THE MEMPHRÉ

Memphrémagog Conservation inc.

MAY 2019

Dear friends,

As a new season begins on Lake Memphremagog, we are busy preparing for the projects and challenges that your organization will face this coming summer.

Since the beginning of the year, our small team has been busy hiring young biologists for the 2019 lake patrol, working on a study of phosphorus in Lake Memphremagog, which the Canadian and American governments, via the International Joint Commission, have mandated us to carry out, and begin a study, on the ground, of fishing activity and the state of fish in the lake, financed over two years by our friends and neighbours in the State of Vermont.

Naturally, there are many other projects currently underway in the region that MCI is involved in and in which it represents your interests. These include updating of the MRC's land use plan, and eventually that of the six shoreline municipalities, the difficult and very long Coventry landfill site saga near the American border, the battle with zebra mussel colonies identified on July 18, 2018 by our patrollers in our lake, and many other subjects.

A diver by the name of Jacques Boisvert searched for the lake's monster, Memphré, during his 5,000 dives in the lake. I would like, for a few minutes, to talk to you about the five 'Monsters' which currently threaten us, and that we are trying to get a handle on. Firstly, the significant proliferation of invasive exotic aquatic plants and algae of all sorts in the lake, a phenomenon which has spread around the world. Secondly, this huge landfill site, with two feet in the lake on the Vermont side, which accepts 30,000 truckloads of garbage annually, and a portion of whose leachate enters our drinking water reservoir, which serves 175,000 Québec residents. In third place, a future monster, the zebra mussel. You will likely notice our patrollers diving with snorkels to inventory the problem, taking care to collect any zebra mussels observed. Our fourth preoccupation is the most complex, the effects of a warming of the planet. Finally, the unceasing increase in the size and power of the boats on the lake, and their impact on our waterways. In concert with our neighbours on Lake Massawippi and the Federal government, MCI is participating in an effort to improve the regulation of motorboats.

The challenges facing us, both shoreline residents and us here at MCI, are immense. Luckily, the team of volunteers and staff of your organization are becoming younger, more enterprising and better educated. With the efforts of all the actors, members of the Board of Directors, governments, municipalities, residents, associations, universities, donors, as well as the prayers of the good monks of the Abbey of Saint-Benoit, we will meet these new challenges as our predecessors did.

In conclusion, we invite you to attend our annual general assembly, which takes place on Saturday, June 8, at 9:30 AM at the Hermitage Club, to discuss and learn more about our actions regarding these various problems that affect the quality of our lake's water.

Many thanks to all of those who help us,

Robert Benoit
Volunteer president

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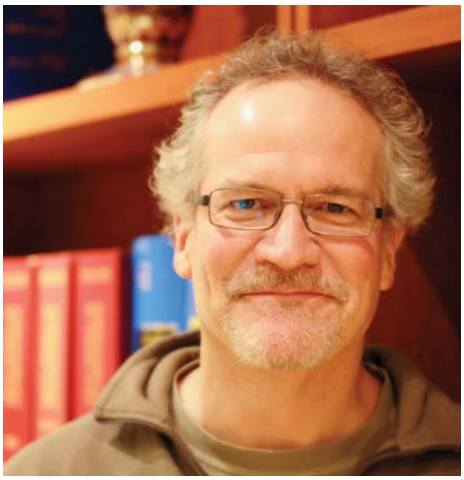
We can all make a **DIFFERENCE...**

A special presentation by Mr. Michel Bélanger will take place at our annual general meeting on June 8 at the Hermitage Club. Mr. Bélanger is one of the founders of the Centre Québécois du Droit de l'Environnement and ex-president of Nature-Québec. His specialty is environmental law, and he has worked as a volunteer for several groups in defense of the environment. At our AGM, he will discuss *Ways that we can make a difference.*

Do not miss this fascinating presentation!



2019 ANNUAL GENERAL MEETING

MCI's Annual General Meeting of members will take place on Saturday, June 8, at 9:30 AM at the Hermitage Club (200 de l'Hermitage Street, Magog). The meeting will review the the 2018-2019 season's results, discuss the work of our patrollers, and bring you up to date on recent battles and successes. Eric Phendler will share with us his journey on the Mississippi River that raised funds for MCI and Mr Michel Bélanger, lawyer and former president of Nature Québec, will be our invited guest. We hope to see you all there!

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MCI and Memphremagog Watershed Association (MWA) are finalizing the study on nutrient loading in Lake Memphremagog

In 2018, the International Joint Commission (IJC) asked MCI and MWA to examine current programs and measures that address nutrient loading and algal blooms in Lake Memphremagog, and to make recommendations on strengthening these efforts.

