10076

In Confidence; Not to be quoted without reference to the Laboratory.

CRUISE REPORT

FRS 'CLUPEA'

8 March - 15 April 1976

Objectives

- 1) To carry out larval surveys over Ballantrae Bank to estimate production of herring larvae.
- 2) To carry out larval surveys over the whole Clyde area to estimate drift, growth and mortality of herring larvae.
- 3) To collect water for herring larval rearing experiments.
- 4) To collect water samples for pesticide analysis.

Narrative

Clupea sailed from Aberdeen at 1400 on 8 March and despite continuous southerly gales arrived in the Clyde late on 11 March. Strong winds prevented any surveys being carried out during the first week, although water was collected and returned to Aberdeen for herring larval rearing experiments.

During the second week the Ballantrae Bank area was surveyed on 3 occasions the intervening time being spent surveying other parts of the Clyde area. On the third week of the cruise two surveys of the Ballantrae Bank area were carried out before the *Clupea* docked at Greenock for the crew*s long weekend break.

Clupea sailed at 2300 on 30 March after the long weekend but the first survey was not carried out until 1st April due to SW gales. During the fifth week of the cruise 3 surveys of the Ballantrae Bank area were carried out with the remainder of the week being spent on surveying the Clyde area.

The final survey of Ballantrae Bank was carried out on 12 April and *Clupea* left for Buckie at 0900 on 13 April further work being prevented by southerly gales.

Results

During the cruise 10 surveys of Ballantrae Bank were carried out but on no survey were large numbers of herring larvae encountered. The only survey on which significant numbers of herring larvae were found was the one immediately preceding the crew's long weekend. No significant numbers of herring larvae were encountered anywhere else in the Clyde area.

During the cruise six 200 gallon lots of water were collected and returned to Aberdeen for use in herring larval rearing experiments and during the fifth week of the cruise 9 samples of water for pesticide analysis were taken from various localities in the Clyde area.

General

Although much of the cruise was carried out in rather unsettled weather conditions little working time was lost due to the weather.

David W McKay 22 April 1976