

# October 2021 Phragmites Working Group Lake Bernard Season End Report

## **1) Organizing and Participating:**

The Phragmites Working Group Lake Bernard completed year three of a four-year plan to remove invasive Phragmites Australis from the shore and water of Lake Bernard. Cutting to drown, and spading methods as outlined in the 2019 control plan prepared by Dr. Janice Gilbert from the Invasive Phragmites Control Center (IPCC) were used. 2021 was the busiest and most successful season so far as the following was accomplished: 28 cutting days, 103 volunteers participating, 1058.5 hours of volunteer time, 33 sites managed, 85 truck loads and 2 trailer loads of cut phragmites was removed to the landfill. The group has participated in removal events on 38 individual sites over four seasons with 4 returned to owners to manage and 1 was not managed this season. Three satellite groups outside the immediate area have consulted with us this season to assist with their removal efforts and we would like to continue to assist with development of removal groups across Almaguin.

Our group removed invasive Phragmites Australis on 8 sites in 2018, 13 in 2019, 27 in 2020 and 33 in 2021. We are seeing reduction in the size of stands, size of stalks, less density, and less regrowth with the best results in deep water, allowing us to occasionally work on up to three small sites in one morning. More than 5 years of management will be needed for the large stands: the dam, the two west end stands and several others, with the anticipated time needed for management decreasing each year.

A new updated best management practices (BMP) document outlines all methods currently used effectively in Ontario: [https://www.ontarioinvasiveplants.ca/wp-content/uploads/2021/05/OIPC\\_BMP\\_Phragmites\\_April302021\\_D10\\_WEB.pdf](https://www.ontarioinvasiveplants.ca/wp-content/uploads/2021/05/OIPC_BMP_Phragmites_April302021_D10_WEB.pdf) . Since the BMP was published a new herbicide has been approved for use in wetlands in Ontario: <https://www.better-vegetation-management.basf.ca/en/products/habitat-aqua.html>.

## **COVID 19 and Cutting Events**

COVID emergency measures restrictions created planning challenges:

1. Group sizes to ensure physical distancing – were restricted to 10 and under at the beginning of the season for the on-land sites. Attention to restricting numbers for small sites continued through the season.
2. Immunization for COVID was being ramped up across the province but was not available for youth who were often volunteers at our events.
3. Seasonal cottage residents from the United States remained unable to cross the border. This group of volunteers were not able to assist with the cutting events in person again this season.
4. MNR Rangers – we had asked to be considered for this group to come to assist with cuts – the program was not being offered.
5. Hit Squad Students – a program of the Ontario Invasive Awareness program was not an option for us again this season, as a smaller trial program was run.
6. Garden centres were open later in the spring. We did distribute 80 copies: “Grow This Instead- Northern version” – [https://www.ontarioinvasiveplants.ca/wp-content/uploads/2016/07/NorthernGMI\\_2014\\_FINAL.compressed.pdf](https://www.ontarioinvasiveplants.ca/wp-content/uploads/2016/07/NorthernGMI_2014_FINAL.compressed.pdf) a pamphlet on aimed at preventing cultivation of invasive plants in gardens and on shorelines.

Funding through the Habitat Stewardship Program for Species at Risk was approved as of July 8th. The Kawartha Credit Union contributed \$1,000.00 and other donations were received throughout the

summer. Cutting event costs came from fundraising until the Species at Risk application approval date of July 8th. Booking and committing for payment of the 2 Truxor event days had to occur in the spring prior to July 8th and was based on the fundraising previously done.

- Regular Tuesday and Friday morning cutting days were scheduled, allowing time to sanitize equipment, service saws and book heavy/light days. 7 days were left between saw operator dates and those who could do heavier cuts. (This allowed alternating teams, and less chance of spread of virus)
- Volunteers were asked to email that they planned to attend. Cuts started at 7:30 am with set up of the boom, signs, tarps. and tools. Saws started if needed and volunteers arrived at 8:00 in staggered time starts. We aimed to finish at noon, and volunteers left at staggered times. Pizza lunches were provided for the two large truxor days. Volunteers brought their own water. Small, packaged power bars, occasional cookies and cans of carbonated flavored water were provided for all cutting events.

We are thankful for the support in provision of administrative time and hands on assistance from the Near North Enviro- Education Centre (NNEEC), the Lake Bernard Property Owners Association (LBPOA), our municipal leaders, respective works/roads departments from the Village of Sundridge, Strong and Joly Townships, our 2 arborists and the STIHL business Black Motor Sales who maintained our saws. The volunteers are the driving force of this program and continue to plan, evaluate, and motivate us all to get the Phrag gone!

The following is a summary of the activities undertaken from October 2020 until October 2021.

#### **2021 Season as of October 2021:**

Lead agency was the Near North Enviro-Education Centre – administration of funding and mentorship

103 Volunteers participated in cutting events this season (87 in 2020, 77 in 2019)

111 Lakeshore property Owners on an email list of 180 receive information regularly on events

8 Municipal Leaders are receiving information and giving support

6 Lake Bernard Property Owners Association Directors have supported this season

7 Local Businesses have been supported/provided business services (T-shirts, purchased services, food, equipment, signage etc.)

4 School Personnel receive information by email/4 student volunteer forms were signed

26 Youth volunteered

13 Properties cleared that are municipal, business, church, or charity

There were 26 Cutting events and 7 smaller satellite sites were cut (On some days more than one site was cleared), 1,058.5 Volunteer hours,

55.5 hours paid saw operator hours, 10 hrs saw operation IPPC, 55 hrs donated (34hrs forestry business, 18 hrs private owners, and 3 hrs Phrag Fighters) Total saw operator hours: 115.5 hours

85 truck loads and 2 trailer loads of cut phragmites composed from 706 tied bundles, and 177 leaf bags and some loose piles were taken to the landfill by works or roads department crew

7 sites required more than one cut, (examples: 5 cuts at the Dam, 2 at Town Dock, 5 at the West End stands)

#### **Purchased services:**

- Since the original saw operator cutting team from the last two seasons was not available, two new local arborists were recruited. 18 cutting events required 2 or more saw operators. Each week one day was scheduled for heavier cuts. Volunteers skilled in the use of their own saws occasionally assisted. 37 hours provided by skilled saw operators were donated this season.

- Cutting in water required that the saws be assessed, greased, and maintained after each cut, as recommended by Dr. Gilbert and the supplier.
- The Invasive Phragmites Control Centre (IPCC) cutting team of 4 was hired for two days July 22 and 23rd along with one Truxor for management of the two large west end stands.

