

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

1975 RESEARCH VESSEL PROGRAMME

REPORT: RV TELLINA: CRUISE 5

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

STAFF

R G Houghton
M Slater (Fleetwood)

DURATION

Left Lowestoft 0900h 1 June

Arrived Lowestoft 2100h 13 June

All times are British Summer Time

LOCALITY

North-east coast

AIMS

1. To carry out a trawl survey for demersal fish from $53^{\circ}30'N$ to $55^{\circ}40'N$ between the coast and the 12 mile limit.
2. To collect specimens of gonads from lemon sole for histological examination.
3. To collect and deep-freeze 10 ungutted cod of the 1972 year-class for Dr Portmann.
4. To collect stomach contents of cod for feeding studies.

NARRATIVE

The cruise officially began on 28 May but adverse weather prevented TELLINA from finally leaving Lowestoft until 0900h 1 June. She anchored in the Humber at 2130h and moved to the Royal Dock, Grimsby at 1230h 2 June where she remained until 2300h 3 June. The vessel left the Humber at 0630h 4 June and steamed north to North Shields where she tied up at 2100h. The next four days were spent trawling between the Tyne and Coquet Island from the coast up to 12m offshore. Catches were generally low. The 25 station survey was completed on 9 June after which TELLINA moved to Hartlepool arriving at 1545h. On 10, 11 and 12 June 18 hauls were completed off Scarborough. The vessel left Scarborough at 0345h 13 June and sailed for Lowestoft when she docked at 2100h on the same day.

RESULTS

1. The original plan to survey the whole coast was abandoned due to lost time. Instead a 25 station depth-stratified survey using the Boris box-trawl for 30 minutes at each station was substituted. This was carried out between 55° and $55^{\circ}20'N$. Depth strata were 0-20m, 20-40m, 40-60m, 60-80m and 80-100m. The 2 shallow strata proved most difficult to carry out because

of the rocky ground close to the coast. This was charted with the echo-sounder and Decca Navigator and a sufficient number of clear tows were found and completed. All fish were counted and cod, haddock, whiting, plaice and lemon soles were measured. Fish were not abundant anywhere. The best hauls (from a commercial point of view) were in the 0-40m depth stratum entirely within the 3 mile limit particularly just off the R. Tyne (haddock and plaice) and in Druridge Bay (plaice). The distribution of plaice was strongly linked to depth (most in 0-20m) as was that of dab (20-40m); the effect on the other species was not as marked. Cod were very scarce and no more than 3 fish (all 2-year-olds) were caught in a tow. I-group haddock and whiting were caught in moderate numbers throughout the area.

Insufficient time remained to carry out a similar survey from Scarborough but 18 hauls were completed in the area principally for cod tagging and collecting lemon sole gonads. Catches were very much better than from off the Tyne and consisted of 2-year-old cod (up to 12 for 30 mins) and large plaice (up to 28).

2. The ovaries of 22 lemon soles were preserved for histological work. Only a small proportion of the catch was suitable for this work as the fish were mainly immature or male.

3. All the cod which were caught were I or II-group fish and so the sample of cod from the 1972 year class for Dr Portmann could not be collected.

4. The stomach contents of 70 cod were collected.

R G Houghton
3 July 1975

SEEN IN DRAFT: A P

INITIALLED: A J L

DISTRIBUTION:

Basic list

R G Houghton

M Slater (Fleetwood)

Northumberland Sea Fisheries Committee

North-eastern Sea Fisheries Committee