eco journal
Manitoba eco-network
v.24. no. 2 Spring 2014

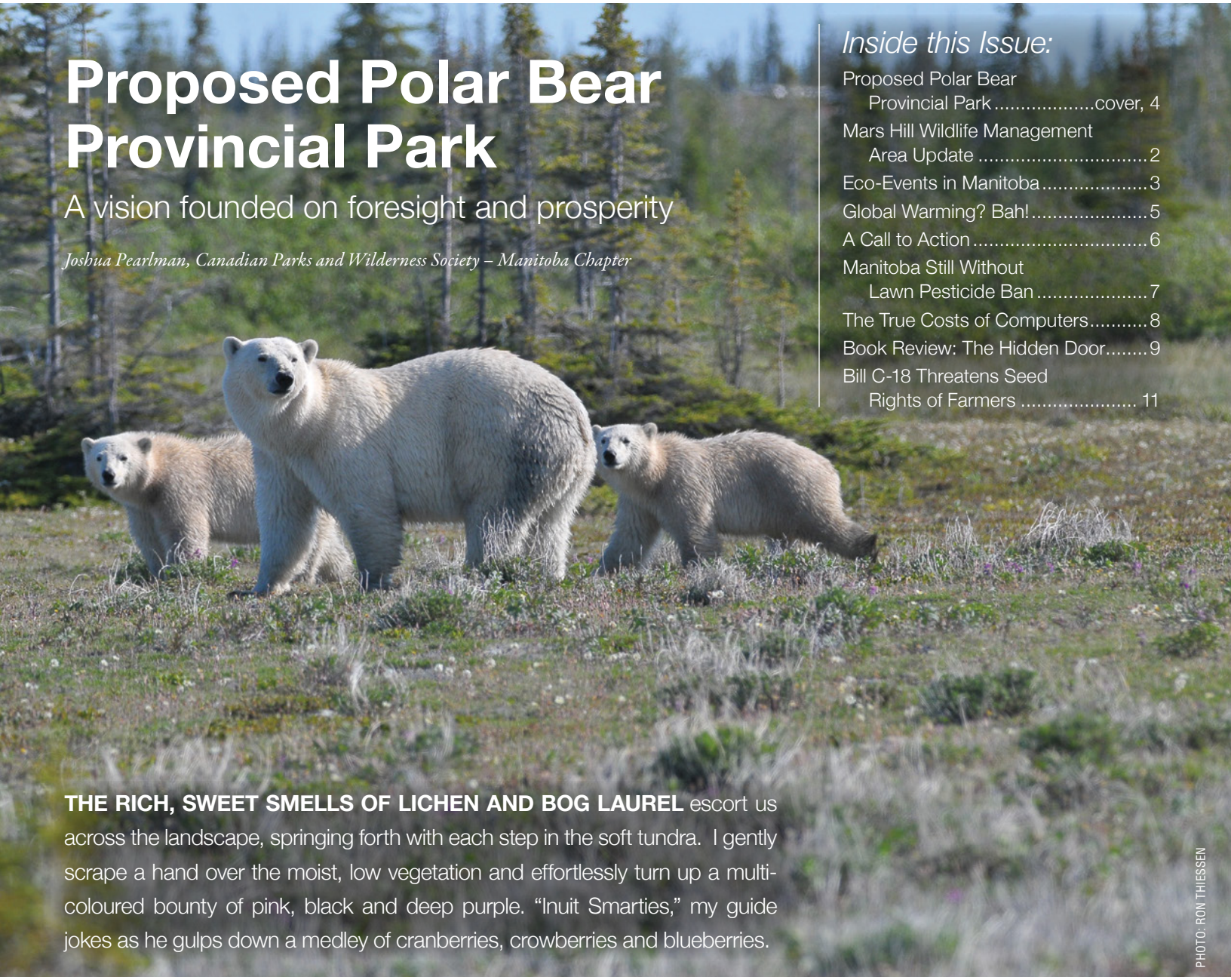
Proposed Polar Bear Provincial Park

A vision founded on foresight and prosperity

Joshua Pearlman, Canadian Parks and Wilderness Society – Manitoba Chapter

Inside this Issue:

Proposed Polar Bear Provincial Park ..... cover, 4
Mars Hill Wildlife Management Area Update 2
Eco-Events in Manitoba 3
Global Warming? Bah! 5
A Call to Action 6
Manitoba Still Without Lawn Pesticide Ban 7
The True Costs of Computers 8
Book Review: The Hidden Door 9
Bill C-18 Threatens Seed Rights of Farmers 11



THE RICH, SWEET SMELLS OF LICHEN AND BOG LAUREL escort us across the landscape, springing forth with each step in the soft tundra. I gently scrape a hand over the moist, low vegetation and effortlessly turn up a multi-coloured bounty of pink, black and deep purple. "Inuit Smarties," my guide jokes as he gulps down a medley of cranberries, crowberries and blueberries.

