

R1/4

In Confidence not to be quoted without reference to Laboratory.

FRV EXPLORER

Cruise 7/80

7ER80  
JM

REPORT

June 11 - July 1 1980

Objectives

- a) Participation in the International North Sea 0 - group Gadoid Survey
- b) Sampling the JONSIS line of hydrographic stations

Narrative

EXPLORER departed Aberdeen at 1600 hours on June 11 and began the 0 - group survey, in the Moray Firth, on June 12. Work proceeded smoothly, only half a day being lost due to bad weather, and 40 trawling stations were completed before EXPLORER called at Kirkwall for the mid-cruise break at 0930 hours on June 23. The ship left Kirkwall at 1400 hours on June 24 and resumed trawling east of the Shetlands on June 25. A further 16 trawling stations <sup>were</sup> worked during the second part of the cruise. The JONSIS line was started at 2300 hours on June 29 and completed by 1400 hours on June 30. EXPLORER then headed south and docked at Aberdeen at 0300 hours on July 1.

During the cruise regular contact was maintained, and results exchanged, with the two other vessels participating in the Survey (RV CORELLA and RV TRIDENS)

Results a) 0 - group Gadoids

The main area of abundance of cod, haddock, whiting and Norway pout was the region between the Shetland Islands and the Norwegian Deep. The distributions of all four species were displaced, in a northerly direction, relative to the situation in 1979. Whiting were also caught in appreciable numbers west of the Orkney Islands, although catch rates were lower than in 1979. In the Moray Firth all gadoids were very scarce. Saithe occurred chiefly along the edge of the Norwegian deeps and along the northerly limit of the Survey area. Blue whiting were taken in six hauls only, all north of lat 60° 00' N.

b) Other fish

The main 'by catch' species were sandeels, sprats and herring. Sandeels were widely distributed but, compared with earlier years, not particularly abundant. Virtually all of the clupeoids were in the 2 - 5 cm length range. The largest catches were made in the Moray Firth and west of the Orkney Islands.

