

Background on Invasive Phragmites

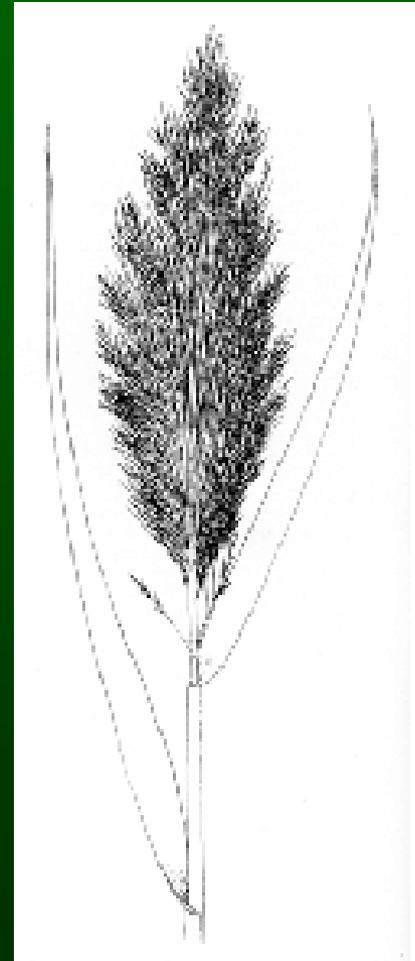


Presented By: Sue Tangora

Date: 03/29/11

Background on Invasive Phragmites

- Introduction
- Dispersal
- Distribution
- Native vs. non-native phragmites
- Impacts
- Challenges





Dispersal of Phragmites

- Rhizomes
- Root fragments
- Seed
- Plantings



Distribution in Michigan

- Heavy infestations
 - Southern Michigan/Saginaw Bay/St. Clair Delta
 - Proximity to urban areas
 - Coastal wetlands/shoreline
 - River mouths and bayous
 - Exposed bottomlands
 - Disturbed wetlands



Distribution in Michigan

- Younger infestations
 - Northern Michigan
 - Inland areas
- Uninfested areas
 - Upper Peninsula
 - Portions of northern Lower Peninsula

