

## DNR Baird Creek Phragmites Grant Summary Report

During the 2016 field season, the UW Extension Invasive Species Program made significant advances in the control of Phragmites in the Baird Creek Watershed. Three people worked spraying in the city limits of Green Bay and in the townships of Humboldt and Eaton.

It is a bit difficult to quantify the work done in the townships because the size of the phragmites clones varied from a few stems to several thousand square feet. In these two townships, a total of 59 clones were sprayed. Of these 59, six were sprayed for the first time, so most of the work was done respraying areas that had been treated in 2014 and/or 2015. Thirty three clones were either all dead or could not be found. These clones for the most part were sprayed with Polaris herbicide with MSO adjuvant. Glyphosate was sometimes used to avoid damage to nearby trees. Application was done with backpack sprayers. Not all the phragmites in the townships was sprayed because in some cases permission from landowners could not be obtained. We will attempt to get permission and spray these clones next season.

Within the Green Bay city limits, in the Baird Creek Parkway, several larger clones were sprayed or resprayed to control any phragmites that grew back. One that was resprayed was just east of Danz Avenue and measured about 2.5 acres. On this same clone, an area of about 0.8 acres was sprayed for the first time. This clone has now been sprayed completely. Another area just west of Danz Avenue measured about 0.5 acres and was also resprayed this year. The clone west of Danz had been sprayed the previous two years and spot-sprayed this year. Some sedge plugs were planted into this clone where the phragmites had been effectively killed from the previous season.



Figure 1: Along railroad tracks east of Danz Avenue



Figure 2: Along railroad tracks east of Danz Avenue



Figure 3: Along railroad tracks east of Danz Avenue



Figure 4: Along railroad tracks east of Danz Avenue



**Figure 5: Small clone east of Danz Avenue**



**Figure 6: Small clone east of Danz Avenue**



**Figure 7: Small clone east of Danz Avenue**



**Figure 8: West of Danz Avenue**



**Figure 9: West of Danz Avenue**

Another area within the parkway, about 3,000 feet east of Danz which we refer to as the Blood Ponds, was resprayed and it measured about 0.75 acres in size. To help the site re-vegetate, this area was seeded to golden glow, cup plant, angelica and cow parsnip. We chose these species because they are native, they have large seeds which should help them grow up through the phragmites residue, and they are tall, competitive, and aggressive.



Figure 10: Blood Ponds east of Danz Avenue



Figure 11: Blood Ponds east of Danz Avenue



Figure 12: Blood Ponds east of Danz Avenue



Figure 13: Blood Ponds east of Danz Avenue

Another 0.5 acres in the Blood Ponds were then sprayed for the first time this year. Almost all the phragmites has now been sprayed at this site, with just a small amount remaining around a permanent pond. We hope to control this next year. Several small clones were also sprayed between Danz Avenue and Superior Road, as well as several along Superior Road, which have been sprayed in the past and were spot treated this year. In addition, a long, narrow strip of phragmites was resprayed along the railroad east of Superior Road. This strip was only a few feet wide but measured about 1,700 feet long.

In all, **414** person hours were spent controlling phragmites in the Baird Creek Watershed this season. Fewer clones were sprayed this year. In 2015, the UW Extension interns were able to continue working into the fall. This year our interns were college students and had to return to school.



Figure 14: Across from Northview Road Self Storage



Figure 15: End of Horkman Road



**Figure 16: Intersection of Finger Road and Horkman Road**



**Figure 16: North of 273 Ronsman Road**



**Figure 17: South of 477 Ronsman Road**

I am very happy with the progress we have made over the course of this grant. The sites we sprayed in 2014, the first year of the grant, have re-vegetated well. This can be seen in the photographs we have included with this report. A small number of phragmites plants in most clones have re-sprouted and have had to be sprayed again, but the sites overall are no longer phragmites-dominated and more importantly, not spreading anymore. We did notice in 2015, the year after initial spraying, control of most sites seemed almost complete, which was very encouraging. In 2016, however, we were slightly disappointed by the amount of phragmites that grew back. The results were still far superior to the use of glyphosate and respraying took far less time than the initial spraying. Large areas of the clones did not need to be resprayed and the vegetation could be allowed to recover. I would like to thank the DNR for making these three successful field seasons possible.

