# The water's voice

## Inform to protect

Spring 2008 Edition

Action Conservation du Bassin Versant du Lac Bromont (ACBVLB) is proud to present the first edition of its newspaper, *The Water's Voice*. In order to contribute to the success of the mission to restore Lac Bromont's water quality and to ensure the perpetuation of recreational activities in the watershed, we, as citizens, must be well-informed. This newspaper will keep its readers abreast of our organization's progress and activities, while also delving into a number of environmental issues and imparting information that will help us to change our collective bad habits. The paper will be published at the turn of each season. The next edition will be out at the beginning of the summer. Happy reading !

### In this issue



### News from the ACBVLB—at last !

Dear members,
Much has happened since last September's Annual General Meeting. We are very satisfied with the progress made on a number of issues, particularly in terms of the establishment of a network of partnerships with key local players. We are convinced that such constructive partnerships must remain at the heart of efforts to preserve our ecosystems and achieve sustainable development. Here is an update of progress made on these fronts:

### Shuffling of Board of Directors

Last October, Daniel Vandenberghe stepped down from his position as executive director of our board of directors. We would like to take this opportunity to thank him sincerely for his involvement. To fill the position, Isabelle Valois, trained as a biologist, has joined our team. Thanks to her involvement in education and awareness initiatives, we now have the resources to publish this newspaper, which will allow us to maintain an open channel of communication with our members. We're thrilled to have her with us, and we thank her for this initiative.

### Ongoing Research and Studies

A year ago, an Université du Québec à Montréal (UQAM) team began to study the sources of excess nutrients in Lac Bromont. Sample collecting for this study funded in part by the Town of Bromont wrapped up at the end of March 2008. A preliminary report was presented last January 21 to elected officials, to town officials, and to members of ACBVLB's board. These initial results elicited much interest and many questions. The final report is expected in June 2008. ACBVLB is collaborating with the UQAM team to secure funding to allow this work to continue. It was recommended that the Town of Bromont pursue its commitment to ensure that the conclusions drawn regarding the health of our lake be based on solid findings. According to the researchers, two to three years of testing are required to reach such valid conclusions.
Last summer, residents of the Lac Bromont watershed were surveyed, and the rate of participation exceeded our expectations. The socio-political survey included three lines of questioning, one of which proceeded via individual interviews and one of which took the form of an open discussion. The report is expected this summer.

acbvlb

## Ongoing Research and Studies (from page 1)

Last summer, the Regroupement des associations pour la protection de l'environnement de l'eau des lacs et des cours d'eau de l'Estrie (RAPPEL) carried out, with the help of volunteers, a diagnosis of our watershed. The report, complete with recommendations, is expected very shortly. The report's authors will deliver a brief presentation at a meeting organized by the town, and to which all interested citizens are invited. We will inform you of the date and place as soon as they are known.

## Meeting with Elected Officials

The board of directors made its recommendations to Bromont's elected officials within the framework of the 2008 budget process. Among the accepted recommendations are several concerning the modification of environmental bylaws affecting the territory as a whole. The town will hire an inspector devoted exclusively to ensuring that these bylaws are respected. A step in the right direction for the preservation of our ecosystems!

## ACBVLB met with Provincial Environment Department Officials

Last January 29, we met with Ministère du développement durable, de l'environnement et des parcs (MDDEP) officials in Quebec City, accompanied by Nicolas Rousseau of the Town of Bromont and UQAM's Dolors Planas and Claire Vanier. This productive meeting allowed us to present the joint efforts of ACBVLB, UQAM, and the Town of Bromont. The environment department officials were very impressed by the synergy among our three groups and were surprised by our depth of knowledge and the progress made so far. The meeting also allowed the department to present its action plan and to clarify its role in the pursuit of our goals. A meeting with the environment department's regional officials is planned.

## Meeting with Agriculture Department Officials

At the MDDEP's suggestion, ACBVLB members and Nicolas Rousseau met with provincial agriculture department (MAPAQ) officials. They spoke to us about their Prime-vert program, which offers grants for projects such as the installation of culverts and fences, or shoreline re-vegetation, on agricultural land. We invited MAPAQ officials to present details of this program to our members at the same time as the presentation of the RAPPEL's report.

## COGEBY Projects

On December 1, 2007, the Conseil de gestion du bassin versant de la Yamaska (COGEBY) organized a meeting in Bromont to present the conclusion of its 2007 blue-green algae action plan and the outline of its 2008 plan. This meeting also served as a forum for conservation associations, municipalities, MRCs, and government departments to network and share best practices, thus further strengthening our partnerships and building our knowledge base. We would like to thank Mayor Pauline Quinlan for her participation.

