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Charter Fishing Vessel *Aalskere* K373

Charter Cruise 1895H

REPORT

15-21 September 1995

Personnel

R S T Ferro	PSO (in charge)
J R Hutcheon	SO
M J Burns	ASO
C G Davies	ASO
H Ozbilgin	PhD Student

Objective

To measure the effect of cod-end selectivity of fishing season. This is the second of three trips to cover the periods when the fish are in poorest and best condition. Target species are haddock and whiting using a 100 mm mesh cod-end with a circumference of 100 open meshes.

Out-turn cost per project: seven days C521

Narrative

Staff joined the vessel and equipment was loaded in Scrabster on the evening of 14 September. The vessel was on station east of Start Point at 0700 hours on 15 September. Fishing hauls, usually of two hours duration, were made between the hours of 0700 and 2400 hours every day until 21 September except on 16 September when the vessel made for Kirkwall at 1600 hours to pick up engine spares. The fishing area was approximately 15 miles east of Start Point in approximately 80 m water depth. At 2200 hours on 21 September, passage was made for Aberdeen, arriving at 1100 hours the next day when equipment and fishing gear were off loaded.

Results

A total of 25 hauls were made of which 17 were considered valid for the calculation of selectivity parameters. Haddock were the predominant species, with a size range of 15 to 50 cm being caught. Whiting were also present in large quantities (particularly the smaller sizes below 30 cm); however, few were retained by the 100 mm cod-end and valid selection parameters may not be obtainable. From each valid haul samples of haddock and whiting were measured for length, maximum girth, live weight, gutted weight, sex and maturity. These data will be used to determine the variation in these parameters, eg the length/girth relation, for these species for comparison with other times of year.

Preliminary results for haddock (table) show that selectivity in terms of 50% retention length (L50) was considerably improved compared to April 1995. The mean L50 was increased from 28.5 to 33.0 cm. The mean selection ranges (SR) were both 6.0 for the two trips. There is little haul-to-haul variation and no clear relation between L50 and total catch size which varied from 127 kg to 823 kg.

Haul	Date	Duration hours	Ground speed knot	W/e spread m	H/l height m	Water temp deg C	Total catch kg	L50 cm	SR cm
102	15.9	2	3.1	21.7	4.9	12.7	481	31.8	6.3
103		2	3.0	19.6	5.0	13.0	505	32.8	7.9
104		1	3.2	22.9	5.0	12.7	127	31.7	6.6
105	16.9	2	3.1	21.8	4.4	12.7	359	33.8	5.4
107		2	2.8	24.0	5.0	12.4	516	32.4	6.8
108	17.9	2	3.0	23.8	5.1	12.3	208	33.6	5.1
109		2	2.8	23.6	5.2	12.3	499	33.1	5.6
110		2	2.9	23.9	5.1	12.2	481	34.6	7.4
112		2	3.0	(21.7)	4.8	12.2	516	31.5	4.6
113	18.9	2	2.9	(25.7)	5.0	12.1	346	35.6	6.4
114		2	3.1	22.3	5.2	12.0	823	30.7	4.8
116		2	3.2		5.0	12.3	355	33.0	5.9
117	19.9	2	2.9		4.7	12.0	273	34.4	6.2
118		2	3.4		5.4	11.6	543	32.2	7.5
122	20.9	2	3.1		5.4	11.7	239	34.5	6.9
123		2	2.9		5.1	11.8	322	32.1	5.0
124		3	2.7		5.1	11.8	267	34.7	6.6
Mean value using between-haul variance analysis								33.0	6.0

Figures in brackets are based on less than 50 individual instrument readings. The light metre did not function correctly and no light readings were obtained during the cruise.

Further detailed analysis will be undertaken in the Laboratory.

R S T Ferro
4 October 1995