

Invasive Plants



<http://fyi.uwex.edu/weedsci>

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Extension

What is an invasive plant?

- **Weed:** plant out of place
- **Invasive plants:**
 - Non-native
 - Persist and spread
 - Cause economic and/or environmental harm

NR40: Wisconsin's new invasive species rule

Prohibited species

- are not yet in the state or only exist as small populations

Restricted species

- are invasive species that are already too widespread to expect statewide eradicated.

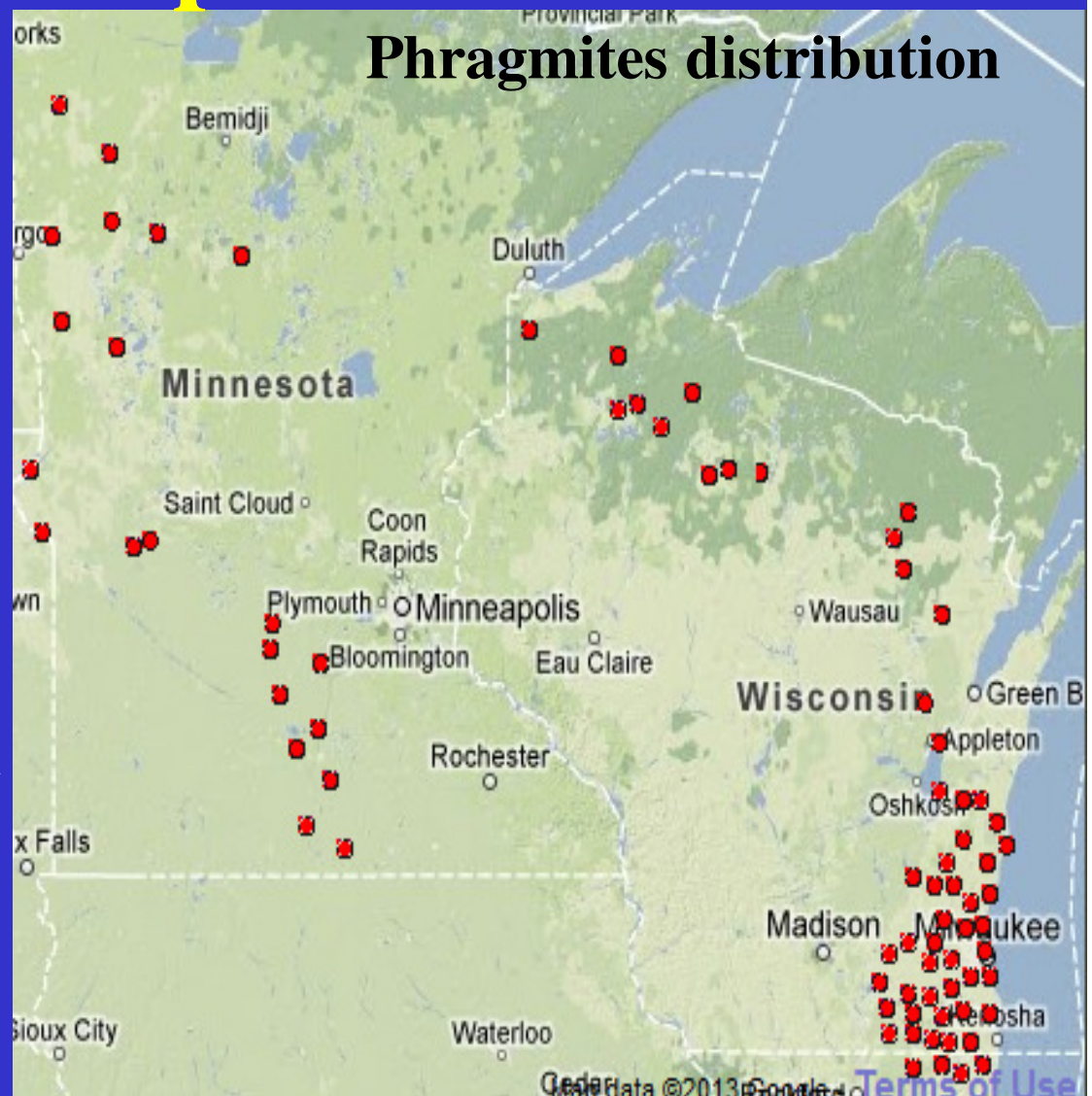
<http://dnr.wi.gov/invasives/classification/>

Updating NR40

- Currently DNR is updating species list
 - Proposed regulated species include:
 - Crown Vetch (restricted)
 - Japanese barberry (restricted)
- Public comment on proposed list of species
- See this link for more info:
<http://invasivespecies.wi.gov/>
- Expected to be approved by: Fall 2014

How do we prevent impact of invasive plants?

