

Awareness & Prevention Grant Projects

Michigan Invasive Species Grant Program

[Link to this story map](#)

[Link to MISGP story map](#)

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Public participation is the most powerful tool available to reduce the spread of invasive species and prevent their introduction into Michigan. When people are aware of what to look for and how to report invasive species, they assist in early responses to new invaders and provide valuable information on the extent of invasive species populations. People who work or play in places where invasive species are already established can take steps to avoid carrying “hitchhikers” to new locations, helping to reduce the spread of invasive species.

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Pathways

Protecting pure Michigan through decontamination

Van Buren Conservation District

Award year: 2018

Status: **In process**

This project will target outreach to recreational users, campers and second home owners in the southwest corner of the state to prevent the introduction and spread of invasive species through firewood, recreational gear and vehicles as visitors travel to and through Michigan.

Invasive species targeted: New Zealand mudsnail, Asian longhorned beetle, hemlock woolly adelgid and oak wilt.

Grant award: **\$53,700**

Contact: AJ Brucks, alison.brucks@mi.nacdnet.net

Preventing the spread of invasive species via recreational, land management, forestry and shipping vectors

Ingham Conservation District

Award year: 2018

Status: **In process**

The Mid-Michigan CISMA will address recreational, private land, forestry and shipping vectors that can spread invasive species. Outreach, trainings and workshops will be provided to landowners, recreation groups and forestry professionals to address oak wilt, Asian longhorned beetle and other watch list species. The CISMA will also treat prioritized populations of invasive species.

Invasive species targeted: Phragmites, Asian longhorned beetle and Japanese knotweed.

Grant award: **\$92,100**

Contact: Michelle Beloskur, michelle.beloskur@macd.org

Invasive species paddling detection, reporting and public awareness program

Michigan State University

Award year: 2017

Status: **In process**

This project will create a statewide AIS program for paddlers on Michigan's water trails. Through the program we will create program materials, train volunteers on a minimum of 12 water trails, develop and install interpretive signs and promote the continued implementation

of the program into the future through information on the Michigan Water Trails website and involvement of our project partners.

Invasive species targeted: Brazilian elodea, European frogbit, European water clover, hydrilla, New Zealand mudsnail, northern snakehead, nutria, parrot feather, red swamp crayfish, water chestnut, water hyacinth, water lettuce, water soldier and yellow floating heart.

Grant award: **\$200,000**

Contact: Mary Bohling, bohling@msu.edu

Benzie, Leelanau and Manistee Counties aquatic invasive species pathway project

Benzie Conservation District

Award year: 2016

Status: **Completed**

[Final report](#)

The program's grant objectives were reached with 1,336 boats washed, 8,364 boaters and public engaged, 293,692 passive media and display impressions, 23 unique boat wash locations, eight static AIS displays at public events and two fishing events. Another activity that this program undertook was speaking about AIS with every Benzie County township as well as several Leelanau and Manistee local officials. The overarching regional reaction to the activities of this program was positive. Many of the lakes where we engaged boaters had an 80% or higher compliance rate with Clean, Drain, Dry actions.

Invasive species targeted: Brazilian elodea, Eurasian watermilfoil, European frogbit, European water clover, hydrilla, northern snakehead, parrot feather, phragmites, purple loosestrife, quagga mussel, red swamp crayfish, water chestnut, water hyacinth, water lettuce, water soldier, yellow floating heart and zebra mussel.

Grant award: **\$155,205**

Contact: Tad Peacock, tad@benziecd.org

Educating educators everywhere to prevent new invaders

Wayne State University

Award year: 2016

Status: **In process**

Click [here](#) to view the Invasive Species Coloring Book.

This project uses teacher professional development workshops statewide to educate about invasive species and prevent their release. Teachers learn how invasive species education helps them to achieve Michigan's science standards. Deliverables include hands-on activities, lesson

plans, on-line educational materials and facilitation of learning communities for long-term broad impact.

Invasive species targeted: Brazilian elodea, bighead carp, silver carp, Eurasian watermilfoil, European frog-bit, hydrilla, New Zealand mudsnail, northern snakehead, parrot feather, phragmites, red swamp crayfish, rudd, tench, water chestnut, water hyacinth, water lettuce, water soldier and yellow floating heart.

