

LAKE WINNIPEG FOUNDATION

The Watershed Observer

Summer 2009

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From the President

Hello. I am Bruce Smith, the recently elected President of the Lake Winnipeg Foundation. I congratulate Anne Doherty, our outgoing President, and all the other Board members, for the excellent work they have done on behalf of the Foundation.

In four years, the Foundation has gone from something that sounded like a good idea during a discussion over coffee to a fully functioning organization that is meeting its stated goals in the areas of research, education, advocacy, management and coordination.

The challenges facing the lake and watershed often seem endless – excessive nutrients, invasive species, shoreline erosion, wetlands degradation - to name a few, but there is reason for optimism.

Ten years ago, hardly anyone spoke of the lake's challenges. Today, increasing knowledge of those challenges and the potential remedies has made more people aware of the things they can do to help the lake. It is a large lake and watershed, and there is a lot to do but with acknowledgement of the issues we are beginning to head in the right direction.

This is totally a volunteer organization and we do have great volunteers. As well as the Board members, there are dozens of people who serve on committees or help with functions such as the Live Lake Walkathons, the Live Lake Concerts and last fall's Symposium.

Of course, none of this would happen without our members. Your membership helps to support the Foundation's activities and the growing number of members makes us a stronger voice for Lake Winnipeg and its watershed. In this issue is a challenge from Janet Sampson, our Membership Chairperson, to increase membership from 375 to 500. Let us talk up Janet's plan with our friends, relatives and associates and make her goal a reality.

Please be sure to get involved in the third annual **Live Lake Walkathon** on Sunday, August 9 happening simultaneously in Victoria Beach and Matlock. See the details in the article in this issue. A fourth **Live Lake Concert** is in the planning stage for Gimli on Thursday, September 17. Details will be sent out as they become available.

The Walkathon and the Concert have brought us funds in support of our many projects. This year the goal for the Walkathon is \$40,000 with nearly a third of that goal already pledged by many generous sponsors a month before the Walkathon.

There were many changes to the Lake Winnipeg Foundation Board in April. Leaving the Board were Don Winstone (our Treasurer since the startup of the Foundation), Joy MacLean (our Newsletter Editor), Eugene Kostyra (formerly Chairperson of the Projects Committee), Bill Percy, Melissa Hotain and DJ Sigmundson. Even though these people are no longer on the Board I know that they will still be involved in Foundation activities. Thank you to all of you for all your past commitment to the Foundation.



New to the Board are Jesse Cringan, Dick Dawson, Lila Goodspeed, and Alex Salki. Members continuing on the Board are Karin Boyd, Art Chipman, Anne Doherty, Rick Gamble, Sheila Grover, Lyle Lockhart, Robin Mather, Barbara Oberding and Janet Sampson.

About This Issue of The Watershed Observer

Joy Maclean, our editor for 6 of the 7 issues in the life of this newsletter has decided to leave that position. We are going to miss her. Looking back over the issues that Joy produced it is easy to see in the pages of the newsletters the growth of the organization.

Joy would be the first to point out that she did not do it alone. There were many contributing writers and storyline suggestions from many individuals. When it came close to the final edit, Joy's husband Cam would do the layout to make the newsletter ready for printing. The members got the final great result.

Thank you very much Joy and Cam!

The single-issue editorial pair of Bruce Smith and Robin Mather edited this issue with technical assistance from Katharine Walton.

Thank you to all the contributors. At first, we thought we would not have enough content for the usual 16 pages but in the end our contributors came through.

You may have noticed that this issue is labeled "Summer 2009" when it should have been the "Spring 2009" issue. The newsletter will get back on schedule with the next issue, "Fall 2009".

**We are looking for a new editor to take over with the next issue.
If you are interested in the position, please contact Bruce Smith
Email: bsmith.lodge@mts.net**

Live Lake Concert

Planning is underway for the 4th Live Lake Concert
which will be held on Thursday, Sept 17 in Gimli
Details available soon

Nature's Kidneys

...this is how Dr. Gordon Goldsborough characterized marshland during his presentation to the 2009 Annual Meeting of the LWF. It would seem that nature's kidneys are in poor health.



