

R1/12

IN CONFIDENCE - NOT TO BE QUOTED WITHOUT PRIOR REFERENCE TO THE LABORATORY

FRV SCOTIA

95R82

CRUISE 9/82

REPORT:

1-21 September 1982

OBJECTIVES

1. To take part in the ICES Herring Larval Survey in Division VIa.
2. To collect surface water samples for radio-caesium monitoring at Cape Wrath (58°40'N 5°00'W), Pentland Firth (58°40'N 2°59'W) and Aberdeen (57°10'N 1°55'W).

NARRATIVE

'Scotia' sailed from Trinity Quay at 1115 on 1 September and moved to the fueling berth, but, because of problems with various items of scientific equipment used to monitor plankton sampler depth, departure from Aberdeen was delayed until 1200 on 2 September.

The vessel proceeded immediately to the north coast of Scotland where work at the first station commenced at 0500 on 3 September. Thereafter the vessel worked westwards and then southwards, occupying the outermost stations; the first of the stations south of 56°N was reached at 1100 on 5 September. Between then and 0100 on 7 September, most of these southern stations were completed and 'Scotia' then worked northwards occupying the remaining stations west of the Outer Hebrides before docking at Stornoway at 0930 on 9 September for the half-landing.

During the period in Stornoway a damaged sampler was repaired by a local engineering company and attempts were made, with the assistance of one of the ship's officers, to repair some of the depth monitoring equipment which had failed.

'Scotia' left Stornoway at 1100 on 10 September and headed for the stations in the Sea of the Hebrides and thereafter southwards to the Irish coast.

During the morning of 12 September, storm force winds forced the vessel to dodge for four hours off Culdaff Bay. Fortunately weather conditions improved markedly within a short period of time and all stations south of 56°N were completed by 2240 on 14 September. The vessel then proceeded northwards, the area west of the Outer Hebrides, the North Minch and part of the north coast being surveyed in turn before 'Scotia' and 'Explorer' met at 1100 on 19 September to exchange scientific equipment. A few remaining stations off the North Coast were then worked and with the second survey having occupied all but one station, the vessel proceeded towards Aberdeen, docking at 1330 on 20 September.

During the middle part of the cruise regular contact was maintained with R.V. "Anton Dohrn" which was also involved in the ICES herring larval survey.

## RESULTS

The surveys suffered only minor delays due to weather conditions and during the first part of the cruise 112 stations (mainly those considered most important) were occupied. During the second part of the cruise 168 stations were occupied.

During the course of the cruise an attempt was made to extract all larval fish from the 112 samples obtained during the first survey. This analysis showed herring larvae to be most abundant west and north of the Outer Hebrides and particularly in

- (i) the area west of the region from Barra to West Loch Tarbert; and
- (ii) the area extending from west of Loch Roag to north-east of the Butt of Lewis.

Smaller areas of larval abundance were found north and west of Tiresa, near Aran Isle and north-west of Loch Swilly.

The doliolid Dolioletta gegenbauri was found at a number of stations, in particular in the area north and west of the Outer Hebrides where other oceanic species were also frequently found.

