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Cruise Report LF0495

National Monitoring Plan 1995

6/2/95 - 9/2/95

Personnel:

M Service	AESD	SIC
B Stewart	"	
J Peel	"	
D Beggs	"	
M Aitchison	FSD	

Objectives

The primary function of the cruise was to sample the three offshore N Ireland National Monitoring Plan stations. Other aims were to carry out additional monitoring of coastal nutrient levels in relation to major riverine inputs, collect sediment cores and water samples for the Oceanography programme and undertake scallop dredging on the N Coast scallop beds.

Procedures:

Water samples for nutrients and chlorophyll determination were made using the rosette water sampler. CTD profiles were collected simultaneously with this. Sediment samples for fauna and chemical analysis were collected using a 0.1m² Day Grab fitted with stainless steel jaws. Scallop dredging was carried out using four spring loaded dredges. A 2m beam trawl was deployed inshore of the N Coast NMP site and a Naturalists Dredge used to collect samples of *M modiolus* at the mouth of Belfast Lough

Narrative:

All personnel were aboard the vessel by 2000h on Sunday the 5/2/95

Day 1:

The vessel left Belfast at 0500h and steamed to the first station located near the mouth of Belfast Lough commencing sampling at 0600h. The cruise then followed the plan proceeding up the N Antrim coast and then to the mouth of L Foyle deploying the rosette a further 7 times. A unsuccessful attempt to grab sample at the NMP station was abandoned due to heavy swell.

Day 2:

The first half of day 2 was spent carrying out 4 tows of the scallop dredges which was partially successful. Following this a short beam trawl haul was made just inshore of the NMP station and the vessel then moved on to the NMP station to begin grab sampling. After the completion of this operation the cruise track was resumed. At station 9 a number of bottles on the rosette sampler sustained damage. The cause of this was not entirely clear but may however, may be attributable to the bottles being deployed closed. The night was spent with the vessel dodging prior to arriving at the second NMP station.

Day 3:

The morning began with grab sampling at the NMP station which proved difficult due to the strong tides in the area but was eventually completed. Following this the vessel moved into

position on the Beaufort Dyke where a grab sample was obtained from 230m depth and a water sample from 200m. At this point the vessel followed the cruise plan, heading south, sampling Oceanography station no 4 on the way before arriving at the next NMP station.

Grab sampling and water sampling were carried out uneventfully at this station. Following this a further two oceanographic stations were visited for core and water sampling. Core sampling at station 38 was unsuccessful and this was attributed to the use of the heavy trawl warp. The night was spent moving up the coast to the Strangford narrows.

Day 4:

The morning of Day 4 was spent carrying out repeated water sampling across the mouth of Strangford narrows in conjunction with QUB staff collecting water samples in Strangford narrows and in the Lough itself. Following this exercise the vessel moved up the Ards coast stopping to carry out to hauls of the naturalists dredge to collect specimens of *M modiolus* before returning to Belfast.

Conclusions

This cruise passed off uneventfully and all the main objectives were achieved. The influence of the large freshwater inputs from the Bann and Foyle were clearly detected as elevated surface nutrient levels. All the NMP stations were sampled as planned.

This cruise was notable for using six different types of sampling gear all which performed reasonably well with the exception of the corer for the reasons given above.


M Service SIC

Master

