Special Note

The partners of the SLELO PRISM have identified 24 Priority Conservation Areas on which we conduct early detection surveillance on a two year rotation. This report is considered as an addendum to the original field report.

The original report is attached to the end of this report.

St. Lawrence Eastern Lake Ontario Partnership for Regional Invasive Species Management

2014 Field Survey Addendum to Chaumont Bay

Water Chestnut, Hydrilla, Asian Clam and Rusty Crayfish Assessment

SLELO-PRISM Early Detection Surveillance August 18th, 19th, 22nd and 26th 2014 Report prepared by Elizabeth MacEwen and Sabrina Dreythaler, 9/2/14



Figure 1. Panoramic view of Chaumont Bay, near Long Point State Park, photo by Sabrina Dreythaler

Summary

In August of 2014, SLELO field crew members Sabrina Dreythaler and Elizabeth MacEwen conducted early detection surveillance throughout Chaumont Bay targeting water chestnut (*Trapa natans*), hydrilla (*Hydrilla verticillata*), rusty crayfish (*Orconectes rusticus*) and Asian clam (*Corbicula fluminea*).

Methods

This survey was conducted using the same methods of rake-tosses and visual surveillance used in the 2012 survey. In 2012 the water chestnut surveillance and hydrilla surveillance were done separately. However, in 2014 both species were surveyed for at the same time. In 2014, it was decided that Asian clam (**Figure 2**) and rusty crayfish (**Figure 3**) should also be surveyed for. Crayfish and clams were surveyed for by looking manually under rocks at HPA 2. HPA 2 had the most suitable habitat for Asian clams and rusty crayfish, with shallow water and a rocky bottom. A small crayfish net was kept on hand to catch any that were found. After data collection, all invasive species occurrences were recorded in the iMap database.



Figure 2: Asian Clam (Corbicula fluminea)



Figure 3: Rusty Crayfish (Orconectes rusticus)

Observations

There were no occurrences of prevention/ watch list species¹. The target management species seen included water chestnut, purple loosestrife (*Lythrum salicaria*), swallow-wort (*Cynanchum* spp.) and Eurasian water-milfoil (*Myriophyllum spicatum*). Other invasive species included curly leaf pondweed (*Potamogeton crispus*), brittle naiad (*Najas minor*) and zebra/ quagga mussels (*Dreissena* spp.). Rusty crayfish and Asian clam were not found during the survey.

In 2012 Guffin Bay (HPA 5) was dominated by water chestnuts. In July of 2014 partners from the Jefferson County Soil & Water Conservation District coordinated a hand-pull event at Guffin Bay. One month later only three small water chestnut plants were found at this site. In 2012, multiple large



Figure 4. Small patch of young swallow-wort plants seen at HPA 2. Photo taken by Elizabeth MacEwen.

patches of swallow-wort were seen at HPA 2 at the boat launch and along the road. In 2014, only one small patch of young plants was seen and pulled near the boat launch (**Figure 4**). Observations indicated that this area may have been mowed recently. In 2012, purple loosestrife was not seen at HPA 2, but a single plant was found in 2014 and pulled.

Observation waypoints and results are presented in the following tables.

 $^{^{\}rm 1}$ For a list of prevention and targeted species, see the SLELO-PRISM 2012-2016 Strategic Plan, pp. 36 – 37.

Table 1. Rake-toss results at aquatic HPA's.

Key for all tables: EWM- Eurasian water milfoil ZM- Zebra/ quagga mussels BN-Brittle naiad CLPW- Curly Leaf Pondweed WC-Water chestnut PL-Purple loosestrife SW-Swallow-wort Location: HPA 1- Long Point State Park Date: 8/18/2014 Latitude # of # of Waypoint Throw Depth (ft) Inv Spp. 2014 Inv Spp. 2012 Notes Longitude **Species** Invasives 44.029153 1 6 **EWM** 1 004 5 ZM,EWM Visual 2014: CLPW -76.215161 2 4 1 ZM 3 1 ZM 44.029781 1 7 006 Visual 2012: EWM -76.213619 2 2 0 Location: HPA 3- 3 Mile Bay Date: 8/26/2014 # of Latitude # of Waypoint Throw Depth (ft) Inv Spp. 2014 Inv Spp. 2012 Notes ongitude. **Species** Invasives 44.080877 0 1 3 022 3 **EWM** -76.196494 0 2 4 44.071988 1 0 0 3 024 EWM, ZM -76.215169 0 0 2 Location: HPA 4- Sawmill Bay Date: 8/22/2014 Latitude # of # of Waypoint Throw Depth (ft) Inv Spp. 2014 Inv Spp. 2012 Notes Longitude Species Invasives 44.066795 2 0 1 015 -76.150127 2 0 EWM 44.064762 4 1 1 5 016 **EWM** -76.130079 2 4 0 44.063961 3 0 1 017 6 EWM, ZM -76.132295 2 3 0 44.061638 2 EWM, ZM 1 6 018 7.5 **EWM** -76.134556 2 3 0 44.070038 1 4 0 019 3.5 **EWM** -76.138554 2 4 1 EWM 44.072463 1 TOO DEEP TO DO 020 EWM, ZM -76.135249 2 RAKE TOSS in 2014 44.068887 1 0 021 **EWM** -76.146996