**Evaluation:** We will continue to follow the recommendation from Dr Janice Gilbert Invasive Phragmites Control Centre to use saw operators when needed for cutting in dense stands in water and on wet shoreline areas. Dependent on direction from Dr. Janice Gilbert and approval of funding for next season we will contract the IPCC for two truxors and a barge for two days.

**Meetings:** Meetings of the executive were held as per the terms of reference for the working group: "6 - 9 annually or at the call of the chair." There are 10 currently on the executive of the Phragmites Working Group Lake Bernard.

Jocelyn Palm – Founder and Director of the Near North Enviro-Education Centre (NNEEC)

Lois Brisbois – Founding member Phragmites Working Group/Lake Property Owner

Dan Burton – Naturalist, Member Muskoka Conservancy

Marilee Koenderink – Chair, Lake Property Owner

Dave McGirr – Lake Property Owner/Supporter

Bob Attwell –Director NNEEC, Lake Property Owner

Sherri Berdusco – President Lake Bernard Property Owners Association

Robert Renaud – Lake Bernard Property Owners Association /Lake Shore Property Owner

Marianne Stickland – Counsellor Strong Township, Supporter

Craig Anderson –NNEEC

Receiving Minutes:

Lyle Hall – Mayor Village of Sundridge

Jennifer Boyce – Lake Property Owner, Supporter

Kathy Pike – Founding member of the Phragmites Working Group Lake Bernard /Lake Property Owner

Jeremy St. Onge- Canadore College School of Environmental Studies, Technician and Technology program

Zoom meetings:

**1. April 21, 2021**, 7:00 pm – 8:30, 8 participants

**2. May 20, 2021**, 7:00 pm – 7:30, 4 participants

**3. June 24, 2021**, 7:00 pm- 8:00, 5 participants

**4. July 15, 2021**, 7:00 pm – 8:00, 5 participants

**5. Aug 19, 2021**, 7:00 pm -8:00, 5 participants

**6. Aug 28, 2021**, Volunteer Appreciation Event (pre school start up) 26 attended

**7. September 23, 2021**, 7:00 – 8:00, 6 participants

**8. October 21, 2021**, 7:00 – 8:00, 9 participants

**2. We continue to follow the recommendations for management of the phragmites on Lake Bernard from the report received October 2019 from the Invasive Phragmites Control Centre**

To download the full report, Recommendations for Invasive Phragmites Management on Lake Bernard, by The Invasive Phragmites Control Centre, click below.

[IPCC Report](#)

The recommendations were in terms of three "areas":

1. The Dam,

2. The West End and

3. The smaller stands scattered along the shoreline in and around the lake.

Consultation with Dr. Janice Gilbert Invasive Phragmites Control Centre (IPCC) occurs in the fall and in May via pictures and emails.

**What is needed?** Mechanical methods cutting with saws and/or cane cutters are suggested for all the small stands in water. Repeated cane cutting and spading for stands in water too shallow to immediately drown, and on shorelines is needed (more than once per season if possible). A new management approach for the west end stand(s) this season is to use a Truxor to cut and dig into the soft bottom and murky water to assist with removal and piling of cut Phrag, along with cutting with saws. The Phragmites Adaptive Management Framework (PAMF) receives our data annually and recommends cutting repeatedly to drown on the edges of the stands and to reassess each season. Using herbicide is outlined as a choice for dry areas. A new herbicide: "Aqua Habitat" has been approved for wetlands in Ontario: <https://www.better-vegetation-management.basf.ca/en/products/habitat-aqua.html>

**How long will this take, how many stands are there, and can they be cut?**

It will take many years to effectively remove all the phragmites on large stands with ongoing monitoring for regrowth and immediate management action as needed. The number of small stands on the lakeshore is unknown. Many property owners report they are removing it on their property; however, some have not yet begun. Others seem to have stopped. Municipalities can declare Invasive Phragmites Australis a noxious weed, leading to more owners removing it or asking for assistance.

Management strategies are stand specific and success depends on the shore bottom composition, size of the stand, age (how high and how long established), depth of water (If the phragmites is growing in 0.6 metres of water, is cut at the shore bottom and kept underwater for 6 weeks, a high proportion will drown. Murky water blocks the sunlight best from reaching the roots.) Factors considered: location of the phragmites (dry land, shore, or deep water), the nature of the shoreline (sand or soft soil for spading versus rocky substrate which makes it difficult to spade rhizomes below the ground) and weather – drought, flooding, or changing lake water levels, and climate change (longer ice off periods, warm weather and longer phragmites growing seasons). But it is a plant – we can tarp it, spade it, cut it, drown it, some apply herbicide, and we can make it gone.

We all need to convince property owners to:

- allow assistance with removal, and
- maintain removal each season and
- begin removing using best practices if they have not done so.

**3) 2022 Volunteer Cutting events (target 20) on stands on the Lake.** Our minimum target for cutting events, is 20 per season. For planning purposes, an event is defined as a minimum of 4 hours in length and a group of 8-10 volunteers using recommended equipment and removal strategies, with transportation of the biomass provided by either the Village or the Township depending on the location. (4 hours x 8 volunteers = 32 volunteer hours approximately per "cut" x 20 cuts = 640 volunteer hours as an annual target minimum).

In 2021 there were 25 cuts along the lake, 7 more smaller cuts in wetlands and ditches along roadways in Strong and Joly Township and 1 at Old Man's Lake in Magnetawan for a total of 33 and 1058.5 volunteer hours.

**Evaluation Data Cutting Events Summer 2021: 33 cutting events**

**1. Elizabeth Street**

7:30 am – 12:00 noon

16 volunteers, resulting in **53 volunteer hours**

Rained last 2 years on this site, 3rd cut went well. Not as high not as thick. With thin stalks, able to clear very effectively on the beach area right back to the bush. Spaded on far shore. Alder, sweet gale, Joe Pie weed growing. Witches Broom type Phrag (see picture) on stand as it tried to regrow from previous cuts– able to pull some of it up by hand. Got back into brush on sandy shore – had not been cut before.

**Equipment used:** Cane cutters, pool noodle boom, rake, toboggans, tractor with trailer

**Biomass removed:** 1 trailer load

**Next Season:** Spading and cane cutting. Need to spade out snorkels on sandy shore now that old dead stalks are down, and new growth slowed. Pictures of cut below.

