

CENTRE FOR ENVIRONMENT, FISHERIES AND AQUACULTURE SCIENCE  
BURNHAM ON CROUCH LABORATORY, BURNHAM ON CROUCH, ESSEX.

2007 RESEARCH VESSEL REPORT

SURVEY REPORT CEnd 12/07

Part A (25/05/07 – 05/05/07)

Staff

Paul Whomersley (SIC)  
David Limpenny  
Michaela Schratzberger  
Jackie Eggleton  
Sue Ware  
Caroline Limpenny  
Claire Mason  
Lucy Brooks  
Hayley Saffen  
Matthew Curtis  
Koen Vanstaen  
Nigel Lyman  
Bill Meadows

CEFAS Endeavour sailed from Lowestoft 25/05/07 at 18:00 and proceeded to a multibeam calibration station east of Lowestoft. After the calibration procedure was completed we began sampling the CSEMP Anglia pilot (NMMP re-design) stations on the morning of the 26/05/07(Aim 1).

On completion of these stations we began work at Area 408 restoration project (Aim 2). Thirty Hamon grabs from within the South reference, control and treatment box were collected. On completion of these 30 grabs a camera tow using the camera sledge was undertaken to visually investigate the effects of gravel seeding within the treatment box. Bad weather prevented the completion of this survey and resulted in us transiting back inshore arriving at the Humber Modiolus station on the 27/05/07.

On arrival we carried out a Modiolus survey using scallop dredgers (Aim 6). After three tows no Modiolus were collected so no further tows were carried out. Following this survey we steamed north to begin work at the Tees disposal site (Aim 5). Due to the persisting bad weather a Shipek Grab survey for contaminants at Scarborough Rock disposal site was dropped from the cruise program. Work did not begin until 28/05/07 when we commenced the Day Grab survey at the Tees disposal site. Following this a 100 % coverage Multibeam survey was carried out.

Several Day Grab surveys and a SPI survey (Souter Point) were then carried out at the historic sewage sludge disposal site (Aim 4) and several dredge disposal sites situated on northeast coast (Aim 5) (29/05/07-31/05/07. These included Blyth, Souter Point and North Tyne. We then headed back offshore to collect samples from NMMP 285 and

345(Aim 3). On completing surveys at these two stations we returned to Area 408 to finish the Hamon Grab survey within the North and West Reference boxes.

Returning inshore (02/06/07) a further two NMMP stations (376 and 386 Aim 3) were sampled before resuming work on the CSEMP Anglia Pilot survey (Aim 1). Progressing south we collected samples from Cross Sands Environmental Assessment Reference Stations (EARS) (Aim 7). and also took opportunistic water samples associated with an algal bloom. A further NMMP station was collected and Hamon grab surveys carried out at Area 222 (Aim 2) and Roughs Tower (Aim 5). The crew change took place on 04/06/07 over a 24-hour period to allow the camera sledge, which had been badly damaged during the bad weather to be repaired.

Part B 05/06/07- 14/0607

#### Staff

Keith Cooper (SIC)  
Paul Whomersley  
Sue Ware  
Matthew Curtis  
Nigel Lyman  
Koen Vanstaen  
Markus Diesing  
Chris Barrio Frojan  
Annie Brown  
Greta Levins  
Clare Jackson

Cefas Endeavour set sail at 10:00 on Tuesday 5<sup>th</sup> June and immediately headed south to the Thames estuary, where sampling was carried out at NMMP 466 (Aim 3) and a number of CSEMP stations (Aim 1). On completion of this work, in the early hours of Wednesday morning, the ship headed into the eastern English Channel in order to sample NMMP 484 off Dungeness (Aim 3), and the Environmental Assessment Reference Stations (EARS) to the east of the Isle of Wight (Aim 7). The ship then continued west along the English Channel, carrying out work at Swanage Bay (Aim 5) in the early hours of the 7<sup>th</sup> June and later at NMMP 575 (Aim 3) in Lyme Bay, finally arriving at the Rame Head disposal site in the evening. Work continued on the grab sampling in this area (Rame Head 2007, Aim 5 and NMMP 575, Aim 3) until midnight, at which time the grabbing operation stopped and Endeavour undertook a 100% multibeam survey of the disposal site and adjacent area. On completion of this survey the following morning, Dr Keith Hiscock, together with two colleagues from the Marine Biological Association, meet the ship, arriving on an MBA launch. All three persons came aboard and, following a safety briefing, observed sampling during the Rame Head survey. In addition, the MBA launch was used for the collection of a sample at an inshore shallow water station. Around midday, the MBA party left the ship to return to Plymouth. Following this, the Rame Head survey was completed, with the ship finally left the site at 20:00. The ship then steamed to the Lantic Bay disposal site off Fowey, where a number of sediment samples, for later analysis of contaminants, were collected (Aim 5). Overnight the ship steamed round into the Bristol Channel to commence work at the first of 25 Irish Sea Benthos (ISB) stations (Aim 8). On the way, 2 separate single line sidescan sonar

surveys were undertaken off the Lizard and Lands end in order to provide some initial data in preparation for full surveys to be carried out on C End 15/05. Cefas Endeavour arrived at the first ISB station around 09:00 on the 9<sup>th</sup> June. Following completion of the work at this, and a further 2 ISB sites the ship steamed to NMMP 605 (Aim 3). Over the next four days the ship completed all the stations within the ISB survey, working up through the Irish Sea to the Isle of Arran and back down into Swansea Bay, where the final ISB station and the Swansea Bay dredged material disposal site (Aim 5) were sampled. The ship finally docked in Swansea on the 14<sup>th</sup> June at 17:00.

**INITIALLED:**

P Whomersley

13/08/07

**DISTRIBUTION:**

All scientific cruise personnel +

M Waldock

S Malcolm

L Murray

D Morris

J Hunt

R Jolliffe

R Law

C Kelly

H Rees

C Vivian

J Thain

J Rees

D Sivyer

J Jones

