



Memphrémagog Conservation inc

Newsletter - June 2010



Word from the president

In this the year of World Biodiversity, MCI has added a new mission, that of promoting conservation of the natural habitats in the lake's watershed. Our best hope of successfully preserving these natural areas on private properties is the owners themselves. Their participation, which is offered on a voluntary basis, helps to bring about the best scenario possible which is to protect these privately owned natural habitats for ever. This will ensure the long-term maintenance of biodiversity and water quality improvement for the lake. Public talks will be given to inform interested landowners about the best ways to participate in this conservation process. Individual meetings can also be arranged for landowners who are interested in moving forward with preserving these natural habitats on their property.

The recent bequest of some 880 acres by the late Michael Dunn is a true and lasting gift to our lake. Here is the perfect example of generosity and vision for the protection of the lake and its respectful enjoyment by future generations. Needless to say, we hope others will follow this example.

In this same perspective of protecting biodiversity and the lake, MCI will again this year promote reforestation and general planting activities; some 3000 shoreline trees and shrubs will be distributed on Sunday, June 6 in Austin, Potton and Fitch Bay. For a third year, MCI will offer free consultations on re-naturalizing the shoreline so that property owners will be able to comply with the new municipal by-laws. The goal of these actions is to restore as much of the

drainage basin as possible to a more natural state. The word that applies here: plant, plant, plant!

Collaborative efforts with our neighbours from Vermont are also important to us, especially when we consider that 75% of Lake Memphremagog's watershed is on American territory. That is why we financed part of the studies carried out on the John's River last year. This year we will partially finance a study of the Black River, the most important tributary in terms of water volume and the big phosphorous load it carries.

The struggle to protect Mont-Orford park appears destined for a happy ending. Bill 90, which calls for integrating all lands in question back into the park, was recently tabled in Quebec's National Assembly. MCI, an active member of the SOS Parc Orford coalition, will not uncork the champagne until the June vote results are known.

Among its forays into the political arena, MCI prepared a brief on the revised regional land use and development plan and tabled it with MRC Memphremagog as well as with all the municipal governments in the watershed. We will closely monitor the events related to this important project which sets out the guiding principles for development of the territory, one consequence of which is the destruction of more habitat.

MCI was invited to present a brief to the National Assembly about the state of lakes in Quebec with regard to cyanobacteria. We found several



Photohélico : Sargent Bay

cases of algae bloom in 2009; the MDDEP also found higher than normal concentrations in several of its test samples. We invite you to join our watchdog network of people who are on the lookout for any signs of algae bloom on the lake. These observations help us to show that our lake is deteriorating and gives us more clout when we ask territory managers and basin residents to take concrete action to help stop this degradation.

I invite you to personally make every effort to reduce phosphorous use on your property. For example, make sure your septic system functions well and meets the prevailing norms,

re-plant your shoreline to a depth of 10 metres, plant as many trees as you can and control soil erosion (roadside ditches, construction work, etc.). To learn more, please visit our website which contains much information about these topics.

In conclusion, I would like to thank each and every one of you for your moral and financial support. I would also like to thank our loyal army of volunteers including board members who do everything possible to defend this precious heritage which is Lake Memphremagog.

*Gisèle Lacasse Benoit
Volunteer President*

The Annual General Meeting 2010

The AGM for members of MCI will be held on July 31, 2010 at 9:30 am at the Austin Town Hall. We look forward to seeing you all!





Lake Patrol



Erich Smith Peter, Catherine Roy, Alexis Martin

MCI has had a lake patrol team for nearly 40 years. Our current crew is attractive, youthful, well educated and, like you, has the best interests of our magnificent lake at heart. Over the last few years the nature of patrol work has greatly evolved in terms of using new technologies and responding more adequately to questions of a scientific nature.

This summer we will have three bilingual patrollers at work around the lake on a daily basis, from May to September. They are Erich Smith Peter, an undergraduate student in molecular biology who is returning for a second year, Alexis Martin, a Master's student in the environmental program at the Université de Sherbrooke and Catherine Roy, an undergraduate student in biotechnologies at the Université de Sherbrooke.

