

PRESS RELEASE

Accelerating Bare Highway Embankment Colonization by Native Plants

September 2008 - Bare highway embankments along the Trans-Labrador Highway in Labrador consist primarily of rocks and mineral soil and may not be colonized by native plants for several years without assistance. Standard revegetation methods using hydro-seeded grasses may not be as successful there as in more southern locations, due to the harsher climate and poor soils.

In July 2004, Intervale, in partnership with Bryophyta Technologies Inc., initiated an experiment near Mary's Harbour, Labrador, with the objective of accelerating bare embankment colonization with native vegetation. Fragments of mosses, lichens, and associated vascular plant seed banks—obtained from local donor sites—were spread on eight 50 m² experimental plots and covered with mulch along with low doses of fertilizer. In addition, clumps of native shrubs and forbs collected from nearby areas were transplanted in each experimental plot.

In September 2005, a team from Bryophyta and Intervale returned to the experimental plots and evaluated plant establishment success. One growing season after plant reintroduction, moss cover in the experimental plots measured approximately 5-6%, as compared with 1% for the controls. During the summer of 2006, Intervale and Bryophyta replicated the experiment along a stretch of Trans-Labrador Highway near Cartwright, Labrador. In September 2008 Intervale's Russell Wall returned to the site at Mary's Harbour to further evaluate plant establishment. Preliminary results suggest that moss cover continued at a more rapid rate than in control plots.

Although moss re-growth on the experimental plots may seem slow, the results are comparable to what has been observed in other moss reintroduction experiments on mineral soils in Quebec. These initial results from Mary's Harbour suggest that plant communities along adjacent or similar stretches of the Trans-Labrador Highway will probably take several years to develop.

The work is still at an experimental stage, and longer-term monitoring of experimental plots is needed in order to assess the effectiveness of the methods. Intervale thanks the help of the Conservation Corps of Newfoundland and Labrador and Environment Canada's Ecoaction program, which help sponsor this program.

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