PHOTO: RON THIESSEN

Far from barren, the tundra and subarctic forests surrounding Manitoba's Hudson Bay coast yield incredible abundance that sustains both the people and wildlife that thrive here. Wolves, foxes and wolverine hunt and scavenge on the heels of moose, hares and thunderous herds of caribou that in turn feed on the plants and lichen anchored in the deep, peat-rich soils. In summers, over 250 species of birds call this place home.

Despite this dramatic diversity, it is the polar bear that draws people from across the planet to experience Manitoba's northern paradise. The continued health of this vibrant ecology and this iconic ambassador of the arctic are key ingredients to maintaining healthy and prosperous regional communities. The recently proposed Polar Bear Provincial Park presents an opportunity to secure this prosperity and assert Manitoba as a global leader in large landscape conservation.

A lack of accessibility has left many of Manitoba's northern regions little changed in the last century. Though technology and climate change are rapidly altering this, the north is still largely undeveloped. This presents a globally-rare opportunity for careful, large-scale planning to realize a landscape where thriving communities and thriving ecosystems exist harmoniously.

continued on page 4 >>

Volume 24, Number 2
Spring, 2014
(date of issue: April 17, 2014)

eco journal

is published four 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: 1-866-237-3130
info@mbeconetwork.org
www.mbeconetwork.org

Editor: Sheldon Birnie
editor@mbeconetwork.org

CONTRIBUTORS:
Kevan Bowkett, Cathy Holtslander, Curt Hull, Peggy Kasuba, Amanda Kinden, Megan Krohn, David Neufeld, Tracey O'Neil, Joshua Pearlman, Ron Thiessen.

Design & Layout: Tracey O'Neil
www.simplelifedesigns.ca

Watch us on YouTube to learn about native prairie plants, composting, Manitoba Hydro's water saving kit, reel mower sharpening and more. http://www.youtube.com/user/ManitobaEcoNetwork

Don't forget to 'like' Manitoba Eco-Network on Facebook! http://www.facebook.com/Manitoba.Eco.Network

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 $100.

Printed by Manitoba Hydro with SFI Certified Sourcing paper stock.

Mars Hill Wildlife Management Area Update

by Peggy Kasuba, Mars Hill Forest Alliance & Mixedwood Forest Society

YOU MAY RECALL OUR 2012 ARTICLE in the Eco-Journal regarding our endeavours to stop the severe forest damage and fragmentation by recreational vehicles in the Mars Hill Wildlife Management Area. After three long years at the stakeholders table, Manitoba Conservation has designated motorized trails with the intent of protecting and conserving wildlife habitat. A big step forward!

You may also recall our plan to collect plant specimens within the Mars Hill Wildlife Management Area, adding to our esteemed Dan and Ted Mosquins' plant collection. In 2012, 89 plant specimens were identified and added to Dan and Ted's original collection, which is still housed at the University of Manitoba Herbarium. What Dan and Ted started 62 years ago is now an ongoing project.

In 2013, we focused on collecting plant specimens from wetlands, meadows, and old gravel extraction sites. These plants are currently in the process of being identified and will be added to our collection at the University of Manitoba Herbarium. The lichen and mushrooms we collected were donated to the Botany Department at the Manitoba Museum.

This year, we will continue to collect plant specimens in these same areas and span out into low-lying areas as well as tree samples. Spring came late in 2013, and while some plants collected were either not there or late, we did miss some blooming and berry times for collection. The 300+ patch of Spotted Coral Root orchids did not avail itself, much to our disappointment. How does one attempt to collect one of every plant on 3,500 hectares? With great perseverance and a great big love of nature!

A great big thanks is owed to some very special people. First, Al Rogosin, retired Botany Professor Emeritus and Mixedwood Forest Society Board member. Al spent two days with me in the wetlands (the fen was fabulous) collecting and identifying plants. Mae Elsinger, Rangeland Biologist answered our call for volunteers and came out to identify grasses. He was ever so patient teaching me how this is done. Diana Bizecki Robson, Curator of Botany, Manitoba Museum came out looking for plants of interest, and left with my mushroom collection and subsequent identification. Diana also provided information on how to take spore prints to aid in identifying mushrooms. Elizabeth Punter, Assistant Curator, University of Manitoba Herbarium, recently retired, has generously donated her time to identify the plants collected in 2013.

We are also very pleased that in 2012 and 2013 we provided field trips to junior and senior students from the Ed Schreyer High School in Beausejour and students from Winnipeg. What a great bunch of young people, who also taught me a few things! Thanks to the Eco-Network for advertising our field trips, which resulted in Winnipeg students coming out to learn about our study and get some hands-on experience. We hope to see everyone again this year! We will continue, and expand upon, our focus on symbiotic relationships with new hands-on learning.