A major network of collaboration has now been established between the various municipal inspectors and our patrol team, a sense of common purpose that helps everyone better know what is happening out in the lake and along the shoreline and better able to act quickly.

The patrollers have also been trained to make recommendations about maintaining natural shorelines, reducing the use of fertilizers and pesticides and the different actions to take to help protect the quality of the water in the lake. They will also be visiting the different day camps in Québec and Vermont to create awareness among youth and to encourage them to use sound environmental habits.

Monitoring water quality in the lake is an absolute priority. Since 1996, MCI has worked with Quebec's ministry of environment, sustainable development and parks, the MDDEP, doing sampling work at some 10 stations, from mid-June to the end of August. In addition, since 2009, a spring and fall campaign has been added to the program. This latter activity takes place in May, September, October and November.

As you know, the involvement of shoreline and other residents is essential for our association, both for voluntary lake surveillance as well as in our fund raising efforts. Following your recommendations, we have now acquired the following promotional items: baseball caps, polo shirts, t-shirts and cotton sweatshirt. Thank you for your support.

Our patrollers hope to be in touch with as many of you as possible this year. We ask you to welcome them. Please contact them to find out more about the blue-green algae situation or to provide your observations. They can be reached daily – on land, in the air, or on water - at (819) 620-3939.

Robert Benoit, board member, responsible for the lake patrol

One of our patrollers is looking for Didymo!

Does the name Didymo (*Didymosphenia germinata*) mean anything to you? For our patroller Erich Smith Peter, it was the beginning of a scientific adventure. Last summer, he believed he had encountered this invasive alga in Lake Memphrémagog. He immediately contacted a world expert on this subject, Dr. Max Bothwell, professor at University of Victoria and a specialist in resolving the problem of the alga Didymo with Environment Canada. He at once invited Erich to do a 3-month internship in New Zealand.

MCI and a generous donor gave him a bursary of \$1,500 to allow him to take advantage of this unique opportunity. Erich was in New Zealand, on South Island in the avant-garde setting of the Institut National de Recherche Scientifique (INRS) from January 25 to April 25 to study the characteristics and the impact of this particular alga and carry out his research.

During his stay there, he sent us these preliminary observations:

"I am doing my internship on Didymo to learn more, and I see the similarities, but I don't think it was the same species. However, it is an invasive benthic diatom that could have repercussions on the ecosystem. I am studying the various impacts that these diatoms might have.



My research is on the behaviour of drift-feeding salmonidae, those that feed on the larvae of insects in the current. The study will show whether, when an invasive alga takes over a river bed, the quantity of insect larvae diminishes, increasing the amount of energy that trout and river salmon must expend during spawning to feed: more time against the current to find larvae = more energy expended and therefore = less energy for reproduction, for example.

I am hoping to find that the alga I observed was not Didymo because, in addition to its having an impact on ecosystems, we must never forget that Quebec has nearly 5% of all the freshwater in the world! My work will be done by microscopic photography when I have a sample."

Thank you, Erich, and keep sending us news of your discoveries!

Madeleine Saint-Pierre, Administrator

Municipal Inspectors

Austin: 819-843-2388
M. Stephen Nicholson

Potton Township: 450-292-3313
poste 224
Mme Marie-Claude Lamy

Stanstead Township: 819-876-2948
poste 224
M. Paul Carignan

Magog: 819-843-3286 poste 53
Mme Nathalie Bournival

Ogden: 819-876-7117
Mme Dominique Gagnon

Useful Resources

MCI Lake Patrol: 819 620-3939

Erich Smith Peter, Alexis Martin, Catherine Roy

Ministère de l'environnement de l'Estrie: 819 820-3882

Emergency: Yvan Tremblay, poste 248

Environnement Emergency 24h. 1-866 694-5454

Wildlife Emergency 1-800 463-2191

MRC Memphrémagog Lake Patrol: 819 620-7669 / 819 821-0435



MWA To Focus On The Black River Watershed



Vermont - The primary focus of the Memphremagog Watershed Association in 2010 will be on the Black River and its tributaries. Previous studies have indicated that Lake Memphremagog's three main tributaries all discharge high levels of phosphorus, nitrogen, and sediment into the lake. However, it is clear that the Black and Barton Rivers deposit considerably more phosphorus and sediment into Lake Memphremagog than the Clyde

