## R1/3

Not to be cited without prior reference to the Laboratory

External Contract Cruise FRV Lough Foyle

## REPORT

1-13 November 1993

## Personnel

D Reid SSO P Copland HSO

# **Objectives**

To carry out an acoustic survey for herring for ICES area VIIa(S), g & j (Celtic Sea) on contract to the Department of Marine, Dublin.

#### Narrative

Marine Laboratory acoustic gear was transferred to Belfast by van and ferry on 31 October. Scientific staff joined the vessel in Belfast on 30 October. Gear was installed and checked on 31 October. The vessel sailed on the morning of 1 November to Lough Swilly for calibration of acoustic equipment. The actual survey started at Loop head on the west coast of Ireland early on the morning of 2 November. The survey track (see attached map) covered the bays of the south west coast and the coastal area of the Celtic Sea out to a maximum of 20 nm. The survey was completed on 12 November at Carnsore point. The vessel then returned to Belfast on the evening of 13 November. Marine Laboratory staff and equipment returned to Aberdeen on 14 November.

## Results

The survey was successful, very little time was lost due to weather. The total mileage surveyed was 1525 nm. Fishing exercises were generally successful. Twenty-five trawl hauls were carried out, 12 of these contained significant numbers of herring. The estimated spawning stock biomass was 43,480 tonnes. There were a number of problems in the analysis of the survey due to a high tonnage of sprats in the area (95,870 tonnes), which were often present mixed with the herring. Very few herring were seen in the traditional fishing areas of the Celtic Sea coast. There is good evidence of a strong recruitment to the stock, with a large proportion of the fish being two ringers.

D G Reid

8 April 1994

