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CRUISE REPORT

FRV "MARA"

May 3-10, 1973

NARRATIVE:

The scientists (Dr R Johnston and Mr R J Shepherd) joined "Mara" at Corpach on the night of Thursday 3rd May. Next morning gear was got ready for the setting out of sediment traps; during the day 3 sets were placed in L. Eil and 1 set in L. Linnhe.

At the same time a start was made with the routine chemical sampling. This was completed next day and a series of plankton collections was also made using the Icelandic High Speed Sampler.

On Monday 7 May Dr T Pearson and G Duncan from the Scottish Marine Biological Association, Dunstaffnage joined "Mara" and an intensive network of core samples was taken and measured on board for pH and redox potential. Dr Pearson left the ship during the evening and the remaining core samples were obtained and measured next day. A grid of tow net hauls (1 metre 60 mesh, 25 fathom warp) was made covering both lochs and also parts of L. Linnhe out to and well beyond the Corran Narrows. On Wednesday 9th, the sedimentation samplers were triggered and retrieved. Thursday was spent on completing BOD sampling.

RESULTS:

The BOD values were rather low, probably due to the way the samples were stored on this occasion - this can be corrected for.

Most of the effort of the trip went into methods of sediment study. The core samples showed little change from recent surveys. The net samplings showed that only a small proportion of pulp fibre travels as far as Corran Narrows and escapes into the outer loch. The sediment traps showed the heaviest fibre deposition near Station 2 in L. Eil (in agreement with Dr Pearson's results). No deposition occurred in L. Eil at a site close to the Annat Narrows - the sample at this site contained clean sand and shell.

The 1 metre tow nets showed the distribution of fibre very clearly in a qualitative fashion. Attempts will be made to determine the pulp fibre content (a) by enzyme digestion of the algae and zooplankton and (b) by carbohydrate estimations.

R Johnston
11.6.73