



# NEWSLETTER

PSLL.CA

## ASSOCIATION PERKINS-SUR-LE-LAC

JUNE 2005

### 2004-2005 ASSOCIATION BOARD OF DIRECTORS

<b>President</b>	
France Joncas	671-4416 home
<b>Secretary</b>	
Odette Surch	671-3419 home
<b>Treasurer</b>	
David Hodgkin	671-0249 home
<b>Barnes Representative</b>	
Paul Strigner	746-0647 home 671-8099 cottage
<b>Bataille Representatives</b>	
David Kerluke	824-6542 home 671-8377 cottage
Helène Lemieux	771-3643 home 671-0632 cottage
Louise Lemieux	746-8565 home 671-8383 cottage
<b>Louise Representative</b>	
Raymond Guénette	728-1143 home 671-7696 cottage
<b>Rhémaume Representatives</b>	
Kim Courtney-Wilson	671-5221 home
Emma Gregor	274-7934 home 671-3670 cottage
Ron Malis	671-0831 home
<b>Truite Representative</b>	
Chris Hemmingway	671-8084 home

### ANNUAL MEETING

Please attend the Annual General Meeting, which will commence at 9:45 am on Sunday, July 17, 2005, at Lac Bataille Beach (rain date July 24). The Association will also be hosting a BBQ immediately following the AGM.

### PRESIDENT'S MESSAGE

Our quality of life at the lake...

Working to maintain it for you!

Once again, your Association has been hard at work on your behalf:

- During 2004, the Municipality inspected most of the septic systems on the lakes of **Bataille, Maskinongé, Corrigan, Chevreuil, Louise, and Barnes**. Properties that were omitted in 2004 will be completed in 2005. A synopsis of the results can be found in the *Newsletter*.
- At the beginning of March 2005, the Municipality enacted a By-Law banning the use of pesticides. This was a joint initiative between the Association, the Federation of Lakes of Val-des-Monts, and the Municipality. An overview of the By-Law is included in the *Newsletter* and is posted on the Association's web site at [psll.ca](http://psll.ca).
- Following a motion from the floor at last year's AGM, the Association is currently in the process of surveying the property owners on Bataille and Rhémaume regarding the modification of the culvert. More in-depth information can be found on the Association's web site. The final results of the survey will be announced at the AGM.
- The Association did additional water testing for E. coli last August. Water quality testing was also conducted this past April, shortly after ice-off. The results of these tests will be presented at the AGM. The Association also plans to test for E. coli and Giardia (beaver fever) in August 2005.

I wish to thank the members of the Board for their continued efforts and dedication. I also want to thank you, the members, for your ongoing support in helping the Association attain its goals.

As a member, you can continue to assist the Association by renewing your membership. For a nominal fee (\$40), you have access to a devoted cadre of volunteers who are willing to contribute their time and energy towards protecting our environment.

Please attend the **Annual General Meeting**, which will commence at **9:45 am** on **Sunday, July 17, 2005**, at **Lac Bataille Beach** (rain date July 24). The Association will also be hosting a BBQ immediately following the AGM.

Talk to your neighbours and invite them to become members of our Association. The more we are, the stronger our voice when the time comes to affect meaningful change. **Together, we can make a difference!**

France Joncas

## UPDATE ON THE MUNICIPAL SEPTIC SYSTEM INSPECTION PROGRAM

The septic inspection program debuted on May 17 and ended on October 8, 2004. On average, 30 to 35 systems were inspected on a weekly basis. The inspection period covered 18 weeks.