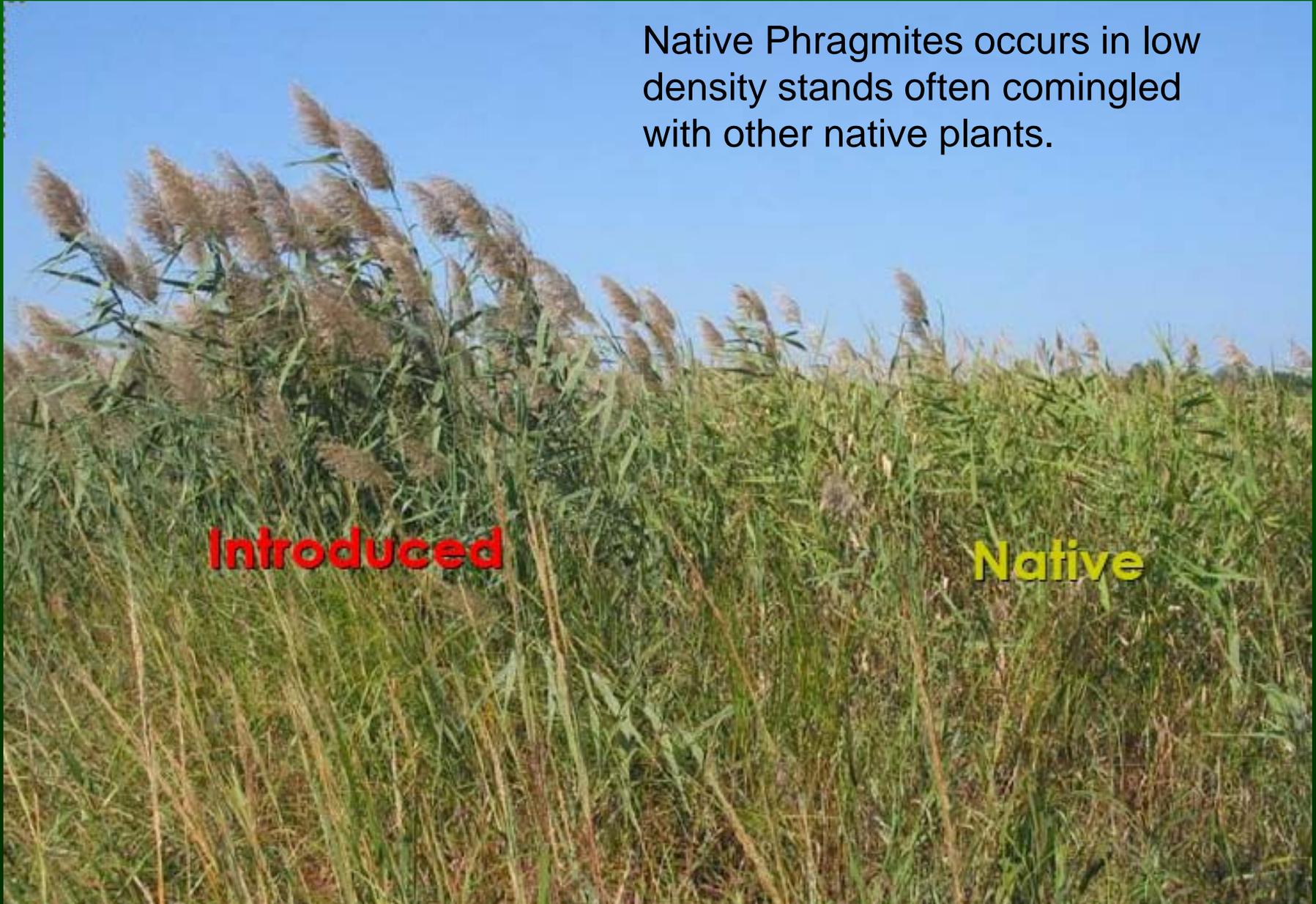


Native and non-native phragmites

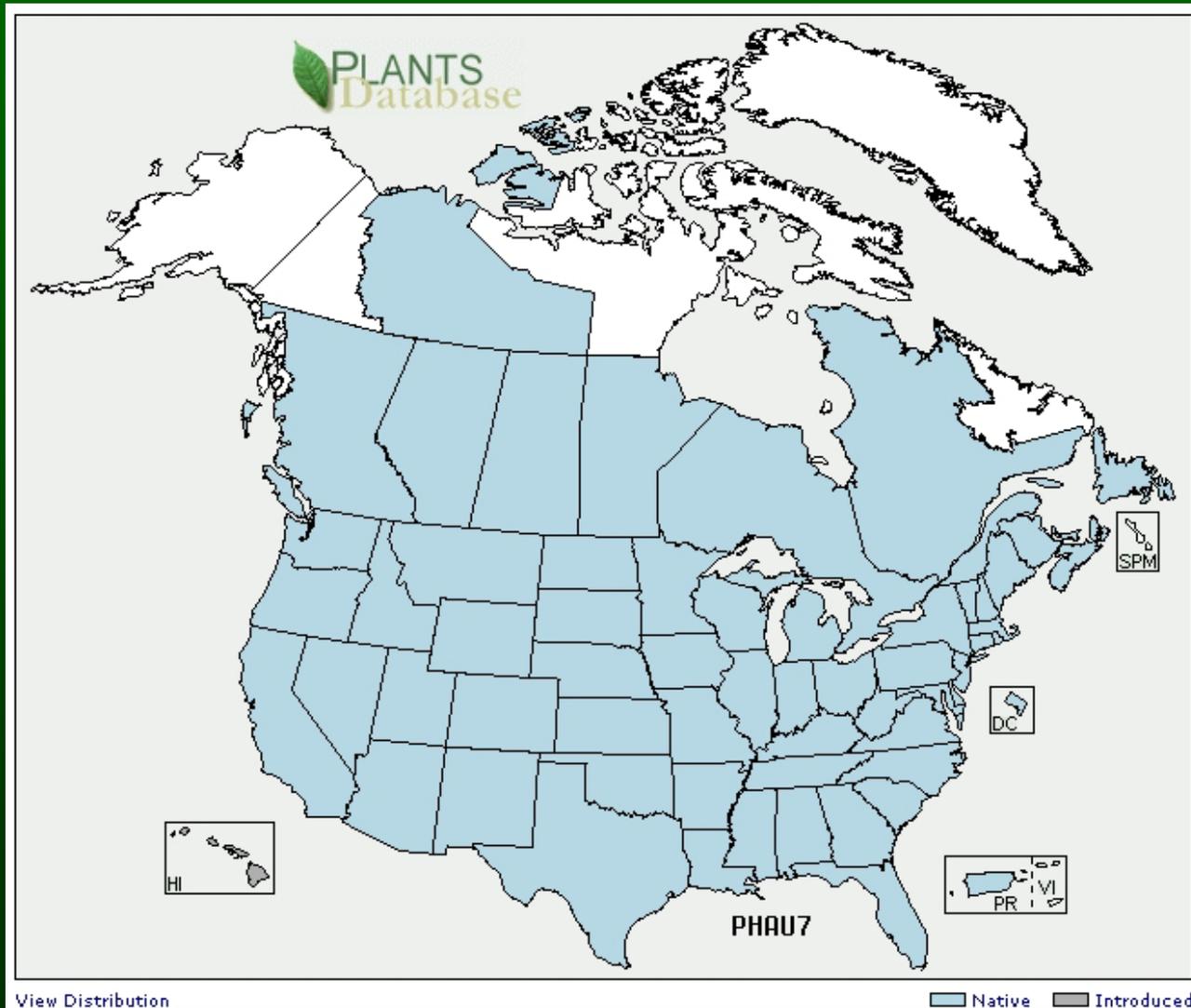
Native Phragmites occurs in low density stands often comingled with other native plants.