Consultation with various experts, organizations, municipalities and other governments, as well as a review of the literature will provide a snapshot of the current state of the watershed and support a review of current management efforts to target nutrient loads in Lake Memphremagog, as well as ways these can be strengthened. Preliminary results from this study will be presented and reviewed in a binational workshop planned for early fall 2019 and then made available for public consultation. The project will provide recommendations on ways to consolidate and improve the current efforts to reduce concentrations of nutrients and the proliferation of aquatic plants and cyanobacteria that they cause.

MCI and MWA will carry out this project with the Conseil de gouvernance de l'eau des bassins versants de la rivière Saint-François (COGESAF) and the Vermont Department of Environmental Conservation (VTDEC). Furthermore, the IJC has appointed 12 people from the United States and Canada to the Memphremagog Study Advisory Group (MSAG) to provide direction and advice to MCI and MWA during the study. The study will be presented to the IJC at the beginning of 2020.

The IJC was established under the Boundary Waters Treaty of 1909 to help the United States and Canada prevent and resolve disputes over the use of the waters the two countries share. Its responsibilities include investigating and reporting on issues of concern when asked by the governments of the two countries.

Ariane Orjikh, Biologist and General Manager

THE MEMPHRÉ
Memphrémagog Conservation inc.

MCI is fortunate to have several young people on its Board of Directors. Our younger members felt that after more than 50 years of existence the annual newsletter should have a new name. We chose The *Memphré*, a nickname for the lake, but also to remember our friend the late Jacques Boisvert, super diver, who made more than 5,000 dives in the lake. Jacques was one of the first members of MCI and is the creator of the friendly, mythic monster Memphré. Our newsletter, with a more modern name and graphic design, is also available on our web site.

THE COVENTRY LANDFILL EXPANSION: **A THREAT TO LAKE MEMPHREMAGOG**

Public meeting on the expansion of the Coventry landfill site organized by Don't Undermine Memphremagog's Purity (DUMP). MCI was invited to present their recommendations.

Memphremagog Conservation is involved in one of the toughest battles it has faced since its inception in 1967: located in the town of Coventry, a small American village within the lake's watershed, the landfill accepts all of Vermont's garbage, as well as garbage from a number of other US states. With the help of a group of volunteers from Vermont, MCI has been leading the charge, rallying those opposed to the expansion of this landfill. We lost count of the number of letters we have written, and media interviews given, publicly stating our position at the MRC, with the mayors of both Magog and Sherbrooke, and our federal and provincial ministers and members of parliament. The courage and competence required to create a public outcry and come up with solutions that are acceptable both environmentally and politically is in our DNA. This is not over…

Technical details of the situation are as follows.

Operated by Casella Waste Systems, the Coventry landfill site, which is adjacent to the Black River, a principal tributary of Lake Memphremagog, is the only waste treatment facility in the State of Vermont. Over the years, the landfill operations have gradually increased. Its starting capacity of 270,000 tons per year was increased to 370,000 tons in 2005 and to 600,000 tons in 2013. In 2017, Casella applied for a 51-acre expansion of the landfill, which would allow the burial of 500,000 tons of waste annually for 22 additional years.

MCI is particularly preoccupied with the Coventry landfill expansion and the leachate treatment at the Newport wastewater facility. We believe that the precautionary principle must be applied due to the ecological, recreational and tourism importance of Lake Memphremagog, and the fact that the Lake is a drinking water reservoir for more than 175,000 residents of the Eastern Townships. The precautionary principle is defined as, «where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation». Currently, little information exists on the presence of contaminants from the landfill in Lake Memphremagog.

Since 2009, approximately 15,000 gallons of landfill leachate has been treated daily at the Newport wastewater treatment plant. This treatment facility is not equipped to treat leachate containing high levels of several contaminants, and in fact does not treat most of the chemicals coming from the leachate. Disposal through the Newport treatment plant currently disperses hundreds of chemicals, many known to have adverse effects on human health, into Lake Memphremagog. Furthermore, in 2017, MCI discovered out that some basic tests have not been performed since 2008 at the Newport treatment plant. Whole Effluent Toxicity (WET) Tests were not carried out between 2008 and 2018, while leachate has been treated at the plant since 2009. The WET test is used in Vermont and Quebec wastewater treatment facilities to determine whether a wastewater discharge will have toxic effects on the organisms in the receiving water. Only one WET Test was performed following MCI's finding, i.e. in August 2018. We believe that new studies must be done to provide evidence on the impacts of landfill leachate treatment on the quality of the lake's water.

When various pollutants have been found in the landfill's groundwater, there has been no information available on the impact of these pollutants on water quality and biodiversity in the lake. There have been no studies of potential changes in aquatic species distribution and composition or on bioaccumulation of toxins in fish. We need information on the risk of contaminants migrating to A. underground water, B. the wetlands, C. the Black River, D. South Bay and E. the Lake, resulting in water and ecosystem contamination.

