



| Quarterly Newsletter

April 1st - June 30th, 2019



Harpwell Heritage Land Trust

Featured: “*Petoskey’s Invader: The Black Swallow Wort:*”

“The mission of the CAKE CISMA is to protect the natural resources, economy, and human health in Northern Lower Michigan through collaborative outreach and management of invasive species.”

Note from the Program Coordinator



Happy summer in northern Michigan! We have been very busy this season, doing everything from public education on invasive species identification across our region to surveying and treating priority species within our four county service area. As with many of our partners, this is our busiest time of year. So far this season, we have surveyed for baby's breath and lyme grass along the Grand Traverse Bay shoreline, surveyed for garlic mustard at local land preserves, and completed routine check ups around the service area on past treatment sites (particularly for Japanese knotweed) to make sure that landowners are being offered follow-up treatment, if needed. As of last month, treatments have officially begun.

We have also been working diligently this year to increase public knowledge on black-swallow wort, particularly in Petoskey. In partnership with the Petoskey Department of Parks and Recreation, CAKE has led a discussion forum on black swallow wort at Petoskey City Hall; additionally, the department mailed out 283 letters to private landowners explaining the issue and CAKE's as an option to assist. News on CAKE's efforts was also included in a May news article by the Petoskey News Review explaining the issue and how to respond/who to contact - the News Review typically has a readership of 10,000! The topic was of interest to the Review, who requested further information for an editorial published on May 17th. CAKE is also working with the City Parks and Recreation Department to fund treatments of both Bear River Valley Recreational Area and Bayfront Park this summer. For more on this species, check out page 4.

In other news, we have finished our new CAKE CISMA website, which will hopefully prove to be a useful tool to the public in understanding our mission and the services we provide to help fight invasives in our region. The new website includes an electronic form that public landowners can fill out to report invasives and request surveys on private property, and an educational request form that groups can use to book CAKE CISMA as an educational resource at environmental focused events. Check out the link on page 7!

We are very busy this time of year, but with the sun shining, plants blooming, and all the other natural beauty that comes with this time of year, it's easy to remember why we do what we do - to keep our neck of the woods as natural and unaffected by harmful invasive species as possible. Here's to the work to come!

- Benjamin

In the Rear view: This Quarter's Notables

- **April 3:** coordinator met with the DNR Wildlife Division to discuss and renew MOA for future Beaver Island survey, treatment and education work.
- **April 11:** coordinator met with Charlevoix County Road Commission to distribute management materials and recruit the road commission as an official Cisma partner.
- **April 18:** CAKE coordinator participated in Leadership Charlevoix County as a part of an environmental panel session at Raven Hill to inform attendees on Cisma's and invasive species.
- **April 22, Earth Day:** the Elk Rapids Parks and Rec Commission partnered with CAKE to lead over 100 middle schoolers from Elk Rapids Cherryland Middle School in trash clean up and invasive species removal from Dam Beach. The event was also featured on 9&10 News.
- **April 24:** coordinator led a informational talk on black swallow -wort at the Petoskey City Hall, partnering with the city's Parks and Recreation department.
- **April 30:** new website live and active!
- Surveying and treatments have begun for Japanese Knotweed and Black-Swallow Wort!
- **May 2:** coordinator supplied information and boot brushes for the North Country Trail 2019 Celebration at Shanty Creek, Bellaire.
- **May 8:** coordinator provided a discussion on black swallow wort at the Kalkaska County library.
- **May 9:** Northern Lake Michigan Islands Collaborative meeting was held to discuss the preservation of the islands natural and cultural heritage.
- **June 5th:** the CAKE program coordinator was involved with the Antrim Conservation Districts annual Lancer's Leap, an educational program on conservation sciences provided to students at Ellsworth schools.
- **June 11:** CAKE led an invasive species ID training at Grass River for volunteers.
- **June 12:** CAKE presented on invasive species concerns and how to ID invasive knotweed at the Charlevoix Conservation District.
- **June 24:** CAKE coordinator presented for the Charlevoix Michigan Township Association on invasive species management and the resources that Cisma's provide.
- **June 28:** Garlic Mustard pull at Glacial Hills with Antrim Conservation District.



