

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

1973 RESEARCH VESSEL PROGRAMME

REPORT: RV TELLINA: CRUISE 1

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

STAFF

P O Johnson  
P D Wallace

DURATION

Left Lowestoft 0930 h 2 January

Arrived Lowestoft 1415 h 9 January

All times are Greenwich Mean Time

LOCALITY

Thames Estuary

AIMS

1. To carry out an echo and fishing survey in the approaches to and around the Thames Estuary for sprat, and if time and weather permit, a similar survey in the Wash area;
2. To collect samples for routine biological analysis and fat determination;
3. To make surface temperature and salinity observations.

NARRATIVE

After leaving Lowestoft TELLINA proceeded south towards the Thames Estuary carrying out an echo-survey along the Suffolk coast en route. Surface temperature and salinity observations commenced off Orfordness and stations covering the Shipway - Sunk - Cork Sand area were made before the vessel finally docked at Ipswich at 2000 h.

On 3 January the survey continued to cover the Black Deep-Tongue-Knock Deep-Sunk areas and some fishing was carried out in the Black Deep. Unfortunately after hauling the net it was found that a hydraulic feed-pipe to the winch had fractured and could not be repaired. This meant that no further fishing was possible but, after notifying the laboratory, it was decided to carry on with the trip to complete the echo-survey and hydrographic observations. TELLINA later docked at Ipswich at 2100 h.

The following day saw extremely dense fog and the vessel remained in port until visibility improved, sailing again at 0530 h 5 January. The survey continued to include the Wallet-Middle Deep-West Swin-Warp-Sea Reach, TELLINA then docking at Sheerness at 1715 h.

On 6 January the echo-sounder broke down after completing only one station and a return was made to Sheerness for repairs. It was then found that nobody was available to attend to it until the morning of 8 January and I attempted home repairs which eventually proved successful, but by then it was too late to sail again that day, a stiff easterly breeze having also now arisen. The survey was then completed on 7 and 8 January a return being made to Lowestoft on 9 January where TELLENA docked at 1415 h.

## RESULTS

1. A total of 50 hydrographic stations for surface temperature and salinity were completed. Surface temperatures ranged from a minimum around  $6.0^{\circ}\text{C}$  inshore to a maximum of  $9.5^{\circ}\text{C}$  offshore; and fell mainly within the  $6.5\text{--}7.5^{\circ}\text{C}$  range.
2. Only one fishing haul was made due to the hydraulic breakdown, but this resulted in 6 baskets of large, good quality sprats for a 30 minute tow.
3. The echo sounder was run continuously (when not bedevilled by faults) over the whole survey area, which extended within the limits  $51^{\circ} 25' \text{N}$  -  $52^{\circ} 05' \text{N}$  and offshore to  $01^{\circ} 40' \text{E}$  and also along the Suffolk coast. No commercially viable concentrations of shoals were located: and practically zero trace levels were recorded over most of the usual fishing channels within the estuary. The best traces recorded were towards the south western end of the Black Deep and in the eastern approaches to the estuary around the Tongue region and offshore from here. A dispersed but fairly extensive patch of small shoals was also evident up to 5 miles off the Suffolk coast between Sizewell and Aldeburgh.

P O Johnson  
18 January 1973

SEEN IN DRAFT      WB

INITIALLED        AJL

## DISTRIBUTION

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P O Johnson  
P D Wallace