The current expansion project of the Coventry landfill is similar to the case of the last landfill located on the Canadian side in Lake Memphremagog's watershed, near Lake Lovering, in Magog. In 2002, Intersan proposed a landfill expansion project, using the most advanced technology existing at the time, to increase the quantity of waste buried annually to 300,000 tons. In 2007, during public hearings held in Magog on the project, even though the project followed all regulations and was proposing the best existing technology, the public at large, as well as politicians, including the Memphremagog MRC and the City of Magog, expressed their opposition to the project. No technology was guaranteed safe and the chosen site was completely inappropriate. As for the landfill in Coventry, the project was too close to the Lake. Following the public hearings, the Québec's environment ministry concluded that the expansion project would not go forward unless the Memphremagog MRC and the City of Magog supported it. The landfill was subsequently closed, mitigating any further risks for the Lake and its watershed.

At the time of this writing, the Coventry landfill is still waiting for the final approval of its expansion, which is planned to start this summer. We hope the Environmental Commission of Vermont will consider the recommendations we presented at their hearing held on January 22, 2019:

- More extensive research must be done to know the actual impacts of the Coventry landfill on Lake Memphremagog;
- The outflow of treated leachate into the lake must stop;
- The expansion of the landfill must be stopped, as was done for the landfill in Magog;
- The precautionary principle to prevent any degradation of Lake Memphremagog must be applied.

Robert Benoit, Volunteer President, and Ariane Orjikh, Biologist and General Manager

Presenting the **2019 PATROL TEAM**

MCI is pleased to welcome Vicki Marcoux as patrol coordinator. She is a recent graduate of Laval University in natural and managed environments, and will be joined by Virginie Lepape, a graduate of the University of Sherbrooke in ecology, and Eric Phendler, pursuing his studies in biology at Bishop's University.

The summer patrol will, as usual, work closely with the Québec Environment ministry (MELCC) in monitoring the quality of the lake's water, with the Memphremagog MRC in monitoring the quality of the water in the lake's tributaries, and with the City of Magog in monitoring the quality of its swimming beaches.

Several projects are also planned for this coming summer, including the revegetation of a phragmite control site at Forand park in Fitch Bay. The patrollers will also continue to monitor the extent and control of exotic invasive species, such as the zebra mussel, phragmites and Eurasian watermilfoil.

The patrol team welcomes all observations, questions and comments, by telephone or text at (819) 620-3939, by email at patrol@memphremagog.org or via our Facebook page Memphremagog Conservation Inc.

Santiago Doyon, Biologist and 2018 Patrol Coordinator


Viginie Lepape


Éric Phendler

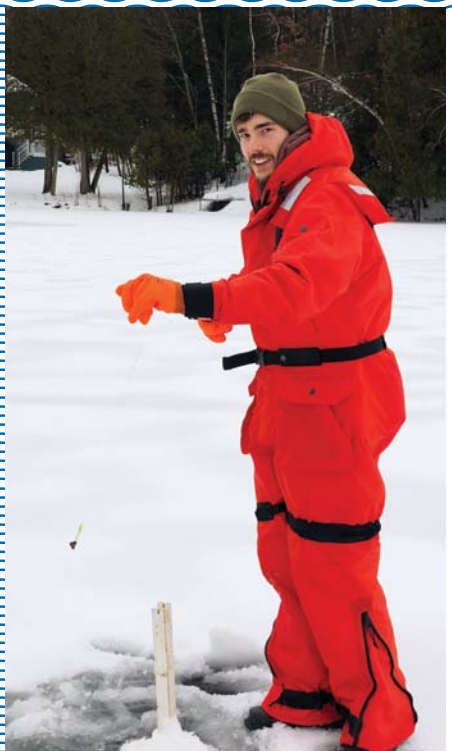

Vicki Marcoux

A LOOK BACK AT THE SUMMER OF 2018

Summer 2018 was the summer of exotic invasive species. The patrol was involved in several control and follow-up activities for zebra mussels, Eurasian watermilfoil and phragmites. It should be noted that at the same time, the Québec government decided to invest 8 million dollars in the fight against exotic invasive plants.

When talking to boaters and shoreline residents, the patrol took the opportunity to discuss various subjects with them, such as best boating practices, exotic invasive species, cyanobacteria, as well as subjects relevant to the protection, conservation and improvement of Lake Memphremagog and its watershed.