Environmental panelists present at the Ravenhill Discovery Center for the leadership session included Paddle Antrim, the regional Audubon society, Charlevoix CD, MDNR, Little Traverse Conservancy, Friends of the Boyne, Tip of the Mitt, Walloon Lake and CAKE Cisma.

Thank you, Leadership Charlevoix County!

Coming Up: Next Quarter

- More knotweed and swallow wort treatments!
- CAKE is spearheading a project proposal with local lake associations, conservation districts, Grass River Natural Area and Tip of the Mitt, to apply to a grant for survey and treatment funding of two invasive species on the entire ERCOL shoreline. Awards will be announced in August.
- CAKE is partnering with Paddle Antrim to lead an aquatic invasive species workshop and guided paddle in Rapid City on July 29. Contact CAKE for details and to register.
- CAKE is partnering with the CMU biological station and the BIA to apply to a grant to fund two seasonal interns for invasive survey, control and education on Beaver Island, for the summer of 2020. Awards will be announced in October.
- CAKE will be traveling to the Beaver Island Chain in August to begin surveying and follow up treatment on Beaver and Hog Islands for invasive phragmites, cattail and spotted knapweed.

Petoskey's Invader: The Black Swallow-Wort

An invasive species as defined by the Michigan Department of Natural Resources, is 'a species that is not native, and whose introduction causes harm or is likely to cause harm to an area's economy, environment or human health'. Black swallow-wort (*Cynanchum louiseae*), also known as dog strangling vine, is a such a species that has been introduced from Europe and invaded North America. Unfortunately, Petoskey hosts the largest infestation of this species in northern Michigan.

This plant is characterized by small, five petaled, star shaped flowers that are dark purple or black in color as well as opposite, glossy-like leaves. Like most invasive species, it tends to spread much faster than native species. Similar to milkweed, when its pods split in late summer its seeds are widely dispersed by becoming airborne on feather-like fibers. However, this plant's rate of reproduction is not limited to just seeds. Black swallow-wort can also reproduce by rhizomes, which are underground stems of the parent plant grown to create clones. Both of these reproductive actions enable this plant to quickly overtake gardens, lawns and parks, and subsequently crowd out native species.



In addition to its aggressive growth rate, this plant is also dangerous to wildlife and domestic animals, as it actually produces toxins within its root system. It is also deadly to monarch caterpillars, as it resembles milkweed. Although monarch's can safely ingest the chemicals produced by native milkweed, the relationship between monarchs and black swallow swallow-wort is quite different; when the unsuspecting adult butterflies mistakenly lay their eggs on the invasive plant, their larvae is killed by ingesting the look-a like. The larger the population of black swallow-wort becomes, the more likely that monarchs will continue to inadvertently sabotage their own population.

To answer this threat, the City of Petoskey's Department of Parks and Recreation is partnering with the regional CAKE CISMA through surveying and treating city parks. However, as this plant is predominantly found on private properties in residential areas, it is critical that city residents check their own properties for this nuisance and directly report any identified plants to the CAKE CISMA. The CAKE CISMA is willing to cost share with private landowners to treat this species. If property owners elect to remove the plants themselves, it is crucial to remove the entire plant through digging it up by the roots. Attempting to pull, mow, or clip the plant can actually encourage its spread. It is also advised to remove the seed pods from the plant before they ripen and place them in an airtight container or sealed bag for disposal at a local landfill.

Are you interested in having your property surveyed for a particular invasive species by the CAKE team? Fill out and send in the attached letter and we will get back to you!



Landowner Survey Request

Dear Neighbor,

Thank you for your interest in invasive species control, and your desire to remove harmful species from your property. We are happy to assist you in this effort and do our best to ensure that our control efforts are as environmentally safe as possible.

