

**The Blue Sea Lake Watershed Association Bulletin
 Issue No. 23 – December 2015**

In This Issue...

Another Busy Summer/Fall. A quick review of the projects that have engaged your Association this fall.

Profile of a New Administrator. Three new administrators were elected to the Administrative Council at the AGM in July. In this issue, we profile André Beauchemin.

The Potential Impact of Fireworks Displays on Our Lakes: Fireworks are popular but have environmental consequences. We look at the evidence and outline our policy.

Watershed Heroes: Hats off to Le Regroupement for this initiative. It got us thinking about our own watershed heroes.

Eurasian Milfoil Infestation - An Update: As you know, the infestation of milfoil on Blue Sea Lake is bad and getting worse. We tell you just how bad and what we're doing to address the situation. And finally...

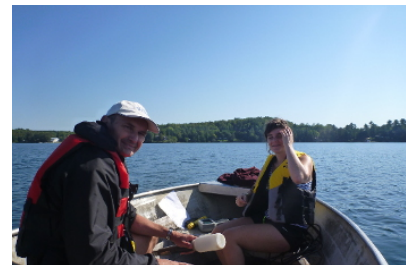
Season's Greetings. From the Administrators of the Blue Sea Lake Watershed Association to you. Enjoy the holidays. And think of how we can all protect our lakes in 2016.



Another Busy Summer/Fall

Wondering what your Association has been up to since our AGM in mid-July? Well, we've been pretty busy. Our volunteers have engaged in a wide variety of activities as they:

- continued with our invasive species information campaign at the Blue Sea and Messines' boat ramps;
- took monthly water samples in Lacs Roberge and Grenon;
- effected bimonthly transparency measurements in Lacs Beaudry (Allard), Grant, Laverdure, Profond, Grenon, Roberge, Castor and Blue Sea;
- assisted ABV des 7 in taking oxygen readings at four sites in Blue Sea Lake;
- retrieved the approximately 60 yellow buoys that mark Eurasian milfoil beds at various locations in Blue Sea Lake;
- assisted ABV des 7 in conducting a lake-wide survey of Eurasian milfoil beds in Blue Sea Lake; and
- surveyed 80% of Blue Sea Lake's shoreline, taking photos and recording the GPS coordinates of those properties that appear not to have complied with [MRC Interim Control By-law 2006-206](#)¹.



In addition to these “operational” activities, we have also conducted outreach meetings with several lake associations within our region, have published two editions of Shorelines, and have met with municipal officials on several occasions. All in all, it has been a very busy period.

We would not have been able to accomplish any of this without the tremendous effort of our dedicated volunteers, the names of whom are listed on our [website](#)². On behalf of the Association, we would like to sincerely thank them for all their hard work.

New Administrator: André Beauchemin

Athlete and expert in urban planning and regional development, André Beauchemin spent his youth in the Laurentians teaching and pursuing the sports of skiing, rock climbing, canoeing, and sailing. At 24, he left for Africa, first to Niger with the International Committee of the Red Cross, and then on an adventure across the Sahara. On his return he considered two career options: music and urban planning. He chose urban planning and in 1980, at the age of 29, he began his bachelor in urban planning at the University of Québec in Montreal. This was followed, a few years later, by a Masters in urban analysis and management. Meanwhile, he continued to work in this new field in the Mont Tremblant area where he was also a member of the ski patrol.



The job of Director General for the MRC, brought André to the Gatineau region in 1992. He stayed in this position until his retirement in 2014. Through skiing, he met his partner, Barbara Major, a native of Bouchette who works as a geomatic technician. They settled in the community of Messines on Blue Sea Lake. Since retiring, André divides his energy between the Blue Sea Lake Watershed Association and the Regroupement pour la protection de l'eau de la Vallée-de-la-Gatineau. André remains passionate about sports and the outdoors. In the summer, it's sailing on Blue Sea Lake and in the winter it's alpine skiing on Mont Ste Marie where he is a member of the ski patrol and an instructor at the ski school.

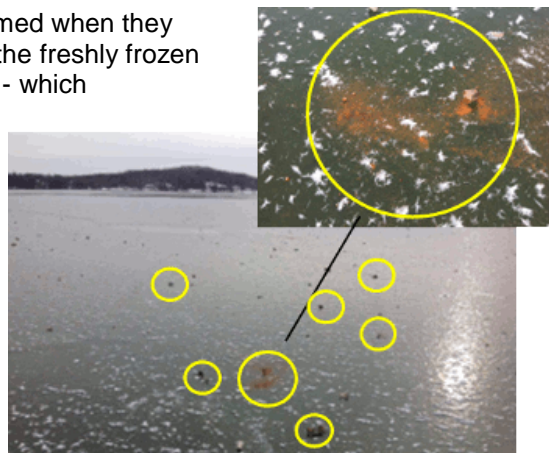
André brings to the Association extensive knowledge and experience. With regards to the state of the watershed, he is very concerned about two issues: the regeneration of the shoreline and invasive species. Whether it's with the Association or with the Regroupement, we can be sure that André will tackle these two challenges with energy and enthusiasm.

