



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

Cruise Report: CO 3311

Vessel: RV *Corystes*

Date: 18th – 20th August 2011

Area: Irish Sea (north); ICES VIIa

Survey Type: Biological Oceanography

Personnel:

B Stewart	SSO	AFBI	18 – 20 August 2011
R Gilmore	HSO	AFBI	18 – 20 August 2011
C Smyth	SO	AFBI	18 – 20 August 2011

Objectives:

- i. To maintain an *insitu* monitoring programme in the Irish Sea.
- ii. To investigate the distribution of dissolved nutrients and phytoplankton in the water column over a standard transect of stations in the Irish Sea.

<u>Circulation</u>	<input checked="" type="checkbox"/>	<u>Comments</u> <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"/>	

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:Thursday 18th August 2011

Following a pre-cruise safety talk Corystes departed Belfast at 2200 hrs and sailed overnight to AFBI mooring site 38A.

Friday 19th August 2011

The weather was dry and bright with a light westerly wind when work commenced with recovery of the instrument mooring to ship deck at 0815 hrs. Data from thermistors, CTD and water samplers were down loaded, samples were removed from the water sampler and following a detailed inspection of mooring components the instruments were reprogrammed and mooring components reassembled. The instrument mooring was then successfully redeployed at 1110 hrs in depth 92.1 metres on position 53⁰ 46¹.921N 005⁰ 38¹.099W. Following deployment of the rosette water sampler and CTD the Corystes sailed to sample at Irish coastal stations 37, 36, 47D and Liverpool Bay transect stations LB08 and LB07 before sailing overnight into Liverpool Bay.

Saturday 20th August 2011

The Corystes continued sampling the Liverpool Bay transect on station LB01 at 0630 hrs and completed the transect sampling on LB06 at 1110 hrs. Thereafter the ship sailed to dock in Belfast at 2030 hrs.

Work Completed:

Favourable weather conditions enabled a successful service of the AFBI mooring and a smooth passage along the standard transect stations. 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 the ship's equipment or indeed any of the scientific equipment. The hotel and catering service was of an acceptable standard and the working relationship between the scientists and the ship's crew was satisfactory. Prior to the ship departing Belfast a comprehensive and detailed safety briefing was delivered to the scientific crew.

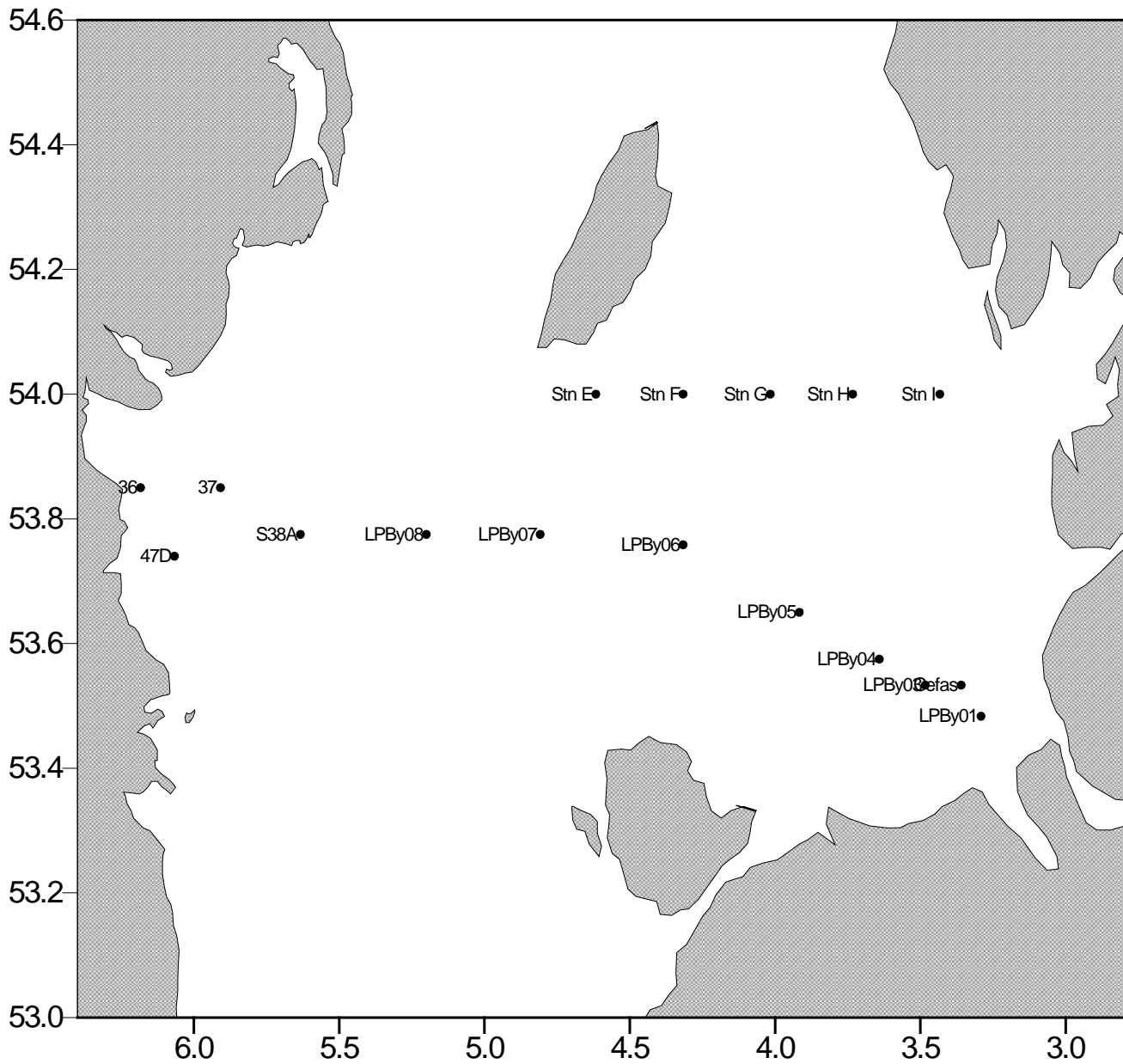
Acknowledgements:

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

Scientist in Charge

Date: 24 August 2011

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Irish Sea, Liverpool Bay and Isle of Man transect stations