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

## **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 to be considered as an addendum to the field reports from 2013 and 2015.

2017 Field Survey
Addendum to

## Delta Lake



Figure 1: Panoramic view of Delta Lake. Photo taken by Alicia Wood.

## SLELO-PRISM Early Detection Surveillance August 24<sup>th</sup>, 2017

Report prepared by Alicia Wood and Bryna Daykin, 9/1/2017

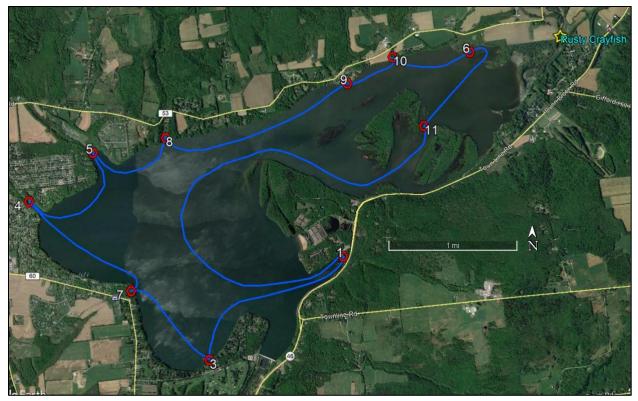
## **Survey Methods and Observations**

Delta Lake was surveyed in August of 2017 by the SLELO Early Detection team (**Figure 1**). The survey involved examining highly probable areas (HPAs) for priority invasive aquatic species. To determine species present at HPAs, the rake toss method was used. For this, a double-sided rake was tossed off both ends of the motor boat to collect aquatic vegetation. The vegetation attached to the rake was identified and determined to be invasive or native. Visual observations were also used when surveying to find and identify invasive species at the HPAs. The location of each HPA was marked using a handheld Garmin GPSmap 60CSx.

The eight HPAs (1-8) examined in 2013 and 2015 were reexamined in the 2017 survey (**Figure 2**). As in previous years, HPA 2 was not surveyed by the 2017 crew as its conditions were unsuitable for aquatic invasive species establishment, due to steep banks, fast water flow, and high water depth. The HPA was located next to the overflow dam, which also raised safety concerns about the crew getting too close to it. Additionally, three new HPAs (9-11) were added

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269 Ouderkirk Road. Pulaski, NY 13142 Rob Williams, Coordinator to this year's survey based on their suitability as habitats for invasive species introduction or establishment (Figure 2).



**Figure 2:** Survey route for the HPAs at Delta Lake. The blue line indicates the motor boat route taken to get to each aquatic HPA, which are marked with red symbols. The yellow star indicates where the Rusty Crayfish were found.

The following 'Prevention "Watch-List" Species' was found during the field survey (Table 2; Figure 4): rusty crayfish (*Orconectes rusticus*). Additionally, the following 'Target Management Species' were found (Table 1): purple loosestrife (*Lythrum salicaria*), Eurasian water milfoil (*Myriophyllum spicatum*), Japanese knotweed (*Fallopia japonica*), and phragmites (*Phragmites australis*). The following 'General Species of Concern' were also found during the survey (Table 1): brittle naiad (*Najas minor*).

Rusty crayfish (*Orconectes rusticus*), a 'Prevention "Watch-List" Species' within the SLELO-PRISM, were found in the 2017 survey.

As a result of finding rusty crayfish in Delta Lake, a recommendation was made to the SLELO PRISM Education and Outreach Committee, to enhance our "Don't Dump Bait" message in the Delta Lake area beginning in 2018.

SLELO-PRISM c/o The Nature Conservancy 269 Ouderkirk Road. Pulaski, NY 13142 Rob Williams, Coordinator Purple loosestrife was found at HPA 5. Both Japanese knotweed and phragmites were only seen at HPA 8. Eurasian water milfoil was observed at HPAs 1 and 4. Brittle Naiad was found at HPAs 1, 4, 5, and 7. Additionally, **Rusty crayfish were found in Mohawk River, at the point where the river feeds into Lake Delta** (**Figure 2; Figure 3; Figure 4**). Rocks were turned over in shallow areas and crayfish were then caught using a small net. These were then thoroughly examined by the Early Detection Team to determine if they were native or invasive. Pictures of those believed to be invasive were then sent to a crayfish expert for confirmation<sup>1</sup>.



**Figure 3:** Rusty Crayfish found at Delta Lake. Note the red spots apparent on the sides of the carapace in the upper two photos. The bottom left photo shows the ventral side of a male crayfish, while the bottom right photo depicts the black bands present on the claw tips of this species. Photos taken by Alicia Wood and Zach Bengtsson.

<sup>&</sup>lt;sup>1</sup> Chris Pennuto, Buffalo State College

**Table 1:** Descriptions, coordinates, and invasive species sightings at HPAs at Dexter Marsh WMA. New HPAs aquatically surveyed for the first time in 2017 are highlighted in yellow.

НРА	Habitat Description	Latitude	Longitude	Throw	Depth (ft)	# Total Spp.	# Inv.	Inv. Type	Visuals
1	Cove Near Delta Lake	43.28623	-75.41666	1	7	5	1	EWM	no
1	State Park Boat Launch	43.20023	-73.41000	2	,	6	1	BN	invasives
3	Cove Near Country Club Docks	43.27454	-75.43752	1	11.5	0	0 no	_	
				2		0	0		invasives
4	Sheltered	43.29245	-75.46616	1	3.5	5	1	BN	BN, EWM
	Cove	73.27273	-73.40010	2	3.3	4	1	EWM	
5	Cove Near Docks	43.29807	-75.45629	1	4	5	1	BN	- PL
				2	_	5	0		
6	Shallow Water	43.30984	-75.39644	1	3	3	0		no invasives
U	Shanow water	43.30704	-73.33044	2	3	5	0		
7	Sheltered	43.28229	-75.44985	1	9	3	0		BN
	Cove			2		2	1	BN	
8	Cove	43.29982	-75.44482	1	3	4	0		PH, JKW
Ű		13.23302	72.11102	2	J	5	0		
9	A-Ok Campgrounds Marina/ Boat Launch	43.30615	-75.41602	1	15	0	0		no invasives
				2		0	0		
10	Cove	43.30923	-75.40878	1	4	4	0		no
				2	•	1	0		invasives
11	Cove with Slow Moving Water	43.30120	-75.40386	1	5	3	0		no invasives
11				2		4	0		

**Table 2:** The coordinates for the location of Rusty Crayfish found at Delta Lake.

RUSTY CRAYFISH								
Point Name	Habitat Description	Latitude	Longitude					
Rusty Crayfish	Slow Moving Shallow Rocky Water	43.31173	-75.38197					



Figure 4: The location where Rusty Crayfish were found at Delta Lake.