River. In the Black River, previous studies have indicated that phosphorus levels were highest in the main stem of the Black River and in its upper watershed. Therefore, there is a critical need to identify phosphorus and sediment sources, particularly in the tributaries of the Black River, to develop a more complete understanding of sediment and nutrient dynamics in the watershed, to identify and implement projects and practices to improve water quality, and to conduct outreach and education efforts to raise awareness about water quality issues in this watershed.

In order to pursue these goals, MWA, in collaboration with Dr. Fritz Gerhardt, the Orleans County Natural Resources Conservation District, and the NorthWoods Stewardship Center, has received a Vermont Watershed Grant. There are three main components of the grant; water quality sampling, restoration projects, and outreach and education. MWA's primary role will be in outreach and education. Water quality sampling will focus on identifying phosphorus and sediment sources along the main stem and the major

tributaries of the Black River. Restoration projects will include two to three streambank restoration projects. It is planned to restore at least 2600 feet of streambank in the upper watershed.

Outreach and education will include a public meeting at a location in the upper watershed that has been planned for mid-July. The focus of the meeting will be on the Black River; Its Past, Present, and future. Speakers will address the river's place in our history and culture, its present state (in terms of water quality), and steps that can be taken to insure its future health and vitality. There will also be two canoe/kayak trips on the river. The first will be in early August with a purpose of raising awareness of its present state. The second will be in early September and will be a streambank clean-up project.

In addition to the Watershed Grant, in 2010 MWA will continue water sampling of other tributaries of Lake Memphremagog, cyanobacteria monitoring in the lake, and working with municipalities in the Lake Memphremagog watershed on procuring erosion control grants. MWA will sponsor a kayak race coinciding with Newport's Aquafest. MWA will also continue to work toward the hopefully successful transfer of the Michael Dunn property to the US Fish & Wildlife Service. And lastly, MWA will perform outreach and education through its membership drive and public meetings and other venues.

Donald Hendrick, President

The importance of studies: knowledge as the basis for action.

Several studies are conducted on water quality every year to provide more knowledge about water quality in the Lake and to try to identify non-point pollution sources. This allows us to take the appropriate corrective measures.

Since 1996 MCI has taken samples at 10 designated places on the Lake for the Environment Ministry, (MDDEP). Trace phosphorus and chlorophyll are the parameters analyzed which, with water transparency, serve as indicators of the trophic stage of the Lake.

For its part, MRC analyzes the different tributaries which provides information about the concentration of certain elements (total phosphorus, suspended solids and fecal coliform). While MCI believes that these concentration measures do not give a true idea of the state of the tributaries, it nevertheless makes it possible to identify certain sources of contaminants and to act to eliminate them.

MCI is pleased to learn that the MDDEP will conduct studies on the phosphorus load in four of the biggest tributaries (Cherry River, Castle Brook, Fitch Bay (under the bridge) and Powell Brook), to have a better idea of the accurate phosphorous export from them. MCI will be a partner in this project.

MCI financed part of the study of Johns River in Vermont last year and will participate this year in a study of the Black River, the biggest tributary on the Vermont side.

In 2009, The Quebec-Vermont Steering Group Committee carried out a modelling of phosphorus exports. This made it possible to develop a portrait of likely phosphorus sources throughout the entire watershed of the Lake. This tool will allow specific intervention sites to be pinpointed and, ideally, to set phosphorus reduction objectives for each user.

A Tribute to Dr. Bruno d'Anglejan

The Board of MCI wishes to pay tribute to Dr. Bruno d'Anglejan who was an active member of the board of directors of MCI and who died recently. A Professor of Oceanography in the Department of Earth and Planetary Sciences at McGill University, Bruno brought his scientific knowledge and love of Lake Memphremagog to support the work of our organization.

Thank you, Bruno.

Heritage Circle Members

MCI recognizes the generosity of those who enrolled in the Heritage Circle member category in the years 2009 and/or 2010.

