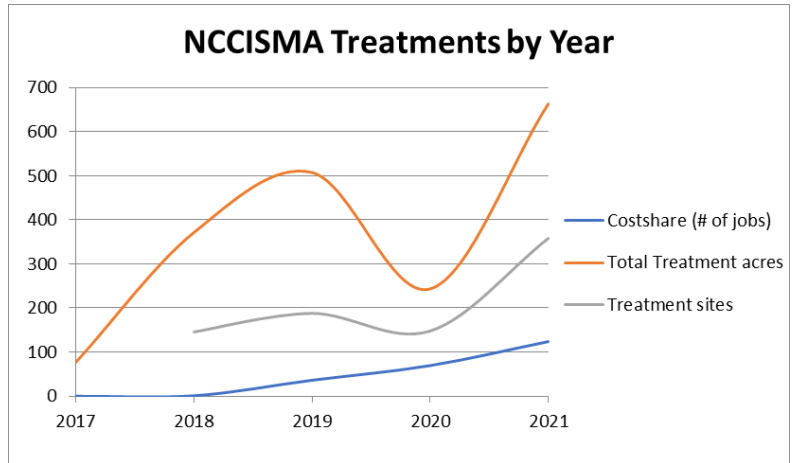


# 2021 Annual Report

2021 was a productive year for NCCISMA! The work for four grants was completed, and three new grants were received. Using a combination of contractors and NCCISMA staff for control, NCCISMA set new records for control objectives and participation in their cost-share program. On top of this, a ton of outreach was accomplished this year.



NCCISMA 2021 Funded Projects		
Project	Funding Source	Completion Date
Strike Team Formation	MISGP	Completed
CISMA Base Funding 2020	MISGP	Completed
Parklands Initiative II	USFS-GLRI	Completed
Public Trails Initiative	USFS-GLRI	Completed
CISMA Core 2021 Base Funding	MISGP	March 2022
EFB Survey & Wild Parsnip Control	MISGP	March 2022
Treatment Instruction Videos	USFS-GLRI	April 2022
Muskegon River Watershed	MISGP	June 2022
Seed collection & school outreach	Cargill Corp.	Fall 2022
Stopping Spread from Roads	USFS-GLRI	December 2023
Supplemental Outreach Funding	USFS-GLRI	December 2023
Parks as Showplace	USFS-GLRI	December 2023
Survey & Control in High Value Habitats	USFS-GLRI	December 2023
Control on USFS Land	USFS-GNA	2025

## Invasives Species Surveys

Nearly 1,400 acres of surveys were achieved in 2021. Surveys of trails were performed, wrapping up a three year project focused on public trails, with surveys of the White Pine Trail in Mecosta County and surveys of the Pere Marquette Trail in Osceola County. Other terrestrial surveys that were performed included surveys of the roads where they crossed wild parsnip infested sections of the trails surveyed, and roads surrounding the source populations of wild parsnip in Osceola and Wexford Counties. In addition, 388 acres of terrestrial surveys were performed at 11 private riparian properties along the Muskegon River. The property owners will soon be receiving inventory maps and management plans to address what was found with these surveys. Some aquatic surveys were also performed in 2021. In Mason County six lakes



*NCCISMA Staff surveyed six lakes in Mason County for European frogbit*

were surveyed for the state watch list species, European frogbit (EFB), which unfortunately was found at one location. Most of the control work initiated this year was in response to watch list and high priority species found during surveys.

### **Invasive Species Control**

NCCISMA's strike team for hire program began as a cost-share program in 2018. With that program, half of the cost for control on private property was picked up by the state, through Michigan Invasive Species Grant Program (MISGP) funding, and the property owner paid for the other half. The grant that provided the funding for the cost-share program in 2021 was

completed in October. Since that time, NCCISMA has still offered their strike team for hire, but without the cost-share from the state. The strike team for hire, at cost, will continue to be available in 2022.

Outside of the control work performed as part of the strike team for hire program, NCCISMA's field crew control efforts were focused in parks, and on trails and roads. The main areas of concentrated efforts were in Osceola and Wexford Counties, on the two source populations of wild parsnip in the region, and at Cartier Park in Ludington, which is one of the two parks that are central to our U.S. Forest Service (USFS) funded Parks as Showplace project.

NCCISMA field crew spent over 100 man hours at Cartier Park in 2021. NCCISMA also performed follow-up monitoring and retreatments, when needed, at all previous year treatment sites. To encourage continued control at public parks, NCCISMA provided invasive species management plans for 12 parks in the region. Notably, Big Rapids City Parks, of which six of these parks are a part of, is now actively controlling priority invasive species at their parks.

