

Bridgeview Park

Biomass Restoration Project

2008 - to the present



Submitted by

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Biomass Restoration Area



Project area shown in gray

Removal of invasive species was done by Prairie Restorations, Inc, Sherburne SWCD staff and Sherburne County Sentence to serve crews on 15 project acres. Cut and stump treatment was the removal method. Funding for this work was provided through a grant from the Minnesota DNR, Division of Ecological Resources.

Fall 2009



Cut material ready to be skidded to landing



October of 2009 – Buckthorn education night at Bridgeview. Ten area residents came to learn about the project, the ecological threat that buckthorn poses and keys to successful removal and control.



PRI cutting crew during removal process

Spring 2010



A prescribed burn was conducted, these images show the Re-growth of some natives that were being suppressed by buckthorn.

Summer 2010



The SWCD worked with sentence to serve on mechanical removal (pulling) of common mullein while it was in the flowering stage. The thick leaves of the rosette stage do not burn and allow the fire to carry through. Pulling was the only answer.



Infestation of common mullein in forest opening



Sherburne County Juvenile Sentence to Serve crew

Summer 2010



The SWCD staff performed critical period cutting on buckthorn re-sprouts that didn't burn effectively.

Funding was secured through a MN BWSR Native Buffer Grant for a second prescribed burn and introduction of native, local eco-type species through seed source islands and over seeding in the open area.

More mechanical work was done by the SWCD to clear the non wooded area of tartarian honeysuckle and buckthorn that wasn't going to have a good chance of burning without the leaf fall, it was cut with a brush hog



Little bluestem straw was hauled in for spreading in the area immediately prior to the burn – in order to ensure adequate fuel to carry the flame through. Post burn, a 30 species local eco-type native prairie seed mix was broadcasted over the area.

Spring 2011

A burn was conducted late spring 2011.

In June 2011– six native seed source islands were installed and protected with fence. Species include: Hispid Sunflower, *Helianthus hirsutus*, False Lily-of-the-Valley, *Maianthemum canadense*, Lindley's Aster, *Aster ciliolatus*, False Solomon's Seal, *Smilacina racemosa*, Large-leaf Aster, *Aster macrophyllus*, Clayton's Sweet Cicely, *Osmorhiza claytonia*.



In late July – early August of 2011 critical period cutting was done on buckthorn regen.

In fall of 2011 a dormant wick application of herbicide was applied to the foliage of the buckthorn resprouts that had been critical period cut in July-August. This photo was taken in January 2012.



Winter 2012

In January and February untreated buckthorn water sprouts that were reaching heights of 6+' (some even starting to bear fruit!) were cut to further stress and deplete the root system



This also serves to keep the plants low so they can be critical period cut during July-August 2012 – then hopefully chemically treated after the natives enter dormancy in the fall. This series of cutting and dormant chemical treatment is planned to continue in through the next 1 to 2 years – meanwhile allowing oak leaf litter to accumulate and buckthorn seed from residual seedbank to germinate, in hopes that a prescribed burn can be done in 2014 or 2015.

Critical period cutting was resumed in mid-July 2012.

All buckthorn was cut over the entire 15 acres. No chemical was used. A prescribed burn is planned for spring of 2013, leaf litter accumulation is looking good. The buckthorn resprouts are small ($< \frac{1}{4}$ ") and will be effectively killed assuming an effective burn can be conducted in the spring.

Spring 2013



A prescribed burn was conducted as planned on May 3, 2013. The burn achieved good control of the existing buckthorn stems.



A dormant overspray was conducted mid-October 2013. The black spotting on the leaves two weeks after the application indicates effective chemical uptake by the plant.

Summer 2014



During the growing season of 2014, chemical control for both common tansy and Canada thistle were implemented. The thistle was primarily in two isolated masses. The tansy, however was widely distributed throughout the project area. Both species are on the MN Noxious Weed List and are required to be controlled.

The Sherburne SWCD has a vested interest in seeing this project succeed and hopes to continue to work with the County Parks Staff to control buckthorn within this original removal area; and the rest of Bridgeview Park as well.



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