

In confidence - Not to be quoted without reference to the Laboratory

CRUISE REPORT
FRV "CLUPEA"
5 SEPTEMBER - 6 OCTOBER 1977

Objective

To carry out herring larval surveys off the north and east coasts of Scotland.

Narrative

"Clupea" left Aberdeen at 1400 on 5 September and proceeded to the Moray Firth to begin the survey. Stations in the Moray Firth and east of Orkney were sampled before the ship had to anchor off S. Ronaldsay for bad weather at 1930 on 6 September. The weather having improved the "Clupea" recommenced the survey the next day. As an intermittent fault had developed in the warp metering system, the plankton warp was run out and marked every 25 m. Sampling continued up the east coast of Orkney but at 0400 on 8 September heavy westerly swell again caused the ship to stop work and seek shelter. At 0730 on 9 September the ship headed for station 67 north of N. Ronaldsay but the swell was still too heavy for working so the ship again sought shelter. Whilst sheltering in the lee of N. Ronaldsay the swell was much less and it was decided to carry out a short trawl haul for fish for the galley. The catch consisted almost entirely of ripe and running herring and half the catch of 4 baskets was measured with a third basket being deep frozen to return to the laboratory. With no sign of improving sea conditions "Clupea" docked in Kirkwall at 16.40 on 9 September.

"Clupea" sailed from Kirkwall at 1230 on Monday 12 September and worked stations northwards to Foula. At 1330 on 13 September deteriorating weather conditions caused "Clupea" to seek shelter. At 1800 on 14 September the ship left Gruting Voe and headed for Orkney with the intention of working stations to the north and west of Orkney if the weather had moderated. At 2130 "Clupea" reached Dennis Ness but the weather had not moderated sufficiently to allow any sampling to be carried out so it was decided to head for the Outer Moray Firth. The survey was recommenced at 0200 on 15 September and sampling continued until 1530 when deteriorating weather curtailed operations. "Clupea" docked in Buckie for the weekend break at 0130 on 16 September.

Scientific staff joined "Clupea" at 1030 on 19 September and the ship sailed at 1420. Sampling continued throughout the week without interruption and having completed the survey of the Buchan area "Clupea" docked in Buckie at 0700 on 23 September.

Scientific staff joined "Clupea" at 0930 on 26 September. Repairs to a fault, which had developed in the ship's radar at the end of the previous week had not been completed because spare parts had not arrived. After consulting with the Marine Superintendent it was decided to sail with operations restricted to the Moray Firth, with the ship returning to Buckie on the 27 September to have the radar repairs carried out. "Clupea" docked in Buckie at 1000 on 27 September, but due to a further hold up in the arrival of the spares, repairs were not completed until 1400 on 28 September. Gale force westerly winds further postponed sailing until 1300 on 29 September. "Clupea" worked stations northwards before docking in Kirkwall for the weekend.

"Clupea" sailed from Kirkwall at 0010 on 3 October and commenced sampling off Start Point, continuing northwards and eastwards to Sumburgh Head. At 1830 deteriorating weather and poor forecasts caused "Clupea" to seek shelter off Westray. The ship weighed anchor at 0600 on 4 October and sampling was carried out west of Orkney. At 0300 on 5 October while the ship was working northwards to complete the survey around Foula, heavy swell necessitated a change of course if sampling was to continue. "Clupea" therefore worked east and south completing the remaining stations of the survey before returning to Aberdeen at 1400 on 6 October.

