

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

2006 RESEARCH VESSEL PROGRAMME

PROGRAMME: RV CEFAS ENDEAVOUR: SURVEY 15

STAFF:

Part A

B Harley (SIC)
N Taylor(2IC)
J Keable
R Humphreys
K Warr
M Eade
L Cox

S Mackinson

Part B

B Harley (SIC)
N Taylor (2IC)
J Keable
R Humphreys
G Engelhard
J Pettigrew
G Padda

J van der Kooji
K Warr

DURATION: Part A: 12 August – 28 August
Part B: 29 August – 14 September

LOCATION: North Sea

AIMS:

1. To carry out a groundfish survey of the North Sea as part of the ICES coordinated IBTS, using a standard GOV trawl in order to obtain information on:
 - a) Distribution, size composition and abundance of all fish species caught.
 - b) Age – length distribution of selected species.
 - c) Distribution of fish in relation to their environment.
 - d) Distribution of macrobenthos and anthropogenic debris.
 - e) Surface and bottom temperature and salinity data using CTD.
 - f) Length weight & maturity information using individual fish measurements, in support of the EU Data Regulation.
2. To collect acoustic data at two operating frequencies (38 kHz and 120 kHz) continuously throughout the cruise. Data recorded from the 38 kHz transducer will be combined with GOV trawl data and an estimate of total abundance made for roundfish species. This work will form part of a three year project (CATEFA) aimed at examining the relationships between trawl catches and acoustic data.

3. To trial new equipment, EM3002, collecting acoustic data for 3D presentation of fish in the water column. To calibrate the echo sounders at a convenient place during the survey.
4. To collect fish white muscle and queen scallop tissue for stable isotope analysis, as part of an ongoing study on the effects of fishing in the North Sea (S Jennings, CEFAS Lowestoft).
5. To carry out 6 hard ground tows of the NE coast using the modified rock-hopper GOV.

PLAN:

Provisionally RV CEFAS Endeavour will sail from Lowestoft on the morning tide (1100h UTC approx) on 12 August. Staff changes will take place in Aberdeen. Calibration of the echo sounders will take place at a suitable location when time permits. The hard ground tows of the NE coast will be carried out at the end of the survey and CEFAS Endeavour will return to Lowestoft and dock on the 14 September.

GEAR:

List distributed separately and marked to relevant individuals for action. J van der Kooij to arrange gear requirements in relation to aim 2 and 3 and S Jennings for aim 4.

B Harley
26 July 2006

DISTRIBUTION:

Basic list +

B Harley	N Taylor
J Keable	R Humphreys
K Warr	G Engelhard
M Eade	J Pettigrew
L Cox	G Padda
S Mackinson	J van der Kooji