

R1/12

In Confidence : Not to be quoted without prior reference to the Laboratory

FRV 'Scotia'

10SR82

Cruise 10/82

Report

29 Sept - 19 Oct, 1982

Objectives:

1. To take part in the ICES Herring Larval Survey in ICES Division VIa.
2. To collect surface water samples for radio-caesium monitoring at Cape Wrath ($58^{\circ}40'N$ $05^{\circ}00'W$), Pentland Firth ($58^{\circ}40'N$ $02^{\circ}59'W$) and at Aberdeen ($57^{\circ}10'N$ $01^{\circ}55'W$).

Narrative:

'Scotia' left Aberdeen at 1600 hrs on 29 Sept and proceeded directly to the north of Scotland where sampling commenced the following morning. Sampling stations were worked continuously along northern Scotland, to offshore west of the Hebrides, to Northern Iceland and Donegal Bay before heading northwards again via inshore west of the Hebrides. On 7 Oct 'Scotia' put into Stornoway for a 24 hour mid-cruise break.

On leaving Stornoway on 8 Oct sampling recommenced in the North Minch area. Advantage was taken of a break in weather conditions and sampling was extended to the west of the Hebrides and St Kilda before working southwards to Northern Ireland. On 12 Oct off northern Donegal, 'Scotia' rendezvoused with "Ioda Naofa" which was on charter to the Dublin Laboratory. A series of comparative hauls were made between the two vessels using the same type of sampling gear. The depths sampled ranged from 49 m to 77 m. 'Scotia' thereafter proceeded to complete the sampling grid in Donegal Bay and off Northern Ireland before working due north to the areas north and west of the Butt of Lewis and along the north Scottish coast.

In the face of severe gale force winds work was eventually halted at 1500 hrs on 17 Oct, and the vessel then proceeded to Aberdeen where she docked at 0200 hrs on 19 Oct.

Results:

The sampling grid was covered twice during the survey. A total of 308 herring larval hauls were completed, 17 of the hauls being directly comparable with those of the Irish vessel.

Attempts to extract larvae at sea proved to be impractical due to the motion of the vessel. However, superficial examination of the samples indicated relatively large quantities of larvae in those areas off northern Scotland, around St Kilda and west of the Hebrides and off northern Donegal. Few larvae were observed in samples from Donegal Bay or from the Minches. Detailed analyses of the samples and of the comparable hauls will be carried out in Aberdeen.

At 58 stations measurements were obtained using a depth monitoring system attached to the sampler for the distance from 1) sampler to surface and 2) from sampler to sea-bed. These data, particularly those for the sampler-sea-bed distance will be incorporated in the further development of the monitoring system.

J Gauld
3 Nov 1982

Seen in draft J W Gillon











