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

1971 RESEARCH VESSEL PROGRAMME

REPORT: RV CORELLA: CRUISE 9

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

STAFF

T Wyatt

J A Nichols

A M Watson

P R Witthames

C M Worrall

DURATION

Left Lowestoft 1400 hours, 17 May

Arrived Lowestoft 1000 hours, 25 May

All times are British Standard Time

LOCALITY

English Channel and Southern North Sea

AIMS

- 1. To survey plankton populations of the Eastern Channel and Southern Bight.
- 2. To monitor turbidity, chlorophyll a and temperature continuously in surface water.
- 3. To record fish traces using an MS29 echo sounder.
- 4. To study diurnal variation in plant pigment concentrations.
- 5. To collect McCave current meter arrays from Den Helder.

NARRATIVE

CORELLA sailed at 1400 hours, 17 May. Sampling began in the Channel at about 0400 hours the following morning, and this part of the grid (24 stations) was completed by 2000 hours, 19 May. Whilst passing through the Straits of Dover, a long narrow oil slick was observed running parallel to the Varne Bank. This slick was several miles long, from 10 to 100 yards wide, with a very clear cut boundary on its windward side. It had apparently not been treated. A ten minute haul through this slick was made using the pneuston net. Sampling continued in the Southern Bight, where a further 81 stations were occupied, taking us up to $53^{\circ}57^{\circ}2^{\circ}$ N. From here we sailed to Den Helder, and arrived at 0800 hours, 24 May. The current meter was loaded, and the

opportunity taken to visit the new marine laboratory on Texel Island. CORELLA sailed again at 1600 hours, 24 May for Lowestoft. During the homeward run, the vertical net was tested; also the TTN was re-calibrated, since the earlier calibration stations indicated that the flowmeters may have been jamming. We arrived at Lowestoft at 1000 hours, 25 May.

RESULTS

Plankton samples were collected at 105 stations. Chlorophyll a and temperature were monitored continuously throughout the cruise, but not turbidity. Chlorophyll a levels were generally very low with small isolated high patches. A thermocline was recorded in the northern part of the grid.

Owing to the low chlorophyll levels, the study of diurnal pigment variation (Aim 4) will probably not turn out well.

T Wyatt

4.6.71

SEEN IN DRAFT: JEMB

INITIALLED: AJL

DISTRIBUTION

Basic List

Mr Wyatt

Mr Nichols

Mr Watson

Mr Witthames

Mr Worrall