



2019 Spring Partner Meeting

*Protecting, enhancing, and promoting
northwest Michigan's natural communities
through terrestrial invasive plant
management and outreach.*

HabitatMatters.org



ISN's History

- Founded 2005
 - NW MI CWMA
- GT Regional ISN: 2010
- Merged 2012!



**Veterans Drive, Manistee County
Before and After, 2016-17**



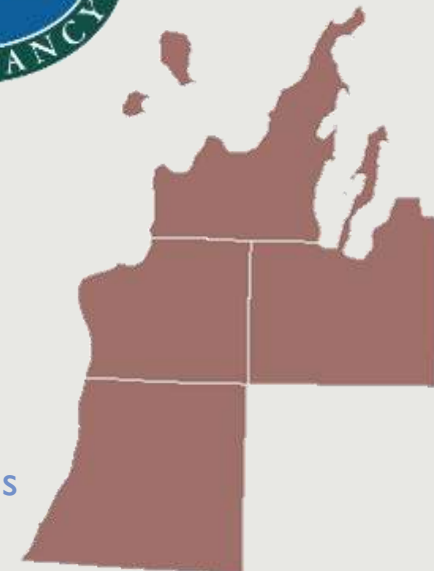


Funding provided by:
Michigan Invasive Species Grant Program
Great Lakes Restoration Initiative

Major Partners



- Garfield Township
- City of Frankfort
- Benzie Long Lake Association
- Portage Lake Watershed Forever
- Friends of Betsie Bay
- The Nature Conservancy
- Sleeping Bear Dunes National Lakeshore
- Grand Traverse Band of Ottawa and Chippewa Indians
- Grand Traverse Audubon Club
- Little Traverse Bay Band of Odawa Indians



Mission

Protecting, enhancing, and promoting northwest Michigan's natural communities through terrestrial invasive plant management and outreach.

Serving Benzie, Grand Traverse, Leelanau, and Manistee counties

ISN Goals

- 1) Raise awareness of high-priority invasive species in the region through education in order to cultivate long-term stewardship of our natural areas
- 2) Prevent introduction and spread of terrestrial invasive plants through outreach and collaboration with government officials and garden professionals
- 3) Survey region for high-priority terrestrial invasive plants to aid in effective prioritization and treatment strategies
- 4) Facilitate and assist with treatment of high-priority species on public and private land based on survey maps and prioritization strategies

