MINISTRY OF AGRICULTURE, FISHERIES AND FOOD

FISHERIES LABORATORY, LOWESTOFT, SUFFOLK, ENGLAND

1976 RESEARCH VESSEL PROGRAMME

REPORT: RV TELLINA: CRUISE 4

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

STAFF

R G Houghton
C N Humphreys (to 19 March)
P D Wallace (from 22 March)

DURATION

Left Lowestoft 0930 h 10 March
Arrived Lowestoft 0900 h 31 March

All times are Greenwich Mean Time

LOCALITY

English Channel

AIMS

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

2. To tag plaice and soles off Brixham

3. To collect 25 living plaice for Dr Hill of the Fish Diseases Laboratory, Weymouth. These to include Lymphocystis infected fish, if possible.

NARRATIVE

TELLINA left Lowestoft at 0930 h 10 March and sailed south. An adverse forecast prevented the vessel from continuing to Newhaven and she put into Dover at 2215 h, where she remained until 0700 h 12 March. One haul of the trawl survey (Aim 1) was completed off Beachy Head before TELLINA went into Newhaven, mooring up at 1730 h. 6 further hauls were made close to Newhaven on 14 March. The work was greatly assisted by the loan of charts showing the positions of wrecks and fasteners, by the skipper of GAYSTAR of Newhaven. This information proved to be very reliable and eventually allowed the survey to be completed without any damage to the trawl. On 15 March a SE force 6 wind prevented work and the day was enjoyably spent talking to a succession of visitors to the ship. On 16 March the 5 most distant hauls of the survey were carried out up to 18 miles SSW of Newhaven. Relatively unknown grounds shallower than 10 m were surveyed with the sounder both towards Beachy Head and also towards Shoreham on 17 March. Several clear pieces of ground were found and 5 hauls were completed.

The ANGELUS of Shoreham came alongside to warn us of trammel nets in the area, which could not be located at times other than slack water because of the tendency of the dhans to pull under in the tide. The remaining 3 hauls of the Newhaven survey were carried out between 0700 h and 1430 h 18 March. The crew and scientific staff travelled by rail to Lowestoft for a weekend break.

TELLINA left Newhaven at 0530 h 23 March and tied up in Weymouth at 1945 h. She left at 0600 h 24 March and headed for Brixham. 2 Russian factory ships and 3 large trawlers were seen anchored in the middle of Lyme Bay. 4 hauls were completed between 5 and 10 miles east of Berry Head before the vessel went into Brixham at 1730 h. On 25 March, despite the SW force 6 wind, the vessel worked in Start Bay and also close to Berry Head. Catches in the 6 hauls were very poor although notable for the presence of small pilchards (8 to 10 cm) and a catch of 80 large otter-shells (Lutraria lutraria), 4 sprats and 2 whiting off Berry Head.

The bobbin rig was exchanged for a "bosom" groundrope in the hope of improving the catch of flatfish. 3 hauls were completed with this gear 17 miles SSE of Berry Head on 26 March before a freshening wind forced a retreat to Brixham. On 27 March it was the intention to cross Lyme Bay for Weymouth but the prospect of strong westerly winds prevented this although 4 hauls were completed near Teignmouth before TELLINA moored in Torquay at 1400 h. She left for Weymouth at 0545 h 28 March and tied up at 1230 h. Nine living plaice, the total catch of this species from 8 hauls, were delivered to Dr Hill of the Fish Diseases Laboratory at Weymouth. The vessel left Weymouth at 0545 h 29 March and was forced to go into Portsmouth at 1300 h. The scientific staff left the ship and travelled back to Lowestoft by rail. TELLINA arrived in Lowestoft at 0900 h 31 March.

RESULTS

1. Four hauls each of 30 min duration were completed without gear damage in each of five depth strata (0, 10, 20, 30, 50, 70 m boundaries) off Newhaven using the Boris Ailsea box-trawl rigged with a bobbin groundrope and a covered codend. All fish were identified and counted and the most important species were also measured. Otolith samples were taken from plaice, sole, lemon sole and whiting. The sex, maturity stage and stomach contents were recorded for each otolithed fish.

Poor cod (Trisopterus minutus) were numerically most numerous (1556 fish), followed by pout whiting (T. luscus) (872), whiting (287), dabs (198), plaice (76), dragonets (36), flounder (31), sole (25) and thornback ray (18). Four species of gadoid were caught (poor cod, pout whiting, whiting and pollack), seven species of flatfish (dab, plaice, flounder, sole, lemon sole, solenette and brill), four elasmobranchs (thornback ray, spotted ray, spurdog and greater spotted dogfish), eleven species of various groups (dragonet, small gobies, lesser weever, red gurnard, tub gurnard, armed bullhead, five-bearded rockling, goldsinny, sandeel and father lasher) and three pelagic species (sprat, sandsmelt and herring).

The gadoids were evenly distributed across the depth strata although slightly fewer were caught in the 20-30 m stratum. The flatfish were concentrated in water shallower than 20 m. The larger flatfish and gadoids were found in deeper water. Unusually, the lesser weevers were only found in depths greater than 30 m. The best "commercial" catches were found in 10-20 m close to the Seven Sisters, east of Newhaven, where the plaice were feeding heavily on a small unidentified bivalve.

2. Only 3 plaice and 12 lemon soles were tagged off Brixham. Catches were extremely poor compared with those near Newhaven. Poor cod dominated the catches in water deeper than 30 m and sprats and pilchard predominated in shallow water.

3. 9 living plaice were delivered to Dr Hill at Weymouth.

The scientific staff would like to acknowledge the efforts of the crew in all departments which made this a successful and enjoyable cruise.

R G Houghton

6 April 1976

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DISTRIBUTION

Basic List

R G Houghton
C N Humphreys
P D Wallace
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Kent and Sussex SFC