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Not to be quoted without reference to the Laboratory

In Confidence

Cruise 9/82
FRV 'Explorer'

9ER82

REPORT
10-30 Sept 1982

Objective

To take part in the ICES coordinated herring larval surveys in the Orkney/Shetland area.

Narrative

'Explorer' left Aberdeen at 1630 on 10 Sept and headed for stations in the outer Moray Firth. While on passage tests were carried out with the IOS monitor and flowmeter calibrations were made. Because of forecasts of strong westerly winds it was decided to work stations in the Moray Firth and east Orkney area. However by 0630 on 12 Sept the weather had deteriorated to such an extent that sampling could not be carried out safely and 'Explorer' headed for shelter. During a slight lull in the gales work was attempted during the afternoon of 12 Sept but further deterioration in the weather caused 'Explorer' again to look for shelter.

Following an improvement in the weather on 13 Sept 'Explorer' proceeded through the Pentland Firth and continued the survey to the west and north of Orkney and Shetland. Coverage of the first survey was completed on 18 Sept. 'Explorer' began the second coverage of the survey area to the west of the Orkney Islands before going to Kirkwall for the half landing.

After the half landing no further work was possible until 0945 on 22 Sept because of severe weather conditions. When the weather moderated 'Explorer' headed for the area north of Orkney to continue the survey begun before the half landing. This second coverage of the survey area was completed by 2200 on 27 Sept despite work being interrupted on two occasions by severe weather.

On 28 Sept further work in the programmed survey area was impossible because of severe SE gales and 'Explorer' sampled a few stations in the southern Moray Firth before returning to Aberdeen on 29 Sept as continuing bad weather made further work impossible.

