

R.V. ERNEST HOLT

Report for Cruise 2/1969

Staff:

Duration:

G. C. Bolster

4-21 February 1969

T. J. Hume

B. M. Watson

J. Dann

J. T. Davy ) Fisheries Helminthology

F. L. Clarke ) Unit

Aims

1. North Sea: ICES Young herring survey
2. Larval survey using Boothbay Net
3. Collect live plaice for Dr. Purdom

Introduction:

The portion of the ICES young herring survey allotted to this cruise consisted of the area bounded by the twenty one squares, each 30 by 30 miles shown on the chart. It was necessary that the following procedures should be carried out in each square:-

1. a haul with the Dutch herring trawl of one hour duration
2. a haul with the Boothbay net of half an hour duration
3. surface and bottom temperature and salinity samples.

Narrative:

The staff having travelled to Grimsby on 4 February, the ship left the port that evening at 2110 hours and steamed overnight to the most southerly square where work commenced on the following morning. The trawl was torn beyond repair on the first station, square G.3. We worked northwards until 1800 hours on February 7, when the weather showed signs of worsening and this, together with a forecast for Dogger of N.W. 8-11 caused us to seek shelter in Bridlington Bay. We remained there until 9 February. Then, with a good forecast for German Bight for the following day we left and worked stations in squares G.6, H.7, J.7, K.7 and L.7.

On the morning of 12 February, while working the Dutch herring trawl in square M.7, a man was injured on deck. Medical attention was needed. The weather which had been workable at first rapidly became strong to gale, easterly, and, with some lee from the land we ran to Esjberg. A doctor came aboard with the pilot at 1730, and we berthed at 1830 hours. The injured man was left in hospital.

We left Esjberg at 1300 hours on 13 February. The forecast was good, and on February 14, 15, 16 & 17 all stations in the ten most northerly squares were completed. We steamed overnight from square H.8 to square E.6 which, together with F.6 and a haul for plaice off Flamborough for Dr. Purdom were worked on 18 February. Due to fouling of the net a repeat haul was necessary in square F.6. The weather worsened, but because of conflicting forecasts it was decided to lay and, as it transpired later, dodge, hoping that a repeat haul could be made on the following day 19 February. A severe gale, Force 10, Easterly, developed. We continued to dodge until 1415 hours on 20 February when with better prospects for Thames, S-SW 6-8 moderating to 5, and with live fish in the tanks, we proceeded towards Gt. Yarmouth. On 21 February a good haul with the Dutch herring trawl was made under favourable weather conditions in the area where previously at Station 1 the trawl had been damaged. The ship entered Gt. Yarmouth at 1300 hours and left for Grimsby on the next tide to dock there at 0900 hours on the following day.

### Results:

- Aim (1) Trawl hauls were made in 20 of the 21 squares. Weather prevented a repeat being carried out in square F.6.
- (Aim 2) Hauls with the Boothbay ney were made in 20 of the 21 squares, the exception being square M.7. Surface and bottom salinities and temperatures were done in all squares.
- (Aim 3) Live plaice were collected for Dr. Purdom.
- a. The numbers of herrings caught in each square on this cruise is shown on the chart Fig. 1.
  - b. In all 2309 young herrings were caught. All were measured for length and maturity, sex, V.S.,  $K_2$ , and otoliths taken from 672.
  - c. 1200 Sprats were caught and samples brought to the Laboratory for Dr. Johnson and Mr. Howlett.
  - d. All haddocks were measured and 192 sampled for sex and maturity and otoliths taken.
  - e. 81 cod were caught. All were measured, and sex, maturity and otoliths taken.
  - f. An echo-sounder record was made during the survey.
  - g. Daily contact was made when possible with R.V's SCOTIA and TRIDENS.
  - h. Meteorological observations were taken where appropriate and results sent to BRACKNELL.
  - i. Wave recorder readings were made each day.

G. C. Bolster  
21.2.69

A total of 658 herrings and 51 sprats were investigated for parasites with particular regard for the nematode Anisakis sp. A number of other fish including cod, haddock and a cat fish were also examined for helminth parasites.

John T. Davey  
21.2.69

Initialled: AJL

Seen in draft: E. A. Binnington, Master.  
G. W. Argumont, Fishing Skipper

21.2.69.

