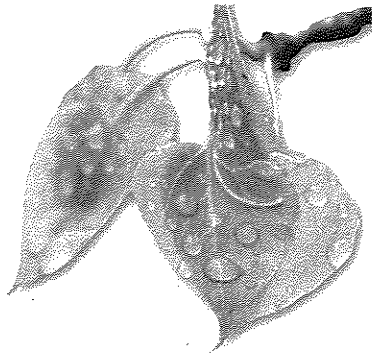
eco-journal

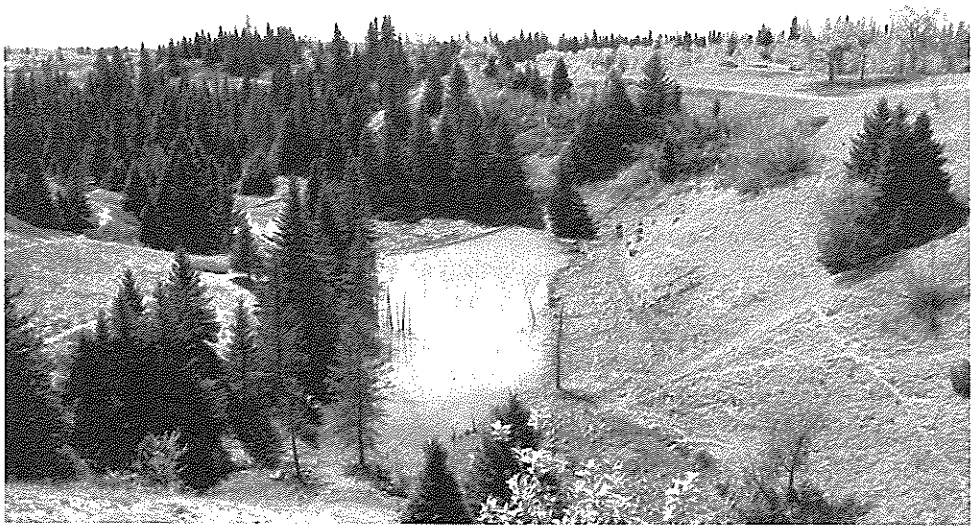
v.19. no. 1 January/February 2009



A Victory for Manitobans

Park Logging Legislation Follows Years of Work

Eric Reder, Manitoba Campaign Director, Western Canada Wilderness Committee



Joel Trenaman

Spruce Woods is one of the many park forests slated to be protected after April 1, 2009.

WHAT DID MANITOBANS get for Christmas? We got a chance to preserve biological diversity, a chance for clean air and clean water and climate mitigation, and peaceful places to unwind and enjoy outdoor pursuits. Manitobans got natural forests in provincial parks.

On November 24, Premier Doer and his government introduced Bill 3, a ban on commercial logging in all provincial parks save Duck Mountain. This legislation is the culmination of more than seventeen years of campaigning, it's the result of thousands of hours of work, and it took tens of thousands of letters from everyday citizens to push government into action. It is a success for the organizations that have dedicated their scarce resources towards this goal, for the individuals who have doggedly pursued this end result, and it is a great victory for future generations in Manitoba.

A Brief History of Park Logging Protest

In 1988, The Environment Act came into effect in Manitoba, which in turn caused the creation of the Clean Environment Commission (CEC), an arms-length government agency tasked with doing impartial reviews of activities affecting the environment. The first CEC review pertaining to commercial forestry in Manitoba was released in 1992, and the very succinct recommendation from the CEC was that commercial forestry activity in provincial parks must be phased out. Many organizations spoke out against park logging at those CEC hearings — Peter Miller and Harvey Williams with TREE, John Shearer with Manitoba Naturalists Society and Roger Turenne with CPAWS. While their work seemed to generate results, the government at the time dismissed the recommendation and park destruction continued.

Park logging battles raged around Duck Mountain and Nopiming in the mid-nineties as a new Provincial Parks Act enshrined logging as a core activity for these parks, and logging corporations were given long-term tenure over the parks. The establishment of the Model Forest Network in eastern Manitoba was seen as a potential solution to the ongoing war in the woods, but those hopes slowly faded. One individual, Alice Chambers, spent a great deal of energy on reining in the expanding forestry operations on the east side of the province before her untimely passing in 1999.

The new Wilderness Committee office in Manitoba took up the park logging protest in 2000 with public awareness efforts, including a Stop Park Logging Educational Report and billboards. Very little opportunity for success existed at the time, as logging corporations still had legal hold over the parks. By 2005, the battle finally shifted as an unusual alliance formed between passionate environmentalists, cottagers, and professional hunting guides. Ron Alexander, Pat and Russ Popp, and Dave Nickarz were vocal and active in their defence of Nopiming Park forests. With logging contracts set to expire, the Wilderness Committee revived the Stop Park Logging campaign in 2006.

Debunking the myths surrounding the impacts of logging became the goal of the latest push to end park logging. While other jurisdictions had acknowledged the impacts of logging a decade ago, foresters in the provincial government as well as logging corporations continued to press the argument that logging had the same impact as forest fires, or was necessary for forest fire hazard reduction. Frequent expeditions to investigate and chronicle logging in parks, coupled with scientific studies on the effects of logging brought to light the devastation occurring. Thousands of people learned the real details of how

continued on page 4 >>

Inside this Issue:

Volume 19, Number 1
January/February, 2009
(date of issue: February 1, 2009)

eco-journal

is published five times per year by the Manitoba Eco-Network/Reseau Ecologique du Manitoba Inc. at
3rd Floor, 303 Portage Avenue
Winnipeg, Manitoba, R3B 2B4
Phone: 204-947-6511 / Fax: 204-989-8476
info@mbeconetwork.org
www.mbeconetwork.org

Editor: Joel Trenaman
editor@mbeconetwork.org

CONTRIBUTORS THIS ISSUE:
Tomas Chernitsky, Bob Grant, Sandra Krahn, Anne Lindsey, Eric Reder, Karli Reimer, Joel Trenaman, Andrea Ulrich, Tessa Vanderhart.

Design & Layout: Tracey Shillington
www.simplelifedesigns.ca

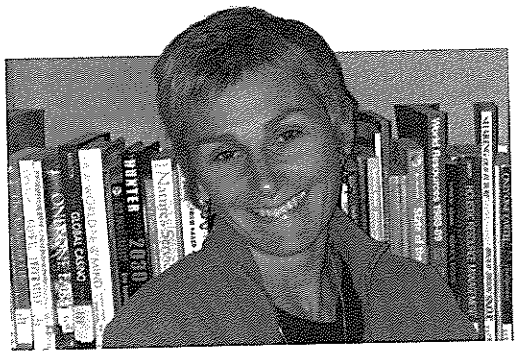
The Manitoba Eco-Network is affiliated with the Canadian Environmental Network.

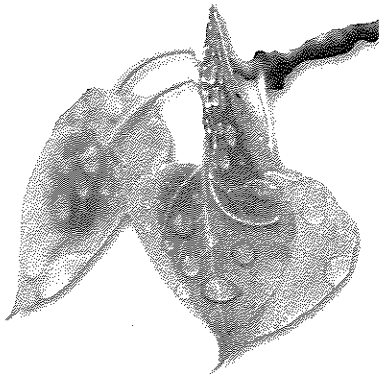
EcoCentre groups gratefully acknowledge the contributions of Mountain Equipment Co-op.

