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CRUISE REPORT

F.R.S. "SCOTIA"

20th June to 8th July, 1963

Narrative

F.R.S. "Scotia" sailed from Aberdeen on the 8th June and proceeded to the Firth of Clyde. Sampling of the Norway lobster stocks and other investigations were undertaken in this area and subsequently in the South Minch, North Minch, the Moray Firth and the Firth of Forth. The cruise concluded in Leith on the 8th July.

Method

Norway lobsters and white fish were sampled by a Nephrops trawl of about 70 mm mesh in the wings and bag. The net was rigged with a minimum number of floats on the headrope and towing speed was reduced as far as possible. The cod-end mesh averaged 69.24 mm. A coullene whole cover was attached to the cod-end.

Norway lobsters

Investigations were undertaken in the main areas of Norway lobster distribution quoted above. Stock composition of male Norway lobsters in these areas is shown in Table 1. Observations were made with the underwater camera, both moored and attached to the trawl head-rope.

A high level of infection of Stichocotyle nephropsis was found in the Sound of Jura and in the South Minch. The organism was not encountered on the grounds off the east coast.

White fish

The most common of the commercial white fish species taken in the Clyde was the whiting (1109), hake (56), witch (15), and plaice (8). On the west coast grounds the most common species were haddock (64), hake (57), whiting (53), and witch (19). In the Moray Firth the commonest species were whiting (1007), haddock (565), common dab (70), and plaice (40), whilst in the Firth of Forth the order was whiting (1562), haddock (786), common dab (78), plaice (75) and cod (71).

Cod were examined for nematode parasites, whiting were otolithed and other species dealt with according to Standing Instructions.

Hydrography

Temperature and salinity samples were taken from Standard depths in all areas.

Plankton

The collections taken off the north-east coast did not contain much Calanus or other crustaceous material, Fleurobrachia, Laodicea and Leukartiara made up the bulk of these collections. In the Moray Firth the smaller copepods Acartia, Temora and Centropages hamatus were relatively abundant as was Oikopleura.

Off the north coast and in the North Minch small Aglantha were very abundant, while the rather scattered samples from the west coast were very similar in composition to those from the north-east coast but with the addition of fair numbers of Spiratella retroversa and Clione limacina.

H. J. THOMAS
18th October, 1963

Table 1

The percentage size composition in 5 mm carapace length groups of male Norway lobsters in specified areas round Scotland, together with the number of individuals sampled and the mean carapace length in mm

Area	No. in sample	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	Mean
Firth of Clyde	6223	-	2.1	13.9	35.8	25.3	13.9	5.6	2.2	0.8	0.2	0.1	-	-	30.2
West of Scotland	5844	-	2.0	17.7	34.9	23.0	11.4	6.0	3.0	1.0	0.5	0.2	0.1	-	30.2
North Minch	827	-	0.1	3.0	21.4	24.7	14.1	14.1	12.3	5.2	2.5	2.1	0.5	-	37.0
Noray Firth	5257	-	0.2	10.0	27.7	36.6	16.1	5.9	2.5	0.9	0.2	+	-	-	31.6
Firth of Forth	3962	-	0.3	3.3	15.1	32.1	18.8	16.1	8.7	4.3	1.0	0.3	+	-	35.9