MR. BAPE.

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

1974 RESEARCH VESSEL PROGRAMME

REPORT: R V TELLINA: CRUISE 2

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

STAFF

J A Bedwell (NIC)
J R Joyce (NERC Student)

DURATION

11-21 February

LOCALITY

Lowestoft Area

AIMS

1. To conduct a grid survey of five particulate sediments in the Lowestoft area.

2. To study the variations in suspended sediment content of the water with current velocity at fixed stations over a tidal cycle.

3. To collect samples of mud and benthic fauna for laboratory investigations.

4. To collect surface samples for phosphate analysis.

NARRATIVE

The start of the cruise was delayed when TELLINA was confined to port by gale force southerly winds on 11 February. Conditions had improved by the next day and a start was made on the sediment grid survey. The Smith-McIntyre grab was rigged but no samples could be obtained with it when the tide was running strongly. The IGS dredge was used instead and proved satisfactory for the whole of the cruise. On this first day sediment and phosphate samples were taken from the area between the Holm Sand and the North Denes before freshening southerly winds caused a return to port. On the next day, 13 February, in marginal conditions, more samples were obtained from this area before increasing winds again caused an early return to port. On 14 February conditions were much better and sediment and phosphate samples were obtained from the southern end of Holm Sand, the Newcombe Channel and the northern end of the Newcombe Sand. For the next two days TELLINA was weatherbound, but on 17 February conditions improved considerably and TELLINA anchored to the NE of the W. Holm Buoy in the area where the dredger LAKE LOTHING is presently dumping its spoil. There the DRCM was rigged and for 13 hours at half-hourly intervals water velocity and direction was measured at three depths, and suspended sediment samples were obtained at the same three depths. Surface temperatures

were measured and samples for surface salinity and phosphate analysis were taken. The next day sediment samples were taken from an area to the east of the Newcombe Sand. On 19 February TELLINA was weatherbound but on the 20th conditions improved and another anchor station was maintained for 13 hours near to the previous position. Again water velocity and direction and surface temperature were measured and suspended sediment, surface salinity and phosphate samples were taken. On 21 February the programme of work was completed with a number of sediment and phosphate samples taken from the area west of the Newcombe Sand between the harbour and Pakefield church.

RESULTS

1. The vessel carried out a grid survey of sediments in the Lowestoft area.

2. Two anchor stations were maintained for a tidal cycle during which suspended sediments samples were taken and water velocity and direction were measured at three depths in the water column. Surface temperatures were measured and surface salinity and phosphate samples were taken.

3. No fauna suitable for laboratory investigations was found in the mud collected.

4. Apart from the phosphate samples obtained during the anchor stations, samples were also obtained during the sediment survey.

J Bedwell
5.3.74

Seen in Draft: A Pearson (Skipper)

INITIALLED: AJL

DISTRIBUTION

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