

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

## 2006 RESEARCH VESSEL PROGRAMME

PROGRAMME: RV ENDEAVOUR: CRUISE 4/06

STAFF: Tracy Maxwell (SIC)  
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Chris Firmin  
Nick Dulvy  
Julia Blanchard  
Mike Shaw  
Emma Lane

DURATION: 10 February – 18 February 2006

LOCALITY: North Sea (ICES IVb)

### AIMS:

The aim of this work is to describe the effects of fishing and environment on production and food web structure during a seasonal production cycle. This is the final cruise of a series of six related cruises that have been scheduled for this purpose (the previous five were successfully completed in 2005). 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 10/2/06. She will work in ICES area IVb (UK waters only) throughout the cruise and will dock at Lowestoft on 18/2/06.

Tracy Maxwell  
Scientist in Charge  
16/1/06

INITIALLED:

Bill Camplin by email 16/1/6

DISTRIBUTION:

Basic List +

Tracy Maxwell (SIC)

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SIGS

Fishing skipper: Endeavour

Eastern SFC

North Eastern SFC