

MR BADE

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

1974 RESEARCH VESSEL PROGRAMME

REPORT: RV CORELLA: CRUISE 15

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

STAFF

- K W Wilson
- M S Rolfe
- P M Connor
- P A Hardiman
- M Lee

DURATION

Left Lowestoft 1300h 22 October

Arrived Lowestoft 0320h 8 November

All times are Greenwich Mean Time

LOCALITY

Irish Sea, Bristol Channel, English Channel, North Sea

AIMS

1. To investigate by a programme of grabbing and trawling the disposal grounds in Liverpool Bay, Bristol Channel, Solent and Thames (9.4.5).
2. To collect samples of sediments, benthos and fish from these areas for chemical analysis (9.1.1).
3. To collect samples of sediments, benthos and fish from the Mersey estuary for mercury analysis.
4. To investigate by a programme of grabbing, fishing and underwater television the Lithothamnion banks in Falmouth Bay (9.4.2).
5. To obtain fish samples from the gravel extraction Areas Nos 221 and 229 off Southwold.
6. To sample sediments, benthos and fish from the eastern Celtic Sea.

NARRATIVE

CORELLA sailed from Lowestoft at high water on 22 October for Liverpool Bay, collecting sediments and benthos from 13 stations in the Celtic Sea on route (24 October). The survey of the disposal ground at the North West Light in Liverpool Bay was interrupted by severe gales and after three days of bad weather CORELLA docked at Liverpool (29 October). The following day sediment samples were collected from the Crosby and Queens Channels and with weather conditions improving the intensive grabbing and fishing survey of the disposal ground and the inner spoil ground (Site Z) in Liverpool Bay were completed by 31 October. After examining the disposal ground in the Bristol Channel (1 and 2 November) CORELLA sailed for Falmouth Bay where she lay at anchor over the Lithothamnion banks and observations of the sediments and fauna were made with underwater television, and later by grabbing and trawling (3 November). Two disposal grounds off the Isle of Wight - the

Needles and the Nab Tower - were surveyed (4, 5 November) and, taking advantage of the fair weather, samples of fish and sediment were taken in the Falls area (6 November). Five grab stations were worked in the Thames and the programme was completed with trawls off Southwold (7 November). CORELLA docked at Lowestoft at 0320h 8 November.

RESULTS

All aims were completed. Details of stations worked and samples taken in the different areas are shown below.

Aim	Area	Gear - No of stations				Samples retained s - sediment b - benthos f - fish
		Grab	Agassiz	Granton	TV	
1, 2	Liverpool Bay Disposal ground	40	6	3	-	s, b, f
	Site Z	7	-	-	-	s, b
	Bristol Channel	14	1 (torn)	-	-	s, b
	Needles	14	2	1	1	s, b, f
	Nab Tower	23	3	-	1	s, b
	Thames	5	-	-	-	s, b
(Suppl)	Falls	6	-	2	-	s, b, f
3	R Mersey	6	-	-	-	s
4	Falmouth Bay	2	2	-	3	s, b
5	Southwold	0	0	2	-	f
6	Celtic Sea	13	3	1	-	s, b
Totals		130	17	7	5 (2 reels)	

Grabbing was carried out with a heavily weighted $\frac{1}{10} \text{ m}^2$ 'Day' grab which worked well except when the wind drove CORELLA off station and the grab was possibly pulled over on retrieval. Under these conditions a $\frac{1}{10} \text{ m}^2$ Smith-MacIntyre grab was used. At each station a sediment sample of the top 2 cm of substrate was taken and the animals retained by a 2mm sieve from a further two samples were examined. Animals for chemical analysis were taken in Agassiz or Granton trawls.

Off Southwold the presence of "fasteners" precluded trawling through Areas 221 and 229, and attempts to trawl east of the area led to a badly damaged trawl (4 man-hours work to repair). A haul west of the areas proved more successful.

SEEN IN DRAFT G Sinclair (Master)
E Bridge (Fishing Skipper)

K W Wilson
20 November 1974

INITIALLED AJL

DISTRIBUTION

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