

2016 Field Survey
Chaumont Bay
SLELO-PRISM Early Detection Surveillance

July 20th, 26th, and 27th, 2016

Report prepared by Ashley Gingeleski and Ben Hansknecht on August 2nd, 2016



Figure 1. Picture of Chaumont Bay. Photo by Ashley Gingeleski.

Introduction and Background¹

Chaumont Bay is a large bay on the northeastern shore of Lake Ontario, west of the village of Chaumont and east of Point Peninsula in western Jefferson County, New York (**Figures 1 and 2**). The large, sheltered bay is a popular fishing, sailing and vacationing destination, and much of the shoreline is developed with camps, cottages and several marinas. Within the larger Chaumont Bay area are several smaller named bays, including Three Mile Bay, Sawmill Bay, Long Bay and Guffin Bay (**Figure 3**).

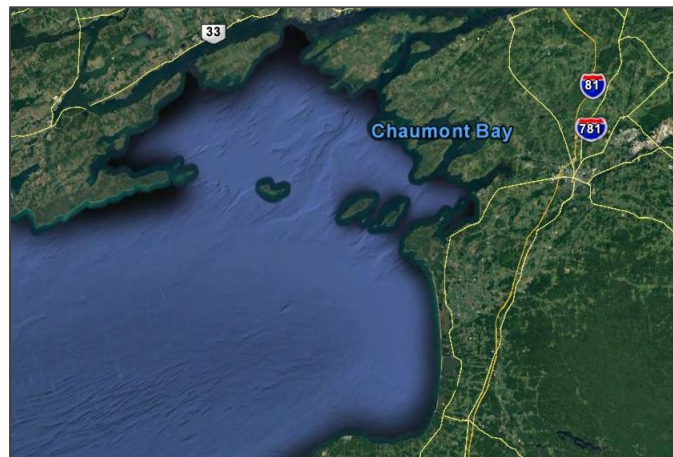


Figure 2. Location of Chaumont Bay along Eastern Lake Ontario.

¹ Introduction and Background taken verbatim from the SLELO-PRISM 2012 Chaumont Bay Water Chestnut & Hydrilla Surveillance report, by Greg Chapman and Mike McHale; <http://www.sleloinvasives.org/wp-content/uploads/2012/07/Chaumont-Bay-Final-Report-2012.pdf>



Figure 3. Chaumont Bay and surrounding area.

Public access is available from several locations along the bay's perimeter. The New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP) operates Long Point State Park on Long Point Peninsula, which provides a bay-side concrete boat ramp as well as fishing and shoreline use access. NYSOPRHP also owns and maintains a concrete boat launch at a site off Route 12-E north of the village of Chaumont that provides access near Sawmill Bay.

The NYS Department of Environmental Conservation (NYSDEC) operates two concrete boat launches on or near Chaumont Bay. Both boat launches are located off of Route 12-E. One is Lake Ontario (**Figure 4**) located East of Long Point State Park. The other is at Three Mile Bay (**Figure 5**) and is located in the hamlet of Three Mile Bay. Also, a private concrete boat launch providing access to Chaumont Bay is located at the former Golden's Marina site off County Route 57 as it approaches Point Peninsula.



Figure 4. NYSDEC boat launch at Lake Ontario at the Isthmus. Photo by Ashley Gingeleski.



Figure 5. NYSDEC boat launch at Three Mile Bay. Photo by Ashley Gingeleski.

Survey Methods and Observations

In July of 2016, the SLELO Early Detection team surveyed the Chaumont Bay Priority Conservation Area (PCA) for both aquatic and



Figure 6. SLELO Early Detection member Ben Hansknecht performing a rake toss. Photo by Ashley Gingeleski.

terrestrial invasive species. This was accomplished by means of the rake toss technique, for aquatic species, as well as visual observations (**Figure 6**). The rake toss method of aquatic plant surveying involves tossing a weighted double-sided rake off either side of one's vessel and using it to uproot vegetation for species identification. Attached to the rake is a rope marked in increments of feet, which is used to calculate water depth during each toss. Visual observations involve scanning both aquatic and terrestrial surroundings for noticeable, defining attributes of target and watch-list species for visual identification.

