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FISHERIES LABORATORY, LOWESTOFT, SUFFOLK, ENGLAND

1975 RESEARCH VESSEL PROGRAMME

REPORT: RV CORELLA: CRUISE 16

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

#### STAFF

I C White  
M S Rolfe  
R A Eagle  
R S Nunny  
H L W Burton

#### DURATION

Left Lowestoft 0930 h GMT 22 October

Arrived Lowestoft 1930 h GMT 5 November

#### LOCALITY

North Sea, Western English Channel, Bristol Channel, Irish Sea.

#### AIMS

1. To investigate by a programme of grabbing, dredging and trawling the dispersal grounds in the following areas: Exeter, Plymouth, Bristol Channel and Liverpool Bay.
2. To collect samples of sediment, benthos and fish from these areas for chemical analysis.
3. To collect samples of sediment for ship board analysis for coliform bacteria.
4. To collect samples of sediment for general microbiological investigation and assessment of techniques.
5. To collect a sample of dinoflagellates for Dr J Dodge.

#### NARRATIVE

CORELLA left Lowestoft at HW on 22 October and made for the vicinity of the Rough Towers dumping ground where a limited programme of grabbing and dredging was carried out (20 stations). CORELLA then proceeded to the Exeter dumping ground where 39 stations were worked over two days. 3 Day grab samples were taken at each of the 37 grab stations and samples retained for detailed faunal, sediment, chemical and microbiological analysis back at the Laboratory. The distribution of faecal coliform bacteria in the sediment was investigated on board. Two hauls with the Granton trawl provided fish, shellfish and benthos for chemical analysis. Similar programmes were carried out at Plymouth (42 stations), Liverpool Bay (47 stations) and Bristol Channel (66 stations) although it was not possible to use the Granton trawl at the latter two sites due to the discovery of a fractured shaft in one of the main trawl

winches when off Plymouth. Attempts to use the Reineck box corer in Liverpool Bay were unsuccessful and a detailed programme of grabbing was substituted. An unscheduled call at Liverpool to repair a steering defect caused little interruption to the programme as the opportunity was taken to replenish stores and freshwater. Despite sampling difficulties caused by the nature of the bottom in the Bristol Channel, an intensive grid of stations was worked and the programme was completed with releases of Woodhead Seabed drifters at the dumping site and at three stations to sea ward. CORELLA then steamed to Lowestoft, taking a dinoflagellate sample en route and docking at 1930 h 5 November.

## RESULTS

1. Stations worked Total 214, broken down as follows:

	Grab/ Anchor Dredge	Box Corer	Agassiz/ Queen Dredge	Granton Trawl	Drifters
Rough Towers	18	-	2	-	-
Exeter	37	-	-	2	-
Plymouth	37	-	3	2	-
Liverpool Bay	42	3	2	-	-
Bristol Channel	60	-	2	-	4

2. The detailed results from the samples retained will not be available until the Laboratory follow-up action is completed. However, on-board analysis for faecal coliform bacteria in the sediments from Plymouth and Exeter demonstrated high concentrations in the vicinity of the dumping grounds with the highest concentrations being recorded well inshore of the dumping ground in the case of Plymouth.

I C White

18 November 1975

SEEN IN DRAFT JEMB  
ETB

INITIALLED AJL

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