LAKE SIR-JOHN AQUATIC PLANT SURVEY - 2025

SURVEY: Most of the shoreline was surveyed as well as the pond on the other side of the culverts and most around the island. **The part of the lake on the other side of the 329 towards Lake Beattie was not surveyed this year.** The plants were checked very close to the shoreline and a bit deeper with an aquascope. An inventory of the plants was made.

DATE: July 28nd, 2025

PLANT TEAM:

Lake Sir-John Volunteers: Mariam Bowen, Chris Romer, Cynthia Dawson, Peter Nicholson

CRE Laurentides trained volunteers from Lake Hughes: Heather McCullough & Joanne Hayes

PREVIOUS SURVEYS: CRE Laurentides: 2016 & Volunteer Plant Team: 2022, 2023 & 2024

Jean-Louis Courteau, diving, surveyed the end of the lake near the 329 and the part of the lake on the other side of the 329 towards the Marchand Dam in the fall of 2024 – he ruled out the presence of Invasive Snails and Eurasian Water-milfoil but did note the very large amount of Large-leaf Pondweed.

2025 AQUATIC PLANT SURVEY

> No invasive or suspicious aquatic plants were identified.

Some of the previously identified plants were not found this year as the part of the lake on the other side of the 329 was not surveyed.

NEWLY IDENTIFIED IN 2025: (3 NEW SPECIES)

Water Smartweed / Yellow Pond-lily (2nd species) / Fontinalis Moss

25 plant groups / 40 plants have been identified during the 5 surveys - SEE ATTACHED LIST

OBSERVATIONS:

There appears to be an increase in all plant growth, especially Large-leaf pondweed.

Lake Sir-John has the largest number of different plants (compared to other Gore Lakes) which is probably due to it being the last lake in the Ruisseau Williams chain of lakes. There is a lot of concern about what is passing through the Marchand dam to Lake Sir-John. The visibility was excellent.

1

REFERENCES: CRE Laurentides / MAINE Volunteer Lake Monitoring Program / RAPPEL

Report prepared by: Heather McCullough

Document reassembled from PowerPoint for ease of distribution

INDIGENOUS WATER-MILFOIL:

This is the first year that some Indigenous water-milfoil was found in the the main part of Lake Sir-John – previously it was only in the part of the lake across the 329.

Eurasian Water milfoil has hybridized with an indigenous milfoil making it even more difficult to identify – the growth and spread of all milfoil should be monitored.

LARGE-LEAF PONDWEED: Extreme concern!

The L-L PW growth and spread has increased substantially – now in all parts of the lake with some dense colonies.

Jean-Louis Corteau, while diving at both sides of the 329 and in the pond beyond the culvert last fall, ruled out Eurasian Water-Milfoil and Chinese Mystery Snails, but did report on the Large-Leaf Pondweed Situation. The Lake Enviro-Plant team has already surveyed and mapped the evolution of this plant and will be studying and evaluating the situation.

LAKE SIR-JOHN (2)

OBSERVATIONS

ALGAE:

- There were small amounts of algae present nothing problematic.
- Algae should be monitored, especially during the fall season, as it often increases at this
 time. Algae increases when there is an increase in phosphorus and warming waters. Unlike
 invasive species, algae is not transferred from one lake to another.
- When cyanobacteria, which is normally found in all lakes, increases and forms a bloom, it may contain toxins.
- For more info about cyanobacteria, also known as "Blue-green algae":
 https://www.environnement.gouv.qc.ca/eau/flrivlac/algues-en.htm.

THE FOLLOWING IS A QUOTE BY JEAN-LOUIS COURTEAU (from an aquatic plant report that he did for Lake Louisa)

As for algae blooms - algae and aquatic plants are 2 things! Algae is mostly microscopic: they are ALWAYS the result of an overabundance of nutrients in the water. And this overabundance is very often the result of human activity. (Inadequate septic installations, devegetation of shores (allowing nutrient-rich run-offs after rains), boats producing big waves in shallow water (this stirs-up sediment and puts back in the water column nutrients that were "buried" in sediments).

Also, for the same reasons, potted decorative flowers or plants should not be present on docks or shore. The nutrients and fertilizers in the soil will get in the water with rain and directly feed algae. In one summer, according to one of our biologist friends, a big potted plant can leak out the equivalent of the nutrients contained in 100 gallons of raw sewage water!

REFERENCES: CRE Laurentides / MAINE Volunteer Lake Monitoring Program / RAPPEL

Report prepared by: Heather McCullough

No need to embellish the lake: you chose to live there because it was already beautiful! Leave it to nature, she knows best.

Compost, even though it is natural, should not be used within the 15 meter / 50 ft shoreline protected zone. It is rich in nutrients which can leach into the lake.

SNAILS:

2 very small snails were found on the shoreline of Lake Sir-John – since the survey, more small snails have been found – presumed indigenous since no larger snails have been discovered.



Lake Beattie: No indigenous or invasive snails were found during the Lake Beattie Aquatic Plant Survey Aug 11th, 2025.

Lake Solar: Invasive Chinese Mystery Snails were discovered during the Aquatic Plant Survey Aug 16th, 2025.

Lake Caroline: Nothing yet reported.

Lake Barron: Invasive Chinese Mystery Snails – limited harvesting 2025

Lake Sir-John has the most proactive team approach for invasive species. As well, the LS-J communication system is amazing.

• In order to include a page in the Aquatic Plant Survey Booklet, lets pool our info – all the things we can do. Let me know what you think.

SUGGESTIONS for FOLLOW-UP at LAKE SIR-JOHN

- It is of interest to all our lakes to share information. Lake Sir-John Environment members will be monitoring the growth and spread of the Large-leaf Pondweed. The Alliance Volunteer Plant team will share information gathered from other local lakes.
- Many of the Sir-John accesses are showing serious signs of erosion, worsened by the severe fluctuation in the water level. The erosion leads to sedimentation which leads to increased nutrients in the runoff during heavy rains. The increased vegetation in the lake at these

REFERENCES: CRE Laurentides / MAINE Volunteer Lake Monitoring Program / RAPPEL

Report prepared by: Heather McCullough

3

Document reassembled from PowerPoint for ease of distribution

- spots is the proof. An improvement project of these accesses has already been planned by the lake association. As well, boat racks are highly recommended.
- A training session for measuring sediments is in the planning stage by the Alliance.
- Since Lake Sir-John is so visible from the road, perhaps signs saying Private Lake No Public Access... Gore has already provided these signs to other lakes and some lakes have made their own.
- Mat Madison recommends analysis (phosphorous and nitrogen) of tributary streams in the
 watershed, including upstream lakes to evaluate the nutrient contribution from the
 watershed. He recommends that streams be tested in the autumn, following a precipitation
 event (flood period).

The Municipality tests 18 streams in Gore + Lake Beattie Boat Launch: 2024: Lake Beattie: average phosphorous level was 6,9 µg/l (oligotrophic).

https://www.cantondegore.qc.ca/storage/app/media/uploaded-files/Surface%20water%20analysis_Report%202024.pdf

• RSVL recommends testing for 2-3 consecutive years and then taking a break for 4 years. Due to the vulnerability of Lake Sir-John, recommend contacting RSVL to request annual testing. Other lakes (Barron, Hughes, Dunany) have been accepted for annual testing.

https://www.environnement.gouv.qc.ca/eau/rsvl/relais/rsvl_details.asp?fiche=273