Santiago Doyon, Biologist and 2018 Patrol Coordinator



Study of **SPORT FISHING** on Lake Memphremagog

MCI, the Vermont Fish and Wildlife Department (VFWD), the Québec ministry of Forests, Wildlife and Parks (MFFP) and the Memphremagog MRC have joined forces to carry out a study of sport fishing on Lake Memphremagog. This study, taking place from December 2018 to November 2020, will provide biological data on the various species of sport fish as well as the fishing pressures they face. Three teams of biologists are interviewing fishermen throughout the entire lake. The data collected includes information on when they fish and what they catch, as well as a survey on their fishing habits on the lake. In winter, they will be on snowmobiles, and in summer in boats well identified with MCI's and the VFWD's logos. MCI is proud to provide their expertise and support to make this cross-border initiative a success. As a matter of fact, two former MCI patrollers are working on this project, a tribute to what they learned during their time with MCI!

Maxime Veillette, Biologist and Coordinator, Sport Fishing study

The ZEBRA MUSSEL, a Small Invader With a **HUGE IMPACT**

Invisible to the naked eye at the larval stage and as small as 2 to 3 centimetres at maturity, the zebra mussel (*Dreissena polymorpha*) is an «engineer» species, which means that it modifies the natural processes of the ecosystem into which it is introduced. It has the potential to filter up to one litre of water a day in order to feed. As a result, native species may become poorly adapted to their own transformed environment. The various impacts of its powerful filtering action do not leave other species indifferent. It alters food chains and competes directly with native freshwater mussels. The economic and social repercussions are numerous: it causes problems such as the obstruction of submerged structures like water intakes, damages pleasure craft, can cause injuries to swimmers with its sharp edged shell and is a transmission vector for avian botulism, a disease responsible for the death of thousands of aquatic birds, to name only a few...

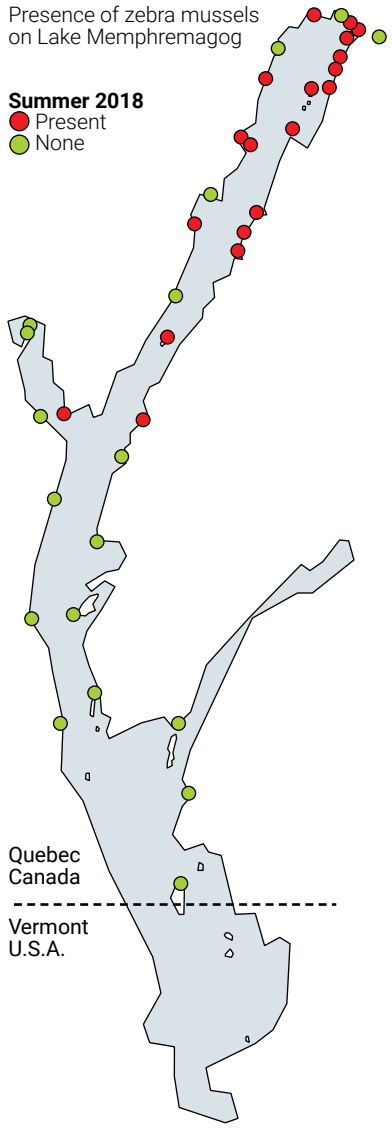
Zebra mussels were first discovered in Lake Memphremagog in the summer of 2017 by an employee of the City of Magog. Only a single zebra mussel was found during July between the MacPherson pier and the west beach, on a rocky substrate, during a snail collection activity aimed at reducing the incidence of swimmer's itch.

In 2018, two additional sightings of zebra mussels were noted by the City of Magog.

On July 19 and 20, MCI's patrol, accompanied by Isabelle Picard, a biologist specializing in aquatic fauna, carried out a survey of zebra mussels in Magog pursuant to an unusual sighting made by the owner of Plongée Magog. On July 23, MCI held a press conference[1] to present their preliminary report on the zebra mussel. The distribution of zebra mussels in the summer of 2018 is shown at right.

This year, the patrol will continue its monitoring and control activities. Twenty artificial substrates will be installed in the lake in order to monitor the establishment and spread of the mussels. Observation posts will be established, and density measures taken throughout the lake. As well, manual collection of the mussels will be organized with the help of volunteers.

For interested shoreline residents, we invite you to an information session to be held May 23 at the Memphremagog MRC. As well, boaters will need to redouble their efforts to limit the spread of this tiny mussel, invisible to the naked eye at the larval stage. It is more important than ever to Clean, Drain and Dry all boats travelling from one lake to another to prevent the propagation of new exotic invasive species in Lake Memphremagog and other bodies of water in the province.