### STATISTICS

Lakes visited: **Rhéaume, Bataille, Maskinongé, Corrigan, Chevreuil, Louise, Barnes, Mud Bay, Devillas, McLaren, à l'Eau Clair, Truite Maigre, du Chantier Brûlé, Dam, Brassard and Grand.**

Total number of septic systems inspected and measured: **437 septic systems** (86%) out of a **total of 507**

Number of inspections carried forward to 2005: **17 systems** (on islands)

Number of sealed systems tanks: **113** (26% of inspected septic systems)

Number of second notices sent to property owners still to be inspected: **70 second notices**

Number of notices sent to empty septic system holding tanks: **73 notices.**

Number of septic system holding tanks emptied (with proof of receipt): **35 systems**

Number of septic systems requiring an inspection by an engineer or technologist: **18 requests for inspection**

Number of septic systems corrected requiring an inspection: **6 systems corrected out of 18 requests**

Number of sites that do not have a system to treat used water: **14 sites**



### OVERVIEW OF THE LAKES AND THE NUMBER OF SEPTIC SYSTEMS THAT WERE INSPECTED AND MEASURED FROM MAY TO OCTOBER 2004

LAKES	SITES VISITED	PERCENTAGE	TOTAL
Rhéaume	108	92	117
Bataille	107	92	116
Maskinongé and Corrigan	5	71	7
Chevreuil	3	60	5
Star (Louise)	6	86	7
Barnes	47	87	54
McGregor (Baie Mud)	12	75	16
Devillas and McLaren	0	0	1
à l'Eau Claire, Truite Maigre, du Chantier Brûlé	16	76	21
Dam	70	83	84
Brassard	24	89	27
Grand	39	75	52
<b>TOTALS</b>	<b>437</b>	<b>86</b>	<b>507</b>

There were **eighteen (18)** confirmed systems deemed sufficiently deteriorated to warrant an assessment from either an engineer or technologist.

Source: Municipality of Val-des-Monts, 2004

### ANALYSIS AND INTERPRETATION OF RESULTS

The lake associations were helpful in communicating the program to property owners and residents. The majority of sites visited were easily accessible and the covers lifted from the septic system holding tanks. The visibility of some system holding tanks was reduced because they were not properly uncovered. Some of the inspections were not as in depth as the majority of sealed systems and a minority of septic systems had one or more extension pipes which, unfortunately, led to incomplete inspections for these systems.

Properties without septic systems were cottages using outhouses to treat their used water (human waste). No exterior pipes were found outside of the dwelling, including plumbing to collect lake water or water from other sources.

Sealed systems were inspected to determine whether the levels of liquids and solids were in the normal range. Dirt in the bottom of a sealed tank is an easy indicator that the tank has been cracked. It is also possible to verify whether a sealed system has been emptied once it starts to refill.

## ANALYSIS AND INTERPRETATION OF RESULTS (CONT'D)

Seventy-three (73) out of a total of 437 septic holding system (16%) required emptying. A system needed emptying if the level of sludge / solids was 30 cm or higher or if there was more than 12 cm of scum. Surface scum is usually composed of oils, grease and paper. Solids found at the bottom of the tank (sludge) consist of minerals, earth and other solids. At these levels, solids inside the tank can either clog the septic tile bed or the exit pipe to the field resulting in overflows and surface pollution. Overall, low levels of sludge and scum were more frequently reported than higher levels.

The majority of repairs to septic systems were of a minor variety. However, there were eighteen (18) confirmed systems deemed sufficiently deteriorated to warrant an assessment from either an engineer or technologist. The inspection program found perforated metal holding tanks, cracked concrete tanks, as well as other major defects. The seepage of waste and the flow of water over the ground is evidence that there is risk of pollution. An engineer or technologist was not required for minor repairs, such as broken baffles, replacing holding tank covers or seeding grass over the septic field.

Property owners found in default received a written notice through the mail and were given a reasonable time frame to contact an engineer or technologist. The follow-up of the twelve (12) outstanding systems requiring modifications, upgrades or complete change, will be treated as environmental complaints. They will have to either provide appropriate plans to modify their systems or an engineer's letter attesting that the system meets provincial regulations regarding the evacuation of used waters for isolated residences.

## CONCLUSION

Outstanding 2004 inspections will be followed up once the program starts up in 2005. Property owners who have not yet emptied their septic holding tanks, as required, are encouraged to do it as soon as possible. Those who have not will be receiving a second notice.

