

L. BRARY

Provisional: Not to be quoted without reference to the writer

R V TELLINA

Report for Cruise 6/1969

Staff: S J Lockwood Duration: 17 July - 14 August
 P Walker
 J C Adamson
 J M Gregory

Aims

1. Electro and electrodesiccation tagging of 0-group plaice.
2. To sample plaice over a 24-hour period twice at both neap and spring tides for determining daily food consumption.
3. To collect 0-group plaice for bomb calorimetry.
4. To collect benthos and plankton for bomb calorimetry.
5. To collect benthos and bring it live to the laboratory for Mr Birkett.

Narrative

TELLINA sailed from Lowestoft at 0945 hours, 17 July and arrived Scarborough 0300 hours the following day. She entered harbour at 0730 hours. The scientific staff prepared the fish aeration system and other gear ready for the start of fishing on 19 July. Fishing was carried out through a 24 hour period on 19, 24, 26, 30 July. All other days prior to 31 July were spent tagging except 29 July when north-east winds were too strong to permit work in Filey Bay. As TELLINA had left harbour on a falling tide six hours were spent dodging before re-entering Scarborough. On 31 July TELLINA sailed for Grimsby where she lay while the crew returned to Lowestoft for the weekend. The cruise was recommenced on 7 August when TELLINA left Grimsby at 0730 hours and returned to Scarborough at 0730 hours, 8 August when the scientific staff rejoined the ship. 7-11 August were spent tagging 0-group plaice, but conditions on 12-13 August prevented work so TELLINA left for Lowestoft a day early. Conditions when leaving Scarborough at 0825 hours were very poor with fog and a very heavy easterly swell. As TELLINA progressed south conditions improved rapidly once Flamborough Head was passed.

Results

The poor conditions at the end of the cruise prevented live benthos being collected for Mr Birkett, nor could a second set of bomb calorimetry samples be collected. It had also been hoped to return some 0-group cod live to the laboratory, but again the poor conditions prevented this.

The fishing through 24 hour periods was carried out successfully; 62 samples of 50 or more 0-group plaice were collected in order to determine daily food requirements. Also the length and sex of all other flatfish were taken and a sample had stomach contents analysed.

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All tagging was carried out with liquid latex. The electrodesiccation technique was found to be unsuitable the day before the cruise commenced. When used the technique causes a small necrous patch to appear on the fish skin; this is obliterated when the fish is preserved. In all a total of 15,101 0-group plaice were tagged and 14,568 released. The mortality of 3.5% was high compared with normal tagging mortality (2%) for latex. This was caused by a mortality approaching 20% on the 23 July when it was difficult to keep the water temperature of holding tanks down. (Also one holding tank which had the highest mortality was badly polluted with soot from the galley stove chimney.) The mean daily tagging rate was 1,678 fish/day though it varied from 1,099 to 2,324. This variability is a reflection of fish density rather than other factors; conditions were always good and Mr Adamson did the bulk of tagging as he proved to be most adept at it.

Unfortunately the deterioration in weather at the end of the cruise prevented TELLINA and two local cobles from fishing for recaptures. Data from the recaptures that were made have not yet been worked up.

S J Lockwood
13 August 1969

Seen in draft: W B

Initialled: A J L

Distribution:

Basic list, plus the following:

Mr Lockwood (3)
Mr Walker
Mr Adamson
Mr Gregory
Mr Macer
Mr Riley
Mr A Jones