Distribution:

Basic list, plus the following:-

G. C. Bolster  
T. J. Hume  
B. M. Watson  
J. Dann  
J. T. Davey ) Fisheries Helminthology  
F. L. Clarke ) Unit  
Dr. Joran Hult, Goteborg 5, Sweden

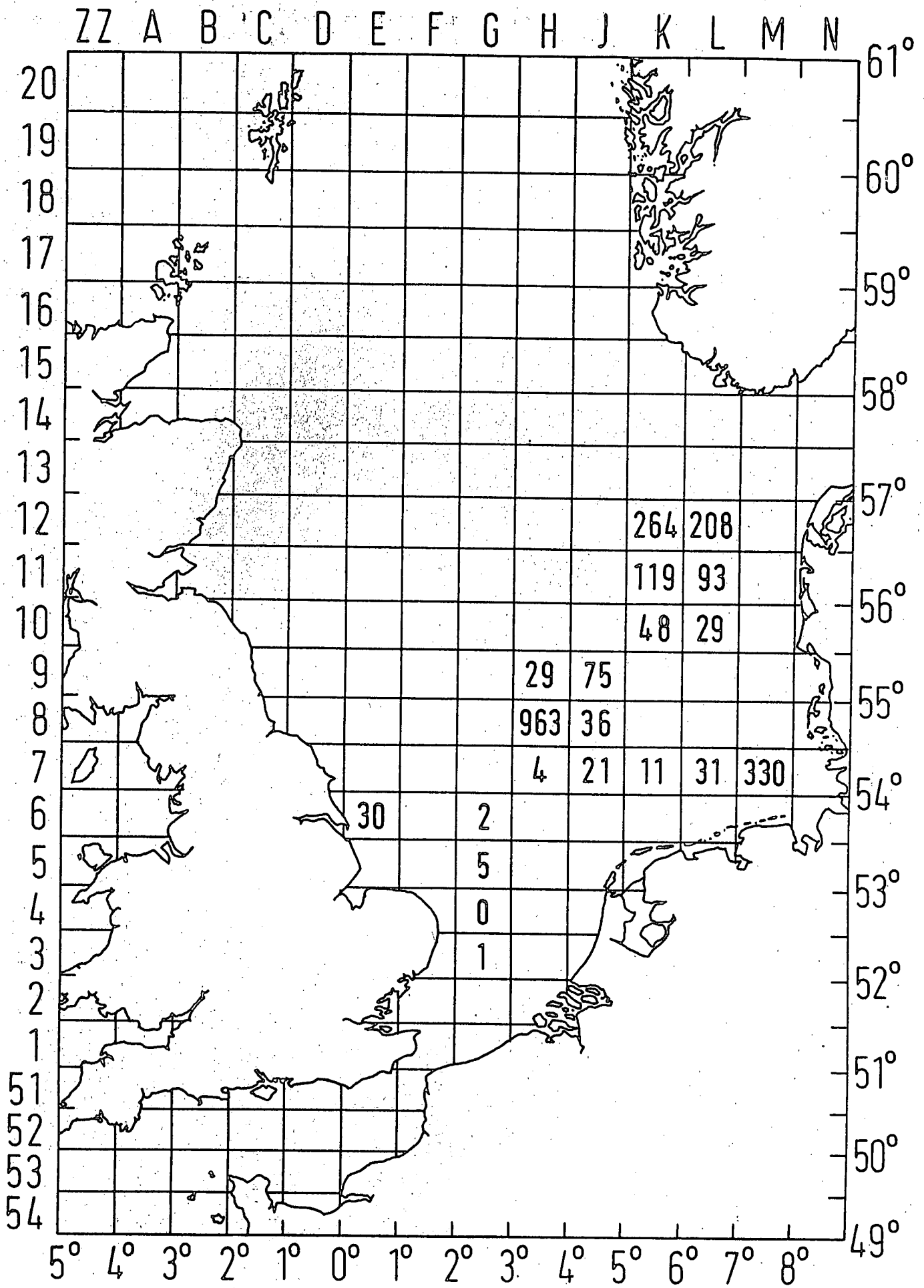


Fig. 1. Numbers of young herring taken in 1 hour tows with the Dutch herring trawl in the squares 30 x 30 miles. R.V. ERNEST HOLT Cruise 2/1969.