



2019 was a big year for NCCISMA. In addition to our three permanent staff positions, we employed six seasonal staff during the field season. With all this added help NCCISMA was able to perform invasive species control on 472 acres at 187 sites across our six-county region. This was the first year for NCCISMA's cost-share program, which provides control of high priority species on private property for half of cost. Funding from the Michigan Invasive Species Grant Program picked up the other half of the cost in 2019, and funding is secured to continue this program in 2020. In 2019 NCCISMA



was able to directly help with the control of 36 high priority species infestations on private property.

In addition to this, NCCISMA advised over 270 area residents on invasive species identification and best management practices through one-on-one consultations. Workshops and demonstrations empowered another 132 area residents to control invasive species on their own. In addition to control work, NCCISMA's expanded staff accomplished a notable amount of invasive species surveys, expanding our known inventory, and leaving us better situated to prevent the spread of high priority invasives in the region. Surveys completed include nine public parks covering 316 acres, 78.5 linear miles of trail, and 243 miles of the Muskegon River shoreline. The trail systems that were surveyed this year include Lake Michigan Recreation Area, Cadillac Pathways, Pere Marquette Trail, and White Pine Trail. The field season was capped off with a good amount of restoration work, planting native species where invasive species had been removed or in areas that were otherwise at risk for invasion. This involved the planting of trees, shrubs, plant-plugs, and seeds on 21.5 acres over 12 locations throughout NCCISMA.



Lake County Highlights

- Participated in Baldwin Public Schools balanced calendar intersession - Lesson: Invasive Species Plan, Lake County
- Enrolled Phragmites treatment site in the Phragmites Adaptive Management Framework - data collected at this site will be part of an international adaptive management research project
- Control of source population of Phragmites for the region on 3 Mile Rd. - 4 acres
- Control of source population of Japanese knotweed for the region on Old M-63 - 10.5 acres
- Assisted with weeding of native plant garden beds at Baldwin Ranger District office of the USFS

Mason County Highlights

- 9 acres of understory seeded with native grass where garlic mustard has been treated for several years at Buttersville Park and Campground
- Provided guidance to volunteers at four AFFEW-sponsored invasive species removal days at Cartier Park in Ludington
- Administered autumn olive control workshop in collaboration with Mason County Conservation District
- Collaborated with Huron-Manistee National Forest to provide outreach to campers at Lake Michigan Recreation Area
- Installed demonstration native plant beds at Cartier Park in Ludington





Mecosta County Highlights

- Restoration native planting at Paris Park including installation of 1,750 shrubs, 321 forbs, and interpretive trail signs.
- Campground outreach including a walking tour showcasing restoration work performed by NCCISMA at Paris Park
- 2nd staging area for NCCISMA strike team including installation of tool crib storage shed at Paris Park thanks to NCCISMA partner, Mecosta County Parks
- Outreach with local students was funded by Cargill Corporation, and included presentations on invasive ID and reporting given to 70 Big Rapids High School students, invasive species walking tours for 155 Big Rapids Middle School students, and a garlic mustard pull with 34 Big Rapids Middle School students
- Assisted Muskegon River Watershed Assembly with native plant installation along Big Rapids River Walk

Missaukee County

- Annual NCCISMA 1/2 day community outreach event was held at Lake Township Hall with focus on Aquatic Invasive Species and the Exotic Aquatic Plant Watch program of the MiCorps Cooperative Lakes Monitoring Program. Hosted by Missaukee Conservation District.
- Collaborated with Missaukee County Road Commission on roadside control of giant and Japanese knotweed
- Administered autumn olive control workshop in collaboration with Conservation District Forester
- Restoration seeding performed at 4 acre Japanese knotweed treatment location where NCCISMA has been providing treatments since 2016
- Aquatic Invasive Species Landing Blitz event at Lake Missaukee