Habitat Matters



For People



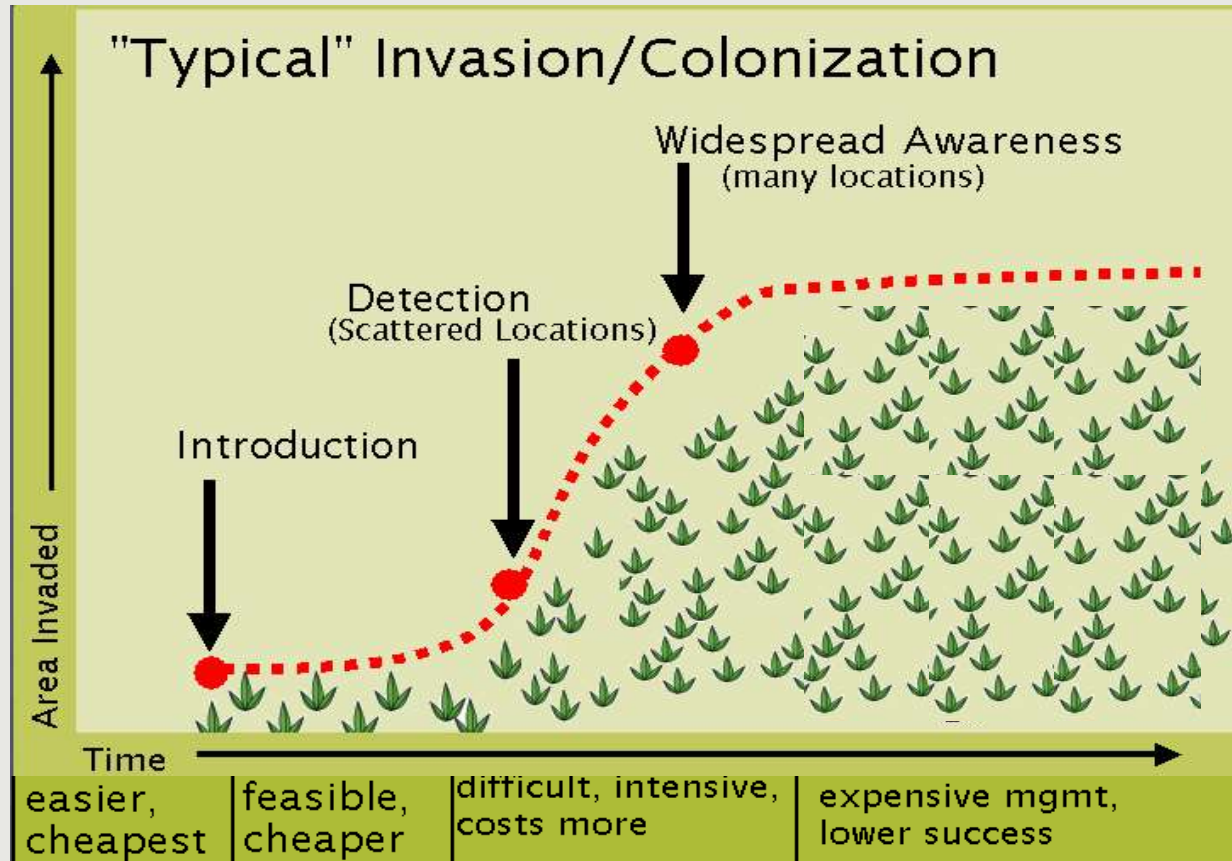
For Northwest Michigan



For Wildlife

What's Invasive?

Formal definition – a non-native species that harms people, the environment, or the economy.



Source: Michigan Natural Features Inventory



Environmental harm – a natural area consisting mostly of one or a combination of introduced plants that provide minimal habitat value.

Top 20 Least Wanted Species

- Developed by ISN Partners in October 2010
- Lists plants causing the most problems
- Half of the plants on the Top 20 still sold for landscape use


TOP 20 LEAST WANTED

SHRUBS:

1. common buckthorn (*Rhamnus cathartica*)
glossy buckthorn (*Frangula alnus*)
2. honeysuckle(s)
(*Lonicera* spp.) *can also be a vine
3. Japanese barberry
(*Berberis thunbergii*)
4. multiflora rose
(*Rosa multiflora*)
5. Russian olive (*Elaeagnus angustifolia*)
autumn olive (*Elaeagnus umbellata*)

HERBACEOUS PLANTS:

7. baby's breath (*Gypsophila paniculata*)
8. bull thistle (*Cirsium vulgare*)
9. Canada thistle (*Cirsium arvense*)
10. dame's rocket
(*Hesperis matronalis*)
11. European swamp thistle
(*Cirsium palustre*)
12. garlic mustard
(*Alliaria petiolata*)
13. Japanese knotweed (*Polygonum cuspidatum*)
giant knotweed (*P. sachalinense*)
14. leafy spurge (*Euphorbia esula*)

WOODY VINE:

6. oriental bittersweet
(*Celastrus orbiculatus*)



oriental bittersweet



lyme grass



narrow-leaved cattail



phragmites



p. loosestrife



reed canary grass



wild parsnip

15. lyme grass (*Leymus arenarius*)
16. narrow-leaved cattail (*Typha angustifolia*)
17. phragmites (*Phragmites australis*)
18. purple loosestrife (*Lythrum salicaria*)
19. reed canary grass (*Phalaris arundinacea*)
20. wild parsnip (*Pastinaca sativa*)

Focus 4: Japanese knotweed

Polygonum cuspidatum (*Fallopia japonica*)



Buyabetterhome.co.uk

Goals:

- Survey
- Develop effective regional treatment strategy
- Treat outlier populations

Traditional uses: food, medicine.

