

Memo

To: Sauk River Chain of Lakes Association
From: Daniel McEwen, Principal Scientist, Limnopro Aquatic Science, Inc.
Date: October 20, 2020
Subject: 2020 Lake Management Highlights

5/12/2020 Spring Curlyleaf Pondweed Meandering Survey

Limnopro delineated areas for treatment, which were subsequently sprayed by a third party vendor (Clarke). A report and shapefiles were provided in the spring to the SRCL Association.

8/25/2020 Summer Point Intercept Plant Survey

Limnopro conducted a point intercept survey at 1 point per 2 acres over the entirety of the littoral zone of the SRCL. Following is a table summary of plants found. These results exemplify lakes poor water quality (high nutrients) dominated by surface plants such as coontail, duckweeds, filamentous algae, watermeal, and water lily. We found one suspected but unconfirmed new AIS in the form of putative hybrid Eurasian watermilfoil.

CC	Scientific Name	Common Name	Density	Occupancy
2	<i>Ceratophyllum demersum</i>	Coontail	24%	33%
1	<i>Lemna</i> spp.	Duckweed	13%	24%
NA	Various	Filamentous algae	7%	9%
5	<i>Spirodela polyrrhiza</i>	Greater duckweed	7%	13%
5	<i>Wolffia</i> spp.	Watermeal	7%	12%
6	<i>Nymphaea odorata</i>	American white waterlily	6%	11%
5	<i>Lemna trisulca</i>	Star duckweed	6%	9%
2	<i>Typha</i> spp.	Cattail	5%	7%
NA	<i>Chara</i> spp.	Muskgrass	4%	5%
5	<i>Utricularia macrorhiza</i>	Common bladderwort	3%	5%
7	<i>Myriophyllum sibiricum</i>	Northern watermilfoil	3%	4%
0	<i>Potamogeton crispus</i>	Curlyleaf pondweed	2%	4%
4	<i>Elodea canadensis</i>	Canadian elodea	2%	3%
3	<i>Stuckenia pectinata</i>	Sago	2%	3%
6	<i>Vallisneria americana</i>	Wild Celery	2%	3%
6	<i>Heteranthera dubia</i>	Water stargrass	2%	3%
8	<i>Potamogeton friesii</i>	Fries' pondweed	1%	2%
6	<i>Potamogeton zosteriformis</i>	Flat-stemmed pondweed	1%	2%
6	<i>Nuphar variegata</i>	Spatterdock	1%	1%
7	<i>Elodea nuttallii</i>	Nuttall's elodea	0.3%	1%
5	<i>Potamogeton richardsonii</i>	Claspingleaf pondweed	0.3%	0.5%
9	<i>Stuckenia vaginata</i>	Sheathed pondweed	0.3%	0.5%
8	<i>Myriophyllum verticillatum</i>	Whorled watermilfoil	0.2%	0.3%
4	<i>Najas marina</i>	Sea naiad	0.2%	0.3%
5	<i>Najas flexilis</i>	Flexuous naiad	0.1%	0.2%
4	<i>Persicaria amphibia</i>	Water smartweed	0.1%	0.2%
6	<i>Potamogeton illinoensis</i>	Illinois pondweed	0.1%	0.2%
3	<i>Sagittaria latifolia</i>	Broadleaf arrowhead	0.1%	0.2%
5	<i>Ludwigia palustris</i>	Water purslane	0.05%	0.1%
0	<i>Myriophyllum spicatum</i>	Eurasian watermilfoil	0.05%	0.1%

Plant survey summary for a point intercept survey in the summer (August) of 2020 on the Sauk River Chain in Stearns County. Density is the total amount of plant biomass collected as a percent of total and occupancy is the percent of sites where at least 1 plant was found for each species

9/22/2020 Intensive Search at Four Landings (see AIS report)

No new AIS were found at boat launches. Zebra mussels were found but already reported in the lakes. See supplemental AIS report for further details.