1. Prevent establishment
2. Detect invasions early and eradicate (EDRR)



Contribute invasive plant location information

Great Lakes Early Detection Network = GLEDN

– www.gledn.org

PROVIDES

1. Framework for data sharing

– Casual observers can enter observations through GLEDN

2. Resources

1. Distribution maps

2. Weed alert system

– <http://apps.bugwood.org/mobile/gledn.html>

Make a Report

www.gledn.org

Welcome guest Login | My Profile | January 30th 2013



Great Lakes Early Detection Network

[Home](#)[Members](#)[Alerts](#)[Maps](#)[In Depth](#)[Contact Us](#)

We are an invasive species network offering ...

- Customized alerts
- Verification services
- Data integration and mapping services

[Report An Invasive Species](#)[Sign Up For Alerts](#)[Verify Reports](#)

New Reports

November 15th, 2012	winged burning bush (<i>Euonymus alata</i>) in	GLEDN Guest	Verified	GLEDN
November 9th, 2012	Japanese Knotweed (<i>Polygonum cuspidatum</i>) in	GLEDN Guest	Verified	GLEDN
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November 9th, 2012	Japanese Knotweed (<i>Polygonum cuspidatum</i>) in	GLEDN Guest	Verified	GLEDN
November 1st 2012	Japanese barberry (<i>Berberis thunbergii</i>) in	GLEDN Guest	Verified	GLEDN

Report a Sighting

Species

Species:

-- Select a Species: ▼

Not Listed?

[Other Species](#)

Location

Please either (a) enter latitude longitude coordinates below from your GPS you used, or (b) click on the map to the right and zoom in to determine and provide an accurate location.

Location Name:

Latitude:

Longitude:

Accuracy:

Site Description:

meters

optional



Date of Sighting

Date:

January



30th



2013

Photo

Photo:

[Upload Photo](#)

Note: Please select small JPG or PNG files. Check out these [tips for great photos!](#)

Photo:

[Upload Photo](#)

Photo:

[Upload Photo](#)

Photo:

[Upload Photo](#)

Optional

Name:

optional

Email:

optional - we will send you an email once your observation is verified

Phone:

optional

[Submit](#)



Use a smartphone to report invasives



<http://apps.bugwood.org/mobile/gledn.html>

- The app uses your smartphone to provide latitude and longitude data and a photo of your reported species.
- The app can store reports when you are out of network service and will upload reports when you regain phone service or wi-fi.

All data will be verified

- Experts will review submissions and approve/reject
- Interested in being a verifier? contact me
 - Signup by county
 - Species specific
 - Will get emails to verify