Notes:

- Native to Asia
 - Colonizes areas after lava flow
- Introduced as ornamental
- **Illegal in Michigan**

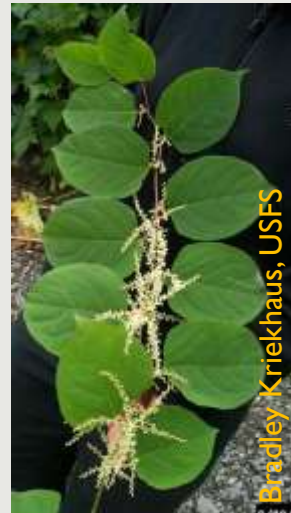
Problems:

- Displaces natives
- Difficult to control
 - Disposal problems
- Property damage



Randy Westrbooks, USGS

5331054



Bradley Kriekhaus, USFS

Focus 4: Garlic Mustard

Alliaria petiolata

Goals for ISN:

- Control in natural areas
- Educate public & encourage private land removal



Chris Evans



Katie Grzesiak



Grand Traverse Regional Land Conservancy

Notes:

- Native to Eurasia

Problems:

- Displaces natives
- Competes with tree seedlings
- Unpalatable to most native herbivores

Disposal Options:

- Find a use
- Trash
- Tarping

Traditional uses: food, papermaking, animal feed

Focus 4: Invasive *Phragmites*

Phragmites australis

Goals:

- Surveying
- Control populations
- Engage landowner groups & municipalities

Traditional uses:

natural building, bioremediation

Notes:

- Native to Europe

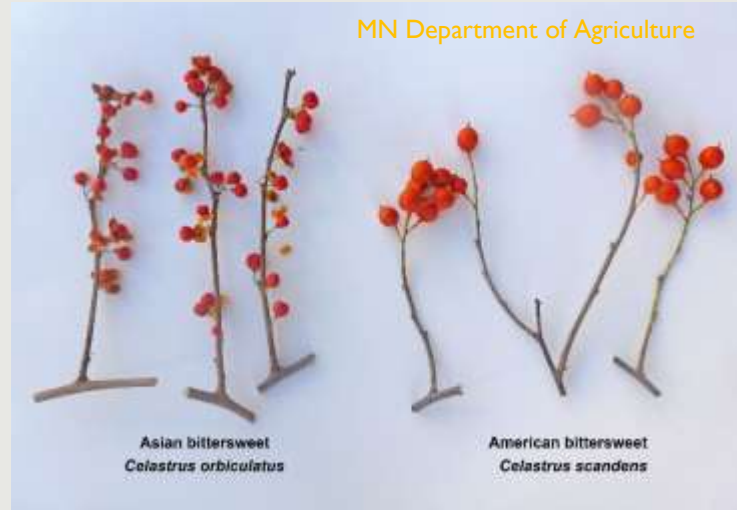
Problems:

- Displaces native plants
- Decreased property values
- Increased fire risk



Focus 4: Oriental bittersweet

Celastrus orbiculatus



Goals:

- Survey
- Treat in natural areas

Traditional uses: native and introduced versions both used in fall crafts

Notes:

- Native to Asia
- Brought as ornamental

Problems:

