

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

1990 RESEARCH VESSEL PROGRAMME

REPORT: RV CORYSTES : CRUISE 9

STAFF:

J D Riley, SIC
L Woolner
C L Whiting
P M Hudson
S Warnes
M Sherlock
E Shreeve)
N Pearson) 14-15 August only

DURATION:

Left Lowestoft 1300 hrs, 14 August
Arrived Lowestoft 0300 hrs, 29 August

All times are GMT

LOCALITY:

Eastern English Channel, southern North Sea

AIMS:

1. To measure the distribution and abundance of commercial flatfish species by means of a beam trawl survey as part of an ICES coordinated programme covering Divisions IV b & c and VII d & e.
2. To collect additional biological data on sole, plaice, dab, turbot, brill and *Cancer pagurus*.
3. To describe the seabed sediment and epibenthos using photographic and acoustic methods.
4. To produce cooperative gear efficiency indices between the 4 m standard heavy DFR beam trawl and the 8 m beam trawl used by the Belgian and Netherlands Fisheries Institutes, on the joint survey.
5. Carry out further equipment trials on the sector scanner.
6. Collect a variety of live and frozen fish for research purposes.

NARRATIVE:

On leaving Lowestoft, sector scanner trials commenced and were completed during the steam to the first fishing station off South Foreland. Beam trawling continued along the English coast and Messrs Shreeve and Pearson were put ashore at Dover. At dawn on 16 August the fishing at stations along the French coast commenced off Cap Griz Nez and proceeded southwards. On 21 August sampling on the French coast was completed except for four stations within the 3 mile zone for which permission to fish was withdrawn at the last minute. A preliminary survey of flatfish in Baie de St Michel (VIIe) was inhibited for the same reason.

The survey of the English coast from west to east was carried out between 22 and 25 August. The revised rendezvous with RV BELGICA off the Humber allowed the sampling of the Belgian station on route on the 26 August.

Comparative fishing in the form of simultaneous tows with ships abeam were carried out on 27 and 28 August. RV CORYSTES set course for Lowestoft at 1500 hrs 28 August.

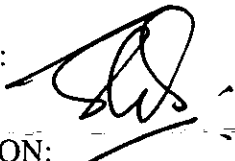
RESULTS:

1. The survey in VIId was completed except as indicated in the narrative, with no significant gear damage.
2. Fish length, weight and otoliths were collected to produce separate age length keys for the French and English coasts for plaice and sole. Dab otoliths were taken on the French coast. All turbot and brill caught were otolithed. Morphometric studies were made on sole otoliths. All *Cancer* caught were sexed and measured. High catches of small *Cancer* were caught in the sea area off the Lincolnshire and Norfolk coasts.
3. At all beam trawl stations, a camera was deployed to take still shots of the seabed every two minutes and sonar echo strengths were recorded to produce seabed hardness indices.
4. Twelve pairs of simultaneous tows were completed with RV BELGICA and 4 stations were sampled by RV CORYSTES which will be duplicated by RV BELGICA within a week.
5. The sector scanner trials were completed satisfactorily.
6. The following were returned to the laboratory:
 - a. frozen flounders (Rectangle 31F1) for Mr Franklin (AEP2).
 - b. 12 large spider crabs for Cambridge University.
 - c. live sole for Mr Witthames (FSM3).
 - d. live tub gurnards for Bristol University.
 - e. live large oysters - Shellfish group.
 - f. selection of epibenthic invertebrates for UEA and London Zoo.
 - g. live male short snouted seahorse (*Hippocampus hippocampus*) with brood of larvae, said to be exceptionally rare in northern European waters.

John D Riley
3 September 1990

SEEN IN DRAFT
M J W
R G

INITIALLED:



DISTRIBUTION:

Basic List +
J D Riley
L Woolner
C L Whiting
P M Hudson
S Warnes
M Sherlock
E Shreeve
N Pearson

R de Clerck, Oostende, Belgium
A Rijnsdorp, IJmuiden, Netherlands
M Giret, Ouistreham, France
A Souplet, Boulogne, France

CRUISE TRACK. 4M. BEAM TRAWL STATIONS. CORYSTES 9/90

SHOWING :
CRUISE TRACK
STATION NUMBER

+ Comparative fishing in
ICES rectangles 35 FO