Individual subscriptions to *Eco-Journal* are available as part of a supporting membership to the **Manitoba Eco-Network** at a cost of $30. Group membership dues are $50. Associate membership dues are $60. Advertising rates are available upon request.

Canada Publication Mail Sales Agreement #40010075, Postage paid at Winnipeg, MB. Return undeliverable Canadian addresses to:
Manitoba Eco-Network
3rd Floor–303 Portage Ave.
Winnipeg, MB R3B 2B4

100% Printed by Kendrick Quality Printing on 100% chlorine-free, post-consumer recycled paper with vegetable based ink.





Executive Director's Letter

THE TEMPERATURE as I write this: a balmy –25 degrees Celsius.

Call me weird, but I actually like winter and the cold weather it brings. There's something about that brisk air, clear blue skies and snow that has a special meaning to me, even though I spent my early years in England's much milder clime. I've been trying to figure out what the allure is — especially because high heating bills and frozen toes (an affliction of mine) aren't my favourite things. I think it has something to do with an attachment to this place, and the challenge of figuring out how to live here.

I'm full of admiration for the original peoples of the Prairies — their adaptation to the extremes of climate (with minimal environmental footprint) is truly remarkable — but we're a long way from their example. Even in our technological age, with all mod-cons, the weather and our geography still confront us with daily predicaments, especially those of us looking to lighten the burden we place on the earth.

I've noticed that our networks of environmental groups and "go local" campaigns can be great aids to "living in place," and wonderful advocates for improving that experience. For example, one can gain a true appreciation of the range of locally available foods and producers through the Organic Food Council, Manitoba Food Charter and 100 Mile Diet project. Groups like Save Our Seine, CPAWS and Living Prairie Museum allow us to focus attention on the ecology of our surroundings. The new tabloid from Climate Change Connection provides lots of tips for crucial energy savings in our daily lives. And Resource Conservation Manitoba's new LivingGreenLivingWell.ca website is developing into a great resource for finding those local, Manitoba-appropriate solutions.

No question, too, that living here in the middle of Canada gives us some unique cultural attributes. Deep down, a lot of us get satisfaction from bragging about just how cold it is out there, Festival du Voyageur ice sculptures are fantastic environmental art, and a skate down the river trail with hundreds of other Winnipeggers on a Sunday afternoon is a real treat. As a society, we may have a significant distance to go in making ourselves more eco-friendly during the depths of the freeze, but in the meantime, maybe I'm not so weird after all!

Anne Lindsey
Executive Director, Manitoba Eco-Network

Issues and Contributors Wanted

WRITING ABOUT YOUR ORGANIZATION'S WORK is a great way to publicize it to Eco-Network members and policymakers, as well as the community at large. In as few as 400 words, you can elucidate your cause or promote an event — and help the mainstream press get its facts straight on the issue. Even if you're not part of a member group, we'd be happy to hear your ideas or proposals.

Consider writing a book or DVD review — a new release or an important work from our library. It's a fun way to draw attention to a great find.

We are also looking for quality Manitoba photography to help illustrate articles.

Contact Eco-Journal editor Joel Trenaman at editor@mbeconetwork.org or 960-4200 for more details or to submit.

eco-events in Manitoba

For more environmental event listings see our website calendar at www.mbeconetwork.org.

FEBRUARY

9 **Our Ecological Footprint: Walking Gently on the Earth.** Everything we do, make, use, or consume affects nature. Our effect on the world around us has often been called our "ecological footprint," and at the moment, the footprint of the average Canadian is huge! Come hear about simple, inexpensive, not-too-strange ways to make our footprint smaller, and to walk more gently on the earth. *MB Naturalists Society Indoor Program,* **7:30 p.m., Franco-Manitoban Centre (340 Provencher Blvd).** Admission $2 for members and $6 for non-members. www.manitobanature.ca/indoors.html

14 **Fair Trade Manitoba's One-Month Challenge begins.** Take the One-Month Challenge and pledge to "go fair trade" for 30 days (until March 15) by having fair trade coffee, tea and chocolate instead of conventional brands. http://fairtrademanitoba.ca.

17 **Food for Thought.** Learn about the Manitoba Food Charter, the consequences of your food purchasing choices and more. *Consumers' Association of Canada (MB) Free Speaker Series,* **7:00 p.m., InfoCentre (218 Osborne St. S.)** For more information: 452-2572, or info@consumermanitoba.ca

20-21 **The Manitoba Food Charter 2009 Growing Local Food Security Conference** will take place at the University of Winnipeg. Over two days of more than 30 hands-on workshops will cover such topics as achieving food security on a low income, growing good food indoors and out, grower cooperatives and urban agriculture, nutrition and food policies in schools, food preservation, youth farm mentorships, climate change and the food/fuel crisis, and indigenous food traditions, knowledge and skills. Registration is underway, and can be done online at www.manitobafoodsecurity.ca or by calling 943-0823 or 1-800-731-2638.

23 ***Manitoba Naturally:* Author Reveals Nature's Secrets.** There are likely few people who know our province as well as Bill Stilwell. The award-winning Manitoba author has written two national bestsellers: *Manitoba Naturally,* and *Scenic Secrets of Manitoba.* His presentation is a firsthand account that leads visitors to an assortment of little-known places that provide amazing scenery and diversity of wildlife, wildflowers and other plants. *MB Naturalists Society Indoor Program,* **7:30 p.m., Franco-Manitoban Centre (340 Provencher Blvd).** Admission $2 for members and $6 for non-members. www.manitobanature.ca/indoors.html

26-28 **Playing It Safe.** Children's Health & Environment Partnership presents two capacity-building workshops on reducing environmental risks to child health, featuring Myriam Beaulne, Health Promotion Coordinator for the Canadian Partnership for Children's Health and Environment. Valuable for childhood educators, child-care providers, health educators, medical professionals and all other front-line workers who interact with children. For more info, or to register: www.childrensenvironment.ca or Kristle at 480-1505.

27 **Native Orchard Conservation Inc. AGM.** Following the business meeting/elections, Marilyn Latta will present on the wildflowers of Manitoba. Also, a silent auction, raffle and refreshments. All are welcome. **7:30 p.m., Dakota Lawn Bowling Centre (1212 Dakota St).** For more info: Peggy at 261-9179, or bainardp@mts.net.

MARCH

7 **Environmental Assessment: What Is It, and How Can I Get Involved?** *Manitoba Eco-Network* presents a one-day workshop on Environmental Assessment (EA), with overviews of the federal and provincial processes, case studies of previous EAs and discussion of how citizens can become involved. Registration is free for MEN members and member groups, and $10 for all others. Lunch included. For more info: Lise at 947-6511, or info@mbeconetwork.org.

18, 22, or 31 **Prairie Planting Workshops.** Learn about native prairie plants and how they might be included in your home or cottage landscape design. John Morgan of *Prairie Habitats Nursery* will conduct the workshops, which include a slide presentation, discussion and seed-planting lab. **Various times, Living Prairie Museum (2795 Ness Ave),** $45 plus GST. For more info or to register: 832-0167 or prairie@winnipeg.ca.