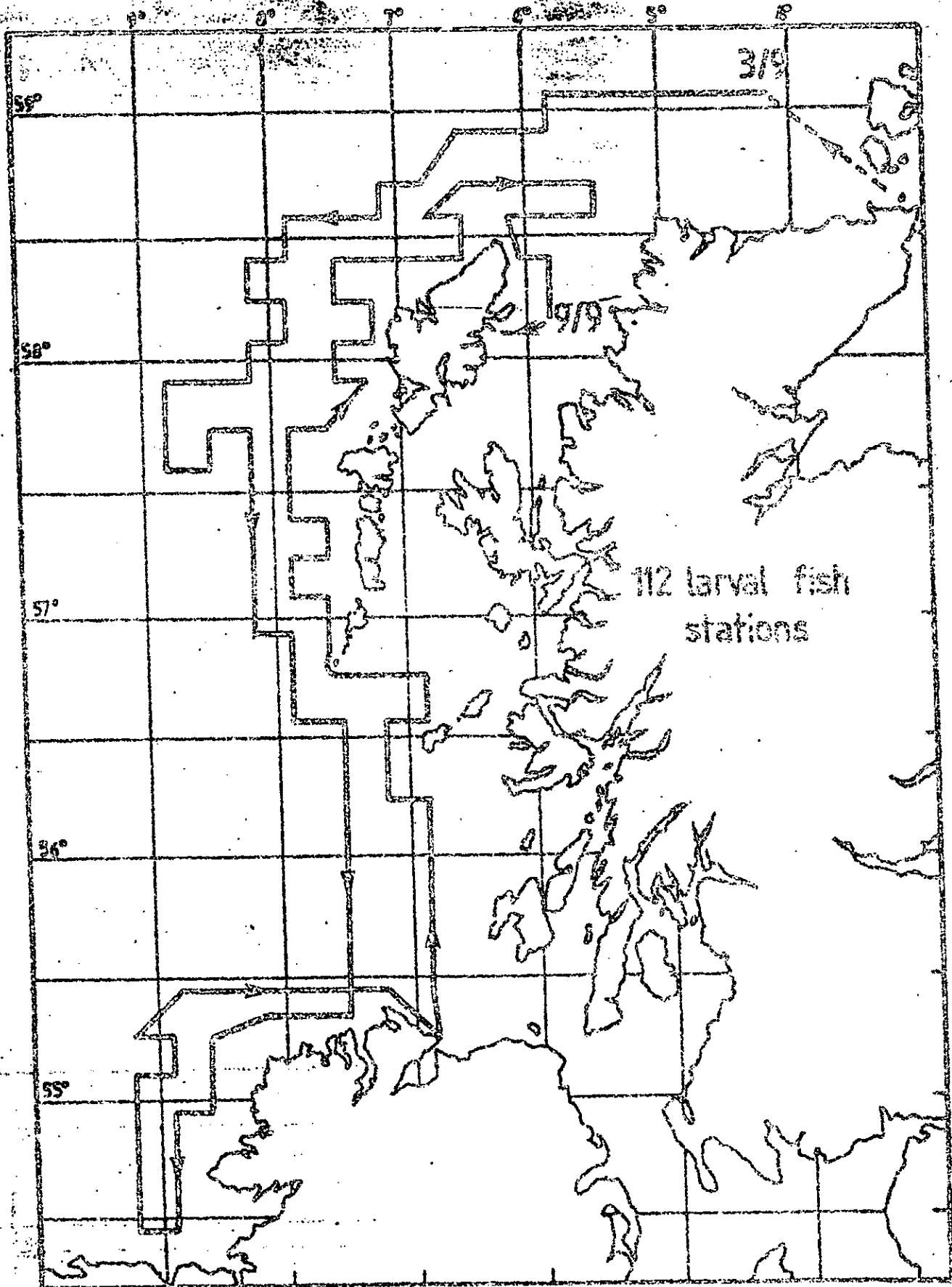
The second survey basically confirmed the distribution found on the first survey although only a crude visual inspection of the samples was made. Some additional areas of larval presence were found in the North Minch and in the Sea of the Hebrides, while the larvae found north east of the Butt of Lewis appeared to be part of a distribution extending eastwards along the north coast.