## **WI DNR Baird Creek Phragmites Grant Summary Report - 2015**

*Kevin Hendricksen, Brown County Invasive Species Coordinator*

During the 2015 field season, the UW Extension Invasive Species Program made significant advances in the control of Phragmites in the Baird Creek watershed. Three people worked spraying in the city limits of Green Bay and in the townships of Humboldt and Eaton.

It is a bit difficult to quantify the work done in the townships because the size of the phragmites clones varied from a few stems to several thousand square feet. Within the watershed, in these two townships, a total of 72 clones were sprayed and another 38 clones were sprayed just outside the watershed to prevent the phragmites from spreading back into the area of concern in the future. These clones for the most part were sprayed with Polaris herbicide with MSO adjuvant. Glyphosate was sometimes used to avoid damage to nearby trees. Application was done with backpack sprayers. Not all the phragmites in the townships was sprayed because in some cases permission from landowners could not be obtained. We will attempt to get permission and spray these clones next season. We did not apply with the DNR for a permit to spray in wetlands because at the time of spraying the sites were dry.

Within the Green Bay City Limits, in the Baird Creek Parkway, several larger clones were sprayed. One just east of Danz Avenue measured about 2.5 acres. This area was completely sprayed and we will go back next season and respray whatever grows back. Another just west of Danz Avenue measured about 0.5 acres. The clone west of Danz had been sprayed the year before and was spot-sprayed this year. Some sedge plugs were planted into this clone where the phragmites had been effectively killed from the previous season.

Another area within the parkway, about 3,000 feet east of Danz which we refer to as the Blood Ponds, was sprayed for the first time and it measured about 0.75 acres in size. About 0.5 acres remain in this site which will need to be sprayed next season. Several small clones were also sprayed between Danz Avenue and Superior Road, as well as several along superior Road, which have been sprayed in the past and were spot treated this year. In addition, a long, narrow strip of phragmites was resprayed along the railroad east of Superior Road. This strip was only a few feet wide but measured about 1,700 feet long.

In all, 603.25 person hours were spent controlling phragmites in the Baird Creek watershed this season. I am very happy with the progress we have made this year and am grateful to the DNR for making this successful season possible.

## **Baird Creek's Phragmites Control Report 2014**

During the 2014 field season, the Brown County UW Extension Invasive Species program worked toward the control of phragmites in the watershed of Baird Creek. We chose the Baird Creek watershed because there is a significant amount of phragmites in the area but something we can address, and it is near the Baird Creek Parkway, which is an important green area for the city of Green Bay both ecologically and as a recreation resource. Also, there is already a private organization working in the watershed, the Baird Creek Preservation Foundation, that will help keep the area free of phragmites after money from this grant runs out.

The work was done between August 1<sup>st</sup> and October 25<sup>th</sup>, a total of 143.5 person hours. This includes 101.5 hours in the city of Green Bay within the Baird Creek Parkway, 13.5 hours in the township of Eaton and 28.5 hours in the township of Humboldt. In the townships, emphasis was given to phragmites growing along roads. Within the City of Green Bay most of the phragmites clones were along Baird Creek, a railroad line, along roads or in larger wetlands.

In Eaton Township, 13 patches of phragmites were sprayed out of a total of about 49 clones that could have been sprayed within the Baird Creek watershed. In Humboldt Township, 23 clones were sprayed out of a possible 69 within the watershed. In the Baird Creek Parkway, about 13 small clones (less than 1,000 square feet each) were sprayed along the creek and roads in the parkway, two clones were 10,000 square feet each, one very long clone along a railroad line (roughly 2,000 linear feet) was sprayed, and 2 large clones, one 1.5 acres in size and another about half that size, were begun but not completed. There are several retention

ponds in the parkway that we had planned on spraying but the city will contract with a private company to have them sprayed in 2015.

In all cases we used backpack sprayers to do the work and an herbicide mix of 3% Polaris with an equal concentration of methylated seed oil. We had hoped to get more accomplished this year but one member of our team left part way through the summer to take another job. We are plan on having a full crew in 2015 and achieve a great deal more.