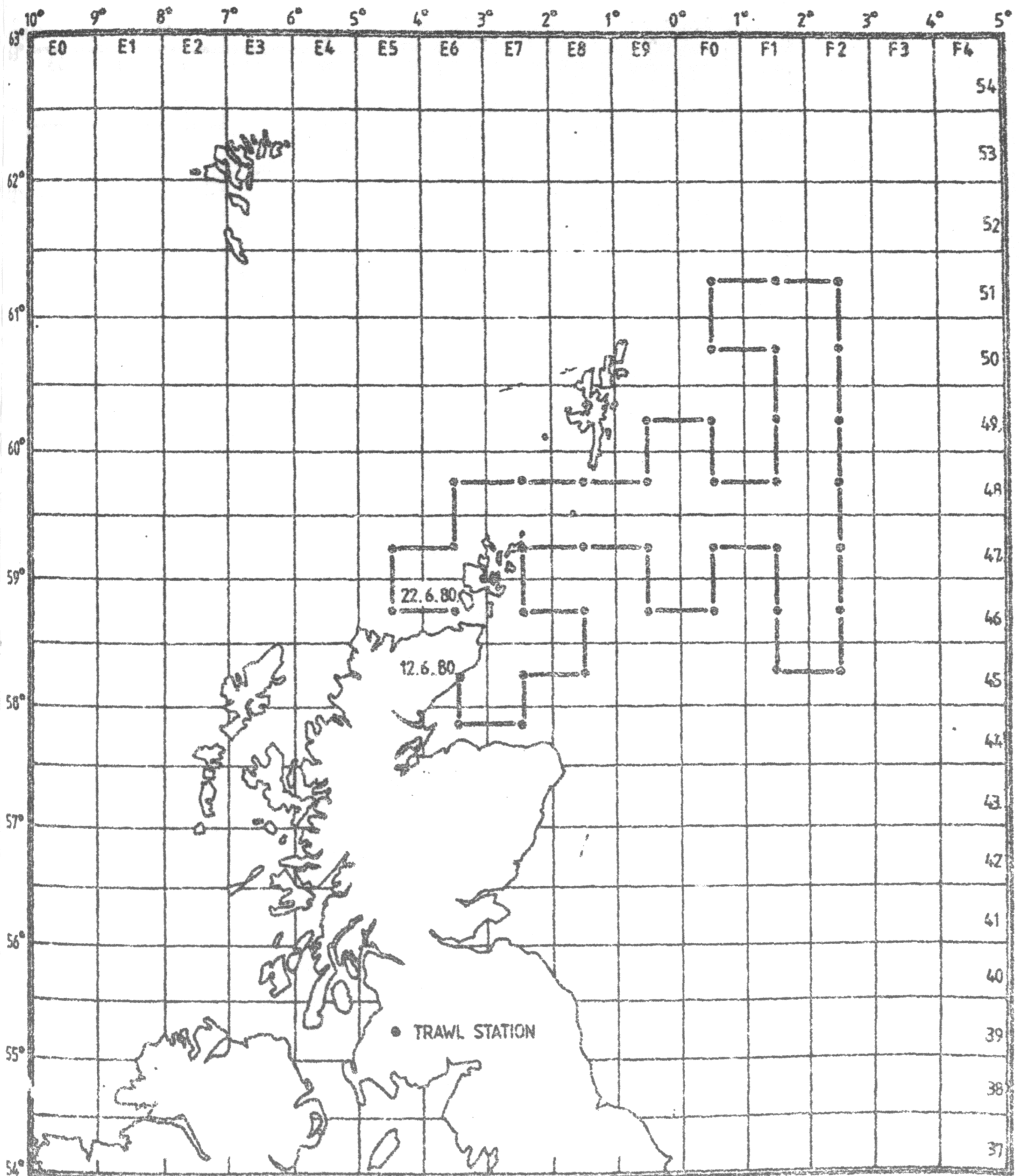
c) Macroplankton

Scyphomedusae were caught in all except one haul of the survey. As in previous years Aurelia aurita was most abundant at inshore stations in the Moray Firth, off the North Coast and around Orkney and Shetland. Cyanea capillata and Cyanea lamarckii although scarce in the Moray Firth were most abundant east of Shetland and off the North Coast. Cyanea lamarckii as expected was less numerous and more coastal than Cyanea capillata. All three scyphomedusae were distributed similarly to 1979 and were a little more abundant. Of the 21 other macroplankton species caught, notably abundant on occasions were -

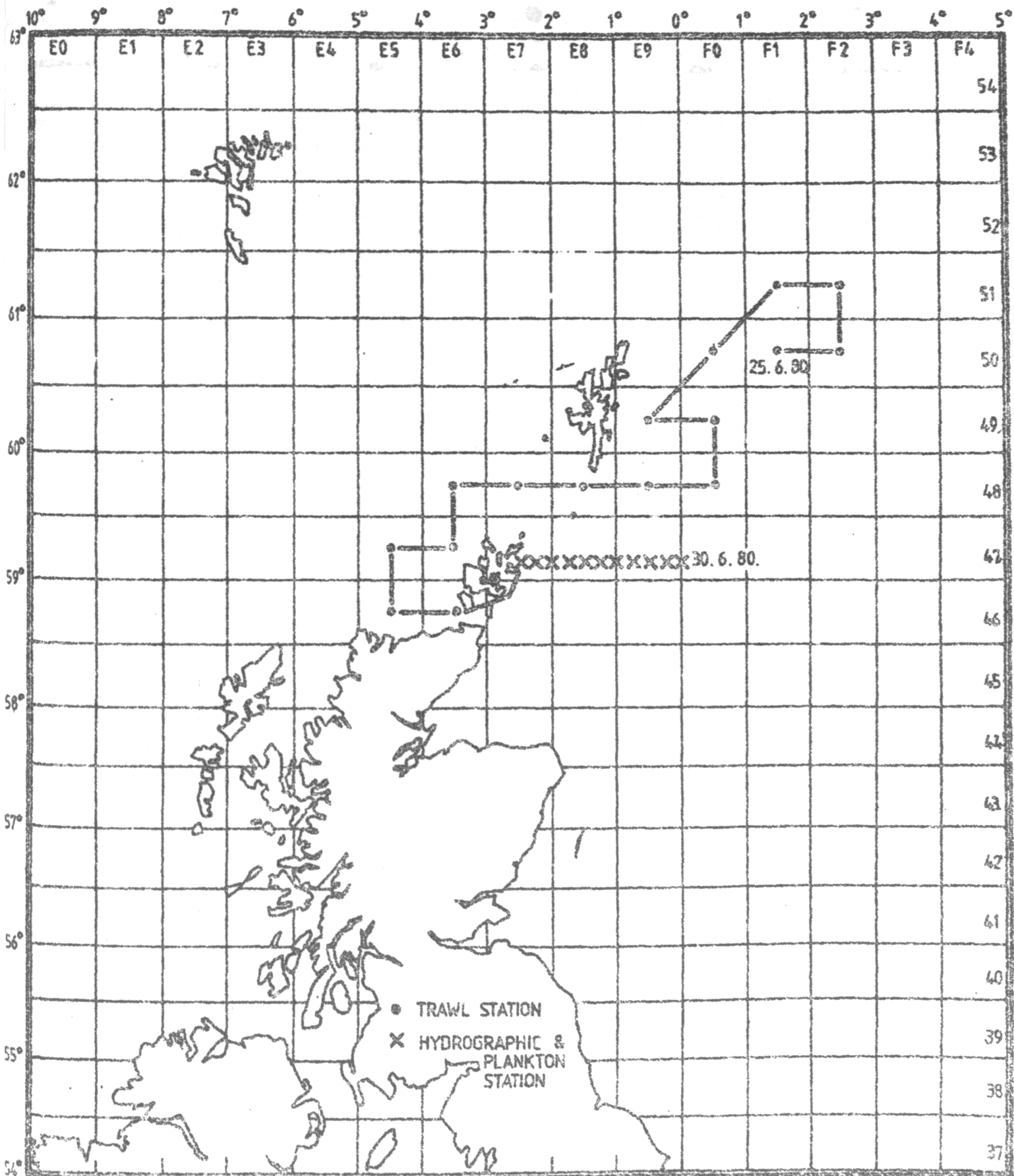
Ctenophora - Pleurobrachia pileus, Beroë cucumis  
Hydromedusa - Laodicea undulata, Cosmetira pilosella, Necturris pileata  
Thaliacea - Salpa fusiformis  
Euphausiacea - Meganyctiphanes norvegica, Thysanoessa inermis

Seen in draft T Henderson CO

J Hislop  
30 July 1980



Explorer 12-22.6.80. 7EP80



Explorer 25-30. 6. 80. 7EP80