CONFIDENTIAL: Not to be quoted without reference to the laboratory.

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CRUISE REPORT

F.R.V. "CLUPEA"

19th February-2nd March, 1962

The cruise was completed in accordance with the programme. "Clupea" left Buckie and proceeded through the Caledonian Canal and to Mallaig from which port the Loch Nevis survey was carried out on the morning of Monday, 19th February. Thence "Clupea" proceeded to the Clyde, making two hauls for live fish which were landed at Cairn Ryan on the afterneon of 18th February.

The population work was restricted partly by camera difficulties and partly by minor damage to the ship which required her return to Ayr on Thursday, 22nd February, until the following Monday. No considerable numbers of fish were photographed.

Weather did not permit overnight anchoring on the bank, but the ship lay hove-to on the evening of 1st March during the critical dusk period. At 14 metres depth, in 15 metres water depth the times to reach particular light intensities were as follows:-

10 lux - 1802 1 lux - 1818 0.1 lux - 1831 0.01 lux - 1848 0.001 lux - 1901

The larval survey yielded few larvae during the first week, but in the second week of the cruise numbers of the order of 200 larvae per haul were obtained. It was thought that the main hatching was then just beginning.

Bottom current markers were released as planned, and drift bottles released daily at the usual spawning centre. A half ton of artificial plankton (finely ground plastic of neutral buoyancy) was released also on 1st March.

An adequate supply of herring and cod were caught and landed alive for experimental work in the tanks at Cairn Ryan. In general the herring fishing by trammell was highly successful, whereas supplies of both herring and white fish in the deep water off the bank were very poor by comparison with recent years. The white fish consisted in the main of large cod, while small haddock and whiting were conspicuous by their absence.

Throughout the cruise close collaboration was maintained with the shore party at Cairn Ryan, and the scientific staff transferred ashore to assist these during the period when the ship was at Ayr for repairs.

R. E. CRAIG 7th May, 1962.