

March 2009

District News



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Special Points of Interest:

- District Board meetings are held at the District Office on the second Thursday of each month, and begin at 7:30 p.m.
- District Office is open: Monday - Friday
- District Phone: (231) 582-6193 or 582-7341; Fax (231) 582-6236
- Staff: Kelly 7:00 a.m. - 3:30 p.m., Chris 8:00 a.m. - 4:30 p.m.
- Lunch: 12:30 - 1:00 p.m.
- Our work occasionally takes us out of the office. We apologize for any inconvenience this may cause.

Directors & Staff

- Timothy Matchett, Chairman
- Eric Beishlag, Vice-Chairman
- Dave Stolt, Treasurer
- Ron Reinhardt, Member
- Dennis Howard, Member
- Kelly Martin, District Coordinator
- Chris Anderson, Forester/Groundwater Technician

www.charlevoixcd.org



Invasive Phragmites



**Threatens
Charlevoix County's
Precious Natural Resources**
By: Kelly Martin, District Coordinator

Have you ever heard of invasive phragmites (frag-MY-teez) before? This invasive species is one you **NEED to learn about** and your local Conservation District is here to help!

Invasive phragmites has been identified as one of the highest threat species in the state and it is rapidly advancing in the northern Lower Peninsula. Miles of shoreline, acres of wetlands, and even roadside ditches are being invaded by invasive phragmites. It crowds out native vegetation, limits access, damages property values, destroys views, and is extremely expensive and difficult to control or eradicate once established. Studies show that detecting invasives early and having the ability to respond quickly provide the best opportunities for control or eradication. Yearly maintenance is likely.

The Charlevoix Conservation District in partnership with the MDNR Wildlife Division, and MDEQ Land & Water Division hosted a very important meeting for Charlevoix County & Township Officials to address the growing concern with invasive phragmites in Charlevoix County. The goal of the meeting was to ensure everyone has adequate and valid information and to begin the discussion on how to effectively address this threat in our region. A Stakeholder meeting was held January 27th with over 50 people in attendance. Several informative presentations were made on exotic & invasive species, an overview of control methods regarding invasives in the Great Lakes Basin, State Agency roles & requirements, permitting procedures & application review, a local success story of a community approach (Beaver Island), plus examples of the chemical treatment methods that were used on Beaver Island. The afternoon was spent networking & brainstorming in breakout sessions to discuss: the best approach to use in Charlevoix Co.; the appropriate roles for townships & organizations; how to pay for treatment; and where do we start location-wise. When the group reconvened and discussed the results, several good ideas came out!!

An Invasive Phragmites Steering Committee was formed as a result of the meeting to work together towards a common goal: a coordinated treatment approach to control or eradicate invasive phragmites on all shorelines, inland lakes, wetlands & ditches in Charlevoix County.

Detrimental Effects of invasive phragmites:

- Crowds out native plant species and animals.
- Creates a monoculture, reducing wildlife habitat and diversity.

While phragmites control can involve significant expenditure of resources, the environmental and social benefits derived from restoring native wetland communities to coastal and interior wetlands are even greater!



The Problem

Once phragmites invades, it causes adverse ecological, economic and social impacts including:

- Threats to coastal and interior wetlands, which are Michigan's most biologically diverse and productive ecosystems.
- Domination of native vegetation, displacing desirable native plant species such as sedges, rushes & cattails, and reduction of plant diversity.
- Reduction of wildlife habitat diversity resulting in loss of food and shelter.
- Alteration of water regime, causing "drying" of marsh soils through increased evaporation and trapping of sediments.
- Reduction of property values due to use impairment.
- Restriction of shoreline views due to tall, dense stands.
- Reduction of access for swimming, fishing and hunting.
- Creation of potentially serious fire hazard to structures due to dry biomass during the dormant season.