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Report An Invasive Species

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Verify Reports

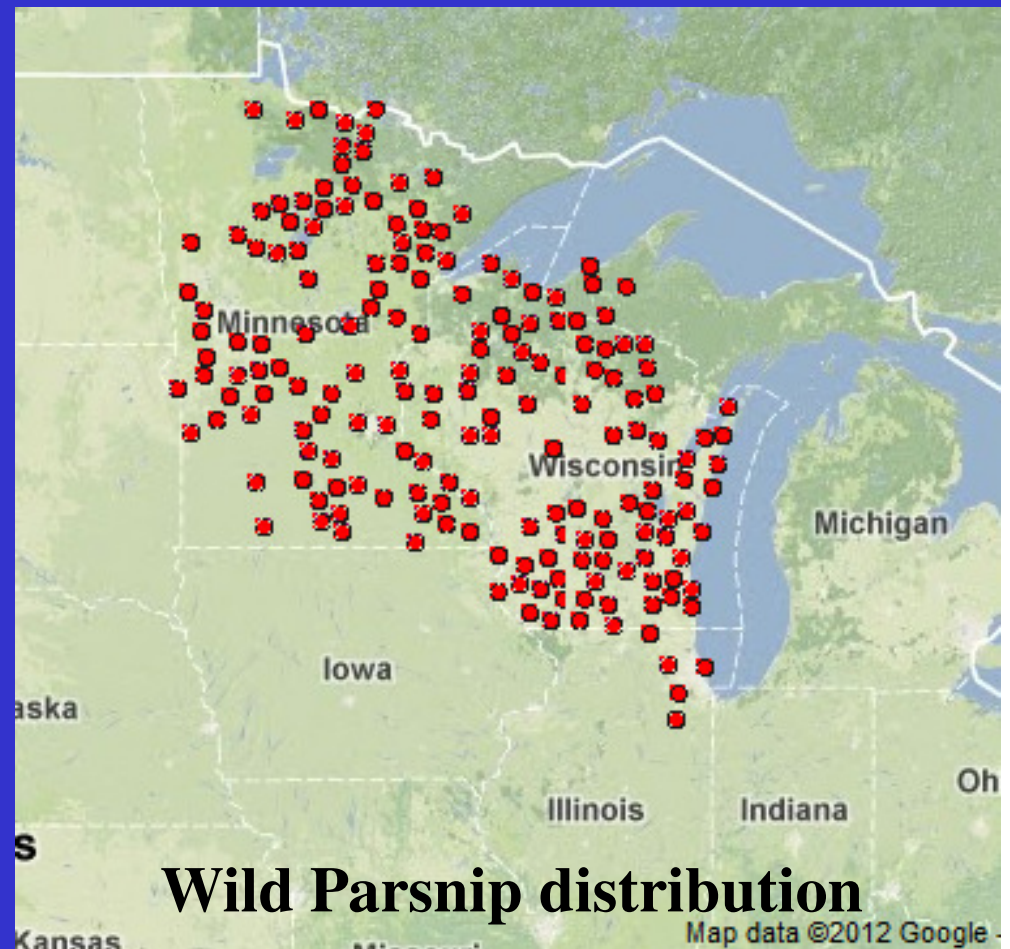
New Reports

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GLEDN Website

www.gledn.org

- If registered can
 - view maps of species distributions
 - signup for email alerts of new sightings
- **You do not need to be a registered user to submit an observation**

