

vol. 28:1 spring 2010

ISSUES

BETWEEN THE COVERS:
Climate Change Along Our Coasts
Sharks in Our Backyard



an ecology action centre publication

www.ecologyaction.ca

Features

Sharks in Our Backyard

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Climate Change Along Our Coasts



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BETWEEN THE SSUCES

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letter to the centre

The Summer 2009 *BTI* focused on wind power. EAC member David Chapman responded to an article co-authored by Alice Power and Richard Gray titled "*Wind Power: A Community Perspective.*" This is a précis of David's response:

Dear Editor,

Researchers at Queen's University have recently initiated a survey-based study on wind turbine health effects. One hopes this will be one of many objective, scientific studies shedding light on possible connections between wind turbines and adverse health effects. "Ground truth" acoustic and vibration measurements in future studies could also be helpful in future studies.

Looking to the issue of annoyance caused by turbine noise, there are parallels between the current issue and ambient ocean noise and ship propeller design. If a causal link exists between wind turbines and adverse health effects, engineering analysis previously used to quieten ship propellers could prove valuable in providing a remedy.

There are also considerations in terms of noise measurement. Physical noise measurements in support of community health standards for wind turbines should be mindful of the filtering that is conventionally applied and should include vibration measurements with vibration sensors well-coupled to the ground.

In conclusion, reports of adverse health effects should be taken seriously, investigated scientifically, and mitigated with good engineering. We should no more dismiss anecdotal reports than we should uncritically accept them. If we apply objective scientific enquiry, reason and engineering, we can mitigate authentic adverse effects and invoke community standards so that wind energy can be part of our renewable energy solution. This does not have to be an "all or nothing" scenario.

David Chapman is a retired defence scientist in underwater acoustics, a Fellow of the Acoustical Society of America and a minor investor in wind power.

We welcome your reactions to any article you read in *BTI*, along with your questions, suggestions and comments. Address your messages to the Editor, betweentheissues@ecologyaction.ca; or send by mail to *BTI* Editor (see address on inside cover).

letter from the centre

Relishing renewal...

With another long Nova Scotian winter coming to a close, we at the EAC find our thoughts turning eagerly to the promises of spring. As we peel off the heavy winter coats and boots and stow the shovels for another year, we reflect that spring is a time for growth and renewal — a chance for dormant seedlings to emerge and for new life to take its first timid steps into a new world. This spring also marks a spate of growth and change at the EAC — we've said farewell to a lot of familiar faces over the last several months and we welcome many new and promising additions to our cast of staff, interns and volunteers. See our Vie en Vert feature for a full recap of the recent changes at the EAC.

Spring is also a good time to pause and reflect on where we stand as a province in our pursuit of our environmental goals. In the wake of the disappointing outcome of the Copenhagen climate summit in December, we can take heart from the fact that the EAC, and with us many Nova Scotians, is striving to make our province the greenest in Canada. And those of us taking our lead from the provincial *Environmental Goals and Sustainable Prosperity Act* even aspire to be the greenest jurisdiction in the world! With our natural location lending itself to the development of alternative energies like wind and tidal power, and our enviable freshwater resources, beautiful forests, and gorgeous coastlines, Nova Scotia has vast potential to become an environmental leader. The challenge facing us is to be able to adapt to the changing environment – adaptation and renewal are key to meeting this goal.

The themes of adaptation and renewal recur in many of the pieces in this instalment of *Between the Issues*. In the spirit of renewal, we introduce two exciting new features – the *Season*-

al Gourmet, with recipes featuring ingredients available locally (p. 23) and Action in Verse, showcasing the talents of poets reflecting on environmental themes (p. 7).

Wittily exploring adaptation, Sadie Beaton chronicles the effects of climate change on our coasts and champions the need for adaptive coastal management strategies to ensure that our shorelines remain strong and resilient for generations to come (p. 12). Exploring adaptive reuse, Aaron Murnaghan relates the inspiring story of how the EAC and the residents of downtown Halifax conspired to save one piece of Halifax's heritage from the wrecking ball (p. 18). In the process, they also demonstrated how innovative reuse of urban architecture can benefit the community and cut back on the amount of waste material flowing into Nova Scotian landfills. On the topic of landfills, Mark Butler and Candace Baldwin bring us a fascinating photo essay from the landfills in Lincolnville, Nova Scotia (p. 14). These landfills stand as a monument not only to the perils of short-sighted thinking in waste disposal strategies, but also to the issue of environmental racism.