Osceola County

- Participated in Swampbuster - Wetland Mitigation Bank Celebration in Sears
- Administered autumn olive control workshop at Kettunen Center in collaboration with Conservation District Forester
- Hosted Japanese knotweed control workshop at Riverside Park East in Evart
- Presented 1/2 day workshop on educational resources for teaching about invasive species at Michigan Alliance for Environmental and Outdoor Education (MAEOE) Conference at Kettunen Center
- Control of wild parsnip source population and outliers covering 31.5 acres, and post-treatment restoration seeding of four acres



Wexford County

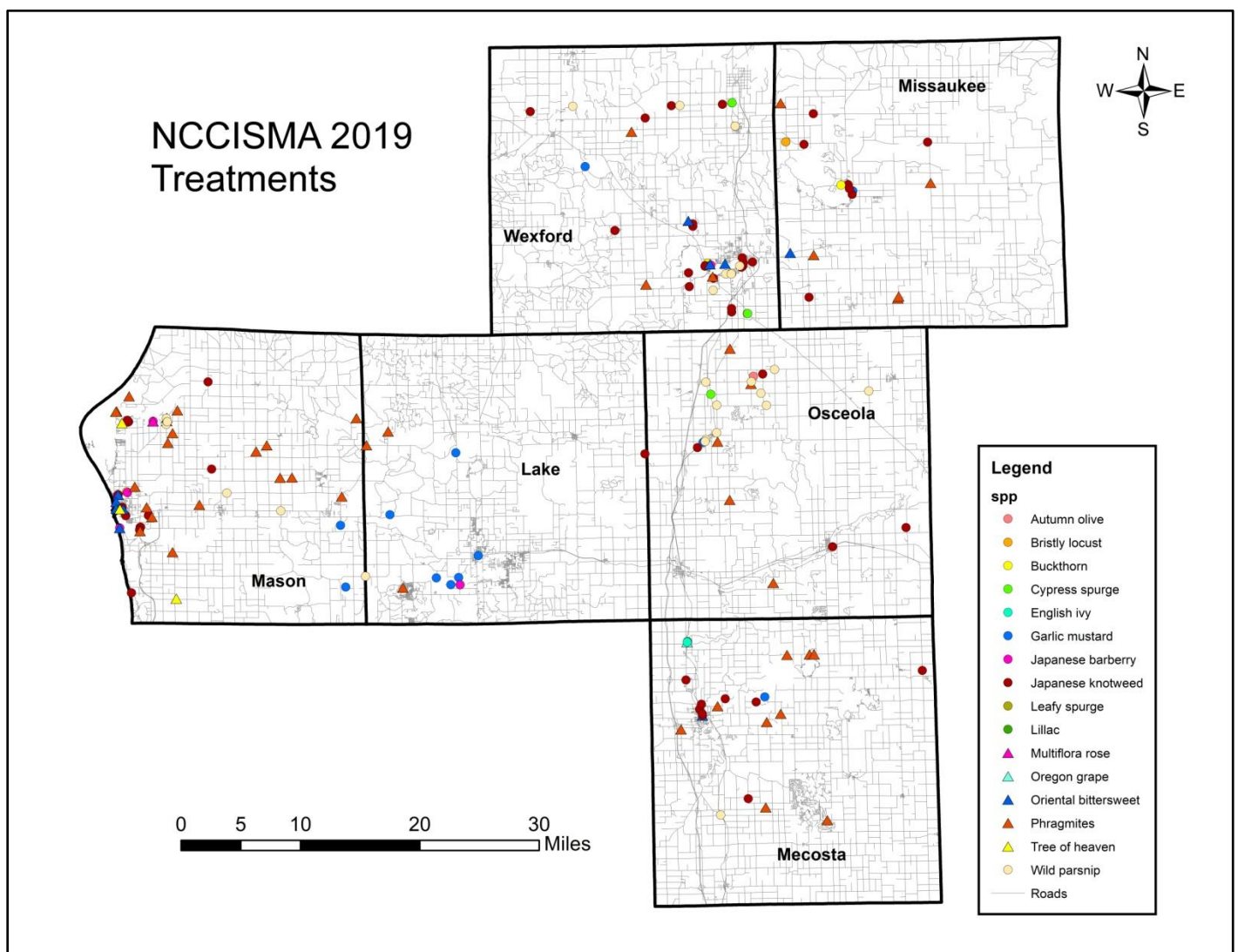
- Restoration planting at Japanese knotweed control site in Wexford County including 250 native shrubs and native grass seeding
- Collaborated with Wexford County Road Commission on roadside control of Japanese knotweed and Phragmites
- Garlic mustard pull at Mesick School Forest with 41 Mesick Middle School 6th graders
- Aquatic Invasive Species Landing Blitz event at Lake Cadillac
- Campground outreach at Mitchell State Park in Cadillac

