

R1/6

In confidence: Not to be quoted without reference to the Laboratory.5  
12CR63

## CRUISE REPORT

F.R.S. "CLUPEA"

7th - 18th October, 1963.

Objectives:

- (1) To undertake a routine trawl survey of the Moray Firth.
- (2) To take blood samples of young and adult herring.
- (3) To tag concentrations of herring using Vinge trawl as the method of capture.

"Clupea" sailed from Buckie harbour at 1400 hours on 7th October to undertake a routine trawl survey of the Moray Firth; owing to bad weather the survey was not completed until midday on 16th October. The remainder of the trip was spent on herring tagging.

The main concentration of herring was found in the stations from the Inverness Firth eastwards to the Buckie/Berrisdale Ness line: catches ranged from 20 to 3836 in number. Length range of herring caught inside the upper reaches of the Firth was 10-20 cm with a mean length of 13 cm, but the length range farther east was 14-25 cm with an approximate mean length of 19 cm. The herring were generally immature and had a high percentage of fat in the body cavity.

Two sets of herring blood samples were sent to the laboratory for analysis.

Sprats were distributed in comparable numbers and over the same general area as the herring.

White fish of commercial size were scarce over the whole area, however recruit haddock varied from 1-500 and recruit whiting from 2-1855 in number in the trawl catches.

Herring tagging was confined to one day owing to adverse weather. Three trawls were carried out from which a total of 272 herring were tagged and liberated.

T. BRUCE  
23rd October, 1963.