In order to provide the best possible management of invasive species on your property, it is crucial that we have a proper understanding of the property and the infestation levels of the species in question. By signing this letter, you are granting permission to CAKE Cisma employees to access the property address that you provide below. The CAKE Cisma field team will perform a survey of your property, and contact you with the results and recommended treatment measures. This survey is free of charge and is provided by CAKE to the landowner as a courtesy. No treatments will occur until you have given your express permission, as designated in the *CAKE Invasive Species Cost Share Treatment Contract*. After conferring with a Cisma employee on the survey results, we will provide you with this contract; please send the completed contract to the CAKE Cisma to finalize control measures.

This particular letter needs to be signed and dated to indicate you desire a survey. Please sign, date and indicate the property and species to be surveyed below:

By signing this letter, I grant access to CAKE Cisma employees to conduct a survey on the following property for the invasive species I have indicated. I understand that no control will be administered at this time, until I have received survey results from a CAKE representative and have completed and returned the cost sharing contract.

Name of Property Owner (print): _____ **Date:** _____

Signature of Property Owner: _____ **Date:** _____

Address of Property to be surveyed: _____

Species to be surveyed: _____

Email Address: _____

Phone Number: _____

Please return this by either electronically by email to cakeisst@gmail.com or mail it to 4820 Stover Road, Bellaire Michigan, 49615. If you have any questions, please don't hesitate to call us at (231)-533-8363, extension 5. Thank you for your interest in invasive species surveying.



Earth Day 2019: Cleaning up the Dam Beach at Elk Rapids



On April 22, The Elk Rapids Parks and Recreation Commission, the Elk Rapids Cherryland Middle School, and the CAKE CISMA partnered on a special project to help clean up the Dam Beach, just down the road from downtown Elk Rapids. The beach provides stunning views of Grand Traverse Bay, with sandy dunes and access to the local marina. Unfortunately, it has been littered with garbage and invasive species such as spotted knapweed and garlic mustard.

To clean up the beach and keep it ecologically intact, the Parks and Recreation commission and the CAKE CISMA helped lead over 100 middle schoolers in an attempt to handpull the spotted knapweed and garlic mustard, and to dispose of the trash along the pier, shoreline and dunes. Thanks to this 'small army' of young conservationists, the Dam Beach is much better off; check out the photos of the resulting pile of garbage bags, full of knapweed, garlic mustard and trash, for further proof! 9&10 News was present to film the effort, and to interview CAKE CISMA on invasive species, why care, and what to do about it. Check out the full story at:

https://www.9and10news.com/2019/04/22/cherryland-middle-school-celebrating-earth-day/?fbclid=IwAR2eOqQZXokZF3susZI-q6C9XEUtFgEtGI9oTdHD0_6qY_op0FpdgBB8_Xg.

Thank you Elk Rapids Cherryland Middle School, for being proactive in your community and taking a stand on Earth Day to help clean up the environment by protecting our natural resources from littered waste and invasive species.

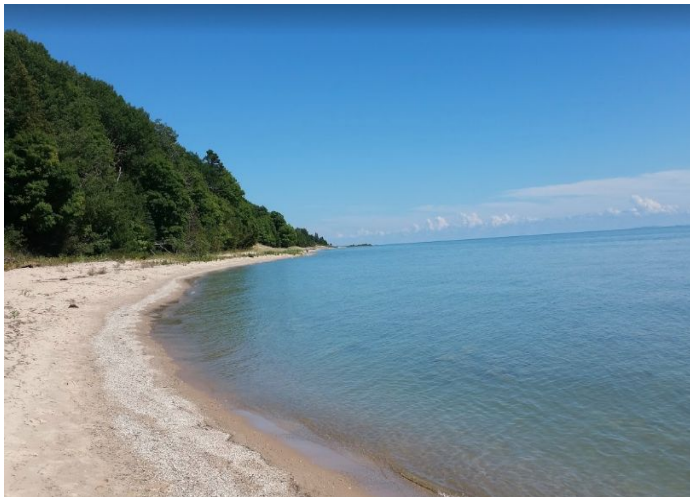


New Website Completed!

Our new website features a description of our mission, service area and services, as well as list of our partners, priority species, ways to get involved, and more. Check us out at

https://cakecisma.wixsite.com/mysite?fbclid=IwAR0BZZUmz7_ch-EnTsj-TESysIdJEyYDUwvnvJ7lb_9qS-4CadxCGEZGATU

and let us know what you think!



