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Charter Fishing Vessel *Aalskere* K373

Charter Cruise 1297H

REPORT

26 January - 6 February 1998

Personnel

R J Kynoch	SO (in charge)
R S T Ferro	PSO
P J Barkel	PTO
S Mckay	ASO

Objectives

1. To measure the selectivity of 100 mm mesh cod-ends made from three different twine diameters, 4 mm double, 6 mm double and 8 mm single diameter twines, using the hooped cover technique.
2. To collect under water film of 100 mm cod-end rigged with a 12 mm diameter wire lifting becket.

Out-turn days per project: 12 days IBDI**Narrative**

Staff and equipment joined the vessel at Aberdeen harbour on 26 January. The fishing gear was rigged and the vessel steamed overnight to Kirkwall arriving on 27 January. The spare net and TV cable was left ashore and the vessel then sailed for the fishing grounds. Underwater observations of the gear were made to check correct operation. Covered cod-end selectivity trials were thereafter carried out on the three 100 mm mesh cod-ends. The grounds fished were in an area 30 miles east of Orkney. Haddock was found in sufficient quantities in every haul and whiting in some.

Due to bad weather conditions during the second week of the cruise underwater observations of the wire lifting becket were unable to be made. The gear and TV equipment was stripped down during 4 February in Kirkwall. The vessel steamed for Aberdeen during the 5th and the cruise ended at Aberdeen harbour on 6 February.

Results

Fifteen selectivity hauls were made of which one was invalid due to a twist in the gear. The mean selection parameters for each cod-end are given in the Table 1. The preliminary analysis shows that the three cod-ends have significantly different 50% retention lengths at the 95% confidence level, showing that the use of thick twine reduces the probability of escape for smaller fish. A fuller statistical analysis will be carried out in the Laboratory.

R J Kynoch
22 April 1998

Table 1

Cod-end twine diameter (mm)	Number of valid hauls	50% length (cm)	Selection	
			Factor	Range (cm)
4 mm Double	3	31.3	3.3	4.38
6 mm Double	6	26.4	2.7	3.49
8 mm Single	5	28.4	2.9	4.21

Note: The results for the 4 mm double twine cod-end were similar to those obtained with the same cod-end on the same net towed by the same vessel in Orkney waters during February 1996.