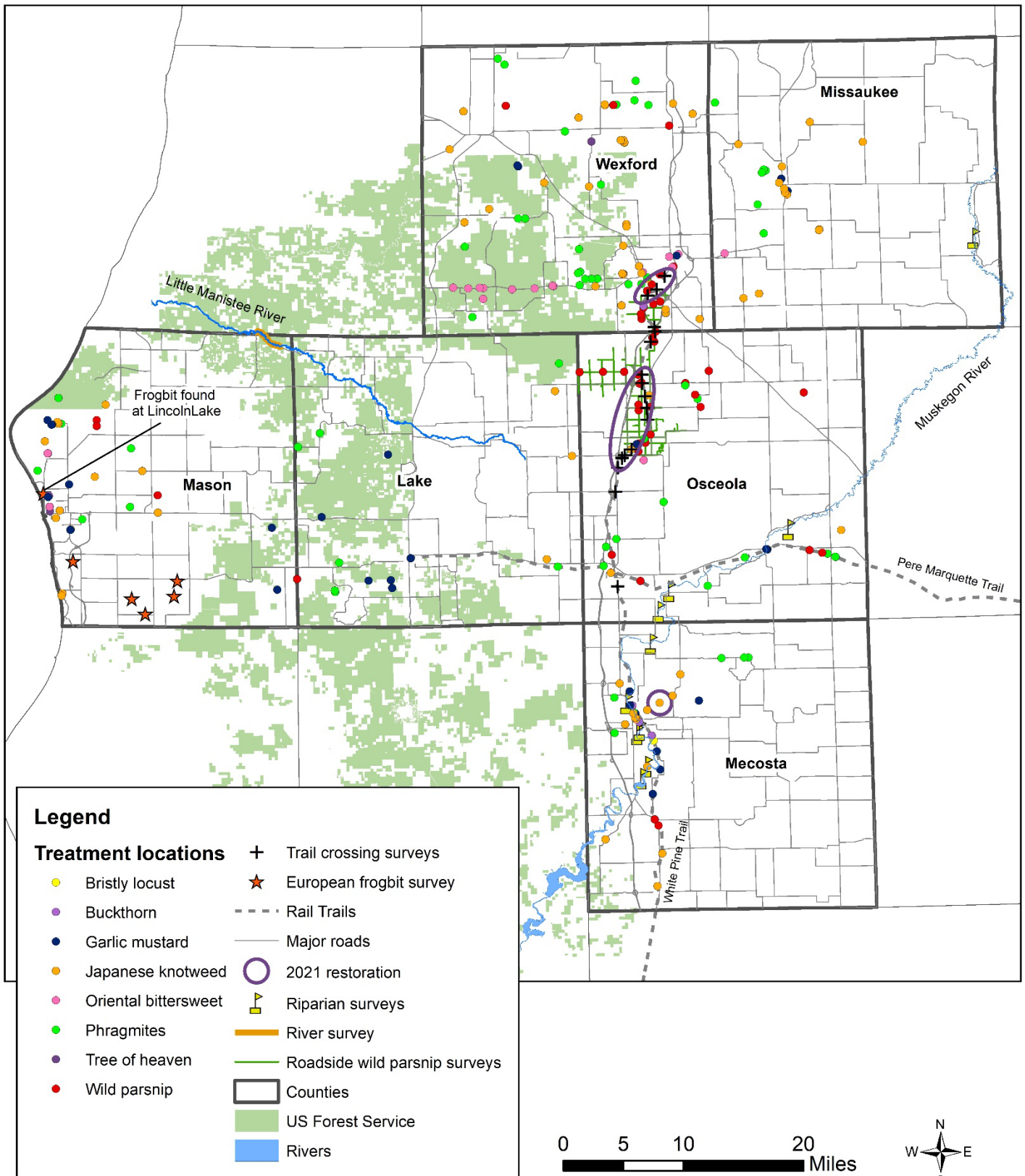


*NCCISMA's 2021 field crew - Jon, Gabe, and Kyle*

Beginning in 2020, NCCISMA began receiving annual funding from the Good Neighbor Authority (GNA) of the USFS. These funds are from USFS timber sale proceeds, and are earmarked for invasive species survey and control work on the Huron-Manistee National Forest. With this funding, in 2021, NCCISMA accomplished 37 acres of control in Mason, Lake, and Wexford Counties.

In addition to control work performed by NCCISMA staff, NCCISMA hired contractors to expand what was able to be accomplished in the field. This included a spring and fall control of wild parsnip along the entire White Pine Trail. Also contracted was an Early Detection Response (EDR) for the European frogbit discovered through surveys.

