

Winter Newsletter

December 2009

Central Upper Peninsula Cooperative Weed Management Area

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Earn-to-learn



CUPCWMA Sponsored Project: Trestle Corridor Native Plants Garden



Michigan Works Earn-to-Learn Crew Helps Out Around County

In the summer of 2009, Marquette County Conservation District (MCCD) and our partners had the privilege and benefits of a Michigan Works Earn-to-Learn Work Crew. This group of seven dedicated and hardworking young men and women, ages 16-23, worked as a team to apply their talents and provide assistance to a variety of organizations, including CUPCWMA.

The work crew started and ended their work season at Trestle Corridor, a native plants garden located along the bike path south of Washington Street, between Fourth and Fifth Streets in Marquette. The work crew discovered right away that this garden, originally started in 2005, required a lot of maintenance, especially in the form of weeding.

Early on, Trestle Corridor became the place where the crew members grew interested and knowledgeable of native plants and grasses. They also saw first hand the destruction caused by the growing number of invasive species at the site. It was also the place whereby Renee Leow, MCCD administrator, was given the nickname "Wicked Witch of the Weeds."

Tirelessly, over the summer they pulled over 2,400 gallons of weeds. They re-planted annual rye, mixed in with native seeds, in the areas where the greatest concentration of invasive plants were removed. While pulling weeds the work crew even found a wedding ring and returned it to its very grateful owner!

Sixth Graders Plant Natives at Trestle Corridor

In October, Trestle Corridor Native Plants Garden received another much needed labor boost when more than 200 eager and very wet sixth graders from Bothwell Middle School planted over 1,500 native plants in the cold rain. The plugs were grown by the inmates and under the supervision of Neil Moran of the Kinross Correction Facility.



The MCCD Staff, Bothwell Middle School students and their teachers braved the cold wet weather to plant nine varieties of wildflowers and four grasses in a very short time. Eleven year old Leah Anderson said “I like the rain, its fun” as she patted soil around the base of the plant she was putting into the ground while wearing a rain suit made from a large plastic trash bag.

The school planting project included an educational component in the morning. The kids learned about the devastating effects caused by invasive species and the benefits of replanting areas with native plants.

The final 2009 event was the application of a native seed mix specifically designed for Trestle Corridor by MCCD staff Jaime Beranek and NMU Student Intern Corey Brochu. A fall planting with over one pound of native wildflower and grass seeds were hand broadcasted over the entire area in early November right before the first real blanket of snow.

All in all, thanks to fantastic tireless volunteers it was a pretty good year at Trestle Corridor. Remember, we can always use an extra hand. And, keep your eyes open for the new growth at Trestle Corridor next year!



Brochure Mailed to Peshekee Landowners

With the help of a generous grant from the WE energies foundation, the Central Lake Superior Land Conservancy (CLSLC) produced and mailed an invasive species brochure to over 160 landowners in the Peshekee watershed in western Marquette and eastern Baraga counties.

The brochure targeted six invasive species that are threatening Michigan’s native landscapes including the emerald ash borer, garlic mustard, phragmites, spotted knapweed, purple loosestrife, and European swamp thistle.

Photos, physical characteristics, and control methods were included to help landowners identify and properly remove the invasives if found on their property.

Landowners in the Peshekee watershed were the targeted mailing audience in an effort to create and maintain a conservation corridor between Craig Lake State Park and the McCormick Tract Federal Wilderness Area.

The brochure mailing was part of a continued endeavor to inform the landowners along this corridor about the importance of maintaining a healthy ecosystem, and educating those landowners about available conservation options including conservation easements and land donations.

For more information, check out their website:

www.clslc.org

Hiawatha National Forest Plant Program: Volunteers make all the difference!

In 2009, volunteers came out in force to ensure the success of the Hiawatha National Forest west unit's native plants program. Volunteers included individuals and organizations such as the Grand Island Association, MSU Master Gardener program, The Nature Conservancy, Moosewood Nature Center, Superior Watershed Partnership, Marquette Senior High School, and retirees from Manistique, Munising, Marquette, and Ishpeming.

