

R17/8

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CHARTER CRUISE REPORT

FRV *Lough Foyle*

H20

1-21 September 1990

Personnel

P W Rankine	HSO (in charge)
L Cargill	SO
E Macdonald	SO
S Heaney	ASO
S Rijs	Visitor (Netherlands) 1-11 September

Objectives

1. To participate in the ICES coordinated herring larval surveys in Division VIa(N).
2. To collect, and preserve in liquid nitrogen, herring larvae for RNA/DNA analysis, as part of an Aberdeen University study.
3. To collect surface temperature and salinity data.
4. To collect, identify and count all herring and other fish larvae caught.
5. To collect and preserve herring and other fish larvae for otolith studies.

Narrative

Scientific personnel joined the vessel in Troon at 1300 on 1 September. The ship left Troon, after equipment installation, at 2200 that night and proceeded to Stn 106 of the survey grid (Fig. 1). Sampling was then carried out as in Figure 1 until 1630 on the 5th. *Lough Foyle* then set course for Kyle to allow replacement of a thermosalinograph and installation of an echo-sounder unit on the 6th. The ship left Kyle at 0800 the next morning, being delayed by gale force winds overnight. Sampling was then continued, as in Figure 1, until the ship docked in Ullapool at 2000 on 10 September.

Lough Foyle left Ullapool at 2000 on 11 September and proceeded to Stn 54 (Fig. 2) where sampling commenced at 2200. Sampling continued as in Figure 2 until 1600 on the 13th when exceptionally heavy weather forced the vessel to shelter in Pierowall Bay in Orkney. The vessel left the anchorage at 1700 on the 14th and proceeded to Stn 6, in very heavy seas, where sampling was restarted. Sampling was continued as in Figure 2 until 1200 on the 18th when increasing north westerly gales forced abandonment of the survey.

Lough Foyle then set course for the Clyde estuary where, despite 65 mph winds, a short survey was carried out in Kilbrannan Sound and East of Arran on the 19th. The vessel docked in Troon at 1600 on the 20th. Scientific personnel left the vessel the following morning at 0900.

General

A total of 207 samples were taken during the trip. Three hundred herring larvae were collected and preserved in liquid nitrogen for RNA/DNA analysis. Over 500 herring larvae were collected, from each of the main spawning grounds, and preserved in a buffered ethanol solution for otolith studies.

All samples were examined for fish larvae and a total of 21,531 herring larvae removed and preserved for subsequent analysis. Figures 3 and 4 depict the herring larval distributions (Nos/m²) encountered during the survey.

Normal contacts were maintained with the ship's owners and with the Marine Laboratory.