There are also some cautionary tales for those of us emerging into the energy and promise of spring. In her piece on the biosolids debate (p. 8), Elizabeth Pierce contends that the practice of spreading treated sewage on Nova Scotian agricultural lands amounts to little more than pollution transfer from the Halifax Harbour to our farmlands. Catherine Muir introduces us to some of the most ancient and majestic denizens of Nova Scotia's waters - sharks (p. 10). Unfairly maligned, these graceful creatures are under serious threat from traditional commercial fisheries, underscoring the pressing need to adapt our fishing practices to protect ocean biodiversity. Sally Erskine Doucette treats us to a behind-the-scenes glimpse at the life cycle behind blue jeans (p. 16). She explores the negative social and environmental consequences and provides some valuable suggestions for how we can adapt our behaviour as consumers to reflect shifting social and environmental priorities.

Rounding out this issue with a nod to the cycles of life, Eco Head hums along with the birds and the bees in a column on eco-friendly sex toys (p. 22) and *Being Green* celebrates the life of ecologist and activist Jeremy Frith (p. 25).

We hope you enjoy the spring issue and its themes of adaptation and renewal. We live in a beautiful province that warrants our protection. The transition from the slushy greyness of winter to the budding brightness of spring exposes both our good fortune in living here and the vulnerability of a province in need of protective action.

action is our middle name

coalitions and consultations (Energy Issues Committee) Years of work by the EAC and others culminated in the Nova Scotia Efficiency Corporation becoming operational this spring! The EIC was also an active participant in the recent Dalhousie University Renewable Energy Stakeholder Consultation Process. For the energy geeks out there, our submission to the process can be found on our website under "energy publications". Heralding our shiny new focus on renewable energy (now that energy efficiency is on its way to becoming a household name) the Nova Scotia Sustainable Energy Alliance (novaSEA) was launched in March. Members of novaSEA have accepted a common mission to fight for the implementation of policies that foster the development of community-based and community-owned renewable energy production. EAC has recently become a founding member of the budding Climate Action Coalition. If you would like to get more information or join the climate action,

flowing with action

contact: energy@ecologyaction.ca

(Coastal Issues Committee) Interested in the sex lives of birds? Dr. Bridget Stutchbury, author of Silence of the Songbirds, will be in Halifax on May 12 speaking on the subject. Check out our website for more information about the talk and related events, including a morning bird walk. Coastal folks are getting our hands and feet wet in communities across Nova Scotia. Water Coordinator Jocelyne Rankin has launched a communitybased watershed management program in two pilot watersheds where a series of community meetings will catalyze action for better water management and implementation of best practices. Coastal Coordinator Jennifer Graham will expertly deliver presentations to municipal planners in coastal communities across Nova Scotia to inform them how to manage coastal ecosystems for multiple purposes. These include buffering communities against the impact of climate change, flood protection, and protecting wilderness habitat. Drip, drop, drip, drop - what's that? Sounds like a delayed Water Strategy! We're wondering what is happening with the provincial Water Strategy. If you're wondering too, it's time to write to your MLA and ask them when Nova Scotians can expect to see a draft Water Strategy.

moving heritage buildings, diverting waste

(Built Environment Committee) Never afraid of a challenge, the Ecology Action Centre and Heritage Trust of Nova Scotia saved a 250-year old building in the nick of time. This effort to preserve Halifax's heritage and divert waste from the landfill culminated in a December 21, , 2009 move of the historic Hollis Morris building. The Waste? NOT! Construction and Demolition Toolkit arrives (via stork?) in April! In Nova Scotia about 30 percent of all solid waste is generated by construction, renovation and demolition projects. This massive waste source is clearly underreported. The EAC is putting together a wealth of resources and practical advice to help Nova Scotians ease the burden on our landfills. The toolkit is focused on providing options for reusing older buildings and building materials and fixtures including the adaptive reuse of buildings, deconstruction and even moving buildings. As architect Carl Elefante said, "The greenest building is the one already built". Visit www.ecologyaction.ca/toolkit for more information.

train tracks and rural inroads (Transportation Issues Committee) Dynamic by nature, Active and Safe Routes to School (ASRTS) has been helping communities across the province become more active!

to their imported alternative. Can you guess which five? Meanwhile, the newly

formed Rail Sub-Committee is working to keep trains alive in Nova Scotia.