Anyone interested in guided field trips, no fee, are more than welcomed to come out and spend a day with me any day of the week, by appointment only. Anyone interested in spending time in the field with me from June to September? You can contact me at 204-265-3499 orpeggykasuba@hotmail.com

eco events in Manitoba

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

APRIL

19 **Nature Manitoba: Hike Headingly grand Trunk Trail**

20 **Easter Brunch at Fort Whyte Alive**

22 – 28 **Celebrate Earth Week with plenty of fun activities for the whole family!**

22 **Nature MB Workshop: Flycatchers for Beginners**

22 **6:30pm - Earth Day celebration and Film Screening @ the Park Theatre**

22 – 24 **Better Buildings conference**

23 **Grey Hares Hike at Oak Hammock Marsh**

24 **7pm - 8pm MEVA Monthly Meeting (Manitoba Electric Vehicle Association)**

26 **6:30 - 9:30pm - Living Prairie Museum: Prairie Planting Workshop**

27 **10am - 3pm - Earth Day at Fort Whyte Alive**

29 **Nature MB Workshop: Morels and Other Fungi**

29 – May 1 **Volunteer Manitoba: Volunteer Management Level 1 course**

30 **Birding for beginners @ Assiniboine Park**

MAY

1st **Nature Manitoba Owls and Woodcocks birding event**

2 **5pm – 8pm - Green Drinks @ the King's Head Pub**

3 **Nature Manitoba: Hike Hunt Lake**

6 **Nature MB Workshop: Skull Duggery**

7 **MB Green Building Council Annual General Meeting & Gala**

7 **Birding for Beginners @ St. Vital Park**

9 – 11 **Mother's Day Event @ Fort Whyte Alive**

10 **Family Birding Scavenger Hunt @ Fort Whyte Alive**

17 – 20 **Permaculture workshop w/ Sepp Holzer (Gimli)**

22 **International Biodiversity Day! 28 - 30 - Volunteer Manitoba - Volunteer Management Level 2 course**

29 **7pm – 8pm - MEVA Monthly Meeting (Manitoba Electric Vehicle Association)**

31 **Archery & Atlatl @ Fort Whyte Alive**

JUNE

4 **Fort Whyte's 26th Annual Sunset BBQ**

5 **World Environment Day**

6 **4:30pm – 8:00pm - Green Drinks @ King's Head Pub**

13 – 15 **Wilderness Skills Intensive @ Room To Grow (Turtle Mtns)**

For a complete and detailed description of this spring's Manitoba Eco Events, visit us at mbeconetwork.org!

<< *continued from page 1*

Polar Bear cont'd...

The incredible scale and significance of such an opportunity is often lost on Canadians with little reference point for measures of "vastness." While Europe works to protect disparate pockets of land totalling 10,000 km2 with the hopes of restoring their lost wilderness, Manitoba's proposed Polar Bear Provincial Park may see over 29,000 km2 (4.5 per cent of Manitoba) of continuous and ecologically significant lands protected for our future. Include the existing Wapusk National Park (11,475 km2) and we could see a continuous protected area comparable in size to the Netherlands.

The benefits are ecological, cultural, and economic.

Evidence of reduced polar bear health, as well as reduced rates of reproduction and cub survival, should be enough to put us on guard. But despite these alarming trends, there somehow exists a lack of consensus on the health of the Western Hudson Bay polar bear population. However, there is little debate that the winter sea ice they depend on to hunt seal is declining at an alarmingly rate, which will create greater dependance on their terrestrial habitats. As recently-recorded concentrations of polar bear dens near the Ontario border would fall within the proposed park, it would acutely safeguard this critical phase of their population cycle.

The habitats of hundreds of other species would also gain new protection if the park were established. As North America's largest wetland and one of the world's largest peat forming ecosystems, the area plays a significant role in slowing down the impacts of global climate change by storing large amounts of carbon. Although they cover just five per cent of the global landmass, northern peat forming systems like this store an estimated one-quarter of all terrestrial carbon.

In addition, northern communities depend on a thriving ecosystem to undertake subsistence activities such as hunting, fishing and trapping, and to support the region's ecologically responsible tourism and outfitting industries. As Churchill is recognized globally for having some of the most unique and accessible wildlife viewing in the world, this is a major local and provincial economic driver (overnight visits to Churchill alone contribute an estimated $21 million annually to Manitoba's economy).

> "The continued health of this vibrant ecology and this iconic ambassador of the arctic are key ingredients to maintaining healthy and prosperous regional communities.