The Potential Impact of Fireworks Displays on Our Lakes

Last December, several of our members were alarmed when they spotted residue from a cottage firework display on the freshly frozen surface of Blue Sea Lake. The sight of this residue - which included significant amounts of charred packaging and chemicals - made us wonder to what extent such pyrotechnical 'fallout' threatened the health of our waterways?

Over the past several months, the Association has conducted an extensive review of both general and subject-matter specific, internet-sourced articles and studies on this issue. The following is a brief summary of what we found:

- A review of the general literature disclosed a variety of conclusions, with some articles asserting that fireworks have no significant effect on water quality, but with others claiming that the heavy metals³ found in fireworks persist in the environment and that that this “fallout” can contaminate water supplies.



- With respect to subject-matter specific reports, two of the scientific studies reviewed definitively established that firework displays can have an impact on lake water. One demonstrated that various metal compounds used as colour-emitters in pyrotechnical exhibits do collect in lake bottom sediment, while another found temporary perchlorate contamination of the water⁴. It should be noted, however, that both of these studies were conducted at very small lakes, one of which had been subject to 10 years of nearly daily professional displays.
- In two other studies, no detectable levels of firework-related heavy metals were found. In one case, detectable levels of perchlorate were discovered, however, those levels were not considered to be a threat to either the environment or to human health. In one of these studies, measurements were taken following weekly professional exhibits on a large lake; in the other, they were taken following 4th of July displays by residents on a small lake.

Even though the studies we reviewed did not reach the same conclusions, most agreed that the extent to which fireworks affect environmental and human health is not yet entirely clear. Although the short term impact of the occasional, shoreline firework display might be negligible, the long term impact of fireworks on a waterway will vary depending on the size of the water body, waterway circulation, water and sediment chemical characteristics, and the quantity of firework debris accumulating over time.

There are growing concerns about the use of fireworks on our lakes for reasons other than their potential impact on water quality. As enjoyable as fireworks can be for those who use them, they can quickly become a nuisance for the neighbours that have to endure them, can cause immense fear and stress for wildlife and domestic animals, and are a significant fire hazard. Because of this, many lakeshore municipalities have either banned or strictly regulated their use by requiring a permit and/or restricting displays to certain holidays.



Because of [the fragile state of our waterways](#)⁵, our Association must err on the side of caution in this matter. We do not support the use of fireworks and would therefore ask that all shoreline residents refrain from using them. We would also recommend that both municipalities review this matter and - for the reasons noted above - consider either banning or regulating their usage.

Responsible Corporate Action

On 3 December, Dick Ryan and Robert Duval, president and vice-president of the Blue Sea Lake Watershed Association, presented the Association's 'Environmentally Responsible Action' certificate to the Village Récréotouristique Majopial in recognition of its policy of excluding pyrotechnical displays from celebratory and promotional activities. Accepting the certificate on behalf of the organization, Sophie Karn indicated that it would be displayed proudly in Majopial's l'Huile d'Olive Restaurant.



Watershed Heroes

This past summer, the "Regroupement pour la protection de l'eau de la Vallée-de-la-Gatineau" conducted a region-wide information campaign entitled "Je suis un héros de l'eau" (I am a hero of the water). The aim of this campaign was to promote greater public awareness of and participation in the fight to protect our waterways by getting young and old alike to share their ideas on how to safeguard our lakes and rivers. We would like to congratulate the Regroupement on this excellent initiative.

The title of this campaign got us thinking about the many unsung heroes within our own association. Included within their ranks are, of course, the many cottagers and residents who help

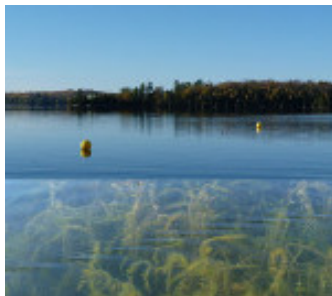
our association monitor the state of our lakes, participate in our information campaigns, and encourage their neighbours to behave in an environmentally responsible manner. Our watershed heroes also include those who are brave enough to report to municipal officials unacceptable/illegal environmental activities such as the building of unauthorized structures along the shoreline, the use of environmentally hazardous materials in shoreline construction, and the violation of shoreline vegetation regulations. Our municipal inspectors cannot be everywhere at the same time and therefore rely on responsible citizens to keep a watch on what is happening on and near our waterways. We applaud those who have the moral courage to report such activities and encourage all our members to do likewise.