It has been a busy time... In November, Clare Recreation offered a Making Tracks: Skate Pass® workshop for girls. ASRTS also partnered with the Glace Bay Youth Action Committee to create a fun presentation promoting active transportation for schools, youth clubs and community groups. In December, Yarmouth's Meadowfields Community School launched the first Pace Car Deputy Program where students pledge to remind drivers of the rules of the road. For the latest active transportation news, follow @asrts on Twitter. TRAX continues to march towards sustainable transportation in Nova Scotia. In March, TRAX will launch the municipal version of the Green Mobility Strategy. The Canadian Idle-less project continues to work with Antigonish and Bridgewater – Antigonish town council is considering the adoption of an idling restriction by-law. The Goods Miles project has identified five Nova Scotian products comparable in price

talks and turnips, snow and sprouts (Food

Action Committee) With the gardens under snow and seasonal soups bubbling on the stove, the Food Action Committee is busy planning for the spring with projects including root cellars, greenhouses and garden workshops. Our food team loves the limelight. In November, Urban Garden Project Coordinator Garity Chapman spoke at the Edible Schoolyard screening hosted by the Nova Scotia Environmental Network. Over 30 people came out to hear about the Dr. Arthur Hines School garden and to glean inspiration from Garity's research trip to community gardens, farms and food projects in Philadelphia, New York, Montreal and Toronto. Food Miles Project Coordinator Marla MacLeod was recently featured on CBC's Land and Sea. Turning A Green Leaf was about the McMillin family who, with advice from Marla, strove to reduce the environmental impact of their diet. To view it online, visit: http://www.cbc.ca/landandsea/ Fashionistas, hipsters and the sustainably minded are celebrating the formation of the new Clothing and Textile Action Group (CTAG). This energetic new sub-committee of FAC will work on issues related to sustainable clothing choices.



For more information, visit www.ecologyaction.ca

Earth Day: April 22, 2010

Cache In, Trash Out: April 24 - 25, 2010

The Coastal Issues Committee, with the help from our geocaching friends, challenges you to discover a few coastal geocaches. On our way out we'll clean up the site by picking up the litter – everyone wins!

EAC Volunteer Appreciation Month: April 2010 In house events running the week of April 19-23, 2010

Nova Scotia Cycling Summit: May 1, 2010 from 9:30am to 3:30pm

Annapolis Royal Legion Community Centre -Port Royal Branch 21 Contact Debra Ryan at (902) 532-3139 for more information.

Birds, Sex and Conservation: May 12, 2010 at 7pm

McCain Arts and Science Building, Dalhousie University This talk by Dr. Bridget Stutchbury, author of Silence of the Songbirds, is hosted by the Halifax Field Naturalists, Bird Studies Canada, Dalhousie University and EAC. Contact Mark Butler at (902) 429-5287 for more information on the talk and related events including a morning bird walk.

Bike Again 10th Anniversary Celebration and Open House: May 29, 2010 from mid-afternoon onward

Safe Kids Week (Got Wheels? Get a Helmet!): May 31 – June 5, 2010

For more information, check out: www.safekidscanada.ca/safekidsCanada

HRM Bike Week: May 28 - June 6, 2010 For more information, check out:

www.halifax.ca/bikeweek/index.html

On The Move In The Community Conference: June 3 – 4, 2010

Holiday Inn Select Hotel in downtown Montreal Vélo Ouébec and the Canadian Active and Safe Routes to School Partnership are excited to present the first major gathering of active transportation stakeholders in Canada. More information will be available soon at www.velo.qc.ca

> Clean Air Day: June 4, 2010 Trails Day: June 5, 2010

World Environment Day: June 5, 2010

EAC's Annual Garden Party: June 6, 2010 - doors open at noon

St. Mary's Boat Club, Halifax Join us at our "no-stuff" auction and bid on priceless experiences!

