

IMER B/1/76

RVB Ref No 1/76

VESSEL RV JOHN MURRAY

CRUISE PERIOD 16-19 January 1976

PERSONNEL

R.M. Warwick	PSO	Senior Scientist
A.R.D. Stebbing	SSO	
R. Price	SO	
C. George	ASO	

ITINERARY

A map of station positions is attached to this programme.

Friday January 16 Travelled to Barry, loaded equipment aboard, sailed 1500 for station B1 in Swansea Bay. (51° 33.5'N 3° 52.0'W). Commenced sampling 2021; work completed 2300.

Saturday January 17 Commenced collection of water samples at stations 1-8 in Swansea Bay 0414; work completed 0639. Commenced sampling station B₂ (51° 16.0'N 4° 08.0'W) 1031, work terminated 1400 due to inoperative camera. Returned to Barry for camera repairs.

Sunday January 18 Resumed work on station B₂ 0014. Camera still inoperative. Operations abandoned 0124. Docked Barry 0620. Unloaded equipment. Returned to Plymouth.

OBJECTIVES

- To complete a regular sampling programme to measure the annual bottom-fauna production at an Abra community station in Swansea Bay (station B1).
- To commence a regular sampling and photographic programme to measure the annual production at a Modiolus community station station off Ilfracombe (station B₂).
- To collect water samples in Swansea Bay (stations 1-8) for subsequent bioassay experiments in the laboratory.
- To obtain a series of bottom photographs along a mid-Channel transect of stations (P1-P16) to obtain quantitative data on certain benthic species.

PROCEDURE AND METHODS

- Station B1. The standard series of hauls with Day grab and naturalists' dredge.
- Station B₂ (i) 15. Day grab hauls sieved at 0.5mm, preserved in formalin. (ii) 2 naturalists' dredge hauls, preserved in formalin. (iii) A series of 50 bottom pictures with the Shipek series 700 underwater camera was planned but not achieved.

- c. At each station one 40 l and 10 l surface water sample was collected with a submersible pump and filtered through a 0.45 μm Millipore filter.
- d. Ten photographs were planned at each station from the drifting ship.

EQUIPMENT
PERFORMANCE

The Shipek series 700 underwater camera failed to operate, even on deck, despite attention by a technician from IOS Barry. Part of objective b. and all of objective d. were therefore not achieved. Fortunately, the Day grab took good samples of the gravelly/stony bottom at station B₂, which are probably adequate for the commencement of the Modiolus community production study.

RESULTS

The cruise was purely for sample collection so that results must await future laboratory work.

