LETTERS

to

the

EDITOR

Dear Sirs,

In reply to Rust's letter in Volume 19, part 2 of Maritime Sediments and Atlantic Geology may we put the matter he refers to in perspective:

- l) The research project (short title "Westphalian faunas in Nova Scotia: Palaeoecology and North American/European correlation") eventually taken up by Vasey, was submitted to the N.E.R.C. of the U.K. several times in the late seventies and finally publicly approved in February 1981.
- 2) Duff had naturally consulted various individuals active in Maritimes geology before emarking upon it and sought permission from the G.S.C. to examine specimens and from the Nova Scotia Department of Mines and Energy and from DEVCO to examine core material etc.. All who were contacted assured us that we were not interfering with any other research work going on in the Maritimes and indeed, welcomed the fact that detailed palaeontological work was planned.
- 3) In May 1981, by chance, Duff learned from Rust that a research student under his supervision, was to commence work on part of the Sydney Basin. In discussion Duff said that he could foresee no problems as Vasey would be working on fossiliferous horizons only and concentrating on bivalves.
- 4) On arrival in Sydney in August 1981, Duff and Vasey commenced work by visiting DEVCO's geological section in Glace Bay. During our discussions we were asked our opinion of a specimen of limestone, thought to be algal, which was being studied by Mr. K. McPhaerson at the University College of Cape Breton. Duff was particularly interested in this because of the frequent association in the Nova Scotian Westphalian of black shales containing bivalves with thin limestones. (The presence of algae had been suspected at Joggins by Duff and Walton (1973) but subsequent study has not confirmed this). The locality, near New Waterford, of McPhaerson's specimen was known to Duff who had visited the locality during reconnaisance collecting of bivalves in 1972, though he had not seen the algal limestone. (We assume [charitably], as it is a shore section, the bed was not exposed during that visit]. Duff and Vasey therefore visited and collected from the locality the day they were told about it, as the tide was suitable. It was in fact the first locality visited by Vasey in the Maritimes.
- 5) Zodrow was later visited and he was kind enough to show Vasey several fossiliferous horizons, one of which included the then exposed algal limestone. A palaeoecological project involving a detailed study of the limestone was suggested to which Duff readily concurred.

- 6) Rust objected strongly to this study and Duff pointed out to him that; (a) a palaeontological study of bivalves could not neglect study of associated fossils (the microfossils, incidently, had been previously collected and were being studied by another research worker, who had been contacted before Vasey's project was put up, and with whom contact has been maintained throughout the study), (b) a palaeoecological study of a few centimetres thick fossiliferous limestone was unlikely to affect adversely the sedimentological study of an X hundred metre thick succession of coal measures and in fact, it might help, and (c) that in his experience coal-measure sedimentologists always welcomed palaeontological input - it generally told them where they were stratigraphically if nothing else. Zodrow concurred with Duff's view.
- 7) Vasey and Zodrow submitted the first version of their paper for publication on February 20th 1982. The version that was eventually published (Vasey and Zodrow 1983) was submitted to Maritime Sediments and Atlantic Geology on the 30th July 1982 and published in the April issue 1983.
- 8) At no time during this period did we know that Rust and Masson were intending to publish on the same topic though they certainly knew of our efforts. The appearance of their paper in the Canadian Journal of Earth Sciences (November 1982) therefore came as a complete surprise to us.

There is bound to be overlap between sedimentology and palaeontology when an attempt is made to interpret the palaeoecology of particular fossils. Normally, such overlap can be accommodated (if more than one individual is concerned) by the parties concerned - in this instance we regret that this has not been the case.

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- 3 Department of Geology, University College of Cape Breton, Sydney, Nova Scotia.
- DUFF, P. McL. D. and WALTON, E.K. 1973. Carboniferous sediments at Joggins, Nova Scotia. C.R. 7. Congr. Int. de Strat. et Geol. Carb. (Krefeld 1971).

VASEY, G.M. and ZODROW, E.L. 1983. The environmental and correlative significance of an algal limestone (Westphalian D), Sydney Coalfield, Nova Scotia. Maritime Sediments and Atlantic Geology 19, pp. 1-10.

Yours sincerely,

P. McL. D. Duff,

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G. M. Vasey, 2

E. L. Sodrw. 3 Zodrow. 3