Go Skateboarding Day: June 21, 2010

EAC Annual General Meeting: June 24, 2010 from 7pm to 9pm

Multipurpose Room, Bloomfield Centre, Halifax Featuring the Annual EAC Awards! Nominations due April 30th.

each little clam here, know how to

jam here... (Marine Issues Committee) SeaChoice Atlantic Coordinator Rob Johnson enjoyed delicious pastries while advocating for strong sustainable seafood policies at the International Seafood Summit in Paris. He swam back in time to attend a Conservation Alliance meeting in Vancouver, the International Boston Seafood Show and, closer to home, spoke at the Aquaculture Association of Nova Scotia's annual conference... Boy, are his arms tired! Before leaving on a post-doctorate adventure in San Diego, Sustainable Fisheries Analyst Alex Curtis tracked down and reviewed elusive observer and landings data for the Canadian pelagic longline fleet and pushed Canada's swordfish fisheries toward sustainability. Marine staff organized a two-day Fish Habitat workshop, bringing together watershed conservation and restoration groups from across Atlantic Canada. MIC has also been a stakeholder for several upcoming Marine Stewardship Council assessments, including offshore Lobster, offshore Scallop and longline and harpooned Swordfish. A new Marine Protected Area is in the works off of Nova Scotia and our team is working to make sure the consultations continue to move forward and sending the Department of Fisheries and Oceans the message that Nova Scotians care about ocean protection. Meanwhile, Sustainable Seafood Coordinator Sadie Beaton has been researching direct marketing opportunities for small-scale fishers and tweeting her mermaid heart out at www.twitter.com/EAC_SeaMouse

biomass quagmire (Wilderness Issues Committee) Cutting our forests for energy is still the topic of the day for our forestry program. The recently released recommendations for renewable energy in Nova Scotia by Wheeler and Adams contains a wealth of progressive and thoughtful ideas. Unfortunately, the report also recommends going forward with some forest biomass energy, and we don't approve. Check out our response to the Wheeler/Adams report on our new forestry website at www.novascotiaforests.ca. Speaking up for our forests has not been easy. The Registered Professional Foresters Association of Nova Scotia has told Jamie Simpson to "cease and desist" using his professional forester's status, given that he's registered in New Brunswick, not here. The same organization has also lodged a formal breach-of-ethics complaint against Jamie for (1) criticizing fellow foresters and (2) acting in a manner that might damage the reputation of the profession of forestry. The allegations stem from Jamie's comments against the recent whole-tree harvesting by Northern Pulp near Upper Musquodoboit. Many from across the province have rallied to support Jamie's work against clearcutting and whole-tree harvesting. In March, he was presented with the Nova Scotia Environmental Network's Langille Honour in the Woods Award.

we love to love our volunteers! During

the month of April the Ecology Action Centre is celebrating volunteers! Our volunteers are a dedicated, delightful and hard working bunch and we couldn't do what we do without each and every one of them. Volunteers make up the EAC Board and Issue Committees, they help make EAC events successful and they spread the word about our work and contribute to a united voice speaking out for the environment. Thank you, volunteers!

ecobriefs

By June Hall

Himalayan ice

"Ah ha," cried the skeptics with glee, "another nail in the coffin of global warming." And for once, they had a point. Seems that claims made in the latest (2007) report of the Intergovernmental Panel on Climate Change (IPCC) about the rate of melting of Himalayan ice were grossly exaggerated. The date given for the disappearance of the ice ("2035 and perhaps sooner") is likely out by centuries. A wake-up call, that's for sure, for scientists working in the political minefield of climate change: be meticulous about checking your sources. In this case the IPCC had relied on a source that was both far from robust and involved a typo. The IPCC has apologized.

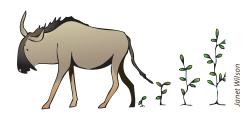
None of this negates, of course, the fact that glaciers the world over are disappearing at an alarming rate. If you aren't persuaded, check out www.asiasociety. org/onthinnerice. Play the video, then click on "Then and Now." For each of the five Asian glaciers shown you can compare two photos taken from the same vantage point but in different years. For instance, David Breashears' 2008 photo of the West Rongbuk Glacier, with Everest in the distance, when placed beside George Mallory's 1921 photo, reveals that the glacier had shrunk by 300 to 400 vertical feet (100 metres plus) in the intervening years. Blown up to almost full-page size in an advertisement in the New York Times, these two photos, along with accompanying text, said it all.

Nature, 21 Jan. '10; New York Times, 14 Nov. '09

Rinderpest

Rinderpest, "the world's most devastating cattle disease," is on the brink of elimination and is the second disease, after smallpox, to be deliberately eradicated. Originating in Asia, rinderpest

arrived in Europe towards the end of the Roman Empire and soon spread through Europe, Africa, the Middle East and the Indian subcontinent, sparking epidemics as recently as the 1980s. This highly lethal disease, which is caused by a virus related to measles, is similarly deadly to a wide range of wildlife.