Areas where these survey methods were employed in Chaumont Bay are known as HPAs, or Highly Probable Areas. HPAs are environments where invasive species are likely to be found as a result of certain characteristics, including: high rates of human activity, still water, shallow photic zones. Of the five HPAs visited in Chaumont Bay for the 2016 field survey—Long Point State Park, DEC boat launch at Isthmus, Three Mile Bay, Sawmill Bay, and Guffin Bay—Isthmus was the only site at which a terrestrial survey was conducted (**Figure 7**).

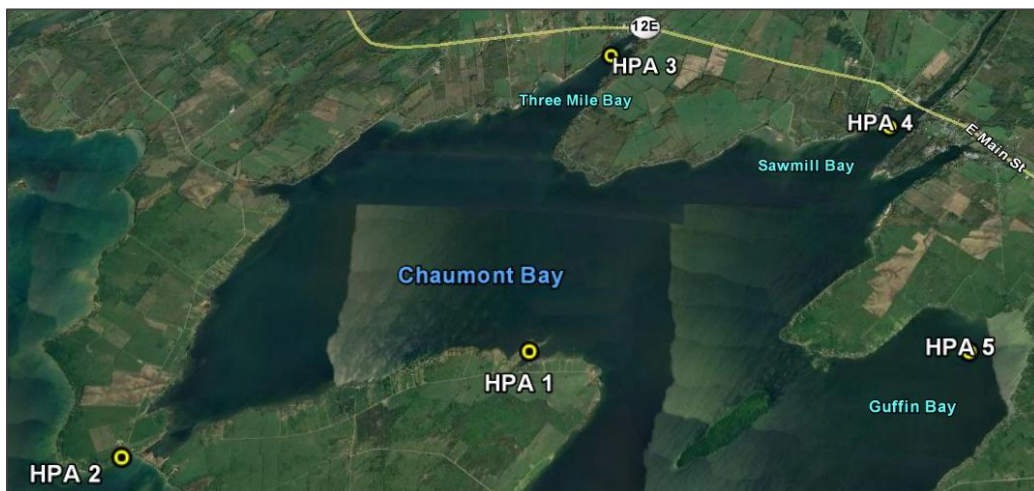


Figure 7. Map of Highly Probable Areas (HPAs) within Chaumont Bay.

Within each of the five HPAs, a series of waypoints (WPs) mark locations around the study sites. New waypoints for the 2016 survey were selected using the criteria for HPAs to supplement

those WP locations chosen for prior surveys of Chaumont Bay in 2012 and 2014. HPAs, WPs and other locations of interest were marked using a Garmin handheld GPSMAP® 62.

No Prevention “Watch-list” species were found in the 2016 survey.

The following target-list species were determined to be at Chaumont Bay in the 2016 field survey: Eurasian water-milfoil, curly-leaf pondweed, European frog-bit, phragmites, water-chestnut, purple loosestrife, pale swallow-wort.

Eurasian water-milfoil was found at HPAs 1 and 3-5 (WPs 1-5, 7, 8, 10, 11, and 13-21). Curly-leaf pondweed was found at HPAs 1 and 3 (WPs 3 and 5). European frog-bit was found at HPAs 4 and 5 (WPs 8 and F). Phragmites was found at HPA 5 (WPs 18 and E). Water-chestnut was found at HPA 5 (WPs 21 and F). Purple loosestrife was found at HPAs 1 and 3 (WPs A, C, and D). Pale swallow-wort was found at HPA 2 (WP B) (**Figures 8 - 14**).



Figures 8 – 14. (Clockwise from left to right) Eurasian water-milfoil; Curly-leaf pondweed; European frog-bit in pithophora algae; Phragmites; Pale swallow-wort; Purple loosestrife; Water-chestnut.

After the detection of pale swallow-wort at HPA 2, the SLELO Rapid Response team visited the site for foliar treatment of these plants (**Figure 15**). The Early Detection team hand-pulled a few thick patches of water chestnut in between visiting waypoints (**Figure 16**).



Figure 15. Site at HPA 2 where the SLELO Rapid Response team performed foliar spraying on pale swallow-wort.



Figure 16. Hand-pulled water-chestnut from HPA 5.

The only invasive species determined to be at HPA 2 was pale swallow-wort. Additionally, zebra mussel, a general species of concern, was also found to be in Chaumont Bay, observed at HPA 4 (WP 11) (**Figure 17**).



Figure 17. Zebra mussel found at HPA 4.