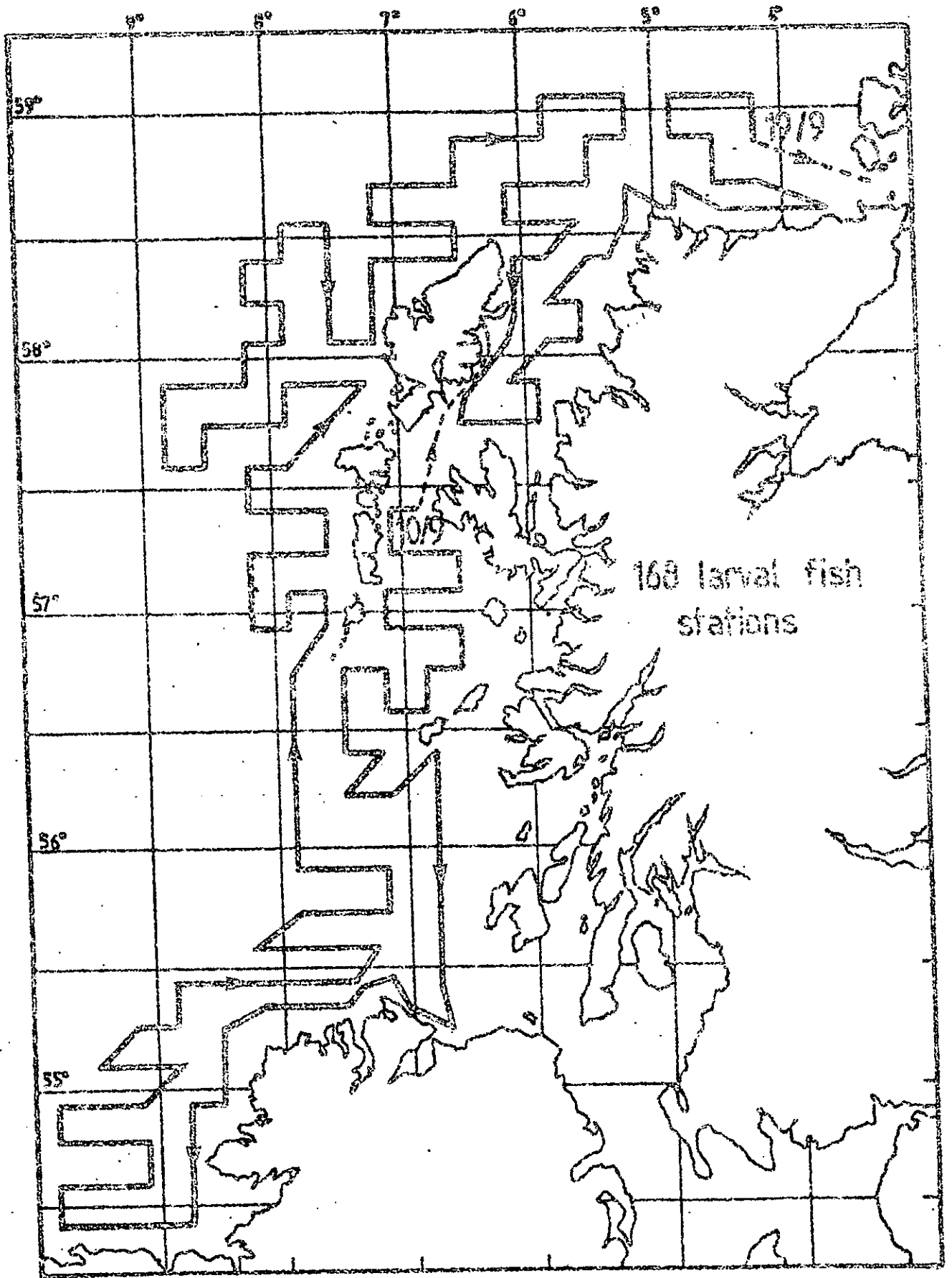
A rather fine specimen of Velella velella (of approximately 45mm along the longitudinal axis) was found, during the second survey, at 55° 25' N 8° 50' W on 14 September.