Launched in 1994, the massive global effort to eliminate the virus has focused on vaccination programs and long-term monitoring. Hardly a walkover, the program has had to operate in developing countries with less than adequate veterinary care and even in war zones such as Somalia.

Campaigns to fight rinderpest at the local or regional level have a long history and the Serengeti in East Africa has been free of the disease since the 1960s. With the virus gone, wildebeest populations there have rebounded, as has tree density. The connection? Well, say researchers at the University of Florida in Gainesville in a new study, more wildebeest = more grass eaten = fewer fires = a better chance for saplings to grow. Having ruled out other factors like climate change, the team suggests that the Serengeti may now be a carbon sink an interesting illustration of how "one change in an ecosystem can have wideranging effects."

Nature, 8 Oct. & 10 Dec. '09

Bats in trouble

Another continent, another disease but this time a recent phenomenon. First identified in February 2006 in upstate New York, white-nose syndrome has since spread to bat colonies in nine northeast American states, leading to "unprecedented mortalities" along the way — close to 100 percent in some populations. Affected bats, which can be recognized by the fuzzy mat of white fungus on their snouts, wings and ears, exhibit behavioural changes and often starve to death as a result.

By 2008 the fungus, which is new to science, had been described and named. Thought at first to be a bystander (an organism that finishes off an animal whose immune system is already weakened), Geomyces destructans is now "widely considered" to be the cause of the disease. It attacks in winter, during hibernation, because it thrives best in the cold, dark, damp conditions where bats



overwinter. Its highly infective nature and rapid spread are disturbing, to put it mildly; several species of bats are already listed as endangered.

Where did it come from? Discovery of the same fungus on several apparently healthy bats in Europe may give a clue. It could be that it is endemic to Europe, and that the bats there are immune. Or could be the virus mutated into a more virulent form once it reached North America.

Science, 8 Jan. '10; www.fort.usgs.gov/WNS

Public footprint

"Leaking like a sieve, with an enormous carbon footprint and energy bills to match," exclaimed the chief of the UK Green Building Council. The target of his ire? The 28,000 buildings "in public ownership" in Britain, which together each year emit almost 14 million tonnes of carbon dioxide, incurring an energy bill of £4 billion (C\$6.6 billion).

Britain has set itself some pretty ambitious targets in its attempts to reduce its carbon footprint. One program requires each government building to display a certificate of its carbon dioxide emissions and its score on a scale of A to G, with A the best performance and G the worst. To judge from the results of the ranking, there's a long road ahead. Only 151 public buildings rate an A, compared to 5,000 awarded a shameful G. Hospitals and prisons are amongst the worst polluters, while New Scotland Yard, that "beacon of law and order," uses as much electricity as 2,200 households.

The energy and climate change secretary (minister) has set government departments a target: "a 30 percent cut in emissions by 2020 from 1999 levels." Now, get cracking, Canada!

Guardian Weekly, 8 Jan. '10

Megatons to megawatts

Bet it's news to you that roughly 10 percent of the electricity generated in the United States is powered by fuel from dismantled Russian nuclear bombs. (For comparison, wind, solar, biomass and geothermal add up to a combined total of just 3 percent.) A little-known spin-off of treaties agreed upon at the end of the Cold War, "recycled Soviet bomb cores" have at times since 1995 made up "the majority of the American market for low-enriched uranium fuel." Today they account for almost half; in

contrast, very little of the fuel comes from recycled U.S. warheads.

Whatever your opinion of nuclear energy, the results will amaze. By December 31, 2009, Megatons to Megawatts the informal title of the program to dismantle and dilute the Soviet-era missile cores — had eliminated 15,294 nuclear warheads from the former Soviet arsenal, i.e., 382 metric tons of bomb-grade highly enriched uranium. By 2013, when the agreement ends, it will have accounted for 20,000 warheads. But what then? Given their lead-time of three to five years, industry is concerned, though unofficial sources report that renewal is likely. The amount of fissile material involved would be equivalent to "a couple of very large uranium mines."



