MR BASE

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

1974 RESEARCH VESSEL PROGRAMME

REPORT: RV CIROLANA: CRUISE 9(c)

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

STAFF

P 0 Johnson

S J Lockwood

W G Parmell

W L Huggins

M W Easey

DURATION

Left Plymouth 1030h 3 December

Arrived Great Yarmouth 1130h 15 December

All times are Greenwich Mean Time

LOCALITY

Western English Channel

AIMS

- 1. To carry out an acoustic survey for pelagic fish shoals
- Midwater trawling for trace identification.

NARRATIVE

The acoustic survey was carried out using the Humber 30 kHz sounder in conjunction with a Simrad echo-integrator. The main survey grid, covering an area between Start Point (03°30'W) and the Wolf Rock (06°00'W) extending offshore for 40-50 miles (49°10'-49°30'N), was completed in fine weather between 3 - 7 December.

The next stage of the survey involved a closer spaced grid covering the Eddystone Bay region between Start Point and the Lizard, offshore to 50°N. Fishing operations were also carried out at this time.

Westerly gales developed later on 10 December and prevented work entirely the following day when they became severe. Work was still restricted on 12 December and the weather did not finally moderate until 13 December when the survey was completed. On the homeward run water samples were collected for FRL from stations along the English Channel.

RESULTS

- 1. Most of the major pelagic fish concentrations located were within the 12 mile fishing limit.
- 2. Offshore traces were generally thinly dispersed with no localised concentrations although in some areas layers of scattered shoals were in evidence extending over considerable distances, notably between about 10 miles east

to 30 miles south south east from the Lizard. No fish shoals at all were located at the western end of the grid between 5 40' and 6 00'W.

- 3. Major and extremely dense mackerel concentrations were evident about 2 miles off Manacles Point (where up to 100 feathering vessels were operating) and between about 4-5 miles E/ESE from Dodman Point (where mid-water trawling vessels were working).
- 4. A very extensive horse mackerel concentration was located centered about 7 miles off the coast from Salcombe Bay, this layer extending over a distance of some 15 miles parallel to the coast and being between 1-2 miles in width. A further, but smaller dense concentration of possibly horse mackerel was found about 20 miles off the coast in this area.
- 5. Several successful hauls were made with the 1600 mesh Engels trawl, although on two hauls extremely large catches of mackerel were made which proved difficult to handle due to the sheer weight of fish and in one case led to an accident.
- 6. The net drum winch worked quite well, although its offset position does tend to result in the net pulling to one side of the deck, which did prove troublesome at times. 200
- 7. The sea surface thermograph was run continuously over the survey grid, and on the return journey water samples were collected for FRL from stations along the English Channel.
- Continuous watch was maintained for foreign fishing activity, but the only vessels observed were two Bulgarian trawlers operating about 30 miles 8. south of the Eddystone, and a small Russian tug anchored in Nevagissey Bay. This information was passed on to D.C.I.

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P O Johnson 15 December 1974 T.H. Finn G.W. Argumont 15 December 1974

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