

R1/12

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

Cruise Report

JR

FRV 'Scotia' 9/83

31 August - 20 September 1983

Objectives

1. To take part in the ICES co-ordinated herring larval survey to the West of Scotland.
2. To collect herring larvae for genetic studies.
3. To collect water samples for radio caesium monitoring.

Narrative

'Scotia' left Aberdeen at 1400 on Wednesday 31 August and headed for the Cape Wrath area. After collecting a radio caesium sample the herring larval survey was begun in the area off the north coast of Scotland. After about 12 hauls had been carried out it was observed that because of poor leads the sheave of the metre block was being badly damaged. As the Simrad netsonde equipment was working well it was decided to remove the metre block to prevent any further damage. The Laboratory were then contacted and arrangements were made to have spare parts for a second block sent up to the Fishery Office in Ullapool for Saturday 3 September. The survey continued westwards to the Butt of Lewis area before 'Scotia' headed for Ullapool to collect the spares for the metre block. Because of deteriorating weather conditions after leaving Ullapool 'Scotia' worked stations in the Minches. By late on 4 September conditions had further deteriorated and sampling became impossible. 'Scotia' resumed operations at 0830 on 5 September and worked stations from Barra Head northwards to St Kilda and the Flannan Isles. All the stations in VIa (north) had been completed by 2100 on 7 September and 'Scotia' headed for the northwest of Ireland. The sampling in this area was completed by 1600 on 10 September. 'Scotia' headed north to begin a second coverage of the area west of the Hebrides but severe weather conditions confined operations to the Minches. Sampling continued until 0600 on 12 September when 'Scotia' headed for Stornoway for the half landing.

After leaving Stornoway on 13 September it was decided to give priority to resampling the stations in VIa (north). Sampling was begun in the North Minch and continued north and westwards. All the stations in VIa (north) were sampled for a second time by 1800 on 17 September. As the time available before the end of the cruise was insufficient to allow any realistic sampling in VIa (south) the remainder of the cruise was spent resampling the stations in the Minches. Severe weather in the afternoon of 18 September made sampling impossible and 'Scotia' headed for Aberdeen. On Passage a further three radio caesium samples were collected and flowmeter calibration hauls were made. 'Scotia' docked in Aberdeen at 1730 on 19 September.

Results

During the cruise a total of 294 Gulf III hauls were made. As they were all examined on board it was apparent that herring larvae were very scarce. Only 2 stations on the first and 5 stations on the second survey were estimated to have over one hundred larvae. On both surveys larvae appeared to be most common in the Cape Wrath area.

Four samples were collected and preserved in liquid nitrogen for genetic studies.

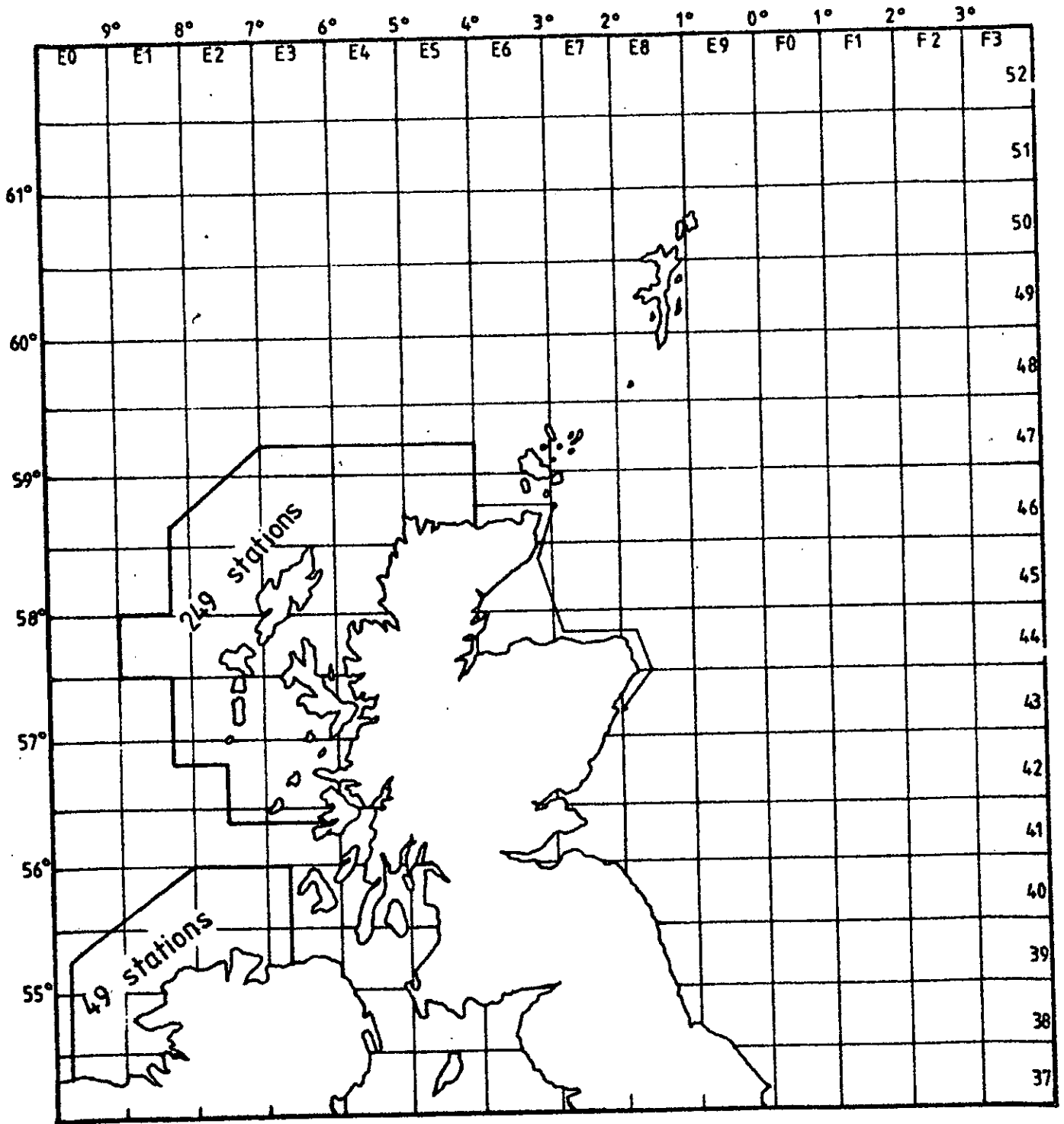
Four samples were collected for radio caesium monitoring.

