

In Confidence - not to be quoted without prior reference to the Laboratory

R1/6

FRV "Clupea"

LD

Cruise 6/84

6CR84

Report

22 May - 11 June 1984

Objectives

- 1) To investigate codends designed to allow a higher rate of young fish escape.
- 2) To film flappers and lifting bags on commercial trawls.
- 3) To measure the engineering performance of, and film, a commercial trawl.

Narrative

Shipyard operations had accidentally disturbed the compass magnets on Clupea and due to a compass adjuster not being available, Clupea was held up in Buckie from the 22 May until 1700 hrs on 25 May. Clupea then set sail for Stormy Bank. On the following day weather conditions were unsuitable for RCTV work at Stormy Bank and Clupea proceeded to the Butt of Lewis where better conditions were found for TV work. During the first haul of the day on 27 May the RCTV camera pan and tilt mechanism failed. Special tools and equipment not available on board were sent to Kirkwall for which Clupea set sail, taking in 3 selectivity tours en route over the rest of the 27th and 28th, arriving in Kirkwall at 1945 hours on the 28th. The 29th May was treated as a half landing day.

Since the spare equipment did not arrive until the afternoon of the 30th May, Clupea had a selectivity tow at Copinsey in the morning of 30th then returned to Kirkwall to receive the spares and repair the camera pan and tilt. Clupea attempted to work to the west of Orkney on the 31st May but weather conditions were unsuitable for the RCTV. On 1st June RCTV work was carried out but over the next 2 days serious electrical and mechanical problems with the RCTV system made it virtually impossible to use for direct observation work.

Clupea returned to Buckie on the 4th June for a half landing and RCTV repair on the 5th. On the following 3 days instrumented tows were conducted in the Bellans and South Deep areas of the Moray Firth. Limited RCTV work was resumed on the 9th and 10th June. The trip ended in Buckie on the 11th June.

Results

It was important to complete objective 2 to add to unfinished data of the previous year. This was done, using the RCTV and the results are to be published shortly in the Research Report series. Objective 1 was not attempted due to the RCTV breakdown. The engineering performance part of the third objective

was successfully completed with a high degree (98%) of instrument success. Part 2 of the third objective could not be attempted. During the initial period of RCTV failure, when the trawl gear instruments were not available (due to the overlapping of trips), the opportunity was taken to gather selectivity data on square and diamond mesh codends. Excellent results were obtained and these data are helping to increase our knowledge of the selection characteristics of square mesh.

J H B Robertson

16 January 1985