While his presentation touched on Delta Marsh (south end of Lake Manitoba), he focused on the Netley-Libau Marsh located at the south end of Lake Winnipeg approximately 65k north of Winnipeg. It is one of the largest coastal marshes in North America and is comprised of over 24,381 hectares of upland and wetland habitat. The area is

flat, and consists of many small bodies of water connected by channels and is interlaced with fingers of grassland, trees and shrubs. While water levels are affected by Lake Winnipeg, the Red River is an important force of change in the large network of wetlands. The marsh habitat is also home to a variety of important bird and fish species and a fall stop for up to 100,000 Canada geese.

However, the sprawling Netley-Libau Marsh is losing ground – literally. Recent surveys of the marsh confirm that uplands are disappearing creating a situation that threatens the very existence of the marsh and ultimately the health of Lake Winnipeg.

Dr. Goldsborough suggested that the marsh has become less a marsh and more a murky, shallow lake -- increasingly devoid of the cleansing and habitat-sustaining benefits normally associated with marsh wetland ecosystems. Mapping over a 25 year period shows that there has been a loss of uplands with the area of the marsh increasingly dominated by open water.

Half of the 24,000+ hectare marsh is now open water. Just 25 years ago, 35 per cent of the marsh was open water. As well, the composition of emergent plant life in the marsh has changed. There's been a significant loss of islands and uplands. The marsh is not providing very good habitat for the birds and fish that use it. The decline of the marsh has been sustained through human and natural causes, high water levels, changes in the emergent plant community and introduced aquatic species such as common carp.

Many people view wetlands as having little value and this delusion can have dire consequences. "The decline in the quality of wetlands is a symptom of the decline in the importance we put on water," Goldsborough said. "If the Netley-Libau Marsh were restored it could reduce nutrient loading going into Lake Winnipeg by six per cent. That may sound puny, but that equals the city of Winnipeg's nutrient discharge.

Deprived of this natural system, however, the city now needs to invest in expensive equipment to do the job of plants." Part of "the water problems we face stems from the fact that people view small bodies of water as a liability – a place



for mosquitoes to breed or otherwise good farmland drowning. This view has to stop. We need to start seeing wetlands as an asset." They are nature's kidneys.

Photos Courtesy Gordon Goldsborough

~ Robin Mather

Walkathon details ***page 7***

The St. Charles Golf Club Naturalists Committee

This happy story began about 5 years ago, when a small but dedicated band of keen birdwatchers started to take regular inventory counts of the Spring and Fall migrating birds, as well as the Summer residents.(total species sighted is now 140).

Urged on by the enthusiastic leadership of former Club President Dr Ken Gould, together with the expertise of the renowned photographer Robert Taylor, this small group soon began to grow in numbers, with each new member bringing in their own special areas of interest, thus broadening the scope of the group.

As these members toured the total 280 acre “Parkland “ property of the St. Charles Club, they soon became aware of their mutual interest in the long range future of this beautiful place. They shared a real concern for the sad state of the bushland, the forested acreage and the riparian zone on the shoreline of the Assiniboine River.

A former waste dumping site with rusting bedsteads, old toilets and lots of other ugly rubbish has been cleared up but more remains to be done. There are many trees in poor condition, needing careful pruning or replacing.

While not a Standing Committee of the Board, the Naturalist Committee has an effective and close working relationship with the management and Staff of the Club. The Committee is a voluntary group of kindred spirits who share an interest in environmental issues.

There is a growing awareness worldwide of the basic concepts of Sustainable Development as a balanced tripod of three equal interests...social, environmental, and economic.

Many individuals are adapting general eco-thinking into their daily lives in lots of little ways. Organizations are acknowledging their environmental responsibilities. Those original bird surveys are now matched with a full spectrum of data including inventories of flora and fauna....20 different tree species, 11 different mammals and dozens of wildflowers. A list of 12 different berry-bearing shrubs has been identified for future planting, both for beauty and as food to attract birds.