# 2021 NCCISMA Field Work





2021 Survey, Control, Restoration, & Inquiry Responses						
	Lake	Mason	Mecosta	Missaukee	Osceola	Wexford
Property owner consultations	10	57	36	19	30	41
Mechanical treatments/acres	3/12	8/34.5	12/19.5	2/1.5	9/43.5	6/17.5
Chemical treatments/acres	20/40.5	50/70.5	42/38.5	23/35.5	63/167	112/79
Contracted treatments/acres	N/A	1/1.5	2/12	N/A	4/42	2/58
Cost-shared treatments	4	18	6	4	2	10
Strike-team-for-hire at cost	0	3	0	1	2	0
County Road Commission sites	N/A	4	N/A	5	N/A	54
Invasive Species Surveys (acres)	10	894	63	0.5	430	0
Restoration work (sites/acres)	0	0	1/1	0	1/17	1/2

**Habitat Restoration**

In the initially discovered areas of wild parsnip infestation along the White Pine Trail in Osceola and Wexford Counties, where control work has been performed over three field seasons, it was noted that garlic mustard was colonizing some of the areas where wild parsnip had been controlled. Because of the proximity of alternate invasive seed sources, and a lack of desirable native species seed sources nearby, restoration seeding was needed in openings left where wild parsnip was removed. According to Michigan Department of Natural Resources (DNR) Parks Division protocol, seeding on lands they manage must be sourced nearby the location they will be planted. The DNR



*Volunteers help collect native grass seed to restore areas along the White Pine Trail*

Cadillac District Wildlife Biologist helped NCCISMA scope out a seed source for collection. Cargill Corporation provided funding for NCCISMA staff time to plan and host a volunteer workday to collect the seed, and later plant it along the trail. Volunteers, including representatives from the Osceola-Lake Conservation District, Wexford Conservation District, Cadillac Area Land Conservancy, and members of the public, helped collect the seed. The agricultural technology students from the Wexford-Missaukee Career Technical Center helped clean the seeds. NCCISMA staff and a volunteer from their steering committee then planted the seed last December.

**Outreach**

After a year of little in person outreach, it was good to get out, and with people, more in 2021. One big event that NCCISMA hosted in 2021 was a 2 day workshop on aquatic invasive species (AIS) ID and control. This event was attended by over 75 people, with an audience primarily composed of lake management company employees and lakefront property owners. The success of this workshop is thanks to the speakers, including an array of experts from the Michigan Department of Environment, Great Lakes and Energy (EGLE), Michigan Department of Natural Resources (DNR), Michigan State

University Extension, and Michigan Natural Features Inventory (MNFI). The two day AIS event was part of an MISGP funded project focused on prevention of invasive species spread in the upper Muskegon River watershed. One of the main goals of this project is to get lakes to enroll in the Exotic Aquatic Plant Watch (EAPW), a program that trains citizen scientists to monitor lakes for invasives. Promotion of the EAPW by NCCISMA took many forms, from articles in newspapers and newsletters, to presentations to lake and township boards. Also part of the Muskegon River project, NCCISMA produced a trail guide for the upper Muskegon River, which includes a panel on avoiding invasive species spread. So far over 3,000 of these have been distributed to 30 different partners within the watershed. To further the reach of this publication, Mecosta County Parks has been taking these to camping trade shows that they are attending this winter to promote their county park campgrounds.

NCCISMA also performed outreach to educate local students. One such outreach initiative of 2021 was funded by Cargill Corporation. They provided NCCISMA the resources to purchase copies of an invasive species themed children's book, *The Pests that Girdle the Home of Tucker the Turtle*, to share with and donate to classrooms and libraries in Mecosta and Osceola Counties. This book was shared with 20 classrooms at four schools in 2021. Other outreach was geared toward older students. One event, that started with a presentation and ended as a volunteer workday, was put on for the honors students at Ferris State University. After a walking tour at Hemlock Park in Big Rapids, the students helped NCCISMA with buckthorn control at River Street Park, also in Big Rapids.



*NCCISMA Outreach Coordinator reads to local students*



*A bigfoot sighting while filming a YouTube video*

Another exciting outreach success to report is an increased presence, and engagements, online through our webpage, YouTube, and social media. By the end of 2021, NCCISMA had 225 Facebook followers, 114 Instagram followers, and 35 subscribers to our YouTube Channel. With funding from the USFS we have been producing short videos with practical advice on invasive species ID and control. In 2021 NCCISMA completed and posted two new videos, one on herbicide safety and another on techniques to control Oriental bittersweet. By the end of the year these had collectively been viewed 278 times. More videos are in the works. We have a goal of reaching 100 YouTube subscribers, which will enable us to

personalize our YouTube channel address. You can check out our videos by going to YouTube and searching for NCCISMA.