Native or Invasive

While *Phragmites australis* is native to Michigan, an INVASIVE NON-NATIVE variety of phragmites poses a serious threat to the natural resources. **A note of caution:** It is difficult to **definitively** distinguish the native and introduced forms of phragmites without genetic testing. However, a number of morphological characteristics have now been identified that can be used to determine a population's type.

The **native variety** occurs in low density stands often comingled with other native plants. Stems grow to a maximum of approx. 8' high, are somewhat delicate, very smooth to the touch, and often have a red chestnut color towards the base. Leaves are pale to yellow-green. The leaf sheaths fall off in autumn; stems often do not survive standing through the winter; and flowering occurs July to August.

The **invasive variety** forms very dense stands which include both live stems and standing dead stems from the previous year's growth. Stems often reach 15' high, and are somewhat rough to the touch. Leaves are blue-green and darker than the native forms. The leaf sheaths adhere tightly to the stem and persist through the winter. Flowering occurs August to September and flowers are bushy in form, usually purple or golden in color. As seeds mature, they begin to look "fluffy" due to the hairs on the seeds, taking on a grey sheen. Additional information on how to identify native versus non-native phragmites can be found on the Cornell University website:

www.invasiveplants.net/phragmites/phrag/morph.htm.

Transporting phragmites is illegal. Possession of phragmites is restricted in Michigan. However, possession for purposes of identifying, treating and destroying is allowed under the law. If necessary to transport phragmites for identification purposes, it is recommended to remove the seed heads and only transport a section of the stem with corresponding photos of it growing.



Understanding Phragmites

Before attempting to control phragmites it is important to be able to identify the native phragmites & other native plants that grow under similar conditions in Michigan's coastal & interior wetlands. Field guides and other resources can be used to identify other wetland plants, and the website link on the previous page through Cornell University can be used to help you identify native from non-native phragmites.

LIFE CYCLE



Rhizomes generate roots and stalks at regularly spaced nodes. An individual plant can multiply into a large stand through its rhizomes. Rhizomes may exceed 60 feet in length, grow more than 6 feet per year and readily grow into new plants when fragmented. In addition to facilitating reproduction, phragmites rhizomes can penetrate the soil to a depth of more than 6 feet.

This allows the plant to reach low-lying groundwater and tolerate a variety of conditions, including dry upland sites & wetlands with water depths in excess of 2 feet.

Mature plants produce as many as 2,000 seeds annually. Germination occurs in the spring, generally on exposed moist soils. Seed viability is considered low and germination a slower process than spreading by rhizome fragments, however new stands will develop from seed.



Effective control of phragmites hinges upon attacking the right portion of the plant at the proper times within the life cycle to slow or stop current and future growth.

Initial herbicide treatment (FALL application), followed by removal of plant material, plus annual maintenance is the best method of control. After the initial herbicide treatment, follow-up methods will not only help provide multiple stresses on the plants, but will also prepare the site for subsequent years of herbicide treatments, and allows sunlight to reach the soil surface to promote germination of native plants. Proper disposal of plant material is important to prevent the spread of invasive phragmites to other areas.

Methods of Control:

- **It can easily spread if improper control methods are used!!**
- **DO NOT ATTEMPT REMOVAL** through digging or hand pulling. It's ineffective due to the extensive root system.
- **DO NOT ATTEMPT REMOVAL** by disturbing the soil through mechanized disking or raking. It encourages rapid expansion by breaking off pieces of the rhizomes.
- **DO NOT ATTEMPT REMOVAL** by burning. Burning without prior herbicide treatment invigorates growth and spreading.
Warning: It also burns very hot and fast, and should only be performed by trained personnel!
- No biological control methods are currently available.
- Initial herbicide treatment (fall application) followed by removal of plant material, plus annual maintenance is the best method.
- Mowing or cutting should not occur until at least 2 weeks after herbicide treatment to allow plant absorption of the herbicide.
- Once area has been cut, thatch should be raked, **bagged** and disposed of in an appropriate location to prevent seed spread.
- Mowing or cutting on Great Lakes Bottomlands below the Ordinary High Water Mark requires a GL Shoreline Management Permit. Consult the MDEQ website www.michigan.gov/deqwetlands or contact the MDEQ Environmental Assistance Center at: 1-800-662-9278 for more information.

