R1/6

dr. 1912

In confidence: Not to be quoted without prior reference to the Laboratory

FRV "Clupea"

1CR84

Cruise 1/84

## Report

12th January - 1st February

## Objectives

To observe the reactions of fish to trawls in "darkness"

## Results

It was unfortunate that this cruise coincided with some of the worst winter weather experienced in the UK for many years. Eleven days were lost completely due to severe gales. On 3 other days only light and bioluminescence profiles were managed in the shelter of Inganess Bay and the towed TV vehicle tested. Trawl hauls were possible on 6 days and 10 trawl hauls were made.

Only on the 25th and 31st January were light measurements and observations of fish behaviour in the dark linked successfully and 350 flash photographs were taken in the mouth area of the net. The other tows were unproductive either due to strong wind and tide making observation impossible or failure of the observation equipment.

Bioluminescence levels were relatively low and light levels on the 25th and 31st may have been low enough to demonstrate that fish do not react until touched by the gear in darkness. The films have yet to be developed and analysed.

C S Wardle

9 February 1984

Seen in draft: G Geddes