The Northwoods Cooperative Weed Management Area (NCWMA) was formed in 2005 and is a collaborative group of state, county, and federal agencies, tribes, municipalities, community organizations, non-profits and individuals who have come together to combat invasive species in northern Wisconsin (Douglas, Bayfield, Ashland, and Iron Counties). This report summarizes the accomplishments of the NCWMA in 2019.

The NCWMA had six partner meetings, two steering committee meetings, and four special meetings in 2019. Ramona Shackleford, the NCWMA Coordinator, also attended at least one Land Conservation Committee (LCC) meeting in each of Bayfield, Ashland and Douglas County, along with meetings of the Bayfield County AIS Program.

**Education and Prevention**

In March through May 2019, the NCWMA put on four free invasive species workshops for Right-of-Way managers in Hurley, Ashland, and Solon Springs (Figure 1). The workshops focused on educating municipal and county employees about the highest priority invasive plants in the region and what they can do to help eradicate, control, report, and slow the spread of invasive plants. Overall, 91 people attended the events. Workshops included a section on identifying high-priority invasive species, a section on Best Management Practices (BMPs), and a section on manners to control invasive species.

Ramona worked to inform the public about the threats of invasive species throughout the year. Ramona gave eight PowerPoint presentations about invasive species and took the NCWMA booth to nine events throughout the year (Figure 2). She also created and distributed the NCWMA Summer Newsletter at events and to the NCWMA e-mail list. Ramona sent 18 informational e-mails and created 37 Facebook posts. The NCWMA website was visited over 17,500 times over 2019 (up from 13,000 in 2018).
Education and Prevention (Continued)

Portable Boat Wash: The U.S. Forest Service funds the NCWMA to maintain a portable high-pressure boat wash to decontaminate boats as they leave or enter water bodies. The NCWMA and the Bayfield County AIS Program worked together to hire three seasonal workers. In addition to giving Clean Boats Clean Waters (CBCW) surveys at boat landings, the seasonal workers took the boat wash to boat landings 25 times from June through September. During these days, they contacted 463 boaters and washed 118 boats.

The NCWMA Toolshed: The NCWMA continues to provide a toolshed for the public to check out tools for treating invasive species. New items were purchased for the toolshed including three weed wrenches that can be used to uproot buckthorn and other invasive plants.

Control and Management

Most of the NCWMA’s control and management time was spent on controlling garlic mustard and knotweed species. Ramona also dug up a site of cut-leaf teasel near Port Wing (Figure 3). In addition, Ramona teamed up with the Gogebic County Conservation District to treat and present information at a public viewing of giant hogweed in Ironwood, Michigan. In the fall, Ramona worked on a project funded by a mini-grant through the DNR to survey and map common buckthorn on Clough Island, an over 350 acre island in the St. Louis River near Superior.

Garlic Mustard Projects

Ramona organized and attended events to hand-pull garlic mustard in the spring. The largest sites of garlic mustard within the NCWMA are along the Montreal River in Hurley and the Bad River around Mellen. The NCWMA monitors changes in garlic mustard density compared to native plants by doing a plant inventory in plots at both of these large sites. Ramona, with the assistance from Northland College Students, recorded plant occurrence and cover in these plots.

Eleven adults and 45 seventh graders helped hand-pull in Hurley on May 23rd (Figure 4 and 5). In two hours, this group hand-pulled over 40 garbage bags of garlic mustard. Eleven people returned to Hurley on May 30th for a day of hand-pulling. During four days of hand-pulling in Mellen (May 13 to 16), 25 people helped remove plants across 70 acres (Figure 6). Students from the WATERS after-school group from Ashland High School helped hand-pull at an event along Bay City Creek in Ashland on May 28th (Figure 7). Other smaller events were organized in Washburn and Bayfield (June 3rd) and Superior (May 31).
The NCWMA Knotweed Project

Currently, the NCWMA has 239 documented knotweed sites. Eleven sites were added in 2019. The NCWMA received a mini-grant from the Wisconsin DNR to renew and update landowner permission forms to treat knotweed. Out 137 permission forms that were sent out, landowners returned 86 signed forms. Ramona organized data and prioritized which of the 86 sites with landowner permission would be treated. Sites associated with wetlands and associated to forests were given the greatest priority for treatment. In the summer, Ramona visited 70 sites of knotweed and recorded information on their size, proximity to water and forests, and noted effects of herbicide treatments from 2018.

