

R1/12

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FRV *Scotia*

Cruise 0206S

REPORT

18–23 January 2006

Personnel

E Jones (SIC)
R Kynoch
N Collie
I Penny
M Stewart
D Bova
H Fraser
A Guerin (PhD student, University of Southampton)

Out-turn Days: 5 days MF06s

Gear

BT 137 (Gov trawl) fitted with ground gear B and scanmar
FRS baited camera frame
2 m beam trawl

Objectives

To carry out trawl and baited camera survey around the Buzzard platform site. This will include:

- Baited time lapse camera deployments
- 2 m beam trawl samples
- GOV trawl samples

Procedure

Scotia left Aberdeen harbour at 0700 on Wednesday 18 January, arriving at the control site, east of the Buzzard Development zone (57°48'N, 0°58'W) at 1200. An initial short deployment and recovery of the frame and mooring line in suspended mode, without instrumentation packages was successfully undertaken. Following this, a short, fully instrumented deployment was carried out in order to assess the tidal conditions and check that the camera system was functioning properly. Following the changeover in *Scotia's* watch, a second, non-instrumented practice deployment was carried out. The first full deployment of the baited camera was made at 1800, before moving off to carry out a beam trawl at a nearby location. Following completion of the beam trawl tow, *Scotia* returned to the deployment position of the lander, but was unable to locate the dhan buoy. The surface pellet floats were spotted the following morning and the lander recovered. The top part of the dhan buoy pole had been severed and the flag and strobe lost. The data downloaded

from the current meter indicated that the mooring had snagged on the bulbous bow of the ship during deployment and been dragged some distance before being released.

Once a second dhan buoy had been rigged the baited camera frame was deployed 800 m from the Buzzard platform. A beam trawl was completed and the camera recovered 4 hours later. Additional floatation was added to the surface arrangement before deploying again at the control site. Following recovery of this deployment, poor weather prevented further camera work until Friday morning. Two more baited camera deployments and two beam trawls were completed before 1700 when poor weather again halted work. The baited camera was then deployed at 2200 but poor weather prevented recovery until the following morning when wind and swell had decreased sufficiently. Camera deployments and beam trawling then continued uninterrupted until midday on Sunday when the first fishing tow was undertaken to the west of the platform, close to the 500 m perimeter. Subsequent problems with the trawl winches prevented the control fishing tows being completed and a further 2 camera deployments were carried out with time being used in between deployment and recovery by the ship's engineers to investigate the problem with the winches. The final camera deployment was brought onboard at 2330 before *Scotia* made way towards Aberdeen, coming alongside the harbour at 0730 on Monday 23 January.

Results

A total of 14 baited camera deployments were achieved during the cruise, excluding the initial non-instrumented and short test deployments. Due to memory card limitations, duration was restricted to 2.5-3 hours in most cases. Deployments were split between the control site and the perimeter of the Buzzard platform with a total of 6 during daylight hours and 8 during darkness. This was the first time that the FRS frame had been deployed as a free-fall system in suspended mode. Apart from minor adjustments this configuration worked well. Initial assessment of the photographs indicated seasonal changes in the fish and invertebrate populations present at this time of year compared to previous sampling. Haddock, in particular small juveniles, were present in relatively high numbers with first arrival times ranging from 1-5 min. A number of new species were also recorded at the bait; snake pipefish *Entelurus aequoreus* and the veined squid, *Loligo forbesii*. In addition to the baited camera deployments, a total of 6 beam trawls and 1 GOV trawl were completed. Biological data including stomach contents and otoliths were collected for haddock and whiting. These data provide background information on the benthic fish and invertebrate community present in the vicinity of the platform and will be utilised in a study of the artificial reef effect of the platform.

Emma Jones
21 June 2006