

**A Review of Recent New Evidence for an Extensive Late Wisconsinan Ice Advance  
on the Scotian Shelf**

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Accelerator mass spectrometry radiocarbon dating of mollusc shells in glaciomarine sediments on the continental shelf and slope off Nova Scotia has provided new evidence for extensive Late Wisconsinan ice advance. Series of dates in cores that can be acoustically correlated increase systematically in age down section, providing confidence that the material dated has not been reworked or contaminated.

On the Scotian Slope in the Verrill Canyon area, work with D.C. Mosher has shown that glacial ice extended to the shelf break between 26 and 21 ka. In Emerald Basin, work with M.

Gipp has shown that the top of the glacial till that underlies the entire basin dates from 17.5 to 18 ka, and the youngest till tongue dates from about 15 ka. Off St Pierre Bank, work with D. Bonifay shows that there was a glacial surge from the Avalon Peninsula, through Halibut Channel to the shelf break, at about 12 ka.

Although this new evidence indicates that Late Wisconsinan ice was more widespread than previously thought, the marine data also shows that the Early Wisconsinan ice advance was even more extensive.