Among the many watershed heroes in our association, there is one couple that deserves special mention, namely, the two cottagers who came across the septic tanker spill on Chemin d'Orlo last August and immediately reported it to the municipal inspector. Their timely action, combined with the Inspector's effective response, helped prevent a serious environmental incident. Although they wish to remain anonymous, we owe that couple our thanks not just for their action in this instance but also for the outstanding example they set for all of us. Kudos to them and to all of you who help defend our waterways.

Eurasian Milfoil Infestation - An Update

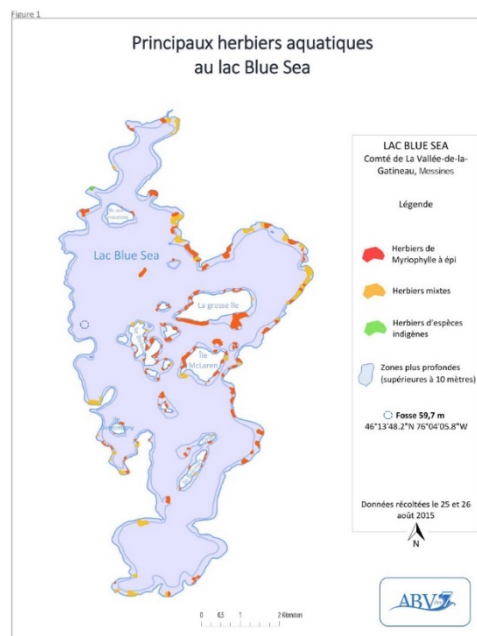
As many of you know, Blue Sea Lake is infested with Eurasian milfoil - an invasive aquatic plant that has spread throughout the lake during the past 20 years. Although this infestation is virtually impossible to eradicate, our Association has been trying to find ways to control it and to mitigate its impact.



Our work to date has been focused primarily on educating residents/cottagers about this threat. We initiated our information efforts three years ago in July 2012 with the "You Hold the Key" campaign. As part of that campaign, we distributed boat key fobs and information cards describing this invasive plant and urging boaters to avoid it whenever possible. Later that Fall, we installed 20 yellow buoys to help mark a few of the milfoil beds. Since that time, we've expanded both of these programs - annually installing and retrieving fifty to sixty yellow buoys and distributing

educational pamphlets as part of our 2014 door-to-door and 2015 boat ramp information campaigns.

During the past three years, we have also been monitoring the ABV des 7 milfoil project at Lac Pemichangan to assess the effectiveness of using jute tarps to help control this plant. As soon as this trial was declared a success, we contacted ABV des 7 to determine how and whether we could use such tarps to help manage this invasive species in Blue Sea Lake. They advised us that to do so we would need authorization from the Quebec government and that, to get that authorization, we would have to conduct a survey of the lake to determine the location of milfoil beds and to verify that these beds did not include any indigenous plant species. Accordingly, we contracted with ABV des 7 last Fall to carry out this survey and to prepare the necessary paperwork for submission to



the Ministry of the Environment. ABV des 7 conducted the survey on the 25th and 26th of August and gave us the preliminary results at the end of September.

According to that survey, mono-specific Eurasian milfoil beds cover over 500,000 sq meters of the lake bottom. As the estimated cost to install jute tarps is \$2 per sq metre (plus tax), we have to be selective in targeting which beds to cover. As a start, we have identified three beds in high traffic areas. These are located near or adjacent to the Blue Sea “public beach”; Raymond Lacroix’s marine gas pump, and the Messines public boat ramp. Combined, the two beds in the Blue Sea sector measure 4,200 sq metres, while the one in the Messines sector covers 6,300 sq metres. We have asked the municipalities to fund the installation of jute tarps over these three beds next summer. We have also asked ABV des 7 to proceed with the preparation and submission of a request to the Ministry of the Environment for authorization to proceed with the installation of tarps over these and other beds around the lake. We will keep you apprised as matters progress.

Winter Tips

With the snow and cold on the way, it’s time to check our [winter tips](#)⁶.



-
- 1 www.associationblueseaa.org/index.php/en/environment/regulations
 - 2 www.associationblueseaa.org/index.php/en/association/members/membres-2015#volunteers
 - 3 According to the Explosives Safety and Security Branch of Natural Resources Canada, the use of toxic chemicals such as arsenic, lead, chromium, mercury, and phosphorus in the manufacture of fireworks sold in Canada is prohibited.
 - 4 Perchlorate salts are commonly used as the explosive component in fireworks. Long term consumption of perchlorate-contaminated water has been linked to health issues.
 - 5 www.associationblueseaa.org/index.php/en/watershed/assessing-the-health-of-a-lake
 - 6 www.associationblueseaa.org/index.php/en/environment/best-practices/seasonal-tips/winter

Shorelines is a production of the Blue Sea Lake Watershed Association.

Contributions : Dick Ryan, Don Karn, Robert Duval, Francis LeBlanc.

Website: www.associationblueseaa.org

To contact us: info@associationblueseaa.org