The data collected to date is not representative of the whole program due to very diverse septic systems, including specific constraints – certain areas have cottages that are 30 years old or more, some are small rudimentary camps, some are four-season homes, while others do not have access roads (construction on islands). As well, the collected data cannot conclusively demonstrate whether problems have stabilized or declined as it takes several years' worth of data to prove any findings. Also, certain areas are older and have systems that are more precarious than others. Systems that are not up to regulation with regards to the treatment of used water but they do not show any signs of pollution.

The comprehension and reception of the program by residents was very positive. The majority of the people read the information sent by the Municipality. The lake associations and the Federation of Lakes of Val-des-Monts contributed greatly in disseminating the advantages and benefits of the program to the property owners.



## WHERE DO FISH GO WHEN THEY DIE?



When their time comes, the fish simply sink to the bottom of the lake where they lay in peace. It is their cemetery. It is lucky for the cottagers because it would be rather unpleasant if their lakes were covered with dead fish.

But why do the fish sink to the bottom? They do so because they are heavier than water and they don't float. In order to float, they need a "life jacket" so to speak. Most fish are equipped with an air-bladder that enables them to control their floatability. The bottom feeders are the only ones without that bladder. When a fish dies, its air-bladder deflates and it then becomes heavier and sinks to the bottom.

Everything takes place under the water. The fish dies discreetly unless its air-bladder remains intact. If that happens, the fish will float to the surface of the lake and end up on the shore where it will decompose. However, this is unusual. That phenomenon is only seen when the mortality rate is exceptionally high due to low oxygen concentration during early spring, the period of winterkill, or the summer.

## MUNICIPAL BY-LAWS ON THE USE OF PESTICIDES

At its regular meeting of March 7, 2005, Municipal Council adopted a By-Law governing the use of pesticides to protect public health and the environment.

"Pesticides" include all substances, matter and micro-organisms used to control, destroy, reduce, attract or repel, directly or indirectly, any harmful, noxious nuisances towards humans, fauna, vegetation, or other types of goods used as a means of regulating plant growth and development. Pesticides include, but are not limited to, all herbicides, fungicides, insecticides or biocides.

The By-Law governs the application of pesticides on all public properties, as well as all private properties within the Municipality's territory. In essence, the application of pesticides is prohibited throughout the Municipality. However, the By-Law does not apply to the application of pesticides within buildings. The By-Law also does not apply to farms that use pesticides on a property that is used for agricultural or horticultural business.

Pesticides can be used to control or destroy insects that infest a property, as long as the infestation has been confirmed, in writing, by a Municipal inspector. However, in such cases, the pesticide application is limited to the area where the infestation has been confirmed.



## AUTHORIZED APPLICATION OF PESTICIDES

Before applying a pesticide, the property owner must obtain a permit from the Municipality and must conform to its policies and procedures governing the use of pesticides. The property owner must also install signs that are easily visible from all streets or pathways that are adjacent to the treated property. In addition, each sign must be installed 24 hours before the pesticides are applied and must remain in place for a minimum of 24 hours after its application. As well, each sign must measure a minimum of 12 cm by 17 cm and should be manufactured, installed and supported by materials that can withstand inclement weather.

## PESTICIDES RESTRICTIONS

No pesticides are to be applied within a zone of two (2) metres from within the property line unless written consent is obtained from the adjacent property owner(s).

No pesticides are to be applied within a zone of fifteen (15) metres from a surface well or within a zone of three (3) metres for an artesian well.

No pesticides are permitted within a ten (10) metre zone of the following areas:

- river, lake, creek, pond or water way;
- water basin created by a defined embankment that could be used to collect water;
- all canals or conduits used to collect water from rain / streams or from other adjacent properties;
- wetlands.

No pesticides are to be applied when it rains unless the weather forecast allows enough time for a proper application.

No pesticide applications are permitted when the outside temperature exceeds 27°C unless stated otherwise on the pesticide label.

No pesticides are to be applied when trees are in blossom.

WHAT WENT WRONG ??? OUR PARADISE HAS BEEN INVADED!

**Loud music** carries a surprising distance over water.  
**Dogs and cats** should be safely home and non vagrant.  
**Fires** should be under your control.

