

MR BATE

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD
FISHERIES LABORATORY, LOWESTOFT, SUFFOLK, ENGLAND

1975 RESEARCH VESSEL PROGRAMME

REPORT: RV CIROLANA: CRUISE 1B

(PROVISIONAL: Not to be quoted without prior reference to the author)

STAFF

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DURATION

Left Plymouth 1230 hours 16 January

Arrived Grimsby 1940 hours 27 January

All times are Greenwich Mean Time.

LOCALITY

Western English Channel (Aims 1 and 2)
Eastern English Channel (Aim 3)

AIMS

1. Acoustic survey of area Start Point - Wolf Rock
2. Trace identification by mid-water trawling
3. ICES larval herring survey.

NARRATIVE

After offloading gear and electronics staff at Plymouth on 12 January CIROLANA was weatherbound by a succession of severe southerly gales until 16 January when she sailed at 1230h to commence the main acoustic survey grid. This survey continued until 1900h 19 January when work was interrupted by a severe southerly gale which necessitated dodging until the following morning. At this stage most of the offshore grid had been completed and when the survey resumed on 20 January CIROLANA returned to the western half of Eddystone Bay to carry out a more intensive survey in this area. The Manacles region was acoustically surveyed and fished on 20 January, but a south-westerly gale then developed which caused an overnight anchorage in Falmouth Bay. On 21 January an area off Dodman Point was intensively surveyed and fishing carried out, but later in the day a further south-westerly gale developed and anchorage was made in Nevagissey Bay. CIROLANA remained here until the morning of 23 January, when severe westerly gales moderated. It was then decided to make passage to the east in order to commence the larval herring survey.

En route townet calibrations were carried out, but later on the 23 January a severe south-westerly gale developed and overnight shelter was sought in Torbay. Townet calibrations were completed during the morning of

24 January and CIROLANA arrived to commence the grid of townet stations in the Bay of the Seine early in the evening. This work continued until 1100h 25 January when, after completing 14 stations, it had to be temporarily abandoned in a severe southerly gale which later veered to storm force north-westerly. After the weather moderated work recommenced at 0800h 26 January and a further 16 stations were completed by 0200h 27 January when the survey was finally abandoned after another severe southerly gale developed. CIROLANA then made a return passage to Grimsby, arriving there on the evening of 27 January.

RESULTS

1. Most of the projected acoustic survey grid was successfully completed, and this covered an area between Start Point and Lands End, extending up to 40-50 miles from the coast. Nearly all the major fish shoal concentrations located were within the 12 mile limit, the most notable patches lying off Mounts Bay, Dodman Point (where a mackerel concentration some 5 miles in length by $1-1\frac{1}{2}$ miles in width was plotted), between Looe and Polperro, and to the east of the Eddystone (where both mackerel and large pilchard shoals were reported by trawlers working in the area).

Offshore mainly rather thinly scattered and smaller shoals were found, although a few denser and more extensive shoal patches (possibly horse mackerel) were located about 20-25 miles south westerly from Start Point.

The Simrad integrator was run on four separate recording channels with gains of 0, 10, 20 and 30 dB respectively and these levels satisfactorily encompassed the extremes of signal strength encountered.

2. Two hauls were made with the 1600 mesh Engel trawl, the second of which resulted in a catch estimated at about 1600 baskets of mackerel. Unfortunately the weight of fish was too great to be safely hauled aboard and the cod end and lower sleeve of the net had to be cut away completely in order to release the catch.

3. One tow was made with the underwater camera in the very dense and extensive mackerel shoal off Dodman Point, but this was not successful due to a mechanical failure causing the camera to jam after a few frames of film had been exposed. One Scripps Depressor was lost when shooting due to its wire strop parting.

4. Several samples of mackerel were measured and deep frozen for further examination at the laboratory, whilst a sample each of pilchard and sprat were measured.

5. A total of 30 high speed townet stations for the ICES larval herring survey were successfully completed. These covered the Bay of the Seine and eastern end of the English Channel, time and weather preventing completion of the grid.

6. The surface temperature thermograph was run continuously during the survey.

P O Johnson
5 February 1975

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DISTRIBUTION

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