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CRUISE REPORT

2GR75
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FRV "GOLDSEEKER"

27 January - 20 February 1975
25 February - 13 March 1975

OBJECTIVES

1. To study the state of scallop and queen stocks in the Clyde area and on the West Coast.
2. To undertake scallop dredge selection experiments
3. To undertake surface temperature readings.

NARRATIVE

After passage from Buckie work started in the Clyde on 4 February and continued until 20 February. Passage to Crinan was made on 27 February, work continued in the Sound of Jura and then the Sound of Mull, and the cruise ended at Corpach on 13 March.

RESULTS

1. Scallop and queen stock survey

A total of 177 hauls were made using 4ft dredges, mostly with 1" teeth and $\frac{1}{2}$ inch mesh. Scallops were caught in moderate numbers on most grounds. The age composition of scallops caught during the survey is shown in Table I. Scallops with 2, 3, and 4 rings were dominant on most West Clyde grounds, with the 1 ring group well represented in many places. Very young scallops were less common on East Clyde grounds. In the W Kintyre-Jura area there was a more even distribution of age groups, with some recruitment continuing, and the picture is broadly similar in the Sound of Mull.

Queens were caught in large numbers in the North Arran - North Kilbrennan Sound area, and in the Sound of Mull. They appear to be mostly the same stock as was caught last year. No concentrations of very small queens were found.

2. Scallop dredge selection experiments

A good concentration of scallops was encountered off SE Jura, and repeat hauls were made using the sampling dredge (1" tooth/ $2\frac{1}{4}$ in. mesh) and commercial dredge (1" tooth/ $3\frac{1}{4}$ in. mesh). All hauls were of 15 minutes and were made over the same ground, using either single dredges or a direct comparison of the two dredges side by side on a towing bar. Results are given in Table II.

TABLE II
Comparison of Sampling and Commercial Dredges

Average No of Scallops per 15 min haul	Single dredge		Two Dredges on bar	
	Commercial	Sampling	Commercial	Sampling
	76.5	76.5	66.0	67.5

These results indicate that dredges fish singly take rather more than when fished side by side on a towing bar, but there is no difference in the total number of scallops caught in the two kinds of dredge. There is a difference in the size composition however, the sampling dredge retaining more of the smaller scallops. In the sampling dredge 21% of the total had 1 and 2 rings, compared with 11% of scallops in the same age groups in the commercial dredge.

J Drinkwater
A Dunthorn
7 May 1975

TABLE I

Percentage age composition of
scallops

"Number of rings"

AREA	"Number of rings"									
	1	2	3	4	5	6	7	8	9	>9
Dunure-Turnberry	-	6	22	22	3	9	-	6	-	32
Lendalfoot *	-	5	17	28	12	18	7	4	-	9
Otter Spit	-	5	20	32	16	5	3	-	8	11
Inverneill	-	11	21	18	-	-	5	7	19	19
Inchmarnock	7	16	29	10	3	3	6	3	7	16
N Arran	10	34	12	20	10	-	-	2	2	10
S W Arran	-	14	9	24	-	5	9	29	5	5
S E Arran	9	21	9	31	-	-	9	9	-	12
Gleonaig	7	16	19	25	7	3	2	-	2	19
Crossaig-Sunadale	18	25	10	8	10	2	-	-	-	27
W Kintyre * - of 20	1	1	14	10	6	13	21	11	3	20
S E Jura	4	18	20	8	6	5	17	9	3	10
Kerrega *	-	-	4	4	-	7	5	19	11	50
Sound of Mull	1	7	15	6	2	4	10	12	14	29

* Including hauls with commercial mesh.