

CRUISE REPORT.

Comparative trawling experiment by
F.R.V's "EXPLORER" and "SCOTIA"
15th - 24th October, 1949.

OBJECT:

The object of this experiment was to compare the fishing capacities of "EXPLORER'S" 46ft. net with "SCOTIA'S" 30ft. one, and to gauge the effect on both gears of the fitting of a small mesh cover.

PLAN OF EXPERIMENT:

A suitable ground was to be found, if possible in the vicinity of Aberdeen, which would yield at least two baskets per haul. Six hauls per day were to be carried out, three with small mesh on and three without. The hauls were of one hour's duration. 80 mm. cod ends were used initially by both ships, and measurements were carried out from time to time to determine any changes in mesh size.

The fish caught were sorted into species, counted, measured, and weighed.

NARRATIVE:

Both ships sailed from Aberdeen at 5 a.m. on Saturday 15th October. Being unable to find fish in the vicinity of Aberdeen, we proceeded further north, and on the 16th commenced the experiment on grounds in the Moray Firth. Early on the first day both ships sustained damage to gear which necessitated our return to anchor for repairs. Fishing was resumed on the 17th at 7.15 a.m. but the "EXPLORER'S" trawl fouled a sunken aeroplane, and a large part of the gear was lost. Since the repairs required at least 48 hours, and as the weather had deteriorated, both ships returned to Aberdeen.

Unfavourable weather detained us there until 20th, when both ships sailed at 7 a.m. and shot the trawls simultaneously 12½ miles off Aberdeen. The first haul yielded more than two baskets on "EXPLORER", and it was decided to continue on these grounds. After three hauls, the experiment was interrupted for the day due to damage to "EXPLORER'S" gear, but on the following three days, (21st - 23rd) six hauls per day were successfully carried out. On the 24th, unfavourable weather forced us to return to Aberdeen, and it was decided to terminate the experiment.

RESULTS:

The catch (of both vessels) consisted mainly of dabs, haddock, whiting, cod, and lemon soles, while gurnards and horse mackerel appeared in some quantities in "EXPLORER'S" catches. Throughout the experiment the "EXPLORER'S" catch was consistently greater than "SCOTIA'S". The following table/

table shows the approximate numerical ratio of "EXPLORER'S" to "SCOTIA'S" catch of the abundant species:

Species	Ratio "EXPLORER": "SCOTIA" (Approx.)
Whiting	Over 10 : 1
Haddock	8 : 1
Dabs	8 : 1
Cod	7 : 1
Lemon Sole	4 : 1

A statistical analysis of the results is being prepared.

A.D. MCINTYRE ("EXPLORER")

R.W. ELLIS. ("SCOTIA").

7th November, 1949.

CIRCULATION.

Mr. London	Dr. Devold	Dr. Tait	Mr. S.D.E. Devlin
Capt. Champness	Mr. Wimpenny	Dr. Fraser	Mr. J. Main
Mr. Graham	Dr. Jespersen	Mr. Rae (Loith)	Capt. Bruce
Dr. Tåning	Mr. E. Ford	Capt. Sandison	Mr. R.W. Ellis
Dr. Carruthers	Dr. Lucas	Mr. A.D. McIntyre	Mr. R.E. Craig
Dr. Blogvad	Dr. Wood	Mr. R.B. Burns	Mr. R.F. Craig
			One other.