

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD
FISHERIES LABORATORY, LOWESTOFT, SUFFOLK, ENGLAND

1997 RESEARCH VESSEL PROGRAMME

REPORT: RV CORYSTES: CRUISE 10b/97

STAFF: M J Kaiser (SIC)
R P Flatt
D B Edwards
P Greig-Smith
K Ramsay (School of Ocean Sciences, Bangor)
C Biles (Manchester University)

DURATION: 07-13 October

LOCALITY: Irish Sea

AIMS:

To survey areas subjected to different intensities of fishing in the Irish Sea using a combination of the following techniques:

- 1) Side-scan sonar survey to ascertain the comparability of substratum type in areas used for comparative studies, and to ascertain the recent intensity of fishing in those areas.
- 2) Sample the epibenthic community within specific areas using repeated tows (3-5 min duration) of a 2 m beam trawl fitted with a stills camera to obtain images of the seabed and quantitative estimates of epifauna.
- 3) Collect specimens of live bivalves at each station using an anchor dredge for determination of historical fishing intensity which can be related to the communities observed in aim 2 (NP0309).
- 4) Collect sediment samples at each station using a Day grab for sedimentological analysis.
- 5) Record the occurrence and damage rate of starfish and retain them for laboratory analyses. Retain live bivalves for laboratory growth studies to ascertain the rate of repair of damaged shells.
- 6) RoxAnn and the new QTC system will be run in parallel to compare which gives the best prediction of community type.

PLAN:

Staff will join RV Corystes on the evening of October 06 or the morning of October 07 depending on tides and sailing times. The ship will sail for a destination off the south east of the Isle of Man. Areas subjected to different levels of fishing activity will be sampled using the following protocol:

The seabed in each area will be mapped using side-scan sonar. This will identify any obstructions or areas of the seabed unsuitable for comparative purposes. A stratified grid of 5 stations will then be sampled using: i) 2 m beam trawl fitted with a stills camera to sample epifauna, ii) Day grab to collect sediment samples, iii) an anchor dredge and/or benthos dredge to collect live bivalve specimens and community samples.

With the aims of the programme completed, the following staff will be put ashore at Anglesey; Dr Greig-Smith, Dr Ramsay, Ms Biles.

M J Kaiser
13/08/97

Basic list +
W J Meadows
Dr AR Brand (Port Erin Marine Laboratory)