22 **Eco Book & Film Club.** *Manitoba Eco-Network* invites you to join our book/film club, which meets every two months to discuss a book or film from our library. The next book to be discussed is Eric Brende's *Better Off: Flipping the Switch on Technology* (2004). All are welcome, great discussion and tasty treats provided. **3:00 p.m., Eco-Centre (3rd floor, 303 Portage Ave).** For more info: Erica at 947-6511, library@mbeconetwork.org or www.mbeconetwork.org.

Please email your event notices to info@mbeconetwork.org.

Eco-Film Series

Each evening we will show a feature film and a short film, followed by a moderated discussion on the issues.

February 25:
Century of the Self, Part 1.
Asking deep questions about the roots and methods of modern consumerism, representative democracy and their implications, part one of this four-episode series documents how the ideas of Sigmund Freud were used to contribute to the consumer society of today.

March 25: **Waste = Food**
This film explores the revolutionary "cradle to cradle" concept with its leading proponents, American Architect William McDonough and German Ecological Chemist Michael Braungart, and demonstrates it with examples from Nike and Ford corporations and a Chinese government housing program.

ADMISSION:
$5 for members, students or low-income
$8 regular admission, or a 3-film pass is $20
Tickets at the door

7pm at the Ellice Theatre
585 Ellice Avenue
The last Wednesday of each month.
Ph: 947-6511 for more information,
or visit www.mbeconetwork.org.

Please join us!

<< continued from page 1

Victory cont'd...

we were managing our forests. Given the facts, Manitobans wanted their park forests intact, and contacted their elected provincial officials to voice their displeasure.

Premier Doer and Conservation Minister Struthers are to be congratulated for taking a step towards a better Manitoba by removing logging from provincial parks. This commendation comes with reservations, however. The parks that are no longer to be logged still face a major threat from mining, and so can't be classified as protected. And then there's Duck Mountain Provincial Park — the Ducks and Algonquin in Ontario are the last parks to be logged in Canada. Twenty years ago it was thought that twelve percent of our province should be protected from development, and now we understand we need to protect at least fifty percent. Manitoba is behind where it should be in preserving our natural heritage, with about 8.5 percent of the province set aside.

There is still work to be done. All Manitobans need to envision a province with a vast network of protected areas. We need to scale back our industrial logging so we can set aside natural forests, both for future generations and for our own ecological benefit right now.

Tessa Vanderhart

Whiteshell logging has intensified since a 2007 windstorm.

Minister of Conservation Speaks on Logging Legislation

By Joel Trenaman

ON JANUARY 19, 2009, the *Eco-Journal* interviewed Minister of Conservation Stan Struthers regarding the pending Bill 3 legislation that would ban commercial logging in seventy-nine of Manitoba's eighty provincial parks. An extended version of the interview is available at www.mbeconetwork.org

ECO-JOURNAL: *I'd like to start by asking for your impression of why the government has moved ahead with the Bill 3 legislation at this time, rather than earlier in its mandate?*

MINISTER STRUTHERS: Well, it's something that Manitobans have been asking us about for a number of years. We've had some opportunities to move forward on this, so we thought while that window was open for us, we would certainly move forward in removing logging from parks. We could not do that [before] without really coming down hard on some of the smaller quota holders in the different areas that rely on jobs, so we think that this is a very good public policy.

How influenced was the government by the lobbying or advocacy activities of different groups in the province and/or citizens?

I meet regularly with a number of people from different environmental groups, and I'm approached by Manitobans, just regular everyday Manitobans on the street. It seemed to me that this was a priority. ... So when the opportunity arose, we did it. And I think there's lots of people that can talk about taking part on this in terms of speaking to me as a minister and making sure I was aware of their desires. So I think it is a policy that reflects the way Manitobans want to portray our provincial parks.

So this agreement would halt logging in four provincial parks, the only four, other than Duck Mountain, where logging is occurring: Whiteshell, Nopiming, Clearwater and Grass River — is that right?

Well there were some parks where the potential for logging existed, but there wasn't any logging taking place. ... So the only park now that has logging in it is Duck Mountain, and all seventy-nine of the [other] parks will not have logging in them. Very critical to this too, we put into place a policy that logging will be excluded from any new parks that come forward. So if someday we have 100 parks in our province, the next twenty will come in without logging in them.

Would you say the main reasons for not extending the ban to Duck Mountain were economic, or what factors were involved?

Yes, there were several factors involved there. Number one, the cutting that goes on there now is done by a whole host of smaller quota holders. ... And part of it was that the previous provincial government, when they signed the agreement with Louisiana Pacific, signed over the whole area. They didn't leave any wiggle room for decisions like this. So given the sheer number of quota holders we were dealing with, and kind of the lack of replacement area, we really couldn't move forward with [banning logging in] the Duck Mountains.

The press release mentions a $3.2 million payment that would be made to Tolko and Tembec, the largest companies affected. Is that funding just to be used for the expense of moving out equipment, or what will that money be used for?

No, that's mostly [for] hard assets. The things like roads and bridges that they had to build, to put some capital dollars into to assist them in their logging operations. We have a legal obligation to pay that money, and that's where a good portion of that money will go. Those are actual tangible structures that they have built in the parks.

Again regarding Tolko and Tembec: are they beginning new leases or licenses on alternate Crown land, or are their current agreements switching over to new tracts?

Well, they have large areas where they can go to get wood for their operations. Of course, given the conditions of the forest industry, there's not a whole lot of logging going on these days. But if and when that market and that economy returns, then they [already] have [other] areas in their license agreements. They will be subject to the rules and regulations that they sign onto in their forest management licensing agreements, and the forest management plans that they put forward ... they just won't be cutting in the provincial parks.

Safe Drinking Water

Finding Solutions One Community at A Time

By Anne Lindsey

FOR MANY CANADIANS, especially those living in urban areas, safe drinking water is just not an issue of concern. Most of the time, we can be confident that drinking the water from our taps will quench our thirst, without compromising our health. Sadly, that is not the case for all people in this wealthy country of ours. A report in the Canadian Medical Association Journal indicated that 1,766 boil water advisories were in place in communities and neighbourhoods across Canada in March 2008.

Fifty-nine of those warnings were in Manitoba, a number that had increased to seventy as of December, according to the provincial Water Stewardship ministry's Office of Drinking Water (These include advisories in ten communities and regions that rely on private wells). In comparison, Ontario reported 679 and New Brunswick only two. What none of these figures include are the 103 advisories (both "do not drink" and "boil water") on First Nations across the country documented in November 2008. Water advisories are issued by provincial health departments (or by Chief and Council, in the case of First Nations) when a water source or system has been contaminated or compromised in such a way as to be a health hazard. Just about all of them occur in rural and remote areas.

If Hans and Sue Peterson have their way, unsafe drinking water will be a thing of the past. In 1997, they started the Safe Drinking Water Foundation (SDWF), a charitable organization whose main goal "is to find treatment and preventative solutions to make surface and ground water safe for human consumption in rural areas of the world." These determined Saskatchewan residents are making a difference, one community at a time.

Hans came to Canada from Sweden, via the UK. He did post-doctoral work at the Freshwater Institute in Winnipeg. Previously head of the Saskatchewan Research Council's Water Quality Team, he currently leads the SDWF as its voluntary executive director, and can often be found out in Aboriginal communities doing research and development work on water treatment systems. He fervently believes that government agencies do not do enough to protect water in rural areas, pointing to the frequent occurrence of pathogens such as camphylobacter, as well as protozoan parasites, in water supplies. These are contaminants that make people sick. In his view, wastewater pathogen removal should be mandatory.

