

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

1977 RESEARCH VESSEL PROGRAMME

REPORT: RV CLIONE: CRUISE 6

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

STAFF

J. D. Riley (NIC)
T. Williams
C. N. Humphreys
A. Watson
J. Curtis (Newlyn)
R. B. Cross

DURATION

Departed Lowestoft 0900h 3 May
Arrived Lowestoft 0900h 18 May

LOCALITY

Central North Sea

AIMS

1. To study the distribution of young gadoids in the region of the English NE Coast, the Dogger Bank and the Danish coast using the Lowestoft frame trawl and Boris Prawn trawl.
2. To test the efficiency of fish traps and to evaluate their use as a survey gear.
3. To survey the distribution of young gadoids close to the NE Coast in collaboration with TELLINA (Cruise 5, Mr Parnell).
4. To compare the efficiency of the Boris Prawn trawl with the Boris Box trawl as used by the TELLINA.
5. To collect large plaice for use in acoustic tagging experiments.
6. To collect various crabs for UEA.
7. To collect frozen pelagic 0-group gadoids for Mr A Child.
8. To collect living copepods for Mrs B Thompson.
9. To tag I-group and I+group gadoids.

NARRATIVE

After leaving Lowestoft on 3 May, a survey of the distribution of gadoids based on the ICES rectangles was started off the Norfolk coast and continued northwards to the Scottish border and then eastwards along approximately 56°N towards the Danish coast. After entering Esbjerg for 13 hrs, between 1400h 10 May and 0500h 11 May to take fresh water, the survey was resumed progressing westwards along approximately 55°N. In the NW Rough area of the Dogger Bank the fish traps were used and two days spent tagging I-group and I+group cod. On 15-16 May comparative fishing was

carried out with TELLINA in an area 8 miles off Hartlepool when further tagging of cod was also done. During the passage home some of the survey stations were repeated and off the Yorkshire coast copepods were collected with a tow net. CLIONE docked at 0900h 18 May.

RESULTS

1. Concentrations of I-group cod were found in an area centred 8 miles off Hartlepool, on the NW Rough and off the Danish coast. I-group whiting were more widespread and locally very abundant. I-group haddock were very scarce. O-Group gadoids were scarce off the English coast but were found off the Danish coast in an area 5° to $7^{\circ}30'E$ and $54^{\circ}30'$ to $57^{\circ}N$. A proportion of these were cod.
2. The fish traps were shot twice using two kinds of bait in a 2mile square which was simultaneously trawled. No I-group gadoids were caught although about 30% of the traps contained fish; these were chiefly large whiting and it is possible that the smaller fish escaped from the traps in this area of very clear water. Fresh mackerel was the most successful bait. A consequence of the highly selective performance of the traps was that there was no similarity between the catches in the traps and the trawl.
3. The surveys along the NE Coast identified the major concentration of gadoids and these results were made available to Mr Parnell NIC TELLINA with the intention that the areas inshore would be surveyed in more detail by TELLINA.
4. Six simultaneous tows were completed with CLIONE using the Boris Prawn trawl and TELLINA using the Boris Box trawl. Provisional results indicate that a satisfactory comparison of the two gear will have been made.
5. 20 plaice suitable for acoustic tagging were brought back in deck tanks to the Laboratory.
6. A selection of various demersal and swimming crabs were collected and brought back alive for UEA.
7. Samples of late pelagic young gadoids were collected off the Danish coast using the Lowestoft frame trawl, deep frozen and returned to the Laboratory for genetic studies for A Child.
8. Although some copepods were collected live for Mrs Thompson the area off Flamborough Head which usually has large concentrations, was found to be comparatively poor on this occasion.
9. 290 prerecruit cod and 37 larger cod were tagged in the NW Rough, 579 prerecruits and 330 larger fish were tagged off Hartlepool.