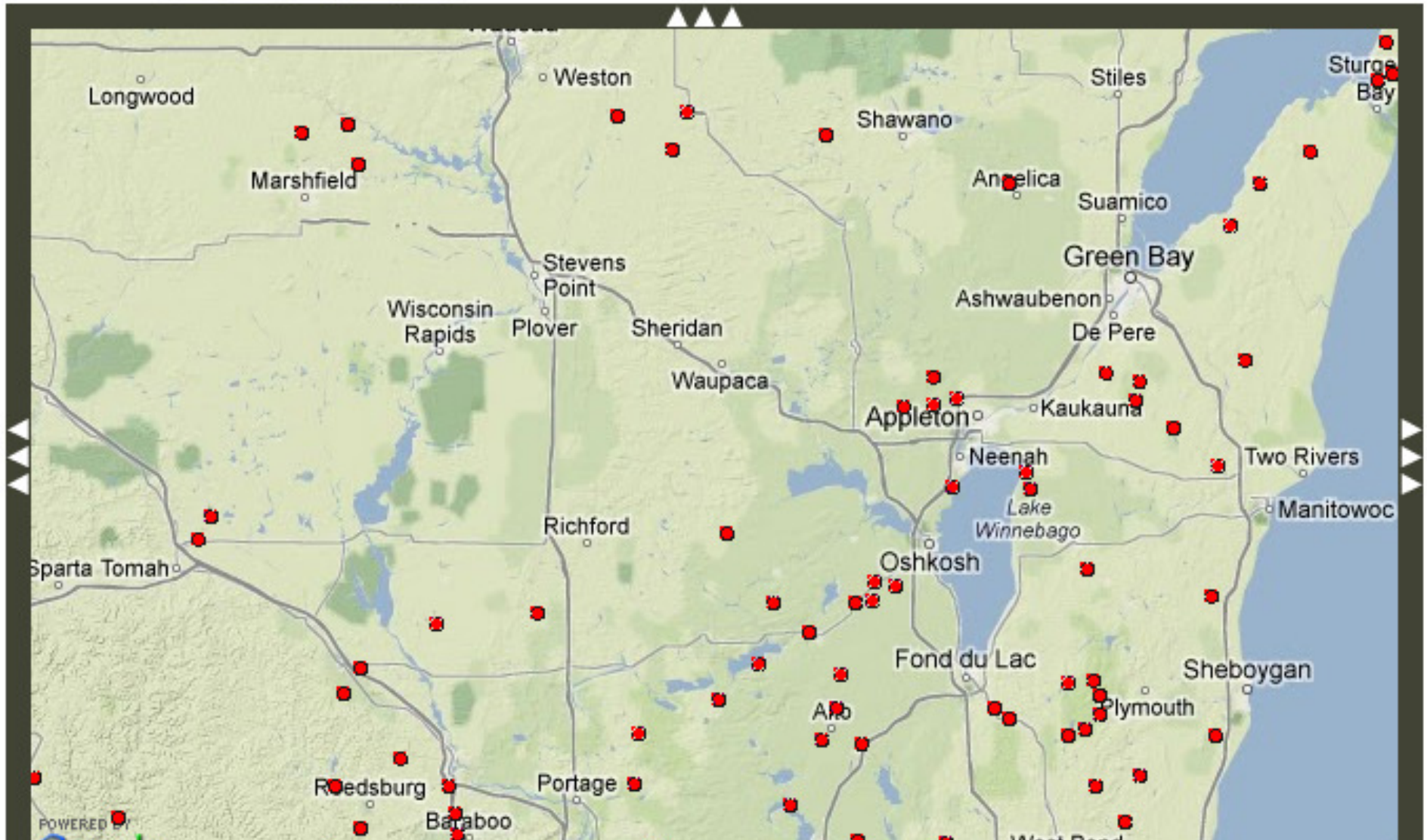


What do we do with the data?

- Share it with everyone
 - Contributing citizens
 - Other data management providers
 - Local, state, federal agencies
 - Researchers
- Use to create tools to help predict spread

