

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

1977 RESEARCH VESSEL PROGRAMME

REPORT: RV CLIONE: CRUISE 12  
(PROVISIONAL: Not to be quoted without prior reference to the author)

STAFF

W G Parnell  
T Williams  
D J Symonds  
S R Flatman  
C Goody  
Dr M Windsor

DURATION

Left Lowestoft 1430 h 20 September  
Arrived Lowestoft 1230 h 2 October

LOCALITY

English North-east coast and Central North Sea.

AIMS

1. To determine the distribution of pre-recruit gadoids along the English east coast and in the central North Sea.
2. To tag pre-recruit gadoids.
3. To collect and deep freeze cod for radio-biological examination.
4. To collect live plaice for Mr Scholes.

NARRATIVE

CLIONE left Lowestoft at 1430 h 20 September and on arrival at the Coal Pit at 2040 h that evening, the Lowestoft Frame Trawl was shot twice to test a depth telemeter and twice for flowmeter calibration.

A fishing survey which consisted of two 30 minute tows with the Boris Prawn trawl and one tow with the Lowestoft Frame trawl in each ICES rectangle was started north of the Sole Pit at 0600 h the next day. During the next  $3\frac{1}{2}$  days, those rectangles close to the English north-east coast were worked though on several occasions considerable gear damage was suffered. South-easterly gale force winds then brought work to a halt from 1712 h 24 September till 1630 h 25 September. At this point because of loss of time due to gear damage and poor weather the number of tows with the Boris Prawn trawl in each rectangle was cut from two to one for the remainder of the survey. Two further days fishing were possible before a southerly gale stopped work again on 28 September till 1730 h. Another full day's work was attained on 29 September in marginal conditions but severe gale force westerly winds forced CLIONE to dodge for the next 2 days. With a bad forecast and sea conditions ruling out any prospect of any more fishing during the remaining time allotted to the cruise CLIONE returned to Lowestoft docking at 1230 h 2 October.

## RESULTS

1. The proposed area of survey had to be cut because of the loss of 5 days due to gale force winds and the gear damage sustained at the beginning of the trip. 28 tows were made with the Boris Prawn trawl in 20 ICES rectangles to the west of 3°E and between 53°30N and 56°00N. In each rectangle all species caught were weighed, commercial species measured and samples of gadoids otolithed. No 0-group cod were found north of 55°00N and east of 1°E, the maximum catch of 67 per 30 minute tow (Standard tow) being taken off Scarborough. 1-group cod were more widespread with the peak catch of 228 per standard tow being taken north of the Sole Pit.

The highest catch of 0-group whiting was made off Blyth (489 per standard tow). Again most were taken west of 1°E but their distribution extended as far as 55°30N. 1-group whiting were very abundant over the whole survey area, maximum catches of 6400 per standard tow being made off Eyemouth and off Flamborough. Relatively few 0-group haddock were caught, the highest catch of 109 per standard tow being taken in Baymans Hole. Some gadoids were taken in the 19 Lowestoft Frame trawl tows. Catches were preserved for later identification.

2. No pre-recruit gadoids were tagged due to lack of time.
3. 17 cod were deep-frozen for radio-biological examination.
4. Only 2 live plaice were collected for Mr Scholes, again as a result of the bad weather at the end of the trip.
5. Two samples of herring were deep frozen for Mr R J Wood.
6. Bags of sandeels were deep-frozen for Mr Htun Han.

W G Parnell  
4 October 1977

SEEN IN DRAFT: J R French - Master  
G F Lee - Fishing Skipper

INITIALLED: AJL

### DISTRIBUTION:

Basic List  
W G Parnell  
T Williams  
D J Symonds  
S R Flatman  
C Goody  
Dr M Windsor