Grant award: **\$139,683**

Contact: Jeffrey L. Ram, jeffram@med.wayne.edu

Modeling ballast water management strategies to slow invasive species spread

University of Toledo

Award year: 2015

Status: **Completed**

[Final report](#)

We conducted a network centrality analysis to identify ports in the Great Lakes shipping network that are important for governing secondary spread patterns between ports. We simulated secondary spread of two potential invasive species (golden mussel and monkey goby) with hypothetical management implemented at ports that scored high in different network centrality metrics. Ports that score high in indegree centrality (connections directed towards a given port) appear to exhibit greater control over secondary spread than the top 20 busiest ports or those that were high scoring in any other measure of centrality. Our results indicate that degree centrality is an effective way to prioritize ports for additional management and monitoring. Attempts to parameterize the model with the environmental distance layer added indicated that environmental distance may not be important for the species we are modeling.

Invasive species targeted: Grass carp and scud.

Grant award: **\$67,276**

Contact: Jonathan Bossenbroek, jonathan.bossenbroek@utoledo.edu

Clean Boats, Clean Waters (CBCW)

Expanding Clean Boats Clean Waters outreach program with regional CISMAs

Michigan Lakes and Streams Association

Award year: 2016

Status: **In process**

This project will expand on the previously-funded Michigan Clean Boats, Clean Waters program, a statewide aquatic invasive species prevention, outreach and education initiative. The project will use materials developed over the last year to conduct 'Train the Trainer' workshops with CISMAs. This project will increase prevention through education and outreach efforts.

Invasive species targeted: Brazilian elodea, bighead carp, silver carp, black carp, grass carp, European frogbit, European water clover, hydrilla, New Zealand mudsnail, northern snakehead, parrot feather, red swamp crayfish, starry stonewort, water chestnut, water hyacinth, water lettuce, water soldier and yellow floating heart.

Grant award: **\$19,049**

Contact: Scott Brown, sbrown@mlswa.org

Enhancing the regional collaboration of Clean Boats, Clean Waters to sustain aquatic invasive species prevention, outreach and education activities

Michigan Lake and Stream Associations, Inc.

Award year: 2014

Status: **Completed**

[Final report](#)

The Clean Boats, Clean Waters project developed online training course for prospective volunteers to become qualified as local program leaders and a comprehensive suite of visual and text-based instructional tools to compliment the training course videos. Through onsite workshops, 29 volunteer leaders were trained and over 2,800 individuals were provided information through 22 outreach events. During the project period, nearly 8,000 people received printed materials generated by the project or visited the website for information about the program.

Invasive species targeted: Brazilian elodea, European water clover, hydrilla, northern snakehead, parrot feather, red swamp crayfish, water chestnut, water hyacinth, water lettuce, water soldier and yellow floating heart.

Grant award: **\$31,300**

Contact: Scott Brown, sbrown@mlswa.org

Citizen Science

Citizen science and New Zealand mud snails: Fly fisherman as sentinels and deterrents of range expansion

Oakland University

Award year: 2016

Status: **In process**

We propose a monitoring network of fly fishers as 'citizen scientists' in order to provide early detection of New Zealand mud snails (NZMS) in a large number of rivers across the state.

Grant award: **\$191,888**

Contact: Scott Tiegs, tiegs@oakland.edu

Eyes on the forest: Invasive forest pest risk assessment, communication and outreach

Michigan State University

Award year: 2014

Status: **Completed**

[Final report](#)

Accomplishments include a rigorous analysis of invasion pathways for three high priority invasive pests: Asian longhorned beetle, hemlock woolly adelgid and thousand cankers disease of walnut. Risk maps developed for each pest identify areas with a relatively high likelihood of entry and establishment based on host abundance. Outreach activities including articles, newsletters, presentations, displays, workshops and landowner visits increased awareness of invasive forest pests and their potential impacts on forest and urban trees. At least 190 citizen scientists volunteered for the Michigan Sentinel Tree program, which involves selecting and monitoring the condition of a tree over time and using online reporting through the Midwest Invasive Species Information Network.

Grant award: **\$204,000**

Contact: Deb McCullough, mccullo6@msu.edu

Firewood

Contact: Pascal Nzokou, nzokoupa@msu.edu

Firewood safety education and outreach in Michigan

Michigan State University

Award year: 2017

Status: **In process**

Firewood movement is identified as one of the primary pathways for introduction and expansion of invasive insects. This project will conduct outreach and education for firewood producers, retailers, residential firewood consumers and citizens in general, with the ultimate goals of increasing the number of informed producers and consumers, increasing the supply and the use of USDA-certified, heat-treated firewood and reducing the movement of untreated firewood, ultimately reducing risk associated with the firewood pathway.

