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CRUISE REPORT

FRV "GOLDSEEKER"

13 October - 6 November 1975

Objectives

1. To investigate the distribution, abundance and biology of Pandalus borealis in the Farn Deeps.
2. To undertake mesh selectivity experiments using a 45 mm mesh shrimp trawl, and cod ends of 45 mm, 35 mm and 25 mm mesh.

Narrative

"Goldseeker" left Buckie for Aberdeen on 14 October. Gear was loaded at Aberdeen on 15 October and "Goldseeker" sailed for Blyth, arriving there on 16 October when the scientific staff joined.

A programme of trawling was carried out at set stations off Blyth and Tynemouth.

The scientific staff left on 4 November; "Goldseeker" sailed from Blyth to Methil, docking there on 5 November.

Results

A total of 40 half hour hauls was made: ten with the 45 mm cod end, 16 with the 35 mm cod end and 14 with the 25 mm cod end. A small mesh whole cover was used for all hauls.

Catches of Pandalus varied from 0.5 kg to 12.5 kg per haul, the total weight caught being 115 kg.

The total weight of shrimps taken in each cod end was:-

45 mm cod end	:	31.5 kg
small mesh cover	:	2.9 kg
35 mm cod end	:	33.6 kg
small mesh cover	:	4.4 kg
25 mm cod end	:	39.25 kg
small mesh cover	:	3.5 kg

Further results of the shrimp catches are in the process of being analysed.

Nephrops catches varied from poor to very good; in all, 3846 individuals were sexed and measured.

The mean carapace length of all Nephrops examined was 30.67 mm; males 31.76 mm and females 28.72 mm.

The catch composition and mean carapace lengths of catches in the different cod ends are given in Table 1.

Results (Cont)

Catches of white fish were generally good. The predominant species caught were haddock and whiting, with lesser amounts of cod.

Frozen samples of Pandalus were brought back to the Laboratory for heavy metal analysis.

F G Howard
20 November 1975.

Seen in draft - J A Calder OIC "Goldseeker

TABLE I

NEPHROPS CATCH COMPOSITION

trapace length mm	15.9	20.4	25.9	30.4	35.9	40.4	45.9	50.4	55.9	60.4	Total	H.C.L. (mm)
5 mm cod end												
Total male	2	54	198	116	64	37	17	6	2	1	497	31.66
Total female	2	25	90	51	17	7	2				194	29.52
Berried female			2	3	1						6	
5 mm cod end												
Total male	24	233	604	364	240	112	41	22	7	5	1652	31.20
Total female	15	274	442	202	66	23	10	4	1		1037	28.27
Berried female		5	16	13	1	1	2				38	
5 mm cod end												
Total male		25	77	83	65	26	18	20	6		320	34.67
Total female	1	27	40	46	17	12	3				146	30.84
Berried female		4	2								6	
10 mm cod ends												
Total male	26	312	879	563	369	175	76	48	15	6	2469	31.76
Total female	18	326	572	299	100	42	15	4	1		1377	28.72