

Miss Howard

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

1970 RESEARCH VESSEL PROGRAMME

REPORT: RV CLIONE: CRUISE 2

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

STAFF

C T Macer
P Winslade
B H Holford

DURATION

Left Lowestoft 1430 hours 13 January

Arrived Lowestoft 0900 hours 20 January

All times are British Standard Time

LOCALITY

North Sea

AIMS

1. To collect specimens of *Ammodytes marinus* in spawning condition and return them live to the laboratory.
2. To test the reactions of sand eels to light by using underwater television equipment.
3. To measure the following environmental factors at the sea bed for comparison with laboratory conditions: light, turbidity, temperature.

NARRATIVE

CLIONE sailed at 1430 hours, 13 January and set course for the Outer Dowsing. Trawling commenced the following day when six one-hour hauls were made; each of these yielded about 1 basket of mixed fish, chiefly sprat, herring and dabs, with very few sand eels. An overnight move was made to the Haddock Bank but five one-hour tows produced no mature sand eels, so it was decided to return to the Outer Dowsing. Here, during the evening of 15 January, the television equipment was tried out but this proved unsuccessful due to a heavy swell and freshening south-easterly winds, which prevented work on 16 January. Trawling was resumed on 17 January when five hauls produced about 80 sand eels, some of which were ripe, but strong south-easterly winds again prevented work in the shoal water on 18 January. On 19 January, a moderation in the weather allowed five more trawl hauls to be made, which produced about 100 sand eels, and observations were also made with the underwater photometer and thermister. CLIONE then left for Lowestoft at 1800 hours and berthed the following morning at 0900 hours.

RESULTS

1. As is usual in winter catches of sand eels were very small. Unfortunately, spawning had almost finished, with only about 5% of the fish being ripe and the rest spent or recovering. However, it is hoped that sufficient ripe fish have been obtained.

Artificial fertilisations were performed twice, using fish which were damaged or would not have survived transportation to the laboratory.

2. This experiment could not be carried out due to the persistent heavy swell.

3. No observations were made on turbidity due to lack of time but successful observations were made on light penetration and temperature. The latter was the same at surface and bottom (10 fathoms) at the Outer Dowsing (5.4°C).

4. Samples of deep frozen sprat and herring were brought back.

C T Macer

26.1.70

SEEN IN DRAFT: M R Sutcliffe (Master)

A H B (Fishing Skipper)

INITIALLED: H A C

DISTRIBUTION

Basic List

C T Macer

P Winslade

B H Holford