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FRV Goldseeker  
Cruise 10/79 (revised)  
REPORT  
Part I  
18-26 September 1979

### Objective

To capture live mackerel for use in target strength experiments.

### Narrative

Staff joined "Goldseeker" with the Aberdeen sonar section's fish barge on a daily basis using the motor launch 'Gigha' to tow the barge to a suitable meeting point. Fishing was attempted with hand lines in the Lochalsh area.

### Results

No significant quantities of mackerel were caught, mainly owing to very strong winds which interrupted operations.

Part II  
9-26 October 1979

### Objectives

1. To study the length and age composition of scallop and queen stocks in the Firth of Lorne - Sound of Mull area.
2. To compare the standard commercial dredge with one of larger mesh, ring size and tooth spacing.
3. To search for natural settlement of scallops and queens.

### Narrative

"Goldseeker" left Corpach after loading equipment, stores, etc and proceeded to Oban, where dredges were rigged and prepared for sea. Dredging was carried out in the Sound of Mull, Kerrera Sound and Hasdale Bay areas, mainly in poor weather conditions. Strong south to southwest winds were encountered throughout the period. "Goldseeker" returned to Corpach where staff disembarked. The vessel returned to Buckie, arriving on 25 October.

### Method

Hauls were made using two 4ft dredges on a towing bar, one fitted with a 12 toothed blade and 83mm rings and mesh, the other with a 10 toothed blade and 95mm rings and mesh. Hauls of 15 minutes duration were made with and against the tide. Dredge positions on the towing bar were reversed periodically.

## Results

From a total of 82 hauls 1030 scallops and 100 queens were caught. The dredge with the larger mesh and 10 toothed blade caught more large scallops and fewer small ones.

The age composition and length frequencies of scallops, caught by the different dredges are shown in the attached tables.

J A Sinclair  
1 May 1980

Seen in draft by W Reid O/C "Goldseeker".

Table I. Age composition of scallops caught by different gears.  
Dredge towing position on bar and number of hauls stated.

Number of rings	12 tooth starboard/10 tooth port		34 hauls		10 tooth starboard/12 tooth port		48 hauls				Total
	1	2	3	4	5	6	7	8	9	10	
12 tooth (Port)	1	1	3	12	15	21	20	18	15	54	160
12 tooth (Strbd)	2	8	19	52	34	38	60	35	19	48	315
10 tooth (Port)	-	1	9	16	40	71	67	49	36	76	365
10 tooth (Strbd)	-	2	1	5	11	27	28	18	19	79	190
All hauls	3	12	32	85	100	157	175	120	89	257	1030
%	0.3	1.2	3.1	8.2	9.7	15.2	17.0	11.6	8.6	25.0	-

Table II. Length frequency of scallops caught by different gears. Dredge towing position on bar and number of hauls as in Table I.

Length in mm	70/79	80/89	90/99	100/109	110/119	120/129	130/139
*12 tooth (Port)	1	-	5	16	43	62	24
12 tooth (Strbd)	2	1	15	42	59	118	56
10 tooth (Port)	-	-	3	14	77	121	105
10 tooth (Strbd)	-	3	1	11	44	86	40

Length in mm	140/149	150/159	160/169	Mean	Totals
*12 tooth (Port)	7	1	-	120.1	160
12 tooth (Strbd)	19	3	-	121.1	315
10 tooth (Port)	39	4	2	126.4	365
10 tooth (Strbd)	5	-	-	122.4	190

\* Add 1 scallop - 45 mm