During the cruise the Simrad netsonde system was used to estimate the distance of the sampler off the bottom. It worked well in all but the roughest weather.

David W McKay

1 November 1983

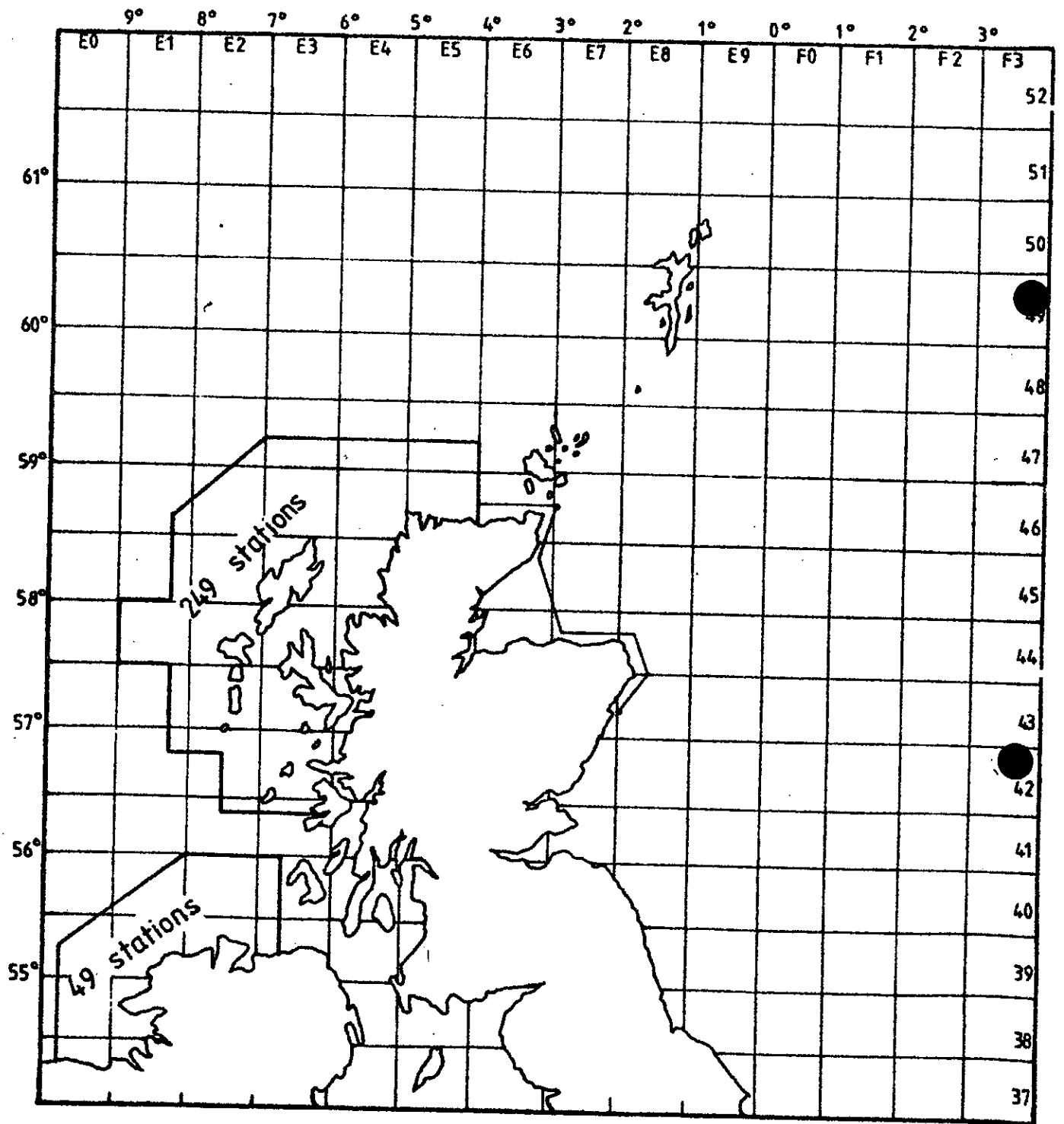
Seen in draft by: W Findlay



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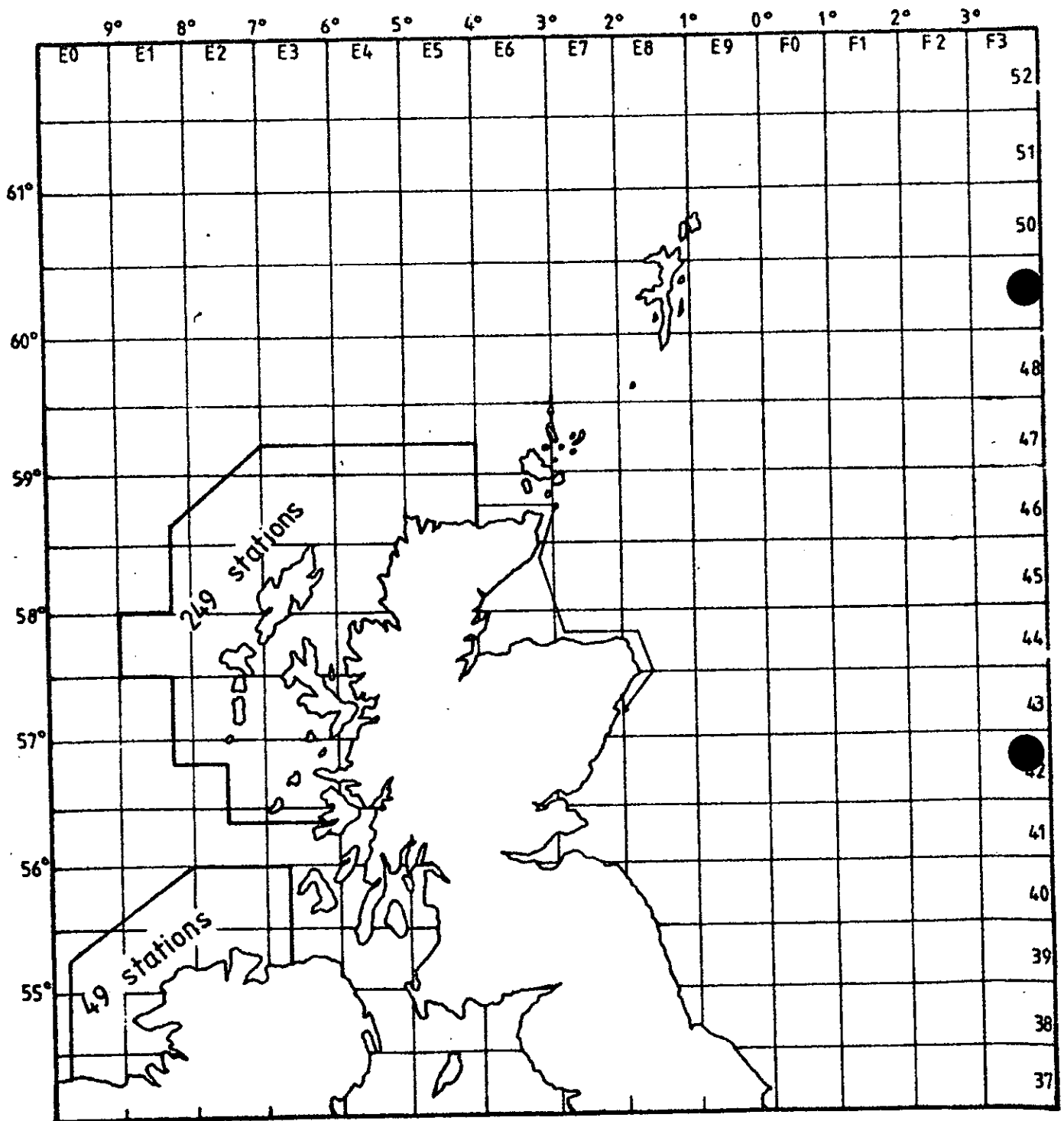
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