CHEMICAL SPRAYING



For technical assistance regarding the use of chemicals for phragmites control or aquatic nuisance control permits contact the MDEQ website: www.michigan.gov/deqinlandlakes

Or the

MDEQ Aquatic Nuisance Control Program at 517-241-7734, or email: deq-lwm-anc@michigan.gov

Chemical Control

In Michigan, controlling phragmites using herbicide treatments or mechanical methods will likely require a permit from the MDEQ prior to treatment or removal. Numerous methods may be used to apply the herbicide depending on the size of the stand & existing site conditions. Methods for scattered plants or isolated plant stands include: injecting stems, hand swiping or selective hand spraying. Spot treating areas with scattered plants or isolated stands can prevent the establishment of large dense stands, and is more cost effective.

NOTE: Using a licensed applicator (level 6) certified in aquatic pest management **is recommended!**

Where do I learn more?

(About invasive phragmites)

Charlevoix Conservation District Website

www.charlevoixcd.org

Under the Conservation Education section, the page was created to help educate the public on Invasive Phragmites after the Beaver Island Property Owners Association alerted the Conservation District of the problem. With water levels down, invasive phragmites is primed for an EXPLOSION! The invasive, **non-native** variety of *Phragmites australis*, is a perennial wetland grass that can grow up to 15' tall!!!

Education is key to controlling the spread of this plant.

A second page was created to emphasize: proper methods of control; warnings on improper methods of control; information on permits and technical assistance for permit application. Also, where you can find a licensed herbicide applicator and a list of approved aquatic herbicides. Links are provided for easy access to MDEQ, MDA, and MSUE websites, as well as many documents to download and videos to watch!

Lake Charlevoix Association Website

www.lakecharlevoixassociation.org

If you are a Lake Charlevoix shoreline property owner, you should keep this website in your Favorites list. This motivated group has recognized the significant threat invasive phragmites poses to Lake Charlevoix and has stepped up to address the problem. Members have begun the task of surveying existing stands and determining whether it's native or the invasive variety. They have formulated a plan of attack and are looking forward to the cooperation of landowners and local units of government around the lake to make it successful. LCA has also applied for a grant from the Charlevoix County Community Foundation to cover permit fees, at least one mailing, a GPS camera, and some community education work. The Conservation District has provided them with a letter of support for their application.

Coordinated treatment efforts will be most effective. If you are a Lake Charlevoix property owner please contact LCA regarding phragmites and **please DO NOT ATTEMPT REMOVAL** on your own. Several agencies, organizations and resource professionals are available to provide assistance & help keep this ominous threat under control.

To learn more about the Association's invasive phragmites efforts, contact LCA via email: info@lca-mi.org, or one of the board members: Sam Williamson, Dan Mishler, Sue Costa, Mike Dow, Jonathan Friendly, Brian Chamberlain, Paul Nowak, Tom Snow, Paul Witting.

More Phragmites Links

www.agreatlakesjewel.org

Watch the video made on Beaver Island

www.BeaverIslandAssociation.org

Watch the video & see numerous photos taken of the treatment efforts on Beaver Island + Ordinance information

www.charlevoixcd.org

Links to all the other websites, PowerPoint presentations on phragmites, best methods of control, warnings what not to do, permit information & technical assistance.

