Newsletter Fall 2025



THE SHORELINE

Association des propriétaires des lacs Cook et Corbeil (APLCC)

Seeking funding for Junior Beach repairs



Junior beach is in urgent need of restorative work. The bank going down to the lake is eroding and will continue to do so unless we act soon. Repair work requires building a small retaining wall, laying down soil, levelling the bank and planting indigenous shrubs to prevent further erosion.

Our funds can cover most of the cost of the work; we have \$3,000 in hand, but as this is an unexpected expense we are asking you, as members of the association to help us. We need an extra \$3,000. Any funds you could give us would be much appreciated.

Contributions can be made via cheque or etransfer to the APLCC.

Better ditches = healthier lakes

Roadside ditches are often seen as little more than muddy trenches. In fact, a well-managed ditch is actually one of the first lines of defense against pollution

entering our lakes. A poorly designed or unstable ditch allows fine sediment from rainwater runoff to find its way into streams and lakes, contributing to premature lake ageing. When designed and maintained properly, ditches slow down rainwater, divert excessive runoff into settling basins, filter out soil sediment and trap nutrients before they flow downstream—helping to keep lake water clean and ecosystems thriving.

Problem areas and solutions

Volunteers from the APLCC have identified some problematic areas and have advised the municipality of the most important one: the ditches alongside Forest Hill down to Lakeshore and their continuation along the sides of



An example of an unstable ditch (corner of Forest Hill & Lakeshore), showing accumulation of sediment and establishment of an invasive plant species (phragmites)

Lakeshore East, where they empty directly into the lake. The main ditch shown in the photo also empties directly into the stream connecting Corbeil to Cook. Maintaining healthy ditches *doesn't* mean clearing them or removing vegetation. In fact, that can be counterproductive. The goal is *balance*: keeping water flowing while preserving plants and soil that filter the water. Routine clearing of blockages, careful re-grading to prevent erosion, and periodic mowing are important. As a resident, you can help by keeping ditches free of trash, yard waste and invasive plants. Taking care of these waterways is a simple and effective way of safeguarding our lakes.



Invasive plants spotted in our area!

Japanese Knotweed

Japanese Knotweed (*Reynoutria japonica*) is a highly invasive perennial plant that causes significant ecological and structural problems. It has spade- or shield-shaped green leaves, hollow bamboo-like stems with a zigzag pattern, and creamy-white flower clusters that bloom in late summer. In spring, reddish-purple shoots grow rapidly, reaching up to 3 meters tall by summer. In autumn, the leaves yellow and wilt, leaving brittle, brown canes throughout winter.



Japanese knotweed is one of the most frustrating and damaging invasive species in Canada. The best available science shows that "poking the bear" - digging, mowing, cutting, and/or tarping - is not effective and can cause knotweed's large underground root system to "roar back" at you, in other words, launch a massive growing spree. Science shows that the most effective control method is applying glyphosate weedkiller during a specific window in late summer.

Japanese knotweed is one of the most resilient organisms on Earth, evolved to survive hot lava flows. Its roots or rhizomes can grow more than 10 feet deep and 35+ feet beyond where you see aboveground stems. The root system can stay dormant for more than 20 years, just waiting for a chance to pop up again.

Identification

Here is one in-depth guide to identifying it: https://youtu.be/MPqVLn_i2nY

Here is a guide to plants that are commonly mistaken for knotweed: https://youtu.be/5fTow4UCQjY

Eradication

Resist the urge to attack knotweed with a mower, string trimmer, or shovel. Any method other than applying glyphosate will likely stimulate this plant's root system to go on a growing spree. Remember, don't poke the bear!

N.B.: The use and sale of pesticides in Morin-Heights is prohibited by municipal by-law. Therefore, residents who need to control Japanese knotweed legally must hire certified pesticide applicators or companies authorized by the province to apply glyphosate specifically for invasive species control.

