

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

2009 RESEARCH VESSEL, PROGRAMME

PROGRAMME: RV ENDEAVOUR; CRUISE 10B / 09

DRAFT

STAFF:

Part A	Part B
J Thain	J Thain
B Lyons	B Lyons
J Bignell	J Bignell
K Bateman	G Stentiford
T Hill	M Green
F Goodsir (Lwt)	F Goodsir (Lwt)
T Maes (Lwt)	T Maes (Lwt)
M Nocolas (Lwt)	M Nicolas (Lwt)
T Bean	R Hicks
P Whomersley (Lwt)	P Whomersley (Lwt)
Paul another (Lwt)	Paul another (Lwt)
Leyla Defra	Michelle Giltrap (Eire)

All staff from Weymouth Laboratory unless indicated otherwise.

DURATION: 21st June – 10th July 2009

LOCATION: Clyde, North Sea and English Channel and Irish Sea.

AIMS:

1. To collect samples of demersal fish for chemical analysis from the Irish Sea, North Sea and Eastern English Channel in support of the Clean Seas Environmental Monitoring Programme (CSEMP).
2. To collect fish samples at CSEMP sites for fish disease and genotoxic markers (e.g. DNA adducts).
3. To collect fish samples at CSEMP sites for biochemical markers (e.g. EROD and bile metabolites analysis).
4. To sample representative CSEMP stations using grab, multicore and beam trawl for trace metal contaminants, sediment particle size analysis, PAHs and benthic fauna.

Deleted: CSEMP

5. To trial the proposed redesign of the CSEMP. Sediment samples will be collected using a day grab for benthos, trace metals, organics and chlorophyll. Water samples will be collected for nutrients and chlorophyll.
6. To collect bulk water samples for radionuclide analysis in the Irish Sea.
7. To collect samples of cod when available for population structuring of cod around the UK.

PLAN: Cruise Endeavour 10A/09 will sail from Lowestoft on 15th June and berth at Hartlepool on Sunday 21st June. Scientific staff will arrive at the ship on Sunday 21st June. An induction course will be conducted on the evening of 21st June. RV *Endeavour* will sail from Hartlepool on the morning of 22nd June and sail to CSEMP stations off the Tees and Amble to take samples under aims 1, 2, and 3. RV *Endeavour* will then sail to the Dogger Bank where samples will be taken at the six CSEMP stations in this region under aims 1,2 and 3. Further sampling will take place at CSEMP stations as RV *Endeavour* south to the Humber, Wash, Gabbard through then Dover Straits to Rye bay and Newhaven. On approximately the 1st July RV *Endeavour* will berth in Portland for one tide to change staff and remove samples to the Weymouth Laboratory and replenish liquid nitrogen. RV *Endeavour* will then sail to Lyme Bay, sampling for aims 1,2 and 3 and then west to Lands End and onwards to Liverpool Bay sampling *en route* at Lundy, Carmarthen Bay and Cardigan bay. In Liverpool Bay further sampling under aims 1,2,3 and 4 will be undertaken and include; Burbo Bight, Red Wharf Bay, Liverpool Bay (including trend samples), Morecambe Bay, SE Isle of Man and Dundrum Bay. Throughout the sampling in the Irish Sea water samples will be undertaken for aim 6. After completing the sampling of stations in the Irish Sea the ship will then steam south where RV *Endeavour* will then take samples where appropriate at stations along the south-west coast under aim 5. RV *Endeavour* will then steam to Portland and dock there on the 10/11th July and then sail again for Cruise 10c/09 and dock in Lowestoft on the 15th July 2009..

A list of CSEMP stations for the sampling of fish is given in Appendix 1 below.

GEAR: full list already requested:

1. 2x Agasis trawls + spare nets
2. 2x Simon Jennings type 2m Beam Trawl + spare nets
3. 2x Burnham 2m Beam Trawl + 2 spare nets and beams
4. 2x 3m beam trawls with cod end liners and spare nets
5. Granton trawl with cod end liner + spare trawl and net
6. Fish hopper and sorting/processing tables
7. 2x Day Grabs (+ a length of rope between warp and grab to avoid contamination)
8. 2x sets of Scallop Dredges with beam and spares.
9. Portable fridge and chest freezer
10. Hand held CTD
11. 2x 1.5 kg balances
12. 1x 5kg balance

13. 1x 10kg balance

All other gear from the Weymouth Laboratory

John Thain (Scientist in Charge) 5th May 2009

INITIALED: Draft seen by SLA 31 / SLA 22 contract leader

DISTRIBUTION:

Basic list: +

STAFF:

J Thain (SIC)

B Lyons

J Bignell

K Bateman

T Hill

F Goodsir (Lwt)

T Maes (Lwt)

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R Hicks

Michelle Giltrap (Eire)

G Stentiford

M Green

cc.

S Rogers

E Macmanus

BELOW:-

Appendix 1: **CSEMP FISHING STATIONS**

Appendix 2: **MAP SHOWING LOCATION OF STATIONS**

APPENDIX 1: CSEMP FISHING STATIONS

CSEMP Number	Location	Mid tow Lat. Long.
Using old NMMP numbering		
244	Amble	55 16.01 N 01 15.26 W
243	Farne	55 29.71 N 01 07.59 W
283	North East Dogger	55 18.05 N 02 53.82 E
284	North Dogger	55 04.08 N 02 05.40 E
286	West Dogger	54 46.76 N 01 17.69 E
287	Central Dogger	54 30.00 N 02 42.53 E
294	Tees Bay	54 45.25 N 01 08.31 W
344	Off Flamborough	54 14.72 N 00 29.91 E
346	Off Humber	54 03.92 N 01 47.46 E
377	Humber	53 19.37 N 00 25.47 E
378	Indefatigable Bank	53 33.40 N 02 04.92 E
387	Wash	53 08.50 N 01 33.30 E
475	Outer Gabbard	52 01.86 N 02 06.57 E
486	Rye Bay	50 46.74 N 00 46.83 E
New	Off Newhaven	50 45.59 N 00 00.00 E
New	Lyme Bay	50 36.86 N 02 55.82 W
New	Off Eddystone	50 06.44 N 04 06.06 W
New	West Lundy	51 09.79 N 05 26.67 W
605	Celtic Deep	51 10.29 N 05 43.75 W
616	Camarthen Bay	51 32.82 N 04 35.13 W
649	North Cardigan Bay	52 42.44 N 04 32.29 W
654	South Cardigan Bay	52 10.90 N 04 29.87 W
656	Inner Cardigan Bay	52 18.00 N 04 16.35 W
665	Outer Cardigan Bay	52 23.76 N 04 53.72 W
706	Burbo Bight	53 28.24 N 03 20.47 W
715	Liverpool Bay	53 28.32 N 03 41.91 W
769	St Bees Head	54 30.71 N 03 47.63 W
776	Red Wharf Bay	53 22.46 N 04 12.84 W
796	Morecambe Bay	53 55.31 N 03 23.23 W
805	SE Isle of Man	54 03.36 N 03 52.47 W
815	Outer Dunderum Bay	54 04.81 N 05 37.29 W
Trend	Smith's Knoll	52 48.67 N 02 45.33 E
Trend	Alternative Smith' Knoll	52 43.91 N 02 27.51 E
Trend	Smith's Knoll Bank	52 46.48 N 02 17.25 E
Trend	Liverpool Bay	53 23.76 N 03 37.55 W

APPENDIX 2: MAP SHOWING LOCATION OF STATIONS

