

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

1973 RESEARCH VESSEL PROGRAMME

REPORT: R V CLIONE: CRUISE 8

STAFF

A Jones
P Scholes
BR Howell
SJ Lockwood
M Htun Han (Burma)
JR Leppington-Clark (NERC student)

DURATION

Left Lowestoft 1325 hours 8 May
Arrived Lowestoft 0912 hours 18 May
All times are Greenwich Mean Time

LOCALITY

Middle North Sea

AIMS

1. To collect mature turbot and return them live to the laboratory
2. To artificially fertilise turbot eggs at sea, returning live eggs to the laboratory
3. To collect turbot and brill gills and guts for parasite studies
4. To collect live plaice and dabs
5. To examine the relationship between chlorophyll; phaeopigment ratios and the standing stock of herbivorous zooplankton
6. To collect heads and gonads of dabs and plaice for histological examination. To collect pituitaries from dabs, plaice and cod.
7. To collect small fish as food for laboratory stocks of turbot and halibut

NARRATIVE

CLIONE left Lowestoft at 1325 hours 8 May and proceeded to the first tin tow net (TTN) station 11 miles North of the Brown Ridge, carrying out TTN calibrations on route. The TTN grid was started at 2032 hours but at 1433 hours 9 May, after 18 stations had been completed, CLIONE had to steam to Don Helder to land one of the ships officers because of a family bereavement. CLIONE left Don Helder at 2248 hours 9 May, and in view of the time lost, it was decided to abandon the remaining 7 TTN stations and proceed to the Cleaver Bank to commence trawling for turbot. CLIONE began fishing on the Cleaver Bank at 0930 hours 10 May but few turbot were caught and so the ship steamed overnight to a new ground to the South-East of the Middle Rough.

Fishing on this ground was delayed because of strong westerly winds, and the trawl was not shot until 1234 hours 11 May. On hauling, the codend was found to be full of weed and sand and after several attempts to haul it inboard, during which a Jiltson hook was straightened and the Jiltson wire parted, it was decided to cut the codend free and abandon it. CLIONE then proceeded to an area to the west of the Middle Rough and started fishing at 0525 hours 12 May. Good catches of turbot were made on this ground, but no ripe females were taken and so a decision was made to explore more southerly grounds and at 2156 hours CLIONE steamed overnight to the Hospital Ground. Fishing commenced at 0525 hours 15 May, but no turbot were encountered, and so at 0925 hours CLIONE steamed further south to the Silver Pits. This area was fished until 2055 hours 16 May and several turbot were caught. Having obtained sufficient numbers of live turbot CLIONE then proceeded to Mablethorpe to fish for Brill. CLIONE arrived off Mablethorpe at 0600 hours 17 May but gale force easterly winds made work impossible and so at 1700 hours CLIONE set course for Lowestoft docking at 0912 hours 18 May.

RESULTS

1. Twelve female turbot with gonads in an advanced stage of maturation were returned live to the laboratory
2. As no ripe female turbot were caught Aim 2 was not completed
3. A total of 43 turbot were caught. Guts and gills were removed from 30 turbot. Gills were fixed in 4 per cent formalin for studies on copepod parasites and guts were examined at sea for the cestode Bothriocephalus scorpii and other parasites. Living eggs and scoleces of Bothriocephalus scorpii were collected and returned to the laboratory for life cycle studies.
4. Thirty plaice and 40 dabs were returned live to the laboratory for use in Acoustic Tag work and physiological studies respectively.
5. A TTN grid of 18 stations was completed in the Southern Bight. Zooplankton and phytoplankton samples from each station were returned to the laboratory
6. Heads and gonads of dabs and plaice were collected for histological examination. Samples of dabs and plaice were deep frozen for Gonadosomatic index studies. Collection of pituitary glands was prevented because of a defective nitrogen container which allowed all the liquid nitrogen to evaporate.
7. Small gadoids were deep frozen and returned to the laboratory for use as fish food for stocks of turbot and halibut.
8. Zooplankton was collected with a 60 mpi international net and returned live to the laboratory for Mrs Howlett.

SEEN IN DRAFTJ.F.....
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DISTRIBUTION
Basic List

A Jones
24 May 1973

A Jones
P Scholes
BR Howell
SJ Lockwood
M Htun Han (Burma)
JR Leppington-Clark (NERC student)