Negotiations to renew the Strategic Arms Reduction Treaty (START) are also expected to bear fruit. Presidents Obama and Medvedev have agreed to a new limit on deployed warheads (1,500), and although there is no direct connection with Megatons to Megawatts, this would obviously free up more warheads for American nuclear power. In addition, Russia agreed in 2000 to dispose of plutonium, and "both countries plan to convert that into reactor fuel as well." Doesn't bear thinking about...

New York Times, 10 Nov. '09

Action in Verse

By Nanci Lee

What we can Learn from the Enallagma Cyathigerum

Bluet, bluest marsh fairy. dragon fly in drag over river spits, mustard grasses, tissue wings zim hummering. Your needled body like threaded beads. indigo hyphenated by ebony to the period of your tail.

Tumid eyes to thinnest tip to tumid eyes. You mate in delirious circles,

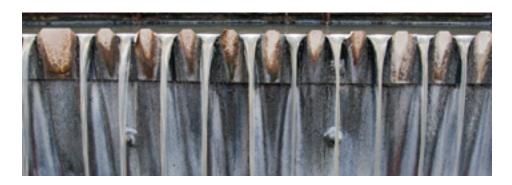
a slow spinning blue.

Inventiveness saved for making love.

Published in *The Antigonish Review*, 2007 (Issue 151)

From Toilet to Table: the Nova Scotia Biosolids Debate

By Elizabeth Peirce



The application of biosolids (treated sewage sludge) on Nova Scotia farmland proves the unfortunate truth that not all recycling is a good thing. In fact, the NDP government-approved biosolids strategy is really nothing more than pollution transfer. Halifax Harbour may soon be cleaner, but what about the land that grows the food we eat?

What are biosolids?

Sewage sludge is the product of everything flushed down our residential, commercial and hospital drains, along with street run-off, before entering wastewater treatment plants. "Treatment", in the case of Halifax Regional Municipality, refers to solids being removed from wastewater and pathogens destroyed. Passing through the treatment process untouched is a potent cocktail of drug residues, flame retardants, heavy metals, synthetic hormones, heavy-duty cleaners, chemotherapy residues and other toxic chemicals.

In Halifax, N-Viro Systems Canada is responsible for the processing of HRM's sludge into 34,000 tonnes of fertilizer destined for up to 4,800 hectares of agricultural land in Nova Scotia each year. The company's preferred liming agent is cement kiln dust, an industrial waste product which has been shown to contain levels of the heavy metal thallium that exceed the parameters for contaminated soils in landfills. In spite of the toxic ingredients contained in N-Viro's product, company president Rae Wallin calls biosolids "safe, green and natural."

Why should we be concerned?

Currently, in Nova Scotia, sewage sludge is tested for 11 heavy metals, two bacteria, dioxins, PCBs and furans. It would be almost impossible, however, to comprehensively test for the thousands of other pollutants found in urban sewage sludges, functioning both alone and in concert with each other.

Even low levels of heavy metals in biosolids can bioaccumulate with repeated applications, a permanent and toxic legacy to the soil. Contaminants can leach into groundwater sources and enter watercourses through field run-off. Some pollutants are taken up by plants grown on biosolids-treated soil. Others, like thallium and flame retardants, are ingested directly by grazing cattle and are excreted in their milk. Both these toxins can cross the placental barrier and enter foetuses. These health and environmental concerns have led several local environmental and agricultural organizations to decry the use of biosolids. The Ecology Action Centre has called for a moratorium on the spreading of biosolids on farmland due to the absence of comprehensive testing on the product.

News on the sludge front

In October 2009, the Kings County Municipal Council voted for a moratorium on biosolids spreading in their largely agricultural district, only to be overruled by the province — the ultimate arbiter on sludge spreading — a

move that angered many Kings county residents. In a recent Chronicle Herald story, local Green Party candidate Anna-Maria Galante spoke out against the NDP's failure to respect the area's wishes and to protect the health of the public and the environment. Meanwhile, a province-wide petition in favour of a provincial ban on biosolids spreading has garnered 2,300 signatures and keeps growing.

Our farmland is too precious a treasure to compromise with potentially harmful practices. Let's work to keep biosolids out of Nova Scotian-grown food!

Elizabeth Peirce is a writer and passionate gardener. Her latest book, Grow Organic: A Simple Guide to Nova Scotia Vegetable Gardening, was published this year.

Take Action

What can we do to stop biosolids spreading on Nova Scotia farmland?

Write your MLA: keep this issue on their radar screen.