Lewis Abbott
Bannerman Family Foundation
Michael H. Belmer
Robert Benoit
J.R. André Bombardier
Travor H. Caron
Michel Côté
Peter F. Coughlin
Famille Martin et Julie Couture
Joanne Cyr & Marc Giasson
Howard & Guylaine Davidson
Jean Dumont
Gael Eakin
Alison Arbuckle Fisher
Fondation Howick
Joan F. Ivory
Sarah Ivory
André L'Espérance
Gisèle Lacasse Benoit
Jean-Luc Landry
Loretta Marcon

Mary Louisa Miller
Catherine A. Milne
Michel Nadeau
Monique Benoit Nadeau et Réal Nadeau
J. Robert et Myriam Ouimet
Wendy Penfield
Alena Perout & Jonathan Peck
Bernard Poulin
Guy Saint-Pierre
Norman Spencer
Jean-Denis Talon

In addition to the above names, 5 donors requested that their gift remain anonymous.

Special thanks to late Mr. Edward G. Aust for his generous donation.

We also want to thank the municipalities of Austin, Canton de Stanstead, Magog, Ogden, Potton and of St-Benoit-du-Lac for their financial contribution.



Protecting our natural areas and the landscapes we cherish!

Francine Hone, Conservation Biologist

Memphremagog Conservation Inc. (MCI) is developing a new conservation project that targets the protection of natural areas and wildlife in the Lake Memphremagog watershed. This territory that covers almost 1,800 km² (512 km² of which are located in the Quebec watershed), is a treasure of undeniable ecological wealth that provides favorable habitats for abundant flora and wildlife. These same landscapes and natural attractions are also the backbone of the region's economic development. While conceding the importance of economic growth that is linked to recreotouristic activities, real estate development, forestry activities and agriculture, it still remains that these activities are impacting this territory and its biodiversity.

As an example, the increase in residential development projects and its associated activities such as tree clearing, road construction, septic tanks, drainage, etc... have significant repercussions on our watershed's natural environment.

Moreover, the presence of cyanobacteria in Lake Memphremagog is linked to many factors, including substantial amounts of phosphorus flowing into the aquatic ecosystem from urban and agricultural sectors as well as from dwellings bordering the lake. The disappearance of the forest cover and riparian habitats also contributes to the sedimentation that carries phosphorus into our streams and Lake. Since Lake Memphremagog is also a reservoir of drinking water for residents of both the Memphremagog MRC and the city of Sherbrooke, it goes without saying that the preservation of our drinking water is an important element to consider in the wider perspective of conserving the natural areas of the watershed.

From every standpoint, be it environmental, social or economic, the forest ecosystem plays an extremely important role by controlling soil erosion, maintaining water quality, preserving landscapes and sustaining the forest as a natural resource. Wetlands are also essential to the water cycle and play a major role in water purification, regulating the flow of streams, retaining water during heavy rains and maintaining biodiversity.

However, these essential natural areas are disappearing and thereby causing damage on both the ecological and economic fronts. Our ecosystems are immensely beneficial to us and their inestimable value is rarely taken into account.

Landowners are key players!

To protect this territory, it is essential for landowners to participate in the process. Every action taken by a landowner to protect his or her natural areas will make a difference, and as more and more landowners protect their land the result will add up to wide expanses of protected wilderness. In the long term, it is the only viable way to preserve the quality of the water we drink, the air we breathe and the beauty of our landscapes.

The conservation process is available to all private landowners. Whether you want to protect your property because of a deep attachment to your land and to nature and you want to bequeath this natural heritage to your children and grandchildren, or whether you want to protect fragile areas such as wetlands, mountaintops or threatened and vulnerable species, options are available to you.



Photo MCI 2008. West side of the Lake

Conservation does not mean that you can no longer use your property. In fact, common sense must prevail in your choice of options. Each property is different, but the important thing is to ensure that the activities and uses maintained on the property are compatible with the environment and take into account the ecosystems and the ecological functions inherent to these ecosystems.

How can landowners contribute?

