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Charter vessels *Liberty* INS 153 and *Fulmar* INS 305

## CRUISE REPORT

Cruise 1093H

6-23 September 1993

### Ports

Loading: Peterhead  
Unloading: Peterhead  
Half landing: Peterhead

### Personnel

#### *Liberty*

R D Galbraith SSO (in charge)  
R J Kynoch SO  
F G O'Neill SO

#### *Fulmar*

G I Sangster HSO  
M Breen SO (6-12 September)  
J T M Hunter PTO  
W E Leiper PTO (13-23 September)

### Objective

To investigate the influence of cod-end mesh size and diameter on pair seine selectivity using covered cod-end techniques. Semi-rigid rings were used to hold the cover off the cod-end meshes. The following cod-end combinations were used on one or other of the vessels:-

Number	Nominal mesh size (mm)	Diameter (total meshes round)
1	90	100
2	100	100
3	110	100
4	120	100
5	90	120
6	100	120
7	110	120
8	120	120

Out-turn days per project - 30 days IBD1

## **Narrative**

With both cod-ends and covers rigged and shipboard instrumentation installed the vessels left Peterhead on the evening of 6 September. Work commenced near the Beryl field on 7 September and continued until late on 10 September when bad weather compelled both vessels to heave to. With strong winds still preventing any work on 11 September the vessels dodged SW and eventually arrived in Peterhead on the evening of 12 September when the catch was landed for the Monday morning market.

With severe weather predicted for the next few days sailing was first postponed until 14 September, then the remainder of the charter was rescheduled to run from 16-23 September. Work resumed in the Beryl area on 17 September and continued until 19 September when weather conditions again deteriorated. The vessels dodged until 21 September when work was resumed and finally set off for Peterhead on 22 September to land the catch the following day. The cruise ended there and staff returned to Aberdeen on 23 September.

## **Results**

A total of 36 hauls was achieved, of which 33 were considered valid. At least four valid hauls were made with each cod-end combination. Catches of cod, haddock and whiting taken in both cod-ends and covers were sampled and selection ogives plotted during the cruise. The results will be statistically analysed using selectivity model techniques developed in the Laboratory.

No gear performance measurements were possible with the vessel's normal rig (12 coils a side) because of the large distances involved. However, using a makeshift wire warp/sweep rig + 4 coils a side some Scanmar measurements were achieved right at the limit of the instruments' range. Vessel ground speed and distance covered were logged for each haul.

R D Galbraith

12 November 1993