(Continued on Page 9)

Live Lake Walkathon 2009

When: Sunday, August 9th, 2009.

Registration:

Matlock: *Matlock Recreational Club, 77 Matlock Road between 10:15 and 11:00 a.m. Walkathon begins at 11:00.*

Victoria Beach: *Victoria Beach Community Clubhouse, between 9:15 and 10:00 a.m.. Walkathon begins at 10:00 a.m. following the Cross country Run.*

The walk is approximately 5 km in length. Directional signs and course marshals will be stationed along the routes.

Who: All of you who have walked the shoreline, watched the sunset or sunrise, marveled at the stars, fished, watched birds, jogged, swam, sailed, canoed, kayaked, windsurfed, skied or snow-shoed on or around beautiful Lake Winnipeg. Your participation in this event is one way of saying thank-you for this great Lake.

Why: All Walkathon proceeds will benefit the lake through financial support for our education, public awareness and scientific research projects. These projects are aimed at improving and restoring the health of Lake Winnipeg now and for future generations.

Details: There is no cost to walk in the Live Lake Walkathon. However, participants must be willing to collect pledges to support the cause. All pledge monies must be turned in when registering prior to the walk. All participants will receive a Lake Winnipeg tote bag



and those who collect more than \$200 in pledges will receive a free Lake Winnipeg Foundation tee-shirt! The ten students who are in grades 8 – 12 (as of Sept/09) and who raise the most money will receive a free trip on the Namao research vessel.

If you are unable to walk please consider sponsoring a walker or providing a corporate sponsorship or door prize item.

Enclosures: We have enclosed two Walkathon pamphlets with your newsletter. We are requesting that you consider walking and collecting pledges, as well as asking a friend to do the same.

If you are unable to walk, we would like you to collect pledges and assign these to Terry McLeod, CBC broadcaster, who has agreed to be our celebrity walker. Please forward these pledges to Box 450, Matlock MB R0C 2B0 by August 3rd, 2009.

Your participation will make a difference.

Kidpower ...the Sequel

Thank you to the seventy-five students in grade five and six from Ecole J. B. Mitchell School for helping prepare our membership brochures for distribution. This real world activity was one of several “Earth Month” projects organized by teachers Chris Wiste, Kerri Swanson and Simone Rowinski.

The young environmentalists worked cheerfully and efficiently to place our membership insert information inside 7500 LWF brochures. With much laughter and chatter the task was completed in just over one hour. They took pride in a job well done and rightfully so!

Following the “work bee” the grade six class participated enthusiastically in a presentation about Lake Winnipeg. The adults in attendance were impressed with the thoughtful and insightful questions and comments posed by the students. Bravo!

~ Janet Sampson

(Continued from Page 6)

With the leadership of our excellent ground staff much progress has been made in reducing harmful chemicals in the course fertilizer plan. Irrigation runoff to the river has been reduced by redesigning drainage to the improved holding ponds on the course.

The carbon footprint of the Club was initially estimated at 1100 tonnes and targeted reductions can now be planned for the years ahead. The kitchen staff is working hard to do more recycling. Compostable materials are more effectively managed in conjunction with larger projects such as the composting of grass clippings.

The Strategic Plan is dominated by the long-term goal to qualify for certification by the “Audubon Cooperative Sanctuary Program” as sponsored by the USGA. It may take us 5 years to be fully certified but we will do it. In addition, future generations will be glad that we did.

~ Richard L.M.Dawson

St. Charles Naturalists Committee Member and LWF Board Member

Declining Global Supply of Phosphorus Expected to Benefit Lake Winnipeg

Lake Winnipeg is the most eutrophic large lake in the world. Although historic evidence suggests that Lake Winnipeg is naturally somewhat eutrophic, the current massive blue-green algal blooms in the north basin are a sign of extreme eutrophication. Nutrients are required for production of life in lakes; and phosphorus is the primary one controlling the level of productivity in lakes. Phosphorus enters water bodies from natural weathering and from anthropogenic activities such as agricultural use of phosphate fertilizers. During the period of available and inexpensive fertilizers, tension has existed between the maintenance of agricultural productivity and the protection of water quality of adjacent aquatic ecosystems.

