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**Deglaciation of Nova Scotia –  
a chronostratigraphic approach**

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Deglaciation of Atlantic Canada is well studied and has been reconstructed based on extensive sets of onshore and offshore data. The records show that during the initial rapid deglaciation of the region, ice caps were isolated and persisted as local ice domes throughout the late-glacial. The regional pattern of deglaciation in Nova Scotia is much more complex than the steady ice retreat that has been documented for the New England coast. Ample field evidence, radiocarbon ages, and pollen studies by others suggest that after widespread climate amelioration during the Bölling/Alleröd, the local ice caps advanced during the Younger Dryas cold event.

Glacial erratics and glacially polished bedrock were dated with cosmogenic nuclides along a transect from southern Nova Scotia to the Cape Breton Highlands. Use of <sup>10</sup>Be surface exposure ages shows that: 1) deglaciation at the Atlantic coast occurred around 15 ka BP; 2) the Cape Breton Highlands were glaciated with warm-based local ice during the Wisconsinan and deglaciated likely around 15–14 ka BP; and 3) the Younger Dryas glacial advance must have reached the southern part of Nova Scotia and was therefore much more extensive than thought earlier. The results tie in very well with field evidence for glaciation. The results are critically discussed in comparison to output data from ice sheet and climate models for the deglaciation of Nova Scotia.