

Understory vascular plant regeneration with reference to site conditions following disturbance

Lead by: Treena Fenniak

Theme: Vegetation

Status: Completed

Start: 1999

End: 2001

Participants

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- Ellen Macdonald

Background

Immediately following disturbance, harvesting and fire provide different site conditions for plant establishment. Establishment occurs with respect to production, dispersal and successful germination of seed or other reproductive organs. The regeneration niche provided by site conditions determines which plant may establish and succeed on a given site. This niche could be extremely influential in succession, since early establishment may be more important than competitive ability in determining community history. Since understory plants are the first to establish, and their presence can be strongly linked to subsequent forest composition, studying early post disturbance conditions and understory regrowth could provide a unique perspective on succession.

Objectives

1) what site conditions exist following various types of disturbance, including soil temperature, nutrient and moisture availability, surface soil disturbance, removal of organic matter, residual live and dead canopy, and

creation of litter and downed coarse woody material. 2) The structure and biodiversity of the understory vascular community before and following disturbance. Results will be used to elucidate relationships between post-disturbance site conditions and vascular plant regeneration in its earliest stages.

Key Results

n/a