Santiago Doyon, Biologist and 2018 Patrol Coordinator

1 Picard, I. and S. Doyon. 2018. Vérification de la présence de moules zébrées dans la baie de Magog au lac Memphrémagog et première évaluation de l'état de la situation. Study undertaken by Memphremagog Conservation Inc. (MCI). 11 p. (online) (http://www.memphremagog.org/fr/centre_docs.php?id=Esp%E8ces%20exotiques%20envahissantes)

THE WHITE PERCH, A NEWCOMER HERE TO STAY

The white perch (*Morone americana*) is an east coast estuarine species that invaded the Great Lakes region in the 1950's. Its abundance did not increase until the mid-1970's, 20 years later. Spawning activity usually peaks in late April when temperatures get warmer. White perch has a broad feeding spectrum, including eggs, insects and small fish. The timing and method of its introduction into Lake Memphremagog remain uncertain.

As an introduced species, it needs to be properly managed. For fish lovers, the white perch is an edible species that is not subject to any quota or possession limit for now. Its taste is like that of yellow perch and its generous size, allowing it to be filleted, makes it a species prized by anglers. Try it, you won't regret it!

Santiago Doyon, Biologist and 2018 Patrol Coordinator

AQUATIC WEED BEDS:
Source of biodiversity **to preserve!**

Aquatic weed beds are wetlands that are submerged all year round. They are characterized by floating or submerged leafy vegetation. In Lake Memphremagog and its tributaries, they can be found by noting the presence of floating vegetation such as water lilies.

They help to keep the ecosystem in equilibrium and maintain water quality, notably by protecting against shoreline erosion and filtering out pollutants. They also provide food, shelter and spawning areas to aquatic fauna. Their protection is crucial for maintaining biodiversity and water quality.

Weed beds are mostly found in bays and shallow areas of the lake where the current is slow, such as Fitch Bay and the mouth of Cherry river.

A rare fish in Lake Memphremagog

The lake's weed beds harbour a threatened fish species, the bridle shiner. In Québec, it has only been observed in certain bodies of water in the southern portion of the province and is protected both federally and provincially. This fish, no larger than 60 mm, only lives for two years, and spawns only once, in the spring. It frequents areas rich in vegetation, allowing it to complete its lifecycle, i.e. feed itself, spawn and reproduce. Its presence in Lake Memphremagog thus depends on the presence of weed beds.

Main threats

Human activity can significantly degrade aquatic weed beds if it is undertaken without consideration for the environment.

Boats

When boating near shore, the waves from motorboats can create erosion on the shoreline, thus bringing sediments to weed beds. When boating in shallow areas, motor boats, as well as some non-motorized craft such as pedal boats, can disturb the bottom and put fine sediments back into the water column. The spread of these sediments can harm spawning grounds by burying eggs and clogging the gills of adult fish.

As well, the noise from motors in weed beds can disturb the fauna seeking refuge there. The propellers or impellers from boats can damage vegetation in these sensitive zones and contribute to the spread of exotic invasive species, such as watermilfoil, that can out compete native species.

Shoreline construction

The construction of infrastructure in shoreline zones can also put sediments back into suspension. As well, docks and boathouses can limit water flow and the circulation of fish.

Residential development

On land, the development of infrastructure such as roads and homes can contribute significantly to the flow of sediments via runoff, thus degrading water quality.

Fertilizers and pesticides

Fertilizers contain nutrients, most notably phosphorous, which cause premature ageing of lakes (eutrophication). Pesticides can have significant toxic impacts on aquatic species.

EUROPEAN WATERMILFOIL, A PLANT WE DO NOT WANT IN OUR WEED BEDS

Submerged or on the surface, this exotic invasive aquatic plant creates dense weed beds, growing in areas from 1 to 10 metres deep. Every piece of stem broken off, by currents or boat propellers, helps spread this plant throughout the ecosystem. This creates several negative consequences, such as: interference with recreational water activities, reduction in the value of shoreline properties, increased proliferation of mosquitoes and parasites that cause dermatitis, competition with native plants, disruption of the food chain, reduction of the amount of dissolved oxygen in the water for aquatic fauna and choking out spawning beds. To prevent its spread in Lake Memphremagog, it is necessary to avoid boating in weed beds.

Virginie Lepape, Biologist and Patroller 2019

Make a difference

In order to help conserve aquatic weed beds in Lake Memphremagog, MCI plans to identify them in several bays by installing buoys in the summer of 2019.

As a boater or fisherman

- Avoid boating near weed beds;
- If you inadvertently catch a bridle shiner, return it to the water as quickly as possible.

As a lakeside resident

- Maintain the forest cover on your property and a shoreline buffer zone large enough to avoid soil erosion;
- During construction, avoid leaving bare soil, and capture sediments before they reach the waterway;
- Avoid using fertilizers and pesticides;
- If you have valuable natural landscapes on your property, protect them.

Voluntary conservation

As an owner of natural landscapes, your participation is essential for the preservation of biodiversity and the water quality of weed beds. MCI would be pleased to answer all your questions regarding conservation options available to you. Depending on the option chosen, you could benefit from fiscal incentives and/or a reduction in school and property taxes.