How can you, as a landowner, take part in the conservation process? Several options are available to you in order to protect your property in perpetuity.

A) You can donate part or all of your property to a conservation organization, the government or a municipality. Property gifting allows you to benefit from certain tax advantages that vary according to your income and the value of the gift. If the land being donated has ecological value, the tax incentives are even more interesting.

B) If you want to protect your property and still continue to use it or live on it, you can enter into a conservation agreement (such as conservation servitude) with a conservation organization that will ensure the long term protection of the property. This kind of agreement restricts certain uses that could negatively impact the natural areas, such as residential development. The advantage of a conservation servitude is that it allows the landowner to maintain certain activities on the land, as long as these activities meet the conservation objectives. The donation of a conservation servitude also allows the landowner to benefit from tax incentives.

C) As a landowner, you can also choose to sell your property at fair market value to a conservation organization that will ensure its perpetual conservation.

D) Since 2001, it is also possible to establish a nature reserve status on your property according to the Heritage Conservation Act. To obtain this status, the landowner must sign an agreement with the *Ministère de l'Environnement, du Développement durable et des Parcs* that stipulates certain conservation measures. This status allows the landowner to benefit from municipal and school tax exemptions.



MCI supports your actions!

MCI can help you evaluate your conservation objectives, as well as orient and support you through the conservation process. MCI can meet landowners individually or in small groups in order to inform and guide them in their choice of conservation options. In fact, MCI is holding 2 conferences on the conservation of private land that will be held in July and September

Hundreds of landowners, aware of the beauty of our landscapes and the value of our forests and wetlands, have already taken action by entering into conservation agreements with organizations such as Memphremagog Wetlands Foundation or Nature Conservancy in order to protect their natural areas in perpetuity. Just recently Mr. Dunn, a resident of Lake Memphremagog made an exceptional gesture by bequeathing his property to the Quebec government. The more landowners commit to the conservation process, the greater our chances will be to protect this incredibly rich and beautiful territory.

MCI would like to thank to the Minister of Développement durable, de l'Environnement et des Parcs (MDDEP) for its financial support within the framework of the "Partners for Nature" Program, as well as the EJLB Foundation.



Source: Vermont Land Trust, the land bequeathed by Michael Dunn

Well done, Mister Dunn!

The generosity of a Lake Memphremagog resident presented a unique opportunity to the Government of Quebec and to the U.S. Fish and Wildlife Service to forever protect a 271 hectare property straddling the Canadian-American border on Lake Memphremagog.

According to the wishes of Mr. Michael Dunn who died in 2007, the Quebec portion of the property that covers an area of 117.6 hectares was offered to the Quebec government. After analyzing the dossier, the Ministry of Natural Resources and of Fauna rendered a decision on February 25th to accept the donation of the property. As for the American portion of the property, the U.S. Fish and Wildlife Service is still evaluating the possibility of accepting the gift.

The issue was considerable for Lake Memphremagog, given the undeniable ecological value of the Dunn property and the scarcity of large undeveloped properties that remain on the lakefront. This land contains forests, wetlands and over 2 kilometres of unspoiled shoreline. In the context of an integrated watershed management plan that takes into account an ecosystem approach as advocated by Memphremagog Conservation Inc. (MCI), it is essential to preserve a maximum of natural areas in order to protect the ecosystem of Lake Memphremagog as well as the quality of its drinking water.

A refusal by the Government of Québec to accept this donation could have led to the sale of the property, given that its market value is approximately 10 million dollars. In addition to losing the property for purposes of conservation, it's likely that the land would have fallen victim to real estate development, adding to the pressures on the Lake's ecosystem.

Apart from its ecological value, the Dunn property has become the symbol of the trans-border conservation of an ecosystem that extends beyond both territorial and administrative jurisdictions of Vermont and Québec.

People of the community and several American and Québec organizations have made it clear to the Québec Government how important it was to accept the donation of the Dunn property and are now delighted by the MRNF decision to accept the gift. MCI is doing everything in its power to see that the



M. Michael Dunn, photo: courtesy of Gavin Scott

property is protected and affirms that the organization is willing to become a partner in the creation of a dedicated fund for the future management of the property. Moreover, certain individuals have already manifested an interest in contributing to such a fund.