Site (Yellow indicates year first removed)	Year	Volunteers	Volunteer Hours (cane cutters and spades)	Saw operator hours	Sheaves Removed	Leaf bags	Truck Loads to landfill	Comments
114 Elizabeth St	2019	26 (8 youth)	71.5 hrs	4 hrs saw	40	8	4 trailer loads	Did not get it all
	2020	10 (1 youth)	35.5 hrs	2 hrs saw	Piled loose in trailer	-	1 trailer load	Did not get it all
	2021	16 (1 youth)	53 hrs	No saw	Piled loose in trailer	5	1 trailer load	Got it all/less in water





**2. Union Street**

10:00 am – 12:00 noon

6 volunteers, resulting in **9.5 volunteer hours**

Fence up now by property owner to property line. Ditching has been done as of last season. Permission to cut to property line and owner will cut on her side. Ditch full of Phrag – almost all removed.

**Equipment used:** Cane cutters, spades, rakes, toboggans

**Biomass removed:** 4 leaf litter bags, 9 tied sheaves, 1 truck load to land fill.

**Next Season:** Spading and cane cutting. Two cutting events would reduce significantly. Pictures below

**See damage to roadside ditch caused by small Phragmites in picture below**

Union street	2019	5	14.5 hrs	No saw	25	10	2 truck loads	
	2020	Not done						Fence installed ditch work
	2021	6	9.5 hrs	No saw	9	4	1 truck load	Did not get all of it



**3. Children's Garden/The Trinity**

(Across from Sundridge Public School- 118 Main Street Sundridge)

2 events 8:00 am – 10:30 am first cut, and 8:00 – 9:30 second cut

10 Volunteers (3 were youth), and 3 volunteers, **Total 24.5 volunteer hours**

**Equipment used:** Rakes, cane cutters, spades, toboggans, and tarps

**Biomass removed:** 8 leaf litter bags, 12 tied small sheaves

Note: This is the fourth removal for this site. Less growth on shore and much less in water. Very hard to get it out of the rocks on edge of shore. Remove 2 x next season.

**Next Season:** Cane cutters and spades, tarps, leaf litter bags, rakes, possibly toboggans.

<b>Children's Garden</b>	<b>2018</b>	10	20 hrs	2 hrs saws	10	6	1 truck load	Saw needed
	2019	26 (5 youth)	26 hrs	No saw	10	6	1 truck load	
	2020	10	25 hrs	No saw	12	2	1 truck load	
	2021	9 (2 youth) 3 (regrowth)	21 hrs 4.5 hrs	No saw	10 -	6	1 truck load 1/2 truck load	Much less/Stoney area regrowth



**4. Sundridge Pharmacy Shoreline**

107 Main Street Sundridge

8:00am – 10:00 am

6 volunteers (2 of them youth under 15) resulted in **9.0 volunteer hours**

**Equipment used:** Spades, cane cutters, rakes, leaf litter bags and tarps

**Biomass removed:** 2 Leaf litter bags, 10 small sheaves

**Next Season:** Spades mostly for next season. Some growth still on side of property in healthy native plants. Remove x 2 if possible. Much less than first season.

Pharmacy shore	2018	9 (1 youth)	11 hrs		7	4	1 truck load	
	2019	16 (6 youth)	16 hrs		7	4	1 truck load	
	2020	10 spading	20.5 hrs		10	4	1 truck load	
	2021	6 (2 youth)	9 hrs		10	2	1 truck load	Much less



**5. Sundridge Town Dock Shoreline**

8:00 am – 12:00 noon and 8:00 am – 10:30 am. Two cuts:

1st cut: 4 Volunteers worked on the Dock areas all sides contributing 15.5 volunteer hours

2nd cut: 7 Volunteers returned to remove the regrowth adding 15.0 more volunteer hours. Phrag concentrated along the edges. Still in the rock areas. Some grew back along the boat launch side and opposite past the bench area. Few grew back in the pickerel weed area close to the beach.

**Total 30.5 hours**

**Equipment used:** Pool noodle booms, rakes, cane cutters, toboggans.

**Biomass removed:** Total from both cuts: 12 sheaves, 10 leaf litter bags, 2 Truck loads.

**Next Season:** Cane cutters and spades, tarps, leaf litter bags, rakes, toboggans. Possibly two cuts to get any strands that re-grow among the rocks. Pictures: Before shots various angles afters and volunteers.

Town Dock	2019	19	57 hrs	1 hr saw	50	3	2 truck loads	
	2020	14	35 hrs		Loose/loaded into truck		2 truck load	
	2021	4	15.5 hrs		12	1	1 truck load	Much less/but regrowth
		7	15.0		-	9	½ truck load	





**6. Lions Building Shore/Caswell's**

10:30 am – 12:30 noon

4 volunteers continued to the Lions Building shore after working at the dock **6.0 volunteer hours**

Work had been done to cover over the drain – Phrag had re-established on top since the spring review. Less in water and on drain. Less muck/solid shore bottom. Much less than the first season but many new thin stalks around where the drain has been covered over. None along side – has been cleared.

**Equipment used:** Cane cutters, toboggans, rake, waders, spades, leaf letter bags as some Phrag stalks were shorter and had some flowers forming, and spading brought out rhizomes

**Biomass:** 6 leaf litter bags full added to pile at the town dock.

**Next Season:** Spading over the drain area and on the sand areas.

Lions Building Shore/Caswells	2018	5	16 hrs	No saw	10 sheaves	5	1 truck load	
	2019	15	45hrs		12 sheaves	10bags	2 truck loads	
	2020	7	32hrs		10 sheaves	7 bags	1 truck load	
	2021	7	6 hrs		-	6 bags	½ truck load	Much less



**7. United Church Manse**

10:00 am - 12:30 noon -done at the same time as the Presbyterian shore

9 volunteers resulting in **19 volunteer hours**

Again, a decrease on shore there was much less. Much more pickerel weed and cattails. Adjacent property Siesta Cabins no phragmites there. Still muck/phragmites beside Siesta Cabins.

**Equipment used:** Pool noodle boom to mark area and prevent spread. Cane cutters, toboggans, rakes,

**Biomass removed:** 16 sheaves, 1 truck load between the two sites

Some still at very back of marsh area- need to concentrate on that area next season.

**Next Season:** Possibly cane cutters only - depending on shore regrowth between properties.

**8. Presbyterian Church Shore**

7:30 am – 10:00

9 volunteers resulting in **10 volunteer hours** (more time spent at United Church manse stand)

Less around the Presbyterian shore. Still in strip over drain between lots.

