

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

1976 RESEARCH VESSEL PROGRAMME

REPORT: RV CLIONE: CRUISE 9

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

STAFF

R G Houghton (NIC)  
D J Symonds  
P D Wallace  
C N Humphreys  
C L Whiting  
R Unsworth (Fleetwood)

DURATION

Left Lowestoft 1730 h 24 May  
Arrived Lowestoft 1315 h 4 June  
All times are Greenwich Mean Time

LOCALITY

Eastern English Channel

AIMS

1. To carry out a trawl survey of demersal species in the eastern English Channel between 51°N and 2°N.
2. To tag and release plaice, soles and lemon soles caught during the trawl survey.
3. To tag and hold rays in the deck tanks in order to estimate the mortality rate of rays caught in a trawl.
4. To carry out a plankton survey for sole eggs and larvae.
5. To collect and freeze plaice and plaice viscera for analysis at the laboratory.
6. To collect live mature soles and deliver them to Lowestoft for the WFA (Hunterston) sole breeding programme.
7. To collect and freeze surplus fish for the Lowestoft Open Day.
8. To test a new pattern of flag tag on I-group whiting.

NARRATIVE

CLIONE left Lowestoft at 1730 h 24 May and sailed south to the first station of the trawl survey near the Bullock Bank. This and four more stations were completed near the Royal Sovereign and in Rye Bay on 25 May. The fishing gear was not fishing properly on the first two hauls (the doors and chains were unevenly polished and nothing was caught) and so one station was repeated and the Bullock Bank station was left to be repeated later in the cruise. Six hauls were carried out off Newhaven on 26 May; two were invalid as a result of the blinder coming open and because of cod-end damage. On 27 May four widely separated stations near Selsey Bill, the Isle of Wight, Poole Bay and in mid-Channel were carried out. CLIONE

steamed for the Bay of the Seine overnight and completed five stations on 28 May. The fourth haul contained 50 baskets of brittle stars (Ophiuroids) and 16 baskets of large pout whiting (Trisopterus luscus). Two of the five hauls on 29 May were repeats of previous stations near the English coast and the five hauls on 30 May were towards the French coast between Cap d'Antifer and Dieppe. Three hauls off Le Treport, Berck and Boulogne were completed on 31 May. Cod-end damage occurred in two hauls on the Bullock Bank and the evening was spent anchored in Rye Bay where the scientific staff angled for I-group whiting which were to be used to test the Howitt tag. On 1 June the first haul on the Bullock Bank was successful.

CLIONE steamed to the French coast and two days were spent at Quémer and Battur tagging plaice before moving to the southern North Sea during the night of 2 June. Fishing for soles took place near the Kentish Knock and also at Sizewell Bank on 3 June and the morning of 4 June before CLIONE went into Lowestoft and docked at 1315 h.

## RESULTS

1. 30 valid hauls were completed using a 78 foot headline Granton trawl rigged with a blinder, a wing tickler and a fine-ground groundrope but without bridles. Six stations had to be repeated. All fish were identified and counted; measurements were taken of plaice, soles, lemon soles, whiting, rays, dabs, poor cod and pout whiting; otoliths were taken from plaice, soles, lemon soles and whiting. 56 species of fish were caught of which the horse mackerel, poor cod, pout whiting, dabs, dragonets and gurnards were most abundant. The largest catches of most species were taken along the English coast, in mid-Channel off Newhaven and close to the French coast in the Bay of the Seine and near the mouth of the Somme. Catches on the south side of the Channel in 30 to 50 m were relatively light.
2. 40 plaice, 33 sole and 9 lemon sole were tagged during the trawl survey; these were supplemented with 163 plaice and 9 sole caught and tagged at Quémer and Battur near the mouth of the Somme.
3. 75 rays were tagged and held in the deck tanks for three days after being left on deck for 15 minutes after hauling. 15 fish or 20% of these died during the three days. 60 surviving rays were released after being held and 34 rays were tagged and released without being held.
4. The plankton survey was not carried out because there was strong evidence that the sole spawning was already over in the Channel.
5. 7 plaice samples were collected and frozen.
6. 51 living soles were delivered to Lowestoft.
7. 120 kg of whiting and 30 kg of plaice were frozen for Open Day.
8. The small Howitt flag tag was attached to 6 whiting of length range 15 to 21 cm caught by rod and line in Rye Bay; these and 6 controls were held in the deck tanks for 83 hours. One control died during this period, thus proving that small whiting could carry the tag. The 5 controls were tagged and released, with the 6 previously tagged fish, near Sizewell Bank.

R G Houghton

8 June 1976

SEEN IN DRAFT      JRF  
                         GFL

INITIALLED          AJL

DISTRIBUTION

Basic list  
R G Houghton  
D J Symonds  
P D Wallace  
C N Humphreys  
C L Whiting  
R Unsworth