

R1/12

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FRV *SCOTIA*

Cruise 0796S

**REPORT**

29 April 1996 - 7 May 1996

**Personnel**

M Heath	PSO
J Dunn	HSO
S Hay	HSO
D Basford	HSO
J Hunter	PTO
M Bailey	Contract
A Gallego	Contract

**Objectives**

To determine the distribution, development and physiological states of larval haddock in relation to the oceanographic features of the northern North Sea.

**Out turn days per project:** 9 days GBF1

**Narrative**

The vessel sailed from Aberdeen at 1030 hours on 29 April and proceeded to carry out gear trials in Aberdeen Bay. On completion a passage was made to the first sampling station. Over the following six days a total of 25 stations were sampled in the northern North Sea (Fig. 1). No work was possible on 3 May due to gale force northerly winds. The vessel docked alongside the vessel *Dana* in Lerwick on the morning of 6 May. Five staff and all scientific equipment were transferred to *Dana* for the continuation of the survey and *Scotia* then returned to Aberdeen, arriving at 0700 hours on 7 May.

**Results**

At each sampling station, plankton samples and hydrographic data were collected with a 5 m<sup>2</sup> Methot-Isaacs Kidd Trawl (MIKT), an Optical Plankton Counter, Opening and Closing plankton net, CTD, and from the vessels non-toxic sea water supply. At selected stations, vertical hauls of live plankton were collected for biochemical analysis and for measurement of egg production by *Calanus finmarchicus*.

All fish larvae in the MIKT samples were sorted aboard the vessel. Very high numbers of sandeel larvae were caught over the whole survey area. Gadoid larvae were restricted to the northern half of the area, and of these approximately 10% were haddock in the area north of 60°N. The distribution of haddock larvae was superficially correlated with water temperature (Fig. 2).

High concentrations of phytoplankton were present in the southern half of the survey area, being composed partly of a *Coscinodiscus* species. Extremely high egg production rates by *Calanus finmarchicus* were measured in the areas of highest phytoplankton abundance.

The gale force winds experienced on 3 May prevented completion of the planned survey grid, so the remaining six stations will be sampled at the beginning of the charter cruise 1296H on *Dana*, immediately following on from *Scotia* 0796S.

M Heath  
9 May 1996

Seen in draft: Captain J Nichols

Figure 1

## Scotia 0796 station positions

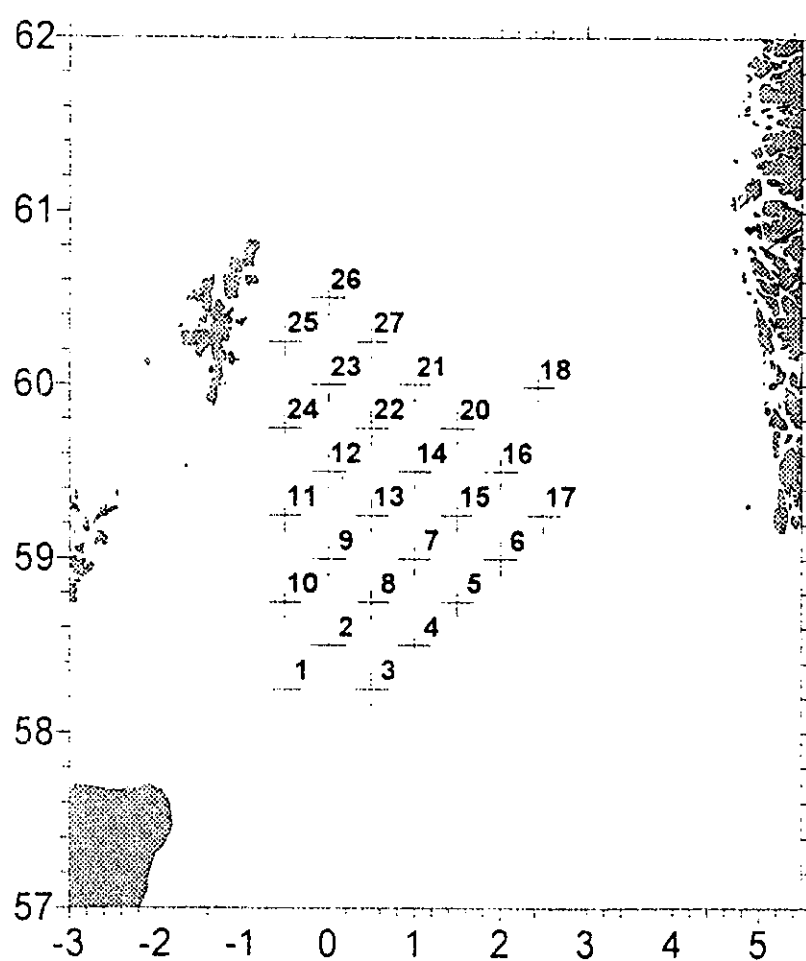


Figure 2

Scotia 29 April - 6 May 1996