Polar Bear Provincial Park would greatly enhance this opportunity, preserve traditional livelihoods, and maintain the ability of the local tourism industry to sustainably support communities in the long term while greatly helping to protect an iconic yet at-risk Canadian wildlife species. A formal public consultation process is expected in the coming months.

In the meantime, please share your thoughts with Conservation & Water Stewardship Minister Gord Mackintosh about the proposed polar bear park - minconws@leg.gov.mb.ca.

Global Warming? Bah!

Look at how cold our winter has been!

By Curt Hull, Climate Change Connection

SOME WINTER WE'VE HAD, EH? This winter was cold, no doubt about it. It is probably the coldest we've seen in North America this century, and perhaps the coldest since some time in the 1990s. So, does this mean that global warming isn't happening?

To really understand what's going on, we need to look at this winter in context and look at some of the mechanisms that brought the cold.

Climate vs weather

First of all, there is a difference between weather and climate. Weather is what's happening outside the door right now. Climate is the pattern of weather measured over decades.

The records clearly show that the earth is warming - especially since 1980 or so. But warming is not happening equally to all parts of the world. It is different in different seasons, and it is not happening progressively year upon year. You have to look at decades of data to separate climate changes from normal weather anomalies. If you look at that trend over decades, the earth on average is indeed warming - and quickly.

Winters have been getting warmer

Dr Danny Blair and Ryan Smith of the University of Winnipeg have been studying temperature data for Canada. The data shows that Canada's average *annual* temperature has been increasing. The rate of change is different for different parts of the country; the north is warming more quickly than the south, for example. But the starkest differences appear when you look at the seasons. The average annual temperature has been increasing at a rate of about 2 to 5°C per century since 1970. Our summer temperatures haven't really changed all that much but our winters certainly have. Our winters have generally been getting warmer - at rates approaching 10°C per century in some places.

So, as cold as this winter has been around here, the winter was not unprecedented.

Cold here, hot elsewhere

When you step outside your door and it is cold, you may think that this means it's cold everywhere. But, of course, that's not so.

Much of North America has been cold this winter. In many parts of this continent, November and December 2013 and January 2014 were all colder than the 1980 - 2010 baseline. In the USA, December was the 21st coldest since 1895 and the coldest since 2009. In January, despite some of the coldest Arctic air outbreaks to hit the eastern US in several years, no state had their coldest January on record. In Winnipeg, according to Environment Canada, we just had the coldest December / January combo since the winter of 1949-50.

However, global combined land and ocean average temperature for November 2013 was the warmest since records began in 1880, December 2013 was the 3rd warmest on record, and January was the 4th warmest on record. While much of North America froze, northern Alaska was much warmer (and wetter) than normal and Russia experienced its warmest November AND December on record.

> "Weather is what's happening outside the door right now. Climate is the pattern of weather measured over decades.

Polar vortex

Aside from normal year-to-year weather variation, the key driver of this phenomenon is variability of the polar vortex. Polar vortices are large air masses that rotate about both the north and south poles. These large-scale rotating wind systems strengthen and expand in winter. At the outer edges of these vortices are the jet streams, where the winds in the upper atmosphere are especially fast.

These vortices and their jet streams are driven by temperature differences between the equator and the poles. With a large temperature difference, the vortex rotates faster and tends to be quite circular. This keeps the cold air near the poles and the warm air in the mid-latitudes.

The polar zone of the northern hemisphere has been getting warmer more quickly than many other parts of the world. This differential warming has been due to a number of factors including loss of the polar ice cap, reduced snow cover, and anomalies in the North Atlantic Oscillation. As the temperature difference between the pole and equator declines, the jet stream slows.

Just like a river, as the jet stream slows, it starts to meander. This meandering causes the undulations in the vortex - the Rossby Waves - to extend farther down toward lower latitudes. These waves move warm air toward the pole and polar air toward the equator. Hence, warmer Alaska, colder Florida.

A weaker polar vortex and these meanders also tend to create weather systems that stay in place longer and increase the chance for weather systems to become blocked. This blocking was a key cause of Superstorm Sandy that hit New York in 2012, and has likely contributed to the historic drought currently affecting California.

As the climate changes due to man-made global warming, it does affect the weather. Scientists are still learning details about what those affects will be. We are seeing new affects every year because we are getting into uncharted territory. We are warming the planet at an unprecedented rate.

And perhaps, one of those affects may be - ironically, and at least for a little while - a cold winter from time to time.

An earlier version of this article appeared in Fort Whyte Alive Life newsletter.

A Call to Action

Taking control of pesticide application on public spaces

By David Neufeld

ALTHOUGH THIS BEGAN as a personal story of uncertainty and loss, it is evolving into a story with strong public interest. The story pulls at some deep yearnings. As humans who depend on the landscapes on which we live, we know there's something wrong with the status quo; that we, as a society, need to deal with both the intensity of individual toxins and the untested and unregulated combination of toxins in our environment. And, we know we need to move from story to action.

