

MR SAPE

MINISTRY OF AGRICULTURE FISHERIES AND FOOD
FISHERIES LABORATORY LOWESTOFT SUFFOLK ENGLAND

1973 RESEARCH VESSEL PROGRAMME

REPORT: RV CORELLA: CRUISE 15

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

STAFF

- K W Wilson
- R A A Blackman (Part-time)
- D S Kirkwood
- M S Rolfe
- I C White

DURATION

Left Lowestoft 1030 h 16 October
 Arrived Lowestoft 1100 h 1 November
 All times are Greenwich Mean Time

LOCALITY

- Irish Sea
- North Sea

AIMS

1. To collect samples of fish, benthos and sediments from areas close to gas rigs on the Leman Bank (North Sea) for hydrocarbon analysis (9.3.4.).
2. To assess the incidence of lymphocystis and other diseases in flatfish stocks in the northeast Irish Sea (9.4.6.).
3. To collect samples of sediment, benthos and fish from Morecombe Bay and Liverpool Bay for chemical analysis (9.1.1).
4. To observe the discharge of industrial waste from a dumping vessel and to evaluate initial and later dilutions of the waste and its impact on caged organisms. (9.5.3.).
5. To evaluate sampling and survey techniques for assessing potential dumping areas (9.4.5.).

NARRATIVE

Bad weather caused the postponement of the visit to the Leman Bank (Aim 1) and CORELLA sailed directly for the Irish Sea. On 17 October Dr Blackman was put ashore at Plymouth and he returned to Burnham. CORELLA continued but with the weather deteriorating she was forced to shelter in Ramsey Bay (19th and 20th). Trawling off St Bees Head and in Morecombe Bay was successfully carried out during the next three days (Aims 2 and 3), but bad weather and difficulties with the grabs caused the abandonment of the sampling of the sediment and benthos in the Lime Deep. Six Agassiz stations were worked. CORELLA then sailed for Liverpool Bay and the Smith-McIntyre grabs were repaired on passage. A total of 35 1/10 m² Smith McIntyre grabs and 10 Agassiz trawls were made at 50 Stations around the North West Light Float dumping grounds (Aims 3 and 5).

On 25 October contact was made with the Effluent Services Ltd vessel SCAMMONDEN and water samples were taken from the slick immediately behind the discharging vessel for two hours following the discharge. Drogues carrying caged shrimps were placed into the slick (Aim 4). Aims 2 and 3 were completed with two trawls in Liverpool Bay and CORELLA then sailed for the Leman Bank. Samples of sediment, benthos and fish taken from around gas rigs (Block 49/26) and from two prospective drilling sites for hydrocarbon analysis completed Aim 1. CORELLA docked at Lowestoft at 1100 h 1 November.

RESULTS

1. A total of 39 cores samples of sediment were taken. Benthic fauna was sparse and adequate samples of Asterias and Eupagurus only were obtained. Samples of cod, whiting, dab and mackerel were taken close to the rigs on rod and line.
2. A summary of the incidence of lesions found in flatfish in the north east Irish Sea is given below.

SPECIES	NUMBER	NUMBERS WITH		OTHER LESIONS
		LYMPHOCYSTES	ULCERS	
PLAICE	675	20	1	8
FLOUNDER	226	18	0	14
DAB	1920	2	24	15
SOLE	194	0	0	1
LEMON SOLE	32	0	0	0
OTHER SPECIES	193	0	0	0

3. A total of 118 samples of fish and benthos were retained for selected chemical analysis.
4. Measurements of initial water dilution from the disposal vessel were taken. Subsequent measurements were restricted to 2 hours post discharge by poor light conditions. Weather conditions were unsuitable for small boat work and all measurements had to be made from CORELLA.
5. Distribution maps of sediments and benthos in the area were drawn up on the basis of examination of the grab and Agassiz samples. The validity of this rapid assessment will be tested by close examination of the retained samples and by comparison with available data on the distribution of sediment and benthos in the area.

K W WILSON
 (Naturalist in Charge)
 9 November 1973

INITIALLED A J L
 DISTRIBUTION
 Basic List

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