R1/6 11CR78 CK

In Confidence: Not to be quoted without reference to the laboratory.

FRV "Clupea"

Cruise 11/78

REPORT

16-27 October 1978

Objectives

1. To recover the thermistor chain moored in Sullom voe during CLUPEA cruise 4/78.
2. To moor and recover sedimentation traps in the upper basin of Sullom voe.
3. To conduct at least twice a hydrochemical survey of Sullom voe.
4. To catch queen scallops off Calback Ness (for TRS).
5. To conduct a hydrochemical survey of Busta voe and Olna Firth.

Narrative

Clupea left Aberdeen at 1130 on 16 October for Busta voe but, because of inclement weather, the ship proceeded directly to Sullom voe. The sedimentation traps were deployed immediately on arrival thereafter, taking advantage of a moderation in the weather, renewed attempts were made to reach Busta voe. This again had to be abandoned because of a further deterioration in the weather. The remainder of the week was spent in Sullom voe and the Calback Ness area, completing one hydrochemical survey, tracking parachute drogues and dredging for Queens off Claback Ness. Before proceeding to Lerwick for the weekend the thermister chain mooring was recovered from the upper basin of Sullom voe.

During the second week, a further two surveys of Sullom voe were completed, a fourth survey being abandoned when winds increased to Force 10/11. The sedimentation traps were recovered from the upper basin early on 25 October prior to the commencement of the return passage.

Clupea docked at Aberdeen at 0700 on 26 October.

Results (numbers as for objectives)

1. The thermistor chain provided records of temperature at 2 hourly intervals at 11 depths between 20 m and 40 m in the upper basin the the period 11 May - 20 October 1978. These data are now undergoing analysis.

2. Sedimentation samples were obtained from 5 depths in the upper basin. Considerable quantities of material were collected in all of the traps, a consequence of the very stormy weather prevailing throughout the period of deployment.

3. The voe was vertically well mixed with the water temperature dropping by more than 1°C from the first to the last survey. Salinity was slightly higher at the head of the voe than at the mouth and there was a region of reduced salinity opposite the terminal area.a In spite of the very stormy conditions these features remained constant.

4. Sufficient Queens were obtained from three dredge hauls near Mio Ness. These have been passed to TRS for taste panel investigations.

5. This objective was not fulfilled because of the persistantly poor weather.

H D Dooley
27 December 1978

Seen in Draft: A Mair