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Plant Remains from the Arco-Woodside Merriman No. 1. Bore

Core from the Arco-Woodside Merriman No. 1. bore was examined, and the following plant remains recorded.

Core No. 3. 4708-4720 feet.

Black coalified root or rhizome compressions are present in some portions of this core, and undetermined leaf fragments showing prominent main veins are present in other portions. A large (8mm.) pyritized nodule of organic origin also occurs in this latter portion.


Core No. 4. 5070-5081 feet.

Numerous stem and leaf impressions are present including Pagiophyllum sp., a form with small thick leaves appressed along the stem and comparable in body form and cuticular anatomy with the present day Araucarian, Araucaria excelsa. Pagiophyllum sp. have also been recorded in Victoria from the Pretty Hill No. 1. bore (Frome Broken Hill Co.) at 2928-2940 feet (Douglas 1962), but it is possible that certain specimens at present regarded as Brachyphyllum gippslandicum McCoy should properly be placed in the genus Pagiophyllum.

Core No. 4. also contains poorly preserved impressions, of Sphenopteris sp, and another obscure form with pinnae which appears to bear sori along the main veins, and hence belong to some pteridophyte (fern) group.

All these forms are found in Mesozoic non marine beds now regarded (Cookson and Dettman 1958), as Lower Cretaceous in age. The stratigraphic position of the Merriman beds yielding cores 4 and 5 is difficult to assess palaeontologically because of the lack of knowledge of Victorian Mesozoic floras. I regarded (Douglas 1962) the plant remains from Pretty Hill bore with Pagiophyllum as rather high in the Otway Group sequence, but correlation on this basis with the distant Merriman No. 1. beds under discussion is futile, Pagiophyllum however, is absent from any

of the beds in the well sampled basal beds of the Tyers Group where well preserved floras are found just above Palaeozoic beds lying unconformably beneath. An entirely ^{different} conifer assemblage is present in these basal Mesozoic beds. It would appear then that there is some justification for regarding the beds represented by cores 3 and 4 from Verriman's No. 1. bore as being well up in the Victorian non-marine Mesozoic sequence.


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References.

Cookson Isabel G. and Dettmann Mary E. 1958.	Some trilete spores from Upper Mesozoic deposits in the eastern Australian region. Proc. Roy. Soc. Vict. 70, 2, P. 95-128.
Douglas J.G. 1962.	Plant remains, Fretty Hill No. 1. bore Vic. Mines Dept. Unpubl. Rept. 1962/79.