

The distribution of bryophyte species diversity in relation to microsite and moisture availability at 2 scales within conifer dominated boreal forests

Lead by: Suzanne Mills

Theme: Vegetation

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Participants

- Ellen Macdonald
- Suzanne Mills

Background

Habitat is the likely key determinant of bryophyte species diversity (Wetson, 1980, Soderstrom, 1988, Vitt et al., 1995). Many bryophyte species require specialized substrates such as logs, large tree bases or disturbed soils. Bryophytes are also vulnerable to water stress which is dependent on light, topography, temperature, and relative humidity. The combined effect of these habitat factors on bryophyte species richness has not been explored.

Objectives

1) To test the link between available substrate and bryophyte species richness. 2) Is this link dependent on environmental factors (light, temperature and moisture)? 3) At what light, temperature and moisture levels do we begin to see a decrease in bryophyte species richness? From this we can make predictions about

how changes in these environmental variables, as a result of forest harvesting, will affect bryophyte species richness.

Key Results

n/a