Hans' wife Sue acts as the volunteer administrator for the foundation, drumming up financial support

Members of SDWF's Advanced Aboriginal Water Treatment Team with Hans Peterson (centre).

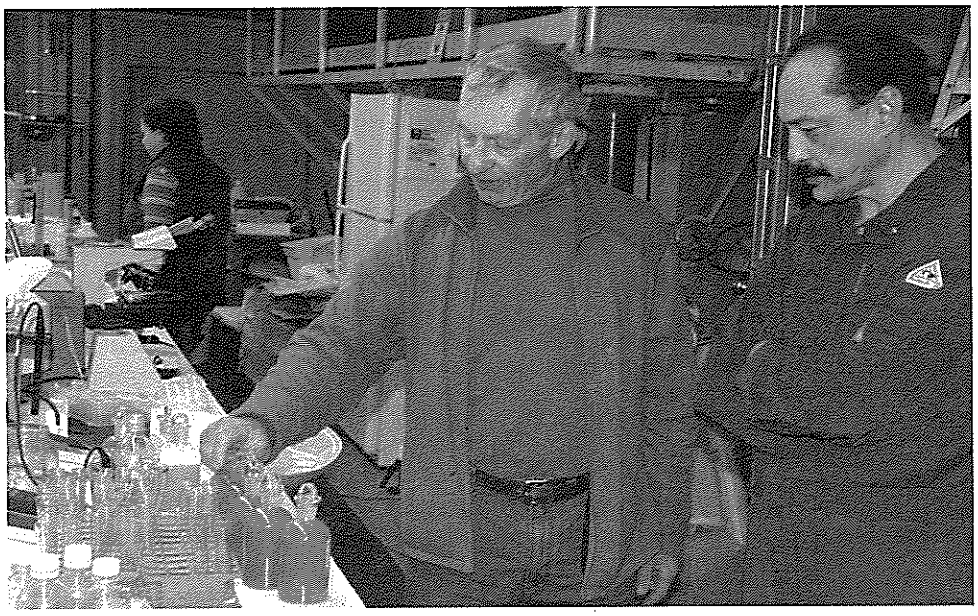
(all of the SDWF's work is financed through donations) and acting as the coordinator for the many educational and outreach projects they undertake with their volunteer Board of Directors and small paid staff. Both emphasize at every available opportunity that Canada is the only developed country in the world not to have federal drinking water regulations. Instead, we have guidelines, which do not even meet the requirements of the World Health Organization. Furthermore, they note that Canada also stands alone amongst developed countries in not voting for water as a basic human right at the United Nations. Not good enough, say the Petersons — hence their dedication to the Safe Drinking Water Foundation.

The SDWF has an impressive resume for its ten-year lifespan. Most notable, perhaps, is the development of the Integrated Biological and Reverse Osmosis Management (IBROM) system for water treatment. Using zero or minimal chemicals, it produces water of a quality that exceeds the Guidelines for Canadian Drinking Water Quality, as well as the more stringent European and US drinking water regulations. Hans and his colleagues discovered the efficacy of the IBROM treatment method by scientific observation, trial and error, when working on a solution to the water problems at Yellow Quill First Nation from 2002 to 2004.

Hans insists that conventional engineering techniques, most commonly utilized for water treatment applications on First Nations, cannot provide all the answers to sometimes-intractable problems faced by reserves and rural communities around the world. He emphasizes that science must be brought to bear on these issues, and that engineers must get used to "thinking outside the box." IBROM (complete with mineral enhancement of the final water product) is in full-scale application at Yellow Quill, George Gordon and Pasqua First Nations in Saskatchewan, and has been successfully piloted in three other communities.

The George Gordon reserve had experienced numerous engineered attempts to render its highly contaminated water supply useable — all to no avail. The community had resorted to bringing in bottled water for residents' use, but the IBROM system has changed all that. It provides water of a superior quality, and at a substantially lower cost than more conventional chemical treatment regimes. George Gordon, a community of 1,000, saves $100,000 annually in direct costs alone on chemicals no longer needed in the water treatment process.

In these communities, Indian and Northern Affairs Canada (INAC), responsible for financing water treatment system construction, has had the vision to move past the conventional engineered-only approach. Unfortunately, this is not the case in many other communities to date. In fact, an expert panel convened by INAC in 2006 to look at regulatory solutions to address the drinking water issues on First Nations concluded, "the federal government has



All Photos Courtesy of SDWF

never provided enough funding to First Nations to ensure that the quantity and quality of their water systems was comparable to that of off-reserve communities." SDWF is showing that while the up-front costs of system installation might be comparable to conventional treatment, the long-term operating costs are far more economical.

These water treatment success stories have given birth to the foundation's Advanced Aboriginal Water Treatment Team (AAWTT), a group of volunteers dedicated to the promotion of successful water treatment on First Nations in Canada. Led by Bob Pratt, water keeper at George Gordon First Nation, and Tony Steinhauer at Saddle Lake Cree Nation, this group offers education and support to other communities regarding the importance of source water protection, as well as of high quality water treatment and distribution systems.

Looking at the issues from both a political and scientific perspective, the AAWTT focuses on empowering community members to understand their water needs and processes (for example by teaching them how to test their own water samples) while carefully incorporating respect for traditional Aboriginal knowledge and expertise. The experience and knowledge of the water keepers and elders is not lost on "Dr. Hans," as the communities affectionately refer to Hans Peterson. Team members often have greater knowledge of water quality and treatment than engineers and government officials.

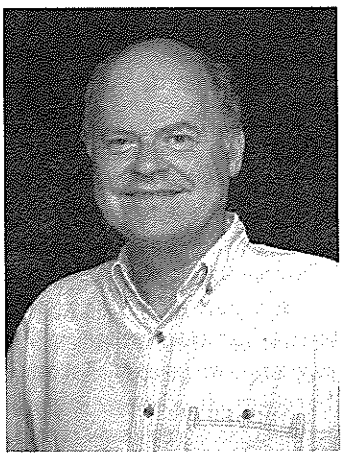
(Clockwise from Top left)

Anaerobic Surface Water.

SDWF Board Chairman Dr. David Schindler in the Saddle Lake Cree Nation lab.

Bob Pratt, water keeper at George Gordon First Nation in Saskatchewan.

Hans Peterson, cleaning up drinking water one community at a time.



A surface water quality lab at Saddle Lake, and a groundwater lab at George Gordon — paid for by band funds, assist the AAWTT in its work. The team is currently supported by grants that enable them to visit other First Nations, and recently were the guests of the Ontario Chiefs. SDWF was also invited by the Indigenous Environmental Network to present at the United Nations in 2005, and is currently consulting with governments and agencies in countries as far afield as Ghana, China and India on safe, sustainable drinking water for communities.

The Foundation also has very good curriculum-based educational materials about safe water in English, French and Cree, available for schools via free download from Safewater.org/education.html. Manitoba's Thomas Sill Foundation has helped fund the development and distribution of this valuable resource.

Even as media reports give us regular reminders of water quality issues, it is important to recognize that initiatives like those of the Safe Drinking Water Foundation are making a difference. They deserve our support.

Compiled with information from the Red Zone conference, the SDWF website, and Hans and Sue Peterson. Visit www.safewater.org for more information, or to make a contribution.