Evaluating Treatment Methods: In 2019, Ramona visited 35 of the 42 knotweed sites that were treated with the herbicide Vanquish in 2018. Of these, only 5 sites had impressive results from the treatments. Most sites had smaller plants, but the plants covered a similar area. In addition, 6 of the 35 sites that were visited had noticeable tree damage that was strongly associated with the herbicide treatment. A landowner made a complaint at one of these sites. Because of these results, the treatment methods for knotweed were re-evaluated. To decrease the negative impacts of herbicides to trees and non-target plants, a special NCWMA meeting was held and the group decided to cut medium to large sites of knotweed, allow them to grow to three feet, and then apply the herbicide treatments. This procedure would also be expected to decrease the amount of herbicide put into the environment. In addition, the NCWMA would try using other herbicides to treat knotweed.

2019 Herbicide Treatments: Prior to herbicide treatments, ten sites of knotweed were cut by Ramona with help from the Iron, Bayfield, and Ashland County Land and Water Conservation Departments (LWCDs). Two other sites were cut by landowners in July. Ramona developed a Request For Proposals (RFP) which she sent to a list of contractors. Six sites of giant, two sites of Bohemian, and eight sites of Japanese knotweed were treated by the contractor with the herbicide Polaris (Imazapyr). Ramona wrote a contract for the herbicide applicator, kept in regular contact with landowners prior to treatments, and managed the payment of the contract.
The NCWMA 2019 Budget Summary

The NCWMA had sufficient funding through 2019. New funding was acquired that will maintain similar spending levels through 2020. In the beginning of 2019, the NCWMA balance was $63,655.55 (Table 1). The U.S. Forest Service’s Great Lakes Restoration Initiative-Cooperative Weed Management Area’s grant (USFS-GLRI-CWMA) had a balance of $46,236.16 (including funds to run the boat wash). This grant ended in December, 2019. The NCWMA also had two Weed Management Area-Private Forest Grants (WMA-PFGs) through the Wisconsin DNR totaling $17,419.39. One of these ended in June. Grant reports and reimbursements were sent for the grants that ended during the year.

The NCWMA received $68,343.32 in additional funding during 2019. In January, the NCWMA applied for a USFS-GLRI-CWMA grant for $40,000, which was fully funded in August. A third WMA-PFG through the Wisconsin DNR was awarded in July for $14,990. The NCWMA received two mini-grants during the year through the DNR’s AIS program to control knotweed species which totaled $8,358.32. In addition, the NCWMA was funded to do buckthorn surveys on Clough Island which totaled $3,811.09. Expenses for the year totaled $69,403.61. The primary expenses were salaries for the NCWMA Coordinator and the seasonal staff. Other expenses included travel, rent, supplies, and website costs. On January 1, 2020, the NCWMA had a balance of $66,386.56.

Table 1: NCWMA Grants, Expenses and Fund Balance

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*$20,000 in Boat Wash funding will be added to the USFS GLRI CWMA total once processed.

Break-down of the 2019 NCWMA Expenses

The NCWMA coordinator’s salary $44,933.88
Salary of Bayfield Co AIS Coordinator (NCWMA grant funded) $2,485.04
Salary for boat washer work $6,241.56
Rent for NCWMA office in Bayfield County LWCD $3,600.00
Mileage and lodging $3,008.53
Website $239.88
Printing and supplies $3,851.73

$69,403.61

Visit our website: www.northwoodscwma.org