2020 Outreach		
Description	# Efforts	# Impressions
NCCISMA Articles in Print/Electronic Publications	18	87,000
Presentations at Partner Events/Meetings	11	188
Booth at Partner Events	5	280
Interviewed for Radio, Television, Print, or Internet	8	43,200
Facebook/Instagram Postings	134	23,378
Invasive Species Walking Tours	2	14
Educational YouTube Videos Produced and Posted	2	278
Updates and Unique Visitors to NorthCountryInvasives.org	12	1,083
Elementary School Outreach	20	676
Educational Placemat Distribution	6	5,250
Volunteer Workday	5	36
Presentations to Local Government	27	340
NCCISMA Hosted Outreach Events	7	207
Spontaneous Outreach in the Field	27	51

### **Partner Efforts in Invasive Species Management**

Partnerships is what NCCISMA is all about – bringing together the skills, resources, and talents to cooperatively address invasive species in the region. NCCISMA staff is grateful for all of the active partners working to protect our natural resources from invasive species. Some notable contributions this year came from several county road commissions (CRC): Mason, Missaukee, and Wexford, who offset the cost to control roadside wild parsnip, Japanese knotweed, and Phragmites. Osceola CRC coordinated with NCCISMA on mowing schedules for areas that are infested with wild parsnip, as did the trail groomers with the Friends of the White Pine Trail. The Big Sable Watershed Restoration Committee purchased and released *Gallerucella* beetles to control purple loosestrife on their river. The Muskegon River Watershed Assembly included articles on invasive species in each of their quarterly e-newsletters in 2021, and also pitched in by giving four of the presentations to local governmental units to promote the EAPW program. A Few Friends of the Environment of the World (AFFEW) contributed greatly to NCCISMA’s work at Cartier Park in Ludington, by holding twice monthly invasive species control workdays throughout the 2021 field season. AFFEW also purchased and installed a boot brush station at Cartier Park.

One big undertaking of a key NCCISMA partner is that of Mason-Lake Conservation District (MLCD), who continues to lead the response to Hemlock Woolly Adelgid (HWA) within NCCISMA. HWA is a forest pest that threatens hemlock trees. Survey efforts are focused within 5 miles of Lake Michigan and along river corridors, as HWA is not known to occur further inland. In 2021 MLCD staff surveyed 4,346 acres on 161



Mason-Lake CD staff search for HWA

different parcels in Mason County. Seven new occurrences of HWA were discovered in Mason County in 2021, all of which were found south of Hamlin Lake, within 3 miles of the lakeshore. Treatments of infested trees take place during the summer months, and are part of a multi-county effort being overseen by MLCD and NCCISMA's cohort to the south, West Michigan CISMA.

Thank you to all of our dedicated partners, organizations and individuals, that actively work with NCCISMA to stop the spread of invasive species in the region!

**Special thanks go out to the following:**

Wexford County Commissioners for donated office space for NCCISMA's three permanent staff

Wexford County Road Commission for safe winter storage of NCCISMA's herbicide inventory at their temperature controlled garage

Mecosta and Mason-Lake Conservation Districts for acting as fiduciaries on NCCISMA grants

Mecosta County Parks for allowing NCCISMA to maintain a shed for storage of supplies and equipment, and also provide a staging place for field staff

Mason-Lake and Wexford Conservation Districts for allowing NCCISMA space in their sheds for storage of supplies and equipment

**The members of NCCISMA's ever dedicated Steering Committee:** Dani McGarry, Mason-Lake Conservation District; Brook Baumann, Mecosta Conservation District; Sherry Blaszak, Missaukee Conservation District; Mark Sweppenheiser, Osceola-Lake Conservation District; Tiffany Jones, Wexford Conservation District; Donna Kirchhoff, Missaukee County Resident; Chris Woodley, Baker College; Carolyn Henne, Huron-Manistee National Forest; Josh Shields, FAP Forester; Jeff Fewless, Natural Resource Conservation Service; Todd Neiss, Michigan Department of Transportation



*Zach Peklo, IS Technician*



*Vicki Sawicki, Program Coordinator*



*Emma Costantino, Outreach*

NCCISMA's team is looking forward to continuing to serve the residents of Lake, Mason, Mecosta, Missaukee, Osceola, and Wexford Counties in 2022!