

dk

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

1984 RESEARCH VESSEL PROGRAMME

REPORT: RV CLIONE : CUISE 8

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

STAFF:

- P D Wallace
- C N Humphreys
- M J Boon
- D R Eaton
- S Flatman
- J M Elson

DURATION:

Left Lowestoft 1330 h 5 July 1984

Arrived Lowestoft 0630 h 25 July 1984

LOCALITY:

Celtic Sea, Bristol Channel, Western English Channel (ICES Divisions VIIe-h).

AIMS:

1. To carry out a groundfish survey in the Bristol Channel and Celtic Deeps area.
2. To carry out a survey for young pelagic fish.
3. To carry out further trawling to obtain information on the distribution and biology of young fish especially sole, monkfish, megrim and lemon sole.
4. To obtain biological samples from a number of species to supplement market sampling information.
5. To investigate the feasibility of catching small sole as a possible means of estimating recruitment to the sole stock in VIIe.

NARRATIVE:

CLIONE left Lowestoft at 1330 h and made a good passage to the specified position in Start Bay where the Plessey rig was successfully laid. The ship then steamed to the Bristol Channel and carried out the 8 standard trawling stations before proceeding to the Celtic Deeps area where a further two stations were completed on 9 July. Throughout the survey bottom trawling took place during the day and at night surface tows with the Neuston net were carried out. Strong south west winds prevented any work on 10 July but moderated by the next day and although the swell was too great to use the Neuston net a further two trawl stations were completed before the ship moved to a position just off the SE Irish coast.

From 12 to 14 July bottom trawling was carried out along the south Irish coast then from 15 July to 17 July a trawling and neuston net survey was carried out on the Labadie, Great Sole, Melville and Parson's Banks. On 17 July at 1800 h course was set for Concarneau and CLIONE docked there at 0900 h 18 July. After obtaining fresh water and stores and having a break ashore CLIONE left at 0900 h 19 July and moved to the Scillies to start a grid of trawling stations - completing them by 1800 h on 20 July. Some feathering for mackerel took place during the evening. On 21 July further mackerel feathering was carried out south of Cornwall and a series of tows worked mainly to catch live Angler fish. The ship then steamed to a position south of the Manacles and further feathering for mackerel took place.

Throughout the night of 21 July CLIONE steamed to Teignmouth Bay and several successful tows were made with the 2 metre beam trawl. Further feathering for mackerel took place in the evening then the ship proceeded to Rye Bay arriving there 1430 h on 23 July. Seven tows were carried out in the Bay for live fish. Fishing finally stopped at 0930 h 24 July. CLIONE then steamed to Lowestoft arriving there at 0630 h 25 July.

RESULTS:

1. 14 valid trawl hauls were made in the Celtic Deeps and Bristol Channel area. The trawl used was a standard Granton trawl fished without bridles. The groundrope had 12" rubber bobbins in the bosom and the cod end had a small mesh liner. Bobbins were used on trawling stations in the Bristol Channel area but in the Celtic Deeps and other areas the trawl was successfully used with the rubber groundrope. All fish species were identified, counted, weighed and measured and the data were recorded on catch and length record forms which together with the station record forms are the input documents for the new Groundfish survey suite. Unfortunately a problem with the loading process meant that the new suite could not be used. After consultation with the laboratory it was decided to postpone data input until the vessel returned to Lowestoft.

A total of 296 fish stomachs were examined for contents which were identified, quantified and the digestion stage recorded.

Aim 2

A total of 32 stations were worked with the Neuston net over a wide area mainly at night. Each tow was of 30 minutes duration and all fish were picked out and preserved for identification. 0 group mackerel were found to be very sparse over the area surveyed. Rockling were fairly abundant and Garfish, Lump sucker, Scad and Scaldfish were present in some of the samples. A persistent heavy swell during the first half of the cruise prevented some of the stations from being worked.

Aim 3

33 valid tows were made over a wide area of the Celtic Sea (see chart). Trawling stations were carried out mainly over the Hurd, Great Sole, Labadie, Melville and Parsons banks. Catch rates were low and a large proportion of the catch by weight and numbers was made up of species such as horse mackerel, blue whiting, Norway pout and poor cod. Catches over the Hurd Bank were particularly small. Relatively large numbers of small megrim were found on the west side of the Great Sole Bank. Hake were present in many of the catches

4. A total of 978 pairs of otoliths were taken from the main species (for details see otolith summary sheet). Special emphasis was given during this cruise to the biological sampling of hake, megrim, scad, mackerel and Angler fish. 46 *Lophius piscatorius* and 10 *Lophius budegassa* were frozen for more detailed examination in the laboratory.

5. It was decided to investigate the feasibility of catching small sole with a 2 m, beam trawl from CLIONE and Teignmouth Bay was selected as a suitable location. Several tows of 30 minutes were made on muddy grounds. The trawl was towed at between 2 and 3 knots and handled extremely well. Sole were not present in the area but large numbers of solenettes were caught.

6. Live plaice and soles were caught in Rye Bay and brought back for Mr Scholes.

7. Samples of scad were obtained from several areas for Mr Eaton. Mackerel ovaries were taken from fish caught in VIIe for Mr Mariduena, and a length stratified sample of mackerel from VIIe for Mrs Dawson.

A number of spiral valves were taken from blue sharks and preserved for Dr Rachel Smith's (National Museum of Wales) studies on Fish parasites.

A selection of fish was frozen for the fish identification course at Lowestoft.

A sample of plaice was obtained for Andrew Franklin (Burnham). Several fish species were obtained for Dr Lockwood's WI course.

Coalfish, pollack and Forkbeard were preserved for UEA.

Peter Wallace
27 July 1984

SEEN IN DRAFT:

G S
P M

INITIALLED:

D J G

DISTRIBUTION:

Basic List +

P D Wallace
C N Humphreys
M J Boon
D R Eaton
S Flatman
J M Elson

Foreign Office (copies for France and Ireland)

CLIONE 8/84 OTOLITH SUMMARY SHEET

	ICES area					Total
	7e	7f	7g	7h	7j	
Blue whiting	22					22
Whiting	29	20	33	20	1	103
Pollack		4	1		1	6
Cod		1	32		2	35
Hake	44	20	73	48	43	228
Ling	1		11	7		19
Megrim ♂	7		7	39	29	82)
Megrim ♀	67	3	68	87	54	279) 361
4-spot meg. ♂					8	8)
" ♀					4	4) 12
Plaice ♂		11	3			14)
" ♀	2	16	6	2		26) 40
Lemon sole	36	16	36	6	3	97
Witch			1			1
Sole	2	22	1			25
Spurdog (spines) ♂			9			9)
" ♀		5	15			20) 29
Total	210	118	296	209	145	978