Learn about alternatives to agricultural application, including Canadian made waste-to-energy technologies like the plasma assisted sludge oxidation process.

If you shop at farmers'
markets, ask vendors if they
use biosolids on their farms
and tell them that you support
growers who avoid sludge.
(Wolfville has recently decided
to ban produce grown using
biosolids from their
farmers' market).

Find out more about the Biosolids and Wastewater Caucus' petition to ban biosolids by visiting www.nsen.ca.
Find us under the Working Groups/Caucuses link.



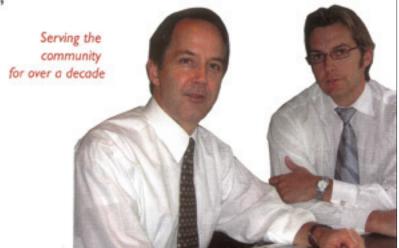
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Sharks in Our Backyard

By Catherine Muir



When most people think about sharks, they likely envision a warm, tropical place with blue waters featuring sharks and other marine creatures swimming amongst lush coral reefs. Atlantic Canada likely doesn't come to mind, with its cool climate, lack of shallow water corals and coastal waters that remain chilly even on the hottest summer day. Yet there are actually 20 different species of sharks found in Atlantic Canada's waters.

A who's who of sharks 'round here

If you go out in the water today, which sharks would you be most likely to meet? How big are they? Are our sharks commercially valuable? Do the sharks need our help? Why should we care about sharks anyway?

How big are our sharks?

Although the largest shark in the world, the whale shark, is not found in Atlantic waters, we do play host to most of the top ten. The basking shark, the second largest shark (and fish) in the world (they can grow as long as 9-10 metres) is found here, although it's quite rare to see one. The third largest shark variety, the white shark, is also found in Atlantic waters, though it is almost never seen anymore. In fact, seven of the ten largest sharks in the world inhabit our waters, including the Greenland, thresher, and bluntnose sixgill sharks, along

with the very rarely seen tiger shark.

But there's no need to worry. The sharks that are responsible for the great majority of all bites on humans around the world are either never found in Canadian waters, like the bull shark, or are extremely rare, such as the great white and tiger sharks. Historically, there are only 32 confirmed observations of great white sharks in Atlantic Canada. Plus, the physically imposing basking shark is a filter feeder and only eats microscopic creatures.

Interestingly, the most common species of shark found in Atlantic waters is also the smallest—the spiny dogfish, with an average length of a metre or less.

Are our sharks targeted commercially?

Although in other parts of the world, sharks are caught commercially for their fins, meat, oil or skin, only three species are commercially targeted in Atlantic Canada. The rest are caught as bycatch—marine animals caught unintentionally while fishing for other, more desired species and usually discarded. The commercially fished sharks in Atlantic Canada include the porbeagle, shortfin mako, spiny dogfish, and blue sharks.

A small directed fishery still exists here for the porbeagle shark, which has undergone dramatic declines globally due to a long history of exploitation for its highly valued meat and fins.

A small directed fishery also exists for spiny dogfish. These marine animals are mainly caught as bycatch, however, and actually make up a large percentage of the bycatch for some Atlantic fisheries.

Similarly, blue sharks are also allowed to be fished in Atlantic waters but are rarely targeted because of their low market value. However, these animals are taken in large numbers as bycatch in pelagic longlines. A small recreational blue shark fishery is also in existence.

Shortfin makos are managed under non-restrictive quotas in Canada and have an allowable catch limit, but are currently only retained as a bycatch species.

Are our sharks in danger?

Yes! According to the International Union for Conservation of Nature (IUCN), close to half of the shark species found in Atlantic Canada are considered globally threatened with extinction.

One of the biggest threats to sharks in Nova Scotia is the surface longline fishery for swordfish. Every year, at least 100,000 sharks are caught and thrown away in this fishery, making it the most wasteful fishery in Canada. For every fish kept, two or three other animals are thrown away, including sharks, endangered loggerhead and leatherback sea turtles and stingrays. Outrageously, this fishery is going to receive a sustainable eco-label for its products. This is bad news for shark conservation, but we still have time to stop it.

Canada strives to protect its wildlife species through the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) and the Species at Risk Act (SARA). Species are first designated by COSEWIC, which provides a scientifically sound classification of wildlife species. Then, to qualify for legal protection and recovery strategies, they need to be listed under SARA. Once a species is listed as endangered under COSEWIC, the political, social and economic factors of listing a species under SARA are considered and a decision is made as to which species are to be protected under this act.