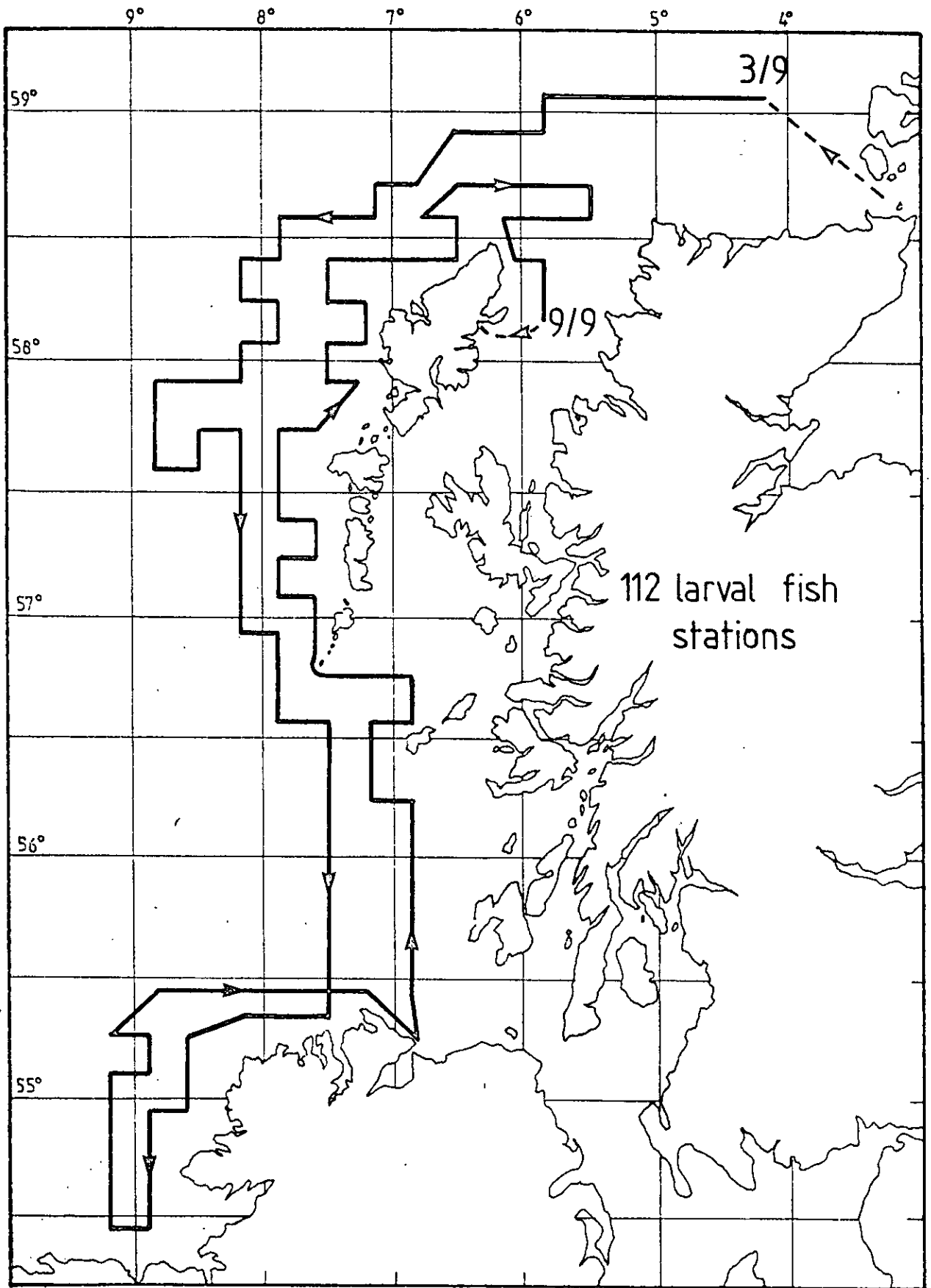
All radio-caesium samples were obtained.