www.michigan.gov/deq Home Page

www.michigan.gov/deq/0,1607,7-135-3313_3681_3710-178183--,00.html

Control & Management of Invasive Phragmites

www.michigan.gov/deq/0,1607,7-135-3313_3687-70142--,00.html

Great Lakes Shoreline Management

www.michigan.gov/deq/0,1607,7-135-3313_3681_3710-10160--,00.html

Permit application forms

www.michigan.gov/mda Home Page

www.michigan.gov/mda/0,1607,7-125-1569_16988_35288-11993--,00.html

Pesticide applicators Licensed to do business in Michigan

www.deq.state.mi.us/documents/deq-wb-swias-anc-approvedherbicides.pdf

List of aquatic pesticides approved for use in waters of the state

www.miseagrant.umich.edu

Aquatic Invasive Species page

<http://web4.msue.msu.edu/mnfi/education/invasives.cfm>

Invasive Species information

<http://mipn.org/invasivesbrochure.pdf>

Why Should I Care About Invasive Plants? brochure

www.Peaine.org/environment

Ordinance information

www.jfnew.com/species-control.asp

Business offering services for invasive phragmites control

www.prolakemgmt.com

Business offering services for invasive phragmites control

www.stewartfarm.org/phragmites/beaverisland.php

Problem & efforts on Beaver Island

www.phragmites.info & www.phragmites.org

Basic homeowner/ landowner information & upcoming events

<http://www.fws.gov/invasives/>

U.S. Fish & Wildlife Service, Invasive Species

<http://www.seasmi.net/>

Business offering services for invasive phragmites control

<http://www.wildlifewetlands.com>

Business offering services for invasive phragmites control

Who do you contact if you have phragmites?

Charlevoix County Residents:

Charlevoix Conservation District: 231-582-6193

Emmet County Residents: Emmet CD: 231-439-8996

Antrim County Residents: Antrim C.D.: 231-533-8363

Lake Charlevoix Property Owners:

Lake Charlevoix Association: info@lca-mi.org

City of Boyne City: 582-6597

City of Charlevoix: 547-3250

City of East Jordan: 536-3381

Property Owners on: Walloon Lake, Deer Lake, Susan Lake,
Thumb Lake, Six Mile Lake, Huffman Lake.....

Tip of the Mitt Watershed Council: 347-1181

Little Traverse Bay Band of

Odawa Indians: 242-1570

Lake Michigan Property Owners:

Charlevoix Township: 547-4611

Hayes Township: 347-2899

Norwood Township: 547-5284

Riverfront Property: Friends of the Boyne River: 582-9373

Friends of the Jordan River: 536-7550

EDUCATIONAL PUBLIC WORKSHOP PLANNED

The Grand Traverse Regional Phragmites Stakeholder Committee is planning a HUGE event for shoreline property owners. A big thank you to the Watershed Center for hosting the workshop.

Scheduled for Saturday, **June 6, 2009** at the Hagerty Center

Northwest Michigan College, 715 East Front Street in Traverse City.

A morning session 9-12 will cover: General Information on the plant, differences between native and non-native, impacts on property values, negative impacts to wildlife, and a success story on Beaver Island. The same session will be repeated from 1-4.

Many exhibitor booths will be on display for visiting throughout the day from M.DEQ, Tip of the Mitt Watershed Council, & related businesses to answer landowners questions.

Contact Kelly at 231.582.6193 for more information or visit the

Watershed Center website at: www.gtbay.org for information on this event you won't want to miss!!!!

Spring Tree Sale



Remember:

- Order early for best selection!
- Distribution date: April 25, 2009.
- Distribution time: 8:00 a.m. - 12:00 p.m.
- Location: District Office @ 303 North St., Boyne City.
- Trees cannot be resold with roots attached.
(PA 189 of 1931, as amended)
- The District cannot guarantee survival of stock.
- If you need assistance determining what to order, contact our District Forester for recommendations. Phone 582.6193.
- Order form and Plants & Products catalog are on-line!
- Additional tree information can be found on our website at:
www.charlevoixcd.org (Conservation Plants & Products)



HHHW Collections

HouseHold Hazardous Waste (HHHW), is a mouthful to say. HHHW **awareness** has increased and the number of people taking advantage of these opportunities has increased as well!



