

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

1991 RESEARCH VESSEL PROGRAMME

REPORT : RV CORYSTES Cruise 5b

STAFF : J H Nichols  
C L Whiting  
P M Hudson  
Mrs G M Haynes  
Miss L Emerson  
Miss R T Harrop

DURATION : 16-22 May 1991

AIMS:

1. To carry out a plankton survey using a 76cm high speed tow net to determine:
  - a) the distribution, abundance and production of sole eggs as part of the ICES coordinated programme to estimate the female sole spawning stock biomass in divisions IVb and c and VIId and e.
  - b) the distribution and abundance of the planktonic stages of crab (*Cancer pagurus*), spider crab (*Maia squinado*) and bass (*Dicentrarchus labrax*) and other ichthyoplankton as time allows.
2. To study the vertical distribution of crab larvae using the LHRP system.

NARRATIVE:

RV CORYSTES sailed from Lowestoft at 1000h 16 May and steamed direct to the first plankton sampling station off Southwold. The survey began at 1200h and after completion of 9 stations in the southern North Sea and Thames Estuary, continued into the eastern English Channel. The survey progressed well, in good weather, along the English south coast to longitude 2°W and across to the Bay of the Seine. Very poor visibility was then experienced on two consecutive nights, 19/20 and 20/21 May, as stations were worked back north-eastwards in the French EEZ. The survey was completed in the Dover Strait at 1415h 21 May. Twelve additional stations in the southern North Sea were completed 40nm off Orford at 0620h 22 May. RV CORYSTES then steamed to Lowestoft docking there at 1510h on the same day.

RESULTS:

1. A total of 57 hauls was completed in VIID and 14 in IVC using the 76cm HSTN (Fig 1). Severe clogging with *Phaeocystis* occurred throughout most of the eastern English Channel east of the Greenwich meridian. A 600µm mesh (diagonal aperture size) was used for all sampling in this area and in the two southernmost rows of IVC. Some clogging also occurred in the Bay of the Seine but this was mainly caused by zooplankton, in particular *Oikopleura* spp. Shipboard sorting for most of these samples proved impractical, therefore little information on the distribution of the target species is available at this time. Small numbers of sole eggs were noted along the English south coast and in the Bay of the Somme. The highest numbers appeared to be in the Thames Estuary at the station off the Oaze. Large numbers of recently spawned pilchard eggs were noted at two stations in the Bay of the Seine. During these tows dense midwater traces were observed on the conning room colour sounder.

At the end of cruise twelve additional samples were taken in the southern North Sea at positions sampled a few days earlier by RV TRIDENS (RIVO). These should provide useful comparisons of results. Severe clogging with *Phaeocystis* meant that the 600µm mesh had to be used for these stations.

2. With the dense *Phaeocystis* in the eastern Channel, resulting in severe clogging of 270µm mesh, conditions were unsuitable for using the LHPR system.

J H Nichols  
22 May 1991

SEEN IN DRAFT : M J Wilcock (Captain)  
R Graham (Senior Fishing Mate)

INITIALLED : G P A, J G S

DISTRIBUTION :

Basic list+

Staff on cruise+

R de Clerk, Belgium

M Giret, IFREMER, France

A Rijnsdorp, RIVO, Netherlands

DI's: SE, SW and E

Sea Fisheries Committees: Kent and Essex, Sussex, Southern

CORYSTES 5B/91

SHOWING :  
CRUISE TRACK  
STATION NUMBER

COASTLINE