The following native species were observed in Chaumont Bay: eel grass, filamentous green algae, fragrant waterlily, slender pondweed, elodea, white water buttercup, common duckweed, long-leaved pondweed, coontail, clasping-leaf pondweed, yellow pond lily, stonewort, cattail, floating pondweed, and slender naiad.

Table 1. Rake tosses at aquatic Highly Probable Areas (HPAs).

HPAs	WPs	Description	Latitude	Longitude	Toss	Depth (ft)	# Spp.	#Inv.	Invasives	Visuals
1 - Long Point State Park	1	Quiet area near campsites	44.02915	-76.21516	1	4.5	3	0		EW
					2	4.5	4	0		
	2	Quiet Marsh Area	44.02652	-76.21773	1	1.5	3	0		EW
					2	1.2	4	0		
	3	Next to Boat Launch	44.02978	-76.21362	1	7	3	0		EW, CL
					2	7.2	2	0		
3 - Three Mile Bay	4	Near Boat Launch	44.08088	-76.19649	1	5	4	0		EW
					2	5	6	0		
	5	Area Near Homes	44.0789	-76.19787	1	1.4	4	0		EW, CL
					2	1.5	4	0		
	6	Middle of Water	44.07199	-76.21517	1	2	1	0		
					2	1.7	0	0		
	7	Quiet Marsh Area	44.0784	-76.20335	1	1.8	4	0		EW
2					1.6	3	0			
4 - Sawmill Bay	8	Quiet Marsh Area	44.06665	-76.15225	1	5	4	1	EW	EW, FB
					2	2.5	3	0		
	9	Middle of Water	44.0668	-76.15013	1	3.3	1	0		
					2	3.2	3	0		
	10	Near Yacht Club	44.06417	-76.13452	1	2.6	4	0		EW
					2	2	3	0		
	11	Rocky Inlet	44.06476	-76.13008	1	6.5	6	2	EW, ZM	EW
					2	6.3	4	1	EW	
	12	Near Barn	44.06396	-76.1323	1	3	2	0		
					2	4.2	4	0		
	13	Side of Bay	44.06164	-76.13456	1	8	3	1	EW	
					2	8	2	1	EW	
	14	Near Bridge	44.07004	-76.13855	1	3	3	0		EW
2					3	4	0			
15	Middle of Water	44.07315	-76.13506	1	4	2	0		EW	
				2	4	2	0			
16	Cove Near Launch	44.06889	-76.147	1	4.5	2	1	EW		
				2	4	3	1	EW		
5 - Guffin Bay	17	Cove Near Houses	44.03889	-76.13379	1	4	4	0		EW
					2	3.3	4	1	EW	
	18	Quiet Area	44.04033	-76.12022	1	2	2	0		EW, PH
					2	1.7	2	0		
	19	Middle of Water	44.04147	-76.11854	1	3	1	0		EW
					2	3	0	0		
	20	Middle of Water	44.0402	-76.12022	1	3.5	2	0		EW
					2	3.5	1	0		
	21	Near Cattails	44.03932	-76.12083	1	3	2	0		EW, WC
					2	3	4	1	EW	

Key: EW = Eurasian water-milfoil CL = Curly-leaf pondweed FB = European frog-bit
 ZM = Zebra mussel PH = Phragmites WC = Water-chestnut

Table 2. Visual observations at Chaumont Bay.

<i>HPAs</i>	<i>WPs</i>	<i>Description</i>	<i>Latitude</i>	<i>Longitude</i>	<i>Invasives</i>	<i>Notes</i>
1 - Long Point State Park	A	Shore	44.03066	-76.2122	PL	Small Patch
2 - DEC Boat Launch at Isthmus	B	Edge of Rocky Area	44.01112	-76.28719	SW	About 60 Plants
3 - Three Mile Bay	C	Rocky Beach	44.07539	-76.20619	PL	10+ Plants
	D	Quiet Area	44.07725	-76.20417	PL	Scattered Plants
5 - Guffin Bay	E	Marsh Area	44.03872	-76.12347	PH	Widespread
	F	Quiet Area	44.04108	-76.11978	WC, FB	Very Large WC Patch Continues Along Shoreline

Key: PL = Purple loosestrife

SW = Pale swallow-wort

PH = Phragmites

WC = Water-chestnut

FB = European frog-bit