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RV "CLUPEA"

6PtICR9
(Period 2)

CRUISE 6/90 Part I Period 2

Report

18-22 May 1990

Personnel

A G Kelly SSO
R Stagg PSO (living ashore)
J Rusin SO
G Clark SO (living ashore)

Objective

1. Sampling of demersal fish and benthic invertebrates by both trap and bottom trawling at Garroch Head and other sites in the Clyde Estuary for physiological investigations and determination of inorganic and organic contaminants.
2. Sampling of fish for Joint Monitoring Group (JMG) required analyses.
3. Sampling of zooplankton in the general Clyde area.
4. Transport of live biota samples to holding tanks at Millport for physiological testing.

Narrative

The scientific staff joined "Clupea" at Troon on 17 May. At that time trawling in the Clyde area had been prohibited for DAFS vessels in the wake of investigations at the Birch Point explosives dump site. This ban was reduced to an area within a 3 mile radius of the centre of the dump site at 1500 on 18 May.

Fish traps were deployed at Garroch Head during the afternoon of 18 May and two trawls were then completed before proceeding to Millport for transfer of live fish and Nephrops. On 19 May two demersal trawls were completed in Irvine Bay and a further trawl completed at a site west of Troon. Grab samples of sediment were also taken. The vessel then proceeded to Millport and from there to Campbeltown where she berthed. Two trawls were completed in the North Channel on 20 May before proceeding to a site east of Davarr Island where a further trawl, sediment and plankton samples were obtained. After transfer of biota at Millport the vessel berthed at Ardrossan. Prior to departure on 21 May, samples from Period I of the cruise were transferred ashore for transport to the Laboratory. The vessel then proceeded to a site south-east of Arran for trawling, sediment and zooplankton sampling. Four further trawls at sites east of Arran were completed, and samples of sediment and zooplankton obtained. The BT149 trawl net was damaged during one of these trawls. After transfer of biota at Millport the vessel berthed at Ardrossan. On the morning of 22 May a trawl and additional sampling was completed

at the Carroch Head sewage disposal site, and a site east of Ardrossan. Further sediment and plankton sampling and a demersal trawl were completed south-west of Irvine Bay before berthing at Ardrossan after calling at Millport.

Results

Samples of dab, plaice and Nephrops were obtained from the various areas and physiological tests are presently being completed. These may demonstrate varying levels of response to pollutants as distance from the pollution sources of Garroch Head and Irvine Bay increase. Samples of sediment await analysis for metals and organic contaminants.

Fish samples were obtained which fulfill JMG requirements for this area.

A G Kelly
6 June 1990

Seen in draft: George Calder, OIC