## RESPONSIBILITIES AND PENALTIES

The Municipality is responsible in applying the By-Law. Municipal inspectors or designated officers are authorized to write up infractions and hand out fines.

For the first infraction, the fine is set at a minimum of \$500 and a maximum of \$2,000 for a person *or* a minimum of \$2,000 to a maximum of \$5,000 for an enterprise.

For all subsequent infractions, the fine is set at a minimum of \$1,000 and a maximum of \$5,000 for a person *or* a minimum of \$3,000 to a maximum de \$10,000 for an enterprise.

In addition, if an infraction spans more than one (1) day, **each additional day** shall constitute a distinct and separate infraction.

**"The first fine is set at a minimum of \$500 and a maximum of \$2,000 for a person".**

## DOOR-TO-DOOR PICK-UP OF RECYCLABLE MATERIALS

The Mayors Council of the MRC des Collines-de-l'Outaouais has recently accepted and adopted the Residual Matter Program, which will apply to all municipalities which form part of the MRC. This program calls for door-to-door recycling pick-up every two weeks with the use of 360 liter recycling containers on wheels. During the autumn, winter and spring months the regular garbage pick-up will be every two weeks and during the summer months it will be every week.

Val-des-Monts Council has recently accepted to retain the services of CFER Outaouais, which will participate in the revision of the tender for garbage pick-up, review the actual Municipal By-Law and supervise the delivery of the recycling containers. Each household and every cottage will receive one of these containers to perform recycling. Purchase and delivery of the containers is scheduled for July 2005. Door-to-door recycling pick-up will start a within a few weeks after delivery. Publicity campaigns, meetings and information sessions are also planned as follows:

- July 5, 2005 at 7:00—J.A. Perkins (Library in Perkins)
- July 12, 2005 at 7:00—St. Louis-de-France School (Poltimore)

## BEAVER FEVER

So you think that all you have to worry about is AIDS, HIV, SARS, mad cow disease, flesh eating disease and West Nile virus? Well think again. If you are a cottager who drinks untreated water you also have to worry about ingesting E. coli bacteria, Hepatitis A virus, parasites such as Cryptosporidium and Giardia, and maybe other bad things. It's Giardia that can lead to "beaver fever". So how does one get it? Well, the pesky (or patriotic, depending on your point of view) beaver is a carrier. Its faecal discharge could contain it and affect the water. You could drink that water and bingo come down with diarrhea. If mild and of short duration, it would lead to discomfort. If severe and lengthy (a week or more), it could even kill you.

So don't drink untreated lake water. Our lakes are tested annually for E. coli. The small amounts found (up to about 10 counts per 100 ml of) indicate that bacteria of intestinal origin (from tame and wild animals (including beavers and birds), humans now unlikely) is present. No amount of E. coli (with possible presence of Giardia) is acceptable in water to be drunk. Small amounts are acceptable for swimming. Indeed, the maximum allowed for swimming, according to Health Canada, is 200 counts / 100 ml of water.

If you must drink lake water, treat it. Various systems are available ranging, in price from several hundred dollars to thousands.

## BOAT LAUNCH ACCESS



All our lakes within the Domain are private and do not have outside public access. In order to maintain our privacy, a gate and lock is in place at the Lac Bataille Beach between April 20 and September 1. During this period, should you need to launch your boat or take it out of the water; you can contact one of the people listed below. So that no one is disappointed, **try to make arrangements the day before.**

Jacques	671-4302	Odette	671-3419
Paul	671-4090	David	671-0249
Pauline	671-9538	France	671-4416
Irma	671-1333		

**Note: All non-members will be charged \$10 each time the gate is unlocked.**



## MUNICIPAL NEWS

**Road Work**

The paving of Blackburn Rd., up to the forks of Blackburn Road and Bataille Road. — approximate 1.2 km. (Maybe more) This money was previewed or reserved in the 2005 Budget. This work should start sometime this summer—depending on the tenders, weather, etc.