Dedicated volunteers put in over 1380 hours assisting the Hiawatha with a myriad of projects, from monitoring sensitive plants to restoring degraded sites either through transplanting native plants or removal of invasive species. The native plant program provided opportunities for volunteers to participate in a variety of events and venues, including the Forest Greenhouse in Marquette, Grand Island National Recreation Area restoration projects, Non-native plant removal, Grand Island plant monitoring, and National Public Lands Day.

Volunteers began early January 2009 with projects at the greenhouse. Between January and the first of March volunteers prepped and seeded more than 18,000 planting cells. Then, between mid March and mid May, volunteers planted an additional 7,000 plants. The value of the native plants raised at the greenhouse this year was well over \$62,500.

During the summer, many of these same volunteers joined with partners from Grand Island Association, Michigan State University Extension's Life of Lake Superior Youth Program, and Alger

County Parks and Recreation "Day Kampers" to transplant 13,500 native wildflower and milkweed seedlings from the greenhouse to the "old farm field" on Grand Island National Recreation Area.

For the twelfth year, volunteers helped manually remove spotted knapweed, St. Johnswort, white sweet clover, thistle, and garlic mustard from Grand Island, AuTrain, Peninsula Point and the Stonington monarch openings.

A Grand Island summer resident has been monitoring a population of pink lady slipper orchids near a foot trail on Trout Bay for five years now. Since the orchid is an indicator of disturbance impacts and population size reflects the degree of impact to the community, the goal of this monitoring is to assess the impact of foot traffic on the population. In addition to sensitive species monitoring, volunteers monitor yearly for the presence of invasive species along the bay and road.

2009 marked the 11th year HNF hosted National Public Lands Day on the Hiawatha National Forest. Volunteers collected native switch grass seed on Sept. 6th, followed by the traditional potluck which was enjoyed by all. On Oct. 10th, eight volunteers collected native warm season grass seed, and on October 11th volunteers collected two 33 gallon sized totes of pure big and little bluestem grass seed. This was the first year the Forest had a mechanical seed harvester, which was used to help collect native grasses from selected areas on the Forest. The seed the harvester collected along with all the seed volunteers collected was the largest mass amount of native seed ever collected on the Forest.

The ongoing involvement of our volunteers and partners is an integral part of the operations and continued success. Volunteer hours add up to roughly \$26,000 worth of labor that simply wouldn't get done otherwise. With the greenhouse activities occurring in the winter months, the program offers unique year-round opportunities for getting involved with protecting the biodiversity of the Hiawatha National Forest from the threat of invasive plants.

www.upicweeds.org

Van Riper State Park had a Michigan Works crew pulling mostly knapweed in Van Riper and Craig Lake State Parks throughout the summer. Over the course of 10 weeks the crew put in about 200 man-hours on this effort.

McCormick Wilderness Stewardship Project

Early in April 2009, the Yellow Dog Watershed Preserve (YDWP) was awarded a grant by the National Forest Foundation, in conjunction with assistance from REI, Inc. to create a management plan for the McCormick Tract to alleviate threats from non-native invasive plant species. The project involves forming a working group of citizen advocates, surveying the McCormick Wilderness, creating maps, and identifying problem species.

In June, YDWP held the first Friends of the McCormick meeting to inform interested people and landowners about the project and how they can help. At a second meeting, U.S. Forest Service Regional Botanist Ian Shackelford presented information about which types of invasives will most likely be found, what ecosystems they inhabit, how to identify them, and how to collect the necessary information. After we had a small group of trained staff and volunteers, we set out in late June to survey the wilderness.

