several Euclio cuspidata were collected at WW18d but Spiratella retroversa was very rare over the whole area. Oikopleura sp. were common north of the Butt.

Fish eggs were sampled at most positions and were particularly abundant at VV20b, being loosely identified as Cod/Haddock, Saithe/Esmarkii, and Onos.

In areas WW18d, XX16b, and XX16d the diatom Thalassiosira gravida was sampled in enormous quantities.

Trawling

For the 20 one-hour hauls, catches were generally poor with few hauls of better than ten baskets. Hauls were confined to the west and north coasts of the island group.

Cod

A fair number of large cod (> 70 cm) were taken at Faroe Bank and over the Faroe plateau fish were scarce and usually below 60 cm in length. Stomach samples were preserved and records of muscle parasites were taken, where the catch was adequate.

Haddock

Very few young fish (ca. 15 cm) were found. The next size range appeared at about 31 cm and there was a good proportion of larger fish. Stomach samples were taken from all suitable catches.

Other fish species

Halibut, lemon sole, common dab, saithe and Sebastes were taken in small numbers on most hauls. Very few small gadoids were found.

Loligo

Catches of $\frac{1}{2}$ to $1\frac{1}{2}$ baskets of Loligo were taken on Faroe Bank, with size groups 7-12 and 16-20 cm predominant.

R. Johnston
19th May, 1966.