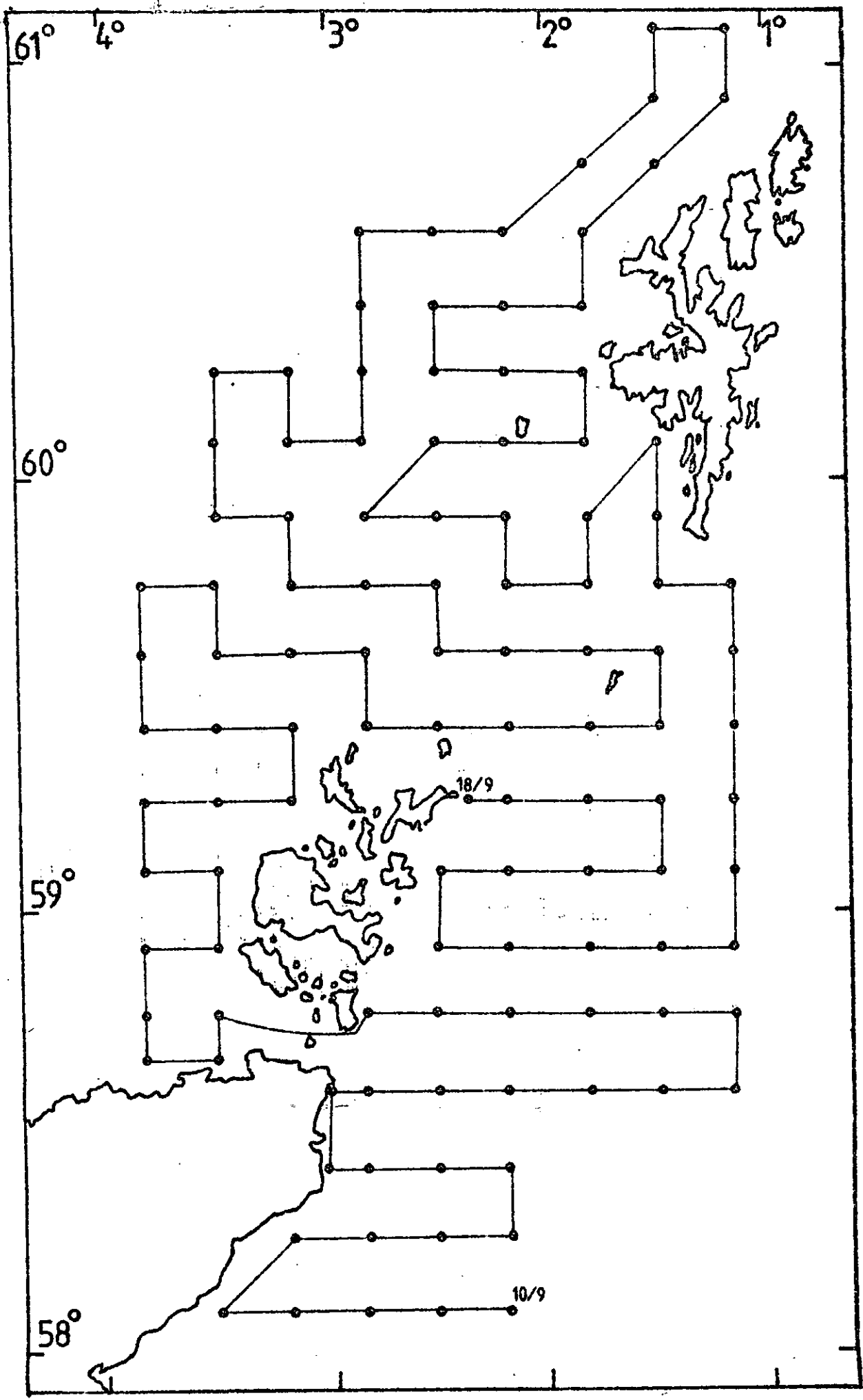
Results

Despite the interruptions for severe weather 'Explorer' completed two coverages of the survey area taking a total of 217 samples. No detailed analysis was carried out on board but visual inspection at the time of sampling indicated that although larger larvae were widely distributed small larvae (<10 mm) were rather scarce. On the first survey small larvae were found at stations on either side of the Pentland Firth and on the second survey one high density station was found off Clythness.

During the cruise depth monitoring of the Gulf III sampler was successfully carried out using a Simrad cableless netsonde system attached to the side of the sampler. The IOS monitoring system never functioned properly during tests and was passed over to the 'Scotia' on 19 Sept.

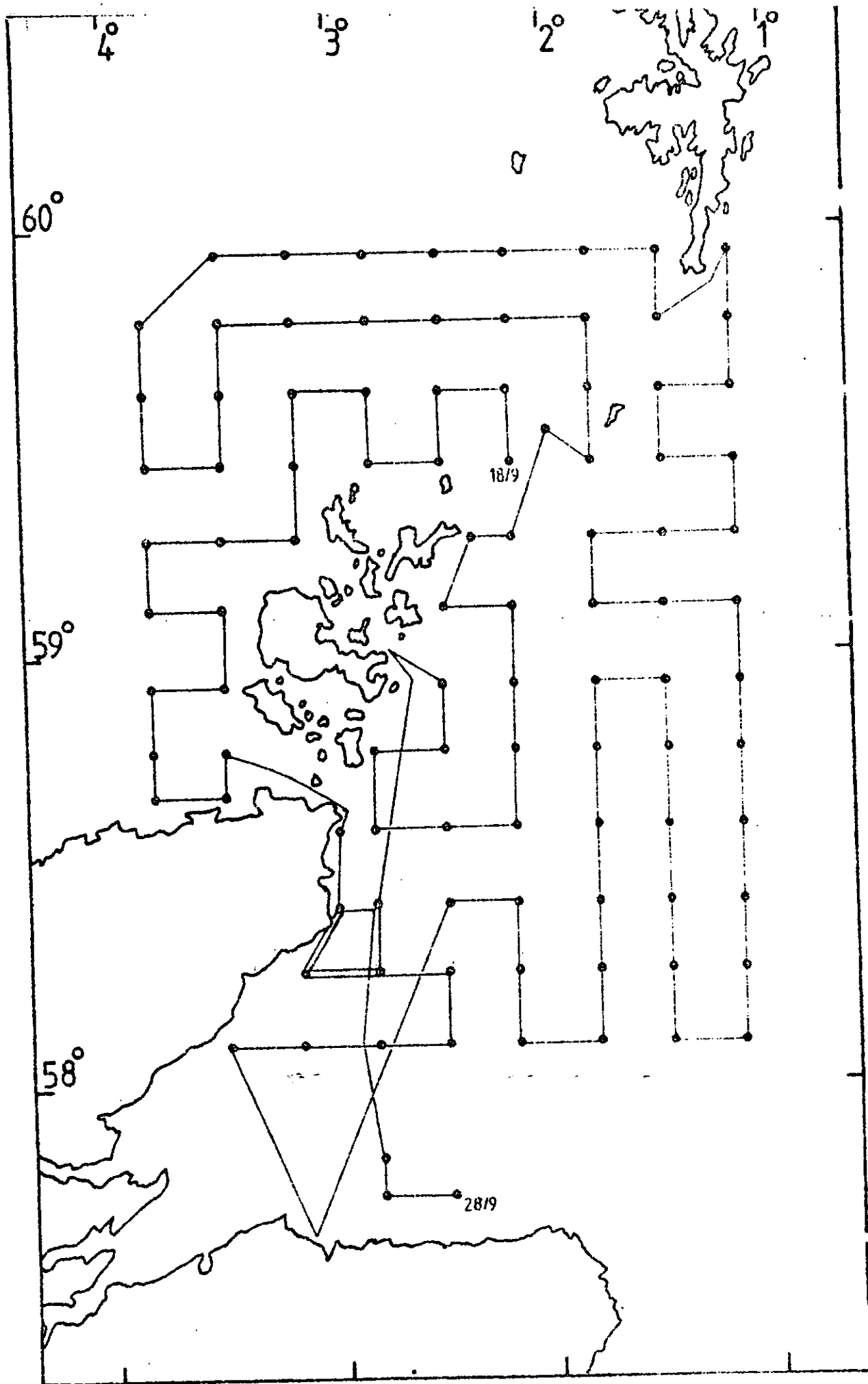
David W McKay
4 Oct 1982

Seen in draft T H Henderson CO



Explorer 10-18/9/82

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Explorer 18-28/9/82

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