Every spring, municipal governments publish "Public Notices" on the pesticides – insecticides, herbicides and rodenticides - they plan on using the following summer. Some names many of us recognise, like malathion, but mostly we don't know what they're talking about. Therein lies the problem. Manitoba Conservation gives citizens a short window of time (although they're willing to be flexible on this) of 15 days from the date of the Public Notice to comment on specific pesticide programs being used.

However, they don't offer any links to information on the products and, we believe, they make it difficult to respond by only providing a postal address. They offer no email address or phone number. If Conservation sincerely values comment from the public, this is an easy thing to change. Yes, they may get citizens berating them for using too much or using too little pesticide on public lands, but they'll also get valuable insights into alternative products and processes. There's mounting independent research on negative effects pesticides have on water, biodiversity and human health of some of the products used. Manitobans deserve to have easy access to this information. The citizens of Manitoba have every right to help decide what the acceptable costs are to using products listed in the Notices.

The personal story behind the public interest story involves the use of Tordon products in ditches. Tordon 101 and 22K contain the active ingredient "picloram," which is known to seriously impact aquatic life, and is used in selected ditches to manage common milkweed (a native species) and leafy spurge. It remains active in the soil for up to five years. Ditches are designed to carry excess water towards aquatic habitat. Regardless of how this product is tested in the lab, consideration must be payed to how it will react in the real world of sandy soils and thunderstorms, and what its long-term environmental effects might be.

This is one product among many that mix in our environment with absolutely zero study being done on the pesticide soup that's created. This is not good science, as it does not serve long term public interest.

Last year, at Room To Grow Greenhouse, we made hay in near-by ditches. We then fed the hay to our horses, composted the horse manure, used the compost in our commercial, organic greenhouse and then struggled to find the cause of plant death that resulted. Unbeknownst to us, the hay was contaminated with picloram residue, three parts per billion of which will kill tomato seedlings!

We've been clear from the beginning that they are more concerned about the knowledge gained about picloram than we are about the financial loss experienced by the whole mess. The province, in return, has responded by ignoring the issues being raised and by defending its pesticide programs.

Anyone who is concerned is encouraged to contact Manitoba Conservation. You can let Conservation know that you want better access to information on which products they approve, how they are used in public spaces and how they are exploring less toxic alternatives. You can encourage them to work with public interest groups to provide the public with as many resources as possible. British Columbia has gone through this process and has legislated the use of Integrated Pest Management strategies which insist on the least toxic solution being used first and the most toxic last.

Manitoba Conservation. Pesticide Section.
geoff.stephens@gov.mb.ca
204.782.3890
Box 80 – 160 – 123 Main Street, Winnipeg, R3C 1A5

Mixedwood Forest Society of Manitba is suggesting Manitoba Conservation needs help from the people of Manitoba to make decisions based both on thorough science and sensible precaution. MFS is also creating a website that informs the public on pesticide back stories and encourages the Province to respect the ultimate "owners" of public spaces, and we encourage all who are interested to contact us for more information, and to contact Manitoba Conservation.

PHOTO: DAVID NEUFELD

View from Room to Grow.

Manitoba Still Without Lawn Pesticide Ban

Legislation promised, but still forthcoming

By Amanda Kinden, Green Action Centre

AS SPRING FINALLY UNFOLDS, Manitobans can finally look forward to wild flowers and other perennial and annual plants blooming throughout the province. Unfortunately, many Manitobans aren't aware that they are not among the 80 per cent of Canadians that are protected from unnecessary pesticide exposure. Perhaps because of all the media attention last June when our provincial government announced they would go ahead with a ban, people believed they had.

Currently, there is no ban. Legislation was promised to be announced in the next session, which would take us into June. If the lawn pesticide ban legislation passes, it won't come into effect until January 1, 2015, with a grace period of one year. So really, January 1, 2016.

This is if the wealthy pesticide industry doesn't succeed in weakening or stopping the legislation. They see Manitoba as a gateway. If a provincial lawn pesticide ban happens for the first time in a western province, other provinces might follow suit. It is important for Manitobans to speak up in support of a lawn pesticide ban (more info on how to do that at end of article).

PHOTO: TRACEY O'NEIL

Manitoba has a lot to gain from a lawn pesticide ban. In provinces which have already introduced a lawn pesticide ban, use has significantly decreased. Pesticides rarely reach their target (over 90 per cent fail to do so), which leaves the rest to be absorbed by us, our children, our pets, beneficial insects like bees and butterflies, aquatic species in our rivers and lakes, and so on.