Special thanks to Wexford County for donating office space at the county courthouse for NCCISMA staff!

NCCISMA staff and volunteer accomplishments in survey, control, and restoration are summarized in the table below.

2019 Survey, Control, & Restoration						
	Lake	Mason	Mecosta	Missaukee	Osceola	Wexford
Property owner consultations	24	95	36	19	27	70
Mechanical Control (sites/acres)	8/14.5	14/41	5/7	3/2	12/39.5	6/19.5
Chemical Control (sites/acres)	4/27.5	34/79	17/21.5	14/26.5	18/44	16/47
Cost-shared treatments (sites/acres)		17/89.5	2/1	2/1	1/0.5	14/11
Reward program (sites/acres)		5/2.5	1/0.5		1/1	1/0.5
Park surveys (sites/acres)			5/222.9		4/93	
Trail surveys (linear miles)	8	5.5	6	15.5	29.3	14.25
Muskegon River aquatic (miles)			63.2	32.8	64.6	
Muskegon River terrestrial (acres)			190			
Restoration planting (sites/acres)		3/10	2/2.5	1/4	4/4	2/1

2019 Invasive species control activity locations are depicted in the following map.



A variety of outreach activities were achieved in 2019. Through these efforts NCCISMA was able to make over 150,000 impressions related to invasive species prevention and management.

2019 Outreach		
Description	Number of Events	Number of People Reached
NCCISMA Hosted Outreach Events	8	432
NCCISMA Articles in Print/Electronic Publications	23	77,350
Interviews for radio, television, print, web	12	43,500
NCCISMA Facebook Postings	60	12,135
Booth at Partner Events	5	278
Presentations at Partner Events	9	270
High School Outreach	1	70
Invasive species walking tours and treatment demos	3	197
Educational Placemats Distributed to Restaurants	19	32,500
Invasive Species Control Workshops/demonstrations	11	132
Volunteer workdays	6	98
Presentations to local governmental bodies	13	439

Services NCCISMA provides:

- Invasive Species Management & Outreach Resource Directory, available online at NorthCountryInvasives.org
- Invasive species identification
- Invasive species surveys and management plans
- Invasive species treatment equipment rentals through partnering Conservation Districts
- Demonstrations and instruction on invasive species control techniques
- Invasive species treatment cost assistance
- Help with obtaining DEQ permits for treatment of invasive species in standing water
- Licensed pesticide applicator contact list

CISMA's are all about partnerships.

In 2019 NCCISMA partnerships were expanded and strengthened in many exciting ways!

Thank You Partners for an Awesome 2019!

NCCISMA 2019 Funding			
Project	Funding Source	Grant Amount	Completion Date
Mecosta-Osceola Student Outreach	Cargill Corp.	\$3,000	Completed
Public Parks Initiative	USFS - GLRI	\$40,000	Completed
CISMA Base Funding 2018	MISGP	\$60,000	Completed
Supplemental Outreach Funding	USFS - GLRI	\$13,315	Completed
Sentries at the Gate	US-EPA - GLRI	\$210,000	Dec. 2019
Parklands Initiative II	USFS - GLRI	\$40,000	April 2021
Treatment Instruction Videos	USFS - GLRI	\$25,000	May 2021
Public Trails Initiative	USFS - GLRI	\$40,000	May 2021
CISMA Base Funding 2019	MISGP	\$60,000	March 2020
Strike Team Formation	MISGP	\$135,000	April 2020
Muskegon River Watershed	MISGP	\$191,900	April 2021