

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

Cruise Report

FRV CLUPEA

26 - 30 April 1976

Objective To establish baseline biological parameters for the evaluation of the effect of concrete platform construction in the Inner Sound of Raasay DSA.

Narrative

"Clupea" left Buckie on the evening of 26 April, arriving in Raasay Sound the following evening. After some preliminary observations were made on the proposed sites of construction (by Howard Doris) Clupea docked at Kyle. This was to enable liaison to be established with Commander G Hathway, the local Marine Supervisor of the SDD. Work then continued until 2 pm on Friday 30 April 1976 when scientific staff returned to Aberdeen.

Results

Each of the sites (termed Phases) was surveyed by TV camera, van Veen grab and Agassiz Trawl. The survey pattern was such that the data yielded would be sufficient to establish whether pollution on a gross scale had occurred between the present and subsequent surveys.

Phase I - Loch Kishorn In this area the sediment was predominantly muddy, although a more sandy sediment was found below the retaining bund from 15m - 20 metres depth and some hard, stony ground lay to the west of the site. The fauna was composed of Pennatulids, starfish, roundfish and shrimps with Nephrops norvegicus and Galathea sp occurring in the deeper parts. Work was in progress at Phase I whilst the survey was being undertaken.

Phase II - Loch Carron This site was not being used in the constructional work and was marked by 3 large buoys. Again the sediment was mainly mud but there were more burrows than had been observed at Phase I. The dominant animal spp were Nephrops sp and Galathea sp, a fact upheld by both the TV sampling and the Agassiz trawling.

Phase III - Crowlin Deep No constructional work was being done nor had buoys been deployed in this area. Two squares of the four which have been proposed as constructional areas were investigated, the second being subjected only to scrutiny by the TV camera. The sediment was muddy with many burrows. The shallower water was dominated by Nephrops sp and Galathea sp but the very deep water was dominated by a Cerianthid anemone and the shrimp Calocaris macandreae.

In general the area was relatively free of observable pollution although there was a certain amount of turbidity around Phase I. Full information on the quantitative and qualitative aspects of the benthic populations will be provided as soon as the samples taken have been analysed.

D C Moore
16 June 1976

Seen in Draft: G Geddes