Starting at the north and least used entrance to the wilderness we were pleased to see that there were no major infestations with the exception of strong European swamp thistle populations along the riparian corridors. While this species can take over an area, it is not considered a high threat by the Forest Service. We documented numerous populations with GPS locations, photos, quadrant sizes, and percent infestation, just to name a few. We then moved on to the more frequently visited south entrance at the trailhead of White Deer Lake. The trailhead itself had a wide variety of invasive plants, not surprisingly since this is the most disturbed area. Among the list of species were

hawkweed, spotted knapweed, oxeye daisy, common burdock, white sweet clover, and more. Again, while these are considered invasive, they are not a high threat according to the Forest Service.

As summer progressed the survey crew made amazing journeys into the least visited areas and fortunately did not find any major threats to the natural ecosystems. European swamp thistle continued to be present in the wetland areas even far away from the trails. This attests to the extreme ease with which seed from this plant travels by wind, water, and animal. We continued to document everything we saw and enjoyed some incredible scenery.

The surveying season is now over and a few things happened to help slow the spread of invasives. First, a small crew pulled most of the European swamp thistle along White Deer Lake trail. Second, a boot brush station was installed at the trailhead, along with an educational sign about non-native invasive plants. Currently, we are synthesizing all of the data collected and are creating visual representations of the various populations along with their locations and sizes. We will use this map to make correlations and/or assumptions about the state of invasives in the wilderness area. Those will be presented in a Non-Native Invasive Plant Species Management Plan that can be used by the Forest Service to identify areas of concern and how to deal with them.

YDWP is certainly glad that we are able to assist the Forest Service with identifying invasive plant populations. We will continue to assist, along with Friends of the McCormick, throughout the future. If you are interested in the project or in volunteering, please call the YDWP office at 906-345-9223 or visit www.yellowdogwatershed.org for more information.

CUPCWMA's goal is to slow the spread of non-native invasive plants in the Central UP (Alger, Delta, Marquette, and Schoolcraft counties); with emphasis on coordinating cross-boundary "on-the-ground" control work, data collection, volunteers, and educational workshops.

CUPCWMA Objectives: The formal agreement between members provides a framework for invasive species management across ownership boundaries. Public and private landowners join together to address invasive species that threaten natural communities in the Central Upper Peninsula. CUPCWMA members survey and monitor existing invasive species populations using standardized data formats. The coordinator compiles the data, creates reports and records it in an inventory and map. The coordinated effort is intended to improve habitat for a suite of threatened and endangered species as well as protect native plants and wildlife on partner lands.

Glossy Buckthorn (*Frangula alnus*) Management In Seney National Wildlife Refuge

By Greg Corace-Forester, Tom Macy-Biological Technician, and Kim Trinkle-Intern

Introduction

A species native to Eurasia, glossy buckthorn (*Frangula alnus*, hereafter GLBT) was introduced to North America in the late nineteenth century for horticultural purposes (Voss 1985). GLBT leaves are 0.5 – 2.8 inches long, alternate, simple, ovate and deeply veined. The tops of the leaves are light to dark green, with a slight gloss and a lighter green below; identification of GLBT is easiest in the fall because it retains green foliage longer than native plant species (Heidorn 1990). Flowering occurs from May to June, and the inflorescence consists of perfect five-petal, whitish-yellow flowers. Fruit begins to form in drupes in July and last through September (Barnes 1981). Initially, the berries are yellow-green, but ripen to red, then to black, as the season progresses.

The bark of GLBT ranges from reddish-green in younger plants to a darker grey-green in more mature plants. When cut, it can be differentiated from other shrubs and trees because of its distinctive yellow wood. The sap wood is a rich yellow color and the heartwood a pinkish-orange when first cut, fading with time (WIDNR 2004). The entire shrub may grow as tall as 22 feet with many stems branching from the base. In older shrubs, base stems can be as large as 10 inches in diameter (Heidorn 1990). GLBT's rapid growth and ability to grow densely were characteristics first thought to make it ideal for use as hedgerows and for other landscaping purposes.

