

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

1971 RESEARCH VESSEL PROGRAMME

REPORT: RV TELLINA: CRUISE 9

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

STAFF

Part A

J D Riley 15-18 & 21-27 August  
G T Thacker 6-14 & 19-20 August  
P R Witthames 6-14 August  
N G Nice (Student) 15-27 August

Part B

J D Riley 6-14 September  
W A Karp 6-14 September

'Push Net' Survey (Shore based)

A Jones 6-14 September  
B Baxter 6-14 September

LOCALITY

South coast of England and north coast of Cornwall

AIMS

1. Survey of the inshore distribution of 0-group fish using standard beam trawls and small midwater sprat trawl, with special emphasis on the kaolin waste polluted areas of south Cornwall.
2. High Speed tow net sampling for fish eggs and larvae supplementary to survey completed in April (TELLINA Cruise 5/71).
3. To survey the Cornish beaches for 0-group fish using a push net.
4. To locate, collect and return live to the laboratory 0-group turbot for use in experiments.

NARRATIVE

Parts A & B

The departure from Lowestoft was delayed until 6 August by bad weather. Between 7 & 11 August Aims 1 & 2 were completed between the North Foreland and Newhaven. After a change in the scientific staff TELLINA proceeded westwards to Plymouth. Staff and crew returned to Lowestoft on 27 August at the end of Part A. On return to Plymouth at the start of Part B on 6 September work was not possible on 9 September due to fresh easterly winds but the inshore survey with the beam trawl and sprat trawl was completed on 13 September. Staff

left the TELLINA at Newlyn to return to Lowestoft. The ship proceeded to Plymouth arriving 15 September to remain there until the start of TELLINA Cruise 10.

Push Net Survey:

Staff left Lowestoft by van at 0700 hours 6 September and arrived in Penzance at 2000 hours. On 7 September Sennan Cove, Marazion and Prah Sands were sampled. From 8-11 September surveys were made at Hayle sands, Carbis Bay, Perranporth, Newquay, Daymer Bay and Hayle Bay all on the north Cornish coast. The 12-14 September was spent at Widemouth Bay, south of Bude. Strong easterly winds hampered work during the early part of the period but light winds and fine weather created ideal working conditions for the latter half. Where possible sampling was carried out at low water.

RESULTS

Parts A & B and Push Net Survey

Aim 1. Over 130 beam trawl hauls in depths of <20m were made between the North Foreland and Lands End. Considerable areas S.W. of Brixham were not trawlable due to the rocky nature of the seabed. Most sandy areas were sampled and in general the commercial 0-group fish densities were low compared with the east coast (TELLINA Cruise 9-10/70). Non-commercial species such as members of the Gobiidae, Callionymus lyra and Microchinus boscanion (Solenette) were most frequent and often occurred in comparable densities to those of 0-group plaice and sole on the east coast.

In the kaolin contaminated bays near St Austell small numbers of sole, plaice and dab were taken.

Aim 2. Ten High Speed plankton samples were taken approximately 50 mls apart in duplicate; the 60 mesh /1" samples for fish egg and larval analysis and the 120 m/ 1" samples for Mr M S Rolfe (Burnham-on-Crouch laboratory) for analysis for Pecten larvae.

Aims 3 & 4. Heavy ground swell made landing on the beaches by dinghy from TELLINA for pushnet sampling impossible S.W. of Plymouth. The shore-based team caught small numbers of 0-group plaice and sole at Marazion in Penzance Bay and Daymer Bay near Padstow. 0-group turbot were found in very low numbers at all but two localities. At Widemouth Bay the highest catches of turbot were recorded and in three days 130 fish were caught and brought back to the laboratory for experimental use.

John D Riley  
Alan Jones

20 September 1971

SEEN IN DRAFT: W Burroughs (Skipper)

INITIALLED: AJL

DISTRIBUTION:

Basic List            N G Nice  
J D Riley            W A Karp  
G T Thacker          A Jones  
P R Witthames        B Baxter

Secretaries:

Kent & Essex Sea Fisheries Committee  
Southern  
Sussex  
Devon  
Cornwall