Invasive species managed: Asian longhorned beetle, balsam woolly adelgid, emerald ash borer, oak wilt and thousand cankers disease.

Grant award: **\$188,300**

Controlling the spread of invasive insects through an improved firewood supply chain in Michigan

Michigan State University

Award year: 2015

Status: **Completed**

[Final report](#)

Michigan has a significant firewood industry that includes more than 600 actors involved the supply chain. Current practices make this industry a significant pathway for infestation and spread of invasive insects. This statewide assessment of the firewood supply chain revealed the industry is mostly very small, informal and lowly regulated, but there are few major players trying to take advantage of potential market opportunities generated by the push towards heat-treated firewood in Michigan other states. The study suggests that there should be more policies and rules to organize and regulate this sector. However, this should be combined with outreach and educational programs related to firewood sanitation or best management practices, which all have a good potential to be adopted by industry if they are tied closely to an economic development initiative that promises to boost the profitability or increase market share for local producers.

Invasive species managed: Asian longhorned beetle, emerald ash borer, oak wilt, balsam

woolly adelgid and thousand cankers disease.
Grant award: **\$69,912**

Midwest Invasive Species Information Network (MISIN)

Contact: Amos Ziegler, ziegler2@msu.edu

MISIN – Bridging the gap and closing the loop on invasive species data in Michigan

Michigan State University
Award year: 2018
Status: **In process**

The Midwest Invasive Species Information Network will continue efforts that support species observation and treatment data capture and management, effective response to emerging threats and an increased awareness of invasive species impacts in Michigan.

Invasive species targeted: Spotted lanternfly and Japanese chaff flower.
Grant award: **\$224,200**

MISIN – Bridging the gap and closing the loop on invasive species data in Michigan

Michigan State University
Award year: 2017
Status: **In process**

This project will establish and work with an advisory group of invasive species managers to provide input on emerging priorities and user needs. The project will also upgrade components of the virtual hosting environment and database system for increased security and database stability, mobile device responsiveness and data browsing performance.

Invasive species targeted: Balsam woolly adelgid and thousand cankers disease of walnut.
Grant award: **\$211,500**

MISIN-Bridging the gap and closing the loop on invasive species data in Michigan

Michigan State University

Award year: 2016
Status: **Completed**
[Final report](#)

The Midwest Invasive Species Information Network has continued to build upon the foundation laid by previous MISGP funding through the continued management and evolution of a data and information framework focused on (1) providing mechanisms for early detection and reporting of terrestrial and aquatic invasive species; (2) ensuring timely information is available on TIS and AIS that have limited distribution and/or are high threat in Michigan; (3) develop and maintain a control activities repository for tracking statewide management efforts and (4) support for the Michigan MISIN user community in its general pursuit of invasive species information.

Grant award: **\$251,835**

Midwest Invasive Species Information Network (MISIN) - Bridging the gap and closing the loop on invasive species data in Michigan

Michigan State University
Award year: 2014
Status: **Completed**
[Final report](#)

The Midwest Invasive Species Information Network (MISIN) efforts continued to play a key role in supporting regional, state and local groups working to control invasive species in Michigan by:

- Providing a data repository for local and regional invasive species coordinators.
- Facilitating the sharing of information among those working to control invasive species.
- Enhancing communication on invasive species statewide.
- Providing support for MISIN smartphone application.
- Addressing common challenges in implementing control efforts.
- Increasing effectiveness of local and regional control efforts.

Invasive species targeted: European water clover, water chestnut, water soldier, yellow floating heart, Chinese yam and hemlock woolly adelgid.

Grant award: **\$290,200**

Engaging Business, Industry & Recreational Leaders

RIPPLE II: Education about invasives in aquarium and pond trade

Michigan State University

Award year: 2018

Status: **In process**

This project will continue and expand the successful RIPPLE outreach campaign to prevent introduction of invasive species via the aquarium and pond trades. Data from research and outreach supported by our initial MISGP grant will drive the development of novel engagement materials and programming and facilitate new and strengthened stakeholder partnerships.