Your options:

- Private nature reserve
- Conservation servitude
- Donation for ecological purposes
- Sale for ecological purposes

Let's preserve our cherished natural landscapes!

The Lake Memphremagog watershed is renowned for the beauty of its countryside and its natural landscapes of ecological interest. It possesses an undeniable ecological richness and is prime habitat for a wide variety of flora and fauna. Its landscapes and natural attractions are at the core of the economic and recreotouristic development of the region, and its natural landscapes also help purify the lake's water, a drinking water reservoir serving over 175,000 people. Despite the importance of the economic development associated with forestry and agriculture activities, it is important to note that these activities inevitably exert pressure on the region and on its biodiversity. It is thus important that the MRC and the municipalities within the watershed take the protection of natural landscapes into consideration in their development plans. To be able to properly preserve our natural landscapes, the participation of private property owners is fundamental, as each action taken adds to other actions already taken by other property owners, thus ensuring the preservation of large tracts of undisturbed land.

Virginie Lepape, biologist and Patroller 2019
and Ariane Orjikh, biologist and general manager

A VISIT TO THE POWELL CREEK NATURE RESERVE

You are all invited to come and visit the Powell Creek nature reserve, on the shores of Greene bay in Austin. This reserve was created in 2018 by the Lacasse-Benoit family to protect their natural landscapes in perpetuity. Ariane Orjikh, biologist and MCI general manager will be there to talk about voluntary conservation options available to landowners who would like to preserve their land. A hike in the woods led by Gabriel Grenier, forest technician, will allow you to discover the short-lived spring flowers in this amazing sugar bush.

When: Saturday, June 15, from 9 - 11:30 AM

Where: 21 chemin Dufresne in Austin. Second road on the left after the depanneur, towards the west.

How: Please confirm your attendance at info@memphremagog.org or at 819-620-3939.

Don't forget to dress appropriately for the weather. Rain boots are recommended given the muddy terrain.

HEALTHY FITCH BAY PROJECT

MCI's Healthy Fitch Bay project is now in its fifth year. This project is a collaboration with the municipalities of Stanstead Township and Ogden, as well as several other partners. A series of actions has been undertaken since 2015 to improve the quality of Fitch Bay's water and conserve the biodiversity of its watershed. These actions have been in a variety of fields such as boating practices, residential activities, farming and the preservation of our natural landscapes. Remember that the quality of the bay's water is of particular concern, especially given its great biodiversity, so important to Lake Memphremagog and the surrounding region. Here are three example of actions taken by MCI in 2018:

Water quality improvements through the adoption of agricultural soil conservation practices in the Fitch Bay watershed

For the past two years, agronomists with the Club agroenvironnemental de l'Estrie (CAEE), in collaboration with MCI, have been working with farmers in the watershed, helping them adopt practices aimed at reducing soil loss, and at the same time benefiting water quality in the bay. Of 31 registered farms in the watershed, 25 were contacted and erosion analyses were carried out for 12 of them, encompassing some 433.83 hectares of land.

This project provided farmers with information on soil conservation practices and documented erosion problems in many farm fields in the watershed. Priority was given to annual crops, which are the most likely to have erosion problems given that tilling exposes bare soil. More than a third of the farmers in the watershed participated in the project, receiving a diagnostic of their agricultural fields with recommendations adapted to their farm, both in cultivation practices and the management of runoff. These diagnostics were also shared with agricultural counsellors, who will be able to assist farmers in the adoption of new soil management practices. This project will definitively reduce silting and result in better water quality in the bay.

Study of Bobolink and Eastern Meadowlark populations in the Fitch Bay watershed

In recent decades, population declines of two species, the Bobolink (Dolichonyx oryzivorus) and the Eastern Meadowlark (Sturnella magna), have been accelerating due to habitat loss, the use of pesticides and climate change. These two species have declined by 88% and 71% respectively in the past 40 years (COSEWIC, 2010; COSEWIC, 2011).

Knowing that these two species at risk have been spotted in the watershed, MCI worked with a master's level student in International Ecology at the University of Sherbrooke, Renata Chávez, to identify their status in the watershed during the summer of 2018. The objective was to come up with recommendations on how we might protect these species and conserve their habitat in the region. Ornithological inventories were carried out and their preferred habitat identified. As well, the main threats to their protection, as well as priority sites for protection, were identified.

To protect any Bobolinks or Eastern Meadowlarks that might be present on your property, there are several things that you can do, in the areas of management of farm fields, haying practices, existing farming infrastructure, and human activity. For more information, visit Regroupement Québec Oiseaux's web site (quebecoiseaux.org).

