

## **Phragmites control at Pine Beach, Marinette, WI. (July 7, 2008)**

With the dropping water levels in Green Bay over the last few years, the invasive plant phragmites began taking over the exposed shoreline at a rapid rate, extending out into Green Bay another 6 to 10 meters each year. Additionally, as each year passed by, the vegetation changed from a mix of bulrush, cat tails, and sedges to a higher percentage of phragmites. Within four years, the vegetation consisted of approximately 95% phragmites, and the stand became increasing thick and tall (up to 12 feet). It seems to do best in standing water up to 18 inches.

As the Wisconsin DNR permitted, three years ago I began cutting the site of phragmites below the ordinary high water line in a band 30 feet wide to maintain a visual view of open water.

My initial cutting was done in June, and required the use of a hand-held gas weed trimmer with a cutter string diameter of 0.95 mm. This trimmer would work on plants up to about five feet tall, but would not cut the taller and thicker phragmites. I used a sharp machete to cut the larger phragmites at the base. I selectively cut just the phragmites (also took out some purple loosestrife, thistles, etc.) leaving native plants such as boneset, swamp milkweed, yarrow, arrow weed, etc. behind. This initial cutting took about 16 hours of work since the stand had become so thick, and required a lot of machete cutting. The stems were stacked on dry land so they would not re-sprout.

By August, the phragmites had again become about 6 feet tall, so I used the same method of selective cutting. The second cutting took about 6 hours of work since the weed eater could do most of the work the second time through, and the stand seemed to be a little thinner.

In the second year of cutting, the DNR allowed a 100 foot wide band to be cut, so my June cutting took another 20 hours of work to widen out the original 30 foot cut. However, I did notice that the previously cut 30 foot wide site had a higher percentage of native plants present and a greater biodiversity, and was much easier and quicker to cut (half the time). I again did an August cut (selectively) of the 100 foot wide site, and this was accomplished entirely with the weed eater. It then appeared that only about 50% of the phragmites had survived to this point, and biodiversity continued to increase.

This third year's selective cutting in June, of a 100 foot wide band by 120 foot deep site took only about 5 hours to accomplish, and was done entirely with a weed eater. The stand now consists of only about 25% phragmites, 25% bulrush, 25% sedges, 10% cat tails, and 15% of many other species including several native wildflowers. Many of the native species have naturally reseeded themselves with much of the phragmites out of the way. The remaining phragmites also seems to be weaker in stature, and even easier to cut. Wildlife has also begun to return to this selectively cut area, including white egrets, redwing blackbird nests, and other waterfowl.

Finally, as some phragmites continues to push out into the bay, I am selectively pulling these pioneer stems out from the water as they appear. Again, these are placed onto dry land so they do not re-sprout. I am leaving the bulrushes in place. This work has taken another two hours this June to do a 100 foot wide band.

In summation, the sooner the phragmites is identified and cut, the easier it will be to maintain an open vista and biodiversity. The initial cutting of invasive plants does take many hours of hard work, but becomes increasingly easier and quicker with each cut. It is important to identify all or most of the plant species present, so that native plants are left to flourish and even compete with the returning phragmites, attracting a greater variety of wildlife as well. I intend to continue these annual June and August cuttings, as well as the pulling of new stems out in the open water, and should not need to spend more than a total of about 10 hours annually to maintain the status quo.

(as related by an area land owner to Greg Sevener, WDNR Watershed Specialist, 715-582-5013, [gregory.sevener@wisconsin.gov](mailto:gregory.sevener@wisconsin.gov))