- Out-competes native American bittersweet
- Shades out trees it climbs on



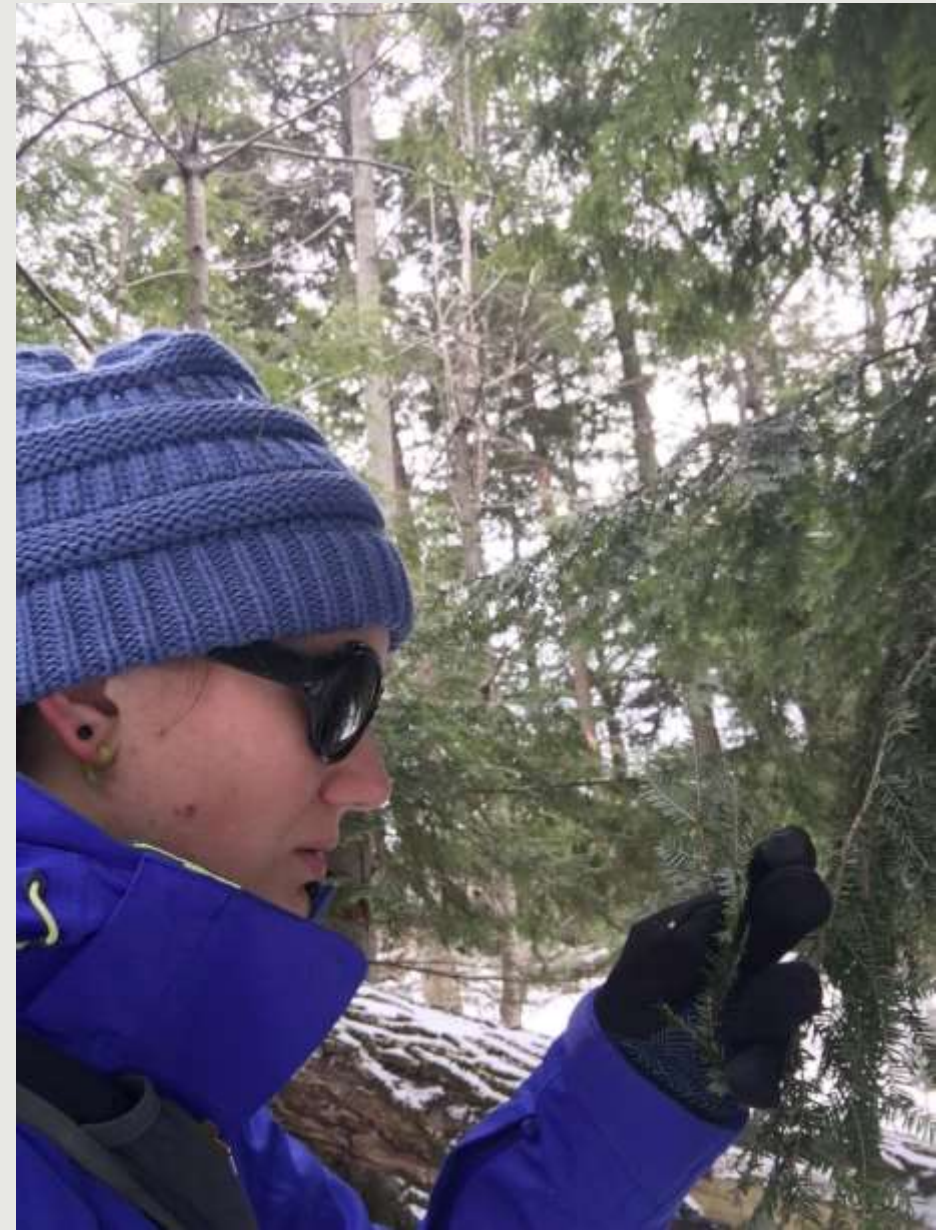
Current Programs

- *Go Beyond Beauty*—a voluntary program to remove invasive ornamentals from local nurseries' and landscapers' inventories
- *Workbees*—focused on garlic mustard, baby's breath, shrubs
- *Control*—high-priority species in high-quality habitats
 - Japanese knotweed, Oriental bittersweet, garlic mustard, invasive Phragmites
 - Ornamental invasives
 - Early Detection species
- *Outreach*—presentations
 - Value of habitat, threat of invasives
 - Local governments, garden clubs, Road Commissions, sportsmen's clubs, schools, etc.



