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R. V. CLIONE

Report on Cruise 12/1967

Staff: L. Birkett  
E. Teare  
J. Holloway

Duration: 13-23 November

Aims

1. To make a trawling survey of the North Sea, with particular reference to plaice populations.
2. To tag soles, especially of Flamborough.
3. To bring live fish to Lowestoft.

Narrative

The vessel left harbour at 1730/13th. Trawling stations along the S.E. edge of the Dogger and White Banks to Borkum and the P.3 Buoy were completed by mid-day, 16th, when it became necessary to seek shelter; the ship dropped anchor off Texel, but only overnight as the storm passed. The rest of the cruise was remarkable for its almost continuously calm anticyclonic weather conditions which in fact made the operations of shooting and hauling difficult at times. Stations were made at ST2 Buoy, Botney Gut and Outer Silver Pits, and a cycle of hauls at 4-hourly intervals over a 42-hour period at Flamborough Off Ground was carried out as an investigation of rhythms in plaice and sole catches.

At all the stations so far, the Granton trawl was used with 6 fm bridles, door-to-door chains and a 66 mm mesh in the codend: the length of each tow was two hours. When collecting baby haddock, however, the tickler was removed to lessen the amount of scruff.

Observations

Soles were tagged all round the North Sea and in all 480 tags (nos. EY 9501 - 9981?) were released; 180 of these were in the Flamborough Off Ground region, where soles were less plentiful.

Plaice otoliths were collected in 5 cm length classes (up to 10 per class). Each haul tended to have a very narrow range of lengths, and when two successive hauls had yielded a similar composition by length, the next positions were tried. The largest catches of plaice were on the Elbow (Dogger Bank) ground. The only real difference between populations that was detected was between the plaice at Outer Silver Pits (and Lemn Ground and East of Smiths Knoll) and the rest of the stations; the plaice were longer here, males by 5 cms and females by 12 cms, and seemed to be more nearly ready for spawning.

The 42-hour station revealed interesting cycles of abundance in the catches but the total numbers caught were probably not great enough. The males and females under 35 cm were most strongly affected, and seemed actually to increase in abundance as the station went through. Plaice of larger size also made a cycle but less definite due to smaller numbers. The soles, on the other hand, exhibited their well-known-rhythm - catches rising sharply over dusk, remaining high through dark, and falling equally sharply at dawn, to zero at times.

Throughout the cruise, various samples of the waste parts of the catch - small whitefish, Eupagurus, Portunus - were placed in the deep freeze for eventual trials as fish-food in the experimental block at Lowestoft. If

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successful, a small amount of effort by future N.I.C.'s could see the laboratory supplied with all the food needed to keep the increasing live-stocks alive.

A remarkable amount of insoluble rubbish - bottles, PVC aprons and gloves, etc. - has accumulated in many parts of the North Sea since I last trawled there.

L. Birkett  
28th November, 1967

Seen in draft: T. A. S.

A. J. L.

Distribution:

Dr. Cole  
Mr. Lee  
Capt. Aldiss  
Dr. Cushing  
Mr. Bolster  
Mr. Burd  
Mr. Hill  
Mr. Cattley  
Mr. Garrod  
Dr. H. Jones  
Mr. Iles  
Dr. Jamieson  
Mr. Margetts  
Mr. Trout  
Mr. Holden  
Dr. Purdom  
Mr. Bridger  
Mr. Mitson  
Mr. Tungate  
Mr. Williams  
Mr. Wood  
Mr. Adams  
Mr. Mills  
Mr. Kay  
General Lab.  
Lab. Registry  
Library (2)  
Mr. Whiting  
Dr. Johnson  
Mr. Simpson  
Dr. Reynolds  
Chief Inspector  
All District Inspectors  
Fisheries Registry  
Capt. Sutton  
CLIONE file  
Mr. Sutcliffe  
Skipper Button  
Mr. Wollaston  
Mr. Baird, DAFS  
Director, Dublin  
Mr. Glover  
Hydrographic Dept.  
Dr. Lucas  
Director, NIO  
Dr. Peachey  
Mr. Shelbourne  
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Director, Charlottenlund  
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Mr. Birkett  
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