## R1/6

Not to be cited without prior reference to the Marine Laboratory, Aberdeen

FRV Clupea

Cruse 1894C Part 1

### REPORT

27-30 September 1994

#### Personnel

J R Hutcheon

SO

S Hoskin

Visitor

G Turner

Visitor (27 September 1994)

Aberdeen University MSc Students

Six per day except 29 September, when only five

## Objective

To demonstrate fish sampling and benthic sampling techniques as used by the Marine Laboratory on research cruises. To obtain samples of fish and benthos for further study at Aberdeen University.

# **Out-turn Costs Per Project**

4 days LAB5

### Narrative

Because of a north westerly gale on 27 September, it was decided to make Peterhead the operations base for the week instead of Fraserburgh. Clupea sailed each morning at 0830 for a fishing ground off Newburgh where one trawl haul was made and the resultant catch separated into species. The Day Grab was then deployed to obtain samples of the bottom sediment and benthic species. Clupea then returned to Peterhead each afternoon to allow Aberdeen University staff to return home. J Hutcheon left Clupea in Peterhead at 1430 on 30 September and Clupea then returned to Fraserburgh arriving at approximately 1700.

#### Results

Catches of from 3-15 baskets were obtained using the trawl. The main species present were common dab, plaice, whiting and haddock. The length frequency of common dab was recorded each day and the method used to raise the frequencies to the total catch was demonstrated, illustrating sub sampling techniques as used by the Laboratory. Of the remaining species, plaice, and half a basket of unsorted fish were taken back to Aberdeen University for further study. The techniques of otolith removal was demonstrated for both round and flat fish and otoliths from whiting, haddock and cod were broken and mounted to show techniques of age determination using a binocular microscope. The Day Grab was used to obtain samples of substrate and benthos from two sites, one of sand/mud and one further inshore, of sand. The substrate was sieved and specimens of benthos frozen for analysis in the University. One trawl haul was made each day and a total of 11 grab samples were taken during the week.