ISN Staffing Changes

- ISN Communication Specialist
 - Funding ran out October 2018 ☹️
 - Hoping for future funding...
- ISN Invasive Species Specialist
 - New position! Welcome (back) Audrey Menninga!
 - Combined HWA tech & Crew Lead positions



Steering Committee Updates



Go Beyond Beauty

- Spring Meeting was held April 3rd – presentation by Carolyn Thayer
- 2019 Japanese Barberry Trade-up Days
 - Grand Traverse and Benzie counties
- Achievement program introduced and now available to participants
 - Fee-based tiers
 - Program is still free at a basic level
- Current participation:
 - 8 nurseries
 - 15 landscapers
 - 21 other participants/businesses



Japanese Barberry Trade-up Days



Boardman River Nature Center
Grand Traverse Conservation District

Friday, June 7 – 2:00pm-6:00pm

Boardman River Nature Center

Saturday, June 22 – 2:00pm-6:00pm

Grow Benzie, Benzonia





Go Beyond Beauty - Achievement Program

BUSINESS OPTIONS - For nurseries and landscapers

*Free participation remains an option

Silver Achievement

- Participate in half-day, Basic Invasive Species Employee Training
 - Can be held at business location OR Boardman River Nature Center (BRNC)
 - Single cost, regardless of number of employees
 - \$150.00 per business, when held at BRNC
 - \$300.00 per business, when held at your location
 - Fees are annual
- Receives "silver recognition" on outreach materials
- Signs include "silver achievement" label

Gold Achievement

- Participate in full-day, Intensive Invasive Species Employee Training
 - Can be held at business location OR Boardman River Nature Center (BRNC)
 - Single cost, regardless of number of employees
 - \$200.00 per business, when held at BRNC
 - \$400.00 per business, when held at your location
 - Fees are annual
- Receives "gold recognition" on outreach materials
- Signs include "gold achievement" label

Sustaining Go Beyond Beauty Achievement

- Cost: \$200.00, annually
- ISN assures, and promotes accordingly, that your business does not sell/use invasive species via an annual site visit or audit, depending on business type
- Additional recognition will be placed on signage and outreach materials for businesses that choose to participate at this level

OTHER PARTICIPANTS

(Homeowner, garden club, other business, etc.)

*Free participation remains an option

Silver Achievement

- Cost: \$50.00/one time
- Receive a site-visit from an ISN employee to determine invasive species on site
 - Approximately 30 minutes
- Receive a one-page explanation of plant species identified as well as recommended management
- Signs will include "silver achievement" label
- Additional website recognition and free outreach materials

Gold Achievement

- Cost: \$100.00/one time
- Receive a site-visit from an ISN employee to determine invasive species on site
 - Approximately 45 minutes
- Receive a 2+ page explanation of plant species identified, management suggestions, AND native planting recommendations based on site conditions
- Signs will include "gold achievement" label
- Additional website recognition and free outreach materials

Champions of Go Beyond Beauty

- Businesses and individuals that commit to not selling and using invasive species beyond those on the high-priority list (2nd tier) will receive additional recognition. You will be listed separately in publicity and have your own "shout-out" slide during public presentations.



For more information:
www.HabitatMatters.org

GO BEYOND BEAUTY




NORTHWEST MICHIGAN
INVASIVE SPECIES NETWORK
HabitatMatters.org

Many invasive plants arrive in our area by way of gardens.
Go Beyond Beauty by hiring landscapers that have committed not to use
or sell high-threat invasive plants, such as the following:


Benzie

Designs in Bloom  
(231) 352-6962 | designsinbloom.biz

Grand Traverse Organic Landscapes 
(231) 938-2626 | gtorganiclandscapes.com

Heritage Landscape Design
(231) 492-4128 | heritagelandscapedesigntc.com

Inhabitect, LLC 
(231) 943-1434 | www.inhabitect.com

The Mossy Tree, LLC 
(231) 499-5369 | mossytreegardens.com

Northwoods Landscaping
(231) 946-7378


Old Mission Associates 
(231) 223-9222 | oldmissionlandscapes.com

Silverman & Company
(231) 932-1925 | michiganlandscapearchitect.com

Grand Traverse

Leelanau

Sustainable Landscape Design, LLC
(231) 735-6972 | sustainable-landscape-design.com

