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THE TRENTON FAUNA OF WOLFE ISLAND, ONTARIO.

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West of the Frontenac axis in Ontario, the most easterly outcrops of Trenton limestone are those on Wolfe Island at the foot of Lake Ontario between Kingston, Canada, and Cape Vincent, New York. The strata exposed there are the northward continuations of the Ordovician rocks of northern New York and present quite a different succession from that in the Ottawa Valley. It is evident that the Frontenac axis even in mid-Ordovician time was sufficiently defined to influence the boundaries of land and sea.

The Trenton limestones on Wolfe Island rest upon somewhat similar formations of Black River age. All dip at a very low angle toward the southwest. The contact between Trenton and Black River strata is not exposed but is probably similar to that in the Cape Vincent-Watertown district, a few miles to the southeast in New York State. A distinct unconformity is there indicated* by the presence of a basal conglomerate and an irregular contact. Disconformity is strongly suggested on Wolfe Island by the marked change in fauna between the Black River limestones along the north shore and the Trenton strata which outcrop in the interior and along the southern shore.†

Prasopora simulatrix orientalis, *Pachydictya acuta*, *Dalmanella rogata*, and *Rafinesquina alternata* are the ubiquitous and characteristic members of the local fauna. They indicate its alliance to that of the "Prasopora zone" or true Trenton as that term is used by Raymond.‡ The fauna at hand has little in common with that of the Hull formation in Ottawa Valley or of the Glens Falls limestone in Mohawk

*H. P. Cushing, Geology of the Thousand Island Region; N. Y. State Mus. Bull. 145, p. 91, 1910.

†See geologic map by M. B. Baker, The Geology of the Kingston district; Ontario Bureau Mines, vol. 25, pt. 3, 1917. The Wolfe Island Trenton is described by E. M. Kindle in Appendix I. of the same report.

‡P. E. Raymond, The correlation of the Ordovician strata of the Baltic basin with those of eastern North America: Bull. Mus. Comp. Zool., vol 56, p. 255, 1916.