

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

1976 RESEARCH VESSEL PROGRAMME

REPORT : RV CIROLANA : Cruise 2

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

STAFF

C T Macer  
B C Bedford  
T W Boon  
M W Easey  
J Dann  
M Slater (Fleetwood)  
G C Baxter ) (22-31 January)  
J W Read )

DURATION

Left Grimsby 0920 h 23 January  
Arrived Grimsby 0100 h 11 February  
All times are Greenwich Mean Time

LOCALITY

North Sea

AIMS

1. To participate in the ICES international young fish survey for I-group herring and gadoids
2. To sample post-larval herring using the Boothbay net.
3. To collect deep-frozen samples of young gadoids.
4. To sample temperature and salinity (surface and bottom) at each trawling position.
5. To service the JONSIS and TYNE current meter stations and to lay some new stations. (NE1, 2, 3 and 4).

NARRATIVE

Delayed for 24 h by bad weather, CIROLANA steamed for the JONSIS 1 current meter position off Flamborough Head. On arrival, conditions were still too bad for working and the ship made for shelter in Bridlington Bay, where she anchored at 1715 h 23 January. Weighing anchor at 0830 h 24 January the vessel again made for JONSIS 1 but was forced to dodge in the face of gale force northerly winds.

Dodging continued until 26 January, when conditions had moderated sufficiently to permit trawling but not buoy-laying, and 3 trawl hauls were made in the Whitby Rough/Bayman's Hole area. After an overnight steam in moderating weather, a grapnel search for the missing TYNE current meter rig was started at 0900 h 27 January. This proved unsuccessful, however, and a new rig was laid, this being completed at

1300 h, after which 100 sea bed drifters were released and a Nansen bottle cast made. The remainder of the day was taken up by laying two new current meter stations NE1 and NE2, and on completion at 2130 h, the ship steamed to the JONSIS 2 station.

This rig was intact and servicing was completed between 0830 h and 1120 h 28 January. Another attempt at JONSIS 1 was made next, arriving on station at 1430 h the same day. Attempts to trigger the pinger on the missing rig eventually proved successful but the onset of darkness precluded activation of the wire chopping device. Preparation of a new rig was started but shooting was frustrated by freshening winds, and the ship was forced to dodge into a southerly gale at 1900 h 28 January.

Dodging continued on 29 January and, after consulting with the Laboratory, it was decided to abandon further current meter work and to disembark Mr Baxter and Mr Read in the Humber. To this end the vessel anchored off Grimsby at 1130 h 30 January but the weather prevented their disembarkation until 1600 h 31 January.

Continuing south-easterly gales prevented sailing until 0900 h 1 February, when the ship steamed to the South-west Patch area, where trawling commenced at 1900 h that day. The following day (2 February), 5 trawl hauls and 2 Boothbay shots were made in the Upper Scruff/Elbow Spit area, while on 3 February 4 hauls were made near the Middle Rough. The Inner Shoal and Broad Weed areas were trawled on 4 February and 5 February was spent on the Little Fisher and Jubilee Bank grounds. Much gear damage was sustained on these latter two grounds before they were finally abandoned.

Arriving off Horns Reef on 6 February, the ship was obliged to dodge by a south-easterly gale but trawling was again possible on 7 February, when the Horns Reef and White Bank were worked. Rectangles off the Northumberland and Yorkshire coasts were fished on 8 and 9 February, and work was terminated on 10 February at 1645 h on completion of rectangles off the Norfolk coast.

## RESULTS

The work was seriously affected by the adverse weather conditions, which caused the loss of 8 working days.

1. A total of 37 one-hour hauls with the Dutch Herring trawl were made, of which 6 were invalidated by gear damage. Hauls were made in 17 of the 26 rectangles allocated to England; 7 of the allocated rectangles are considered to be unsuitable for the Dutch Herring trawl. Whiting was the most abundant of the juvenile fish sampled (maximum 5776 fish per hour off Whitby), followed by haddock (387 per hour in Broad Weed area), cod (47 per hour off Whitby) and herring (27 per hour on the White Bank). Samples of these species and of *T. esmarkii* were measured and otolithed; sprat and mackerel were measured only. Results were radioed to the Dutch research vessel TRIDENS every 2 days.

2. In view of the time lost, the Boothbay sampling for 0-group herring was given low priority and single hauls were made in 4 rectangles only. A few clupeoid post-larvae were taken.
3. Samples of cod, haddock and whiting less than 25 cm were deep frozen for Mr Parnell.
4. Nansen bottle casts were made at each trawl station and also at the TYNE current meter station.
5. The TYNE current meter rig was not recovered (except for the guard toroid) and a new rig was laid. The new stations NE1 and NE2 were laid and JONSIS 2 was recovered and relaid. JONSIS 1 was located to an approximate position but was not relaid. There was insufficient time to attempt to establish the new stations NE3 and NE4 off the Wash.

C T Macer  
17 February 1976

SEEN IN DRAFT

T H Finn  
G W Argumont

INITIALLED AJL

DISTRIBUTION

Basic List

C T Macer  
B C Bedford  
T W Boon  
M W Easey  
J Dann  
M Slater (Fleetwood)

G C Baxter  
J W Read

W G Parnell