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1970 RESEARCH VESSEL REPORT

R V ERNEST HOLT: CRUISE 1b

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

STAFF

C E Purdom

J Last

P Walker

R Turner

DURATION

Left Great Yarmouth 1430 hours 12 January Arrived Grimsby 0730 hours 21 January

All times are British Standard Time

LOCALITY

North Sea

AIMS

- 1. To collect live plaice and flounder for genetic, hatchery and radiobiological studies.
- 2. To collect pituitary glands from mature cod.
- 3. To attempt pituitary-induced spawning at sea.
- 4. To collect live sole, dab, turbot, and lemon sole for Mr Thacker.
- 5. To make chromosome preparation of gadoids.
- 6. To collect cod blood samples for Dr Jamieson.
- 7. To collect a sample of dab from the Moray Firth for Mr C Lee.
- 8. To collect and preserve codling and haddock for Mr Trout.
- 9. To collect plaice and sole heads for Dr Shelbourne.
- 10. To collect 100 starfish and 20 small plaice for Radiobiology Section.

NARRATIVE

The ship left Great Yarmouth at 1430 hours 12 January and steamed to the Eastern Deeps.

An egg survey was planned, to locate spawning plaice, but the 2 m stramin net was lost on the first tow when the wire parted. Trawling therefore began at 2120 hours 12 January. Although some ripe female plaice were caught, the trawl received extensive damage on each of the first three tows and a move was made to cleaner grounds on the eastern side of the Brown Ridges at 1445 hours 13 January. Twelve $1-1\frac{1}{2}$ hour tows were made east, north and west of the Brown Ridges but very few ripe female plaice were caught. The ship steamed for the

Hinder Ground at 0110 hours 15 January, following reports that good catches of female plaice had been made there. The trawl was re-rigged with large bobbins and the chains removed, but extensive trawl damage occurred again and it was decided to return to Great Yarmouth. The ship docked at 1700 hours 15 January and live fish and other material were transferred to the laboratory.

The ship left Great Yarmouth for the Moray Firth at 0,05 hours 16 January, arriving 1300 hours 17 January. Strong south-easterly winds and a heavy swell prevented fishing on Smith Bank as planned, but after a preliminary echo survey, 5 tows were made close in to the southern bank of the Firth. Only 2 female plaice were caught but lemon soles and dab were plentiful. After a slight moderation in both wind and swell, the ship steamed for Smith Bank at 1730 hours 18 January. Five tows were made to the south-west of the bank and a few female plaice were caught - these appeared to be concentrated between the 30 and 40 fathom lines. With freshening southerly winds the ship returned to the lee of the southern shore of the Firth and after one more tow, steamed for Grimsby at 2130 hours 19 January, arriving 0730 hours 21 January.

RESULTS

All aims were achieved except Aim 3 which was abandoned due to the scarcity of female plaice - only the minimum required number of plaice was obtained and these were returned to the laboratory.

C E Purdom 3 February 1970

SEEN IN DRAFT: JE MB (Master)

W J S (Fishing Skipper)

INITIALLED: H A C

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