Introduced

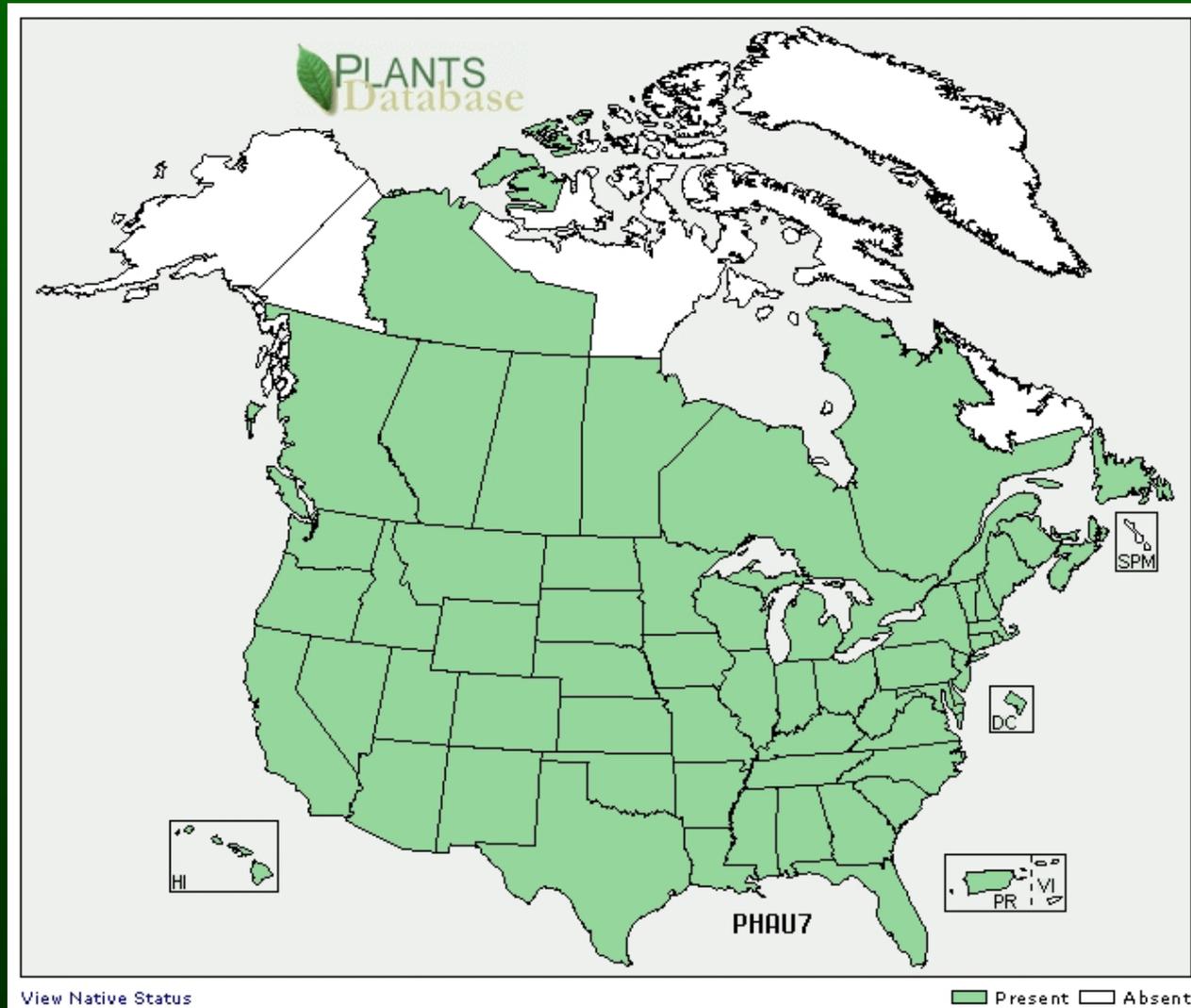
Native



Distribution of Native Phragmites



Distribution of Non-native Invasive Phragmites



Identifying Native vs. Non-native Phragmites



Native *Phragmites* has dark (purple/red) coloration

Identifying Native vs. Invasive Phragmites

Invasive leaf sheaths adhere

persist through the winter.