Charlevoix County residents are provided two collections a year which are funded by the county recycling millage. A location is selected on each side of the county, so residents won't have to travel so far to drop their items off. The event locations are NOT publicized to eliminate unauthorized dumping of household hazardous waste prior to the scheduled date.

Collection totals have steadily increased with old electronics and alkaline batteries leading in total poundage. The first event, held in September 2002 collected a total of just over 10,000 pounds. The most recent event held in September 2008 boasted a collection total of **43,274 pounds!!** Old electronics made up 18,251 lbs., and alkaline batteries 1,574 pounds!!! The District took calls & scheduled almost 400 appointments for that day. That is a very good thing.

The next HHHW Collection will be held on **June 13th**. Two weeks prior to the event, please call the District Office to schedule a time slot and learn of the location. If you have any questions or need additional information, please contact Kelly at 582-6193.

NOTE: September 5th date changed to the 12th.

Old Tires Collected 2008

The **2008** HHHW collections included a special addition:

To bring: **4 car sized tires per household - at no charge!**

Working with Lakeshore Tire, and Riverside Tire,

the Charlevoix County Recycling Program collected **380 old tires** during the 2008 HouseHold Hazardous Waste collections.



Wildlife Damage

By: Chris Anderson, District Forester

With spring coming & the snow starting to melt, it's time to see what damage has been done to our trees & shrubs by wildlife. While wildlife may damage trees anytime of the year, it is more common in winter when food is scarce. There are many animals that cause damage, but I've written about 3 of the most common.

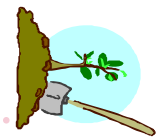
Mice will damage trees & shrubs by girdling stems, branches, & roots. While searching for obvious girdling at the soil line of the trees, also look for mouse travel lanes through the sod & mouse-sized holes leading below ground. One way to prevent mouse damage is to keep the grass & weeds around the trees short by mowing or herbicide. This provides less cover from predators & makes it harder to travel under the snow. Mulches such as woodchips & bark will prevent weedy growth, however, because mice burrow through soft materials & make homes in it, the mulch will have to be raked away from the tree each fall. Wire netting can do an excellent job of preventing mouse damage. The netting should have small enough mesh to prevent the mice from entering. A mesh size of 1/4" or less should do. Trunks of individual trees may also be wrapped with the commercial plastic tree wrap.

Rabbits can severely damage trees by girdling the trunks or major branches or by completely severing the growing points of terminal leaders on small trees. Because rabbits travel on top of the snow, winters of deep snow are usually accompanied by heavier damage. Usually the greatest damage is caused from December to February. A fence of chicken wire 36" high with several inches buried into the ground may be effective but can be expensive. Also, as with mice, plastic tree wrap may prevent damage.

Deer may damage a variety of tree plantings by feeding on buds, stems, & small branches or by rubbing their antlers causing breakage & bark damage. Look for deer browsed vegetation from ground level to about 5' in height. Rabbits also browse on low twigs, but damage can be distinguished easily. Rabbits clip stems clean; deer tend to break or tear stems. Properly constructed & maintained fencing around each individual tree or plantation appears to be one of the best methods for preventing deer damage. However, the cost for fencing materials & labor can be very expensive & often times infeasible for the landowner.

An alternative to physical or cultural practices to prevent damage are repellents. Repellents are substances to deter animals from eating or damaging the plants it has been applied to. One such substance is a product called **Plantskydd**. It is an all natural substance that can be sprayed on trees & shrubs to prevent damage from deer and rabbits. Repellents, when applied correctly, can provide long lasting protection for usually a lesser cost than fencing. It may be impossible to prevent all damage to trees & shrubs. But hopefully I have given you some ideas on how to lessen the severity of it.

Charlevoix Conservation District



303 North Street
Boyne City, MI 49712
www.charlevoixcounty.org/cd.asp

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