**WATER QUALITY DAY****Federation's Water Quality Day**

**Saturday, July 9<sup>th</sup>, 2005**

**10:00-12:00**

**Hôtel sur le Lac**

**St-Pierre de Wakefield**

**Do you want to know how our lakes are doing? Don't miss the water quality day. This event is hosted by the Federation of the Lakes in collaboration with the Municipality.**

**Agenda**

- **Welcome—Federation's President, Tom Barber**
- **Results of Water Testing—Henry Fournier, Biologist**
- **Word from the Mayor—Marc Carrière**
- **Pesticides and Fertilizers—Dr Scott Finlay**
- **Federation Water Quality Activities**

**Coffee will be served on arrival and a light lunch will be served after the meeting.**

**Septic Systems**

I am very glad to say that the Municipality will continue its program of checking out all septic systems to ensure that the systems that have been installed are still working sufficiently and are not destroying the environment. This year Grand Lake, McGregor Lake, Scattergood Lake and Bonin Lake will be added to the list.

**Upcoming Elections**

Yes, there are upcoming elections in Val-des-Monts, this year — Sunday, November 6, 2005. The elected members (old and new) will be elected for a four (4) year term. Starting with this election, the geometry of Ward #3 will have substantially changed to reflect provincial laws and the swelling of Val-des-Mont's population.

It's very important that each one of you check to see if your name is on the voter's list. Make sure that all changes have been updated. Check out to see who has the right to vote, especially if you are a non-resident, if the property is in two names. Check to see what documents you need at the polling stations as proof of a voter. For more information you may contact Ms. Patricia Fillet at 457-9400, ext. 2200, or Mr. André Malette at 457-9400, ext. 2303.

**Web Site**

Also, you may find out useful information by visiting the Web Site of the Municipality at: [www.val-des-monts.net](http://www.val-des-monts.net) — this web site is fully interactive. You can even use it to send complaints, obtain information (all subjects) and even register to receive the Municipality's regular newsletters. You can also, contact me through the web site as my e-mail is listed there. Please use this site as your reference guide.

I trust that each member will have an enjoyable summer season. If you need to get in touch with me for any questions or need information pertaining to the Municipality, please, feel free to get in touch with me.

Margaret C. Carey, Ward #3, Municipality of Val-des-Monts

Tel: 671-3278 Fax: 671-7480 E-mail: [mccarey@storm.ca](mailto:mccarey@storm.ca)

**PSLL ASSOCIATION BY-LAWS**

As announced at the Annual General Meeting of July 18, 2004, the By-Laws of the Association are presently being revised by an ad-hoc committee. These revised by-laws will be presented to PSLL members at a special general meeting.

**SPECIAL GENERAL MEETING**

**Sunday, October 2<sup>nd</sup>, 2005 at 1:00 pm**

**At the J.A.Perkins Building (Library)**

**17, du Manoir Rd., Perkins**

**No further notice will be sent**

## LAKES AND LAWNS

Did you know that lawns are the main source of ecological degradation of lakes? Wherever there is a lawn, there is deforestation. Wherever there is deforestation, there is degradation! The immune system of a lake is the forest that surrounds it. Of course, a healthy lake can make some allowances to satisfy some of our needs. Nevertheless, it cannot tolerate lawns along its shoreline or within its forestial border. Lakes abhor all excesses created by humans.

### The Evils of Lawns

Some cottagers adore their lawns. On the other hand, lakes cannot tolerate lawns: they make them sick. Whenever lawns are found along the shores of lakes, the results are felt in in various ways, such as warming of the water, over fertilization, increased water flow, erosion and biological desolation.

### Fertilizers

Healthy green lawns have usually been sprayed with fertilizer. Unfortunately, a vast amount of this fertilizer gets washed into the lake by rainwater, thus contributing to the over fertilization of the lake water. As a result, the aquatic plants begin to multiply at an excessively high rate.

### Warming of the Water

Overfertilization is not the only problem that a lake has to face. When forests are replaced by lawns, the lakes have too much and too direct exposure to the sun, resulting in the warming of the water temperature. The warm water also contributes to excessive growth of aquatic plants, even algae blooms. Moreover, trout suffer due to this warming trend. Trout like cool water and are constantly searching for shaded areas near the natural shoreline. Trout don't like lawns.

