

CENTRE FOR ENVIRONMENT, FISHERIES AND AQUACULTURE SCIENCE,  
LOWESTOFT LABORATORY, LOWESTOFT, SUFFOLK, NR33 OHT, UK

2005 RESEARCH VESSEL PROGRAMME

PROGRAMME: RV ENDEAVOUR: CRUISE 11/05

STAFF: Tracy Dinmore (SIC)  
Simon Jennings (2IC)  
Julia Blanchard  
Nick Dulvy  
Matt Eade  
Paul Eastwood  
Natasha Taylor

DURATION: 12 July- 17 July 2005

LOCALITY: North Sea (ICES IVb)

AIMS:

The aim of this work is to describe the effects of fishing and the environment on production and food web structure during a seasonal production cycle. This is the third of five related cruises that have been scheduled for this purpose. The data collected will be used to parameterise size-based food web models and to describe how seasonal patterns of energy flow affect indicators of fisheries impacts on trophic structure, biomass and production.

The study will focus on the Silver Pit region of the central North Sea and the following work will be conducted:

- (1) Analysis of spatial and temporal variation in carbon and nitrogen stable isotope ratios close to the base of marine food chains (filter feeding infauna and zooplankton).
- (2) Analysis of relationships between body size, energy content and trophic level (from nitrogen stable isotope analysis) in space and time for zooplankton, benthic invertebrate and fish communities.
- (3) Analysis of relationships between body size and production for zooplankton, benthic invertebrate and fish communities.

PLAN:

RV ENDEAVOUR will sail from Lowestoft on 12 July 2005. She will work in ICES area IVb (UK waters only) throughout the cruise and will dock at Lowestoft on the 17 July 2005

Tracy Dinmore  
Scientist in Charge  
7 June 2005

INITIALLED:

(E.C.E. Potter, FB SAH)

**DISTRIBUTION:**

Basic List +

Tracy Dinmore (SIC)

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SIGS

Fishing skipper: Endeavour

Eastern SFC

North Eastern SFC