

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

CRUISE REPORT

FRV CLUPEA

17-28 April 1972

Objectives

1. To calibrate the counting echosounder against known targets.
2. To assess the Marconi Digital sonar.

1st Week The Loch Ness calibration trials were carried out as planned. The echo level distributions obtained from standard targets at known density were ascertained and they provide a reference for all future work.

Arrangements were made to have the target level of these standard targets checked by measurement on the NERC range at Easdale.

Mr J Dunn of Birmingham University joined "Clupea" for some of these trials.

2nd Week "Clupea" left Buckie on 24 April to conduct an echo survey. The area east of Shetland from 60° to 60°30'N and eastwards to 2°E was expected to yield herring traces but none were found. As a result "Clupea" returned to a trials area about 20 miles E of Wick where traces had been observed on the passage north.

Preliminary results show that the target level of the fish concerned was lower than suggested by earlier work (at 400 KHz), and rather few counts were obtained until late in the cruise, when the count threshold was reduced by 15 dbs.

During this cruise the Marconi digital sonar was used, and it proved to be disappointingly insensitive. A further brief trial has subsequently been arranged.

R E Craig
15 June 1972