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DANI - part of the JONAS project involving both laboratories. The cruise also serviced the DANI mooring which is now providing unique data some of which has recently been worked up by a Japanese collaborator.

Biological Oceanography Cruise : LF2197

Cruise Report

Dean Henry 26/

(May 18 - 23)

Personnel

R. Gowen	(SIC)	SSO,	DANI
B. Stewart		SSO,	DANI
G. McCullough		RA,	Queens University of Belfast
D. Mills			CEFAS
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Cruise Objectives

The objectives of this cruise were to study the impact of copepod grazing on the spring bloom, quantify the flux of particulate organic carbon to the benthos and service the CEFAS moorings. Detailed objectives were to:

1. quantify phytoplankton production in two size fractions (whole and $< 5.0 \mu\text{m}$).
2. estimate copepod grazing.
3. collect samples of phytoplankton and zooplankton for later identification and enumeration.
4. collect sediment samples for the determination of sediment pigment concentration.
5. collect water samples for the determination of particulate aluminium and dissolved inorganic nutrients.
6. service the CEFAS moorings at station 38A and in Liverpool Bay.
7. undertake limited sampling of Liverpool Bay bottom sediments for heavy metals

Cruise Narrative


R.V. Lough Foyle departed Belfast at 2000 h on Sunday May 18 and sailed for station 38A (Figure 1). At station 38A production and grazing studies began at 0530 h on Monday May 19. Sampling was scheduled to allow for servicing of the CEFAS mooring. The mooring was retrieved at 0930 and redeployed at 1630 h. At 0300 on Tuesday May 20 Lough Foyle sailed for Dundalk Bay. Sampling at this station commenced at 0500 and production and grazing studies were carried out during the day. Sampling was completed by 0100 on Wednesday May 21 and the ship sailed for Liverpool Bay. Recovery and servicing of the three CEFAS moorings in Liverpool Bay was undertaken on Wednesday May 22. Sampling for copepod gut pigment content commenced at 1800 h on Wednesday and was conducted at 3 hour intervals until 1500 h on Thursday May 22. Process studies (primary production and copepod

) grazing) were carried out during Thursday May 22. At 1530 h D. Mills was transferred to the Prince Maddogh (UCNW) to allow him to return to Lowestoft. Two of the CEFAS moorings were redeployed before the ship sailed for Belfast. On route sediment samples were collected from three stations for M. Service.

All of the mooring work and process studies were completed.

Acknowledgements

I would like to thank the captain, officers and crew of the R.V. Lough Foyle for their assistance during the cruise.



R.J. Gowen

June 16, 1997

Figure 1.

A map of the Irish Sea showing the positions of the three process stations. The DANI mooring is located at station 38A