Wildlife & Wetland Solutions 
(231) 360-1203 | wildlifewetlands.com

Cre Woodard Garden Design 
(231) 735-5300 | crewoodard.com

Laurel Voran, LLC 
(231) 632-3211

TruNorth Landscaping  
(231) 922-0087 | trunorthlandscaping.com

Cyman Gardens
(231) 533-8960 | cymangardens.com

Pine Hill Landscaping
(231) 941-1808 | pinehill-nursery.com

Antrim

KEY:  MICHIGAN NATURAL
SHORELINE PARTNER

 CERTIFIED GREEN
INDUSTRY PROFESSIONAL

New Project: Invasive Species Signs

POTENTIALLY INVASIVE

Buyer Beware! This plant has been proven to be highly invasive in some areas.



NORTHWEST MICHIGAN INVASIVE SPECIES NETWORK

Protecting, enhancing, and promoting Northwest Michigan's natural communities through terrestrial invasive plant management and outreach.

Grand Traverse Conservation District



MYRTLE/Common PERIWINKLE (*Vinca minor*)

To learn more about alternatives to invasive ornamental plants and protecting our native habitats, visit HabitatMatters.org

Key Facts:



Ryan Kaldari

Potential Problems

This ground cover can carpet the forest floor, crowding out other plants. It spreads from beds on forest edges and scraps in compost.



K Chayka

Native Impacts

Periwinkle in woods (far left) crowds out spring wildflowers like Trillium (near left), jack-in-the-pulpit, and spring beauty.



John Beetham

Alternatives to Explore

Canada anemone (left), wild ginger, and Canada mayflower are great native replacements for this plant. Don't be afraid to try a combination--the best native ground covers are mixed!

Native Plant Signs Spring Order

- **Orders Due April 15!**
- Nearly 300 species available!
- 7x5” printed on aluminum w/ UV coating & 30” stake
- <\$10 each (cheaper w/o stake)
- *Anticipated* ready in early May
- OR ask for the species you want & we’ll send you PDFs for free to print on your own



MONKEY FLOWER
(Mimulus aurantiacus)



Key Features:

- Unique Flowers:** Flowers are reminiscent of oropendras, attracting native pollinators.
- Rain Garden:** Beautiful addition to any rain garden. Rain gardens help keep run-off and pollution out of natural areas.
- Visitors to Explore:** Hosts caterpillars of butterflies like the Baltimore checkerspot, as well as the common buckeye butterfly and chalcidovoy nitrogen moth.

Is monkey flower right for your garden?
1-3 ft tall
3/4-1 ft wide
June-Aug.

To learn more about how you can help protect our wild places, visit HabitatMatters.org

Boothbrush Stations

- Sign, station, brush, lumber, \$150 cost-share (\$300 value)
 - Space on sign for logo sticker
 - Need landscape fabric, gravel, concrete, installation
- Upgrade or mini-station: scrub brush, cable, & keeper (\$20)
 - Play Clean Go has smaller signs



Municipality Outreach

- **Continued work with municipalities**
- Presentations & Invasive Species Ordinance Requests
 - Bingham Township
 - Suttons Bay Township
 - Benzonia Township
 - Leelanau Township



Garlic Mustard Dumpsters Participants

- Benzie Lake Township
- Manistee Conservation District
- Leelanau Conservancy
- City of Frankfort



Municipality Outreach

Goals for 2019

- Continue contacting & presenting to municipalities in all 4 counties
 - Getting ordinances approved
- Contacting & presenting to other municipalities as possible
 - lake associations, etc.



