Agri-Food and Biosciences Institute
Agriculture, Food and Environmental Science Division
Fisheries and Aquatic Ecosystems Branch

Cruise Report: CO 0807
Vessel: RV *Corystes*
Date: 18th – 21st February 2007
Area: Irish Sea (north); ICES div. VIIa & VIa
Survey Type: Biological Oceanography & Mooring service (NMMP Sampling)

Personnel:

B Stewart (SIC)	SSO	AFBI	18 – 21 February
R Gilmore	SO	AFBI	18 – 21 February
I McCausland	ASO	AFBI	18 – 21 February
G Brady	ASO	AFBI	18 – 21 February

Objectives:

i. To maintain insitu monitoring at the offshore mooring site in the NW Irish Sea.

ii. To conduct sampling at the AFBI standard stations in the western Irish Sea.

iii. To maintain long term monitoring of chemical & biological trends in the marine environment

Circulation	✓
DCSO & CSO	✓
Ship Managers	✓
Fisheries Division	
ANIFPO	
NIFPO	

Comments

Signed Head of Branch

Methods:

- Stations 38A and 47D were sampled using a Seabird 911 water sampler and Falmouth Scientific CTD
- Vertical zooplankton net hauls were taken using a 200 micron mesh bongo net with a 500mm diameter inlet.
- Sediment samples from the seabed were taken using a Day grab

Cruise Narrative:

Sunday 18 February 2007

In preparation for the cruise, all AFBI scientific crew were onboard by 2000 hrs when mooring components and the automated sampler were prepared for deployment. Following a talk on ship's safety and a demonstration of personal life saving equipment, the RV Corystes departed Belfast at 2100 hrs and sailed overnight in a strong southerly wind to NMP1 station off the north coast.

Monday 19 February 2007

The vessel arrived on station NMP1 at 0800 hrs. The weather was dry and bright with a strong southerly wind when work commenced with the deployment of Day grab. The presence of strong tidal currents interfered with the operation of the Day grab and sampling of the seabed was postponed until slack tide. In the meantime the Rosette water sampler was deployed. After lunch the Day grab was successfully deployed with the required number of replicate samples acquired by 1430 hrs. At this point the vessel sailed at reduced speed in a south easterly gale towards the NMP5 station.

Tuesday 20 February 2007

The vessel arrived on station NMP5 at 0700 hrs. The weather was dry and bright with a moderate southerly wind when the water sampler and Day grab were deployed. The vessel sailed to mooring station 38A where the deployment of the water sampler and Day grab was repeated together with the zooplankton net. Sampling completed, the instrument mooring was quickly recovered to ship deck. The thermistors were removed from the mooring and data downloaded. Following a detailed inspection the mooring components, thermistors, McLane water sampler and CTD were then reassembled and the instrument mooring was successfully redeployed at 1415 hrs in depth 93 metres on position 53^0 47^l.004N 005^0 38^l.120W. Following this the vessel sailed to inshore station 47D when the Rosette water sampler and zooplankton net were again deployed before work for the day finished at 2130 hrs.

Wednesday 21 February 2007

Work for the day commenced on station NMP3 at 0800 hrs when the water sampler and Day grab were again deployed. The deployments were repeated on station NMP4 before the vessel sailed to dock in Belfast at 1930 hrs.

Work Completed:

Comfortable weather conditions during the survey enabled scientific staff to complete all work objectives.

Results:

Detailed results of the hydrographic data collected during the cruise will be made available as the data is worked up and interpreted by the laboratory. Samples taken for nutrient analysis were returned to the laboratory and processed for ammoniacal nitrogen, phosphate, total oxidised nitrogen, silicate, nitrite and chlorophyll. Results will be available when the data is fully worked up by the laboratory.

Operational Aspects of the Ship:
During the cruise the A-frame, main trawl winches, both hydrographic winches and the ship's clean seawater supply were used. No problems were encountered with any of the ship's equipment nor indeed with any of the scientific equipment. The hotel and catering service was of the usual high standard and there was a good working relationship between the scientists and the ship's crew. Prior to the ship departing Belfast a comprehensive and detailed safety briefing was delivered to the scientific crew.

Acknowledgements:
I am indebted the deck crew of the RV Corystes for their co-operation and assistance during the mooring recovery and deployment operation. The ship's master, officers, engineers and catering staff are also thanked for their co-operation during this cruise.

Scientist in Charge Master (seen in draft)

Date: 2 April 2007