**Equipment used:** Cane cutters, pool noodle boom, toboggans, leaf bags, rakes, tarps, twine

**Biomass removed:** 7 sheaves.

**Next Season:** Start in the drain area and Marshy area Unite Church Manse.

United Church Manse	2019	11	29 hrs	1 hr saw	35 sheaves	1bags	1 truck load	
	2020	6	22 hrs	No saw	16 sheaves	-	1 truck load	
	2021	10	19 hrs	No saw	16 sheaves	-	1/2 truck load	Less but lots in mucky area at back
Presbyterian Church Shore	2019	12	29 hrs	No saw	35	2	1 truck load	
	2020	20	24.5 hrs	-	12		1 truck load	
	2021	10	10 hrs	-	7		½ truck load	Much less



**9. Sewage Pumping Station and 10. HANDS shore combined**

8:00 am – 11:00 am

11 Volunteers, **30.00 hours**

Both adjoining shores have much less phragmites and much more native shore plants. However, regrowth and spading of the entire area were needed several times this season. Cat tails, alder, Joe pie weed, sedges and grasses are scattered along the fringe nearest the black willow. A phantom Phrag fighter had removed many Phrag strands and piled them on the shore. Roots (rhizomes) come up with spading making bags very heavy now.

**Equipment used:** Cane cutters, spades, leaf litter bags, twine, tarps, toboggans, pool noodle boom

**Biomass removed:** 9 leaf litter bags, 8 tied sheaves = 1 truck load

**Next Season:** Spading on shore. Remove any strands in water. Assess for new growth and remove.

<b>Sewage Pumping Station</b>	<b>2018</b>	9 volunteers	25 hrs	No saw	9 sheaves	20	2 truck loads	
	2019	26	26 hrs	-	10 sheaves	12	1 truck load	
	2020	8	15 hrs	-	8 sheaves	10	½ truck load	
	2021	11	15 hrs	-	4 sheaves	7	½ truck load	Spading now
<b>HANDS Children's mental health shore</b>	<b>2018</b>	9	25 hrs	No saw	8 sheaves	24	2 truck loads	
	2019	10 (2 youth)	17 hrs	-	17 sheaves	10	1 truck load	
	2020	8	12.5 hrs	-	8 sheaves	8	½ truck load	
	2021	11	15 hrs	-	8 sheaves	7	½ truck load	Spading now



**11. Private Road Lake Bernard Drive**

10:30 am to 12:00

7 Volunteers and **10.5 volunteer hours**

Close to railway tracks on side of a private road along cottage properties/and homes. Lots of alder, some cat tails, wild rose, sedges. Also, on opposite side of wire fence on CN property. Owners loaded own vehicle and took the load to the landfill.

**Equipment used:** Spades, cane cutters, rake, leaf bags, tarps

**Biomass removed:** 5 leaf litter bags and 5 tied sheaves.

**Next season:** Return x 2 if possible.

Private Road Lake Bernard Drive	2021	7	10.5 hrs	No saw	5	5bags	1 truck load	On train track easement
---------------------------------------	------	---	----------	--------	---	-------	-----------------	----------------------------



**12. Albert St South Aggregate Lot Business**

7:30 am – 12:00 noon

10 Volunteers **21.0 hours** **6.0 hours** saw operators

Phragm on edges of the lot going into brush area. Natural plants and Japanese Knotweed on site. Removed phragmites leaving as much of natural plants as possible. Hope for no seed production.

**Equipment Used:** Saws x 2, cane cutters, leaf litter bags, toboggans, twine, and tarps

**Biomass Removed:** 7 leaf litter bags, 31 sheaves 2 truck loads

**Next season:** Consider herbicide for wetland areas: if not managed with cutting, get the Phragm growing across ditches into brush on back of property. Manage Japanese Knotweed early in season.

Albert St South Aggregate Lot Business	2021	10 volunteers	21 volunteer hrs	6 hrs saw	31 tied sheaves	7bags	2 truck loads	Japanese Knotweed as well on site
--	------	------------------	------------------	--------------	--------------------	-------	---------------	---



**13. West End Stand (1.3-acre shore stand)**

Day 1: 7:00am – 3:30pm 11 volunteers total 48.5 hours, plus Saw operators 16.0 hours

Day 2: Fringe removal 7:30 – 12:30, saw operators 10.0 hours

Day 3 and 4: Fringe removal 2 volunteers and 1 saw operator 14 hours

**Total 64.5 volunteer hours and 34 saw operator hours**

This stand was enrolled in the Phragmites Adaptive Management Framework (PAMF) data collection processes as of 2019, and we have received two years of management direction. Pictures of the stand after ice off were sent in May to Dr Janice Gilbert from the IPPC for confirmation of management for the season. Two truxor days piled cut Phrag in the middle and flattened a path in the middle. Three dates followed to take down the phragmites fringe that had been left around the outside to catch any floaters until the Phrag dried in the pile. The stalks were less high, and not as dense with no seed pods forming until the very last cuts for fringe removal. The Phragmites Adaptive Management Framework (PAMF) report after year 2 management noted that there was a **28.57 % decrease in stem density**.

**Equipment used:** Pool noodle boom, cane cutters, saws, toboggans, rakes, rubber fish nets, waders

**Biomass:** Left on site in the middle in piles to dry. Very difficult to walk on the stand as it is uneven, and boots sink in places up to shins. Tough terrain for operation of the saws. Cut stalks are sharp. Less muck on the corner adjacent to the lakeside stand. The channel between the shore portion and the lakeside portion is widening.

**Next season:** Review of the stand in the spring after ice off. Plan two days with truxors and a barge to cut and bring phragmites to shore to go to the landfill increasing the drowned area of the stand. Possibly a second cut with saws after the Truxor days.

West End Stand (1.3 acre shore)	2019	27volunteers	118 hrs	27 hrs	-	-	Piled on site	
		23	74 hrs	34 hrs				
		11	48 hrs	25.5 hrs				
			Total <b>240</b>	Total <b>86.5</b>				
	2020	10	30 hrs	3 hrs			Piled on site	
		13	36.5 hrs	12 hrs				
		13	39 hrs	12.5 hrs				
		9	33 hrs	9 hrs				
		6	11 hrs	-				
			Total <b>149.5</b>	Total <b>36.5</b>				
	2021	14	64.5 hrs	10 hrs			Piled on site	Sinking/less dense/wet/fewer with flowers/seed pods
		2	-	10 hrs				
		3	-	14 hrs				
			Total <b>64.5</b>	Total <b>34</b>				

Phrag on the edges all around and the channel before the cut pictured below





**Above: A stolon floats on the water showing how it spreads      Saw operators get the fringe down**

**14. West End Stand (0.9-acre lakeside stand first cut with IPCC Truxor)**

The Invasive Phragmites Control Centre (IPCC) was contracted to cut on the lakeside portion of the large west end stands. Our work permit from the MNRF was on hand. An incredibly huge effort by the volunteer Phragmites Fighters was undertaken over the two 10-hour days- with a half hour to set up and clean up not counted – there was a total of 253 volunteer hours given to this removal effort this season, while leaving the native plants on site. We did not have time to walk through the stand and clear with cane cutters the Phrag that had established among the native aquatic plants this season.