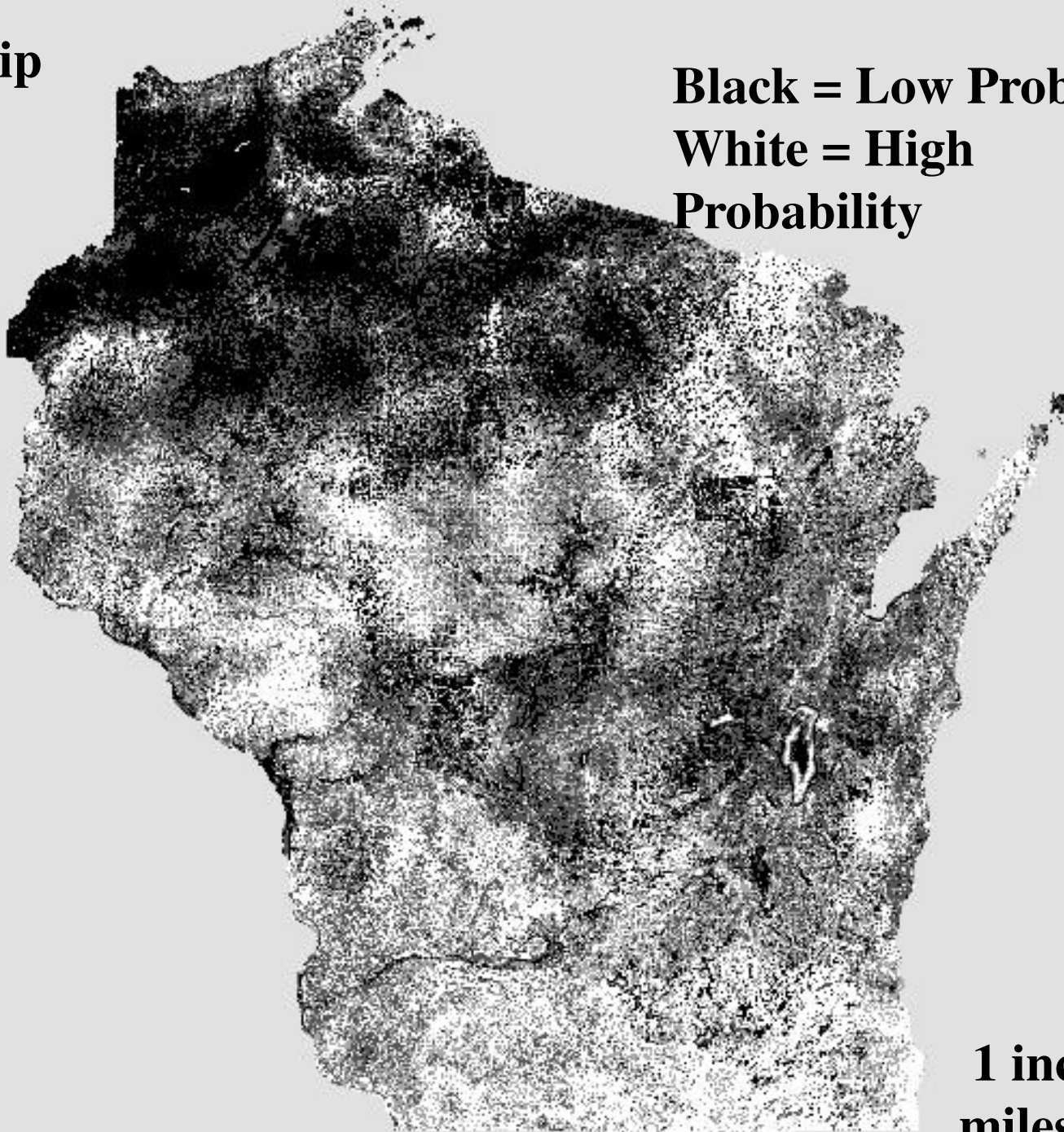


Is this accurate enough for local management decisions?



