



# | Quarterly Newsletter

## January 1st - March 31st, 2019



### **Featured:** *“HWA: The Fight to Save Our Hemlocks”*

*“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***

Hello!

My name is Benjamin VanDyke, I'm the new program coordinator for the Charlevoix, Antrim, Kalkaska, and Emmet Invasive Species Management area. I started my role in mid December, and I am thoroughly enjoying my new role in northern Michigan.

I was born and raised in the Great Lakes State, around the Grand Rapids area. I've loved the great outdoors and wildlife for as long as I can remember, so pursuing a field in conservation was a natural choice for me. I attended Cornerstone University in Grand Rapids and earned a bachelor's of science in Environmental Biology. For my program of study at Cornerstone, I attended the Au Sable Institute of Environmental Studies in Mancelona, where I studied wildlife ecology and land resource use. My summer at the Au Sable Institute proved to be one of importance to my future; I developed a fondness and passion for this wonderful region, and knew that one day I would want to return.

Before CAKE, I have worked in outdoor, environmental education for the Mackinac State Parks, the Kalamazoo Nature Center and the Battle Creek Outdoor Education Center. I am thrilled that I get to use both my passion for conservation science and my educational background as the CAKE CISMA program coordinator, in an area that I am very passionate about. Through continued cooperative efforts, I hope that residents find the CAKE CISMA to be a strong educational resource for the public on the harms of invasive species, and a management force between these harmful species and the lands that we care about so deeply.

The CISMA has been very busy over these last few months in monitoring for hemlock woolly adelgid, recruiting new partners to our ever expanding network, applying to external funding opportunities and even building a new website that will soon be published online. Thank you, to all of our partners for enabling the CISMA to continue going about its mission in protecting the natural resources and the ecological beauty of our region. It may not look it yet, but spring is officially here folks - here's to a great year of thwarting invasive species!

- Benjamin





## *In the Rear view: This Quarter's Notable Events*

- **January 19th:** CAKE was represented by the program coordinator with an informative booth at the Antrim Conservation District's 'Family Fun Day'.
- **January 23rd:** steering committee held quarterly meeting
- **February 21st:** the program coordinator attended the Northern Lake Michigan Island's Collaborative in Charlevoix.
- **March 5th:** CAKE CISMA held its Annual Partner Meeting at the Au Sable Institute to discuss ongoing projects, upcoming events and gain partner feedback and requests.
- **March 9:** Program coordinator met with Au Sable Institute environmental education interns to discuss CISMA's, conservation districts and led an HWA survey demonstration.
- **March 14th:** CAKE was represented by the program coordinator with an informative booth at the Charlevoix Conservation District Open House.
- **March 25th to March 28th:** the CAKE team visited Beaver Island for four days of HWA surveying (see story)
- **March 29th:** Program Coordinator attended MSU Extension "Engaging Decision Makers on Invasive Species class workshop at the Michigan Nature Association.
- CAKE developed and submitted project proposals for Sustain our Great Lakes by the U.S Fish and Wildlife Foundation and to the Great Lakes Restoration Initiative by the National Forest Service.



*A big thank you to everyone who was able to attend our Annual Partner Meeting at the Au Sable Institute! We appreciate all of the Partner feedback and requests. Thank you, Au Sable, for hosting us!*

## *Coming Up: Next Quarter*

- CAKE is applying to a mini-grant to revive the Clean Boats, Clean Water initiative along the Elk River Chain of Lakes. More details to come.
- Cost Sharing surveying begins in April
- Cost sharing treatments begin in early May.
- New website to be completed!
- **May 4th:** Pine Hill Nursery will be hosting an open house from 10am- featuring Emily Cook from ISN and materials from CAKE on invasive species management.
- **May 9th:** Northern Lake Michigan Islands Collaborative Meeting on Beaver Island
- **June 11th:** Grass River Natural Area Volunteer Training Day.
- Quarterly Steering Committee Meeting: Date TBD
- Date TBD: Kalkaska County Black Swallow Wort education program. Stay tuned for more details!



