## Not to be quoted without reference to the writer

## R V ERNEST HOLT

# Report for Cruise 11a/1969

<u>Duration</u>: 1 - 5 December

Staff: C E Purdom

P Scholes

L Emerson

P Walker

P A Gedge

## <u>Aims</u>

 $\int_{\mathbb{R}^2} g H_{k} \simeq \frac{1}{\sqrt{2}} g$ 

- 1. To collect live plaice for genetic and hatchery use.
- 2. To collect pituitary glands from mature cod.
- 3. To attempt pituitary-induced spawning of plaice at sea.
- 4. To collect offshore water for the laboratory.
- 5. To make chromosome preparations of cod, whiting and other gadoids.
- 6. To collect live soles (smallish) for Mr Bromley.
- 7. To collect blood samples (20 per station) for Dr Jamieson.
- 8. To collect shell glands from rays (thornback and spotted), 2 per station, for Mr Holden.
- 9. To collect herring eggs if available for Mr Wallace.
- 10. To deep freeze mackerel for Mr Bolster.
- 11. To collect dogfish serum for Professor Alexander.

## Narrative

The scientific crew joined the ship at 2000 hours on 30 November.

R V ERNEST HOLT sailed at 1015 hours, 1 December, to fish the Flamborough Off grounds. Trawling began at 1550 hours. Plaice were sparse, but sufficient fish were obtained after six 1-1½ hour trawls and at 0250 hours, 2 December, the ship sailed for the Silver Pits. Fishing commenced at 0945 hours but only about a dozen suitable plaice were caught during seven 1½ hour trawls. Cod were more plentiful and blood samples (for Dr Jamieson) and cod pituitaries were collected. In view of the excessive time spent on the Silver Pits, and the lack of good plaice catches, it was decided to leave the Borkum stations until the next cruise. The ship therefore proceeded to Smiths Knoll, steaming at 2400 hours, 2 December.

At Smiths KnollR V ERNEST HOLT was joined by R V CLIONE for ARL Scanner trials. Trawling began at 0920 hours, 3 December, and continued until 2010 hours. Plaice were again scarce but good catches were made of cod and large haddock. Blood samples and pituitaries were collected as before, and shell glands from Raja clavata and R. montagui for Mr Holden.

The ship steamed south at 2200 hours, 3 December, to fish the Outer Gabbard. Trawling began at 0800 hours the next day, but damage occurred to the trawl on the second and third tows and fishing grounds were changed again, this time to smoother grounds about 10 miles north of the Outer Gabbard and outside the 20 fathom line. Trawling began at 1955 hours and continued until 0147 hours, 5 December, after which the ship steamed for Gt Yarmouth, docking at 0710 hours. Plaice catches were better on this ground but the occurrence of large amounts of 'scruff' left few fish undamaged.

#### Results

Aims 1, 2, 4 and 5 were completed with the exception of the collection of fish from the P. Buoys. Aim 3 was not attempted due to the scarcity of fish and pituitary material in the early days of the cruise. 90 cod blood samples were collected for Dr Jamieson and shell glands from four rays for Mr Holden. Spurdog serum was collected for Professor Alexander.

C E Purdom 9 December 1969

Seen in draft: EAB AJL

### Distribution

Basic list, plus the following:-

### Scientific staff on cruise

Mr L Emerson

Mr P Walker

Mr P A Gedge