Cut, mowed, or dug-out knotweed plant material is like a time bomb. If you scatter bits of it around your yard, new plants will likely grow. If you seal it in a trash bag and send it to the landfill, it can start growing inside the bag, break through the bag, and start a new stand at the landfill.

If you burn knotweed in a firepit and miss a piece of root, you may end up with a new patch in your firepit. Remember, this plant is adapted to lava flows.

If knotweed is in your yard or a neighbour's, think twice about sharing plants from your yard with friends, selling them, or moving them to a new home or your camp. Roots hidden in soil are another common method of spread.

Invasive plants spotted in our area (cont.)

Common reed or Phragmites australis

Phragmites australis, commonly known as the common reed, is an invasive perennial wetland grass that spreads aggressively in wet or moist habitats. It invades areas by spreading through windblown seeds, animal movement, soil transfer, and extensive underground rhizomes that resprout when broken. This plant can grow over 15 feet tall and forms dense, monotypic stands, with over 20 stems per square foot, crowding out native vegetation and wildlife by monopolizing nutrients and space.



Given the harmful effects of common reed on the environment and because it is very difficult to eradicate, it is important to prevent its establishment.

The invasion of *Phragmites australis* causes significant ecological and recreational problems. It lowers biodiversity by outcompeting native plants, releases toxins from its roots that inhibit other vegetation, alters wetland nutrient cycles and water levels, and creates barriers that restrict wildlife movement.

Eradication

When trying to eradicate phragmites, several practices should be strictly avoided to prevent worsening the infestation (N.B.: see note on previous page on the use and sale of pesticides in Morin-Heights):

- Cutting without herbicides: Cutting phragmites multiple times in a season or cutting alone will not kill
 the underground rhizomes. It can actually stimulate growth and increase the stand density if not paired
 with herbicide application. Cutting without removing or treating cut stems can cause sprouting and
 spreading.
- 2. Cutting after seed head development: Cutting plants after seed heads have developed and matured can aid in spreading seeds further, leading to new infestations. Therefore, cutting should ideally happen before seed maturation, typically before mid to late August.
- 3. Partial treatment: Treating or cutting only a portion of a phragmites stand or infestation cell will not control its spread and wastes resources. Complete treatment of the infestation area is necessary.
- 4. Incorrect herbicide use: Applying herbicide at the wrong time (too early or after seed set), under unfavorable weather conditions, or using herbicide concentrations lower than recommended reduces efficacy. This not only wastes effort and resources but can lead to resistance in phragmites populations.
- 5. Improper Disposal of Cut Material: Leaving cut stems or rhizomes on site can lead to resprouting or spreading new plants from broken fragments, increasing the problem.
- 6. Neglecting Follow-Up: Phragmites eradication is a long-term effort requiring multiple treatments and monitoring. Stopping control efforts prematurely will likely result in regrowth.

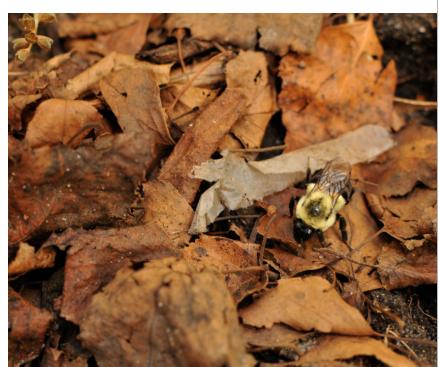
Leave the leaves!

If you've not already raked or blown the leaves off your lawn, relax... you're not lazy, you're ecologically minded! Leaving leaves on lawns directly benefits insects by offering habitat, shelter, food, and overwintering opportunities, as shown by multiple recent studies and expert surveys. This practice supports healthy ecosystem functioning, helps pollinator populations recover, and benefits the broader web of wildlife.