This stand is separated from the shore stand by a small channel. We have cut on the shore stand two previous seasons but have not had the time to get to this stand as it took four cuts to do the shore stand. The Truxor and two saw operators cut the phragmites and volunteers **loaded and unloaded 65 boat loads** at the shore for pick up by the township to take to the landfill. Two summer staff worked with roads department to load the trucks (app 20 loads) over the next two days and took the cut Phrag to the landfill. Unbelievable but awesome that the volunteers were able to accomplish this.

**Day 1:** 7:30 am – 6:30 pm, 21 volunteers, 132.5 hours, Invasive Phragmites Control Centre (IPCC) team of four 40 hours

**Day 2:** 7:30 am – 6:30 pm, 14 volunteers, 113.0 hours, IPCC team 40 hours

**Totals: 253 volunteer hours, IPCC 80 hours**

**Equipment Used:** Saws, cane cutters, toboggans, waders, an amphibious truxor from the IPCC

**Biomass:** 65 boat loads, approx. 20 truck loads removed to the landfill.

**Next season:** Reassess in fall and spring, receive management guidance from the IPCC and from PAMF. Plan for two more Truxor days if available and recommended.

<b>West End Stand (0.9 acre lakeside first cut)</b>	<b>2021</b> Truxor 2 days	21 (6 youth) 15 (1 youth)	140 hrs 113 hrs <b>Total 253</b>	IPCC team 2 cutting and truxor			65 boat loads= 20 truck loads	IPCC Truxor and four of team
---	---------------------------------	------------------------------	--	---	--	--	----------------------------------	---------------------------------







**15. 23 Tamarack (Behind garage in water)**

8:00 – 12:00 noon

6 volunteers **Total of 13.5 hours**

Owner had arranged to have two saw operators cut and pile on tarps. Volunteers bundled in sheaves and bags raked and transported to the roadside where they were piled on tarps and covered/accessible for pick up.

**Equipment Used:** Our saws, bags, tarps, twine, rakes

**Biomass removed:** 10 leaf litter bags, 60 bundled sheaves 3 truck loads

**Next Season:** Plan to cut with saws and cane cutters earlier in the season to prevent any seeds from forming. Possibly two cuts early and late.

23 Tamarack (Behind garage in water)	2020	10	16 hours	3 hrs		6	unknown	
	2021	6	13.5 hours	4 hrs	60 sheaves	10	3 truck loads	



**16. Shaw's Lakeshore**

9:00 – 10:00

4 volunteers, **Total of 4 hours**

**Equipment Used:** Cane cutters and spades

**Biomass removed:** 1 leaf litter bag

**Next Season:** remove every time the shoots are seen clearing the ground and this will never spread or establish on the shore.

B & A Shaw	2021	4	4 hrs	-	-	1 bag		
------------	------	---	-------	---	---	-------	--	--



**17. 89 High Rock Drive**

7:30 – 12:00 noon

18 volunteers, Total of 45.5 hrs plus 5 Saw operator hrs

2 owners did 10 hrs, **Total this season: 55.5 hours plus 5hs saws**

**Equipment used:** Cane Cutters, saws, toboggans, pool noodle boom, leaf litter bags, tarps, twine

**Biomass removed:** 6 leaf litter bags, 72 tied sheaves

**Next season:** May need to do 2 cuts. Adjoining property did not clear this season, need both cut each season for best effect. Perhaps a Truxor could assist if west end stands are done quickly next season.

89 High Rock Drive	2021	2 (owners) 18 (8 youth)	10 volunteer hrs 45.5 Total 55.5 (did not get it all)	4 saw hrs	25sheaves 72sheaves	11bags 6 bags	1 truck load 4 truck loads
--------------------	------	----------------------------	---	-----------	------------------------	------------------	-------------------------------



**18. 99 High Rock Drive**

8:00am – 10:00 am

11 volunteers, 2 saw operators resulted in **8 hrs volunteer time and 2 hrs saw operators**

Owner did most of the management – this work was on the edge joining another property in water.

**Equipment Used:** Cane cutters, saws, toboggans, pool noodle boom

**Biomass Removed:** 20 sheaves

**Next season:** Help owner in any way – offer saws, spades and volunteers to keep getting it gone.

99 High Rock Drive	2021	11 (1 youth)	8 volunteer hrs	2 saw hrs	20 sheaves		1 truck load	
--------------------	------	--------------	-----------------	-----------	------------	--	--------------	--



**19. 109 High Rock Drive**

7:30 – 10:00

12 volunteers worked for **total of 23.5 hrs, Saw operators 3.0 hrs**

The group finished on these two sites and went further down High Rock Drive to a third for the remainder of the morning. Second year for this site. Owners' family members had cleared 12 huge sheaves and 2 bags prior to this cut.

**Equipment Used:** Cane cutters, saws, toboggans, rakes, pool noodle boom, tarps, twine

**Biomass Removed:** 70 tied sheaves, and 10 leaf bags – 3 truck loads

**Next Season:** Spades and cane cutting- remove all the snorkels- remove x 2 if possible. May not need saws. Definitely less, even with the 12 hugs sheaves the family removed.

109 High Rock Drive	2020	11	25 volunteer hrs	20 saw hrs	-		5 truck loads	
	2021	12 (1 youth)	13.5volunteer hrs	3 saw hrs	70 sheaves	10bags	3 truck loads	Much less

**Pictures:** 12 Sheaves removed by family members, underway, gathering and piling and shore clear



## **20. 139 High Rock Drive**

**Day 1:** 8:00 – 12:00

4 volunteers and 1 saw operator

**Total of 13 volunteer hours and 2 saw operator hours**

Rained and had a late start. Smaller stalks were cut last season. Large stand around the edge of the property extending down the shore.

**Day 2:** 10:00 – 12:00

13 volunteer and 2 saw operators

**Total of 25.5 volunteer hours and 3.5 saw operator hours**

**Equipment Used:** Cane cutters, saws, tarps, toboggans, rakes, leaf bags, twine, pool noodle boom

**Biomass Removed:** 10 leaf litter bags, 50 tied sheaves

**Next Season:** Continue to cut back into the shore and any Phrag attached to this stand.

139 High Rock Drive	2020	4 volunteers 6 volunteers	13 volunteer hrs 15 hrs	- -	20 sheaves -	5 bags 3 bags	2 truck loads 1 truck load	
	2021	5 (2 youth) 15 (5 youth)	13 volunteer hrs 25.5 volunteer hrs	2 saw hrs 3.5 saw hrs	50 sheaves	10bags	3 truck loads	Stand extends around corner



**21. 293 High Rock Drive**

8:00 – 12:00 noon

15 volunteers, 2 saw operators **Total 49.5 hrs volunteer time and 7 hrs saws**

Second season cut. Got it all this season. Thinner stalks, easier to walk and cut. Native plants and shrubs on shore. Owners had removed a large pile – ready to go to the landfill.