GLBT was first documented in Michigan in Delta County in 1934 (Voss 1985). Based on the age of previously cut stems, the arrival of GLBT at Seney National Wildlife Refuge may have occurred in the 1940's or 1950's, although a review of the historical records at the Refuge does not mention this species. A survey conducted by McNeil et al. (1999) indicated that GLBT was present and widespread in Unit 1 of the Refuge and on adjacent State of Michigan Department of Natural Resources (MDNR) lands (Figure 1). Further work has identified scattered areas of Unit 2 (especially A-2 and C-2 dikes and scattered areas at Lower Goose Pen) with this species as well.

Intensive management of GLBT aimed at reducing its extent and abundance at the Refuge began in the summer of 2001. Initial treatments included cutting GLBT and applying a 20% glyphosate mixture to the cut stumps. In the summer of 2002, Refuge staff began spraying GLBT with a glyphosate solution; during that same year, the scorching of seedlings with a propane torch was also utilized. In 2003, the Refuge and the MDNR began a cooperative effort to manage invasive plants, focusing on GLBT. Through this partnership, the State provides a prison crew and guard and the Refuge provides a licensed pesticide applicator, the glyphosate-based herbicide, and the associated equipment. The Refuge began another partnership with Michigan Technological University in 2004 to research the efficacy of different GLBT management treatments (Nagel et al. 2008, Corace et al. 2008). Results indicated that future management should focus on foliar spraying and that 2.5% active ingredient glyphosate (*Rodeo*) works well for treating stems up to 2 inches in diameter.

The purpose of this report is to document invasive plant management activities on the Refuge in 2009. Due to budget constraints, the State was not able to fund the prison crew and the focus of GLBT management shifted back to the Refuge and the efforts of Refuge staff.

GLBT Management Methods

A major focus of management in 2009 was to revisit previously treated areas and spray GLBT resprouts (and seedlings) with a 2.5% solution of *Rodeo*. Detailed instructions on the *Rodeo* label were followed regarding preparation



and application of the herbicide. Spraying devices included a hand pump and power sprayer attached to an all-terrain vehicle and a new Honda pump from the back of a pickup. When spraying occurred in areas with high public use, signs were placed at appropriate increments and left for at least 24 hours to notify the public that herbicide had been applied.

Results

The 2009 GLBT management season began on 18 June 2009 and ended on 24 September 2009, with treatment occurring over 42 days. A total of 72,632 ounces (567 gal) of a 2.5% *Rodeo* solution was sprayed, equating to approximately 30 gallons of *Rodeo* (54% active ingredient) being applied. On average, nearly 1,730 ounces (14 gallons) of 2.5% *Rodeo* were sprayed each working day. The largest and most dense stands of GLBT were encountered along the M-77 corridor north of Refuge Entrance Rd. Well established stands were also encountered in thickets north of the weather station, and on the islands of most pools in Unit 1. All of the islands in Unit 1 pools were treated with the exception of A Pool islands, on which no GLBT was present, B Pool islands which were inaccessible due to low water levels, and E and F Pool islands, which were not visited due to time constraints. Sporadic stands of established GLBT were also encountered in areas along the Wildlife Drive and the Fishing Loop.

Treatment of these areas were similar in past years, except that during the 2009 season the Refuge's MarshMasters were employed for treating GLBT for the first time. This involved securing the 25-gallon tank and battery to the MarshMaster. The hand sprayer was operated from the deck of the MarshMaster, which was driven by a qualified



fire crew technician. This treatment technique was highly effective in treating GLBT along the interior shores of F, I, and the Show Pools, as well as marshy areas surrounding pools that would be otherwise inaccessible. Finally, a survey was conducted to determine the western periphery of GLBT in the Holland Ditch: N46.31228, W86.00413 (NAD27 CONUS).

