

RV TELLINA

LIBRARY

Report for cruise 3/1969

Staff:

M S Rolfe
D Brown
N Latham (until 15 April)
P Connor (from 15 April)
D A Hancock (15-21 April)

Duration:

8-26 April 1969

Aims:

To determine (1) the absolute density of escallops and (2) the dredging efficiency of the Baird sledge dredge on a selected area on the Eddystone escallop grounds by the cumulative catch₂ method, supplemented by a short term tagging experiment, grabbing with a $\frac{1}{2}$ m² Baird grab, and underwater photography.

Narrative:

TELLINA left Lowestoft at 1000 hours on 8 April and arrived at Plymouth at 2300 hours on 9 April. The scientific staff went aboard the following day. No sea-time was possible on 10 April due to necessary fuel-pump repairs on TELLINA. A further $5\frac{1}{2}$ days were lost through bad weather, leaving $8\frac{1}{2}$ days when work at sea was possible (13, 14, 16, 17, 18, 19 (morning only) 21, 23 and 24).

The scientific staff left TELLINA on 24 April. TELLINA left Plymouth at midnight on 25 April and, after taking shelter at Portsmouth for $12\frac{1}{2}$ hours on the 26-27th, arrived back at Lowestoft at 0530 hours on 28th.

Exploratory hauls were made in the vicinity of the densest area found during the October 1968 survey. A site (Area A) was chosen where five dozen escallops were taken in 15 minutes on clean ground. With the aid of the Decca Navigator and Track plotter equipment, an area of 700 metres long (1.0 lane on Green Decca co-ordinate) and 130 metres wide (0.2 lane on the Purple Decca co-ordinate) was 'seeded' with 3350 painted escallop shell valves and 439 tagged escallops.

After several hauls over area A, it became apparent that it supported a much lower density of escallops than was first estimated from the exploratory haul, and it was decided to select a second site (area B) for the cumulative catch experiment. Area B was 700 metres long but only 65 metres wide. A further 1,161 escallops (dredged from area B) were tagged and relayed over area A for subsequent recapture by dredging.

The Decca track-plotter was used during the dredging in an attempt to cover the ground evenly. From area A totals of 175 tagged escallops and 691 painted shells were recaptured from 1600 and 3350 respectively, after 29 hauls. Forty-five hauls were made on area B but with no distinct evidence of any decrease in catches.

Seen in draft:

WB, HAC

M S Rolfe
30/6/69

Distribution:

Basic list, plus the following:

Mr Rolfe
Mr D Brown
Mr Latham
Mr Connor
Dr Hancock