

in the pioneer stage of reef development and records arrested ecological succession. The ubiquitous presence of filter-feeding organisms and the occurrence of disarticulated crinoids indicate biostrome development occurred under mesotrophic, normal marine, non-evaporitic conditions with periods of current reworking. Cathodoluminescent microfabrics and stable isotope data ($\delta^{13}\text{C}$ and $\delta^{18}\text{O}$) from brachiopod valves imply alteration during burial diagenesis. These results demonstrate that the chemistry of some Windsor Group brachiopods is not a reliable gauge of Paleozoic seawater composition.

**The sedimentology and diagenesis of a Mississippian
brachiopod biostrome in the vicinity of Newport
Landing, Hants County, Nova Scotia**

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A biostrome formed primarily of brachiopods (terebratulids, productids, spiriferids) and bryozoans (delicate branching fenestellids) is present in the Mississippian Windsor Group in the vicinity of Newport Landing, Nova Scotia. This build-up is