- A 2025 University of Maryland study found that removing or shredding leaves from lawns *significantly reduced beneficial insect populations*, with moths and butterflies declining by 44%, spiders by 67%, beetles by 24%, and parasitic wasps also negatively affected.
- Studies show leaf litter supports the full insect life cycle, providing shelter for eggs, larvae, caterpillars, pupae, and adults—including pollinators (butterflies, moths, bees), decomposers (beetles, ants), and predators (spiders, centipedes).
- One square meter of leaf litter can house 40,000–50,000 insects!



 Several species of butterflies overwinter in Quebec under leaf litter, mainly as larvae (caterpillars) or pupae, emerging as adults in spring.



- Bumblebee queens use leaf litter for winter insulation and hibernation, while beetles, fireflies, and ants rely on leaves for microhabitats and development.
- Not only insects—leaf litter also aids amphibians (frogs, toads), birds (sparrows, thrushes, turkeys), and small
 mammals by providing shelter, overwintering sites, and food sources.

Practical Guidance

• Experts recommend leaving a light layer of leaves on lawns or relocating excess leaves to garden beds and under shrubs, rather than removing or shredding them entirely.





What happens beneath the frozen surface of our lakes?

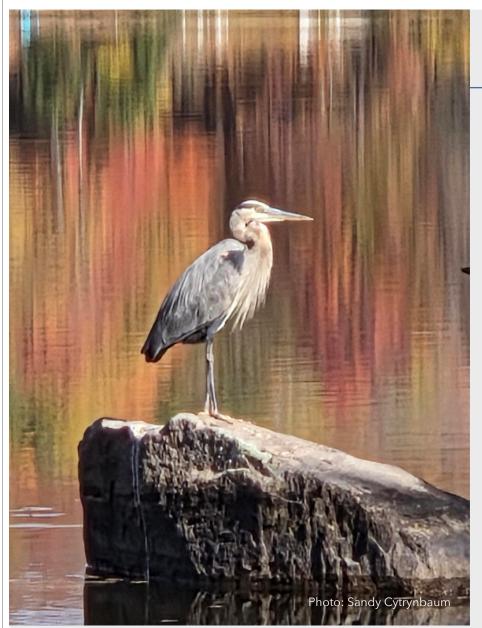
During winter, life under the ice remains surprisingly active despite the frozen surface. The ice insulates the water below, creating a stable thermal environment where water temperature stays around 4°C, which is optimal for aquatic life survival.

Photosynthesis slows but continues as some light penetrates the ice and snow, supporting algae and microscopic plants that form the base of the food web. Zooplankton and small invertebrates adapt by reducing their metabolism or entering dormancy, while fish such as rainbow trout remain active, seeking oxygen-rich areas and feeding opportunistically. Cold water has a higher oxygen capacity, so dissolved oxygen levels remain sufficient, but depletion can occur in poorly mixed or organic-rich lakes. Amphibians and reptiles enter a state of dormancy or hibernation.

This dynamic winter ecosystem influences lake health year-round and demonstrates resilience to seasonal extremes, though it is vulnerable to ongoing climate change impacts that alter ice cover duration and water chemistry.

Have a great winter!





What is the APLCC?

What is your property worth on a polluted lake?

The APLCC is a voluntary community organization created in 1986 and incorporated in 1991, bringing together individuals and families dedicated to the preservation of the natural environment of Cook and Corbeil lakes.

Our mission:

Protect and improve Cook and Corbeil lakes and their surrounding areas, improve water quality, fishing and the aesthetic values of our lakes, while respecting the interests of landowners.

Our objectives:

- Educate and inform permanent and temporary residents about actions related to our mission,
- Foster relationships between residents of our lakes regarding common goals and concerns,
- Provide an educational forum for all topics affecting our common interests,
- Provide a forum to voice concerns and issues regarding our lakes,
- Cooperate and work with all levels of government and agencies on issues affecting our lakes,
- Undertake projects and activities deemed beneficial for our lakes.

APLCC Executive

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www.aplcc.info