SILURIAN HELIOLITID, HALYSITID, AND SYRINGOPORID TABULATE CORALS FROM THE CHALEUR BAY REGION: PRELIMINARY RESULTS

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The Silurian clastic and carbonate rocks of the Chaleur Bay region possess a range of faunas which include most of the important lower Paleozoic invertebrate groups. A large collection of heliolitid, halysitid, and syringoporid tabulate corals from eighteen sections of the Anse Cascon, Anse a Pierre Loiselle, La Vieille, and Gascons formations of the southern Gaspe Peninsula, and the Armstrong Brook, Petit Rocher, Limestone Point, and La Vieille formations of northern New Brunswick, includes twenty-seven species distributed among ten genera. All species were defined using both quantitative and qualitative data.

The high diversity of this collection is related, in part, to the occurrence of Tabulata in a broad range of lithologies representing intertidal to open shelf environments (including several shelf bioherms). The range of environments should allow some understanding of factors controlling distribution, and preliminary analysis of halysitid distribution suggests strong facies-control on the occurrence of the most abundant species.

The widely-held belief that North American and European Silurian Tabulata show little provinciality is incorrect, and is related to past misidentification of North American specimens. The Chaleur Bay faunas are very different from European faunas, and quite distinct from those of Anticosti Island and northern Newfoundland as well. Each of the three major groups studied has species endemic to the Chaleur Bay region.

The stratigraphy of the Chaleur Bay region is still open to considerable interpretation. Conodonts are rare or absent in many sections, brachiopods have not been thoroughly studied, and much correlation between sections has been based on lithology. It is expected that analysis of tabulate distribution patterns will help to clarify this picture.