Discussion

During the 2010 season it is recommended that all of the islands with GLBT in Unit 1 be revisited in order to treat any resprouts or seedlings, with those islands in B, E, and F Pools as highest priority. The majority of these islands can be treated via spraying a 2.5% *Rodeo* solution. B, E, and F Pools may require some cutting. Also work should occur on the ditch from Upper Goose Pen to Lower Goose Pen, especially from the Smith Farm Bridge to Upper Goose Pen. As in previous years, it is also recommended that the 2010 crew follow-up with a spray of 2.5% concentration of glyphosate solution in areas that were previously treated to account for any resprouts, especially along M-77 treated in 2006-08. Treating GLBT in the wet, marshy areas north of the Show Pools and along M-77 via the MarshMaster needs to be the priority in 2010. Finally, some thought should be put into dividing areas of confirmed GLBT into separate compartments that can be treated on rotation.

FYI – more 2009 news

Pictured Rocks Lakeshore

The National Park Service is getting substantial funds from the Great Lakes Restoration Initiative for work combating invasive species. Plans include a mass media outreach and education effort, hiring seasonal workers for control and outreach, and developing a web-based citizen monitoring program and alert system for new invaders.

The Great Lakes National Parks are scheduled to receive \$500,000 for invasive species control work and \$1million for education and outreach throughout the Great Lakes from this initiative. Bruce Leutshcer and three other NPS employees from around the Great Lakes are in the first steps of

devising the strategy to accomplish the overall goals for education/outreach.

They will be working with Harper's Ferry Center and a group of interpreters in early December to develop a media strategy for a mass media outreach and education effort. They plan to hire seasonal interpretive support and biologic technicians to help with the outreach and control efforts. Planning for control work is actually the easy part in this case.

This shows how substantial the funding is for just the NPS portion of the effort. Once other agencies/entities know what they have to work with there really needs to be communication so we do not duplicate education and outreach efforts. That way, everyone involved can enhance

the overall effort without wasting resources on overlapping strategies, target audiences, messages, and development and production of materials for the public.

Whether or not local UP entities get funds from Great Lakes Restoration Initiative, the education/outreach money the NPS is receiving is to be used to benefit the entire region. Therefore, as planning progresses, there will be open communication between the NPS and its partners to help meet the outreach needs of the park and its neighbors.

At some point, Bruce will be looking for input from the CUPCWMA on how the NPS effort can help locally. He will keep us updated as things progress.

Conservation Districts:

Alger Conservation District coordinated projects for a Michigan Works youth crew, providing manpower for invasives control around the county. These six people spent 16 days removing invasives like garlic mustard and spotted knapweed in places such as Adams Trail, Cliffs Basin Road, Hanley Airport, and Alger Fairgrounds. Five other District volunteers worked on knapweed removal at Samuelson and Slapneck Road area east of Chatham. Approximately one acre with heavy knapweed growth was treated by pulling and mowing (before seed set). Plans are for volunteer group to revisit and

continue removals on roadside area and any new growth from seed bank next year or as long as it takes.

Dickinson CD

According to Ann Hruska of the Dickinson Conservation District, all of T41N R 27W (Breen Twp SE) and T41N R28W (Breen SW and Waucedah N Twp) are infested with Buckthorn. The towns of Foster City and Hardwood are the heart of those areas, where it seems to be moving along stream corridors. Large fruiting specimens have been spotted along the Sturgeon River, along with populations in

south central Dickinson County. Infestations around Iron Mountain, Breitung Twp and within a couple mile radius of Fumee Lake Natural Area are not to the extent of the Foster City bunch. Iron County also has a significant infestation. The town of Alpha seems to be the epicenter and it is extremely thick in the woods along US 2 just east of Iron River (near the Bates Twp Hall. Two Japanese knotweed spots aren't yet under control: One in Quinnesec (T39N R30W Sec 4) and one on Cowboy Lake (T39N R31W Sec 34).

