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Charter Vessel Cruise

RRS Frederick Russell

REPORT

1-15 September 1986

Personnel

SO (in charge) P W Rankine

N T Nicoll

HSO

G Slesser

HSO

D S Beveridge

ASO

I D Leaver

AS0

C Burton (NCC) Visitor

Objectives

- 1 To carry out a hydrographic, environmental and plankton survey over herring spawning grounds to the west of Orkney.
- 2 To participate in the ICES coordinated Herring Larval Surveys in ICES subdivision IVa(N).

Narrative

"Frederick Russell" left Aberdeen at 1600 on 1 September and proceeded to station D8, north west of Orkney. A north westerly gale prevented sampling at this station, however, and safe anchorage was made in Pierowall Sound at 1430 on 2 September. Gale force winds continued over the next 2 days and "Frederick Russell" commenced sampling to the west of Orkney in very heavy weather conditions on 5 September (Figure 2, Hydro 1). Surface salinity, nutrient, micro-zoo and phytoplankton samples were collected at this time and a larval patch identified for study by FRV "Scotia".

The ICES Larval Survey commenced at Stn 17 on 6 September again in severe weather conditions, and the grid depicted in Figure 1 worked without further interruption until 12 September. Acting on information from FRV "Scotia", "Fredrick Russell" then surveyed a line of hydrographic/environmental stations adjacent to the larval patch being followed by "Scotia". A further 2 hydrographic/environmental transects were surveyed on 12 and 13 September (Figure 2, Hydro 2). "Fredrick Russell" sailed for Dunstaffnage at 1700 on 13 September, arriving at 1730 on 14 September.

General

A water sample for radio-caesium analysis was collected at Cape Wrath, 58°40'N 05°05'W. Herring larvae for otolith study were collected to the west of Orkney.

Despite the often severe weather conditions encountered throughout the survey a total of 128 plankton hauls were made and 22 hydrographic/environmental-stationscompleted.

Radio contact was maintained at appropriate times with FRV "Scotia".

Paul W Rankine 23 September 1986





