WHITE LAKE Property Owners Association Environment Volunteers

SPECIAL REPORT

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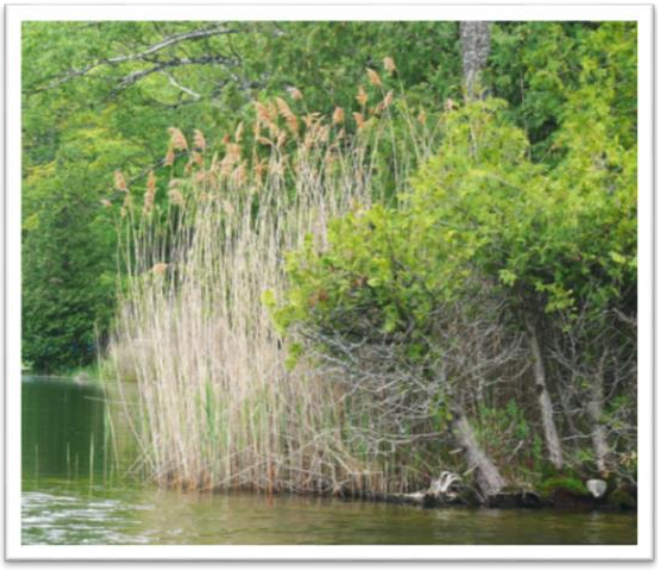
PHRAGMITES CELL CONTROL

Large cells of invasive phragmites attract a lot of attention. They also require a huge coordinated very expensive effort to contain them. There are relatively few examples on the internet illustrating control methods of small cells occuring on private property. Both Lanark and Renfrew Counties are on the front line of the phragmites invasion. At present the majority of cells are small, scattered and still accessible. Eventually this situation will change. Cells will expand, merge and spread beyond our ability to manage them. It is important to find ways for individual property owners to push back on this plant when it is found on their property.

A WHITE LAKE EXAMPLE

This is the approach I used last summer to contain a small White Lake phragmites cell. This cell is about 6 square metres, which is small enough that a single person can manage it during the growing season.



Phragmites cell, May 28 2018.

The dead stems are from the previous year. They will be replaced with new growth. The seed heads produced in the previous year may still harbour viable seed the following year.

June:

Seeds may be present in the seed heads from the previous year. This is a topic that is not well understood at present. Collect old seed heads by bending down the dead stalk, then cutting off the seed heads while they are retained inside a paper garbage bag. The bag containing the seed heads can the be burned off site.

July:

The breeding cycle for the majority of fish, birds and amphibians has passed. Now one can cut out the heart of the cell working from the landward side. If possible, spade the stems away from their rhizomes. I use my shovel like a knife. Do not try to dig up or overturn the soil. At this time, any scattered plants that are spreading beyond the cell perimeter can also be spaded.

July 2021: The center of the cell before cutting
below: growth extending beond cell

The cut material is raked into a pile at a high point at the site. It will be exposed to the heat of the summer sun, dry out and eventually rot. It is best to keep cut material on site if possible to reduce any chance for further spreading of the plant.

August:

By now the plants growing at the shore and in the water have spent several months producing new growth. The substrate under the water can be slippery with algea and jagged with fractured rock and cobbles. Our aim is to make the least impact on the shoreline.

To avoid injury and reduce disturbance I found I could work in a kneeling position using a strip of plywood laid over the bottom. I also wore long pants, knee pads and old running shoes. Rhizomes were running around and under the submerged rock. I used pruning shears to cut stems right on the bottom and cut out any accessible rhizomes. Under these conditons it is not possible to pull up rhizomes. The plant mass is buoyant and will easily drift out of range so a rake was used to retrieve any floating material and add it to the pile on shore. If the weather cooperates none of this is an unpleasant task!

August 2021: before shoreline cutting begins

August 2021 after harvesting . All cuttings concentrated in one exposed pile

September:

By now you will see secondary late season growth. This is a good time do a repeat cut.

September 2021 new phragmites growth

This cell will be a recurring project lasting an indeterminant time. But subsequent removal work should be less demanding. Our aim is to encourage the re-establishment of a native plant cover on the shore and in the water. Only time will tell how successful this strategy is.

I found this example of Bottle Gentian growing adjacent to this phragmites cell. No doubt plants like these will be easily displaced if invasive cells are left unmanaged.

August 2021: Bottle Gentian growing at the edge of a phragmites cell