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CRUISE REPORT

F.R.V. "MARA"

20th May - 18th June 1959

## Narrative

"Mara" left Aberdeen at 17.45 hrs. on the 20th May and proceeded to the west coast via the Caledonian Canal, several plankton hauls being taken off Aberdeen and in the Moray Firth. A defect in the ship's radio was remedied at Oban, and the underwater television equipment was embarked there. "Mara" sailed for the Outer Hebrides on the 25th May, and from then until the 29th May comparative creel fishing was attempted in three areas near Barra. While good catches of crabs were obtained, lobsters were scarce, and it was decided to seek better grounds elsewhere for the remainder of the cruise. The television gear was used on the Barra grounds. "Mara" returned to Oban at 23.00 hrs. on the 29th May to disembark the television gear.

The return to the Outer Hebrides was delayed until the 3rd June by south-westerly and westerly gales, though creel fishing was meanwhile attempted off the coast of Mull. Fishing was restarted off the west coast of Lewis on the 4th June, and the grounds there proved more productive of lobsters. On the 6th June gales forced "Mara" to shelter in East Loch Roag, and on the 7th she ran to Stornoway for water and provisions. Mr. A. M. Olsen of C.S.I.R.O. joined ship at Stornoway on the 8th June.

Persistent gales between south and north-west delayed the return to the west coast of Lewis until the 11th June, when it was possible to haul the creels shot six days previously but not to shoot them again. During the delay trawl and plankton hauls were taken in and near Broad Bay and Tolsta Bay. After picking up the creels "Mara" carried out another trawl in the Minch and proceeded to Mallaig, arriving there early on the 13th June.

Mr. McIntyre and Mr. Steele successfully carried out two days' bottom fauna- productivity studies in Loch Nevis, and "Mara" then returned to Aberdeen, arriving on the morning of the 18th June.

## Results

Too few lobsters were caught for the experiments comparing the efficiencies of the Scottish and French types of creels to give any significant results, but considerably more crabs were caught. Near Barra, using the Scottish method of fishing (hauling daily), 69 hauls with Scottish creels yielded five lobsters and 117 crabs, and 70 hauls with French creels no lobsters and 40 crabs. West of Lewis, using the French method (hauling thrice daily), 75 hauls with Scottish creels yielded 13 lobsters and 58 crabs, and 74 hauls with French creels yielded six lobsters and 32 crabs.

Blood samples were taken from the lobsters caught, and will be examined for Gaffkya.

Useful preliminary experience was obtained in the use of underwater television in finding rocky ground suitable for lobster fishing. It was found that, while spot viewing might be possible, a continuous search for, or survey on, rocky ground provides serious hazards for the gear. Shortage

of lobsters and the limited time available precluded the possibility of watching the actual capture of a lobster.

At Barra, the opportunity was taken of sampling the cockle beds of Traigh Mhor, cockles being taken at five tide levels. The largest (more than 2 inches) were found at low water and the smallest near high water.

Norway lobsters were taken in only one trawl haul, in the area XX 151. Of 102 caught, 71 were males and 31 females (including one berried). The size distribution (carapace length in cms) was as follows:

Si.zo group	2.0-2.9	3,0-3,9	4,0-4,9	5.0-5.9	6.0 <del>-</del> 6.9
Malo	3	23_	28	15	2
Female	3	23 28 <sup>55</sup>			

including one berried specimen 3.8 cms.

JAMES MASON

13th July, 1959.