COGEBY and ACBVLB will supervise the donation of trees sponsored by Quebec's natural resources department. The date and place of this distribution will be communicated shortly. Since no shrubs will be donated by the MDDEP, COGEBY has taken the initiative to finance shrub donations. This distribution will be held May 17-18. Given the limited quantity of shrubs, priority will be given this year to the re-vegetation of Lac Bromont's shoreline. ACBVLB's involvement will include a planting workshop, expert landscaping advice and consultation, and the help of volunteers with the planting itself.

**In closing, the association has continuously grown and expanded since its revival in August 2006.** We firmly believe our decision to work with key local players—though it requires patience and perseverance—has made possible this progress, and that it holds the greatest promise of successfully implementing changes that will make sustainable development a reality.

The board of directors

## A LAKE'S LIFE

Ecosystems, just like living organisms, have a certain lifespan. The birth of a lake occurs due to various geological or climatic processes. Lac Bromont, like most lakes in our province, was carved out by glaciers. According to some studies, Lac Bromont is around 10,900 years old.

A young lake is called oligotrophic. It is characterized by fresh, clear, and well oxygenated water. Vegetation is sparse. The lakebed is composed of sand and gravel. There is a high degree of biodiversity, and, often, abundant trout.

Lakes naturally become enriched with organic matter (plant and animal remains) and sediments coming from aquatic organisms or the surrounding environment. Over the course of a few thousand years, an oligotrophic lake becomes mesotrophic. This second phase is characterized by an increase in the quantity of organic mater and in the number of aquatic organisms.

This enrichment process continues as the lake ages. The period between the mesotrophic phase and the following phase—the eutrophic phase—is only a few hundred years. Between the oligotrophic phase and the eutrophic phase, the lake becomes shallower. The water becomes murkier and poorer in oxygen. The shoreline is replete with aquatic plants, and the species make-up undergoes a transition. Trout are replaced by catfish and other species requiring less oxygen to survive.

Little by little, land encroaches upon the lake. Thus, an ancient lake gives birth to a new ecosystem—for example, a wetland. The lifespan of a lake depends on various factors, such as its size, its depth, and its surrounding environment. The quicker the lake is filled in, the quicker eutrophication, i.e. the aging process, will occur.

Oligotrophic

Dystrophication

Eutrophication

### WHEN HUMANS STEP INTO THE MIX

What nature does over the course of thousands of years, humans can do in a few decades. Indeed, humans can quickly convert an oligotrophic lake into a eutrophic one. To distinguish this from the natural phenomenon of eutrophication, scientists speak of dystrophication.

Humans do this by allowing substances containing phosphorus or nitrogen to seep into the water, thus accelerating the growth and proliferation of aquatic plants. By uprooting plants, humans also speed erosion, which carries sediments toward lakes. Shoreline shrubbery is replaced with manicured lawns, which do not retain phosphorus, nitrogen, and sediments.

**DOING THINGS DIFFERENTLY**

*Toilet water savings*

To reduce the quantity of water used each time you flush, place in your toilet tank two uncapped 750ml glass jars. Once filled with water, they will cut water use per flush from 13 litres to 11.5 litres.

**SUGGESTIONS**

To find out more about lakes and eutrophication: The book *Nos lacs, les connaître pour mieux les protéger*, by A. Hade, published by Fides.

The following Web sites : www.rappel.qc.ca www.mddep.gouv.qc.ca/eau/rives/richesse/index.htm.

**THE NUMBER**

**2.5**% is the proportion of freshwater on Earth. This water is found in lakes, rivers, snow, ice, and aquifers. The remaining 97.5% of the earth's water is saltwater, which we cannot drink. Let's preserve this precious resource!

Source : Environment Canada http://www.ec.gc.ca/water/en/e_quickfacts.htm

**THE WORD**

An **ecosystem** is a dynamic home of living organisms (plants, animals, and micro-organisms) that interact with one another and with their environment. The size of an ecosystem can vary considerably; it can be very small, like a marsh or a dead tree, or very big, like the earth!

**We need your help !**

There's no need to live along the lake or even in the watershed to join our association. Your membership will allow us to pursue our conservation objectives, and it will bear witness to your commitment to share in the collective responsibility we have, as citizens, to preserve our precious water resources. To become a member, simply fill out the form below and return it to the address provided. Thank you for doing your part to save Lac Bromont!

Name(s): _____

Address : _____

Postal code : _____

Telephone : _____

E-mail : _____

New member: ☐

Renewal: ☐

Individual membership ($10): ☐

Family membership ($20): ☐

Corporate membership ($50): ☐

Cash : ☐ Cheque (to the order of ACBVLB : ☐

Return the form to the following address or to acbvlb@yahoo.ca
ACTION CONSERVATION DU BASSIN VERSANT DU LAC BROMONT
C.P. 17, Bromont (Qc), J2L 1A9