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

## 1971 RESEARCH VESSEL PROGRAMME

REPORT: RV CORELLA: CRUISE 6

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

STAFF

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# DURATION

Left Lowestoft 0930 hours 25 March

Arrived Lowestoft 1330 hours 2 April

All times are British Standard Time

## LOCALITY

Southern North Sea and Flamborough area

## AIMS

- 1. To carry out a survey of fish eggs and larvae in the Southern North Sea and Flamborough area.
- 2. To monitor transparency, chlorophyll A and temperature continuously in the sea surface water.
- 3. To collect surface salinity samples on each sampling station.
- 4. To measure temperatures and total illumination at different depths on selected stations.
- 5. To collect chlorophyll samples for spectrophotometric examination.
- 6. To release Woodhead seabed drifters at selected points in the Southern North Sea and Flamborough areas.
- 7. To do an echo survey along the ships track for fish traces.
- 8. To count flagellates at certain stations.

#### NARRATIVE

CORELLA sailed at 0930 hours 25 March in fine weather, Calibrations of the plankton sampler were done en route for the first station. On the first haul the electronic equipment on the sampler failed soon after it entered the water. The trouble could not be corrected so both the electronic package and the conning room equipment were changed. This was no more successful and further tests suggested that the fault lay in the cable, probably a break which only opened under tension. The survey had to be done using the mechanical counters on the flowmeters, and Kelvin tubes at all stations.

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The first station was worked at 1600 hours 25 March and the Southern North Sea part of the grid was completed by 1400 hours 29 March. Calibrations were done at 4, 5, 6, 7 knots on passage to the Flamborough area. The second part of the grid was started at midnight on 29th and completed by 2100 hours 1 April. Quiet weather prevailed throughout the cruise and this, coupled with the smooth working of the ships crew and the scientific staff, enabled the survey to be completed well within the allotted time. On 31 March a request was received for the collection of plaice eggs in the Flamborough area. This was done.

CORELLA anchored for the night of 1-2 April in Corton Roads and entered Lowestoft harbour to berth at 13.45 hours on the 2nd.

# RESULTS

132 TTN stations were worked. Aim 4 could not be carried out because of the failure of the electronic equipment. All other aims were successfully completed. 32 chlorophyll samples were collected.

The <u>Phaeocystis</u> patch, formerly present off the Schelde estuary has now extended north eastwards to beyond the limits of the grid,

Plaice eggs were present at only one station in the Southern North Sea. In the Flamborough area there were small numbers in the northern part of the grid but none south of Flamborough Head.

Current meters A and B of the International grid were located and found to be in good order.

N Reynolds

7 April 1971

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### DISTRIBUTION

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