2019 Workbees and Other Events

- **Garlic Mustard**
 - May 10 – Grand Traverse
 - May 11 – Benzie
 - May 17 – Leelanau
 - May 18 - Manistee
- **Garlic Mustard Papermaking – May 15**
- **Baby's Breath – all summer, beginning May 30 in Elberta**
- **ID Trainings**
 - June 3 – Grand Traverse
 - June 4 - Manistee
- **Japanese Barberry Dumpster Days – June 7 and 22**
- **Japanese Knotweed Workshops**
 - July 9 – Leelanau
 - July 10 - Manistee

Visit www.HabitatMatters.org/events for more information!

Treatment & Survey Goals for 2019

Treatment: 1,000 Acres

- Invasive Ornamentals (medium to large scale populations)
- Satellite Sites
- Prevention-based Control
- Focus 4 & other High Priority Species
- Early Detection & Response Treatments (Swallow-wort!)

Survey: 3,000 Acres

- Assessing & Monitoring Treatment Sites
- Surveying New Areas for Invasive Species
- Site Visits to Private Properties
- Early Detection & Response
- [Contact Audrey with Survey Ideas!](#)



Treating swallow-wort in Kingsley.



Using an herbicide foamer for cut stump.

Field Season—Crew

- “Check-out” Crew
 - We’re back!
 - “Check out” procedures will come out on the Google Group later this month
 - Focus on high-priority and ornamental invasive species
 - Surveys for rain days
 - Email Audrey with suggestions: ameninga@gtcd.org



Restoration for 2019

Planting Over 1,000 Seedlings Across ISN Service Area

- Areas of previous treatment OR areas at high risk of invasion a “plus”
 - Generally high-quality sites that just need “help”
 - Includes tree tubes and stakes
- Waiting on additional funding for partner projects

Species List:

White Cedar
Black Cherry
Red-osier Dogwood
Nannyberry
Ninebark
Red Pine
White Oak
White Spruce



Maple Bay Natural Area Wetland Restoration



Getting seedlings ready at Chippewa Run Natural Area



Protected oak at Traverse City Light & Power

HWA Survey Updates

Detection surveys

- “Bang for your buck”
 - *Not* a complete inventory of hemlock trees
- Targeting high-risk areas
- Looking at a “threshold” of trees per acre
- Prioritization Meeting (12/19/2018)
- Partner Training (2/21/2019)

2018-19 Survey Wrapping Up Now!

- Acres: 5,160
- Sites: 119 (37 different property owners/partners)
- Lots of COLD days!
- Questions:
 - How did this go with partners?
 - What would you like to see happen next year?





Break!

15 minutes



Coltsfoot (*Tussilago farfara*)



Butterbur
(*Petasites hybridus*)



Flowering rush
(*Butomus umbellatus*)



Scotch thistle
(*Onopordum acanthium*)



Himalayan blackberry

(Rubus armeniacus)



Slender false brome
(Brachypodium sylvaticum)



Wood bluegrass
(*Poa nemoralis*)



Woodland forget-me-not
(*Myosotis sylvatica*)



Yellow flag iris
(*Iris pseudacorus*)



Callery pear/Bradford pear
(*Pyrus calleryana*)



Mobile Data Collection

MISIN

www.misin.msu.edu

- Data Submission
 - Web
 - App (Apple & Android)
- Identification resources
 - I pg (Species Information)
 - Training modules (Tools>>Training Modules)
- Treatment Tracking

Resources Reminder

- HabitatMatters.org/other-information
 - Decontamination Protocols
 - Planting Guides (municipalities)
 - Print & Online resource lists
- MISC Forum (forum.michiganinvasives.org/)



The screenshot shows the Northwest Michigan Invasive Species Network website. The top navigation bar includes: HOME, ABOUT, IDENTIFY AND REPORT, RESOURCES, HABITAT MATTERS, GO BEYOND BEAUTY, and a SEARCH icon. A central menu lists: Education, Tool Library, Planting Guides, Ordinance Templates, Treatment Information, and Other Information. Below this is a section titled "Other Information: Online and Printed Resources" with sub-sections for "Online Resources" and "Invasive Plant Resources".

