

CRUISE REPORT

F.R.S. "SCOTIA"

11th November - 4th December 1969

Narrative

"Scotia" left Aberdeen at 0210 hrs on the 13th November and began work on a line of environmental stations running east towards the Skagerack. By the morning of the 15th the weather had deteriorated and the survey was temporarily abandoned until the 18th when, during a short lull in the gales, one further station was completed.

The return of severe weather compelled "Scotia" to proceed to Skudness Fjord and to dock in Haugesund at 1515 hrs on the 18th November. Continuing gale to storm force winds kept "Scotia" in Haugesund until the afternoon of the 21st when, after obtaining medical attention for one of the leading stokers, she recommenced the environmental survey off the Norwegian coast. Two stations were completed but early on the morning of the 22nd another of the stokers required urgent medical attention and the ship had to break off work and make a direct passage to Lerwick.

After some delay due to crew illness "Scotia" sailed from Lerwick at 1640 hrs on the 26th and proceeded north to begin trawling on the 61° 01' N line. Unfortunately a prolonged spell of severe weather prevented any further work and "Scotia" was obliged to dodge for a time off Balta, in Shetland, before making a slow passage back to Aberdeen where she docked at 1600 hrs on Sunday the 30th November. The remaining few days of the scheduled programme were allocated to radio buoy recovery.

Hydrography

Surface temperatures were obtained from the Continuous Recording Thermograph. They ranged from 10.0°C in the Central North Sea area to 8.2°C over the southern part of the Norwegian Deeps. At all stations surface samples were taken for salinity, phosphate, nitrate and silicate determination.

Productivity and Plankton

Chlorophyll a samples were collected at all stations and in addition to the routine Gulf III samples preserved in formalin replicate samples were frozen, or dried then frozen, to provide material for a study of the effect of formalin preservation on zooplankton dry weight. Standard net samples of phytoplankton and sedimentation samples were obtained for Dr J D Dodge of Birbeck College, University of London.

Crustaceous plankton was only poorly represented at those stations within the Central North Sea area whereas the Diphyid Lensia conoidea was present in fair numbers. Calanus and Meganycitiphanes norvegica were moderately abundant off the Norwegian coast and over the deeper water within the Skagerack. Salpa fusiformis, in good condition, was also present off the Norwegian coast and had penetrated as far east as 57° 30' N 08° 00' E. The salps were feeding mainly on Ceratium tripos, Ceratium fusus, Nitzschia seriata, Coscinodiscus concinnus, Pleurosigma spp and Halosphaera.

Trawling

Prolonged bad weather and loss of ship's time due to the illness of crew members prevented any trawl samples being taken. Pelagic echo traces were very sparse over all areas surveyed and significant demersal traces were recorded only once, between 57° 45' N 00° 30' W and 57° 45' N 00° 30' E.

D D SEATON

5 December 1969