# HWA: The Fight to Save Our Hemlocks

Northern Michigan is characterized by varying shades and hues of deep green, as a result of the many conifers across the landscape. One key evergreen species is the eastern hemlock (*Tsuga canadensis*), known for its thin green needles and fondness for hilly terrain and stream banks. The eastern hemlock is habitat for many species of wildlife, including song birds and small mammals. As it is often found along streams and brooks, the eastern hemlock offers critical shade to water based habitats; this shade helps to keep water levels cooler which raises the oxygen content for fish and aquatic invertebrates. For these reasons, hemlocks are deemed as highly ecologically valuable.

Unfortunately, Michigan's population of hemlocks is at risk from an invasive species. Hemlock woolly adelgid (*Adelges tsugae*), often abbreviated to HWA, is a parasitic insect that feeds off the stored starches of hemlock branches. This activity is enough to cause tree mortality, and can kill the tree in fifteen years or less. It is believed that this invasive is being spread along the coast of Lake Michigan in areas that correlate with high recreational traffic and bird migratory flyways. HWA may also be spread by imported hemlocks from ornamental nurseries. If left unchecked, this pest will cause a devastating blow to Michigan's native hemlocks.

## *Partnering with The Nature Conservancy*

To answer this threat, The Nature Conservancy has awarded all Cooperative Invasive Species Management Areas that border eastern Lake Michigan with funding to survey and monitor for HWA. This project is to last two years, from fall of 2018 to spring of 2020. Because adelgids form white, protective ovisacs that are only visible in the winter months, surveying efforts have occurred from November until late March, and will resume again this upcoming November. The CAKE strike team has been kept active surveying both private and public lands within the service area. Landowners that are concerned about their own hemlocks are encouraged to contact the Cisma to fill out a land access permission letter and benefit from a free hemlock survey.

## *Season Accomplishments*

From November through the end of March, the CAKE Cisma strike team has:

- Surveyed over 5,000 acres of private and public lands for hemlock woolly adelgid within the counties of Charlevoix, Antrim, Kalkaska and Emmet.
- Surveyed preserves for key partners such as the State of Michigan, the Little Traverse Bay Band of Odawa Indians and the Little Traverse Conservancy.
- Produced a news article to draw public attention to the issue; this article was published in the *Elk Rapids News*, the *Record Eagle*, the *Antrim Review* and the *Northwest Michigan Voice*.



Photo: CAKE Cisma crew leader Ed DeRosha surveying for HWA at Glacial Hills Natural Area, Antrim County.

**Are you concerned for your hemlocks and would like the CAKE team to come survey for our next HWA season (November- March)? Fill out and send in the attached letter and we will get back to you!**

## Landowner Consent for Hemlock Woolly Adelgid Survey

### Landowner Information:

Survey for Eastern Hemlock Trees, Hemlock Woolly Adelgid and Elongate Hemlock Scale

Landowner Name(s): \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Property Address(s): \_\_\_\_\_

Property Legal Description (See Deed or Tax Form): \_\_\_\_\_

Daytime Phone(s): \_\_\_\_\_

Email Address: \_\_\_\_\_

Tenant Name (if applicable): \_\_\_\_\_

Tenant Telephone: \_\_\_\_\_

Special Instructions Regarding Property Access (landscape features, animals, gates, preferred access times, etc.)

### The undersigned ("Landowner"):

1. Authorizes CAKE CISMA, The Nature Conservancy ("TNC"), and their respective authorized agents and contractors, to enter and cross the above-described property ("Property"), during the period from \_\_\_\_\_ to \_\_\_\_\_, for the purposes of surveying the Property for eastern hemlock trees, the presence of hemlock woolly adelgid and elongate hemlock scale, and for evaluating and inspecting this surveying work (collectively, "Survey Work").
2. Agrees that the information collected from the Survey Work on the Property may be used by CAKE CISMA, TNC, and the Michigan Department of Natural Resources ("DNR") for any non-commercial purposes and will be public information.
3. Release TNC and the DNR from all claims, damages, liabilities, losses and costs to the Landowner that may arise or result from the presence of CAKE CISMA and their authorized agents and contractors on the Property, and their performance.
4. Represents, for the benefit of CAKE CISMA, TNC and DNR, that the undersigned owns the Property, and has the requisite authority to grant the authorizations provided in this document and to sign this document without the need for approval from any other party, or if any such approvals are needed they have already been obtained.