This could soon change with the growing recognition that the global supply of rock phosphate, the mineral source of phosphate fertilizers is declining. This issue has been termed “peak phosphorus” in a sense analogous to “peak oil”. Nevertheless, this is as far as the similarity between phosphorus and oil goes. Unlike oil, phosphorus is indestructible. The quantity on the planet does not change. Rather, “peak phosphorus” refers to the diminishing reserves of the concentrated mineral form, rock phosphate, that has been mined since 1853 and processed economically into fertilizers and other forms of phosphorus used in industry. About 80% of the world’s phosphate production is derived from ancient deposits of marine origin with lesser amounts from deposits of bird guano. Present human activities are dispersing most of the phosphorus from these reserves back into the ocean, into freshwater sediments or into landfills where it is effectively immobilized.

Unlike oil, phosphorus is an absolute requirement for life. The DNA double helix in the genetic material of all life forms is only possible because of the phosphate ester bridges that bind the helix strands. The unique energetics of the phosphate molecule are key in photosynthesis and the energy cycle of cells.

There is absolutely no substitute for phosphorus. Of the numerous elements that are required for life, such as carbon and nitrogen, phosphorus has been called nature’s bottleneck. Its concentration in living organisms has the highest ratio of concentration in the environment compared to any of the common elements.

The most practical and attainable solution to the peak phosphorus problem is suggested to be reduction of soil erosion, more efficient use of phosphate fertilizers in agriculture, less tillage and recycling and reuse of the phosphorus which we as consumers have contact with. Recycling of phosphorus is not new. In fact, in many parts of the world, use has been made of animal manures and human wastes as a source of nutrients for crops for thousands of years. It is only in modern times that we dilute human wastes with water and transport wastes considerable distances to treatment plants where biological oxygen demand is reduced but the phosphorus may be disposed of in the ocean or receiving fresh waters or land-fills. Favourably, in the Lake Winnipeg Basin, most large urban centres, including Winnipeg, engage in or are upgrading to tertiary treatment of municipal wastewater. Nevertheless, the process must go beyond the removal of

phosphorus from the wastewater to include the recycling of the phosphorus back to agricultural land.

As well as human wastes having become separated from the land, so has the production of food become separated from where it is consumed. Food is distributed globally. As well, a unique modern phenomenon is the extreme wastage of food. Close to half of all food produced worldwide is wasted. This is associated with enormous waste of water and energy that is consumed in food processing, transport, preparation and disposal. As well, the decomposition of much of this food in landfills produces large amounts of greenhouse gases.

There are alternatives to food wastage, including:

- **Source reduction** – creation of only the amount of food that can be consumed in a timely fashion
- **Eating appropriately** – buying only food that can be safely stored and used; ordering appropriately-sized meals in restaurants, (doggy-bagging the excess); eating the 100-mile diet; avoiding obesity
- **Feeding hungry people** – food recovery and distribution from supermarkets, restaurants and institutional kitchens
- **Gleaning** – picking crops farmers plan to leave in the field when the market price doesn't justify harvest
- **Feeding animals** – pets, livestock
- **Diversion** - fats and greases to rendering plants for biodiesel production
- **Composting** – for local recycling of the compost

Diverting all organic materials, not only food wastes, but also paper, wood, organic fabrics and garden wastes from landfills to appropriate composting and recycling facilities is recommended as well. Reliable management of animal manures must be developed.