Paul W Rankine

1 October 1990

Figure 1

VIA(N) IHLS SURVEY GRID I

Lough Foyle 1-10 September 1990

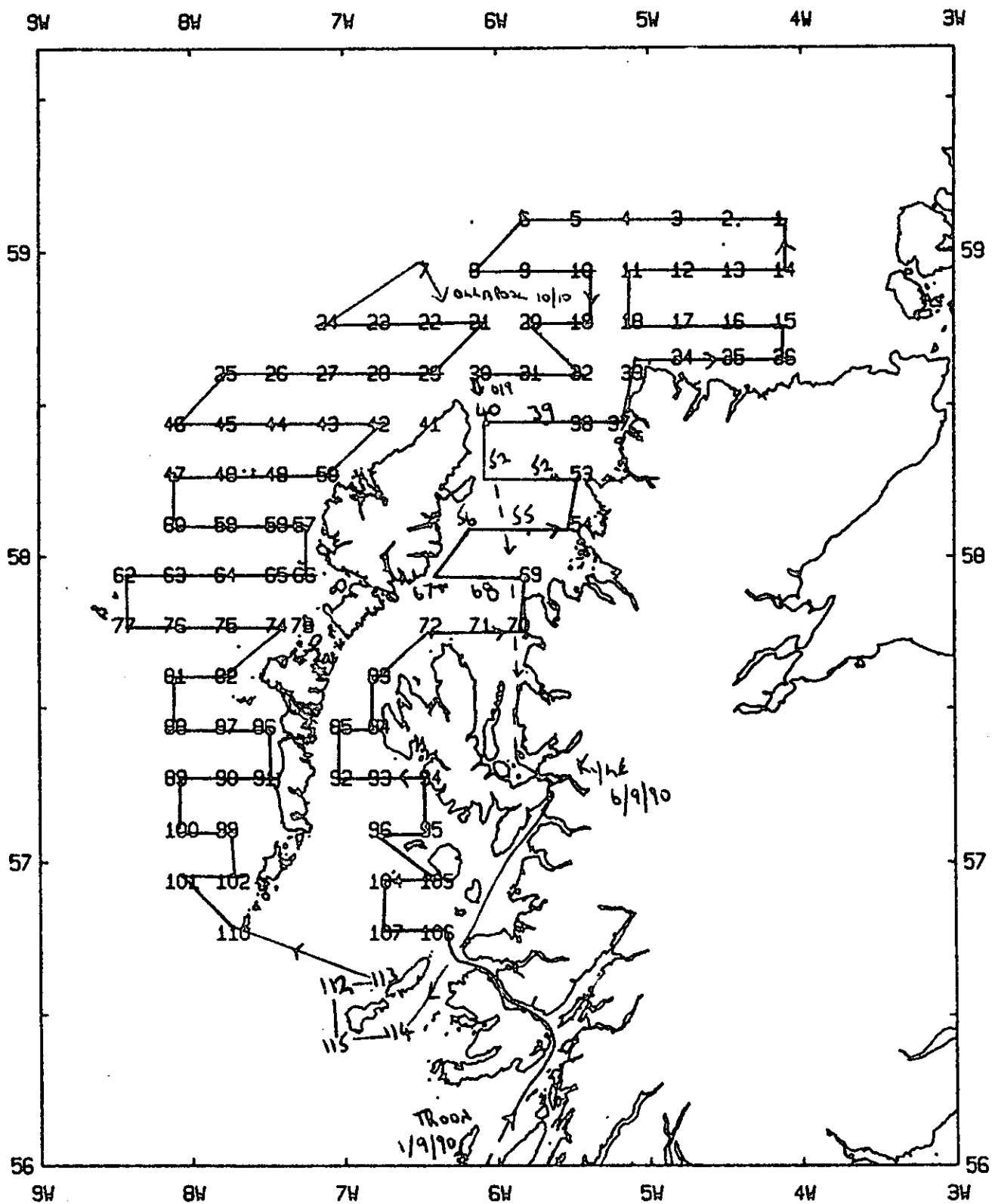


Figure 2

VIA(N) IHLS SURVEY GRID II

