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FRV CLUPEA

Cruise 13/79

REPORT

22 October - 2 November 1979

Objectives

1. To study the abundance and distribution of squid species on the West Coast and to obtain data on mesh selectivity.
2. To study the populations of Nephrops and Dichelopandalus bonnieri.
3. To make photographic studies of the behaviour of D. bonnieri.

Narrative

Sailing was delayed until 23 October because of inspections by refit contractors and DOT officials. Gale force winds prevented CLUPEA from entering the Pentland Firth and so proceeding to the West Coast. The winds had not abated by 26 October, consequently the formal objectives were abandoned, and CLUPEA carried out a limited programme of trawling for "1" group Nephrops in the Moray Firth.

The scientific staff left the ship at Buckie on 2 November.

Results

Initially hauls were made using a Danish shrimp trawl with 35mm cod end. This net was damaged and replaced with a 70mm Nephrops trawl and shrimp trawl cod end. Thirteen one-hour hauls were made and 53kg of Nephrops caught. A total of 11kg of Nephrops were sexed and measured to provide a length frequency analysis. Additionally, all Nephrops under 20mm carapace length were removed from the catches and measured separately. The length frequency distributions of sampled Nephrops are given in Table I.

Considerable quantities of small fish were caught, particularly in those hauls in which Nephrops catches were poor. A total of about 950kg of fish, the predominant species being whiting (range 8-15cm and 16-34cm) and haddock (range 12-17cm and 25-40cm). Some herring (11-21cm) and sprat (9-15cm) were also taken.

F G Howard
26 November 1979

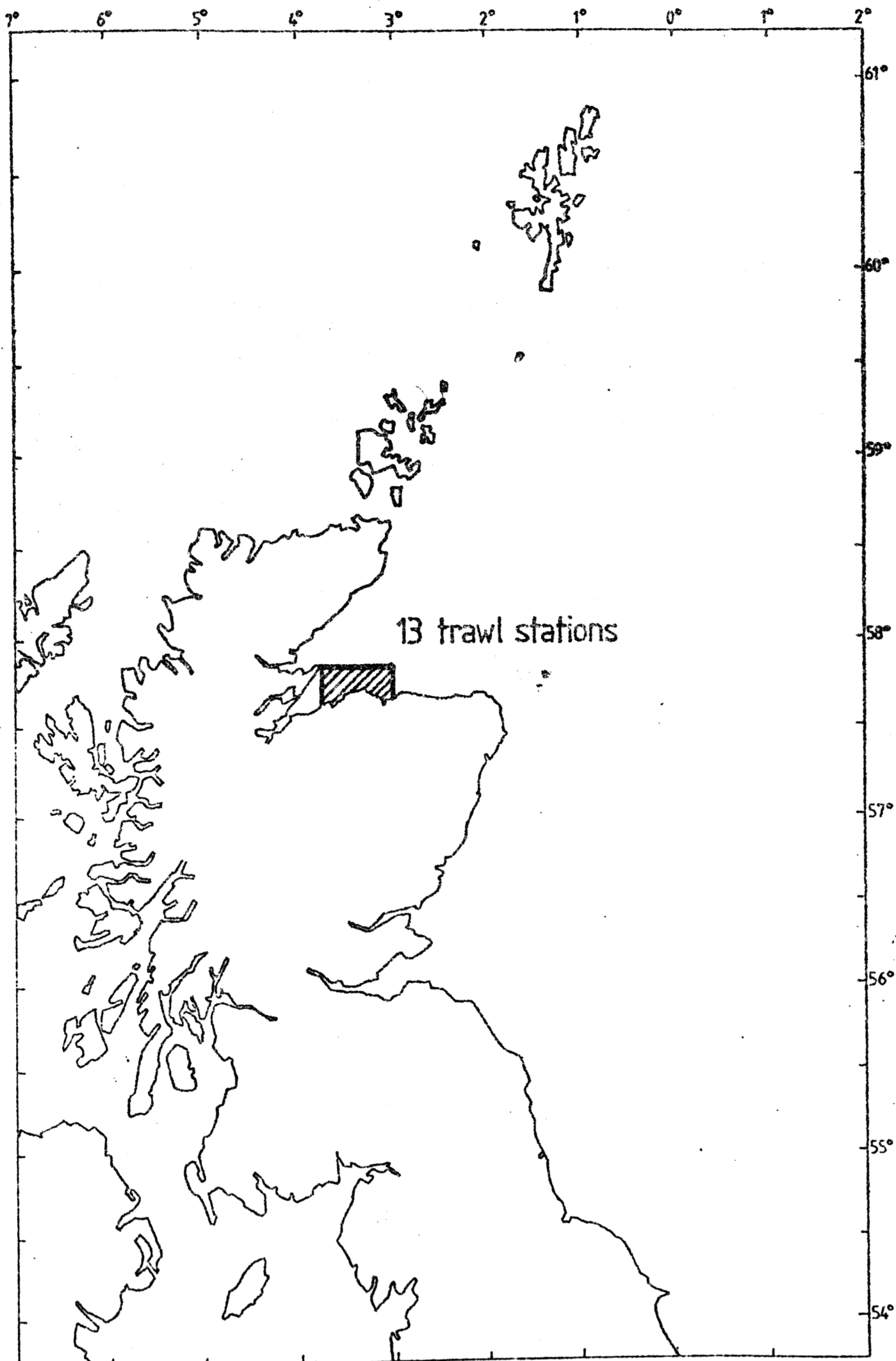
Seen in draft: G Geddes

Table I Length frequency distribution of Nephrops catches

Carapace length mm	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	Total	Mean carapace length mm
Males		14	124	176	86	44	19	7	1	471	28.7
Females		29	166	177	58	9	5	1		445	26.1
Berried females			4	7	14	1				26	29.8
Total		43	290	353	144	53	24	8	1	916	27.4
%		4.5	31.7	38.5	15.7	5.8	2.6	0.9	0.1		

Total catch of Nephrops carapace length < 20mm

Carapace length mm	10-14	15-19
Males	-	98
Females	1	136



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