

R1/12

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FRV *Scotia*

Cruise 1392S

REPORT

6-15 October 1992

### Personnel

S J Hay	HSO
L H Cargill	SO
J Turriff	ASO
N T Nicoll	Visitor

### Objectives

1. To complete a plankton survey off the Scottish north and west coasts (area VIa) as part of the ICES International Herring Larval Surveys.
2. To collect surface temperature and salinity data during the survey.
3. To collect live plankton material for photographic recording.
4. To undertake preliminary trials of a newly developed net sampling system.

### Narrative

*Scotia* left Aberdeen at 1000 on 6 October and made passage to the north coast, arriving at the start of the survey grid at 2200. Sampler calibrations were performed on the passage north. Although northerly gales slowed the pace of sampling at times the whole (77 stations) survey grid (Fig. 1) was completed by the morning of 13 October. Further flowmeter calibrations were then completed. At 17 grid stations sampling was repeated using both the Dutch Gulf III sampler and the new net system at each station, for comparison of net performance. Again, northerly gales made this work slow and difficult. Throughout the cruise, surface temperature and salinity were monitored from the onboard non-toxic sea water supply. A number of vertical net hauls were made and the live plankton collected were used in photographic studies. *Scotia* docked at Aberdeen at 0730 on Thursday 15 October.

### Results

Preliminary results from counts of herring larvae extracted from samples at sea, are illustrated in Figure 2. Larvae were widely distributed with concentrations both near and offshore in the northern area, the largest numbers of small larvae and were found west of the Hebrides with few larvae in the Minches except at one station west of Skye. Generally there were fewer larvae at stations closest to the shelf edge although distributions showed a wide spread of larval abundance. Thermosalinograph records of surface temperature and salinity were collected throughout the survey area for later analysis. Trials of the new net were conducted and comparisons between catches using both gears will be made. Hauls for live material allowed photographic and video studies of a number of plankton species. Evident in most of the samples, except in the Minches and close to the Scottish north coast were large numbers of the thalacian species *Salpa fusiformis*.

