

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

1977 RESEARCH VESSEL PROGRAMME

REPORT: RV CLIONE: 13/77

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

STAFF

P D Wallace
C L Whiting
S R Flatman
J C Rigg (Milford)
J Rees (Newlyn)

DURATION

Left Lowestoft 0830 h 13 October
Arrived Lowestoft 2100 h 31 October
All times are Greenwich Mean Time

LOCALITY

Irish Sea

AIMS

1. To carry out a trawl survey in the area between St Georges' Channel and the Calf of Man.
2. To tag young cod along the Irish coast for studies of recruitment.
3. To collect material for studies on stock separation of cod (blood samples, vertebral counts, otoliths).
4. To collect cod stomachs for Mr T Watson.
5. To collect cod for Mr Jefferies.

NARRATIVE

CLIONE left Lowestoft on 13 October and after a good passage began the first trawling station of the groundfish survey in Barnstaple Bay at 0720 h 15 October. The trawl survey was designed to carry out two replicate hauls on predominantly sandy bottoms in each of the four depth strata (0-10, 10-20, 20-50 and over 50 fathoms). Each trawl station consisted of a one hour trawl haul using the standard Granton trawl with rubber wheels in the bosom and a small mesh liner and cover on the cod end. Trawling took place only between 0630 and 1800 h. The numbers of each fish species caught in the cod end and cover were recorded and the commercially important species were measured. Length stratified samples of plaice, cod, whiting and sole were otolithed and all cod were weighed whole. All brill turbot and lemon sole were otolithed.

After completing the first station in the 0-3 mile belt in Barnstaple Bay trawling continued until 1830 h 17 October. Throughout that day the wind gradually increased from the south east so CLIONE moved throughout the night to Cardigan Bay and commenced the inshore stations in ideal weather conditions. These stations were completed by 1800 h 19 October then the ship left to carry out the trawling stations in the Bristol Channel followed by those outside the 12 mile limit off the Bristol Channel and Cardigan Bay.

CLIONE docked at Douglas at 0930 h 22 October to take on fresh water and stores and left at 0900 h 23 October. The ship then steamed to the Chickens area SW of the Isle of Man and carried out two trawling stations there in a freshening south westerly wind. Later that day after a gale warning CLIONE steamed to Redwharf Bay for shelter. By 2300 h 24 October the wind had moderated and CLIONE steamed to Arklow Bank to tag cod. Catches of cod were very poor, both east of the bank and in shallow water. The cod that were caught were found to be in poor condition for tagging and a cage was used for releasing some of the fish. Local Irish fishing vessels reported that they had abandoned cod fishing and were concentrating on catching squid.

At 1530 h 26 October gale force southerly winds prevented any further fishing and CLIONE steamed to Redwharf Bay and anchored for the night. The forecast on 27 October gave south west gales for the Irish Sea so CLIONE spent the day trawling in the 0-3, 3-6, and 6-12 mile coastal belts in the Conwy area under the lee of the land and trawling took place beyond the 12 mile limit throughout 28 October. It became increasingly apparent throughout the day that strong south westerly winds would prevail over the Irish Sea for the next few days so during the night CLIONE moved south to the Bristol Channel and began fishing in the area outside the 12 mile belt. At 1700 h an imminent south west gale was issued and as the prospect for further work in the Bristol Channel seemed unlikely CLIONE left the area and steamed round Lands End during the night. Strong south westerly winds continued throughout 30 and 31 October while on passage to Lowestoft. CLIONE docked at 2100 h 31 October.

RESULTS

1. The main part of the trawl survey along the Welsh coast and in the Bristol Channel was successfully completed.
2. Due to the scarcity and poor condition of cod caught on the Arklow Bank only 30 fish were tagged.
3. 46 samples of cod blood were taken and vertebral counts were made on all otolithed cod.
4. 57 cod stomachs were deep frozen for Mr Watson.
5. 11 cod were deep frozen for Mr Jefferies.
6. The stomach contents of all otolithed fish were examined and noted using a 10 point index of fullness. In all the numbers of fish measured and otolithed were:-

	Otoliths	Measurements
Plaice	313	1443
Whiting	270	4831
Sole	204	356
Cod	59	89
Brill	11	11
Turbot	11	11
Lemon Sole	12	12
Rays	-	489
Gurnards	88	327
Pout Whiting	19	61
Monkfish	-	2

SEEN IN DRAFT: Captain J R French
G F Lee - Fishing Skipper

INITIALED: AJL

DISTRIBUTION:

Basic List

P D Wallace

C L Whiting

S R Flatman

J C Rigg (Milford)

J Rees (Newlyn)

Dr Brander

Lancashire and Western Sea Fisheries Committee

Mr Corlett - Isle of Man