

R1/3

Not to be cited without prior reference to the Laboratory

Charter Vessels *Constant Friend* (PD 83) and *Starlight* (PD 150)

Cruise Report

1-14 August 1991

Personnel

Constant Friend

R D Galbraith HSO
W R Mojsiewicz SO
R J Kynoch ASO

Starlight

J Main SSO
J H B Robertson HSO (8-14 August)
J T M Hunter PTO
D J Tait ASO (1-8 August)

Objective

To investigate the influence of cod-end mesh size and diameter on pair trawl selectivity using recently developed covered cod-end techniques.

Narrative

With cod-ends and covers rigged and instrumentation installed, the vessels left Peterhead on the afternoon of 1 August. Four hauls were made on the Turbot Bank to familiarise both crews with deployment of the modified fishing gear. The vessels then steamed off to the East Forties grounds, 110 miles east of Peterhead, where a further 25 fishing hauls were made. The vessels returned to Peterhead early on 8 August to land the catch and exchange scientific staff. Work resumed on the East Forties grounds on 9 August and 18 more hauls were made before the vessels finished the cruise in Peterhead on 14 August.

Results

A total of 47 hauls was achieved, of which 40 were considered valid. Catches of haddock, whiting and cod taken in both cod-ends and covers were measured and selection ogives plotted for the majority of hauls. The 50% selection lengths obtained for haddock for each haul with the various cod-end combinations are listed below.

Cod-end No	Nominal mesh size (mm) X Total meshes round	50% selection lengths (cm)
1	90 x 80	27.9, 28.9, 29.9, 31.4
2	90 x 120	20.4, 22.4, 24.6
3	90 x 150	14.4, 17.7, 18.9
4	100 x 70	29.4, 29.6, 37.3
5	100 x 100	30.6, 32.0, 34.6

Cod-end No	Nominal mesh size (mm) X Total meshes round	50% selection lengths (cm)
6	100 x 130	20.8, 24.6, 28.4, 29.6
7	110 x 80	31.9, 35.1, 40.4, 41.4
8	110 x 100	25.5, 35.9, 37.7
9	110 x 120	28.4, 28.5, 31.3

A more detailed analysis of these results will be carried out in the Laboratory.

R D Galbraith

7 October 1991