S Hay  
9 November 1992

See in draft by *Scotia* captain

VIA(N) IHLS SURVEY GRID

CRUISE TRACK  $\rightarrow$

REPEATED AND  
NET TRIAL STATIONS  $--*--*$

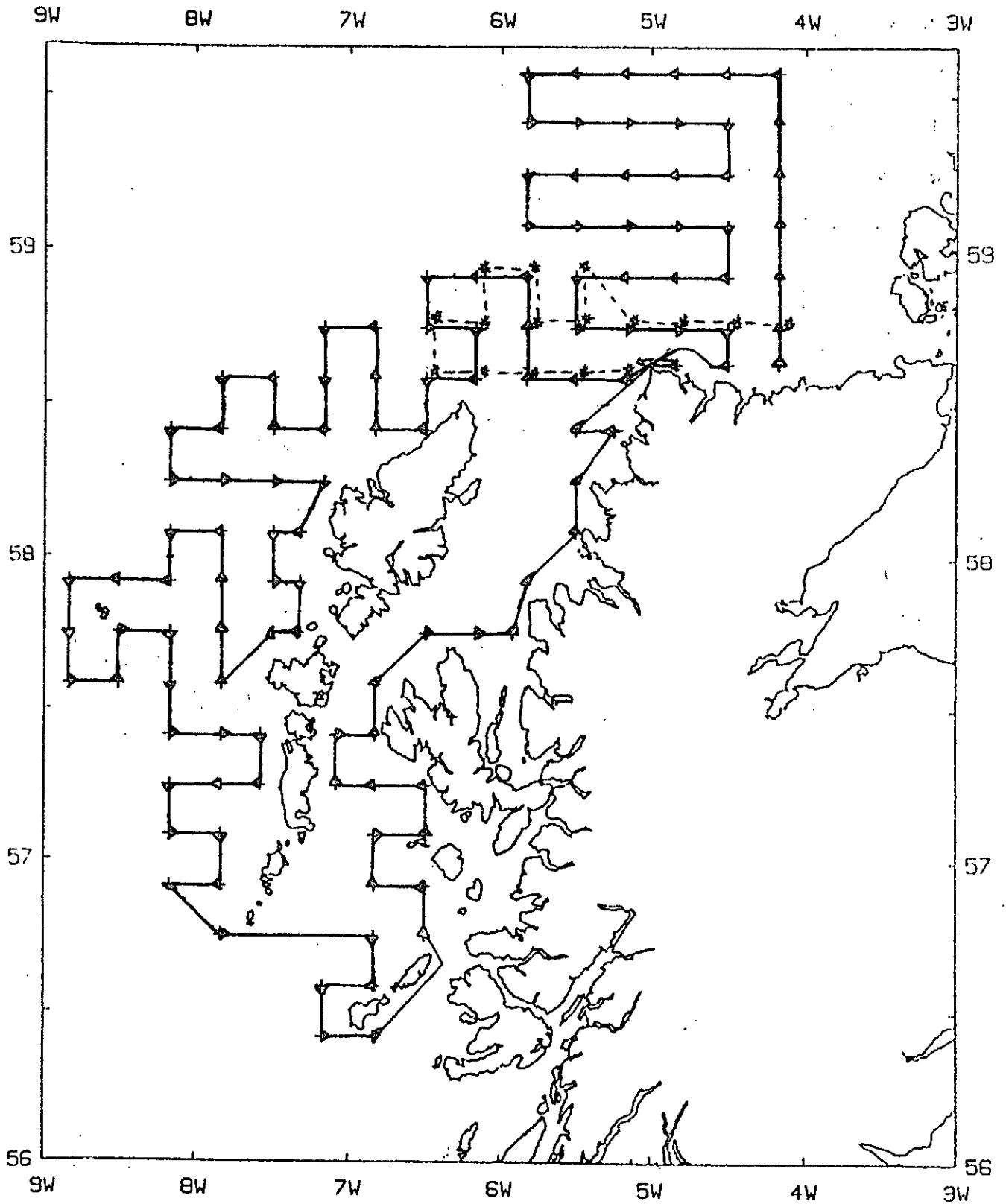


Figure 1

VIA(N) IHLS SURVEY GRID  
 PRELIMINARY COUNTS  
 HERRING LARVAE  
 NUMBERS PER METRE <sup>2</sup>

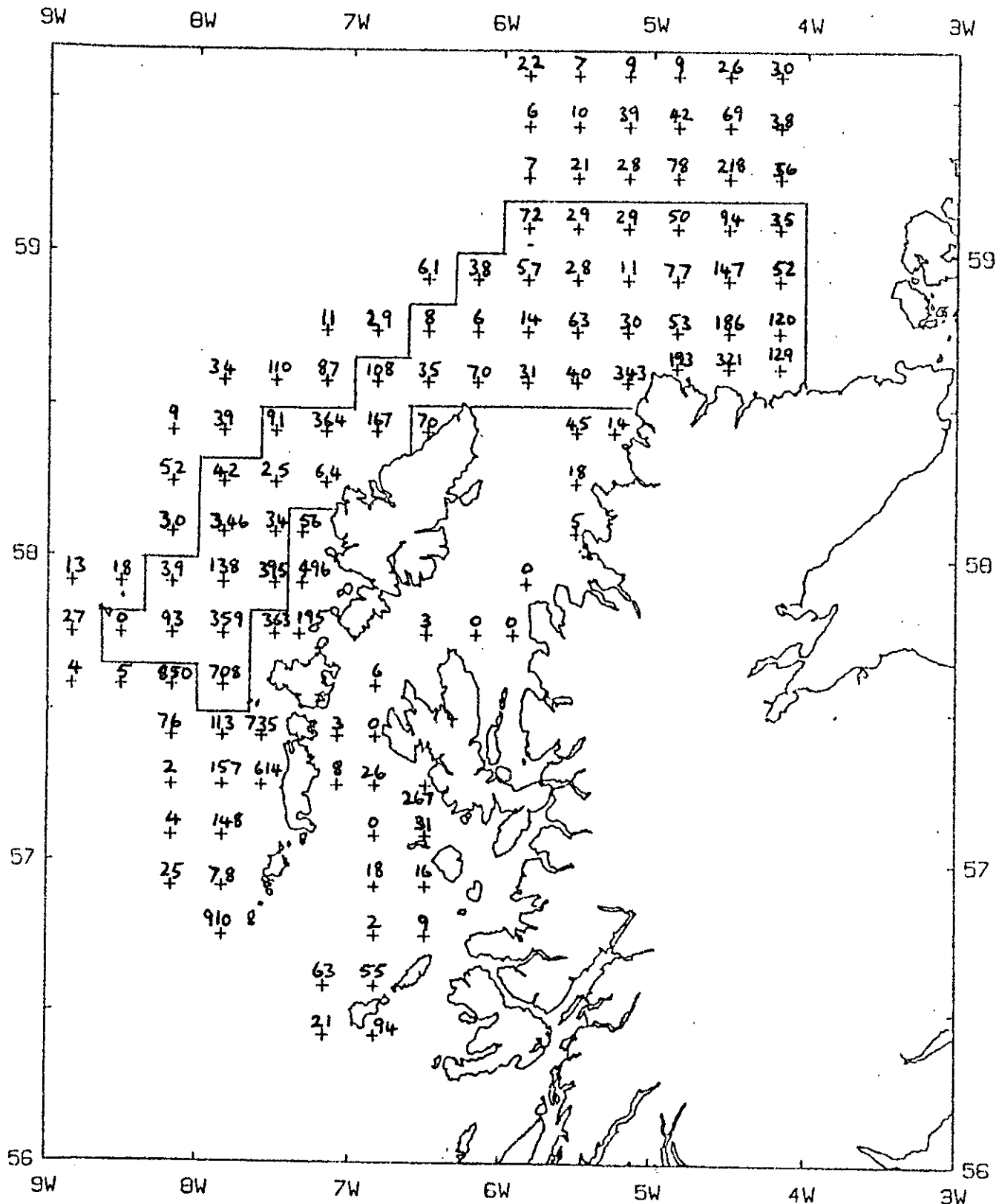


Figure 2