John D Riley
26 May 1977

SEEN IN DRAFT: Captain J R French - Master
R C Newrick - Fishing Skipper

INITIALLED: AJL

DISTRIBUTION:

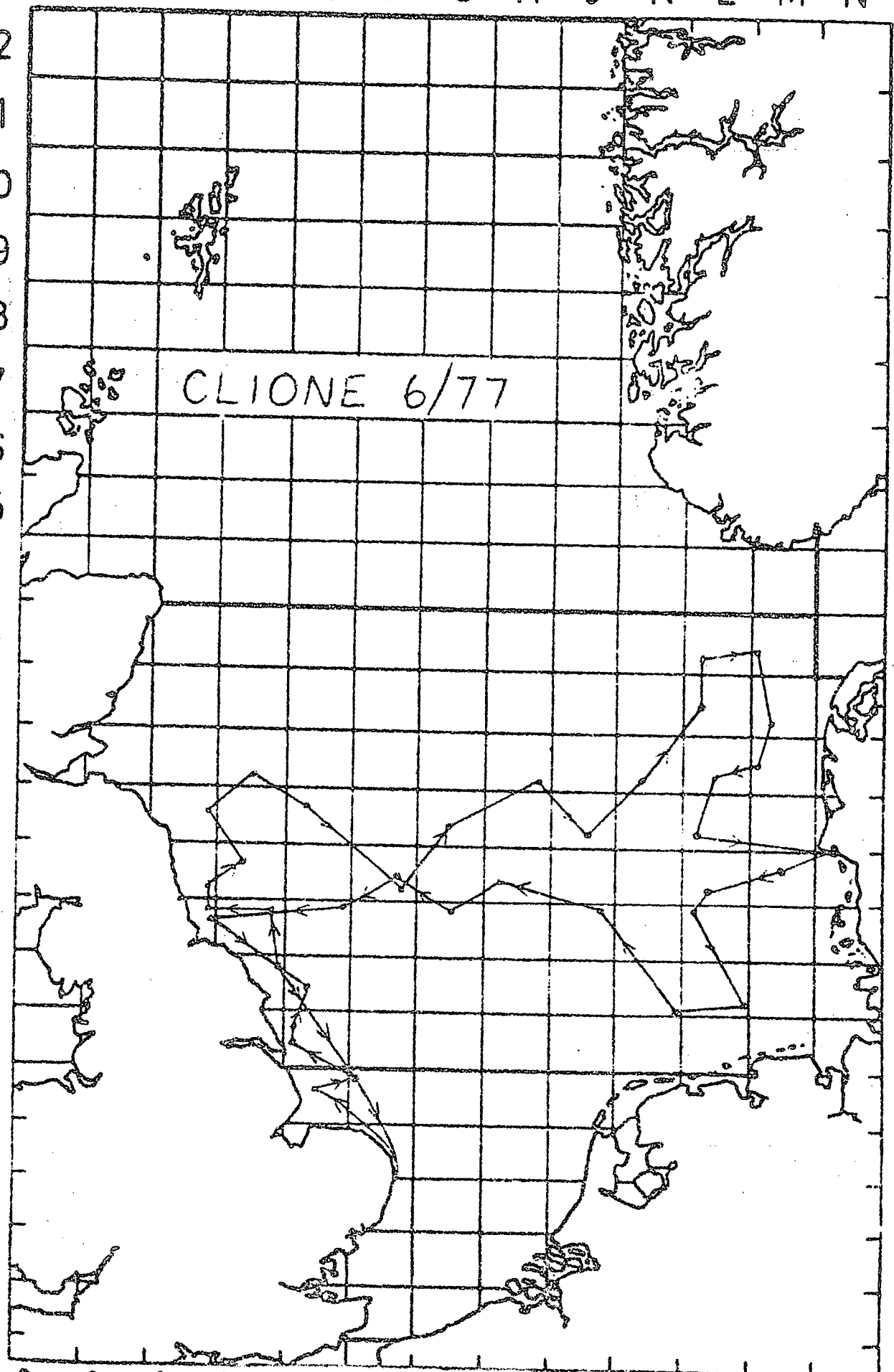
Basic List	
J D Riley (NIC)	A Watson
T Williams	J Curtis (Newlyn)
C N Humphreys	R B Cross

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CLIONE 6/77



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