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

FRV *Clupea*

Cruise 1707C

REPORT

4-7 December 2007

Loading: Fraserburgh

Unloading: Fraserburgh

PERSONNEL

Alistair McIntosh

Gillian Packer

Lyndsay Brown

Fishing Gear: 2m beam trawl; Day grab

Objectives

1. Sample flounder in the Firth of Forth, for biological and chemical measurements.
2. Sample sediments for phytoplankton cysts.

Out-turn days per project: 4 days 10124 (AE11p)

Narrative

Scientific staff and equipment joined *Clupea* on evening of 3 December. *Clupea* sailed at midnight and made passage south to the Firth of Forth where fishing by beam trawl commenced at 1500 on 4 December. From three trawls over the Blackness ground, 11 flounder were taken and processed for biological effects measurements, organic and inorganic chemistry. *Clupea* anchored overnight at the Tancred anchorage. The anchor was lifted at 0900 on 5 December and a grab sample taken for phytoplankton cyst study. Due to an apparent change to the substrate at the Blackness site and consequential lack of success in obtaining enough fish, tows were taken at the previously sampled Tancred site. Sufficient fish for the various analyses were obtained from 4 trawls. Sediment was sampled at 5 sites in the Firth of Forth before anchoring overnight in St Andrews Bay. The anchor was lifted at 0700 on 6 December and passage made to Fraserburgh. Sediments for phytoplankton cyst studies were sampled at a further 15 locations before berthing was completed by 1900. All scientific equipment and samples were unloaded on the morning of 7 December and returned to Aberdeen.

Results

Thanks to the excellent co-operation of the officers and crew of *Clupea*, and the scientific staff, the objectives were successfully completed.

From 7 beam trawls covering Blackness and Tancred, 25 flounder were processed for Biological effects measurements and chemical analyses.

Sediments were sampled from 16 locations for phytoplankton cyst studies.

A McIntosh
28 December 2007

Seen in draft: A Simpson OIC *Clupea*