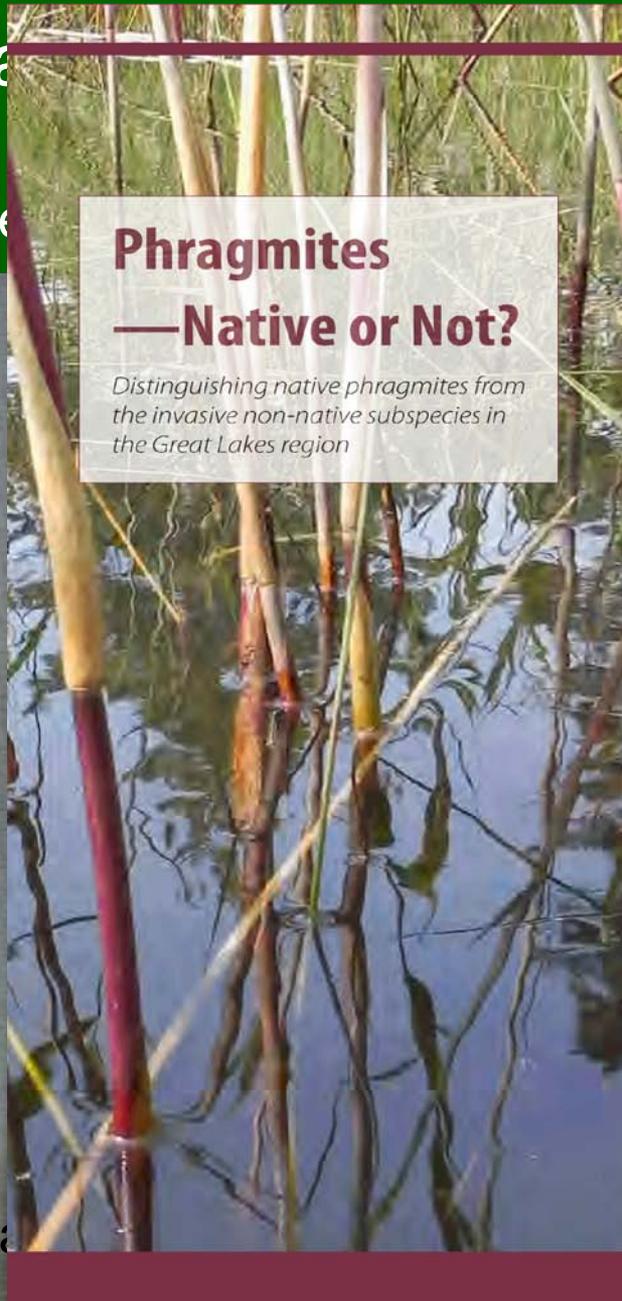
Phragmites —Native or Not?

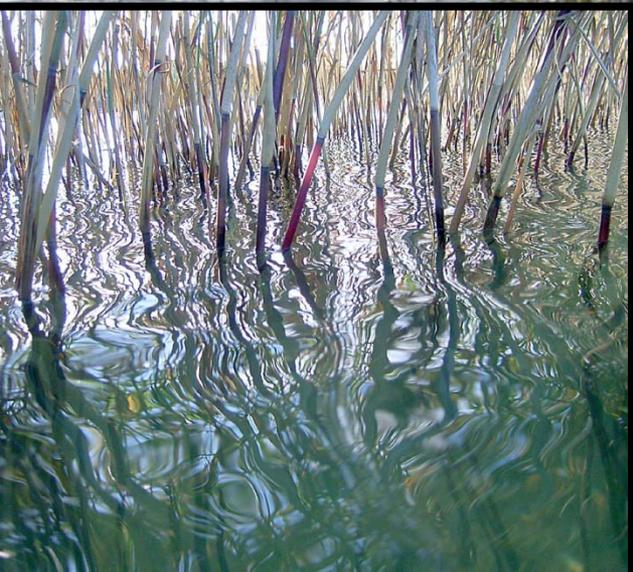
Distinguishing native phragmites from the invasive non-native subspecies in the Great Lakes region

Invasive

Native without sheaths

Native with sheaths that
do not adhere tightly









80% of plant below ground.

