

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

1975 RESEARCH VESSEL PROGRAMME

REPORT: RV CLIONE: CRUISE 10A

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

STAFF:

M J Holden

T J Hulme

C L Whiting

M White

DURATION

Left Lowestoft 1730h 20 June

Arrived Lowestoft 1015h 29 June

All times are Greenwich Mean Time

LOCALITY

Northern North Sea

AIM

To participate in an international 0-group gadoid comparative fishing experiment.

NARRATIVE

A few hours after sailing the ship had to return to anchor in Corton Roads to rectify engine overheating. Repairs were effected overnight and the ship then proceeded northward to  $60^{\circ}15'N$   $00^{\circ}32'E$  where she arrived at 0500h/23. Unfortunately EXPLORER had been delayed by engine trouble and had not been able to survey the area previously to determine whether 0-group gadoids were sufficiently plentiful to make this the best area in which to work. However, 0-group haddock and Norway pout were found to be abundant and the 23 and 24 June were spent fishing in company with DANA, JOHAN HJORT and TRIDENS to compare efficiencies at catching 0-group gadoids. On 24 June CORELLA, which had been delayed by engine trouble, joined the experiment. DANA, TRIDENS and CORELLA were working the standard 0-group gadoid pelagic trawl, JOHAN HJORT a large pelagic trawl and CLIONE a Boothbay net. Over the 2 day period each vessel made as many standardised 1-hour hauls as possible in 4h periods spent in one of six 3-mile square boxes which were fished in a random sequence by all 5 ships. In addition CLIONE made a series of V-hauls to compare the catches by the method of working the Boothbay net with those made by a standard haul.

On 25 June an experiment to determine the stratification of 0-group gadoids started. By this time EXPLORER had arrived; she was working an 0-group gadoid pelagic trawl. For this experiment the water column was divided into 5 depth strata each of which was fished once on a random basis

by one of the 3 vessels working a pelagic trawl in each 4h period. Each 30 min tow in the depth stratum was immediately followed by a shoot and haul to the depth stratum to determine this component of the catch. During this experiment CLIONE fished a bottom trawl using a herring codend to hold back large fish and benthos from the 'Frimar' cover. She started fishing at 0500h/25 and the other vessels at 0800h and the experiment continued until 1200h/26 by which time increasing winds had stopped all vessels fishing. As no immediate improvement was forecast the experiment was cancelled at 1700h/26 and CLIONE steamed south to undertake an O-group survey off the north-east coast. CORELLIA and EXPLORER remained on station to compare their catching efficiencies the following day, if that proved possible.

Fishing started again at 55°30'N 01°33' and a grid was worked from this position down to the coast to Flamborough Head working 3-8 miles off. This survey was completed at 2107h/28 when the ship sailed for Lowestoft.

#### RESULTS

The experiment to compare the efficiencies at catching O-group gadoids was completed but that to determine the stratification of O-group gadoids was disrupted by bad weather. Haddock were abundant and apparently evenly distributed. Norway pout, which were very abundant, had a patchy distribution. Cod and whiting were scarce. Off the north-east coast, a patch of O-group whiting, with a few cod, was found between 54°31'N and 00°29'W and 54°06'N 00°08'E with the maximum catches being taken at 54°18'N 00°11'W.

M J Holden  
9 July 1975

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#### DISTRIBUTION

##### Basic list

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