J.A. ADAMS  
10 January 1983

Seen in draft: I.C. McLeod

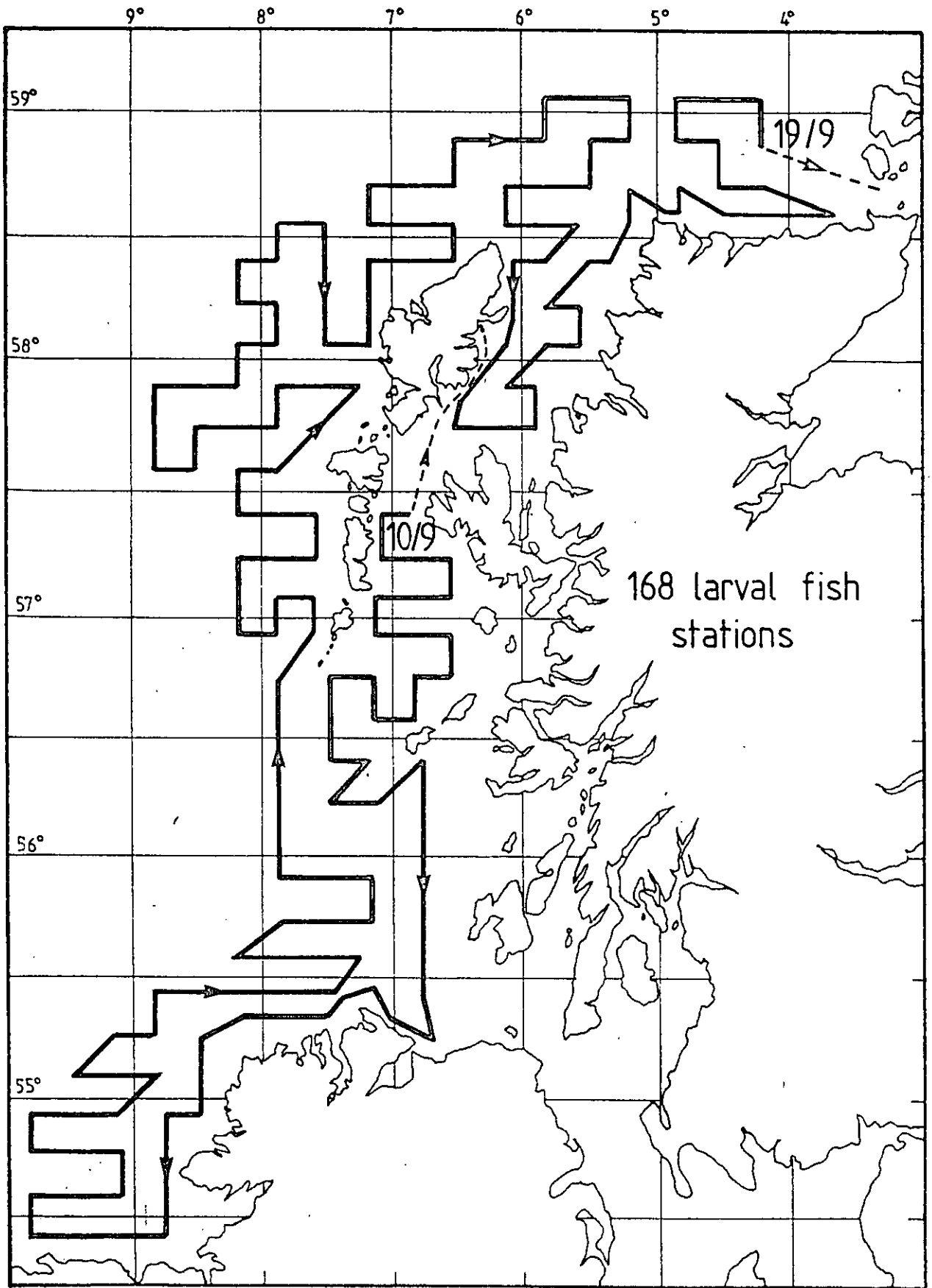






