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Charter Fishing Vessel *Shemarah II* (LH 65)

**CHARTER CRUISE 2201H** - Joint cruise carried out by FRS Marine Laboratory, Aberdeen and Institute of Marine Research (IMR), Bergen

## REPORT

16 October - 8 November 2001

### Personnel

R D Galbraith, FRS	(In charge)
P.J. Barkel, FRS	(16 - 20 October)
J Mair, FRS	(20 October - 8 November)
N Graham, IMR	
A Myklebust, Norwegian Directorate of Fisheries	

### Objectives

1. To carry out underwater RCTV observations on experimental grids and escape panels in Scottish waters.
2. To carry out twin trawl selectivity trials with experimental grids and escape panels in Norwegian waters.

**Out-turn days per project:** 24 days MF06qz

### Narrative

After loading fishing gear and installing equipment at Aberdeen on 16 October *Shemarah II* steamed overnight to the Moray Firth and underwater observations of the gear using the RCTV (remotely controlled towed vehicle) commenced on 17 October. Technical problems caused the vehicle to lose power at depth and the vessel was obliged to put in to Fraserburgh that evening so that the fault could be traced and repaired. Trials were resumed off Macduff the following day but the failure of a drive motor required the vehicle to be put ashore again and the motor replaced. On 19 October after preliminary technical trials with the vehicle underwater video film was obtained of the experimental gear fitted with both grid and escape panel. Shots of the net mouth and footrope were also taken but insufficient time remained to adjust vehicle buoyancy in order to film sweeps, clump or doors. *Shemarah II* returned to Fraserburgh that evening and all RCTV equipment was put ashore the following day for return to Aberdeen. Fishing gear was also made ready for selectivity work. The test gear was switched to the starboard side and a 50 mm control cod-end fitted to the port trawl. *Shemarah II* left Fraserburgh early on 21 October and steamed north-east to Norwegian waters where selectivity trials began on the Patch grounds on 22 October.

The first two hauls were carried out with a 120 mm cod-end and 40 mm grid. Very few haddock were taken in the test cod-end so subsequent grid trials were carried out using 35 mm bar spacing. While this change of gear took place *Shemarah II* moved north to the Alle Bank area and fishing continued until the evening of 23 October when a SE gale prevented work for 24 hours. A further four hauls were carried out before bad weather again stopped work on 25 October. The grid section was removed and work with the standard 120 mm cod-end resumed on 26 October and carried on until 27 October when deteriorating weather conditions brought work to a halt. The vessel then steamed south to Peterhead to land the catch on 28 October.

*Shemarah II* left Peterhead on 29 October and fishing resumed the following day in the Alle Bank area with a 110 mm square mesh panel in the 120 mm cod-end 6 metres from the cod-line. Work was again halted by bad weather on 31 October and the vessel dodged until the morning of 1 November when after a further three hauls with the escape panel another two with the standard 120 mm cod-end were made to complete work with this cod-end mesh size. Two hauls with a 110 mm cod-end fitted with 100 mm square mesh panel, again inserted 6 metres from the cod-line, were made before weather conditions necessitated that the vessel leave the fishing grounds on the evening of 2 November and entered Bergen on the morning of 3 November. Bad weather kept the vessel in port until the morning of 5 November. Work was resumed later that day in the area previously fished and continued until 6 November when *Shemarah II* steamed south and entered Peterhead on the evening of 7 November to land the catch. Fishing gear and equipment were unloaded at Peterhead on the morning of 8 November and staff returned to Aberdeen later that day.

## Results

A total of 30 hauls were made, two with the RCTV in the Moray Firth and 28 selectivity hauls in Norwegian waters, of which 26 were considered valid. The following number of valid hauls were made with each case:

Standard 120 mm cod-end	7 hauls
Standard 120 mm cod-end + 110 mm square mesh escape panel	7 hauls
Standard 120 mm cod-end + 35 mm grid	7 hauls
Standard 120 mm cod-end + 40 mm grid	2 hauls
Standard 110 mm cod-end + 100 mm square mesh escape panel	3 hauls

Data will be analysed at FRS Marine Laboratory, Aberdeen and Institute of Marine Research, Bergen and a joint report published on the selectivity of the above gear combinations with respect to haddock, cod and saithe.

R D Galbraith  
26 November 2001