

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

1971 RESEARCH VESSEL PROGRAMME

REPORT: RV TELLINA: CRUISE 10

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

STAFF

T J Hulme
J Dann

DURATION

Left Plymouth 0715 hours 29 September

Arrived Lowestoft 1230 hours 8 October

All times are British Standard Time

LOCALITY

South Coast of England; Plymouth to Dungeness

AIMS

1. To carry out an echo and fishing survey along the south coast of England to study the distribution of sprat shoals with particular emphasis on locating 0-group fish in the Tor Bay-Lyme Bay region. The survey to be extended as far to the east as time and weather allowed.
2. Samples to be collected for routine biological analysis and fat determination.

NARRATIVE

TELLINA sailed from Plymouth at 0715 hours, 29 September and carried out an echo and fishing survey in the vicinity of the Eddystone Lighthouse, returning to Plymouth the same day. It soon became obvious that neither the Kelvin Hughes MS29 echo sounder nor the head-line transducer was operating correctly making it necessary to have the MS29 serviced in Torquay and to alter the rigging of the head-line transducer on the trawl, after which both worked successfully. During the following seven days an echo survey was carried out along the south coast from Berry Head to Dungeness, with particular emphasis given to the Tor Bay-Lyme Bay region, fishing with the mid-water trawl was carried out in the areas of heaviest trace. TELLINA sailed from Ramsgate at 0315 hours, 8 October for Lowestoft carrying out an echo survey of the outer Thames Estuary and East Anglian coast on her way back, docking at Lowestoft at 1230 hours.

RESULTS

Along the entire stretch of the south coast that was surveyed, it was found that fish traces of any kind were few and far between.

The Eddystone area produced only a few 'spikey' traces that were fished on without success, and the only fishable traces between Start Point and Berry Head were found in a sector from up to 10' East to 10' S.E. of Berry Head where the Brixham fleet were operating. TELLINA located and fished on a few good mid-water traces $6\frac{1}{2}$ ' East of Berry Head, which produced only 51 large sprats for a half-hour tow.

An extensive echo survey both inshore and offshore in Tor Bay and close inshore in Lyme Bay to try and locate 0-group sprats produced no fish traces of any note and this was the pattern of things in subsequent surveys between (a) Portland Bill and the Isle of Wight and (b) east of the Isle of Wight up to Newhaven.

The only fish traces of any quantity were located east of Hastings at the Western end of Rye Bay and were of the 'fleck' and 'small plume' type. These traces formed a continuous band right across Rye Bay to Dungeness and beyond fading out off Folkestone. The mid-water trawl was shot 4'-5' S.E. from Hastings for half-an-hour and the catch showed that the traces were a mixture of sprats and 1-group herring, with sprats making up well over 98% of the catch.

Fish traces similar to those found in Rye Bay were located in the outer Thames Estuary and formed a continuous band which extended from North Foreland out to the Kentish Knock L.V. on to the Shepwash L.V. fading out along the East Anglian coast. The heaviest traces were found in the deep water either side of the Kent Knock L.V.

Only two samples of sprats and one sample of 1-group herring were preserved for routine biological analysis.

T J Hulme

18 October 1971

Seen in draft: WB (Fishing Skipper)

INITIALLED: HAC

DISTRIBUTION

Basic list

T J Hulme

J Dann