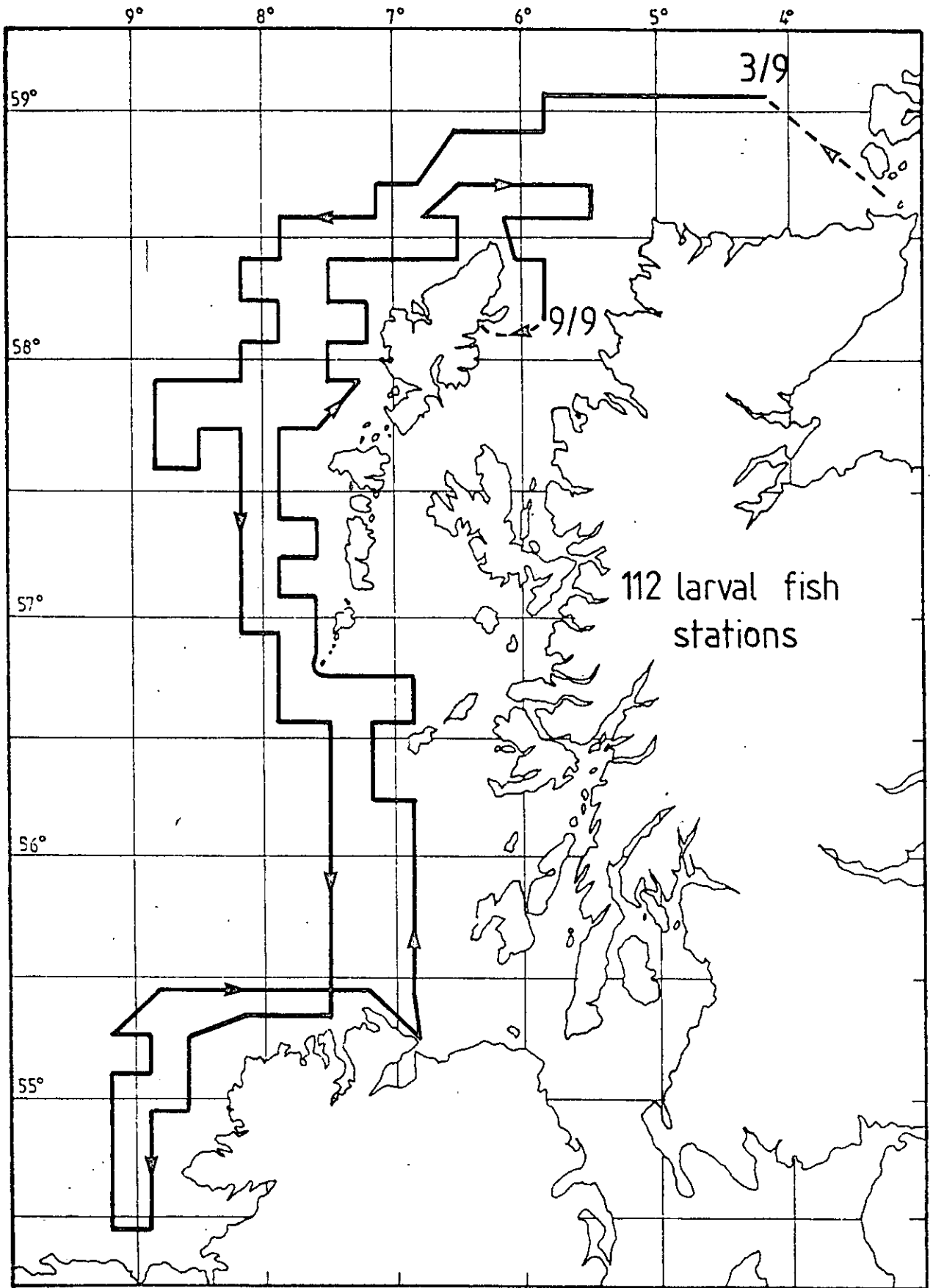
FRV Scotia 3/9-9/9/82 (part 1)