The issue is not whether present reserves will last a few decades or a thousand years even if new reserves are discovered. It is that the phosphorus that we allow to run off into the oceans will not return through natural geomorphological processes for our use as concentrated rock phosphate for tens of millions of years. The stock of concentrated phosphorus we have now in the remaining rock phosphate reserves, in agricultural soils, in crops, composts and agricultural products is that which we have under our potential control to support humanity for the foreseeable future. It is suggested that a global capacity be established to

track the movements and fate of phosphorus within and among nations in fertilizers, food and manufactured products.

The global tracking of the movements and fate of phosphorus from cradle to grave could become the gold standard for global, equitable, efficient and effective recycling for other non-renewable resources as well.

Recommended reading:

Vaccari, D.A. 2009. *Phosphorus: A looming crisis*. Scientific American Vol 300, No. 6, p 54-59 June

~ Diane Malley

Befriending Percival

I wasn't looking for another 'relationship'. I mean I already had enough to deal with. The thing is they all expect to be fed and once you feed them – well, they pretty much use your address as home. Know what I mean? So when Percival came into my life I really had to do some deep soul-searching. I knew it could never work of course. It was his need to constantly be traveling to warmer climes. And his fastidious grooming – it was enough to drive me to distraction. Not to mention his insatiable appetite for fresh fish. My budget would be blown in a month if he stayed....

But there was something imploring in his manner. He was a magnificent creature. Okay so his mouth was a tad large but whenever he looked at me with those meaning filled eyes and wiggled his butt I have to admit I melted.



Photo by: Elaine Allwright

It was late September when we first met at the Beach.

There he was. Sunning himself. I walked past him ever so slowly mostly to get a good look at his magnificent body but also not to startle him with my presence. He was alone and from what I gathered unattached. He joined me on that first walk along the beach. Each of us happy for the companionship but respecting our differences.

Later that same day while I enjoyed my own afternoon ritual of reading on the beach he joined me. Now let me make this perfectly clear. He had not been invited. Yet for some reason he had claimed me to be his partner. I did not need this. Nor did I

need the demands he was making on me. He expected a picnic lunch for heaven's sake and even had the nerve to go into my bag searching for a snack. Why do I always attract these needy types I asked myself over and over.

And yet... something was happening within me. I was finding myself strangely attracted to Percival. He needed me. I knew that. And somehow I knew after that first afternoon I would do everything in my power to look after him. Of course there was always the chance he would leave me. But for the moment he did not seem interested in anyone else even though deep down I knew I was not his type.

And so a pattern developed. Everyday we would rendezvous on the beach. I would provide the sushi and he would lie down beside me on the warm sand while I settled into a book. As comfortable as he appeared to be I sensed though that he was longing for some distant place and someone more suited to his lifestyle.

There was more to his story of course as there always is with his type. He was only staying here long enough to recover from a recent injury and then he would be up to his regular antics – flying halfway around the world eating in the best seafood bars basking in the sun and cavorting with some long-necked elegant female on another white sand beach. This I knew. It was breaking my heart but it was his fate.

Attempting to detach myself from a potentially co-dependent relationship I started going to another beach and then another. He found me every time emerging from a chilling autumn swim to settle beside me on the blanket of sand.

And so it was a bittersweet moment the day Percival and I said our good-byes. It was the same day she had flown in from the North and as Destiny had designed it Percival took one look at her and as the saying goes the rest is history. He brought her to meet me although she preferred to keep her distance.

His injury had healed. The fish-hook that had been caught in his cheek and removed by a fisherman with a pair of pliers had left a gaping wound that was now sufficiently healed for him to embark upon the long southerly flight.

It's been a week now since the last of the pelicans left. I know it will be a long winter ahead but there is one thing that I know for a certainty. Next spring I will be reunited with my Percival.

~ Suzanne Forcese

The Lake Winnipeg Foundation 500

The number 500 sounds special, important and worth striving for...The Fortune 500, the Indianapolis 500. How about the **Lake Winnipeg Foundation 500?**

Our membership goal for 2009/2010 is to achieve 500 members who care about the future of Lake Winnipeg, its eco-systems, surrounding communities and vast watershed. To accomplish this goal we need to retain every member we have at present and add one hundred and fifty new members this season.

