MINISTRY OF AGRICULTURE, FISHERIES AND FOOD

FISHERIES LABORATORY, LOWESTOFT, SUFFOLK, ENGLAND

1976 RESEARCH VESSEL PROGRAMME

REPORT: RV TELLINA: CRUISE 7/76

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

STAFF

S Flatman
B C Mumford (to 17 May)
T Watson (from 21 May)

DURATION

Left Lowestoft 0845 h 10 May
Arrived Lowestoft 0200 h 30 May

All times are Greenwich Mean Time

LOCALITY

English Channel

AIMS

1. To carry out a trawl survey for demersal species between $0^{\circ}10'E$ and $0^{\circ}20'W$ between the coast and $50^{\circ}30'N$.

2. To carry out a trawl survey between $2^{\circ}10'W$ and $2^{\circ}30'W$ between the coast and $50^{\circ}20'N$.

NARRATIVE

TELLINA left Lowestoft at 0845 h 10 May and steamed to Newhaven. Two trawl hauls were carried out before the vessel docked at 1000 h 11 May. During the period 12-16 May TELLINA worked from Newhaven and completed a further 15 hauls between periods of strong southerly winds. The tows carried out in the Newhaven area (Aim 1) had previously been surveyed and found to be clear (TELLINA 4/76). On 17 May the crew and scientific staff travelled to Lowestoft for a mid-trip break.

TELLINA left Newhaven at 0600 h 21 May, carried out two trawl hauls and steamed west. Freshening SW winds forced the vessel to return to Newhaven where she docked at 1315 h. At 0600 h 22 May TELLINA left Newhaven, steamed to Weymouth and docked at 2000 h. No information was available on clear tows in the Weymouth section (Aim 2), although the skipper of the WHY NOT was able to give some details of clear tows and wrecks in part of the survey area. Rough ground, underwater cables, firing ranges and submarine exercise zones greatly reduced the potential trawling grounds. However, between 23 and 25 May TELLINA completed 15 hauls, without serious net damage, by echo-surveying the trawling areas first. On 26 May engine trouble after the first haul forced the vessel back into Weymouth. Repairs were completed at 0930 h 28 May and the vessel left Weymouth to finish the 4 remaining tows. Two hauls were made off Weymouth beach in the 0-10 m depth zone, and with rough ground and crab pots preventing further work in that zone, TELLINA steamed east. Adverse weather forced the vessel in to Newhaven at 0300 h 29 May, but at 0700 h a moderating forecast enabled her to continue to Lowestoft where she finally docked at 0200 h 30 May.

RESULTS

1. A total of 19 hauls each of 30 minutes duration were made: 4 in each of the depth zones 0-10 m, 10-20 m, 20-30 m and 30-50 m; and 3 in 50-70 m. These hauls were repeats of the tows off Newhaven carried out by TELLINA (Cruise 4/76), again using the Boris Ailsea box-trawl with bobbin groundrope and covered cod-end. All fish caught were identified, counted and the majority measured. Otolith samples were taken from whiting, plaice, sole and lemon sole.

Of the demersal species caught, poor cod (Trisopterus minutus) were most numerous (344 fish), with pout whiting (T. luscus) (230), whiting (204), dabs (92), lesser weevers (30) and dragonets (11).

Four species of gadoid were caught (whiting, pollack, pout whiting and poor cod), four species of flatfish (dab, plaice, sole and lemon sole), three elasmobranchs (thornback ray, spurdog and tope) and seven other species (dragonet, goby, lesser weever, red gurnard, black bream, tub gurnard and sand eel). The most numerous pelagic species were sprats (1122 fish) and horse mackerel (163). Herring and anchovy were present in small numbers.

The gadoids were distributed across the depth strata, the median zone was at 10-20 m. The numbers of flatfish were so small (with the exception of dabs) that it is difficult to draw any conclusions about distribution. The greatest numbers of dabs occurred in 10-20 m depth. The sprats were almost all in the 10-30 m depth range.

2. 18 30-minute hauls were made in the Weymouth sector: 2 in 0-10 m depth zone and 4 each in 10-20 m, 20-30 m, 30-50 m and 50-70 m. Fishing gear and processing of the hauls were exactly the same as for Aim 1.

As in the Newhaven area, poor cod were most numerous (501 fish) followed by pout whiting (257), goby sp. (167), thornback rays (28), horse mackerel (28), and lesser spotted dogfish (17). Species caught were: gadoids (poor cod, pout whiting, whiting), flatfish (dab, plaice, sole, solenette), elasmobranchs (thornback ray, spotted ray, painted ray, undulate ray, lesser-spotted dogfish and greater-spotted dogfish), others (dragonet, red gurnard, goby, john dory, butterfly blenny, goldsinny, greater pipefish, and axillary wrasse). Horse mackerel were the only pelagic fish caught.

The gadoids were caught between 10 and 70 m, with some concentration in the 50-70 m depth zone. The majority of the rays were caught in the 10-30 m depth range on the outer edge of Weymouth Bay, which was the position suggested by the skipper of the WHY NOT. The dogfish were caught deeper than 30 m, the gobies shallower than 30 m. Flatfish were very few in numbers, and none were caught deeper than 30 m.

Scientific staff took the opportunity to visit the Fish Diseases Laboratory at Weymouth, and would like to thank Dr Alderman for giving up some of his time to show us around.

The scientific staff would also like to thank the skipper and crew of TELLINA for their efforts in making this a successful and enjoyable cruise.

S Flatman

10 June 1976

SEEN IN DRAFT A Pearson

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DISTRIBUTION

Basic List

S Flatman
B C Mumford
T Watson
DI (SE)
Kent and Essex SFC
Cornwall SFC
Devon SFC
Southern SFC
Sussex SFC
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