### Increased Water Flow

The humus found in the forest easily retains the rainwater, even on very steep slopes. This helps control the water flow into the lake and prevents excessive water intake. Lawns, however, retain very little rainwater and, consequently, the level of lakes rises after a rainfall. The difference between low and high levels becomes greater making for scary rises, followed by low dry periods.

### Erosion

During a rainstorm, millions and millions of raindrops come down in the forest and are slowed down in their path by the presence of leaves and shrubs. When the drops finally reach the ground, they no longer have the strength to cause erosion. However, when a forest is replaced by a lawn, it is a totally different story. The raindrops hit the soil with full force, at a very high speed, thus creating erosion. Lawns cannot prevent erosion, except in a very superficial way.

### Biological desolation

Fish need food to survive as insects are a crucial element of their diet. A great number of those insects come from trees, shrubs and plants growing along the shoreline of lakes. The natural vegetation supplies food for the fish. Unfortunately, lawns are like biological deserts.



### The Sun

Even though lawns have many negative attributes, they nevertheless provide us with a sunny spot where we can enjoy the sun and recharge our batteries. Isn't sunshine part of cottage life? It is not surprising that cottagers regard a deck, a patio or a grassy area as an essential element of the property. It provides a pleasant corner where one can sit and enjoy the summer sun. How can we protect the lake and still enjoy the sun? Is it possible to have a lawn and protect the lake at the same time? Yes, but under one condition: the lawn must be located beyond the shore (10 to 15 metres from the shoreline). The vegetation of the shoreline must be present to stop the fertilizers from going into the lake and to protect the lake from too much sun. Warning! Not only must the lawns be kept 10 to 15 metres away from the shoreline, they must also be reduced to the smallest possible size.

In the city, lawns give life to a sterile environment greatly covered with asphalt, concrete and stones. Green spaces greatly improve the quality of life of citizens. However, it is a whole different story around lakes. Lawns don't improve the environment of lakes. They are a negative attribute. A lawn is like a wasteland, whereas a forest is a rich and diversified natural environment.



## MORE ABOUT AQUATIC PLANTS

TONY LESAUTEUR & LUCIE MCNEIL

Without aquatic plants, lakes would be biological deserts akin to swimming pools. As a lake ages, the aquatic plants become more and more numerous. It is a natural phenomenon that cannot be stopped and we must accept that reality! However, excessive proliferation of aquatic plants is usually brought on by over fertilization (i.e. nutrient loading) and warming of the water caused by deforestation around the lake. Lawns are particularly problematic as they inevitably cause run-off which encourages the excessive growth of aquatic plants.

**It is human intervention that causes the excessive growth of aquatic plants. Why blame nature when we are most often the ones responsible for the problems?**

### Can we control the growth of aquatic plants?

Aquatic plants are an integral part of a lake environment. Cottagers can slow down the growth of the plants by keeping the shoreline and forestial border intact.

### Should harvesting machines be used?

Those machines are very effective in the short-term in removing aquatic plants. However, it is a rather pointless exercise because the plants grow back, like any other weed or plant found on land. Not only is it not effective in controlling the growth of aquatic plants but it might also have the opposite effect and encourage a more rapid propagation of the plants. Also, the procedure must be repeated every year and can become a costly affair. This operation also creates the illusion that a lake can be saved without making the necessary effort to solve the problem at the source.

### What about raking on a regular basis?

The results are the same whether the job is done by a machine or laboriously by hand. The aquatic plants will keep growing back and the job will never be done. Why be so stubborn?

### What if weed killers are used?

Weed killers are very toxic. If they are used, the lake will have a serious water quality problem. Anyhow, the use of those substances is forbidden in Quebec. Forget about it!

### Are there other techniques that could be used to control aquatic plants?

Research has been done to try to destroy aquatic plants by freezing them. The water level of the lake was lowered late in the fall and the plants froze during the winter months. The plants were damaged but nevertheless they came back the following spring. Frost does not alter the natural environment of a lake. The fertilizing elements continue to increase and nature will follow its course if pollution and deforestation around the lake are not remedied. The plants will grow! Consequently, this technique is just as ineffective as the others. Moreover, lowering the level of a lake on a regular basis is a very bad practice.



