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1971 RESEARCH VESSEL PROGRAMME REPORT: R V TELLINA: CRUISE 7

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

PART I

STAFF:

R G J Shelton

P M Connor

A C Wheeler (British Museum)

DURATION:

Left Lowestoft 0930 hrs 26 May Arrived Ipswich 1300 hrs 3 June

All times are British Standard Time

LOCALITY:

Outer Thames estuary

AIMS:

To survey sludge dumping grounds in the outer Thames estuary.

NARRATIVE:

Beam trawling was carried out on the sand bank slopes around the Black and Barrow Deeps from 27-29 May inclusive using the standard 4 m trawl. Catches were generally poor but were not significantly worse in the dumping area. No dead material was found which could be attributed to dumping activities but on one occasion, morbund Asterias and dead Crangon and isopods were found. These were probably disgorged by a Roker which also formed part of this catch. This may well be the explanation for earlier reports of dead benthos in the Black Deep.

Bottom sampling with the Smith-MacIntyre grab and the Forster anchor dredges was carried out from 30 May to 1 June inclusive and with the exception of one station this part of the programme was completed. The whole area was poor from the point of view of benthos and there appeared to be a considerable accumulation of anaerobic material in the Barrow Deep to the south west of the post-1967 dumping area. This is in contrast to the March 1970 survey when little visible sign of the sludge was found in the Barrow Deep though some traces were found on the old, pre-1967, Black Deep dumping ground. The Barrow Deep accumulation is probably due: a. to the fact that dumping in the new area is now beginning to take effect, and b. to the long period of fine weather prior to the present survey.

It was disappointing that the anchor dredge sampling did not result in the collection of any of the deeper burrowing benthic species which would be missed by the grab. This negative finding adds to the general impression gained that the outer Thames Deeps, though not necessarily the sandbank slopes, have a sparse benthic population.

Dissolved oxygen was monitored (by meter) throughout the survey. Early morning readings at Sheerness were around 90-95 per cent rising to over 120 per cent in the outer estuary after periods of strong sunlight. There was no evidence for oxygen depletion in the dumping zone; a dissolved oxygen survey of the Orwell was carried out on the morning of 2 June. This was found to vary evenly from 44 per cent at Ipswich to 85 per cent at Pin Mill and up to 99 per cent at Harwich.

The weather deteriorated on 2 June and a period of gales set in. The scientific staff left TELLINA at 1300 hours 3 June.

PART II

STAFF:

M S Rolfe

DURATION:

Left Ipswich at 1145 hours 7 June

Arrived Lowestoft at 1310 hours 17 June

All times are British Standard Time

LOCALITY:

Wash: June 8, 9

Humber: June 10, 12

Yorkshire coast: June 13, 16

AIMS:

To survey queen scallop grounds in the vicinity of the Wash and

extending northwards.

NARRATIVE:

June 8 and 9 were spent dredging in the Wash but as no queens were taken there, TELLINA proceeded northwards, docking at Grimsby at night, to dredge off the mouth of the Humber. June 10 and 11 were lost through bad weather but dredging was possible on June 12. As no grounds were located and only seven queen scallops were taken in all, it was decided to make for the Scarborough-Whitby area where previously (TELLINA, Cruise 2/1970) a short survey for queen scallops had been curtailed by bad weather. TELLINA arrived at Scarborough at 1830 hours 13 June, but no dredging was possible on June 14-16 because of strong northerly winds.

TELLINA left Scarborough at 2000 hours June 16 and docked at Lowestoft on June 17.

R G J Shelton - NIC (PART I)
12 July 1971

SEEN IN DRAFT: W B (Fishing Skipper)

INITIALIED: A J L

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