

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

1976 RESEARCH VESSEL PROGRAMME

REPORT: R V CLIONE: CRUISE 3

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

STAFF: T J Hulme  
W G Parnell  
B C Mumford  
C L Whiting  
M White  
D Wright (Fleetwood)

DURATION: Left Lowestoft 1000 h 18 February  
Arrived Lowestoft 4 March  
All times are Greenwich Mean Time

LOCALITY: English Channel

AIMS:

- 1 To carry out a depth-stratified trawl survey for demersal species between  $51^{\circ}00'N$  and  $02^{\circ}00'W$  (ICES Division VIId).
- 2 To tag demersal fish in two areas:
  - a. between  $51^{\circ}00'N$  and  $02^{\circ}00'W$
  - b. between  $02^{\circ}00'W$  and  $05^{\circ}00'W$  north of  $49^{\circ}45'N$ .
- 3 To collect live soles for Mr Kerr (WFA).

NARRATIVE:

CLIONE sailed from Lowestoft at 1000 h 18 February and steamed to the Straits of Dover. Trawling began the next day near the Bullock Bank and was carried out in the eastern end of the Channel and along the English coast as far Poole Bay during the period 19-23 February.

After two hauls in mid-Channel on 23 February, trawling was commenced along the French coast in the Bay of the Seine, and was continued eastwards to Boulogne until 27 February, when CLIONE called into Boulogne for water.

Upon leaving Boulogne on 28 February CLIONE steamed across the Channel and carried out an unsuccessful search for suitable trawling ground in the Rye Bay area before steaming in thick fog to Start Bay. Trawling was carried out in the vicinity of Start Point on 29 February; CLIONE then steamed up the Channel during 1 and 2 March, stopping to fish in selected areas en route. Because of the very poor catches found offshore, CLIONE steamed to a ground just off Newhaven and fished there on 2 and 3 March. At 1820 h 3 March, CLIONE left the Newhaven grounds and steamed for Lowestoft, docking there at 1115 h, 4 March.

RESULTS

1 The trawl survey in area a. was completed. A total of 34 hauls were made in four different depth strata. After each haul, all the soles, plaice, lemon soles and rays were put into tanks for tagging. The catch was sorted and the most important commercial species were weighed and measured. Otolith samples were taken from soles, plaice, cod and whiting.

The catches everywhere were small. Taking the survey area as a whole, whiting were found to be the most abundant of the commercial species per standard haul, followed by plaice, sole, assorted rays, lesser and greater spotted dogfish and lemon soles respectively.

In terms of total numbers caught per depth stratum, sole were found mostly in the 0-20 m depth stratum, whereas plaice were most abundant in the 40-60 m stratum. Whiting, rays, dogfish and lemon soles were found mostly in the 20-40 m stratum. No dogfish or lemon soles were caught in the 0-20 m stratum.

Only whiting and plaice were caught in sufficient numbers to make any assessment of the differences in the length composition between different depth strata. Whiting showed an increase in length with depth, whereas plaice showed an increase in length with depth.

2a. Tagging in area a. was split into two parts. Some 317 fish were tagged from the 34 hauls of the trawl survey. Two offshore hauls produce only 9 fish, whereas from the 12 hauls made just off Newhaven some 495 fish were tagged, 412 of which were plaice. From the 48 hauls made in area a. a total of 812 fish were tagged as follows: 89 soles, 563 plaice, 22 lemon soles, 138 assorted rays.

As part of an experiment, 79 assorted rays were tagged and held in the tanks for 72 hours before being released.

2b. A total of 160 fish were tagged from 11 hauls as follows:

Plaice (49), lemon sole (46), assorted rays (44) and soles (21). As in area a the rays were tagged and held in tanks for 72 hours before being released.

3 32 live soles were collected for Mr Kerr (WFA).

I would like to record my appreciation of the help, cooperation and advice accorded to us by the Newhaven fishermen, in particular Mr W Hill, skipper of MFV ROSEHEARTY. Also to Mr K Knox (WFA), Hull, for supplying us with his very comprehensive list of fasteners and obstructions in the English Channel.

T S Hulme  
Naturalist in Charge  
9 March 1976

SEEN IN DRAFT: J R F (Master)  
G F L (Fishing Skipper)

INITIALLED: A J L

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