Peak Phosphorus

An Unsavoury Truth

By Andrea E. Ulrich

PHOSPHOROUS AVAILABILITY in the 21st Century is at risk. The underlying dilemma is that cheap, easily-mineable rock phosphate reserves are increasingly limited and experiencing reduced global accessibility. The problem is that phosphorous (P) is central for life on earth, essential to all living things, and at the heart of modern farming, where rock phosphate converted to fertilizer is key to producing sufficient food to support the planet's population.

Phosphorus, in contrast to oil, has no substitute. Once the element has found its way into the waterways and eventually into the sea, it is lost for human use. The challenge is if we want to feed our planet's growing population into the future, we have to carefully manage the use of the element and recycle organic materials containing it. The good news is that awareness of limited P reserves is slowly emerging, particularly in Europe. Nevertheless, it remains to be seen if the challenges related to the increasing scarcity of this primary, life-supporting, non-renewable element can be put on the political agenda and communicated to the public in an appropriate, timely and comprehensive manner.

Even though peak P has an alarmingly high potential to disturb global, national and regional food security, it also holds a great number of possibilities for sustainable action and sustainable futures. Instead of simply becoming a potential crisis, P shortages could add a new thought dimension to food production techniques and methods, the biofuel discussion, as well as reverse nutrient pollution of aquatic ecosystems and water management — for example, the challenges facing Lake Winnipeg.

Immediate priorities are phosphate removal and recovery from wastewater as planned by the City of Winnipeg, combined with the recycling of that phosphate for agricultural land; reduction and better management and control of animal and food wastes, as well as an increasingly phosphate-focused application of animal husbandry. These are the most promising key areas for closed-loop nutrient cycling, along with participatory planning by multiple stakeholders and integrated strategic management. In this future scenario of reduced global P reserves, the Lake Winnipeg Basin is facing an unprecedented opportunity to be at the forefront of sustainable P research and action, green job creation, sustainable watershed management and comprehensive stakeholder involvement. The decision as to if and when this challenge is accepted will be up to all strategic stakeholders in the basin, but must be led by policymakers. Clearly, multiple jurisdictional changes, restructuring of significant budgets, a groundswell of public opinion, and long-term educational awareness programs are required.

The P issue is one symptom of a much greater problem, human-induced stress on our planet's life-support system. At present, multiple environmental problems face humanity: climate change, freshwater shortages, fossil fuels, depleted marine fisheries, and loss of biodiversity, among others. These issues are often treated separately, leading to a paralysis preventing concerted, coordinated and timely action by governments and other bodies. And yet, this is creating crises in the very foundation on which societies and their economies are based. We are currently facing a high risk that the majority of environmental issues will be neglected due to the imminent challenges caused by the rupture of banking systems and deepening global recessions.

What is needed is not only a new *understanding* of stewardship for the environment, but behavioural and mindset *change*. Truly, the challenges are complex, involving long-established commercial interests, dependence on manufactured fertilizer, and food production systems that have become increasingly water, energy, and nutrient-consumptive over the decades. There is a need for a radical shift in P use so that the loop can be closed. A major problem is that some of the least glamorous subjects need to be tackled, such as soil and farming, manure, compost, sewage and wastewater treatment — an unsavoury truth.

A major change in the use of P has been made in many countries with the formal or informal banning of phosphate in household detergents. Nevertheless, since the great majority of rock phosphate is used in agriculture, changes in phosphorous application and the rethinking of phosphorous use have been minimal to date. Clearly, a fundamental approach to change has to occur within agriculture. However, limiting the efforts and pressures to only this area will not be sufficient. Present agricultural methods and food production practices are answers to demand patterns that have been established by society, industry and politics over time. They frame the system within which agriculture operates. Therefore, there is a need for broad societal engagement in sustainable phosphorus use and management — a global challenge for action. Only cross-sectored and cross-social considerations will lead to promising solution-finding mechanisms. Currently, economic disincentives, general problems with the concept of sustainability, conformity, limited spatial-temporal human understanding and obsolete value systems form the main obstacles that need to be overcome.

The needed response is actionable research that puts people and governments ahead of the challenge, rather than one step behind. The planet needs a response that creates a vision so profound that it is going to change behaviour, ideals and values. This is a time of experiments to engage, precipitate and facilitate change. This is a time to try new initiatives, drawn from the broad knowledge base we have, but not limited by discipline and political boundaries. We must start looking at watersheds as the life-giving organs of planet earth.

Let us hope that 2009 will become a year where neither structural nor financial constraints will prevent us from working towards sustainable phosphorus use and freshwater ecosystem protection. Indeed, let us work to make the year a milestone in action and change towards the sustainability of our global resources, so clearly represented by the challenges within the water and phosphorus cycles.

Andrea E. Ulrich is pursuing a Master's degree in Sustainable Resource Management at the Technical University of Munich, Germany, and worked with Dr. Paul Watts and Dr. Diane Malley on a project on Food and Water Security in the Lake Winnipeg Basin. Further information can be accessed at www.foodandwatersecurity.net.

"getting vocal!"

Growing LOCAL

'Growing Local' Conference Spreads Roots

By Tessa Vanderhart

IN 2008, the Oxford English dictionary added "locavore" as a word, and the Manitoba Food Charter held its first "Growing Local, Getting Vocal!" food security conference. Now in its second year, the conference's practical, do-it-yourself, and community-minded sessions champion everyday efforts to support Manitoba agriculture of all varieties.

The 2009 Growing Local Conference: Creating Local Solutions for a Food Secure Manitoba will once again be held at the University of Winnipeg. Paul Chorney, community liaison for the Manitoba Food Charter, wrote in an email that the feedback from last year's conference participants was "great."

"Good stimulating content and lots of great networking opportunities," Chorney wrote. "We hope for that to happen again this year. There's no one session that stands out because community food security is broad and holistic, and different folks have different interests."

Five concurrent sessions will be held three times per day on both Friday and Saturday, Feb. 20 and 21, on topics from urban agriculture to northern farming, seed starting to beginning a community garden, reinventing food banks to "living on the wild side." Friday begins with a keynote address from the *Manitoba Co-operator's* Laura Rance, titled "Separating Wheat from Chaff in the Sustainability Debate," and ends with the signing of the Manitoba Food Charter.

Friday's plenary session will centre on GMOs, with panelists professor Curtis Rempel from the University of Manitoba, Peter Entz of Richardson International, and Pat Mooney, executive director of the ETC Group, an organization focused on ecological erosion, new technologies and global governance. Chorney said that, "we were pleased that Pat Mooney, who has international stature, agreed to attend, and wanted to have a session that balanced perspectives [on GMOs] by bringing in more agribusiness-oriented speakers on a panel with him. We're hoping for a respectful dialogue around a charged issue."

The conference ends Saturday, Feb. 21 with the play "Unequal Harvest: Voices from the Global Food Crisis," written by local author Geoff Hughes.

To register, visit manitobafoodsecurity.ca. Last year the conference sold out, but as it's held during the university's reading week this year, some sessions will be held in larger rooms. Chorney said that, "if we sell out, we sell out. It's best to register early." Individual registration is $65 per day, or $35 for low-income/students/seniors. There are also pre-conference tours and a free food film festival for those new to the idea of eating local.

Groups Lobby City for Active Transportation Funding Increase

By Tessa Vanderhart

THE CITY OF WINNIPEG'S active transportation budget increased for 2009, but according to activists and a number of councillors, it wasn't quite enough.

