









# 37<sup>th</sup> National Indian Timber Symposium

# "Overcoming Obstacles in Pursuit of Sustainability"

June 10-13, 2013

Keshena, WI



# Invasive Earthworms Cause Dramatic Changes in Hardwood Forests



Brennan Waupoose
Biological & Physical Sciences
College of Menominee Nation

**Invasive Species Research Intern Summer 2012** 

ITC Symposium June 2013

## Project Overview

 College of Menominee Nation and University of Wisconsin-Platteville

Funded by Wisconsin Alliance for Minority
 Participation (WiscAMP) Small Grants Program

 Data collected will be used to propose a large scale assessment of Great Lakes region. Study Area BAYFIELD DOUGLAS RON ASHLAND VILAS BURNETT MASHBURN SAWY FLORENCE ONEIDA PRICE FOREST MARINETTE POLK RUSK BARRON LINCOLN LANGLADE TAYLOR CHIP PEWA ST. CROX MENOMINEE OCONTO DUNN DOOR MARATHON SHAWAND PIERCE CLARK EAU CLAIRE PEPIN TREMPEALEAU PORTAGE WAUPACA OUTAGAMIE BROWN WOOD BUFFALO JACKSON. MARITOWOO, WAUSHARA VARREBAGO CALBERT ADAMS LA CROSSE MONROE JUNEAU FOND DU LAC NEBO TOAM VERNON COLUMBIA SAUK DODGE WASH-RICHLA ND CRAMPORD! VAUKES HA DANE JEFFERS ON NWO GRANT RACINE

