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Charter Vessel RV Alkaid

Cruise 0063H

REPORT

11-21 September 1991

Personnel

PW Rankine HSO (in charge)

L Cargill

SO

J Turriff

ASO

R Payne

SSO (part-time)

Objectives

- 1. To participate in the ICES coordinated herring larval surveys in ICES Sub-Division VIa(N) (west of Scotland).
- 2. To count and identify all herring and other fish larvae collected in the plankton samples during the survey.
- 3. To collect surface sea water temperature and salinity data during the survey.

Narrative

After the transfer of scientific staff and installation of equipment from FRV Scotia on 11 September, the Alkaid left Ullapool at 0830 the following morning. Sampling commenced at station 54 later that morning after brief gear and echosounder trials in Loch Broom. Sampling continued as in Figure 1 until 2330 on 13 September when a force 8 SW gale forced Alkaid to take shelter in Loch Eriboll. The ship remained anchored until 1700 on 14 September but was forced to move out of the Loch due to the anchor dragging in the now 60 knot winds. The ship dodged overnight and sampling recommenced at station 18 at 1030 the next morning, in a very heavy swell. Sampling then continued as in Figure 1 until an increasing SW gale at station 94 forced Alkaid to anchor in Loch Harport, Skye, at 1707 on 16 September. The survey was resumed at 1233 the next day but the very heavy weather conditions forced the abandonment of sampling at 1530 and Alkaid anchored in Loch Scresort, Rhum, at 1830 that night.

Due to the worsening conditions no further sampling was attempted in this area and Alkaid weighed anchor at 1230 on 18 September and steamed northwards, in very heavy seas, arriving in Broad Bay, Lewis, at 0100 on 19 September. Flowmeter calibrations were then carried out at 0700 that morning before Alkaid made a passage to Invergordon, arriving at 0900 on 20 September. Mr Payne then joined the vessel and

mooring, current meter and buoy equipment were loaded on board. Current meter equipment were deployed successfully off Invergordon in the afternoon before *Alkaid* set sail for Aberdeen, arriving at 0800 on 21 September.

General

A total of 49 plankton hauls were made during the survey period. All samples were examined on board for the presence of herring and other fish larvae. The large concentrations of larvae found during the earlier *Scotia* cruise were re-encountered off the north coast of Scotland. In addition larvae were found in the Minch at greater densities than in previous years. Larval numbers per m² are given in Figure 2.

Surface sea water temperature and salinity were monitored continually during the cruise.

Paul Rankine 29 October 1991