Kevin Miller, Bike to the Future co-chair, wrote in an email that the original capital budget included a "disappointing" $1 million for recreational trails and bike paths (compared to $1.5 million in 2008) and $500,000 for active transportation corridors, (down from $600,000 last year).

Joel Trenaman

Winter cyclists may gain from $2.5 million in 2009 capital funds.

That led Bike to the Future, along with groups like the Winnipeg Trails Association, Resource Conservation Manitoba and One Green City to take action to press the city for more funding. Some of the groups also participate in the City's Active Transportation Advisory Committee.

Debate on increasing active transportation budgeting began formally on Dec. 2, when Bike to the Future and the Winnipeg Trails Association presented to the city's Infrastructure Renewal and Public Works Committee.

Bike to the Future presenter Mark Cohoe pointed out that the city had budgeted $95 million for road improvements, compared to the relatively minute amount for less car-oriented transportation upgrades.

After four hours of presentations and discussion, the committee voted to reallocate $4.7 million toward active transportation. The plan included $4.25 million for infrastructure, as well as $250,000 to study the potential for a pedestrian/cyclist connection from south St. Vital to the University of Manitoba, and $200,000 in sidewalk repairs.

The latter two projects in particular won the support of St. Norbert councillor Justin Swandel and Transcona councillor Russ Wyatt, who noted the similarities between active transportation and sidewalk renewal: "Sidewalks in many ways are the original active transportation, and we're not maintaining that in the way that we should."

After the infrastructure committee passed the budget reallocations, they were forwarded to the Executive Policy Committee (EPC). However, only the St. Vital study and sidewalk repairs gained enough support to be added to the final capital budget. As a result, on Dec. 16, with more than seventy-five Bike to the Future members in attendance, Swandel and Wyatt voted against EPC approval of the budget in order to show their displeasure, a rare occurrence.

It the end, however, Swandel and Wyatt chose to vote for the final capital budget when it came before the full council. "There's a view, once the budget is released as written . . . it has a lot to do with politics of pride and other nonsense," Wyatt said.

After the capital budget passed without additional active transportation funding, Mayor Sam Katz called for a five-year active transportation plan to dictate next year's allocation.

But according to Miller, "the Active Transportation Advisory Committee already has a five-year plan, [but] in fact, at the rate it's being funded, it's a twenty-five-year plan!"

On Biketothefuture.org, a spreadsheet details the city's plans — and estimates that at funding levels of $2 million per year, the city's ongoing plans won't be complete until 2014. With the citywide spot improvements already planned and the additional ones that are likely to be added, Miller estimates that $8 million would need to be budgeted for active transportation every year to meet the city's goals.

"That's why $2.5 million in 2009, while much better than every year prior to 2007, is nowhere near enough funding."

Wyatt said that he hopes to increase active transportation through the city's operating budget. The capital budget provides funding for new projects, while the operating budget funds ongoing projects, he said.

"Believe it or not, there is absolutely no maintenance budget for active transportation in the operating budget. So what we're doing is building active transportation, and in the years to come, its going to all come apart, because we're not managing it at all," Wyatt said.

Thinking Outside the Box

Vincent Massey Collegiate and Alternative Energy

By Sandra Krahn

WHEN WE THINK OF SCHOOL, we usually think of classrooms, lockers and hallways — we rarely think of the roof. Beyond keeping us dry, the roof of a school seems like an important necessity, but not a valuable resource. Students at Vincent Massey Collegiate, as well as educators from across the world, have convinced me that a few dedicated and creative individuals can make radical changes to how we view our community and interact with our world.

This past summer I spent a month in India and had the opportunity to visit many schools across the country. I observed with amazement the many functions that the roof of a school could perform. Solar panels and water heaters were a common sight on many buildings in India, but one school had actually used their roof to raise chickens, providing income that helped students attend classes. Most amazing was the Loreto Day School in Kolkata, West Bengal, which houses 300 children on top of the building, with a thatched roof added to protect them from the rain and metal trunks to hold their belongings.

While it is obvious that some of these options are not possible or necessary in Canada, students at Vincent Massey have also seen their roof as a valuable resource and are developing an infrastructure that will benefit generations of students. In 2005, after a unit on global warming, a student asked geography teacher Ken Corley an important question: "So what can we do about it?" The discussion that followed was the beginning of the school's Sustainable Development Committee, which chose alternative energy and the concept of creating a healthy, closed industrial cycle as its focus.

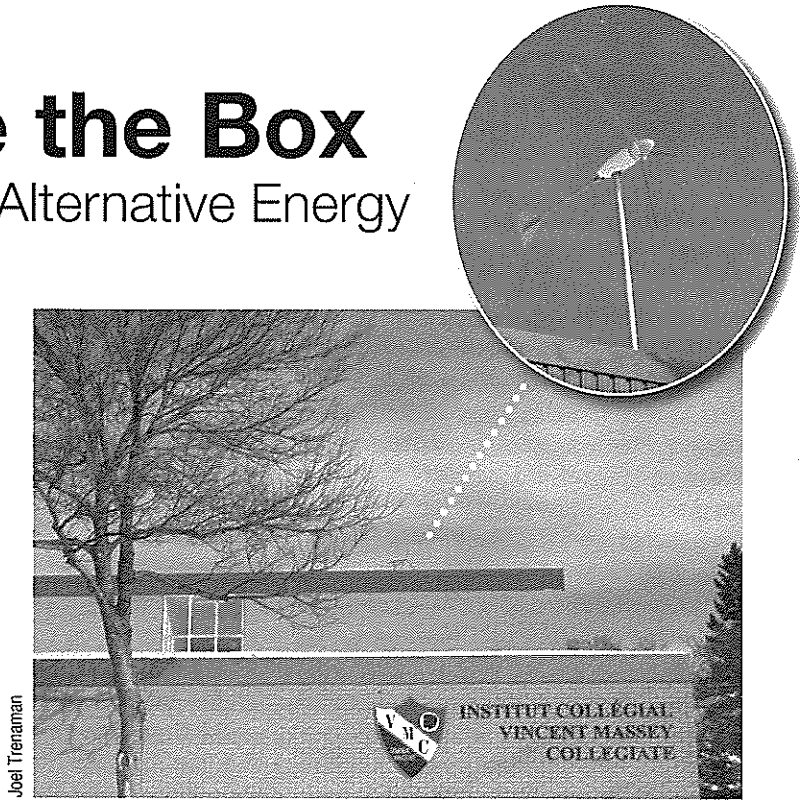
"With the help and encouragement of our principal, Mr. Rick Martin, we purchased a weather station for the top of the school and gathered data over a nine-month, three-season period. Based on our research we were able to determine what energy sources we should focus on, and the types of equipment best suited to our needs. Eventually, this translated into (plans for) a small-scale wind turbine, solar cells, a green roof and a greenhouse on our roof," Corley explained.

On May 28, 2008, in an event leading up to World Environment Day (June 5), the United Nations Environment Programme invited selected youth from around the world to discuss their greenhouse gas reduction projects via videoconference with students and UN officials in New York City. Vincent Massey students were able to present their "Alternative Energy Array" to groups from high schools in Australia, Malaysia and the United States.