Phragmite control

Lake Memphremagog and its watershed are threatened by the presence of exotic invasive species (EIS), both flora and fauna. MCI has continued its phragmite, or European common reed, control activities in Fitch bay this past year, to prevent it from invading nearby wetlands. The results at Forand park this year show that these measures are working. The textile that covers the site of the phragmite colony, in place since 2016, has prevented the regrowth of this exotic invasive plant.

On Saturday, May 18, the textile will be removed, and grass seeds will be sown, and indigenous shrubs planted. You are all invited to join MCI's team of volunteers in this revegetation activity. On the same day, MCI will be giving away trees donated by the Ministry of Forests, Wildlife and Parks, in collaboration with the Association forestière du sud du Québec.

Please confirm your presence at the revegetation activity at Forand park by email at info@memphremagog.org. Many thanks to the volunteers contributing to the protection of biodiversity!

Ariane Orjikh, Biologist and General Manager

Meadowlark

Bobolink

A strategic vision for the environment and a viable, sustainable and Eco responsible use of the entire territory

In 2019, the Memphremagog MRC began a revision of the land use and development plan for its territory. As a part of this process, consultations regarding the strategic vision[1] were held. This first step is critical, as it orients the next steps in the process and influences land use planning and its implementation, such as bylaws and resource allocations. MCI has submitted a brief[2] in which we asked the MRC to give the environment, and more specifically the protection of the various ecosystems and natural landscapes, the priority they must have within a viable, sustainable and Eco responsible vision of the territory.

Our brief is based upon, among other sources, the orientations recommended by the Municipal Affairs and housing ministry (MAMH)[3]and we believe this fits in well with the strategic vision for development proposed by the Memphremagog MRC. It proposes the following for municipalities focused on sustainable development.

"The municipality of the future is Eco responsible. It preserves and showcases the environment, contributes to the improvement in the quality of life and offers a suitable framework for economic development. An Eco responsible municipality is one that is citizen focused, welcoming and attentive, open to the world."

As **priority number 1** in the MRC's strategic vision, this would mean that the planning and development of the territory would occur in a harmonious fashion, taking into account the preservation of the environment.

The MRC's vision should reflect the following elements in its statement:

1. An Eco responsible, viable and sustainable use of the territory with the greatest respect for natural landscapes and ecosystems. This implies that it:

- Values and preserves the environment;
- Contributes to improvement in the quality of life;
- Offers a favorable environment for economic development.

2. A use of the territory that specifically ensures the conservation of biodiversity and the benefits offered by the ecosystems, especially in the face of the challenges linked to climate change. This implies that it:

- Promotes ecosystem resilience and the maintenance of the essential ecological services which contribute to well being and prosperity.

Our region possesses exceptional natural riches which enhance the attractiveness of the MRC. Let us ensure that we have a vision that prioritizes the environment.

Francine Hone, Biologist

1 MRC de Memphrémagog (2019). Projet d'énoncé de vision stratégique du développement. [Online] www.mrcmemphremagog.com/gestion-du-territoire/amenagement-du-territoire/projet-denonce-de-vision-strategique-developpement/

2 Memphrémagog Conservation inc. (2019). Mémoire du Memphrémagog conservation sur la vision stratégique du schéma d'aménagement de la MRC de Memphrémagog. 5p. [Online] http://www.memphremagog.org/FCKeditor/ckfinder/userfiles/files/Centre_de_documents/FR/2019-01-23-Vision-Sch-ma-d-am-nagement-MCI.pdf

3 Ministère des Affaires municipales et de l'Habitation (2019). Vision de la municipalité axée sur le développement durable. [Online] www.mamh.gouv.qc.ca/municipalite-durable/municipalite-axee-sur-le-developpement-durable/vision/.

One Million Strokes for One Lake

On June 30th, 2018, Daniel Phendler and I (Eric Phendler) pushed off in our canoe from the banks of Lake Itasca in Northern Minnesota. This marked the beginning of a 3,700 km, seventy-one day journey down the Mississippi River. Paddling started on that day, but the planning and logistics began a year earlier. Because we wanted to give meaning to this trip and wanted to give back to our beautiful region here in Quebec, we decided to raise money for Memphremagog Conservation (MCI). Dan and I have spent many memorable summer days on Memphremagog, which made our choice of organizations that much easier. Our seventy-one days were full of laughs, some brushes with danger, bugs, new friends and, although Dan will never admit it, a few tears. Throughout this journey down the river, our generous donors showed us tremendous support, and $2,525 was contributed to MCI under the *Mississippi Challenge for Charity* page. We could not have chosen a better group to receive the money and we look forward to raising funds for MCI through future excursions.

Thank you for all the work you do!