Online Resources
While far from exhaustive, this list includes resources ISN utilizes regularly.

Invasive Plant Resources

- Michigan DNR/DEQ/MDARD invasives website
- Decontamination guidelines & checklist from the Michigan DNR Forest Resources Division: Aquatic and Terrestrial
- USDA invasives website
- Midwest Invasive Plant Network (including a Landscape Alternatives to Invasive Plants app and other tools)
- Suggested Alternatives to Invasive Plants from the Georgia Exotic Pest Plant Council--a bit south, but a great resource!
- Aquatic Invasive Plants and Their Look-Alikes PDF from the Midwest Invasive Plant Network
- Midwest Invasive Plant Network Control Database
- West Michigan Hemlock Woolly Adelgid Taskforce (SaveMIHemlocks) user-friendly information about this early detection invader

Native Plant Resources

MISIN
Midwest Invasive Species Information Network

FORUM
MInvasives
Join Michigan's Invasive Species Community

MIPN.org
Midwest Invasive Plant Network

Grants Update

Current Grants

Fully funded through April 2020

Strongly funded to Oct. 2020

- **EPA GLRI 2016**
 - Extension to September 2019!
 - Subgrants in progress
 - 2019 field crew
 - Restoration, treatments ongoing
- **USFS 2018**
 - Year I complete
 - Funded GM dumpsters, treatment
- **GTBOI Subgrant**
 - Funded crew member, treatments
 - Almost done!
- **MISGP 2018 CISMA**
 - Basic functions
- **MISGP 2018 Project**
 - 2020 Crew
 - Treatments, outreach, “leadership in IS work”
- **Gerstacker 2018**
 - Education integration efforts with GTCD
- **TNC HWA subgrant**
 - ½ done! HWA survey

Upcoming Grants

- USFS CWMA 2019 (submitted—pending)
- USFS Outreach 2019 (submitted—pending)
- MISGP 2019 (RFP due out soon)
- Others?



Funding Plan

- Draft complete!
- Finalize by ~~March 2019~~
- Overview:
 - Pushing toward diverse funding
 - Identifies strategies
 - Grants
 - Cost-share
 - Fee-for-service
 - Active fundraising?



Strategic Plan

- Approved 2018!
 - On website
- Living document
 - Steering Committee will revisit & fine-tune one section per meeting
 - Updated on website annually
- Full update in 5 years



Species Prioritization: Revamp!

- 2010→2020; it's time to update!
- Species Assessments—in progress
- June Steering Committee Meeting discussion
- Focus Group work
 - Want in?
- Fall Partner Meeting feedback
- Fall/winter Steering Committee Meeting approval
- Roll out in 2020!

MICHIGAN
INVASIVE
SPECIES
NETWORK

TOP 20 LEAST WANTED

SHRUBS:

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2. (Frangula alnus)

3. also be a vine
4. blackberry
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Wanted for northwestern lower Michigan based on their collective experience...

Top 20 represent the greatest invasive plant threats to the region, the managers...

generations to enjoy. Invasive species which did not make the Top...

Michigan Invasive Species Network. Reporting ALL sightings to <http://www.michiganinvasivespeciesnetwork.org>

Top 20... visit <http://www.michiganinvasivespeciesnetwork.org>

Species Prioritization Revamp

DISCUSSION

- What do we want (output)?
 - Straight list?
 - Categories (gardens vs. wetlands vs. *etc. etc.*)?
 - Other?
- Are there (non-native) species *you* want to see considered?

State-wide Updates

- **Michigan Invasive Species Coalition**
 - Core Team participation
- **Play, Clean, Go**
 - Eastern Expansion involvement
- **MIPN & WIGL Collaborative**
 - Board Participation
 - Collaborative Participation—app updates!



MInvasives
Michigan Invasive Species Coalition



RIPPLE
REDUCE INVASIVE
PET & PLANT ESCAPES



MIPN.org
Midwest Invasive Plant Network



Partner Updates!

2 minutes each, please