

**THE CENTRE FOR ENVIRONMENT, FISHERIES AND AQUACULTURE SCIENCE,  
LOWESTOFT LABORATORY, LOWESTOFT, SUFFOLK, NR33 0HT**

**2005 RESEARCH VESSEL PROGRAMME**

PROGRAMME: RV CEFAS ENDEAVOUR 17/05      Defra research contract M0229

STAFF:      Mike Smith (SIC)                      Dave Palmer (2IC)  
                Peter Walker                      Dave Brown (CRP)  
                Derek Eaton                      Kevin Sullivan

DURATION: 24 October – 4 November 2005

LOCATION: Western English Channel (VIIe)

AIMS:

1. To carry out a survey of scallops (*Pecten maximus*) in an area of the western English Channel (VIIe) to quantify sampling and spatial variability of scallop size and age structures in dredge catches.
2. To characterise sediment types at scallop survey stations using a remote acoustic seabed discrimination system (swathe bathymetry & QTC).
3. To collect data on fish by-catch and epibenthos in scallop dredges.

ADDITIONAL AIMS:

4. To collect and preserve samples of edible crab tissue for genetic studies to be carried out under contract C2298.
5. To collect water samples from the ships supply for the Defra funded AE001 project (Provision of Advice in Relation to Radiological Matters). Two x 25 litre carboys (for <sup>137</sup>Cs analysis) and one x 1 litre polybottle (for <sup>3</sup>H analysis) with seawater from the ships supply will be collected at each of 10 stations.

PLAN:

CEFAS ENDEAVOUR will sail from Lowestoft on the morning tide (01.09) of Monday 24<sup>th</sup> October and proceed to the start of the scallop dredge survey grid in the western English Channel. On completion of the survey, CEFAS ENDEAVOUR will return to Lowestoft for the evening tide (22.50) on Friday 4<sup>th</sup> November.

Scallop samples will be taken using two gangs of four standard Newhaven dredges towed for 20 minutes. The preliminary sampling plan is for a grid of 106 stations in the western Channel, with an average separation of 7 nautical miles. Station positions have been adjusted to avoid potting zones. Further adjustments to avoid underwater obstacles etc. will be made as necessary. Replicate dredge samples will be taken at a subset of stations as time allows.

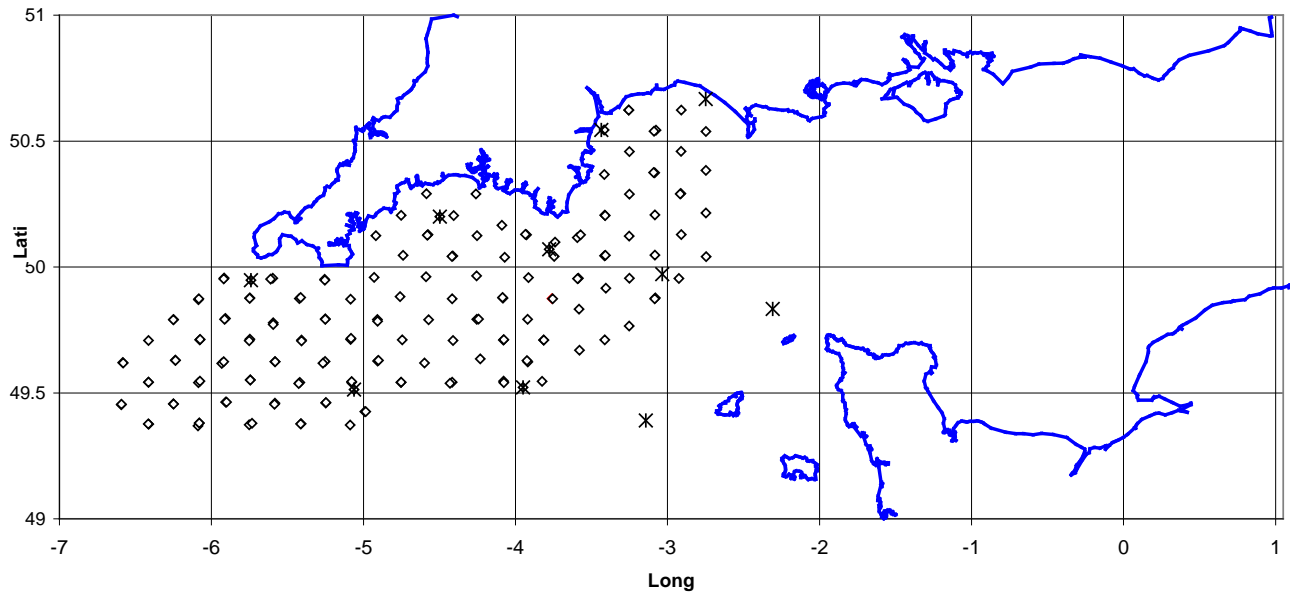
Last year's survey achieved a sampling rate of around 12.5 stations per day, including replicates at 54% of stations. This year's survey duration has been reduced by 2 days to accommodate rescheduling of the North Sea Groundfish Survey resulting in a maximum of <10 days survey time on station. To maintain the existing

sampling grid a reduction in the percentage of stations replicated to around 18% is required. Alternatively, a small number of lower priority stations (identified from last year's results) may be omitted in order to increase the level of replication.

#### PRELIMINARY SAMPLING PLAN:

Diamonds scallop survey, asterisks water samples

CEFAS Endeavour 17- 05 sampling plan



Sampling will be undertaken for 18 hours per day, nominally 0600-2400 BST. A watch system will be worked, with three scientific staff each working two 4.5hr watches per day.

M T Smith  
29 September 2005

INITIALLED: JTA

#### DISTRIBUTION:

Basic List +  
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