In Confidence: Not to be quoted without reference to the Laboratory

CRUISE REPORT

FRV MARA

4 - 23 December 1972

Objectives

1. To compare the efficiencies of various gears used in the fishing of queens and scallops.

- 2. To trawl for <u>Pandalus</u> and <u>Nephrops</u> if circumstances prevent the pursuit of objective 1.
- 3. Pollution work in Loch Eil area.

Narrative

Gear was loaded at Buckie on 4 December and 'Mara' sailed later that day for the west coast. Areas around the islands of Balnagowan and Kerrera, the east side of Mull and Mull Sound were sampled for queen stocks. A stock of a size suitable for fishing was present in Scallastle Bay; this area also gave some shelter from the gale force winds which prevailed for most of the cruise. The weather curtailed fishing and precluded shooting the otter trawl. Comparison of gears was made with the 8' Manx queen dredge, the 8' beam trawl and a pair of 4' scallop dredges. The size of queens caught in all areas was fairly small and to retain samples the scallop dredges were blinded with chafer netting. Hauls were of 15 minutes duration.

The comparative fishing programme ended at Oban on the 15th. 'Mara' proceeded to Fort William on the 17th to carry out the pollution programmes, which were completed on the 19th. 'Mara' then returned to Buckie.

Results

A total of 2965 queens were caught in Scallastle Bay, 158 off Balnagowan Island and 106 in Craignure Bay. The catches from Scallastle Bay taken by various gears are tabulated below.

Gear	Number of Tows	Total catch	. Catch/foot hour	Mean size
8' beam trawl	7	2597	26.5	44.3
8' Manx queen dredge	4	227	7 . 1	50.8
2wt scallop dredges	6	141	2.0	50.0

The percentage size composition in 5 mm length groups of the queen stocks in various areas, together with the mean size in each area is recorded below.

Area	15/19	20/24	25/29	30/34·	35/3.9	40/44	45/49	50/54	55/59	60/64	65/69	70/74	Mean
Balnagowan Island Scallastle	-	1.3	16.4	27.0	25.0	11.8	10.5	6.6	1.3			-	37.0
Bay	0.2	2.1	5.6	8.3	13.9	17.0	16.5	22.4	11 -1	2.7	0.1	+	44.9
Craignure Bay	-	0.9	3 . 8	5.7	6.6	19.8	12.3	29.2	18.9	1.9	0.9	_	47.9

Scallops. Only 31 scallops were taken, 16 in the scallop dredge and 15 by the Manx queen dredge; 24 were aged 9 or greater and 6 were between 6 + 8 years old. The majority of the ovaries were at stage 3 (recovering).

C Davidson