Conodonts of Late Ordovician (Late Caradoc-Ashgill) age are rare in the Canadian Appalachians. They have been recovered from the Vauréal and Ellis Bay formations of the Anticosti Basin, the Matapedia and Grog Brook groups in the Matapedia Belt of Quebec and New Brunswick, from an unnamed formation in west-central New Brunswick, and from the predominantly volcanic Goss Point beds, Letang Peninsula, southwestern New Brunswick.

Faunas from the Anticosti Basin are of undoubted Midcontinent affinity. The Matapedia and Grog Brook groups, which are locally interbedded, represent basinal deposition close to the margin of Laurentia. Both units have faunas that are highly mixed both paleoecologically and provincially, containing elements of both shallow and deep water Midcontinent affinity and elements typical of the Atlantic faunal region. This implies that these basins had endemic faunas of Atlantic Province affinity with influxes of faunas from adjacent Laurentia. The limited fauna from west-central New Brunswick, also of mixed provincial affinity, is from a limestone conglomerate that rests unconformably on Middle Ordovician Craig Brook Formation of the Miramichi Anticlinorium (Gander Zone). The easternmost occurrence is within the Goss Point beds, previously believed to be part of the Mascarene Group, a Silurian cover sequence on the
Avalon Zone. This unit has produced a meager fauna that contains species of both the Midcontinent and Atlantic faunal regions.

The fact that all faunas east of the Anticosti Basin are provincially mixed suggests that Late Ordovician conodont faunas around the Iapetus Ocean may have been more homogeneous than earlier Ordovician faunas. This may indicate that the ocean was smaller or that current patterns changed in the Late Ordovician to permit trans-lapetan migration.