Eric Phendler, Patroller 2019

A parliamentary medal for their involvement in environmental protection for

Robert Benoit and Gisèle Lacasse Benoit

In May 2019, Mr. Robert Benoit and Mrs. Gisèle Lacasse Benoit, MCI board members of long standing, will receive the parliamentary medal from the Federal member of Parliament for Brome-Missisquoi, the Honorable Denis Paradis, for their environmental work. Robert Benoit, currently volunteer president of MCI, was for many years the opposition spokesman on environmental matters at the National Assembly. Gisèle Lacasse Benoit has worked for over 30 years on the protection of Lake Memphremagog and was president of MCI for 8 years. She started and led the SOS Parc Orford coalition in the fight to re-integrate the land removed from the Mount Orford national park. Bravo and thank you! We are proud to count you as part of the MCI team for all these years!

Our General Manager

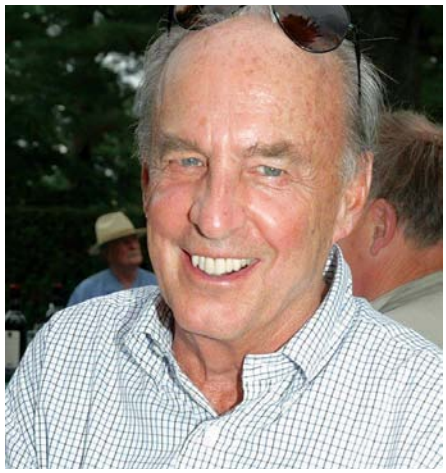
Ariane Orjikh

Ariane Orjikh was featured in the magazine *In Vivo* of the *Québec Biologists Association* (vol.39, n°1). Ariane has worked with MCI since 2012. A graduate of the university of Sherbrooke, she holds a bachelor's degree in biology and a master's degree in Biology with specialization in international ecology. Starting out as a patroller, then as patrol coordinator, she is now the organization's general manager. She is highly qualified, and very dedicated to MCI's mission. We would like to take this opportunity to let her know how much we appreciate her work, devotion and involvement within our organization. Ariane, MCI and all its members are lucky to have you! Thank you for everything that you do!

Catherine Roy
Vice-president

Homage to

Mr. Donald Fisher



MCI would like to pay tribute to the late Donald Fisher, who left us in March. Donald was president of MCI in 2004 and 2005. He was an exceptional leader, a true diplomat, a very friendly and endearing man who modernized MCI. Among other accomplishments, he instigated the major Operation Healthy Lake project, which gave MCI huge scientific credibility. In 2009, he was awarded the MCI-Gordon Kohl commemorative prize for his exceptional dedication to the protection of the lake.

CALENDAR

May 4: RAPPEL's annual general meeting

May 4: Mount Orford's forest environment day

May 11: MCI's lake patrol begins

May 18: Tree distribution - Austin, Fitch Bay, Ogden

May 18: Revegetation of the phragmite control site at Forand park, Fitch Bay

May 23: Conference on aquatic exotic invasive species at the Memphremagog MRC

June 2: Tree distribution and horticultural fair at LAMRAC, Magog

June 8: MCI's annual general meeting - Hermitage Club

June 15: Visit to the Powell creek nature reserve

June 29: MCI kiosk at the Canada day celebrations in Georgeville

September 1: The end of MCI's lake patrol activities

Other activities: Conferences, patrol kiosks, zebra mussel and common reed control activities. Contact us for more information!

HERITAGE CIRCLE MEMBERS

Abbott, Wiliam
Agence de communication Bang Marketing
Anthony, Karen
Arbuckle Fisher, Alison
Auger, François
Bannerman Foundation, A/S Mr. Paul Bannerman
Beljers, Elisabeth
Benoit, Robert
Bombardier, J.R. André
Brandt, Albert
Cabana, Pierre
Caron, Trevor H.
Coughlin, Peter F.
Couture, Martin
Cyr, Joanne
Davidson, Howard
deLange, Andrew J.
Desjardins, Jean-Guy
Eakin, Gael
FP Worthen Foundation
Gestion André Jacques Dupuy
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Ivory, Joan F.
Ivory, Sarah
L'Espérance, André
Lacasse Benoit, Gisèle
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Mitchell, William
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Pradella, François
Ruest, Jean-Jacques
S.E.C., The Memphremagog Golf Club
Savard, Guy
Sirois, Sean
St-Germain, Guy
Straessle, Tony
Talon, Jean-Denis
Thorburn, Cynthia Caron
Wilson, Janet

In Memoriam
Graeme Boswall
Robert Cooney
Lise Maynard Palmorino

Municipalities :
Austin
Magog
Canton de Stanstead
Potton
Ogden
Abbaye St-Benoit du Lac