Children are the most at risk to pesticide exposure. New studies are coming out daily about links to pesticide exposure and ADHD and other developmental disorders, as well as Alzheimer's and cancer. When children are exposed to seemingly small amounts of pesticides, those chemicals accumulate in their bodies and are able to negatively affect them throughout their lives. Of course many people know that pesticides have a negative impact on bees, but they also pose a risk to monarch butterflies since they are designed to kill Milkweed – the butterfly's sole source of food.

Many people believe these products are safe because they are regulated by Health Canada. That is a myth. According to Health Canada's own website, companies wishing to register a product must provide studies proving safety and effectiveness. In addition, only the active ingredient is tested for safety. The other "inert" ingredients (these ingredients are neither chemically, biologically or toxicologically inert), which make the chemical stick to the target, are not even listed on the label let alone tested for their toxicity when mixed with other chemicals in the bottle or the environment. Recent studies show active ingredients are much more toxic than previously thought when tested with the other ingredients in products.

What can you do? You can let your Member of Legislative Assembly (MLA) know you support a ban, to find out who your MLA is and for their contact information visit greenactioncentre.ca/learn/pesticide-reduction/.

Learn more about the issues and attend Green Action Centre and Manitoba Eco-Network's screening of Precautionary Principle: The Nicole Bruinsma Story on April 22 at The Park Theatre from 6:30-9:30pm. Tickets are available at Green Action Centre's website.

Finally, learn about safer products and how to care for your lawn organically at Manitoba Eco-Network's FREE Organic Lawn Care workshops at a library near you this Spring. For more info and to register visit mbeconetwork.org.

> "Every spring, municipal governments publish "Public Notices" on the pesticides – insecticides, herbicides and rodenticides - they plan on using the following summer. Some names many of us recognise, like malathion, but mostly we don't know what they're talking about. Therein lies the problem.

The True Costs of Computers

Taking a look at the costs of our reliance

By Kevan Bowkett

SHOULD WE BE CAUTIOUS about introducing new computers and computerized systems into our home or work environments? Absolutely. Computers have many negative aspects, and it's prudent to use caution when introducing new consequential technologies to our lives. While the benefits of computers are obvious, I'd like to take a look at the negatives with you here.

After some analysis, it does seem that there are so many downsides to computers. Particularly in their early years, computers caused harm to our health. Even today, their light, EM fields, required postures, and component materials have been implicated in cancer, eye damage, and repetitive strain injuries. We also suffer emotional damage in the forms of cyber-addiction, and reduced real-person contact. Computers also enable cyber-bullying and very easy access to pornography, with their heavy psychological costs, as well as exposure to predators. Cognitively, too, our tweeting and "liking" seems to reduce our ability to attend to and think in larger units.

Social justice and equality are also negatively impacted by our demand for computers. Our desire for cheap materials promotes sweatshop labour and horribly dangerous work in mining and smelting — work often done by children. The pace of development of computers since the 1970s would have been impossible in a worldwide environment of fair, safe work. Computers also make possible global trading on money markets, permitting flows of financial capital of such high speed and volume that it's difficult for national governments to keep sovereign control over their currencies and economies, undermining democratic control. Simultaneously, computers enhance the capacity for centralized control within large institutions like states and transnational corporations, partly through massively augmented surveillance power. So while computers and smartphones and the Internet are widely hailed as a big step forward for democracy there's also some sense in feeling that, "If the printing press was the gun-powder of revolution, computers are the talcum powder of revolution."

For local computer recycling check out: **http://greenmanitoba.ca/electronics-products-recycling-association/.**

A critical approach to high technology can be found in Jerry Mander's In the *Absence of the Sacred*, published in 1991 and still relevant — maybe more so today. Current critical approaches can be found at: **www.etcgroup.org;www.icta.org; http://www.electronicstakeback.com/home/.**

For negatives of social media, see Raffi Cavoukian's new book *Lightweb Darkweb: Three Reasons to Reform Social Media B4 It Re-forms Us* **(see http://www.childhonouring.org/).**

Consider visiting: **http://www.fairphone.com/** for an attempt at a fair-trade smartphone.

And for fall 2014 the Green Kids eco-theatre company is planning a Canadian schools tour called "Unplugged," addressing some of the negatives of computers, especially cyber addiction and Nature Deficit Disorder **(www.greenkids.com).**

Computers increase our vulnerability. There's a lot of private or secret material online. Personal identity info is vulnerable to hacking, not to mention government or corporate surveillance. Ubiquitous computerized cameras and smartphones have diminished privacy, as everyone's on camera all the time.

Today's advanced weaponry, including many weapons of mass destruction, are also made possible by computers. And they make nuclear annihilation not only possible, but possible in minutes instead of hours. We should recall that modern computers of the Mauchly/Sperry/Von Neumann kind (the early forms of today's computers) were developed in tandem with the atomic bomb. Nuclear weapons would be impossible without them.