**Equipment Used:** Saws, cane cutters, toboggans, pool noodle boom, leaf bags, tarps, twine, rakes

**Biomass Removed:** 4 leaf bags, 36 sheaves

**Next Season:** Assess to see if saws are needed. May be able to cane cut only, with some spading.

293 High Rock Drive	2020	12	40.0 volunteer hrs	2 saw hr	-	-	1 Dump Truck	
	2021	17 (3 youth)	49.5 volunteer hrs	7 saw hrs	36 sheaves	4bags	4 truck loads	





**22. Strong Township ditch/shore area beside #293 High Rock Drive**

7:30 am – 12:00 noon

7 volunteers and 2 saw operators for **Total 24.5 volunteer hours and 7 hours saw operation**

Phrag in the ditch on roadside, along the drain in amongst the brush and extending out into the lake from the shore. Volunteers carried it out on the toboggans and up the side of the ditch to the roadside.

We got about three quarters of this stand – but not all of it. Some amongst the brush to get next season.

**Biomass removed:** 2 leaf bags, 30 sheaves and another loose pile. 4 truck loads

**Equipment Used:** 2 saws, cane cutters, toboggans, leaf bags, tarps, twine rakes

**Next season:** Assess for drowning on lakeside- look both sides and remove. May still need saws. Use cane cutters in the brush. May be able to spade in ditch.

Strong Township ditch/shore area beside #293 High Rock Drive	2021	7 (2 youth)	24.5 volunteer hrs	6 saw hrs	30 sheaves	-	4 truck loads	Did not get it all
--	------	-------------	--------------------	-----------	------------	---	---------------	--------------------



**23. 65 Turtle Lane Shore and garden**

7:30 am - 1:30 pm

14 volunteers for **Total of 49 hours**

**Shore area:** Spading in the front section where previously mowed. A few flowers forming late in the season. Most stalks four feet or less. In water thicker and 6 feet tall. Hot humid weather. Mucky section with peat making it difficult to walk to spade or cut. ATV used by volunteers to carry sheaves up hill to roadside for pickup.

**Equipment Used:** Spades, cane cutters, tarps, twine, leaf bags, rakes, waders, ATV (volunteered)

**Biomass removed:** 8 leaf bags, 30 tied sheaves 2 truck loads

**Next Season:** Start with group on water side and work in to be sure tough area is cleared first.

65 Turtle Lane Shore and garden	2020	8 4	27 volunteer hrs 15 volunteer hrs	- 9 hrs	20 sheaves 15 sheaves	7bags 15bags	2 truck loads 1 truck load	
	2021	14	49 volunteer hrs	No saw	30 sheaves	8 bags	2 truck loads	Garden not done/mowing



**24. High Rock 843 High Drive**

7:30 am – 11:30 am

6 volunteers for **Total of 17 hours**

Water over knee deep- used waders, should have some drowning effect- but clear water. Others had been removing and laying to dry on shore.

**Equipment Used:** Cane Cutters, Phrag toboggans to pull to shore, tarped, tied, carried to roadside

**Biomass Removed:** 21 tied sheaves

**Next Season:** Hope to have some drowning. Go twice and get it early and then later in season to have most effect.

High Rock 843 High Drive	2021	6 (1 youth)	17 volunteer hrs	No saw	21 sheaves		2 truck loads	
-----------------------------	------	-------------	------------------	--------	------------	--	---------------	--



**25. The Dam (In water and along Bernard creek)**

The ditches along the road are near the lake and Bernard Creek. They were dug out last season removing the old stalks. A decision was made to cut with saws and try to decrease the formation of seeds. The in-water stand on private property was cut for a third season. There were five cutting events at the dam this season – **we did not get it all.**

Day 1: Ditches, 15 volunteers, 2 saw operators Total: 33.5 hrs volunteers and 6.5 hrs saws

Day 2: Ditches and in-water portion, 23 volunteers, 2 saw operators Total: 49.5 hrs volunteers and 8.0 saw operators

Day 3: Ditches, 2 saw operators cutting and 1 volunteer tying and piling Total: 5 hrs volunteers, 14 hrs saw operators

Day 4: Ditches and shore Bernard Creek, 6 volunteers 2 saw operators Total: 22.5 hrs volunteers and 5.5 saw operators

Day 5: Ditches, gathering cut Phrag, tying and piling Total: 1.5 hrs. **Grand total: 126 volunteer hrs, 34 saw operator hours**

**Equipment Used:** Saws, cane cutters, waders, toboggans, rakes, tarps, twine, leaf bags, noodle boom

**Biomass removed: 150 tied sheaves, 41 bags, = 19 Truck Loads**

**Next Season:** Go early in season (June) and cut ditches x1, Reassess and cut mid season (July). Cut in water after July 15. Clear shore of Bernard creek both sides August.

<b>The Dam (In water and along Bernard creek)</b>	2019	15 (2 youth)	90.25 volunteer hrs	14 hrs	259	10	5 truck loads	Huge effort/muck Did one side in water
	2020	12	39.5 volunteer hrs	18 hrs	Loaded 7 tarp loads loose	3	1 Dump Truck + 1 Half ton	In water/shore Bernard Creek
	2021	23 (10 youth)	49.5 hrs	8.0 hrs			6 Truck loads	In water





**26. The Dam (the Ditches)** Three and a half of the five cutting days were spent on the ditches.

The Dam (the Ditches)	2021	15 (6 youth)	33.5 hrs	6.5 hrs	45 sheaves	15	5 Truck loads	Ditches
		3	19.0 hrs	14.0 hrs	75 sheaves			Ditches
		8	22.5 hrs	5.5 hrs	30 sheaves	13	5 Truck loads	Ditches
		1	1.5 hrs	-	-	13	2 Truck loads	Ditches/did not get it all
			Total 76.5 hrs				1 Truck load	



**27. 16 Birch Lane**

7:30 am – 10:30 am

12 volunteers, no saws this season Total: **35 volunteer hrs.**

70% less this season on both stands. Waist high water in places. Healthy rushes. 10 people cutting and done.