Results

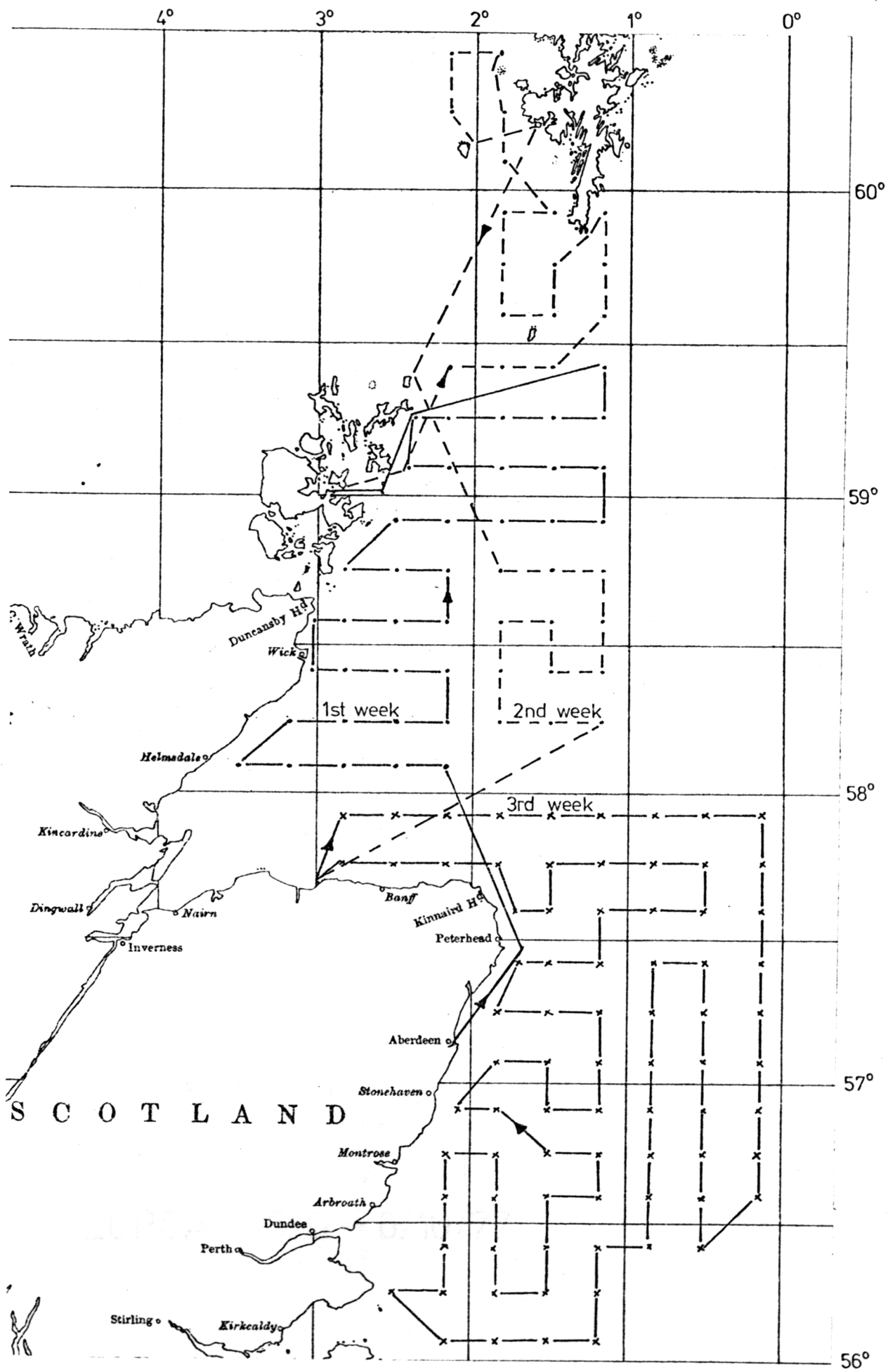
During the cruise 217 stations were worked and although no detailed analysis of the samples has yet been carried out, visual examination of the samples at collection indicated that on the first survey of the Orkney/Shetland area, larvae were most abundant around Fair Isle and northwards towards Foula. On the second survey of this area larvae were found over much of the survey area, but were generally in the larger length groups. In the one survey of the Buchan area larvae were generally very scarce and those that were found were at a few stations off Peterhead.

General

During much of the cruise the plankton metering system was subject to an intermittent fault which appeared to be caused by faulty connections in a junction box at the foot of the after gantry. Although several attempts were made to remedy this, it appeared to be impossible as the junction box was not waterproof, so that water penetrated during heavy weather.

D W McKay
24 October 1977

Seen in draft. - A Mair



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