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FISHERIES LABORATORY, LOWESTOFT, SUFFOLK, ENGLAND

1977 RESEARCH VESSEL PROGRAMME

REPORT: RV TELLINA: CRUISE 9
(PROVISIONAL: Not to be quoted without prior reference to the author)

STAFF

- R Millner
- J Swainson
- A Wheatley (Sandwich student)
- M Vince)
- C Baker) Divers
- J Tipple)

DURATION

31 August - 9 September

LOCALITY

Off Southwold

AIMS

1. To sample benthos on the Southwold dredging ground.
2. To sample gut contents of demersal fish species.
3. To photograph the seabed using underwater TV and still cameras.
4. To carry out a diver survey of newly dredged trailer tracks.

NARRATIVE

Between 31 August and 5 September, TELLINA worked daily from Hamilton Dock collecting benthos and gut samples as weather permitted. On the 6 September divers were taken on board together with underwater TV and ancillary gear but poor weather prevented any work. The following day arrangements had been made to meet a dredger working off Southwold and the divers were able to locate and examine a number of dredged tracks. On the 8 September sediment and benthos samples were obtained using a Day grab before the divers again located an area of dredged ground. The underwater television was then used in an attempt to obtain pictures of the dredges area. Whenever possible during periods of slack water black and white and colour photographs of the sea bed were also taken. The final grab samples were collected before the Cruise finished on the 9 September. In addition to the work carried out off Southwold, a short period was spent testing the towing performance of an underwater gamma probe for FRL.

RESULTS

1. 51 epibenthos samples were collected and examined from stations on the dredging ground and control area to the east. Areas where dredging had been fairly intensive were characterised by reduced numbers of animals and an increased volume of clean stone in the trawl.

2. 251 gut samples from cod, whiting, pout, dabs and skate were retained for analysis in the Laboratory.
3. Despite the poor underwater visibility a short length of TV film was recorded in which the sea floor was clearly displayed. No satisfactory still photographs of the seabed were obtained with either black and white or colour film.
4. Diver examination of the dredged tracks produced some useful information. Fresh tracks were found to be steep-sided, between 15 and 25 cm deep and approximately 2-2.5 metres wide. The sediment in the tracks consisted of fairly clean pebble and stone. Tubes of the polychrete worm Lanice were evident in collapsed material at the side of a new track but no animals were recorded in two 0.25m² quadrants taken in the track. In contrast Lanice was present in numbers of about 100 per 0.25m² outside the track together with occasional individuals of Psammechinus, Pagurus, Macropipus and various encrusting animals. Either side of the new track was an area of clean fine sand. This was flat and devoid of ripple marks and was considered to be outwash material from the dredger. It appeared to have smothered any animals buried beneath it.

Older tracks in the same area were shallow-sided (tending towards 45°) about 15 cm deep and 2-2.5m wide. The tracks were clearly distinguished from the surrounding seabed by their very uniform flat silty appearance.

ACKNOWLEDGEMENT

Loan of the underwater television by Marconi-Elliot and the time and effort put in by J Muir and D Howick to ensure that the system worked successfully is gratefully acknowledged.

R Millner
21 September 1977

INITIALLED: AJL

DISTRIBUTION:

Basic List
R Millner
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