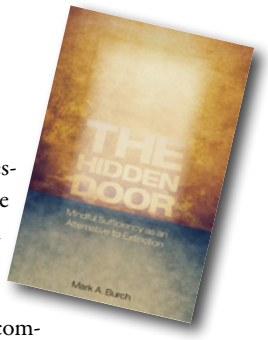
Finally, the ecological harm done by computers is staggering. There is an insatiable demand for natural resources to build and ship and run them, with concomitant destruction of ecosystems. There is resulting pollution: rivers of chemical toxins and mountain ranges of e-waste. And as with weapons, computers also make possible other damaging or ecologically questionable technologies, like genetic engineering, synthetic biology (cyborg organisms), nanotechnology, and global geo-engineering. Without computers these potentially catastrophic technologies would be impossible.

We often miss these negatives, because computers are smooth, shiny, and "cool," which hides their messy aspects. Also their benefits seem so obvious, we don't look any further. And we assume technologies are morally neutral; that they're only good or bad according to how they're used, and who uses them, and don't have any inherent social or ecological effects. Given all these negatives, is it still as clear as it was that the benefits of computers exceed their costs?

eco journal

The Hidden Door: Mindful Sufficiency as an Alternative to Extinction

By Mark A. Burch



MARK BURCH'S *THE HIDDEN DOOR* explores how humankind's pursuit of limitless affluence, supported by a culture shaped by and oriented toward consumerism, is destroying our planet. Burch provides convincing evidence that our over-consumption may, in turn, lead to our extinction if we do not make changes. In stark contrast to consumer culture, Burch suggests a different way of life, one where through engaging in voluntary simplicity, or mindful sufficiency, we can ensure that there are enough resources for all people, and we can benefit individually from a better quality of life.

The Hidden Door is written with the assumption that the reader has a basic understanding of the concept of mindful sufficiency, which is the practice of conscious engagement with daily life in order to achieve the maximum well-being with minimum material consumption. Practitioners of mindful sufficiency are more concerned with qualitative deepening rather than with quantitative growth.

As a practitioner of mindful sufficiency since the 1960s, and with decades of experience writing and speaking to groups on the topic, Burch is well suited to discuss the potential benefits for individuals, communities and the environment of adopting this way of life. He also intelligently counters arguments set forward by others that mindful sufficiency is not compatible with a healthy economy and technological advancements.

Burch paints a picture of a future in which all people have equitable access to resources, where the economy is not dependent on consumption, but instead is maintained by diverse and self-sufficient sustainable communities, and where technology is developed only when it will effectively fill a need without doing ecological damage. It all sounds a bit utopic, and Burch acknowledges that, but he has a grand vision: "Whoever will shape the future culture of sustainability may not be many in number. But whoever they are, they are, or soon will be, standing at those critical balance points where the tiniest push at the right time may birth a new world." At the same time, he points out that what he envisions is not far from what has been done in small communities communities for thousands of years.

Burch provides a number of suggestions about how human societies need to change, some of which may be controversial. Several times throughout the book he highlights over population as a key problem that needs to be addressed. He doesn't expand on how this would be done, but he does emphasize a need for people to see reproduction as a social and ecological act rather than an individual right. He also suggests limiting individual consumption of goods (especially of luxury items), "interrogating" technology before developing it, and reorganizing society so that every individual on the planet has an equal right to goods. Burch is unapologetic in addressing what some readers may find to be uncomfortable topics but, as he points out, "Extinction will be uncomfortable too."

The Hidden Door is a thought provoking book. Burch advocates strongly for educating others through sharing personal stories, and engaging in face to face conversations. He argues that this kind of transformational learning is far more effective than advertising or using social media for spreading the message. While I did not agree with everything that Burch had to say, I found myself constantly rethinking the way that I live my life and coming up with ideas of how I might do things differently to be more mindful and ecologically sustainable. *The Hidden Door* succeeds in opening the door for more discussion on this topic, and for sharing success stories and visions for the future.

