

CRUISE REPORT

F.R.S. "CLUPEA"

July 15th - 20th, 1963.

- Objectives
- 1) Vertical migration studies.
 - 2) Experimental fishing with drift nets.

Results.

The fleet of 17 drift nets was shot on four nights, 4-6 baskets of herring being caught per night. Despite the rather poor catches, interesting results were obtained with the two "Ulstron" nets, one green and one white, which fished consistently better than the other nets, all except two of which were brown. Whether the higher catches of the "Ulstron" nets were due to their colour or some other feature is not known. Their mesh size was about average, but the fibre was much more elastic and the meshes ran horizontally along the nets, rather than vertically. This greater elasticity made them very easy to haul, but it was very difficult to shake out the herring, as they seemed to be meshed deeper. About 25% of the herring caught were headless as a result of this, compared with about 5% or less in the other nets.

The multi-coloured nets (with green, white and black panels) caught rather small numbers of fish. Nevertheless the catches again showed that the centre of the net takes most fish and that there is a slight tendency for green to be the best colour.

Although the number of echo-traces observed was small, the Honeywell Sea Scanar was found to function extremely well, and in the evening it was possible to pick up traces up to 400 feet in front of the ship. An attempt to use "Clupea" as a search vessel for "Mara" with the purse seine on board and the plan to photograph and observe the drift nets underwater off Burghead had to be abandoned because of unfavourable weather.

Light readings and bathythermograph records were taken as required by the programme. Plankton indicator samples were taken between 6 p.m. and 6 a.m. in the area designated by S.M.B.A.

J. H. S. BLAXTER

22nd August, 1963.