To this end we distributed 6500 membership brochures via the Cottager Magazine ad-bag program on the east side of the south basin. On the May long weekend our brochures were delivered to the door of every home and cottage in Victoria Beach, Albert Beach, Traverse Bay, Hillside Beach, Lester Beach, Belair, Grand Beach, Grand Marais, Sunset Beach, Whitesands, Lakeshore Heights, Beconia and Gull Lake.

We have membership contact individuals in Victoria Beach and Victoria Estates, Traverse Bay, Belair, Grand Beach/Grand Marais, Matlock, Winnipeg Beach, Willow Island, Gimli and Silver Harbour. These willing volunteers will arrange informational presentations, provide membership information and sell our latest promotional tote/beach bags at \$5.00 each. They will promote participation in the LWF Walkathons at Victoria Beach and Matlock on August 9th and distribute walkathon pledge forms in July.

Our membership is the lifeblood of the Lake Winnipeg Foundation. Your financial support is necessary for the ongoing support of many projects underway and makes possible the development of new projects that are waiting in the wings. Most importantly, a larger membership gives us a strong voice and increases our ability to influence public policy and practice throughout the watershed.

To our current members...thank you for your ongoing support. We salute your commitment to our mandate to restore, maintain and protect the health of this great lake for future generations.

~ Janet Sampson Email:sampsonm@mts.net
Membership Chairperson

LWF Membership Application Form

Please note: Membership dues are eligible for an official tax receipt.

Name: _____

Mailing Address: _____

Email _____ Phone _____

I would prefer to receive my newsletter by email (PDF format)_____

Membership Dues:

Adult

Family

Student

_____ 1 year - \$30.00

_____ \$45.00

_____ 1 year - \$15.00

_____ 2 years - \$50.00

_____ \$75.00

_____ 2 years - \$25.00

Method of Payment:

___ Cash ___ Money Order ___ Cheque ___ Visa ___ MasterCard

Card # _____ Expiry Date ___ / ___

Name on Card _____

Mail to: Lake Winnipeg Foundation Box 450 Matlock, MB. ROC 2B0

The Watershed Observer is a publication of the Lake Winnipeg Foundation, a registered Canadian Charity. Established in 2005 with a mandate to actively promote the health of Lake Winnipeg, the foundation is dedicated to achieve this goal through support for research, public education, advocacy and management.

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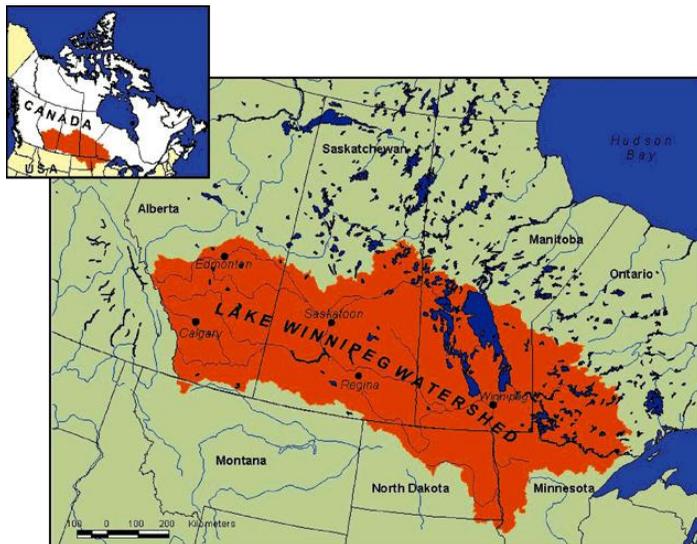
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A Really Big Watershed!

Lake Winnipeg's watershed (shown in orange) is almost one million square kilometres.

When measured by surface area, it is the 10th largest freshwater lake in the world.

Millions of acres of productive agricultural cropland drain to the lake.

Almost 7 million people live in the watershed plus several times more farm animals.

Water drains into Lake Winnipeg from four provinces and four states.