9SR82



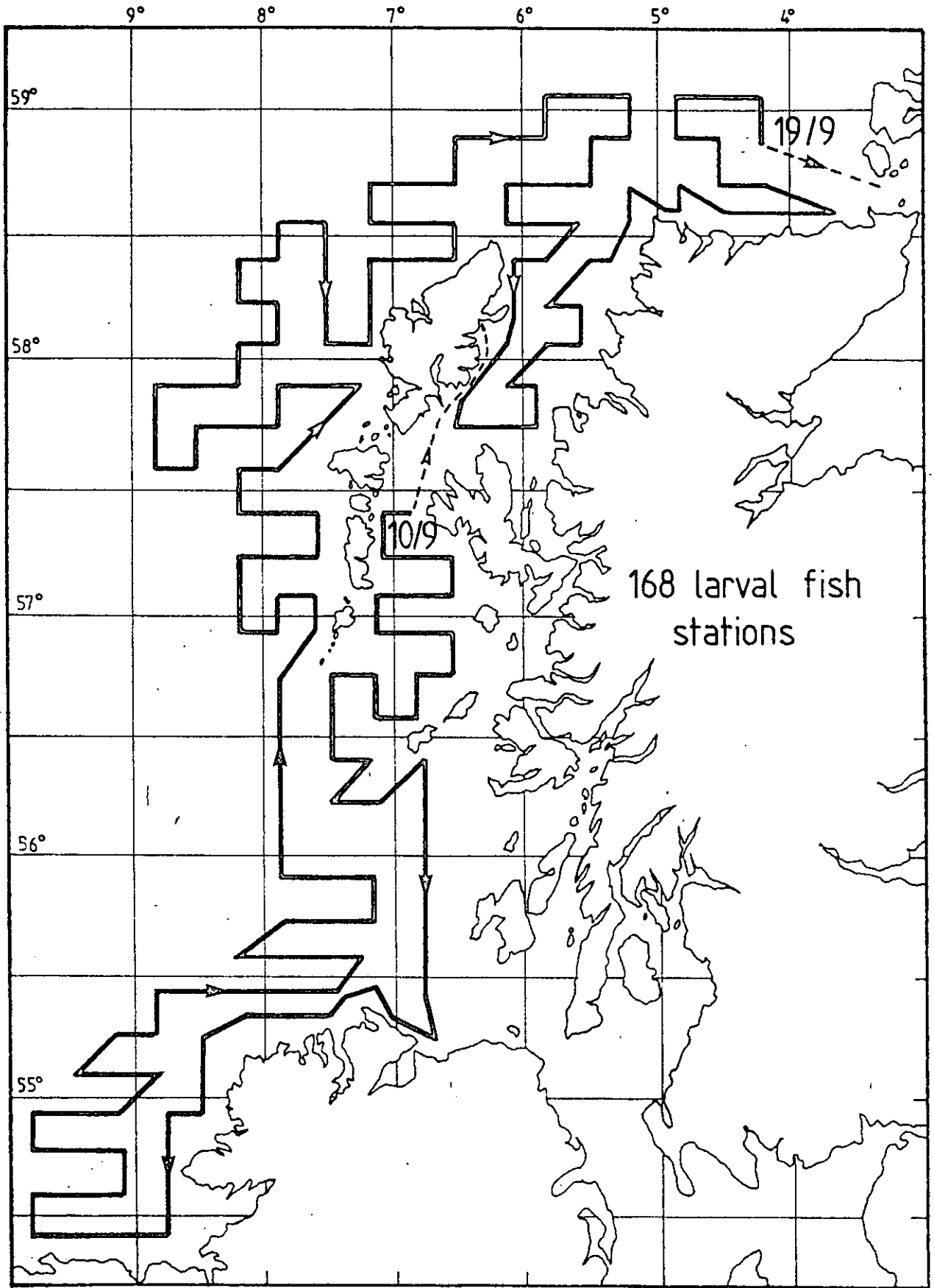
FRV Scotia 10/9 - 19/9/82 (part 2)

9SR82



FRV Scotia 3/9-9/9/82 (part 1)

9SR82



FRV Scotia 10/9 - 19/9/82 (part 2)

9SR82