—Reviewed by Megan Krohn, Water Caucus Program Manager

Working with you for a Greener Future

Gord Mackintosh
MLA for St. Johns
204-582-1550
GordMackintosh.ca

James Allum
MLA for Fort Garry-Riverview
204-475-2270
JamesAllum.ca

Nancy Allan
MLA for St. Vital
204-237-8771
NancyAllan.ca

Ron Lemieux
MLA for Dawson Trail
204-878-4644
Ron-Lemieux.ca

Rob Altemeyer
MLA for Wolseley
204-775-8575
RobAltemeyer.ca

Kevin Chief
MLA for Point Douglas
204-421-9126
KevinChief.ca

Bill C-18 Threatens Seed Rights of Farmers

By Cathy Holtslander, NFU Director of Research and Policy

TO PLANT A SEED is the most fundamental act of agriculture. For millennia, farmers have been the keepers of seed – choosing and saving seed from each harvest for the next year's planting. By selecting, storing and exchanging the seeds with needed qualities, farmers have created the wealth of agricultural biodiversity that feeds the world today and provides the source for future varieties that will thrive in tomorrow's uncertain conditions. Canada's publicly funded public plant breeding institutions built upon this heritage by developing and releasing new varieties to meet farmers' agronomic needs as well as societal goals for healthy food and robust agriculture ecosystems.

The relationship between farmers and seed is so basic as to be easily taken for granted. Yet, both the public breeder's and the farmer's roles in plant breeding and seed saving are threatened by corporate agri-business efforts to enclose and control plant breeding by claiming intellectual property rights to new seed varieties (called "Plant Breeders Rights" or PBRs) that supersede and negate this common heritage by turning it into private property for the benefit of a few. Bill C-18, the *Agricultural Growth Act* omnibus bill, which amends Canada's *Plant Breeders Rights Act* to conform to the UPOV '91 model law, is the latest and most serious threat.

The stated mission of UPOV (the International Convention for the Protection of New Varieties of Plants) is "to provide and promote an effective system of plant variety protection, with the aim of encouraging the development of new varieties of plants, for the benefit of society." Since UPOV was formed, new versions of its model laws were created in 1978 and 1991, each one conferring greater control over seed to plant breeders. Only 71 countries are signatories to UPOV, and of them, 20 (including Canada) use the older regimes.

The monopoly control over propagation of new varieties that UPOV provides plant breeders enables them to collect royalties every time the seed is used. Private financial benefit from plant breeding was supposed to stimulate further plant breeding. However, private plant breeding focuses on creating private benefits (such as cross-selling other input products), and has not necessarily resulted in varieties that respond to agronomic conditions, nutritional needs or biodiversity goals. Meanwhile the control PBRs bestow on seed giants such as Monsanto, Bayer, Syngenta, DuPont and Dow impinges upon farmers' ability to save seed and increases seed costs.

Bill C-18 gives plant breeders exclusive rights to authorize all reproduction, conditioning (cleaning and treating), stocking (bagging, binning and storing), importing and exporting of PBR protected varieties of seed for 20 years. It also allows seed companies to collect royalties on the whole crop following harvest (end-point royalties) if they did not collect when they sold the seed. Under Canada's current UPOV '78 *PBR Act* royalties can only be collected on the sale of PBR-protected seed, for only 18 years, and there are no restrictions on using farm-saved seed.

The new exclusive rights under C-18 will encourage seed companies to import seed from other countries. Combined with existing and proposed variety registration rules, C-18 will increasingly force farmers to buy PBR protected varieties regardless of the seed's performance. This, along with the import incentive, works against claims that adopting UPOV '91 will promote investment to develop varieties for specific Canadian conditions.

The controversial "farmers' privilege" provisions in C-18 appear to guarantee farmers the ability to save, clean and reuse seed on their own farms. However, C-18 does not allow farmers to stock (store) seed without permission. Section 50 of C-18 authorizes the Governor in Council to make regulations to exclude classes of farmers and plant varieties from the farmers' privilege and to restrict or put conditions on farmers' use of harvested material grown under the farmers' privilege.

The National Farmers Union is deeply concerned about Bill C-18's implications for farmers' autonomy and livelihoods, for food sovereignty and for the ecological impacts of a seed system increasingly designed to serve the corporate bottom line. Our resistance to Bill C-18 is about taking back from corporations our seeds, our sovereignty and our democratic rights as Canadian citizens.

For more information about Bill C-18 and the NFU's campaign, see www.nfu.ca/issue/stop-bill-c-18 or phone our national office at 306 652 9465.

SAVE MONEY!

LOWER YOUR WATER BILL

JOIN Winnipeg's Protect Our Water Program

FREE household water efficiency kit
FREE water audit & customized water reduction plan
FREE workshops
Be entered to **WIN** a rain barrel!
Become more environmentally conscious

LIMITED TO 20 HOUSEHOLDS

REGISTER TODAY!

Email: water@mbeconetwork.org
Phone: (204) 943-0318
Website: www.mbwatercaucus.org

THIS PROJECT IS SPONSORED BY:

This project was undertaken with the financial support of:
Environment Canada Environnement Canada

Ce projet a été réalisé avec l'appui financier de :
Environnement Canada Environment Canada

Manitoba eco-network

Manitoba

Manitoba eco-network

Complimentary copy
Please consider subscribing at
204-947-6511 or
www.mbeconetwork.org

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