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

1976 RESEARCH VESSEL PROGRAMME

REPORT: RV CLIONE: CRUISE 11

STAFF

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R A Eagle
M G Norton
M S Rolfe
R S Nunny
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DURATION

Left Lowestoft 1200 h 3 July
Arrived Lowestoft 0200 h 19 July
All times are Greenwich Mean Time

LOCALITY

Thames Estuary, English Channel, Bristol Channel

AIMS

1. To investigate by a programme of grabbing, trawling, hydrographic and underwater camera observations the disposal grounds: off Harwich, Thames, Isle of Wight, Exeter and Bristol Channel (B 1.4, 1.7).
2. To collect samples of sediment, benthos and fish from these areas for chemical and microbiological analysis (B 1.1, 2.1, 2.6).

NARRATIVE

CLIONE arrived at the Roughs Tower disposal ground on 3 July and commenced a hydrographic station, measuring surface and bottom currents, suspended solids, salinity and temperature. A series of observations over the disposal area was made by side-scan sonar and the survey was completed by a number of 'grab' stations for benthic organisms, coliform bacteria and sediment. CLIONE then sailed for the Thames Estuary where a similar programme was undertaken around the Barrow Deep (5-6 July). A detailed study of the Nab Tower ground (7-9 July) was followed by a grabbing and trawling survey of the Exeter disposal ground (10-11 July). CLIONE visited Plymouth on 13 July to replenish water and stores before sailing to the Bristol Channel where, in deteriorating weather, side-scan sonar, grabbing and fishing stations were worked. CLIONE revisited the Thames and Roughs Tower grounds (18 July) whilst returning to Lowestoft.

RESULTS

All aims were successfully achieved with the exception of a hydrographic station in the Bristol Channel which was lost because of poor weather and defective instruments. The following summarizes the type and number of observations made on each disposal ground.

	Hydrographic (hours)	Side-scan sonar (hours)	Grab stations	Trawl/dredge hauls
Roughs Tower	26	3	28	2
Barrow Deep	-	3	52	7
Nab Tower	26	18	22	-
Exeter	26	2	31	4
Bristol Channel	(2)	18	30	6

Side-scan sonar again proved reliable and easy to use and provided much information on the bottom topography of the disposal areas. Coli-form bacteria and Escherichia coli were found in the sediments around many of the grounds. Trawl hauls were very successful, especially in the Bristol Channel, in obtaining samples of round- and flatfish for chemical analysis but very little epifauna was collected in either Granton or Agassiz trawls. However, samples of in-fauna, particularly Abra alba, were collected from most areas by persistent grabbing. These were cleansed for 24 hours and preserved for chemical analysis. Numerous underwater photographs were taken.

K W Wilson
(Naturalist-in-Charge)

20 July 1976

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DISTRIBUTION

Basic list
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