PREPARED BY : R M Warwick

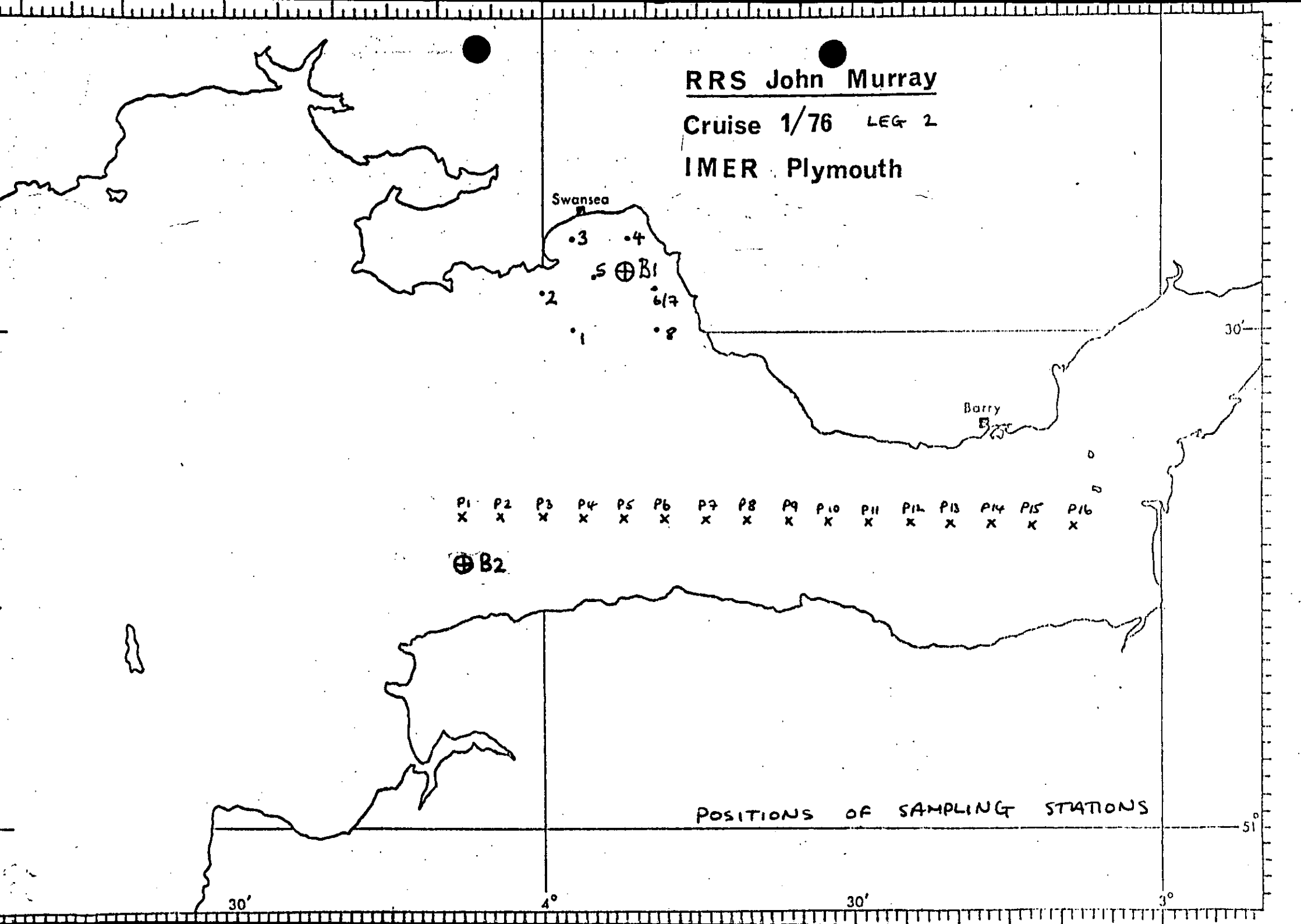
APPROVED BY : A R Longhurst

DATE : 21 January 1976

RRS John Murray

Cruise 1/76 LEG 2

IMER Plymouth



CIRCULATION LIST - BRISTOL CHANNEL

Internal

Glover
Longhurst

Hamilton
Robinson
Fay

File
Notice Board - (Brown)

External

NERC

Foxton

IOS

Mrs Edwards (BODS)
Cartwright (Bidston)
Charnock (Wormley)
Tucker (Taunton)

IGS

Moore

MBA

Denton

SMBA

Currie

MAFF

Lee
Cushing
Wood

DAFS

Parrish

RVB

Stobie - (2)

DOE

Garnett, London

CWPU

Wise, London

WRC

Eden, Stevenage

Welsh Office

Lloyd Jones - (4)

ICI

Pearson

BRISTOL UNIVERSITY

Dineley
Eglinton

UNIVERSITY COLLEGE CARDIFF

Bellamy
Hammond

UWIST CARDIFF

Edwards

UNIVERSITY COLLEGE SWANSEA

Banner
Knight-Jones
Nelson-Smith
Brooks
King

UNIVERSITY COLLEGE LONDON

Morris

IMPERIAL COLLEGE OF SCIENCE & TECHNOLOGY

Webb

UNIVERSITY OF LIVERPOOL

Abduilah

WATER AUTHORITY

Welsh National
Severn-Trent
Wessex
South West