Wild Parsnip

Black = Low Probability
White = High
Probability



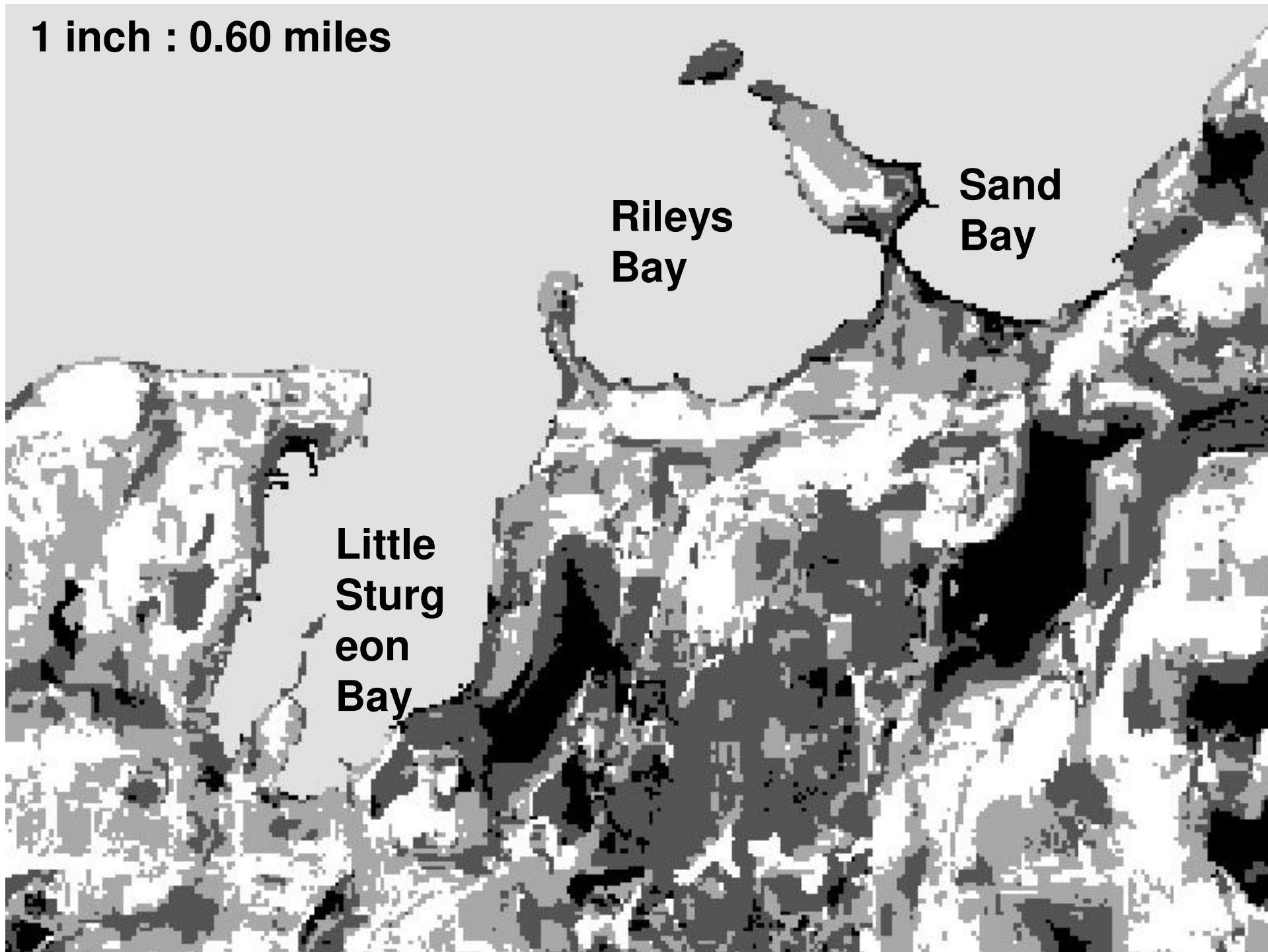
1 inch : 50
miles

1 inch : 0.60 miles

**Rileys
Bay**

**Sand
Bay**

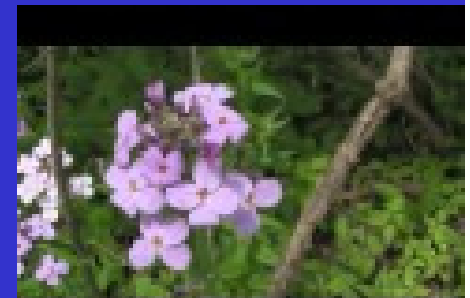
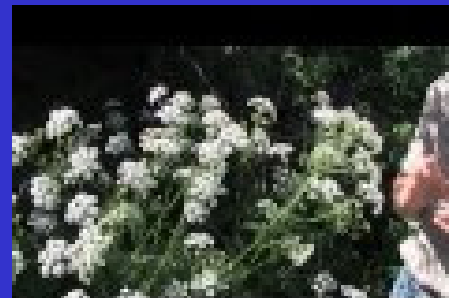
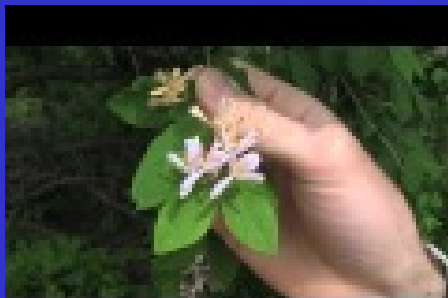
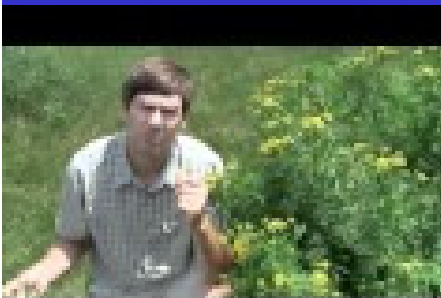
**Little
Sturg
eon
Bay**



Invasive plant ID videos

<http://fyi.uwex.edu/weedsci>

- Black swallow-wort
- Bull thistle
- Bush honeysuckles
- Canada thistle
- Creeping bellflower
- Dame's rocket
- Garlic mustard
- Hill mustard
- Japanese hedge parsley
- Japanese hop
- Leafy spurge
- Perennial pepperweed
- Plumeless thistle
- Poison hemlock
- Spotted knapweed
- Teasels
- Wild chervil
- Wild parsnip



How do I select the appropriate control methods?

Factsheets on control

- Free download: <http://fyi.uwex.edu/weedsci>
- Purchase: <http://learningstore.uwex.edu/>





Introduction to the MIPN Control Database

<http://mipncontroldatabase.wisc.edu>



WI First Detector Network

- Train a network of volunteers who are willing to respond to reports of invasive species
 - Assist Federal, State and Local agencies
 - Improve knowledge of invasive species distribution
- First training will be winter 2013-14
 - Trained in person or through online tutorials
 - Yearly gathering/conference to present accomplishments, receive awards, and network

Current invasive projects in my lab

- Composting buckthorn and garlic mustard seeds
- Developing predictive maps for invasive plant spread
- Determining the impacts of Canada thistle on prairie establishment
- Effectiveness of herbicides on Japanese knotweed, sweet clovers, crown vetch
- Invasiveness of ornamental plants