Marquette CD (see pages 1&2)

Superior Youth Conservation Crew Works on Invasive Plant Control

During the 2009 field season the Superior Watershed Partnership completed several invasive projects in the central Upper Peninsula. The SWP staff developed a GIS inventory and maps for the Big Island Lake Wilderness and the Rock River Canyon Wilderness areas. The maps show known populations of invasive plant species and areas where invasive plants have recently been removed.



During 2009, the Superior Youth Conservation Crew pulled invasive plant species on the trail system of the Big Island Canoe Wilderness in the Hiawatha National Forest. The SWP also coordinated a professional inventory of two lakes in the Hiawatha National Forest for Eurasian water milfoil. The project confirmed that Steuben Lake does have EWM while Farm Lake, in an adjacent HNF wilderness area, does not. To prevent the potential spread of milfoil the SWP is working with the CUPCWMA and HNF to secure additional funding through the National Forest Foundation in order to treat EWM infestations in Steuben Lake during the 2010 field season.

For additional information on the SWP and other field projects please call: 906-228-6095 or visit:

www.superiorwatersheds.org

CUPCWMA is supported by the Upper Peninsula Invasives Council. UPIC's goals are to provide non-native invasive plant information and facilitate the creation of more Cooperative Weed Management Areas in the Upper Peninsula.

UPIC was formed as a way to raise awareness, facilitate information exchange, educate, advise and provide technical support concerning management, control, inventory, and monitoring of invasive plants. UPIC meetings, newsletters and website serve as forums to discuss invasive plants issues.

www.upicweeds.org

Central Upper Peninsula Cooperative Weed Management Area:

Alger Conservation
District

Borealis Seed Company

Hiawatha National Forest

Marquette County
Conservation District

Moosewood Nature Center

Pictured Rocks National
Lakeshore

Seney National Wildlife
Refuge

Superior Watershed
Partnership

The Nature Conservancy,
in Michigan

Upper Peninsula Resource
Conservation
& Development Council

Van Riper/Craig Lake State
Parks

For more information:

www.upicweeds.org

109 W. BARAGA AVE.
SUITE B
MARQUETTE, MI 49855

A **Cooperative Weed Management Area** refers to “a local organization that integrates all invasive plant management resources across jurisdictional boundaries in order to benefit entire communities” from www.MIPN.org

Baby's Breath (*Gypsophila paniculata*)

Baby's Breath was introduced into the US to be planted in ornamental gardens and for use in cut and dried flower arrangements. Baby's breath is an aggressive, perennial herb growing up to 3 feet tall with a thick, deep, tap root and branched stems. It has narrow, opposite leaves, with a prominent mid-vein, that grow 1 to 4 in long. Plants typically flower the third year; small (1/4 in across) white or pink flowers form on diffusely branched clusters. It has an airy, delicate appearance.

The coarse, sandy soil of the Great Lakes sand dunes provides a good habitat for baby's breath. This can be a problem because its long tap root can stabilize naturally shifting sand dunes to the point of significantly changing the open dune habitat that certain native plants need, while also taking water and nutrients that native plants use. It is currently invading Michigan's east shore of Lake Michigan and there have been some occurrences in the Upper Peninsula.

To prevent baby's breath from invading the Upper Peninsula, avoid planting it in ornamental gardens or purchasing any floral arrangements with it. Also, learn to identify baby's breath and control or report any plants found in the wild, particularly along sandy beaches.

Baby's breath can be effectively controlled by manual removal. A flat-nosed spade is placed close to the base of each baby's breath plant and pushed into the sand at a sharp downward angle so that the tap root is severed as far below ground as possible (at least 10cm). The goal is to sever the tap root below the caudex, the point where the root becomes the stem. If severed below the caudex the plant cannot resprout; if severed above the caudex, the plant has the chance to resprout.

Information from: **Invasive Plants of the Upper Midwest – Elizabeth J. Czarapata & http://dnr.wi.gov/invasives/fact/babys_breath.htm**

