7. R.1/5

IN CONFIDENCE: Not to be quoted without reference to the Laboratory.

CRUISE REPORT

F.R.S. "SCOTIA"

22nd August to 3rd September, 1963.

## Narrative

F.R.S. "Scotia" sailed from Aberdeen on the 22nd August and proceeded to the North Minch. Samples of Norway lobster stocks and other investigations were undertaken in this area and subsequently in the Moray Firth. The cruise concluded at Aberdeen on the 3rd September.

#### Method

Norway lobsters and whitefish 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. A courlene whole cover was attached to the cod-end.

In conjunction with the trawl programme measurements were made with the light meter and turbidity meter.

# Norway lobsters

The stock composition of male Norway lobsters in the two areas investigated is shown in Table 1.

Whilst the observations on catch of Norway lobsters in relation to light intensity can only be regarded as preliminary, it was apparent that the catch of Norway lobsters was reduced during periods when the light intensity at the bottom was high. 420 male Norway lobsters were tagged and released in the North Minch and 1,250 in the Moray Firth.

### Whitefish

The most common commercial whitefish species taken in the North Minch were Haddock (128) and Whiting (100). In the Moray Firth the most common of commercial whitefish species were Haddock (382), Whiting (314) and Plaice (109).

Cod were examined for nematode parasites. Other species were dealt with according to Standing Instructions.

### Hydrography

Temperature and salinity samples were taken in both areas.

# Plankton

Plankton hauls were taken in the following sub-square areas, C14c, B16c, A16c, YY16c and YY15c. The samples were similar in general composition but those on the North and est coasts were richer in crustaceous material and contained small numbers of Rhincalanus nasutus and Eucalanus elongatus. Oikopleura was present at all stations.

Medusae were not particularly abundant although fair numbers of Pleurobrachia were present off the N.E. coast. At B16c a few Sagitta setosa were taken.

H. J. THOMAS

5th November, 1963.

Table 1

Area	Total No.	15-19	20 <b>-</b> 24	25-29	30-34	35 <b>-</b> 39	40-44	45-49	50-54	55 <b>-</b> 59	60-64	65 <b>–</b> 69	70-74	Mean Carapace Length
North Minch	2,977	0.2	3 <b>.</b> 6	17.6	25•7	19.1	12.0	8.0	6.3	4•4	2•5	0.5	+	37•6
Moray Firth	4,036	2.2	21 •4	32.4	23•4	11.5	5•5	2•4	0.8	0.2	+	+		29•6