Invasive species targeted: Brazilian elodea, European water clover, hydrilla, northern snakehead, parrot feather, red swamp crayfish, water chestnut, water hyacinth, water lettuce, water soldier and yellow floating heart.

Grant award: **\$137,400**

Contact: Jo Latimore, latimor1@msu.edu

RIPPLE: Statewide education about invasives in aquarium and pond trade

Michigan State University

Award year: 2015

Status: **In process**

The project will implement the new Reduce Invasive Pet and PLant Escapes (RIPPLE) statewide outreach campaign to prevent introduction of aquatic invasive species via the aquarium and pond trades. Through various media, RIPPLE educates hobbyists, retailers and organizations about containment and disposal of potentially invasive organisms.

Invasive species targeted: Brazilian elodea, European water clover, hydrilla, northern snakehead, parrot feather, red swamp crayfish, water chestnut, water hyacinth, water lettuce, water soldier and yellow floating heart.

Grant award: **\$138,314**

Contact: Jo Latimore, latimor1@msu.edu

Feral swine and terrestrial invasive species outreach and education strategy

Michigan United Conservation Clubs

Award year: 2016

Status: **In process**

MUCC will undertake a campaign to increase the awareness of emergent terrestrial invasive species issues, particularly feral swine, making use of its vast communications network to deliver targeted messages in a variety of print publications and online; develop adult and youth programming, and disseminate these products among conservation partner organizations.

Grant award: **\$79,300**

Contact: Amy Trotter, atrotter@mucc.org

Invasive species public awareness project

Michigan United Conservation Clubs

Award year: 2014

Status: **Completed**

[Final report](#)

For this project, MUCC produced and disseminated invasive species information through 49 blogs on mucc.org, articles in eight print editions of Michigan OutofDoors Magazine, four pieces in the Michigan OutofDoors Magazine digital edition and two advertisements in the Great Lakes Sport Fishing News. In addition, information has appeared in 39 editions of the Conservation Insider/MOOD Update digital newsletter and through our social media outlets. We also published two TRACKS Magazines fully devoted to invasive species, one aquatic and one terrestrial, targeted towards upper elementary children. We produced a mass mailing to 25,000 members of the National Wildlife Federation and 600 leaders from our affiliated clubs around the state.

Invasive species targeted: Asian carp, Chinese mitten crab, didymo, European frogbit, flowering rush, killer shrimp, narrow-leaf cattail, New Zealand mudsnail, nutria, parrot feather, yellow floating heart, Asian longhorned beetle, autumn olive, beech bark disease, Chinese yam, Eurasian collared dove, feral swine, giant African snail, giant hogweed, glossy buckthorn, hemlock woolly adelgid, Himalayan balsam, kudzu, lyme grass, mute swan, Norway maple, oak wilt and pine shoot beetle.

Grant award: **\$62,000**

Contact: Amy Trotter, atrotter@mucc.org

Education and outreach for the nursery and landscape industry, natural shoreline professionals, gardeners and the general public

Michigan Nursery and Landscape Association

Award year: 2015

Status: **In process**

This effort focuses on preventing the spread of invasive plant species through education and

outreach to the nursery and landscape industry; national shoreline professionals; master gardeners, gardeners and consumers. Materials will be used at industry conferences, natural shoreline training classes, MSU Extension programming, posted on websites, promoted to gardening groups and distributed at home and garden shows.

Invasive species targeted: Brazilian elodea, curly-leaf pondweed, flowering rush and autumn olive.

Grant award: **\$39,431**

Contact: Amy Frankmann, amyf@mnl.org

Reduce oak wilt with collaborative education

Arboriculture Society of Michigan

Award year: 2015

Status: **Completed**

[Final report](#)

ASM and collaborating partners ReLeaf Michigan, Arborjet, MEAOE and Our Global Kids successfully provided: public education at various community events, nature centers, schools, libraries, personal residences and public grounds with active oak wilt infections; professional education on oak wilt to arborists and the green industry; assisted arborists in collecting oak wilt samples and provided technical support for samples with positive results; developed and maintained the www.MichiganOakWilt.org website with oak wilt education and resources; continued information sharing and collaboration with industry stakeholders on the Oak Wilt Coalition; removed infected oak trees and treated healthy oaks on residential and public grounds, and developed/delivered a webinar to educate MSU Extension Master Gardeners.

Grant award: **\$115,000**

Contact: Annie Kruse, info@asm-isa.org
