

IMER 7/79

RVS 18/79

VESSEL R.R.S. JOHN MURRAY

CRUISE PERIOD 2-5 November 1979

PERSONNEL	M B Jordan	HSO	Senior Scientist
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ITINERARY The cruise track and list of plankton station positions was the same as for cruise IMER 3/79.

Thursday	1	November	Travelled to Barry and set up equipment.
Friday	2	"	Sailed 0730. Hove to in Barry Roads for winch engine repairs until 1100. Commenced cruise track along North Somerset and Devon coasts. At 2400, north of Lundy, the weather had deteriorated to the extent that plankton sampling had to be abandoned.
Saturday	3	"	Weather too severe to attempt large volume water sampling over the Scarweather Bank or to get core samples. Continued on the main cruise track just using the pumped water supply until calmer conditions were found to continue plankton sampling.
Sunday	4	"	Completed cruise track in the morning. Sailed west again and completed three of the plankton stations which had previously been missed until weather conditions again became too severe to continue operations. Anchored in Penarth Roads overnight.
Monday	5	"	Locked in to Barry at 0730. Discharged equipment and returned to Plymouth.

OBJECTIVES

- 1) To continue a series of cruises to monitor the performance of the area to update ecosystem model GEMBASE.
- 2) To collect a series of large volume water samples from the Port Talbot to Scarweather Bank area for bioassay experiments.
- 3) To collect sediment cores for the study of copepod eggs.

PROCEDURE AND
METHODS

Continuous sampling was carried out over the area, water being supplied by a submersible pump. Surface temperature, salinity, nitrate-nitrogen and turbidity were recorded continuously. Frequent water samples were taken for salinity calibration. Fluorescence was measured continuously for chlorophyll estimation and samples were taken every half-hour and filtered for subsequent calibration by spectrophotometry. Sixteen of the proposed twenty five plankton samples were collected using undulating tows, wherever the water depth was great enough, of the Lowestoft sampler.

EQUIPMENT
PERFORMANCE

All equipment worked well apart from the breakdown of the winch engine clutch and the failure of 1 Flygt submersible pump.

RESULTS

Due to the very heavy weather objectives 2 and 3 had to be abandoned and it was too dangerous to collect plankton samples from nine stations in the North West of the region.

Prepared by:
Approved by:
Date:

M B Jordan
M. B. Jordan
7 November 1979