

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

1973 RESEARCH VESSEL PROGRAMME

REPORT: R V CORELLA: CRUISE 14

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

STAFF

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DURATION

Left Lowestoft 0917 h 27 September

Arrived Lowestoft 0610 h 9 October

All times are Greenwich Mean Time

LOCALITY

Central North Sea

AIMS

1. To carry out a tin tow net survey for herring larvae in the western half of the central North Sea, as part of the ICES survey of the abundance and distribution of autumn spawned herring larvae in the North Sea and adjacent waters.
2. To release seabed drifters at selected stations within the main areas of herring larvae distribution.
3. To compare the catches of herring larvae obtained with various types of tin tow nets.

NARRATIVE

CORELLA sailed from Lowestoft at 0917 h 27 September and set course northwards. "Free Flow" calibrations were carried out off the Norfolk coast during the afternoon and the ICES herring larval survey was commenced at 1534 h. The weather, which was good at first, rapidly deteriorated and after completing only 4 stations CORELLA was forced to seek shelter in the river Humber from a SW gale at 2115 h. Next day, 28 September, 8 further stations were worked in a strong-gale force SW-W wind before a further deterioration in the weather forced CORELLA to seek shelter off the Yorkshire coast near Hornsea at 2250 h. The following day, 29 September, it was only possible to work 3 stations in marginal conditions before storm force winds from NW-W once again forced CORELLA to seek shelter, this time in Bridlington Bay, where the anchorage was reached at 1915 h. Severe conditions persisted for some 36 hours and it was impossible to recommence the larval survey until 1235 h 1 October. A further 53 stations were then completed in good weather conditions before CORELLA called at Leith on 4 October. CORELLA docked in Leith at 0630 h and sailed again at 1730 h after Mr Wood had represented the laboratory at the 54th meeting of the Herring Industry Advisory Council in Edinburgh. The ICES larval survey grid was recommenced at 2216 h 4 October and the last station completed at 2315 h 6 October. Next day, 7 October, was devoted to T.T.N. comparative work off the Yorkshire coast, while on the

8 October 17 stations were resampled in the Dowsing area in order to cover the late hatching there of herring larvae. All cruise aims were completed by 1900 h 8 October and CORELLA returned to Lowestoft at 0610 h 9 October.

RESULTS

Aim 1. The IGLS survey worked by CORELLA effectively covered the whole area of distribution of herring larvae in the western part of the central North Sea between latitudes $53^{\circ}25'$ N and $57^{\circ}15'$ N. Herring larvae were found at most of the stations to the south of latitude $55^{\circ}15'$ N. but very few were located north of this latitude.

Aim 2. 250 seabed drifters were released at 5 selected stations within the main areas of herring larval distribution.

Aim 3. Comparative work was carried out within a patch of herring larvae off the Yorkshire coast using various combinations of high-speed plankton sampling gear. Catches of herring larvae were sizeable throughout the series of hauls which was made and the results, when available, should clarify a number of outstanding questions regarding the comparability of the catches of herring larvae obtained by various samplers in use, both at the present time and in the past.

MISCELLANEOUS

1. A Single Depth Plankton Indicator was towed at T.T.M. stations worked between 1800-0600 h for the Institute for Marine Environmental Research Edinburgh.
2. The echo sounder was run continuously over the survey grid for Dr Johnson.

R J Wood
16 October 1973

INITIALLED A J L

DISTRIBUTION

Basic List

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