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CRUISE REPORT

F.R.S. "M A R A"

24th September - 17th October, 1962.

On Monday, 24th September, "Mara" was engaged in productivity work in Aberdeen Bay. On the following day, gear for the coastal survey was loaded and the ship headed for Lerwick, arriving there on the afternoon of 26th September. Adverse weather, first fog then gale force winds, kept the ship in port until Wednesday, 3rd October. On that day the wind, although still strong, changed direction to south-west, making it possible to work for the remainder of the week in sheltered areas north of Lerwick and off Bressay. During this period, Dales Voe, Lax Voe, Wabister Voe and Voe of Cullingsburg were sampled by grab and dredge. Temperatures and water samples were also taken. More exposed ground north-west of Bressay and north of Noss was also examined. On this ground the clam dredge was damaged but this was repaired at Lerwick during the weekend.

On Monday, 8th October, the ship set out for Yell, but was forced to return to Lerwick because of thickening fog. Next day visibility was slightly improved, and it was possible to work on the comparatively open coast south of Lerwick, in Brei Wick, Voe of Sound, and Gulber Wick. The fog lifted completely on Wednesday 10th, and the ship headed north, working for the rest of the week off the north mainland and round Yell and Fetlar. Biological and water samples were collected, and experimental dredgings made in Sollum Voe, Garth Voe, Yell Sound, Orka Voe, Mid Yell Voe, Basta Voe, Wick of Gruting and Wick of Tresta. Working south again, grounds off the Out Skerries were examined and Dury Voe and South Nesting Bay sampled before the ship put into Lerwick on the evening of Friday, 12th October.

"Mara" headed for the west coast of Shetland on Monday 15th, but strong south-west winds prevented passage round Sumburgh Head, and the ship was forced to return to Lerwick. The weather was similar on the following day, and when the afternoon forecast predicted no improvement it was decided to terminate the cruise. The ship docked at Aberdeen on the evening of 17th October.

The samples showed that three distinct infauna communities were present, associated with different types of substratum - shell gravel, situated in exposed areas such as South Nesting Bay and off Fetlar; sand, found typically off the south mainland (Voe of Sound and Gulber Wick) and soft mud, found in sheltered situations (Sollum and Dury Voes). The sand areas in particular supported very rich infauna populations with lamellibranchs and amphipods dominant. These samples are being analysed in detail.

The results of dredgings were also of interest. Since the nature of the ground was unknown, a trial run was first made with the echosounder, and when reasonably flat areas were found, short experimental hauls (5-15 min) were made with the 6 ft clam dredge. The best catches were made on the west side of Yell Sound in 30-35 fathoms between Burra Voe and Muckle Holm where 21 clams were taken in a 15 minute tow, and also 1 mile east of Score Head, Bressay, in 40-48 fathoms where 11 specimens were taken in 15 minutes. In both these areas the ground was clean and free of weed. Smaller numbers of live clams or recently dead shells were found at 15 fathoms in Sollum Voe; in 14 fathoms at the entrance to Basta Voe (Yell); in 28 fathoms off Wick of Gruting (Fetlar) and in 30 fathoms between Whalsay and the Out Skerries. In other hauls in shallow water (8-16 fathoms) the dredge quickly became clogged with weed, but the presence of clams in the clean deeper grounds suggests that they may also be present in shallow water although initial intensive dredging to clear the weed would be necessary. The survey certainly indicates that clams are widely distributed in the Shetland area, and the specimens found were of good uniform size (5-6 ins.) and in first-class condition.

Dredging in Sollum Voe disclosed a large population of horse mussel (Modiolus) along the middle of the Voe in 15-20 fathoms.

During the cruise the echosounder was run more or less continuously. Good fish traces, probably of herring, were found on several occasions between Sumburgh Head and Helli Ness. The records were reported to the laboratory, and the traces kept.

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2nd November, 1962.