GLRI 2019 Proposal: Success!

CAKE is excited to report that the National Forest Service has officially approved our project proposal for the 2019 cycle of the Great Lakes Restoration Initiative, and has awarded us with \$24,884.00! This two year project includes a survey of Hog Island's 14 mile shoreline for invasive phragmites and narrow-leaved cattail, a survey of St. James Harbor for cattail, a survey of Little Traverse Conservancy's Little Sand Bay preserve for spotted knapweed and cattail, and subsequent treatments for these sites. It will also include two outreach events to the residents of Beaver Island to educate on invasive species identification, the protection of endangered endemic species, and what actions can be taken to mitigate the further spread of harmful invasive species. These isolated ecosystems are unique, rich and fragile, and CAKE is excited to be playing a part in their management and preservation.



Welcome, Roger!

The CAKE CISMA has hired on a new field technician for the 2019 summer season! Roger Willford is a senior at Lake Superior State University, and is pursuing a degree in Fisheries and Wildlife Management. While there, Roger is also kept busy as a college athlete for track and field. He is passionate about wildlife conservation and is excited to work for CAKE this summer as *"it will give me field experience, and the opportunity to work outside all day!"* Roger has been very helpful in assisting with surveys, treatments, data collection, and interacting with landowners. Thank, you Roger!



Species in Focus: Japanese Knotweed

Did you know? Japanese Knotweed is not only a difficult invasive species to control, it can also be detrimental to structures and building foundations. With an ability to destroy concrete, it is important to keep this harmful invasive in check. CAKE recommends cutting (not mowing) the plant in June, letting it grow back to four feet, and then applying herbicide to the plant in early fall. It is important to collect all fragments of this plant after clipping. Contact CAKE for a 50% cost-sharing opportunity, and we will treat this species for you.



Partner Spotlight: The Grass River Natural Area



The Grass River is a beautiful waterway that connects Clam Lake to Lake Bellaire within the Elk River Chain of Lakes. It serves as habitat to a variety of creatures, including sandhill cranes, bald eagles, great blue herons, muskrat and even river otters.

Situated around the river is the Grass River Natural Area, which is celebrating 50 years this year. The Natural Area possesses an inspiring history of protecting the natural features of the Grass River and surrounding landscape, as well as educating members of the public on local flora, fauna and how to get involved with local conservation. This legacy of protection and environmental action is constantly being instilled in tomorrow's leaders through their children's nature programs. Additionally, the Grass River Natural Area is very aware and supportive of invasive species efforts. This year, they held an invasive species identification training on their site to educate and inform their volunteer on priority species. This year the CAKE program coordinator was invited to help educate volunteers on invasive species identification. We are grateful for the work that the Natural Area does, and for the opportunity to be involved in partnering with its mission and dedicated volunteers. Thank you, Grass River Natural Area, for your tireless work in conserving this piece of northern Michigan, and congratulations on 50 years!

New Partner: The Charlevoix County Road Commission

CAKE is pleased to announce that the Charlevoix County Road Commission has become a CISM partner! The road commission, based in Boyne City, was very receptive to the CAKE CISM's requests to adopt certain mowing practices along roadsides that will help tremendously to reduce the spread of seeds of invasive species that would otherwise spread rapidly by way of traveling equipment, gear, and regeneration of cut fragments. The CAKE CISM supplied the commission with guides to species of concern, which included identification tips and times to avoid mowing when possible. Thank you, CCRC, for working with us to reduce invasive species in Charlevoix County!



Do you have questions on invasive species control, management or education? Use any of the following contact information to get in touch with us, we'd love the opportunity to help in any way we can:

Program Coordinator email: benjamin.vandyke@macd.org

Strike Team Leader: cakeisst@gmail.com

Office Phone Number: (231)-533-8363 (extension 5)

Or, drop in for a visit! We are located in the Antrim Conservation District at 4820 Stover Road, Bellaire, MI 49615 Our office hours are 9:00am - 4:00pm, Monday through Friday.

You can also follow us on Facebook for regular posts about invasive species control and identification, partner updates and news on invasive species.

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