

R1/4

In Confidence: Not to be quoted without
reference to the Laboratory

Cruise Report

FRS Explorer

3 - 5 July 1973

Objectives To study the sea bottom in the vicinity of May Island as part of an assessment of its suitability as an area for disposal of sewage sludge.

Narrative

The scientific staff joined the ship at Leith on the evening of 2 July and the ship sailed on the following morning, reaching May Island in the afternoon. During the next thirty hours a comprehensive survey of the area round the island was made using underwater television.

The gear was lowered at each of the stations which had previously been sampled by grab, and at each lowering the ship was allowed to drift for at least 15 minutes with the camera viewing the bottom so that a reliable assessment could be made of the type of bottom and the fauna in a wide area in the vicinity of each station. Detailed notes were made from the viewing screen at sea and the first ten minutes of each television run were recorded on video tape for future study ashore.

Two main types of ground were encountered: (1) a typical Nephrops mud with numerous burrows, best developed to the south-west of the island; and (2) a region of considerable water movement with a typical hard-bottom fauna (particularly the soft-coral Alcyonium digitatum), best developed to the north and the north-east of the island.

These observations confirm the general impression built up from grab samples, but the grab produced data on only a single small area (1/10m²) while the TV pictures provided a very much wider cover. The video tapes are now being studied in the laboratory and a report providing an assessment of all the information collected so far (from current meter, grab and television) will be prepared.

The survey was completed on the evening of 4 July and the ship then headed for Aberdeen, docking there on the first tide on 5 July.

A D McIntyre
23 July 1973