Lough Foyle 11-20 September 1990

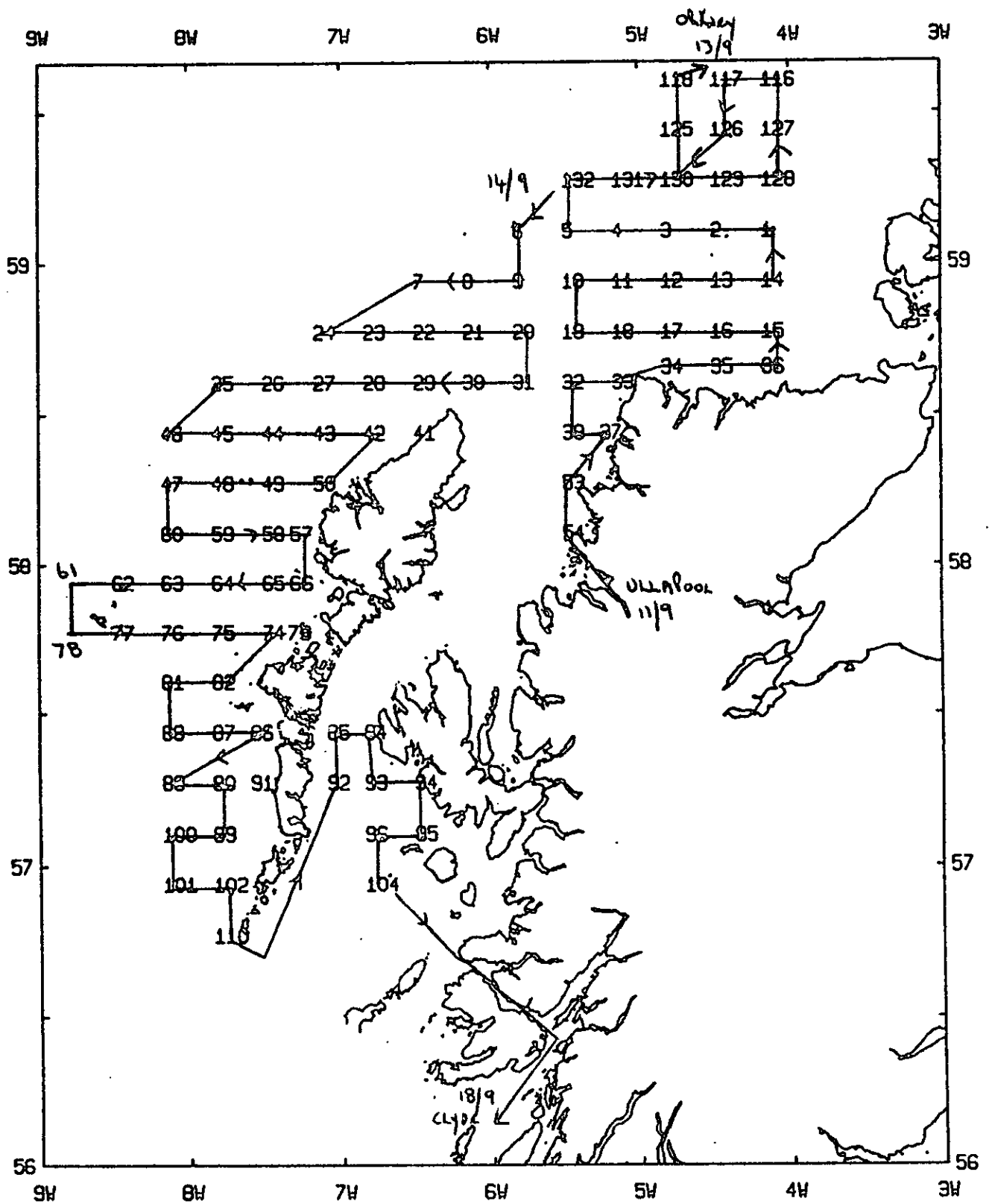


Figure 3

VIA(N) IHLS survey 1 nos/m2

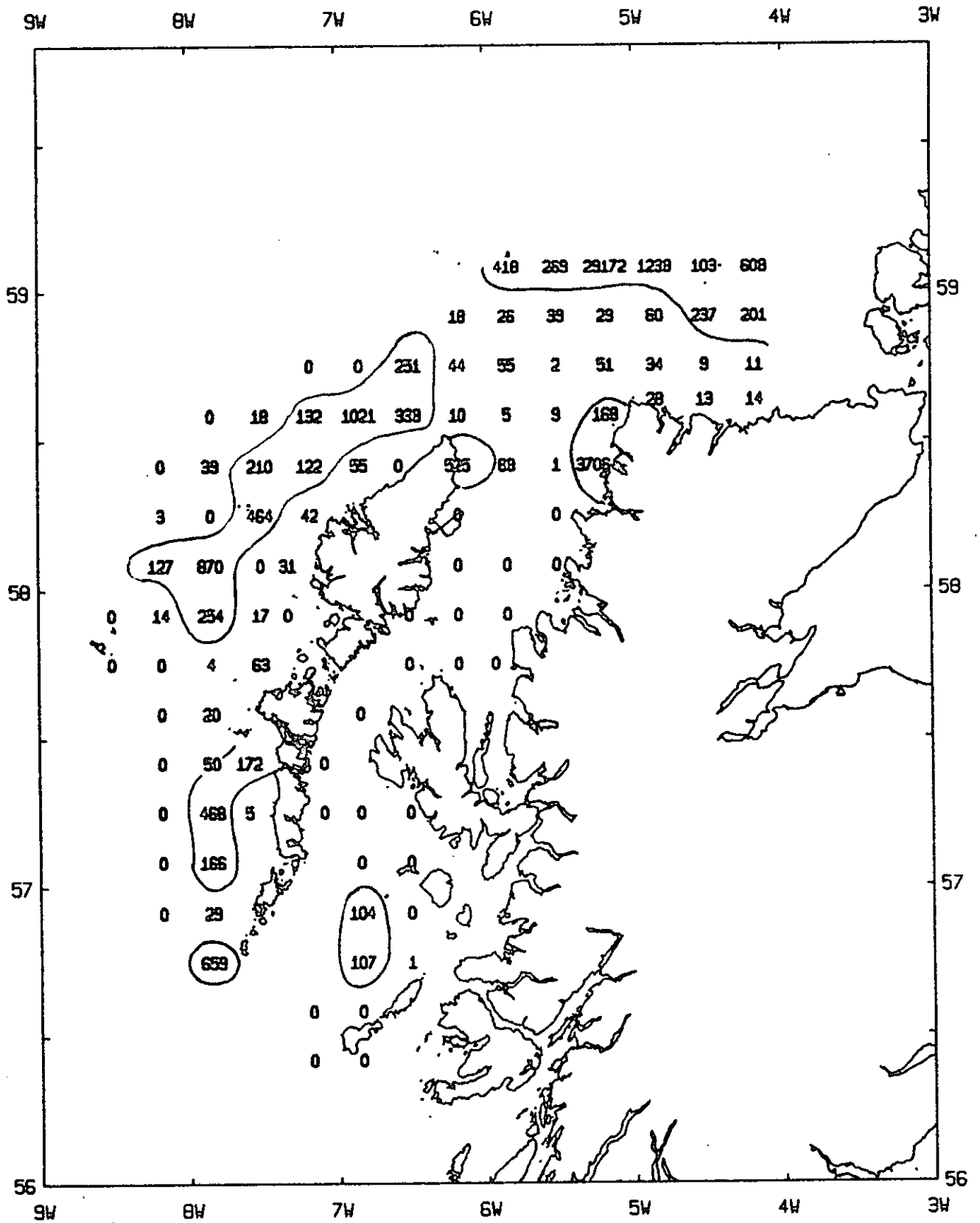


Figure 4

VIA(N) IHLS SURVEY 2 (nos/m²)

