# Patterns and causes of variation in understory plant diversity and composition in the mixed-wood boreal forest of Alberta.

Lead by: Virginia Chavez

Theme: Vegetation

Status: Completed

Start: 2004

**End:** 2010

### **Participants**

- Virginia Chavez
- Ellen Macdonald

### **Background**

The boreal forest of Alberta is a dynamic landscape wherein its mesic areas comprise a shifting mosaic of canopy dominance of broadleaves and conifers. This canopy mixture grants the opportunity for fine-scale studies within mixedwood stands to examine the response of understory diversity patterns in relation to canopy composition. Although the role of overstory on understory communities in the boreal forest has been addressed in a number of studies, much work is still needed to adequately understand understory species diversity and composition patterns in mixedwood forests.

## **Objectives**

The general objective of this project is, therefore, to contribute to the understanding of the patterns and causes of diversity variation in understory plant communities in the mixedwood boreal forest of Alberta. This project is composed of the following three sub-studies: 1) Variation in patterns of understory plant diversity and composition within boreal mixedwood forests; 2) Spatial relationships and associations between canopy

and understory species composition and diversity; 3) Effects of understory species interactions on understory diversity.

# **Key Results**

n/a