

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

1976 RESEARCH VESSEL PROGRAMME

REPORT: RV TELLINA: CRUISE 5

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

STAFF

J A Bedwell (NIC)
J R Joyce

DURATION

8-14 April

LOCALITY

Off Lowestoft

AIMS

1. To continue the benthic survey of fine particulate sediments off Lowestoft and to take shear stress measurements using a hand-held viscometer.
2. To study the variations in suspended sediment content of the water column with current velocity at fixed stations over a tidal cycle.
3. To collect samples of mud and benthic fauna for laboratory investigations.
4. To investigate the production of a fluid mud stream by a dredger when dumping its load.

NARRATIVE

TELLINA worked out of Lowestoft on a day-to-day basis. The cruise began on 8 April with a continuation of the grab survey of the Lowestoft dumping grounds. Some 20 samples were taken and tested using the hand-held viscometer. Also an excellent echo sounder trace of a turbidity current produced by the dredger LAKE LOTHING while dumping its load was obtained.

The second day was spent conducting a 13 hour hydrographic station on the Lowestoft dumping site, water samples and DRCM readings being taken every half hour. On 10 April the grab survey continued and was completed on the morning of the 11th, some 56 samples having been taken. During the afternoon TELLINA obtained further samples of mud from the Benacre Ness site for laboratory tests and conducted a 5 hour hydrographic station in conjunction with the DB1 project. The final 13 hour hydrographic station was completed on 12 April.

Owing to the exceptionally fine weather the objectives of this cruise were completed ahead of schedule and so on the 13th TELLINA was handed over to FSM 3 under the supervision of Mr Parnell for gear tests.

RESULTS

1. A total of 56 bottom sediment samples were obtained from the Lowestoft sampling grid and the surrounding area. These samples were tested for shear strength on board using a hand-held viscometer.

2. Two sets of water samples and DRCM data were taken over 13 hour tidal periods on the Lowestoft dumping site.
3. Specimens of Pectinaria were obtained from station 72 on the Lowestoft grid and from Benacre Ness, together with samples of mud.
4. An echo sounder trace was obtained of a turbidity current produced by a dumping dredger.
5. A 5 hour current meter station at DB1 was carried out.

John R Joyce
22.4.76

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