

**DEPARTMENT FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS.  
CEFAS LOWESTOFT LABORATORY, LOWESTOFT, SUFFOLK, ENGLAND.**

**2004 RESEARCH VESSEL, PROGRAMME.**

**PROGRAMME: RV ENDEAVOUR; CRUISE 7/04.**

<b>STAFF:</b>	<b>Part A</b>	<b>Part B</b>
	J Thain (SIC)	J Thain (SIC)
	J Jones	J Jones
	E Garnacho	E Garnacho
	P Roberts	P Roberts
	W Reynolds	B Lyons (Lowestoft)
	S Feist (Weymouth)	G Stentiford (Weymouth)
	J Bignall (Weymouth)	K Bateman (Weymouth)
	S Lincoln	A Kenny
	L Clarke	J Harries
	F Goodsir (Lowestoft)	S Brooks
	P Martin (Weymouth)	

All staff from Burnham Laboratory unless indicated otherwise.

**DURATION:**

21<sup>st</sup> June to 12<sup>th</sup> July, 2004.

**LOCATION:**

North Sea, Irish Sea, Clyde, Celtic Sea and English Channel.

**AIMS:**

1. To collect samples of demersal fish for chemical analysis from the North Sea, Eastern English Channel and Irish Sea in support of UK National Marine Monitoring Programme (NMMP).
2. To collect water samples for NMMP biological effects studies and to deploy fractionation / bioassay techniques on water samples from offshore and near shore/estuarine locations.
3. To collect fish samples at NMMP sites, for fish disease and genetic toxicological analysis (e.g. DNA adducts).
4. To further investigate the use of appropriate biochemical, cytochemical and other biological techniques in support of NMMP.

5. To sample representative offshore NMMP locations using grab, core, and trawl for trace metal contaminants, PAHs and other organic contaminants (including nonylphenols, flame retardants and HCs) and the benthic fauna.

6. To collect biota for determination of imposex and TBT analysis, and sediment for TBT analysis from shipping lanes, anchorages and reference sites in support of OSPAR requirements.

**PLAN:**

*RV ENDEAVOUR* will sail from Swansea on the evening tide of 21<sup>st</sup> June and sail to Cardigan Bay and take samples under aims 2, 4 and 6 and trawl for fish under aims 1 and 3. Further sampling will take place at NMMP stations at Red Wharf Bay, Liverpool Bay, Morcambe Bay and Dundrum Bay and at anchorages and shipping lanes in the Irish Sea for aim 7. *ENDEAVOUR* will then sail to the South coast taking samples *en route* at Celtic Deep and Lyme Bay under aims 1 and 3 and TBT samples for aim 6 at representative anchorages and shipping lanes. On approximately the 1<sup>st</sup> July *ENDEAVOUR* will dock at Weymouth for a change over of staff and equipment. After leaving Weymouth *ENDEAVOUR* will sail to Rye Bay and trawl for fish under aims 1 to 5. After completing this work *ENDEAVOUR* will sail through the Dover Straits to the NMMP stations at Thames Warp and Gabbard and take samples for aims 1,2 and 6. On completion of this work *ENDEAVOUR* will sail north. Further samples of water, fish and sediments will be taken under aims 1 to 6 as *ENDEAVOUR* steams to the Central North Sea, Dogger Bank, North East Coast and NMMP stations in the Humber and Wash. *ENDEAVOUR* will then sail to Lowestoft to dock on the 12<sup>th</sup> July. Water samples for aims 2 and 6 using the ships Jet Boat will be taken as and when conditions are suitable eg Southampton Water, Tees and Milford Haven.

Change of scientist to take place at Weymouth on 1<sup>st</sup> or 2<sup>nd</sup> of July.

**GEAR:**

**Endeavour 7/04 Gear List**

1. 2 x Agasis trawls + spare nets
2. 2 x Simon Jennings type 2m Beam Trawl + spare nets
3. 2 x Burnham (Our type) 2m Beam Trawl with 2 spare nets and spare beams - from Burnham.
4. 2 x 3m beam trawls with cod end liners and spare net.
5. Granton Trawl with cod end liner plus spare trawl and spare net
6. Small Portuguese Trawl + spare net if available (may be required for cod fishing in Northern North Sea)

7. Fish processing tables
8. Reineck Corer and ancillary equipment
9. Rock dredge with chain link bag
10. Two Day Grabs (plus a length of rope between warp and grab to avoid contamination).
11. 2 set of Scallop Dredges with beam and spares – Jet Boat for estuary and “away from boat” work (Approx 5 estuaries)
12. 2 x Hand-held VHF Radios

All other gear from Burnham Laboratory.

John Thain (Scientist In Charge)  
31<sup>st</sup> May 2004

**INITIALLED:** Draft seen by AE002 contract leader

**DISTRIBUTION:**

Basic list: +

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