

CENTRE FOR ENVIRONMENT, FISHERIES AND AQUACULTURE SCIENCE,  
LOWESTOFT, SUFFOLK, ENGLAND

DRAFT 2008 RESEARCH VESSEL PROGRAMME

PROGRAMME: RV Endeavour: CRUISE 08/08

STAFF:

Dave Sivyer (SIC) (CEFAS)	
Neil Needham (CEFAS)	Elke Neubacher (Queen Mary College)
Naomi Greenwood (CEFAS)	Rachel Helsby (Partrac)
Keith Weston (UEA)	Kevin Black (Partac)
Chris Wood (University of Southampton)	Adam Hamilton (?)
Fay Couceiro (Portsmouth Uni)	
Gary Fones (Portsmouth Uni)	

DURATION: 6 days.

Approx Sailing Time 03:00 Wednesday 10th September

Approx Docking Time 22:00 Monday 15th September

LOCALITY: Southern Bight and Central North Sea, Dogger Bank region

Background: This is the 9th cruise of a series of cruises that form an essential part of a project addressing the source, cycling and fate of nutrients (i.e. carbon, nitrogen, silicon, oxygen) in UK Shelf Seas, specifically the North Sea. It will examine the relative importance of the various ecosystem components, their degree of connectivity and their susceptibility to change due to environmental or human pressures. The project combines an intensive observational programme in the North Sea, with model development and operation. Three representative sites have been selected for detailed process studies of pelagic (water column) and benthic (seabed) food webs, with horizontal and vertical spatial sampling over a broader area being achieved using a variety of towed instruments, and the temporal range being extended using autonomous buoys and bottom landers. These cruises have significant involvement from partners, through the existing University links but also through the NERC collaborations and through NIOZ.

**Specific cruise AIMS (not in priority order)**

1. Recover lander at Sean Gas Field
2. Recover the SmartBuoy and lander at the north dogger site.
3. Deploy sediment flume instrument for resuspension studies
4. Perform scanfish tows North of the Dogger Bank to give context for productivity
5. CTD casts for Primary productivity estimates and deck incubations.
6. Collect Plankton samples for species composition using vertical nets
7. Deployment of SPI camera
8. Collect core profiles, of nutrients, oxygen, chl-a. (NIOZ corer) and sediment profiles.

PLAN (all times GMT) however, work will vary and all timings are approximate and liable to change:

Weather permitting Endeavour will sail at approximately 03:00 (GMT) on 21st April and head for the Sean Gas Field site. Work will commence here as soon as we arrive with a CTD cast then recover the lander. Then passage to the North Dogger area with a scanfish section starting on the Dogger Bank running north for approx 16 hrs (112 nm). Surface samples collected en-route for calibration. Return to North Dogger main site via CTD stations. Recover SmartBuoy and lander. CTD and coring will take place at 6 sites in the local area.

It is intended to dock at Lowestoft at around 22:00 on Monday 15th September

Dave Sivyer  
(Scientist-in-Charge)

1 Sep 2008

DISTRIBUTION:  
BASIC LIST+ all those on cruise.