**Landowner acknowledges that it has read the terms of this document and agrees to the stated terms.**

Printed Name of Landowner	Signature of Landowner	Date
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Printed Name of Landowner	Signature of Landowner	Date
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# Hemlock Surveying on Beaver Island: March 25th - March 28th



To wrap up HWA efforts for the first survey season, Ann, Ed and myself travelled to ‘America’s Emerald Isle’ to survey high risk sites, land preserves and coastal areas. Although few in number this time of year, the islanders were as friendly and encouraging as ever and we felt very welcome -you would be hard pressed to pass an islander on the road without receiving a friendly wave as they drove by. To offset the shortage of people, the white-tailed deer population has selflessly taken it upon itself to skyrocket, as you would also be hard pressed to go around a bend without seeing two or three of them every half mile.

In addition to surveying, the Beaver Island Association arranged for CAKE to give a short radio interview on *WBVI: The Voice of Beaver Island*. The interview addressed the threat of HWA, how to spot it, and why islanders should be concerned for their hemlocks. The CAKE team is very grateful to the Association and all the travel arrangements that were made on our behalf.

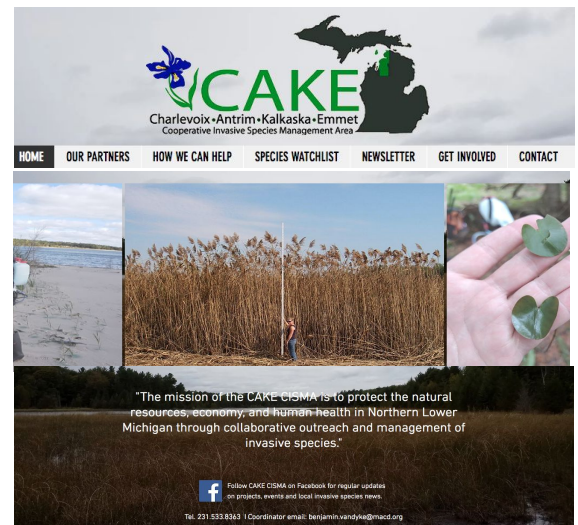
The trip was highly successful in that we were able to cover much ground in a relatively short amount of time, and survey many areas with high hemlock densities both on the perimeter and in the interior of the island. We were delighted to find that many of the main roads were clear of snow and ice - it seems that even the remote, dirt back roads of Beaver Island are aware and welcoming of spring’s arrival.





## *New Website In Development*

CAKE is pleased to announce that our new website is getting closer to completion! Once published, it will feature information on CAKE's partners, staff, priority species, available programs (such as education and cost-sharing), as well as photo galleries and news updates. Our hope is that it will be an accessible, easy to use resource for invasive species questions and program requests. Stay tuned for updates, and let us know what you think once its live!



## *Strike Team Extension: Success!*

CAKE is happy to report that the Michigan Department of Natural Resources has approved an extension to our strike team grant activities for the next year! This means that we will be continue to be busy surveying and treating out in the field for priority species such as black swallow-wort (*Cyanthum louisicacae*), invasive phragmites (*Phragmites australis ssp. australis*) and Japanese knotweed (*Fallopia spp.*) as well as working with our area's landowners through our cost sharing program to survey and treat private lands. Additionally, Lake Michigan coastal regions will be surveyed and treated for invasive lyme grass (*Leymus arinareus*) and baby's breath (*Gypsophila paniculata*), as these plants form deep roots that are detrimental to dune systems and crowd out native species.

