

**Why Laurentide ice indicators are absent in the Baie Des Chaleurs region,
northern New Brunswick**

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Mapping of surficial deposits and glacial features in northern New Brunswick was initiated by Robert Chalmers in the late 1800's. Since then, several attempts have been made to unravel the glacial history of this area. Chalmers' original ideas were resurrected and adapted to presently accepted theories and models of glacial processes and isostatic rebound. "Erosion stratigraphy" has been used because of the lack of stratigraphic sections and the abundance of glacial erosional features. This information is supplemented by clast provenance studies and fabric trend analysis. Results of detailed mapping reveal four glacial events. Dating of these events is a problem because of the lack of dateable materials. An early southeastward flow is recognized in the

eastern part of the area and the Chaleur coastal plain. A secondary, strongly erosive, iceflow was in an easterly direction, and might have been of importance throughout the Wisconsinan and possibly throughout the Pleistocene. A third flow, supported by striae and abundant fabric trends indicates a northeastward flow into Baie des Chaleurs. A late-stage local flow took place in several directions off the highlands and possibly out of the Baie des Chaleurs. An attempt is made to place these events in a regional context, in which the interaction of Laurentide ice with Appalachian ice and the concept of the Laurential Channel as an ice-stream channel are evaluated, and to explain the absence of Canadian Shield erratics in the Baie des Chaleurs region.