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FRV *CLUPEA*

Cruise 0294C

REPORT

27 January - 10 February 1994

Personnel

C S Wardle	SPSO
C W Glass	SSO
C D Hall	SSO
Y H Kim	Visitor

4 x BBC personnel (29 or 30 January)

Objectives

1. To assess significance of light levels in determining night and day selectivity mechanisms affecting fish in cod-ends.

2. To assess small fish escape routes at night using small mesh pocket covers.

3. To assess the effectiveness of glowtwine in promoting escape behaviour under dark conditions.

4. To assess and quantify the visual contrast of a selection of fishing materials against the water background when viewed from different angles and under varying water conditions.

Out-turn Days per Project: 14 days, ICL1

Narrative

The aims of the cruise were severely hampered by a continuous spell of poor weather with gales. Sailing was delayed for two days but *Clupea* was able to reach Inganess Bay during Saturday. Choice of this area allowed some work to be carried out in shelter despite the continuing bad weather. The pre-arranged rendezvous with BBC personnel was not possible due to the weather.

Four trawl tows developing the gear and a new flash TV observation technique were made when the weather allowed. There were some teething problems with the new vehicle towing cable and alternative wiring was needed to reduce noise picked up by the cable. The new technique was perfected using a very low light intensity flash gun to illuminate a single TV frame captured by the SIT TV camera. This was recorded onto video tape successfully but there were no opportunities to observe fish reactions in the cod-end in darkness due to persistent gales. The visual contrast of coloured twine samples (Objective 4) was successfully recorded together with light level depth profiles on six occasions. The twine samples were viewed at various depths and all angles between vertically up and vertically down. We docked at Fraserburgh midday on Wednesday 9 February.

C S Wardle
9 March 1994

Seen in Draft: S Clark, OIC