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

MFV *Osprey III* (BF500)

Cruise 0404H

REPORT

20 September to 13 October 2004

Personnel

R J Kynoch SIC (20 September - 1 October 2004 / 9-13 October)
I Penny SIC (4-8 October)
J Mair (4-8 October)

Port

Loading: Macduff
Unloading: Macduff
Halflanding: Macduff, 2-3 October

Objective

1. To measure the selectivity of an 80 mm Nephrops trawl rigged with a 160 mm diamond mesh headline panel, 90 mm square mesh panel and 80 mm (nominal) diamond mesh codend using the twin trawl technique.

2. As objective 1 but with a 94 mm (nominal) diamond mesh codend.

3. To measure the effect on whitefish selectivity by extending the length of the headline panel from 15 to 30 meshes.

Narrative

Staff and equipment joined *Osprey* at Macduff on 20 September 2004. Staff commenced rigging of fishing gear and the wheelhouse instrumentation aboard the vessel along side Macduff harbour. However, due to a NW gale on 21 September the vessel was unable to sail until 22 September. Initially gear performance trials were carried out on fishing grounds 6 miles north of Macduff to check the symmetry of the twin trawl system. Thereafter mesh selectivity trials continued on the same fishing grounds for the remainder of the cruise. Staff changes took place at Macduff on 4 and 9 October and rest days were taken during the period 2-3 October. Due to lost fishing time caused by poor weather conditions at periods throughout the trials the cruise was extended by two days and ending at Macduff on 13 October with staff and fishing gear being returned to Aberdeen.

Results

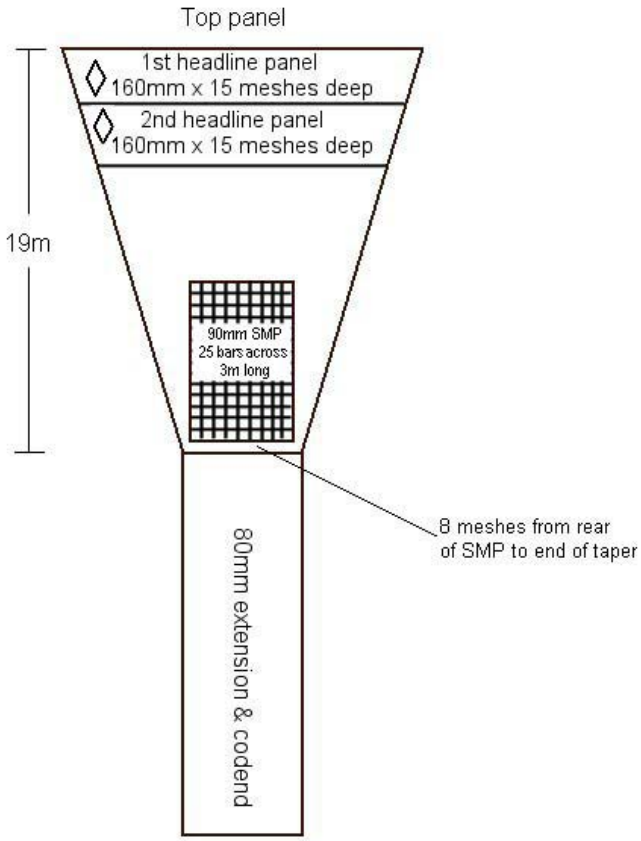
During the cruise 27 selectivity hauls were carried out of which 20 were considered valid. Table 1 contains the breakdown of the number of hauls per test case and Figure 1 shows the positioning of each test case in the trawls top sheet. The other seven hauls were considered invalid due to fouling of the gear on the seabed or because debris such as creels were picked up in the test codend. Due to lost fishing time caused by the poor weather

conditions encountered during the cruise it was not possible to carry out Objective 2. A full statistical analysis will be carried out in the laboratory.

Table 1. Hauls completed for each test case.

Test case	Number of hauls
80 mm codend	4
80 mm codend+160 mm headline panel 15 meshes deep	6
80 mm codend+160 mm headline panel 30 meshes deep	7
80 mm codend+160 mm headline panel 30 meshes deep+90 mm square mesh panel	3

Fig 1. Top sheet of trawl showing the position of each panel test case.



R J Kynoch
29 December 2004

List: Cruise Programmes and Reports

CHARTER VESSEL

Programmes - Mr J A Morrison for approval. Reports - Mr J A Morrison for approval.
Issue two copies of Record of Haul and Station Numbers pro-forma with Scientist-in-Charge's copy of *Scotia* and *Clupea* programmes.
Two xerox copies of track chart for reports to be sent to Dr L Rickards.

PROGRAMMES ONLY

Lab staff	**Non-lab staff**
~~Mr J T M Hunter~~	~~Island Cmdr Faroes (Faroes only)~~
~~Mr T Reid~~	~~Flag Officer, Denmark (Danish part of N Sea only)~~
~~Mr P J Copland~~	~~Coastguard~~
~~Mr J Dunn~~	~~G Lees~~
~~Mr A Beaton~~	
~~Mr G Howard~~	
~~Security~~	

PROGRAMMES AND REPORTS

Lab staff		**Non-lab staff**
Mr J A Morrison		~~Library, Danmarks Fisk (reports only)~~
Capt R Denholm		~~Mr J Mortensen (Faroes only)~~
Mr R S T Ferro	) Fish Man team	~~Mr A Souplet (Fishing Cruises only)~~
Mr C Hall	) progs only	
Dr R M Stagg		W J McCurdy, Belfast
Dr C Moffat		Technical Director, SFIA (J E Tumilty)
Mr M R Heath		Dr L Rickards
		Dr I Joint
Mr A Macdonald		
D Lichtman (+ additional copy of track chart of reports only)		Director – Havfor Inst, Norway
		Dr S Ehrich
Mrs E Morrison		Monsieur le Chef du dépt, Nantes
Library (2)		Mr J C Brabant
File		Mrs van Duyvenvoorde
		Dr J G Gordon
		G Kane
		R de Clerck
		Mr B Stewart
		Controller Coastal Ops - A Stewart
		Dr P Grieg-Smith
		Mr H C Boyar
		Dr R J A Atkinson
		Mr H i Jákupsstovu

Laboratory Personnel on Vessel	**Fishery Officers at**
R Kynoch	MacDuff
I Penny	Buckie