Now that the Quebec government has accepted this land donation, MCI would like to reiterate the importance of forever protecting the natural areas of the property and, in a more concrete way, recommends that a legal status be applied to the land. Once this has been achieved, we will then be able to say that the government has truly honoured Mr. Dunn's will, a man who made an exceptional gesture to ensure that his property would be protected in perpetuity for the enjoyment of the present and future generations.



Photohélico: Mont-Orford

Parc national du mont-orford: Victory!

Victory is close at hand for MCI and the SOS Parc Orford coalition. After four years of often heated struggle, the coalition members have succeeded in protecting the territorial integrity of the park. This coming June, Bill 90, which calls for the return to the park of the 450 hectares in question, will be voted on in Québec's National Assembly.

MCI has been an active member of the coalition throughout this process. Let us remember that Orford provincial park is situated in the lake's watershed and that some real estate developers wanted this land to build a major housing project, which would have meant the removal of a tremendous amount of the forest cover.

This is one of the most satisfying victories for ecologists in the history of Québec.

Talks on preserving natural habitats

We invite you to attend one of our talks on preserving natural habitats on private lands. The goal of the session is to inform landowners about the ecology of the region and how they, as property owners, can voluntarily collaborate in the preservation of natural habitats on their lands. The speakers will be Francine Hone and Terri Monahan, two pioneers of the conservation movement in Québec.

Sunday, July 18 at 10h
Murray Memorial Hall
4680, chemin Georgeville
Georgeville

Saturday, September 11 at 9h30
Austin Town Hall
21, chemin Millington
Austin

Noise pollution from boats

Put pressure on the police by **making an official complaint** every time you hear **loud noise from a boat // loud boat motors**, to pressure the police increase their presence on the lake.

Telephone:
Sûreté du Québec: 310-4141
Lake Patrol, MRC de Memphrémagog: 819 620-7669 or 819 821-0435

Membership

Have you renewed your MCI membership for 2010?

Since 1967, the MCI has been dedicated to the preservation and conservation of Lake Memphrémagog and its surrounding country. While the success of this organisation is largely due to the work of its many volunteers, its success very much depends on the continuing financial support from its membership.

Our mutual love of our beautiful lake means that we must continue in our efforts to protect its health. We ask you to renew your membership for 2010, if you have not already done so, using the membership form that is included in this newsletter. If you wish, you may renew your membership on line by using the MCI web site at www.memphremagog.org

Distribution of shoreline trees and shrubs

MCI will be distributing 3000 trees free of charge which have been supplied by the Association forestière des Cantons de l'Est and the Ministère des Ressources Naturelles et de la Faune. In addition, more than 600 native shoreline plants (1 gallon) will be sold below retail cost. This day is the ideal time to promote the importance of trees and the forest for the health of the lake.

Sunday, June 6, 2010
From 9h00 to 12h00

Dépanneur d'Austin
2 200, Ch. Nicolas Austin, Austin

Dépanneur Jewett
Chemin du lac, Corner ch. Val Perkins
Potton

Parc Forand
201 chemin Narrow
Stanstead Township (Fitch Bay)
in collaboration with the municipality
and Natur'Eau Lac, shoreline planting
demonstration.



Weir beach, 2008

MCI Board Members (2009-2010)

Gisèle Lacasse Benoit, President
Austin 819 868-1369

Pat Trudel, Vice-president et Treasurer
Mansonville 450 292-3550

Claude Bernier, Vice-Présidente
Magog 819 847-0845

Madeleine Saint-Pierre, Secretary
Austin 819 843-6063

Johanne Lavoie, General Manager
Austin 450 292-0864

Robert Benoit, Patrol
Austin 819 868-1369

Anne Boswall
Ogden 819 876-2838

Jean-Claude Duff
Austin 819 843-2131

Liz Goodwin
Magog 819 843-2498

Peter Lépine
Ogden 819 876-2838

Susan Watson
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François Bélanger
Francine Hone
Tom Kovacs
Terri Monahan
Edith Smeesters

