Herbaceous Diversity of Indiana's Old-Growth Forests

Jeremy S. Weber
Dept. of Botany and Plant Pathology
Purdue University
December 8, 2004

Objectives

To establish a baseline status of the herbaceous vegetation of eight of Indiana's old-growth forests

- Establish what is found on each site and where
 - Monitor invasive species
- Provide starting point for future studies and to provide more information to resource managers

Objectives

Two components to the study

 Determine the diversity and spatial distributions of herbaceous species

Determine how each site fits into the landscape around it

Plant Diversity and Spatial Distributions

- Cyclic transects
 - 1m² quadrats in a repeating pattern
 - Sample once for spring ephemerals and again in late summer for summer herbs
 - Hemispherical canopy photos and GLA[©]
 - Detailed habitat notes

Coarse woody debris

Trails

Beech aphids

Hydrology

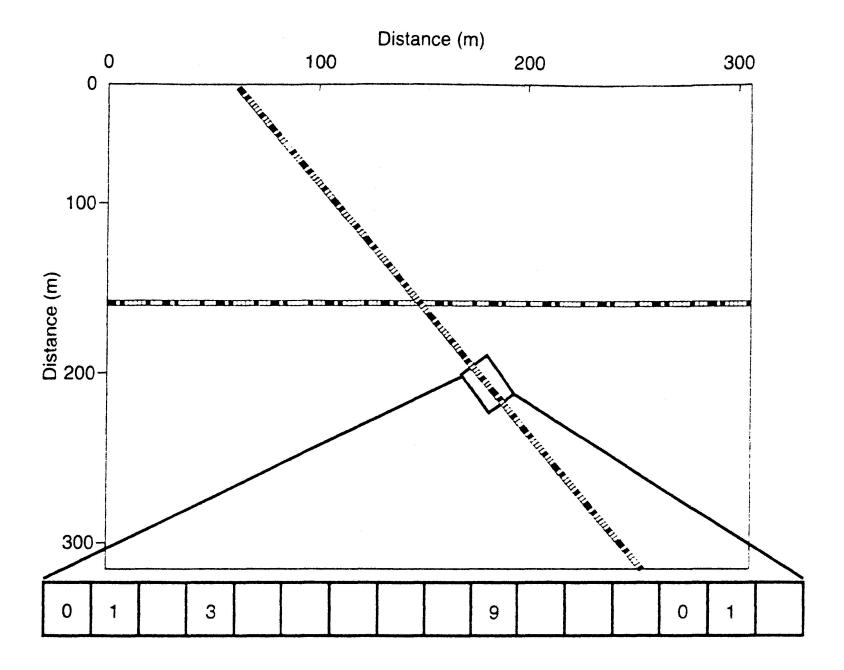
Treefall Gaps

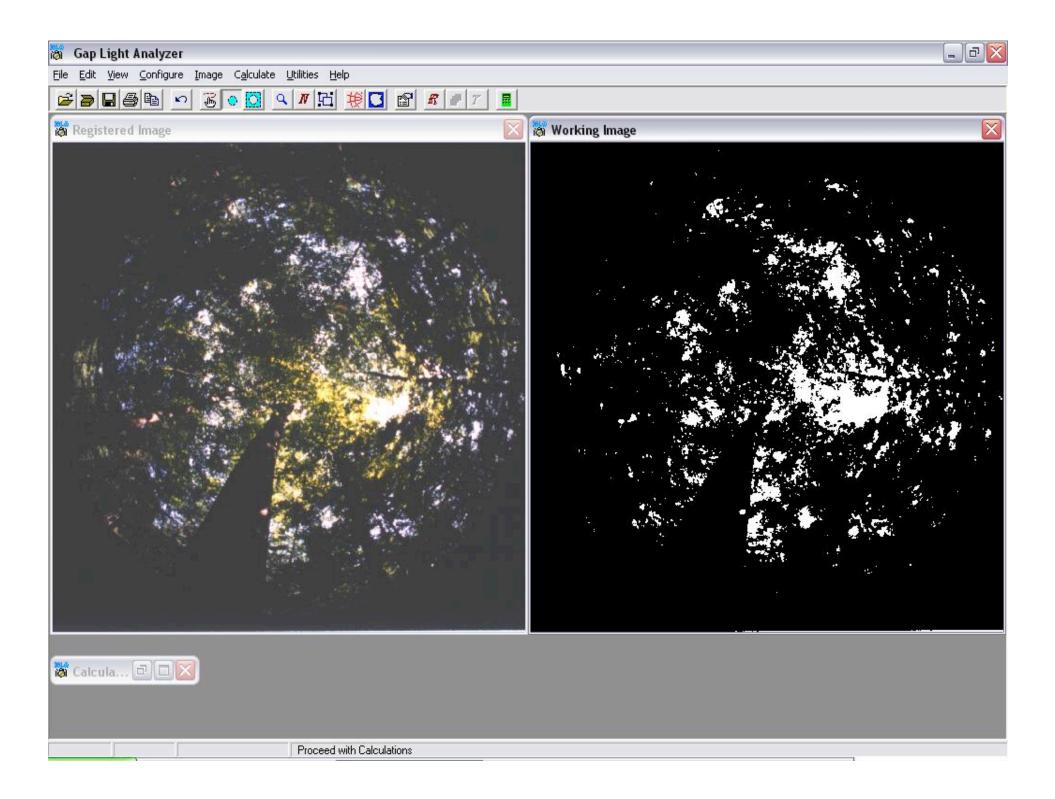
Pits and mounds

Slope and Aspect

Animal activity

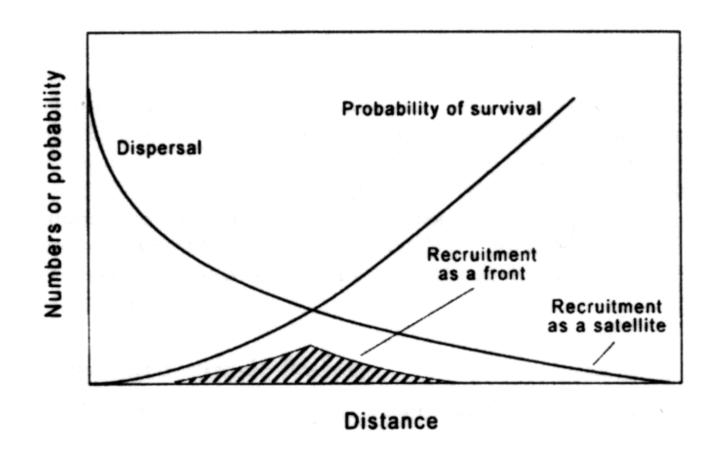
etc.





Plant Diversity and Spatial Distributions

Why are spatial distributions important?



Landscape Characteristics