It is now 2009. With many hours of research and determination the installation of the wind turbine has become a reality. The turbine will not only provide power to the school and charge batteries to run backup generators, it will also collect data that can be used by students in the classroom. Once solar cells are installed they will be added to the system. As we research installing a green roof, we are excited to find new benefits every week. Green roofs provide more green space in our city, increase the lifespan of the roof structure, decrease heating and cooling costs in a building, and provide habitats for plants, birds and butterflies, to name a few.

The data collected from the wind turbine over the next few years will provide information on the school's energy consumption, which can then be compared with consumption levels after the green roof is completed. This data will provide more information on the value of installing green roofs in public buildings. The hope of staff and students at Vincent Massey is that this project will inspire individuals and other schools to search for creative solutions to increase alternative energy options and decrease energy consumption. Students at Massey have learned that a small group of dedicated individuals can make a lasting impact on their community.

Sandra Krahn is a teacher at Vincent Massey Collegiate.



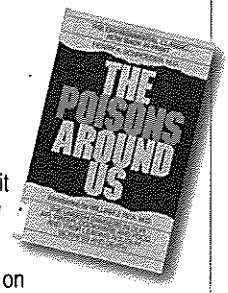
Joel Trenaman

Vincent Massey students have been working towards creating a green roof. Inset: A rooftop turbine provides power to the school.

New In the Library

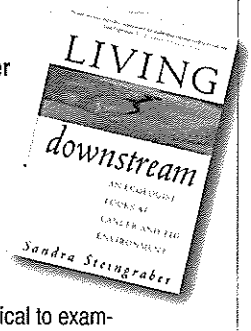
All of the materials in the Alice Chambers Memorial Library may be loaned out free of charge. There is no-charge postal delivery outside Winnipeg. Please contact Erica Young, Resource Assistant, at 947-6511 for more information. www.mbeconetwork.org/library.php

New Books:



The Poisons Around Us
By Henry A. Schroeder
Keats Publishing, 1994

The cover of this book bills it as an "environmental classic." First published in 1974 and reprinted in 1994, the focus is on metals, their industrial usages and effects on the human body. Lead, mercury and cadmium are the main toxic trace metals examined — how they get in our food and water, and what can be done about it.



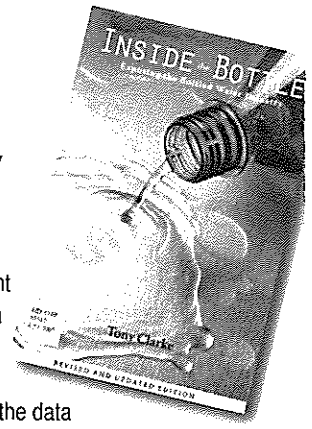
Living Downstream: An Ecologist Looks at Cancer and the Environment
By Sandra Steingraber
Addison-Wesley Publishing, 1997

Steingraber is a biologist, poet and cancer survivor. She interweaves the personal, scientific and ecological to examine cancer patterns and their environmental connections. The writing is informative, but also based around powerful narratives.

The Composting Toilet System Book
By David Del Porto and Carol Steinfeld
The Center for Ecological Pollution Prevention, 2000

More interesting than it may sound, this "practical guide to choosing, planning and maintaining composting toilet systems" is a sort of bible for those considering installing their own system at home or the cottage, or for anyone interested in how alternative septic systems work. Packed with photos and explanatory diagrams, it summarizes not only the how-to, but the why. *This book was generously donated to the Library by Jeff McKay.*

Featured Book Review



By Joel Trenaman

Inside the Bottle: Exposing the Bottled Water Industry

By Tony Clarke
Canadian Centre for Policy Alternatives/Polaris Institute, 2007

Thirsty? Think twice before you reach for that so-called healthy and convenient bottle of water. That's the basic message of Tony Clarke and the research team behind *Inside the Bottle: Exposing the Bottled Water Industry.*

This 216-page book was revised and updated in 2007, building on the first edition released two years earlier. The chapter format has changed, much of the data has been updated using 2005 figures, and there are two new sections: "Global Reach" and "Industry Responds." It provides a breakdown of the industry and tackles the many issues that surround it — price gouging, supply sources, safety and regulation, marketing, ecology, recycling and privatization.

Inside the Bottle takes issue with the widespread claims that bottled water is part of a healthy lifestyle and the implication that it is better for you than tap water. The arguments rest on the assertion that it is the most unregulated resource industry. Canadian testing standards mostly date back to 1973, companies that use groundwater usually pay little or nothing for it, and often there are no limits or permits required (in the U.S., companies are not even legally required to disclose the location of their takings). In Quebec, for example, the source about half of the country's bottled water, extraction can cost a company $1,500 to $4,000 for a ten-year permit. That may come as a surprise, but more astonishing is the fact that large bottlers Coke and Pepsi simply draw on Canadian municipal water supplies, filtering the water or putting it through a common reverse osmosis process before releasing and marketing it to consumers.

The book's first segment features comprehensive corporate profiles of the four major players in the North American market (and most of the world) and their respective brands — Nestlé Waters (Perrier/Pure Life), Groupe Danone (Evian/Volvic/Naya), Coca-Cola (Dasani) and PepsiCo (Aquafina). The "Big-4" began aggressively expanding and increasing their collective market share in the 1980s, just in time to take advantage of the enormous sales growth since the mid-1990s. Between 1993 and 2004, per capita bottled water consumption doubled in the U.S.. The Canadian Food Bureau says that by volume, the beverage is now more popular than coffee, tea, apple juice and milk.

An extensive number of statistics are used to present the big picture, though the book relies heavily on figures from the New York-based Beverage Marketing Corporation, the "leading provider of beverage-related data." Interestingly, Mexicans are said have the third highest average bottled water consumption, 179 litres in 2005, due to local water quality problems. (Italians consume the most per capita.) In terms of overall consumption, the United States leads the way, sipping its way through twenty-eight billion litres on a daily basis. Yet the fastest growing markets for bottled water are all in the global south.

The book is well organized, and the arguments are succinct. Like the majority of non-fiction, it's not a book to read for its prose, but information is presented clearly, making good use of charts, graphs and sidebars. It includes a Bottler's List, documenting the locations of most of the major bottling plants around North America.

Part 4, Response and Resistance, tells readers how to respond to what Clarke, executive director of the Polaris Institute, calls the "environmental-health fraud" of the industry in general. He documents ten counts or charges against the "contemporary con artists," that while raising many valid points, come across as bordering on dogmatic or overwrought. On the other hand, the chapter also gives readers tools to become more active and aware of the standards — or lack of — in their own communities, and details effective examples of resistance in Ontario, the U.S. and Brazil.

The issues were given recent prominence in December 2008, when the City of Toronto banned the sale and distribution of bottled water on city premises. According to a subsequent op-ed article by Clarke, seventeen municipalities from five provinces have enacted similar bans. The Polaris Institute has organized an ongoing campaign at Insidethebottle.org.

Clarke does recognize that bottled water has a role to play in emergency situations, and provides economic benefits to many communities. And the solutions the book advocates seem quite reasonable, if not entirely pragmatic under current conditions: community control of the resource; extraction from sustainable sources; the use of recycled containers with a deposit/return system; and federal standards at least equal to those for tap water.

In the meantime, since the release of *Inside the Bottle,* the industry has continued to expand. Make way for oxygenated, herbal and vitamin waters, and the multitude of issues and claims brought by these products, as companies do their best to convince you to turn off the tap.

