

IN CONFIDENCE: NOT TO BE QUOTED WITHOUT REFERENCE TO THE LAB.

CRUISE REPORT

FRV "GOLDSEEKER"

7 August - 1 September

OBJECTIVES:

1. To investigate the stocks of Nephrops in the Moray Firth.
2. To study Nephrops predators.
3. To beam-trawl for small Nephrops.
4. To investigate the stocks of Pandalus.
5. To take daily surface temperature readings.

NARRATIVE:

The scientific staff joined "Goldseeker" at Buckie on 7 August. Operations were delayed until 11 August by strong to gale force north to north west winds. A programme of trawling was carried out using standard "Goldseeker" Nephrops gear with 70 mm codend and whole small mesh cover. A polyethylene codend was used and mesh measurements recorded. Hauls were taken in selected positions using an 8 ft beam trawl. Daily surface temperatures were recorded.

The cruise ended at Buckie on 1 September.

RESULTS

Trawling

In 40 half-hour trawl hauls a total of 1594 Nephrops were caught, 1136 males and 458 females of which 41 were berried. The size and sex composition and mean carapace lengths are given in the following table.

Nephrops norvegicus size distribution in 5 mm groups

Carapace mm	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	Totals	Mean Carapace length (mm)
♂	4	153	268	414	180	96	19	2	1136	31.1
%	0.4	13.5	23.6	36.4	15.8	8.5	1.7	0.2	-	-
+	11	130	124	132	56	5			458	28.3
%	2.4	28.4	27.1	28.8	12.2	1.1			-	-
♂ + ♀	15	283	392	546	236	101	19	2	1594	30.3
%	0.9	17.8	25.0	34.2	14.8	6.3	1.2	0.1	-	-

The fish catch consisted mainly of small Haddock and Whiting, which occurred in large numbers in all parts of the area. Lemon sole, Fitch, Common dabs, long rough dabs and Trisopterus esmarkii were also found in most catches. Stomach contents were examined for the presence of Nephrops. Species and numbers examined are shown in the Table.

Species	No examined	No with <u>Nephrops</u>	No of <u>Nephrops</u>
Cod	54	7	17
Haddock	65	-	-
Whiting	22	-	-
Ling	10	-	-
Angler	20	-	-
<u>Squalus acanthias</u>	8	-	-
<u>Soyhorhinus caniculus</u>	4	-	-

Beam Trawling

Eleven hauls were made with an 8 ft fine mesh beam trawl. A total of 98 Nephrops were caught, 59 males and 30 females, of which 7 were berried. No Nephrops under 15 mm carapace length were taken.

Samples of Fandalus, which were very scarce were preserved and brought back to the laboratory for examination.

Hydrography

Surface temperature readings ranged from 11.1°C to 12.3°C during the period.

J A Sinclair
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