



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

**Cruise Report:** CO 4509  
**Vessel:** RV *Corystes*  
**Date:** 31 October – 4 November 2009  
**Area:** Irish Sea (north); ICES div. VIIa  
**Survey Type:** Biological Oceanography & Mooring Service

**Personnel:**

B Stewart	SSO	AFBI	31 Oct – 2 Nov
R Gilmore	SO	AFBI	31 Oct – 2 Nov
G Brady	TSO	AFBI	31 Oct – 2 Nov
G Hamilton	ASO	AFBI	31 Oct – 2 Nov
K Mooney	Student	Student	31 Oct – 2 Nov

**Objectives:**

- i. To maintain an *insitu* monitoring programme at open Irish Sea station 38A.
- ii. To investigate the distribution of dissolved nutrients and in the water column along a grid of stations at the Beaufort Dyke in the North Channel.

<b><u>Circulation</u></b>	<input checked="" type="checkbox"/>	<b><u>Comments</u></b>    <hr/> <p style="text-align: center;">Signed Head of Branch</p>
DCSO & CSO	<input checked="" type="checkbox"/>	
Ship Managers	<input checked="" type="checkbox"/>	
Fisheries Division	<input type="checkbox"/>	
ANIFPO	<input type="checkbox"/>	
NIFPO	<input type="checkbox"/>	
	<input type="checkbox"/>	

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**Methods:**

- Stations were profiled using a Seabird SBE 32 water sampler and SBE 911 CTD
- Vertical zooplankton net hauls were taken using a 200 micron mesh bongo net with a 500mm diameter inlet.

## **Cruise Narrative:**

### Friday 30 October 2009

Following a talk on ship's safety and a demonstration of personal life saving equipment, the RV Corystes departed Belfast at 2130 hrs and sailed overnight to the mooring station 38A.

### Saturday 31 October 2009

The vessel arrived on station 38A at 0630 hrs. The weather was dry and bright with a strong westerly wind when work commenced at 0800hrs with an attempt to recover the instrument mooring. After several unsuccessful attempts and with increasing winds the recovery process was abandoned and the vessel sailed to sample stations 47D, 36 and 37. The vessel then returned to the mooring site 38A and with lighter winds the mooring was successfully recovered to ship deck at 1530 hrs. Data from thermistors, CTD and water sampler were down loaded. Samples were removed from the water sampler and following a detailed inspection of mooring components, instruments were reprogrammed and mooring components reassembled. The instrument mooring was then successfully redeployed at 1720 hrs in depth 93 metres on position  $53^{\circ} 46^{\prime} .897\text{N}$   $005^{\circ} 38^{\prime} .203\text{W}$ . Following deployment of the rosette water sampler, CTD and zooplankton net the vessel sailed to shelter overnight from an increasing westerly gale off the Irish coast.

### Sunday 1 November 2009

As gales persisted the vessel continued to shelter off the Irish coast.

### Monday 2 November 2009

With a poor weather outlook the vessel sailed to sample along the four Beaufort Dyke stations before docking in Belfast at 1600 hrs

## **Work Completed:**

Unfavourable weather conditions meant that sampling along the Liverpool Bay and Isle of Man transects was unable to be completed. However a short weather window enabled a successful mooring service and sampling at some Irish coastal stations.

## **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 ship's equipment nor indeed with any of the scientific equipment. The hotel and catering service was of an acceptable standard and there was a reasonable 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*

Date: 16 March 2010

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