A Case for Wetlands

Restoration Incentive Program Only Part of the Solution

By Bob Grant, Manitoba Manager of Provincial Operations, Ducks Unlimited Canada

AGRICULTURAL PRODUCERS own and manage the majority of land in southern Manitoba. This agricultural land is the key to safeguarding our nation's natural capital because of the ecological goods and services (EGS) these healthy and conserved landscapes provide.

EGS are the benefits that society receives from natural lands, including wetlands. The benefits of wetlands include the purification of water and air, carbon sequestration, groundwater recharge, flood and erosion control, and biodiversity. But wetlands continue to be lost in Manitoba at an alarming rate. In fact, seventy percent of wetlands have disappeared or have been degraded in settled areas of the province.

Landowners have the unique opportunity on their lands to provide an increased abundance and diversity of EGS. Preventing the further loss of wetlands and other natural areas is an essential step in making Manitoba a leader in greenhouse gas mitigation, water quality protection, scientific innovation and environmentally responsible agricultural production. Promoting wetland retention and restoration as part of regular farm practices is a necessary and pivotal shift away from the alarming pattern of ongoing loss and environmental degradation and must be a priority for all Canadians in order for meaningful progress to be made toward a sustainable rural and urban Canadian landscape.

Impacts of Wetland Loss

Wetland loss is significantly deteriorating Manitoba's environment. Algae blooms on Lake Winnipeg and many other lakes and reservoirs are a symptom of increased nutrients being delivered from upstream watersheds. When wetlands are lost, significant amounts of phosphorus, nitrogen and other pollutants are allowed to be released from the landscape into the water systems. In addition, greenhouse gases are released and the land's ability to store carbon is reduced, contributing to global climate change.

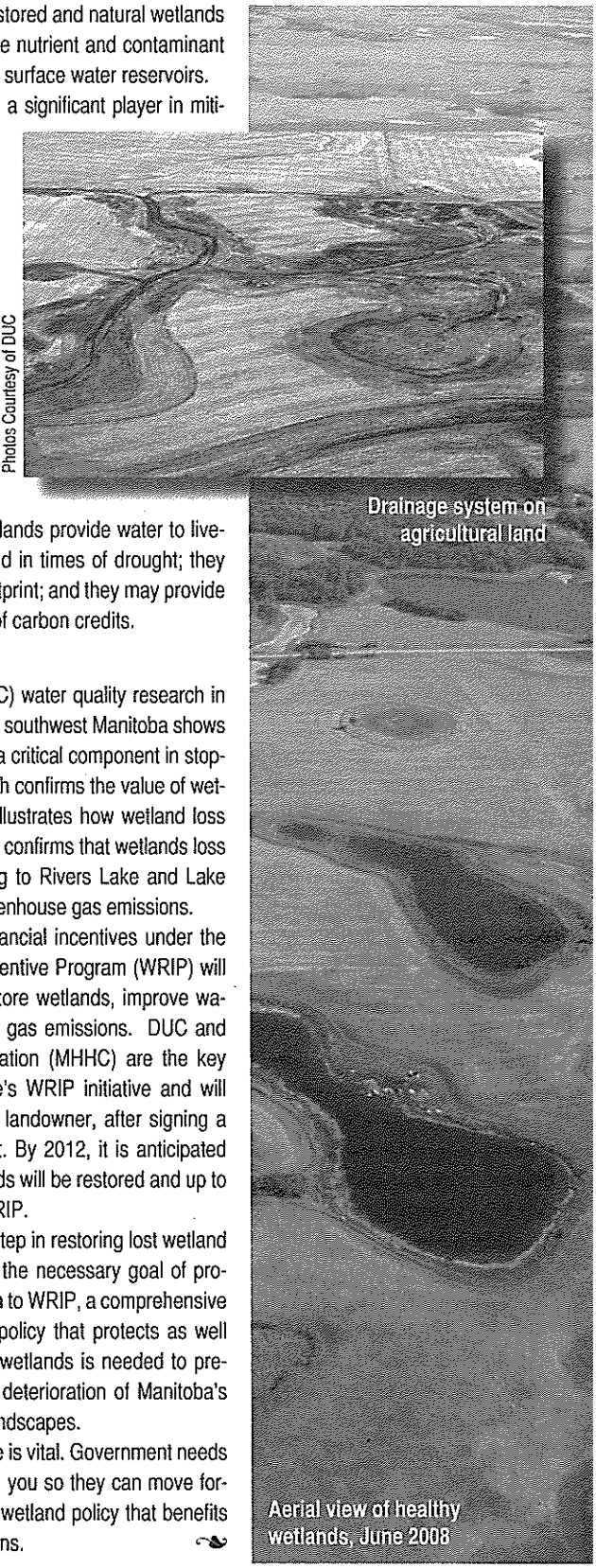
Loss of wetlands also increases peak runoff and average annual sediment loading, which leads to erosion and damage downstream. A more subtle but definite change is the slow but steady decline in native plant, waterfowl and wildlife populations.

Restoration Benefits

Restoration usually means simply placing a small earth plug on an existing drainage ditch. The benefits of restoring wetlands are seen in improvements to surface and groundwater supplies and assimilation of nutrients, pathogens and other pollutants into wetland vegetation. A restored wetland is capable of retaining or removing up to ninety-five percent of these elements that are introduced to it. A network of restored and natural wetlands has the ability to significantly reduce nutrient and contaminant loading to Lake Winnipeg and other surface water reservoirs.

Wetland restoration can also be a significant player in mitigating climate change. The newly restored wetland vegetation and soil will sequester large amounts of carbon, preventing its release to the atmosphere as carbon dioxide.

Wetland retention and restoration as a beneficial management practice has been largely overlooked in the pursuit of sustainable agriculture even though wetlands provide many benefits that contribute to the agricultural economy and broader social and economic well being. Restored wetlands provide water to livestock; they provide a source of feed in times of drought; they can reduce a producer's carbon footprint; and they may provide future economic return in the form of carbon credits.



Photos Courtesy of DUC

Drainage system on agricultural land

Aerial view of healthy wetlands, June 2008

DUC's New Research

Ducks Unlimited Canada's (DUC) water quality research in the Broughton's Creek watershed in southwest Manitoba shows the need to engage landowners as a critical component in stopping wetland loss. This new research confirms the value of wetlands to all of society and clearly illustrates how wetland loss impacts the environment. The study confirms that wetlands loss results in increased nutrient loading to Rivers Lake and Lake Winnipeg, as well as increasing greenhouse gas emissions.

The good news is that new financial incentives under the province's Wetland Restoration Incentive Program (WRIP) will encourage landowners to help restore wetlands, improve water quality and reduce greenhouse gas emissions. DUC and Manitoba Habitat Heritage Corporation (MHHC) are the key partners in delivering the province's WRIP initiative and will restore wetlands at no cost to the landowner, after signing a perpetual Conservation Agreement. By 2012, it is anticipated that over 2,500 acres of lost wetlands will be restored and up to 150 producers will participate in WRIP.

The WRIP, while an important step in restoring lost wetland function, still does not accomplish the necessary goal of protecting existing wetlands. In addition to WRIP, a comprehensive and integrated provincial wetland policy that protects as well as restores wetlands is needed to prevent further deterioration of Manitoba's important landscapes.

Your role is vital. Government needs to hear from you so they can move forward with a wetland policy that benefits all Manitobans.