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Not to be cited without prior reference to the Marine Laboratory, Aberdeen

FRV Clupea

REPORT

Cruise 0296C

1-15 February 1996

Personnel

C W Glass SSO (in charge)

C S Wardle SPSO W R Mojsiewicz HSO P Barkel PTO

Fishing Gear

BT 130 with RCTV

Objectives

- 1. To assess significance of light levels in determining night and day selectivity mechanisms affecting fish in cod-ends.
- 2. To assess and quantify escape behaviour in square mesh extensions in relation to fish encounter rate and tail-beat frequency.
- 3. To assess small fish escape routes at night using small mesh pocket covers.
- 4. To develop and test a low light level video flash technique for photographing fish in cod-ends.

Out-turn days per project: 15 days ICL1

Narrative

Clupea sailed from Fraserburgh on 1 February and worked throughout in the Moray Firth area before returning to Fraserburgh on the evening of 14 February. Twelve fishing tows were carried out during this time and over 1,400 still photographs taken of the extension region of the cod-end. Analysis of the orientation and behaviour of fish in this region continue as does analysis of the tail beat frequencies used during escape behaviour. Initial trials with the video flash system proved encouraging but problems with signal noise on the video line caused this line of research to be abandoned after two days. Conventional flash photography techniques were used for the remainder of the trip.

C W Glass 27 May 1996

Seen in draft: A Simpson