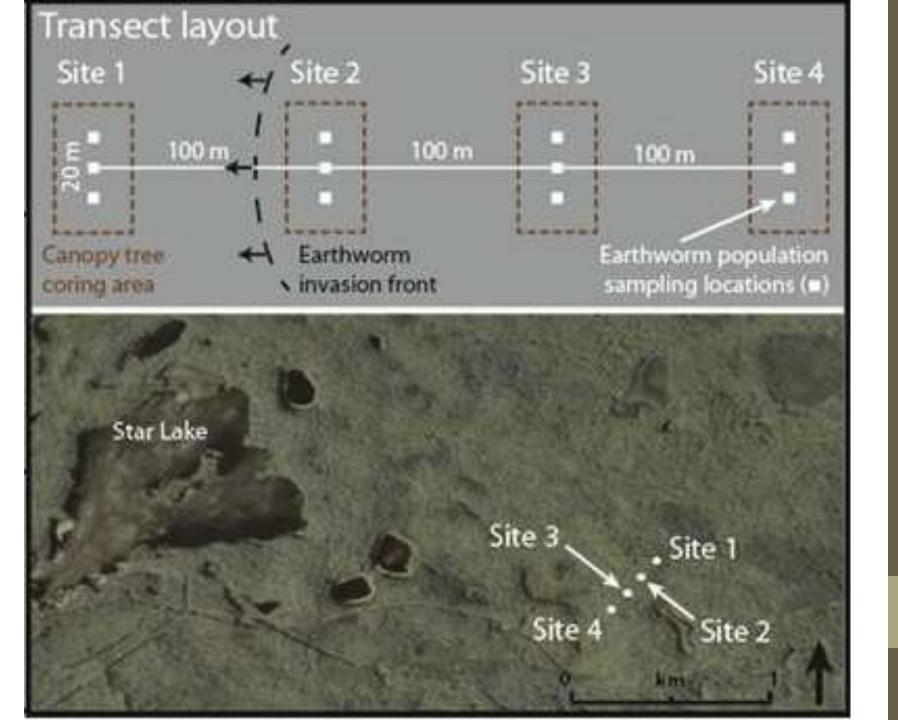
GREEN

LAFAYETTE

ROCK

VALVORTH

KENOSHA











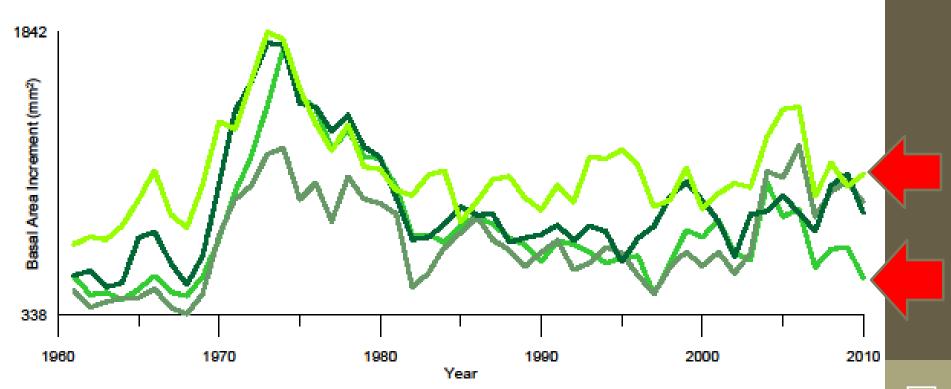


#### **PINE REGENERATION???**

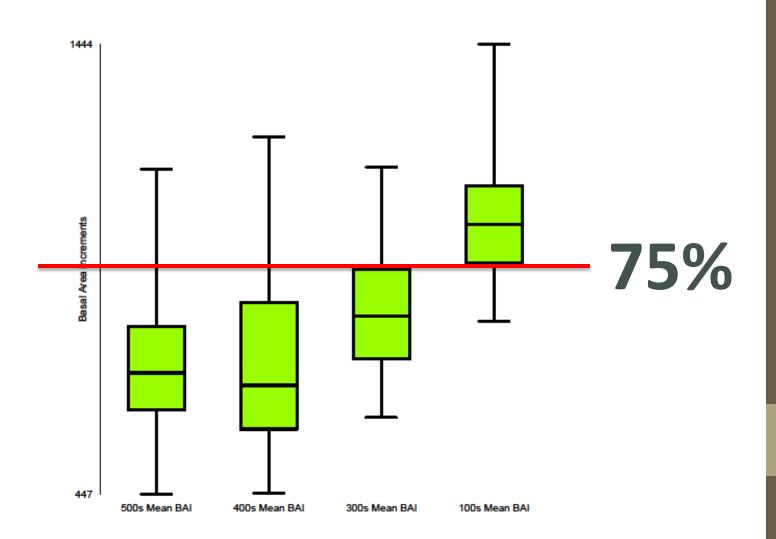




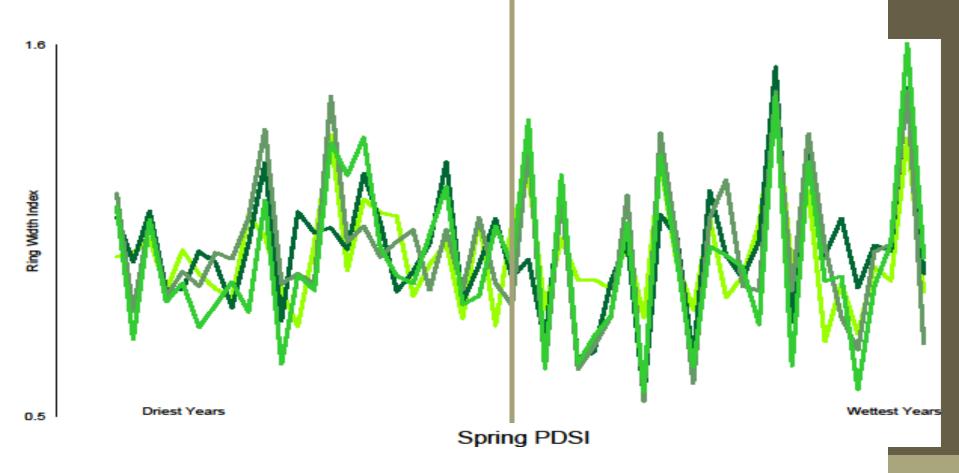
# Basal Area (mm²)



#### Basal Area 1980-2011



## Climate Data



#### Conclusion



 Earthworms drastically alter the appearance, productivity, and sensitivity to drought of hardwood maple forests.

# Cultural Impacts?

- Sugar Camps
- Timber Harvesting
  - Millworks
  - Traditional Crafts
- Medicinal Plants
- Animals

#### Thank You!





#### Symposium Videos Produced by











School of Environmental and Forest Sciences

UNIVERSITY of WASHINGTON

College of the Environment