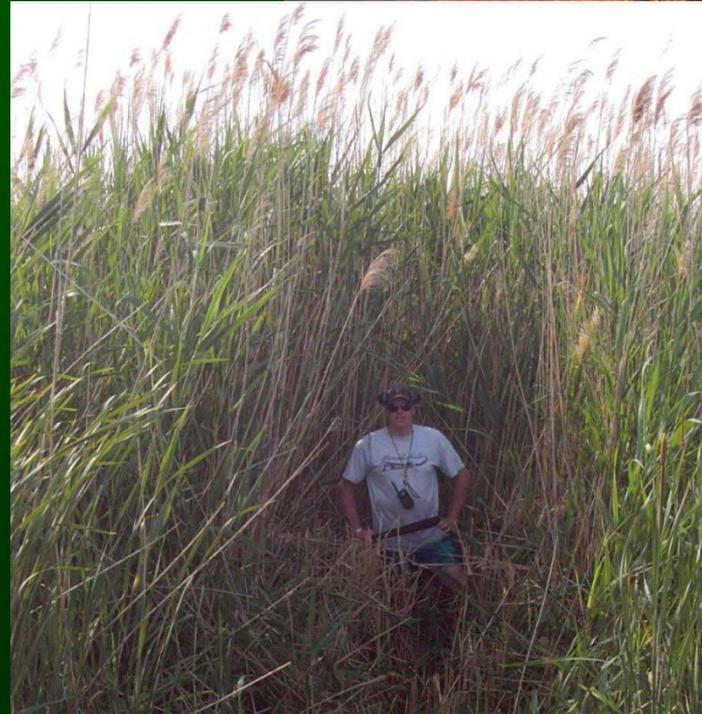
Impacts to Wildlife

- Impacts specialists
- Increases in some generalists
- Changes in food web
- Changes in wetland use (nesting/brood rearing)



Impacts to Human Safety

- Fire hazard
- Obstructed views for drivers
- Impedes navigation



Impacts to Human Values

- Recreation
- Property values
- Aesthetics
- Infrastructure



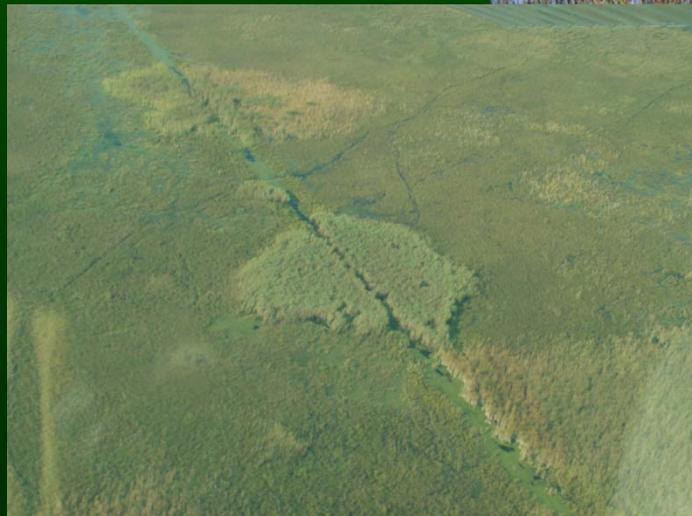
Impacts from Phragmites Treatment

- Herbicide use
- Limited funding/resources pulled from other programs
- Follow-up and sustainability challenging
- Ineffective/inefficient treatments
- Other invasive species can follow



Challenges in Monitoring and Detection

- Access
 - Private lands
 - Coastal and interior wetlands
- Public lands
- Gaps
- Native phragmites
- Awareness



Challenges in Mapping Phragmites

- MISIN database
- Research projects
- Local efforts
- Merging information
- Continuity
- Tracking treatments

MISIN Midwest Invasive Species Information Network

SUNDAY, MARCH 27, 2011

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Features

Buckthorn Watch

Welcome to Buckthorn Watch! Register Now! We are partnering with the Midwest Invasive Species Information Network to map the distribution of common buckthorn across the north central U.S.... [Read more »](#)

Invasive Plants: Unwanted in State Parks!

Contact: Lindsay Ross (rossl2@Michigan.gov)
517-241-3366

Visitors to Michigan state parks are invited to participate in a new early detection and rapid response (EDRR) initiative to find the very first outbreaks of unwanted invasive plants. Early detection will aid in rapid response control measures aimed at eliminating the invasive plants before they become widely established. [Read more »](#)

Tags: Michigan, Rapid Response, Stewardship

Funder Profile: MSU SMEP

The Sustainable Michigan Endowed Project is an initiative of Michigan State University (MSU). It provides a venue for ongoing scholarly reflection and critique on the sustainability of Michigan, as well as seed grants for sustainability research from a Michigan state-level perspective. SMEP also provides a venue for on-going, long-term sustainability discourse with the goal of influencing the intellectual culture within MSU, and particularly the College of Agriculture and Natural Resources. [Read more »](#)

Tags: Funding

News Highlights

Could a tiny insect halt the invasion of Japanese knotweed?

