

→ How Forests Respond to Rivers ←

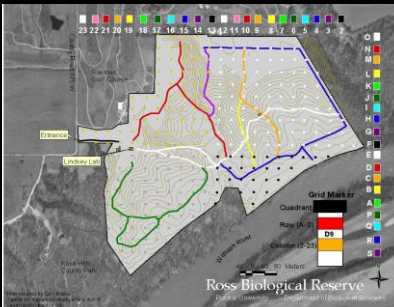
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→ Background ←

- Modern Issues: Conservation and Restoration of the Environment
- A necessity to modernize Forest Restoration Strategies
- Improve Forest Restoration Strategies by studying forest dynamics
- How do forests adjust to nearby sources of disturbance, such as a river?
- Change in tree size? Tree density? Tree diversity?

→ Methodology ←

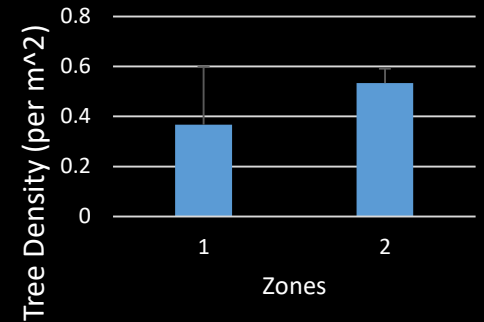
- Measure tree diversity, tree density, and tree size in response to nearby river
- Study System: Temperate Forest @ Ross Biological Reserve



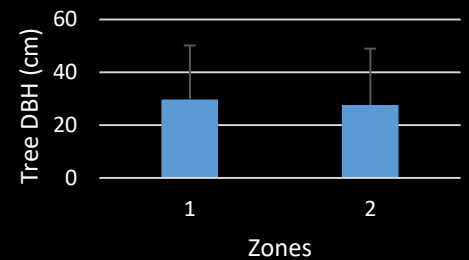
- Establish a Site (adjacent to the Wabash river) with two Zones
- Zone 1 = 0-10m away from river
- Zone 2 = 10-20m away from river

→ Results ←

Tree Density v. Zones



Tree DBH v. Zones



→ Discussion + Significance ←

- Tree size doesn't change when you compare trees close to the river, to trees a little farther away
- However, there is a slight increase in tree density as you get farther away from the river (not significant)
- This information allows us to modernize restoration strategies by learning where to allocate more/less resources
- Restore local forests by planting native saplings- however we recommend planting a higher density of saplings, further away from rivers/areas of disturbance