### If the problem is corrected at the source, will the plants disappear?

No! Of course, it is difficult to accept the fact that the aquatic plants are there to stay, that it is impossible to eliminate them, and that the only thing that we can do is to slow down their growth. We cannot step back and rejuvenate a lake any more than we can rejuvenate ourselves! The fact remains that the only way to slow down the growth due to human activities is to correct the problem at the source. Consequently, it is very important to differentiate between natural growth and excessive growth due to human activities in order to effectively deal with aquatic plants. We must stop considering natural growth of aquatic plants as a nuisance and must forget about recreating suburbia on the shores of our lakes.

### Is aquatic plant coverage the same in all lakes?

No! Usually the greatest coverage is found in shallow lakes that are rich in nutrients and in clay bottom lakes. Deep lakes and rocky or sandy bottom lakes have fewer aquatic plants.



## LET'S PROTECT THE WATER QUALITY OF OUR LAKES

Two articles on this subject are posted on our web site at [psll.ca](http://psll.ca); paper copies will also be available at AGM. These are:

- *Managing your septic system*
- *Household and personal cleaning alternatives*



## THE REVENGE OF AQUATIC PLANTS

If your lake were free of aquatic plants, it would not be the end of your problems. On the contrary! A series of reactions would begin to take place and they would have serious repercussions on your lake. There is only one correct way and that is the natural way: interrelation. A place and a time for everything! Lakes abhor changes and can easily take revenge on those who are foolhardy enough to impose an artificial way of life on them.

### No more shelter.

Without aquatic plants, there would be no shelter for fish nor animal life. The fish would not be protected from the sun and would also be vulnerable to predators and strong currents. As far as the young fish are concerned, it would be a question of life or death. For certain species of fish, it is the spawning areas that would be at risk. No reproduction. No fish. No fishing. Think about it!

### Farewell shoreline!

The shoreline would be eroded by wave action if the aquatic plants were destroyed. The trees near the shore would also be more apt to disappear. Without trees, the water would become warmer and there would be no fish. Moreover, it is known that treeless shorelines are vulnerable to landslides. Think about it!

### Farewell to life!

The disappearance of aquatic plants would affect habitats and the food supply for the fish, birds, insects and a multitude of other living organisms. The oxygen supply would also be at risk. Think about it!

The disappearance of aquatic plants would affect habitats and the food supply for the fish, birds, insects and a multitude of other living organisms. The oxygen supply would also be at risk. Think about it!

## LET'S KEEP OUR SKY DARK

One of the advantages of being far from the city is that we can observe freely the spectacle offered by unpolluted dark skies. At Perkins-sur-le-lac, we are fortunate since we can still see many stars, meteorites and the Milky Way with the naked eye. Galaxies and nebulas are easily within reach of binoculars and telescopes. However, light pollution could rapidly take this privilege away. This pollution is mainly due to unnecessary artificial external lighting. However, contrary to popular belief, permanent external lightings (i.e. when not needed) has no advantage but many disadvantages:

1. Studies show that they do not scare away thieves. On the contrary, they can attract them and even help them commit their crimes. Lights triggered by motion detectors are more useful because of their surprise effect.
2. They attract unwanted insects such as mosquitoes.
3. They have a negative impact on the biological clock of wild animals.
4. They spoil visual dark adaptation and reduce the capacity of our eyes to see beyond the lighted areas. (When needed, lights that are exclusively directed toward the ground are preferable and red lights do not reduce as much dark adaptation).
5. They deprive the surrounding community of the beauty of the sky.
6. They increase electricity bills while enhancing the pollution caused by its generation.

To learn more about light pollution, efficient lighting and security, consult the following website: [www.darksky.org](http://www.darksky.org)

Let's save energy, money and respect this fragile gift of nature. Our visits to the cottage will be more secure and pleasant.

Joseph De Koninck  
Lac Bataille

