

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

Mr. Sale.
Miss Gull

1972 RESEARCH VESSEL PROGRAMME

REPORT: RV CLIONE: CRUISE 1

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

STAFF

C E Purdom
G T Thacker
Mrs A Houghton
Mrs M Boon

DURATION

Left Lowestoft 1120 h 3 January

Arrived Lowestoft 1440 h 7 January

All times are Greenwich Mean Time

LOCALITY

German Bight and Southern Bight

AIMS

1. To collect live plaice from the Borkum Grounds
2. To collect live plaice and cod from the Southern Bight
3. To collect plaice eggs if spawning has begun
4. To monitor chlorophyll 'a' by fluorimetry and by collection of samples for spectrophotometry at the laboratory.

NARRATIVE

CLIONE left Lowestoft at 1120 h 3 January and proceeded to the ^{SE} Newcombe Buoy where water samples were collected at high-, mid- and low tide, respectively, over a chain of 9 stations extending $4\frac{1}{2}$ miles eastwards from the buoy. These samples, and all relevant data, were put ashore via the Yarmouth Pilot at 2230 h after which the ship's course was set for the Silver Pits.

Trawling began at 1108 h 4 January and 2 hauls produced sufficient plaice from the Silver Pit grounds. CLIONE then proceeded to the Borkum Grounds 20 miles north of the P2 buoy where trawling began at 0103 h 5 January after a preliminary tin tow net survey. The required number of plaice was obtained after 5 hauls and the ship proceeded to the Southern Bight via Texel. Phytoplankton was sampled along the Dutch coast and at other stations in the North Sea.

Trawling began at the Ribs and Trucks at 2312 h 5 January although a preliminary tin tow net survey failed to detect plaice eggs. Suitable ripe plaice were very scarce and other grounds were tried, including the Outer Gabbard and Kentish Knock. Plaice were scarce on all grounds fished but sufficient were obtained after a total of 11 hauls in the Southern Bight. No ripe, or near ripe cod were observed throughout the entire cruise, but RV CORELLA reported some near ripe fish and kept alive sufficient for the second part

of Aim 2. On completion of the collection of all other live fish required at the laboratory the cruise was finished on 7 January and a course was set from north of the Outer Gabbard to Lowestoft at 1055 h. CLIONE berthed at Lowestoft at 1440 h, 7 January.

RESULTS

1. With assistance from RV CORELLA re cod collection all fish collection aims were completed. A total of 98 plaice, 18 soles, 10 dab and 16 rays was returned alive to the laboratory.
2. Plaice egg surveys by tin tow net showed very low egg densities in the Sliver Pit and Borkum areas and a complete absence of eggs in the northern and southern regions of the Southern Bight.
3. Chlorophyll 'a' surveys gave only low estimates for phytoplankton at all stations. Readings on the highest range of sensitivities of the fluorimeter were significant but suggest that samples returned to the laboratory for spectrophotometry will be of borderline significance only.

Weather was perfect throughout the whole cruise which, in all respects, went very smoothly.

C S Purdom
12 January 1972

SEEN IN DRAFT: MRS

AHB

INITIALLED: AJL

DISTRIBUTION

Basic List
C E Purdom
G T Thacker
Mrs A Houghton
Mrs M Boon