**Equipment Used:** Cane Cutters, pool noodle boom, rakes, and toboggans.

**Biomass removed:** 1/3 of a trailer load to the landfill. Much less than last season

**Next Season:** Cane cutters and toboggans and twice if possible.

16 Birch Lane	2020	28	99.5 hrs	14 hrs	-	-	2 Trailer loads	2 stands
	2021	10(2 youth)	35 hrs	Not needed	-	-	1/3 Trailer load	Much less



Before picture -phrag close to shore



After Phrag gone only healthy rushes remain

**28. 364 Crescent Lane**

7:30 am – 12:00 noon

13 Volunteers, 2 saw operators **Total Hours: 45.5 volunteer hours, 4 hrs saw operators**

Large stand owners helped and had been cutting periodically close to dock area each season. Huge long stolons. Creek on property with some healthy shrubs, cotton grass, sweet gale, Joe pie weed, rushes alder, jewel weed. Saw on 1/3 of stand- the rest cane cutters. Phrag stands on either side of this property- need to get them next season at the same time.

**Equipment Used:** Pool noodle booms, cane cutters, saws, tarps, rakes, waders, toboggans

**Biomass removed:** 6 truck loads – owner used small trailer to bring to roadside throughout the cut

**Next Season:** Need to get both adjacent properties cut within same two weeks if possible. Would be ideal to have a second cut as well.

364 Crescent Lane	2021	13 (1 youth)	45.5 hrs	4 hrs	Loose loaded in truck	2	6 Truck loads	Large stands properties both sides
-------------------	------	--------------	----------	-------	-----------------------	---	---------------	------------------------------------





**29. Albert Street North – both sides on ramp**

7:00 – 9:30 am

Satellite stand – second year /municipal property and private. Obtained verbal permission to remove from land owner. 1 volunteer this season. **Total 2.5 hrs this season**

**Equipment:** cane cutters, twine, boots, gloves, tarp

**Biomass Removed:** 6 sheaves

**Next season:** Winning here!! Go back assess and remove!!

Albert St North at Hill Valley Road	2020	2	6.0 hrs	No saw	6 sheaves		1 truck load	
	2021	1	2.5 hrs		6 sheaves/smaller		½ truck load	

Before in wetland

After piled on roadside from wetland



Phrag removed fast from wetland area

**30. Roadside near Layolomi**

Two Phrag fighters and separate times removed for 1.5 hours on small stands on High Rock Road near Layolomi

Roadside near Layolomi	2021	2	1.5 hrs		3			
------------------------	------	---	---------	--	---	--	--	--

**31. Albert St North at Hill Valley Road**

Second season for this wetland area along the roadside. 3 sheaves and 1.5 hours of volunteer time. First year 2020 data not available.



Cattails returning. Much less and phragmites shorter than last year.

**32. Pevensey Road Phrag stand**

One Phrag fighter, almost has this roadside stand gone! Monitoring each season and removing

Pevensey Road Phrag stand	2019	1	1 hr		2 sheaves		Taken by volunteer	
	2020	1	1.5 hrs		1			
	2021	1	.25 hrs		1			



Phrag is almost gone – only 15 minutes to get what’s there

**33. Strong Township Yard**

One Phragm fighter who spotted new growth and got it early. 4 sheaves to the landfill.

Strong Township Yard	2021	1	1.0 hr		4			
----------------------	------	---	--------	--	---	--	--	--

**34. Strong-Joly Boundary Road/Strong Township side**

One Phragm Fighter, 1hour, 2 sheaves. Keeping it out of wetlands.

Strong-Joly Boundary Road/strong side	2021	1	1.0 hr	-	2 sheaves			
---------------------------------------	------	---	--------	---	-----------	--	--	--



**35. Strong -Joly Boundary Road/Joly Township side**

One Phragm fighter keeping an eye on the wetlands for us all. Second year removal and stopping it from spreading – thank you. See the before picture on the left and the rhizomes removed on the right below.

Strong -Joly Boundary Road/Joly Side	2020	1	1.5 hrs	-	2 sheaves	1 bag		
	2021	1	.5 hrs			1 bag		



**36. Old Man's Lake**

10:00 am – 1:00 pm

7 Phragm Fighters spotted Phragm and decided to organize a new group of Phragm Fighters. Determined they spotted another stand and with a great bunch of volunteers have started to get it out of Old Man's Lake.

**Total 17 volunteer hours**

**Equipment Used:** Cane cutters, spades, leaf bags, toboggans, tarps, rakes

**Biomass removed:** 12 leaf litter bags

**Next Season:** Remove using spades if possible and cane cutters in difficult areas.

Old Man's Lake	2021	7	17.5 hrs	-		12 bags	1 truck load	New group
----------------	------	---	----------	---	--	---------	--------------	-----------



**37. Canadore College Parking Area**

New team working for the second year on a patch in the Canadore parking lot. Class of Environmental Technology and Technician students are learning firsthand how to remove Invasive phragmites. Review of the site this season and plans are laid for an event after Thanksgiving. See below the stand and some of the students with their professor. We are lucky to have this team take the initiative and clear the Phrag on site as they learn how damaging this is to our wetlands and inland lakes.

Canadore College Parking Area	2021	5 (prof plus 3 students)	2.5					Demonstration – they will cut with classmates
-------------------------------	------	--------------------------	-----	--	--	--	--	---



**4) Provision of Educational Materials and Education Sessions:**

1. Three education sessions of 30 minutes using zoom, question and answer and power point were provided to **grade 9 – 10 students March 22, and March 29, and June 14, 2021.**
2. A powerpoint presentation was given May 12, 2021, to the newly formed **Almaguin Lakes and Watersheds Association** regarding phragmites control on Lake Bernard.
3. **Dr. Janice Gilbert Invasive Phragmites Control Centre (IPCC)** presented Thursday May 13 from 6 PM - 7 PM on Zoom on Best Management Practices for Controlling Invasive Phragmites in Sensitive Areas and answered questions about the Lake Bernard area and Phrag management.
4. **The Ontario Turtle Conservation Centre** presented a half hour behind the scenes virtual tour by zoom at the Volunteer Appreciation event, Saturday August 28th, to 25 Phragmites Fighters who were keen to hear more about how removing Invasive Phragmites Australis helps restore habitat for our endangered freshwater turtles.
5. **Invasive Species Walk:** Bob Bowles Master Naturalis provided a nature walk to survey for invasive species on July 7th on the shore of Lake Bernard Sundridge. Bob teaches courses on invasive species for Lakehead University - is a birder, turtle enthusiast, master naturalist - and knows a little about our lake. He is now offering to help with species identification for our group. We identified Japanese Knot weed, Chinese Banded Mystery snail, Invasive Phragmites Australis and others of concern.