Patrick Barkham of The Guardian reports that the British government believes it has found a way to stop the spread of Japanese knotweed in Britain. Japanese knotweed... [Read more »](#)

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New Great Lakes Invasive Species Report

Are more invasive species headed for the great lakes? EPA has released a final report entitled, "Predicting Future Introductions of Nonindigenous Species to..." [Read more »](#)

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Lyme grass invading Michigan dunes

Jeff Alexander of the Grand Rapids Press writes about the significance of this coastal invader. An invasive plant that competes with native dune grass is thriving... [Read more »](#)

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Meetings

2011 Stewardship Network Conference

The Stewardship Network and the Midwest Land Trust Alliance partner this year to bring you two great days of informative talks and workshops that will focus on... [Read more »](#)

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MISIN News

Invasive Plants: Unwanted in State Parks!

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517-241-3366 Visitors to Michigan state parks are invited to participate in a new early detection and rapid response... [Read more »](#)

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How Do I Report An Invasive Species Sighting?

Garlic Mustard / Learn More...

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Tags: Michigan, Data, EAB Meeting, Report, Developers, OSU Dunes, Browse EPA Grass, Funding Great Lakes, Lady Beetles, Stewardship Rapid Response

Challenges in Control Efforts

- Ownership patterns
- Large stands
- Small isolated stands
- Coordination
- Programs historically available to individual landowners



Challenges in Permitting Phragmites Treatment

- Up to three permits needed
 - Wetland
 - Aquatic Nuisance Control
 - National Pollution Discharge Elimination System (?)
- Laws created to address other environmental issues and are still relevant today
- Staffing of permitting programs experienced deep cuts
- New treatment categories and targets have complicated issue



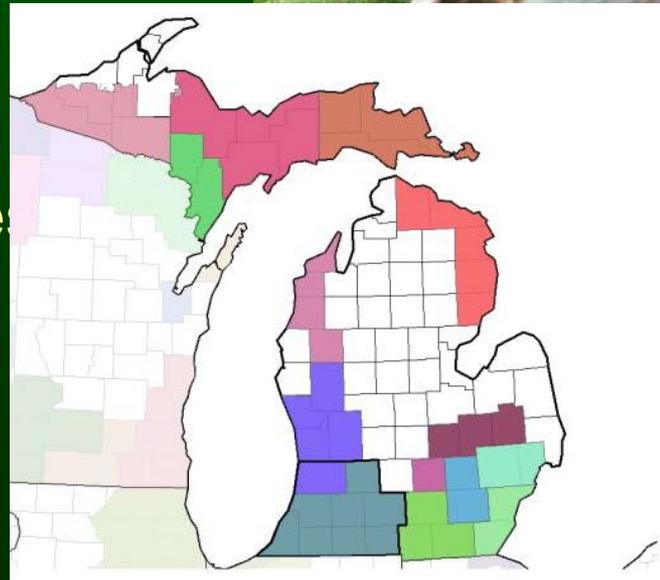
Challenges in Sustaining Treatments

- Short-term funding
- Maintenance funds lacking in wetland restoration and mitigation projects
- Monitoring effects of treatments



Moving Phragmites Management Forward

- Breaking down institutional barriers
- Better tools and support for increased coordinated effort and prioritization
- Innovative treatment methods – grazing, new technologies, biofuels
- Integrating aquatic and terrestrial invasive species efforts
- Grassroot efforts
- Our message



A Silver Lining

- Community building
- Citizens and leaders can connect among a range of values
- Gets people outdoors
- Strengthens partnerships
- Creates jobs



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Features Inventory

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Thank you



Great Lakes, Great Times, Great Outdoors

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