Location: HPA 5- Guffin Bay Date: 8/19/2014								
Wavpoint	Latitude	Throw	Depth (ft)	# of	# of	Inv Spp. 2014	Inv Spp. 2012	Notes
	Longitude			Species	Invasives			
009	44.03889	1	4.5	2	0		EWM, ZM	
009	-76.133791	2		2				
010	44.040333	1	2.5	4	1	BN		2012: 20 WC-pulled
	-76.12022	2		4	4	BN		2014-Visual BN
011	44.041467	1	3	4	1	EWM	EWM	
011	-76.118536	2	3	1	0		EVVIVI	
012	44.040204	1	3	3	0			2014: 3 WC-pulled
	-76.120218	2		2	0			2014. 5 WC-pulled
014	44.039322	1	2.5	5	1	BN	EWM	
	-76.120829	2		3	1	BN		

Table 2. Visual observations from aquatic and terrestrial HPA's.

Location:	HPA 1- Long	Park Date: 08/18/2014		
Maynaint	Latitude	Invasive	Notes	
Waypoint	Longitude	Species		
005	44.027054	FWM	large patches	
	-76.216685	E VV IVI	large pateries	
007	44.029236	T\A/\ /\	tall large natches	
007	-76.214217	EWM	tall, large patches	

Location	HPA 2- DEC	Date: 08/18/2014		
Maynoint	Latitude	Invasive	Notes	
Waypoint	Longitude	Species	notes	
001	44.011518	PL	1 plant pulled	
	-76.288555	r L		
002	44.011108	C/W/	~20 young plants hand	
002	-76.287249	SW	pulled	
002	44.011128	CVA/	~7 young plants hand	
003	-76.287172	SW	pulled	

Location:	HPA 3- 3 Mile	Date: 08/26/2014		
Maynaint	Latitude Invasive		Notes	
Waypoint	Longitude	Species	notes	
023	44.080155	EWM	large natches	
	-76.198277		large patches	

Location: H	IPA 5- Guffir	Date: 08/18/2014		
Waypoint	Latitude	Invasive	Notes	
	Longitude	Species		
008	44.032469	FWM	large patches	
008	-76.148579	EVVIVI	large patches	

2014 Survey Maps

Key for all maps

Red dots are aquatic visual occurrences.

Green lines are an aquatic track.

Red lines are a terrestrial track

Green dots are terrestrial visual occurrences.

The **rake markers** are rake-toss points.



HPA-1, Long Point State Park

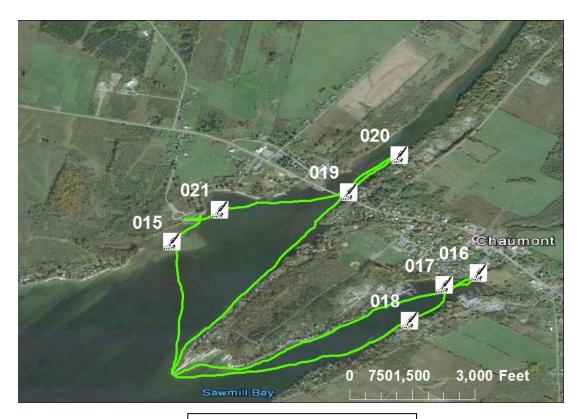


HPA-2, DEC Boat Launch



HPA-3, Three Mile Bay

269 Ouderkirk Road. Pulaski, NY 13142 Rob Williams, PRISM Coordinator



HPA-4, Sawmill Bay

Hyperlink to 2012 Field Report