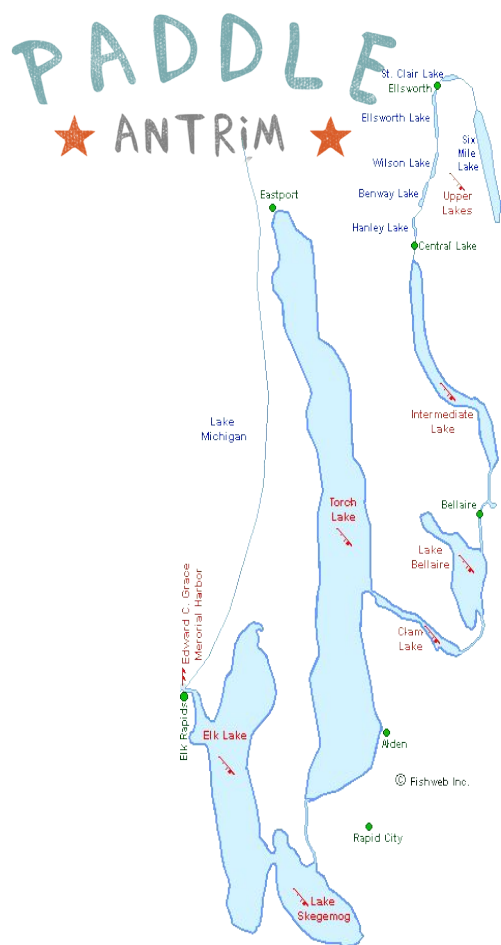
## *Good luck, Ann!*

Our field technician, Ann Mills, has been a tremendous help to the CISMA over the past six months in surveying and treating for priority invasive species. She was especially busy over the winter mapping out priority areas for hemlocks and actively surveying land preserves and private properties, rain or shine. We are very thankful for her and the work she has done! With the HWA season concluded, Ann has taken a new position with the Rocky Mountain National Park, where she will work in invasive species removal and restoration efforts. Good luck Ann, we wish you the best! "*The mountains are calling, and I must go.*" - John Muir.



## ***Now Hiring: Seasonal Field Technician***

CAKE is currently looking to hire a seasonal field technician to assist with surveying and treatments for spring - summer of 2019. The Invasive Species Strike Team Technician is a seasonal position, working from 36- 40 hours/week for up to 16 weeks. Primary responsibilities include working under the direct supervision of the Strike Team Crew Leader to manage terrestrial invasive plants throughout the CAKE service region. Managing invasive species will be done through the use of multiple treatment methods including manual and chemical treatments as well as surveying and prioritizing infested sites. For more information and the job posting, check out our website, or Indeed.com.



## ***Partner Spotlight: Paddle Antrim***

Paddle Antrim is a non-profit organization whose mission is to ‘*protect our water resources by using paddle sports to connect people to our waterways*’. Paddle Antrim has spearheaded the efforts to develop the Chain of Lakes Water Trail, the first waterway in northern Michigan to receive this designation from the state Department of Natural Resources. The Trail contains over 80 miles of trail and 14 connected lakes and streams.

In an effort to continue to protect water resources, Paddle Antrim is using the Water Trail as a way to educate paddlers on the harms of aquatic invasive species within the Chain. Under the Michigan Sea Grant, Paddle Antrim will be hosting an event in Rapid City on July 29th that will educate paddlers how to identify invasive aquatics - CAKE will be assisting with education. Another event, the Paddle Antrim Festival, will take place September 12-14; paddlers will have the opportunity to challenge themselves by selecting beginner (7 miles), intermediate (9 miles ) and advanced (42 miles) routes. Events will include a kickoff in Ellsworth, a block party in Bellaire and a celebratory party in Elk Rapids to conclude the event.

Paddle Antrim is also developing and installing signs at 81 access sites along the Chain of Lakes Water Trail. These signs will be installed at public access sites including boat launches and public parks where they will be seen by not just paddlers, but the general public as well. The anticipated installation for these signs is 2020. Thank you, Paddle Antrim, for all you are doing to educate paddlers on aquatic invasive species!

## ***New Partner: The Au Sable Institute of Environmental Studies***

CAKE is pleased to announce that the Au Sable Institute of Environmental Studies has become a Cisma partner! The Institute, located on Big Twin Lake of Kalkaska County, is an accredited institution whose mission is to ‘*serve, protect, and restore God’s earth.*’ Undergraduate and research students from various colleges attend the institute during the summer months to take classes in land resource use, conservation science, ecology and other environmental disciplines. During the winter, the institute offers internships in hands on, environmental education that gives interns the chance to teach k-12 students. We are excited to see how we will partner in the future to engage college students with the topic of invasive species management!





**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](mailto:benjamin.vandyke@macd.org)

Strike Team Leader: [cakeisst@gmail.com](mailto: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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