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## CRUISE REPORT

F.R.V. "CLUPEA"

27th March-29th April

Objectives

1. To make a cod larval survey in the Moray Firth at the beginning and end of the cruise.
2. To tag roundfish.
3. To conduct further trials with a detachable codend and with tagged fish release cages.

Narrative

Owing to persistent bad weather, work on the cruise was heavily curtailed. Priority was therefore given to the two larval surveys, with the result that only a short time was available for the tagging and detachable codend experiments.

Cod Larval Survey

The first survey was completed during the period 3-11 April. The eggs collected during this survey had not developed to the stage where they could definitely be identified as cod eggs. The densities of these eggs were greatest in the deeper water areas where catches ranged from 225-377 eggs/550m<sup>3</sup> water filtered. In the shallower Smith Bank area, densities ranged from 4-36 eggs/550m<sup>3</sup>.

The second survey was completed during the period 24-27 April. The results of this survey are now being analysed.

Tagging

During the short time available for tagging, the catches of roundfish were extremely poor in the Moray Firth and only 4 cod were tagged.

Experiments with Detachable Codend and Release Cage

The detachable codend worked satisfactorily on the occasions when it was used, but no substantial catches were obtained, owing to the poor fish concentrations in the area. Preliminary trials were also made with a new release cage for tagged fish, designed to open after a period of time on the sea bed.

R. Jones  
D.V.P. Conway  
10th May, 1967