6. **Wilfred Laurier, Geography and Environmental Sciences students** (3rd year) researching phragmites identification through use of drones on Lake Bernard consulted January 21, 2021 via zoom and received information by email to assist with their research and a zoom webinar. The recording is posted on the Great Lakes Phragmites Collaborative site: <https://www.greatlakesphragmites.net/resources/webinars/>

7. **The following links and videos were distributed** with mail outs to the phragmites fighters during this year season:

- Remember to Wild Your Shore -<https://watersheds.ca/>
- Grow Me Instead (North) Ontario Guide: [https://www.ontarioinvasiveplants.ca/wp-content/uploads/2016/07/NorthernGMI\\_2014\\_FINAL.compressed.pdf](https://www.ontarioinvasiveplants.ca/wp-content/uploads/2016/07/NorthernGMI_2014_FINAL.compressed.pdf)
- NEW 2020 Phragmites Best Management Practices: <https://www.ontarioinvasiveplants.ca/wp-content/uploads/2021/01/Phragmites-BMP-2020.pdf>. Impact of Phragmites on sensitive area.
- Excellent phragmites presentations from the March Ontario Invasive Species Centre Phragmites Forum: [https://www.youtube.com/watch?v=ptq4rJeXJeo&list=PLdxRdOLT-h0i1VT8nlnkfZI4339TA0P4m&index=10&ab\\_channel=InvasiveSpeciesCentre](https://www.youtube.com/watch?v=ptq4rJeXJeo&list=PLdxRdOLT-h0i1VT8nlnkfZI4339TA0P4m&index=10&ab_channel=InvasiveSpeciesCentre) **The sessions cover impacts of Phragmites on Species at Risk (including our turtles)**, what has happened at Long Point, new field information on the success achieved in removing Phrag. in murky waters less than optimal depths and shows Truxors at work in very large stands.
- **Impacts of Phragmites on Species At Risk video:** <https://www.youtube.com/watch?v=dsYdegvppSI>
- **Handouts distributed:** The Ontario Phragmites Working Group (OPWG) “Cutting to Drown” <https://www.opwg.ca/wp-content/uploads/2018/05/OPWG-Cut-to-Drown-Postcard.pdf> and “Spading” <https://www.opwg.ca/wp-content/uploads/2018/06/OPWG-Spading-Postcard.pdf> postcards are posted on the NNEEC website: <https://www.nneec.ca/phragmites>. Almaguin Freshwater Turtles information sheet was handed out.

**Names added to volunteer list:** 45 new volunteers participated this season, in addition to 58 volunteers from last season for a total of 103 participating at cutting events. 180 members received regular emails through out the season.

### **5) Hands on Demonstrations:**

At all of the 33 cutting event locations June to mid-September, demonstrations were given at each site to the owners and neighbours who were present and to new volunteers. Postcards were distributed at each event. Cane cutters were available for a donation.

**6) Offering Homeowner Visits:** Homeowners received assistance with identification, education, and removal strategies. We obtained a signed “Neighbour Information Permission form” asking for volunteer removal assistance when necessary. 14 new sites (private and municipal) were managed with organized cutting events.

### **7) Engaging Community/Lakeshore Business Owners/ Construction Companies/ Real Estate Brokers**

13 properties cleared of phragmites were municipal, business, church, and or a charity.

7 Local businesses have been supported, provided business services (T-shirts, purchased services, food equipment, signage etc.)

6 businesses provided donations or assisted in some capacity.

One member of the Phragmites Working Group Executive has a linkage to local construction companies.

Two members of local real estate companies have assisted with phragmites cutting events and continue to receive emails.

### **8) Support from Municipal Workers:**

Students from the Village of Sundridge and Strong Township assisted in various capacities: with removal of the phragmites to the landfill; returned the

tarpaulins/bricks after each truck load; assisted with phragmites removal on township property.

The superintendent of the landfill educated individuals on safe and proper transportation of phragmites to the landfill.

We had municipal support from the mayors, councils and works departments. We received site visits, emails of support and thanks.

### **9) 2020 Enlisting Garden Centres:**

Distribution of pamphlets: “Grow Me Instead – northern version”:

<https://www.ontarioinvasiveplants.ca/resources/grow-me-instead/> .

As part of the provincial initiative to educate and encourage growing native plants on the shoreline, this was sent by email to over 180 on the email out list. Paper copies were left at Kidd’s Hardware, Nicholson’s and Foodland’s Garden centres once they opened in the spring.

### **10) Recruiting Youth:**

26 youth assisted with cutting events:

15 under 15 years of age assisted this season,

5 students from high school requested signing of volunteer sheets.

### **11) Casual employment of Phrag Fighters:**

A local business that provided saw services last season employed two saw operators to assist with 24 hours of saw operator time. Our team scheduled 10 cuts with 2 arborists to operate saws through the season.

### **12) Communicating Out:**

Three newspaper articles were written for outreach in the Almaguin News:

<https://www.northbaynipissing.com/community-story/10435196-almaguin-phrag-fighters-urging-other-areas-to-be-aware-of-phragmites/>

<https://www.northbaynipissing.com/news-story/10401830-phrag-fighting-machine-booked-for-sundridge-lake-this-summer/>

<https://www.northbaynipissing.com/news-story/10401830-phrag-fighting-machine-booked-for-sundridge-lake-this-summer/>

The Lake Bernard Property Owners Association provided support over the season with Facebook posts advertising the activities and events of the group. The lead agency, the Near North Enviro-Education Centre, provided an excellent link on their website to information on provincial sites, the plan from the Invasive Phragmites Control Centre for removal on Lake Bernard, and education information.

### **13) Additional Resource Material:**

**Website:** Magnetawan has added information on Phragmites and the Working group on its web site:  
<https://magnetawan.com/news/phragmites-australis-in-the-municipality-of-magnetawan>

**Spading/Cutting to Drown postcards:** These resources have been provided to the Village office, the Townships offices, and are posted on the NNEEC website. They were brought to cutting events and given out to individuals who requested information to help with management.

**Neighbour helping Neighbour Information /Permission Forms:** Five new permission forms received for new sites.

### **2022 Season Planning**

---

We have 33 sites to reassess in the spring, and 6 or more new ones to start managing. Hopefully, many of the smaller sites can continue to be combined as one cutting event and new sites that need a first cut added as we continue removal on High Rock Drive and around the lake. If funds are secured Truxors will be a huge help with managing the large west end stands.