R1/6 In Confidence: Not to be quoted without reference to the Laboratory.

2 CR 63

CRUISE REPORT

F.R.V. "CLUPEA"

20th February - 10th March 1963

After two days of delay due to mechanical breakdown, a start was made on Saturday, 23rd February with a hydro-plankton survey of Ballantrae Bank. Thereafter four plankton surveys were made, the remaining time being occupied by traw 1 and trammell net fishing for samples and live fish for the shore tanks at Cairn Ryan. In addition a camera watch was maintained on the bank for ten days continuously.

Hydrography Temperatures 1-y between 4° and 5°C being 1° below the minimum of recent years and 2° below the mean.

Plankton No significant numbers of larvae were obtained.

Photography Of some 2,000 photographs, only about half a dozen showed fish, suggesting that the population during the period 25th February to 7th March was small compared to 1961. This is in good accord with other methods of sampling. (The 1962 photographic results were unsatisfactory for technical reasons).

Fishing Both herring and white fish were so scarce in the Ballantrae region that fewer fish than desired were obtained for the shore tanks. Weather conditions were so bad that only once was it possible to go far afield to seek catches, and a few cod were on this occasion obtained off Turnberry. Trawl catches were small by any standards, and only the first trammell haul, on 26th February, gave more than about 100 fish.

From this evidence and commercial trammell catches there is reason to suppose that more fish had been on the bank in the preceding fortnight, which is supported by the recovery of developed spawn from the sea bed in one trammell haul.

The usual catches of immature herring north and west of the bank were conspicuously absent, and heavy echo traces north of Ailsa Craig appeared to be due entirely to sprats, which are obviously plentiful in the Firth of Clyde.

R. E. CRAIG

26th March, 1963.