

CRUISE REPORT

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Library (2)

FRV GOLDSEEKER

JUNE 17 - JULY 11

OBJECTIVE

To undertake comparative fishing experiments with a standard (70 mm mesh) Nephrops trawl cod-end (A), and a Nephrops trawl and cod-end of 50 mm throughout (B).

Narrative

Crew and scientific staff joined "Goldseeker" at Leith on June 16, gear and stores were loaded next day.

Trawling commenced on the 18th in an area north-east of Craig Leith in depths of from 20 to 25 fathoms. Day fishing for Nephrops was tried but was completely negative, so night fishing was resorted to for the remainder of the cruise.

A change in the programmed sequence of trawls had to be made due to the time loss at change over during the periods when Nephrops were taken in the catches. Two trawls with (A) at dusk, change gear during darkness, and two trawls at dawn with (B) changing the (A) (B) sequence daily, got over the lost trawling time.

Twenty-two trawls were made with gear (A) and twenty with (B), mesh measurements of both cod-ends were made daily.

"Goldseeker" docked in Aberdeen on July 9 and sailed later that day en route to Buckie.

RESULTS

The catch composition, size ranges, mean carapace lengths and catches by the different gears are shown in the tables. A further statistical analysis of the results will be undertaken.

The mean mesh measurement of cod-end (A) was 68.4 and of (B) 49.5.

The predominant fish species in the catches were small whiting and haddocks with approximate mean lengths of 22 and 20 cms respectively. Surface temperatures ranged from 11.8°C to 13.1°C (mean 12.6°C).

C Davidson

16.7.75

The number, mean carapace length and percentage at each size group of Nephrops taken by

(a) 70 mm mesh Nephrops trawl

Carapace length in mm	10/14	15/19	20/24	25/29	30/34	35/39	40/44	45/49	50/54	55/59	60/64	TOTAL NO	MEAN CL (mm)
No	2	78	1433	3805	4109	1351	354	132	39	4	2	11309	30.1
%	+	0.7	12.7	33.6	36.3	11.9	3.1	1.2	0.3	+	+		

b) 50 mm mesh Nephrops trawl

No	3	81	1065	3308	3581	1138	331	147	41	6	-	9701	30.3
%	+	0.8	11.0	34.1	36.9	11.7	3.4	1.5	0.4	0.1	-		

TABLE 2

Catch composition from combined hauls

Total ♂	3	90	1426	4348	5475	2096	352	40	6	1	2	13839	30.4
%	+	0.7	10.3	31.4	39.6	15.1	2.5	0.3	+	+	+		
Total ♀	2	69	1072	2765	2215	393	333	239	74	9	-	7171	29.9
%	+	1.0	14.9	38.6	30.9	5.5	4.6	3.3	1.0	0.1	-		
No BERRIED	-	-	-	18	16	10	10	10	-	-	-	64	
% at each size group				0.6	0.7	2.5	3.0	4.2	-	-	-		

39 of the berried Nephrops were at late or hatching stages of development, twenty-five were newly berried.