To date, four shark species in Atlantic Canada have been evaluated by COSEWIC, two as endangered (white and porbeagle sharks), one as threatened (shortfin mako shark), and one as special concern (blue shark). So far, none of these four have been legally listed under SARA. The porbeagle

shark was rejected under SARA in 2006 despite its endangered status.

Unfortunately, commercially harvested marine species have rarely been given legal protection under SARA. Currently, the Atlantic populations of blue, shortfin mako, and great white sharks are being considered for listing under SARA. As blue and shortfin mako sharks, however, are frequently caught in commercially profitable pelagic longline fisheries directed at tuna and swordfish, the listing of these species under SARA is a long shot.

Should I care about the state of sharks in Atlantic Canada?

Yes! Scientific studies have shown that shark populations have been fished out to only 10 percent of their historic levels, with numerous species at risk of extinction. Sharks are unusually sensitive to overfishing because of their life-

Take Action

Surface-longlined swordfish is in the process of being 'eco-labeled' by the Marine Stewardship Council (MSC). Far from being ecologically sound, however, this fishery causes great harm to local shark and other marine populations. Help us stop the certification of surface-longlined swordfish before it hits the shelves:

Go to www.ecologyaction.ca/ marine and send a message to the MSC – this is greenwashing.

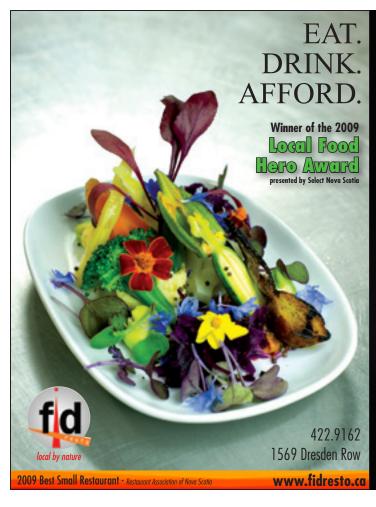
Buy swordfish that has been caught by harpoon, a traditional and sustainable Nova Scotian fishery. If you don't see it, ask for it.

Learn and spread the word – watch the movie 'Sharkwater'.

history characteristics, including late age of maturity, long life, slow growth, and low reproductive rate. As top predators, sharks are incredibly important to the healthy functioning of the ecosystem and the fisheries that rely on it.

The oldest sharks date back 400 million years, easily preceding the age of the dinosaurs, which makes sharks one of the oldest surviving vertebrates in the world. They were cruising our Atlantic waters long before the first humans walked the Earth, an inspiring longevity, yet now sharks are among the most threatened marine vertebrates on the globe. It seems that sharks definitely have more reason to be afraid of us than we do of them!

Catherine Muir is the Manager and Education & Outreach Liaison for the FMAP (Future of Marine Animal Populations) project in the Biology Department at Dalhousie University, Halifax.





Living by our Wits: Adapting to Climate Change Along Our Coasts

By Sadie Beaton



Causeway damage due to a storm surge after Tropical Storm Bill.

Rising sea levels. Increased storm surges. Eroding beaches. Changing marine ecosystems. We are already feeling the impacts of climate change along Nova Scotia's shores, especially in areas already under pressure from human activities that disrupt natural shoreline processes.

Are we go-getters or will we be left behind? How coastal communities in this province choose to adapt to these serious changes over the next short while will define our future.

The Intergovernmental Panel on Climate Change (IPCC) defines adaptation as the "adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities" (IPCC, 2007). Or, as we

Take Action

Released in late 2009, the province's "State of the Coast" report is the first step in a formal process to develop and implement a Sustainable Coastal Development Strategy. There will be public consultations about the coastal strategy in spring 2010.

Read the report and learn about opportunities to have your say here: www.gov.ns.ca/coast/

are more likely to put it around these parts, "living by our wits."

A well-managed coast is the best possible line of defence against the effects of climate change. Natural, intact coastlines

creating green jobs and growing ecotourism. Making sure we design, repair and locate infrastructure wisely to reduce their vulnerability and increase the natural resiliency of our coasts is another major way to prepare for climate change.

Many communities in Nova Scotia are already experiencing lost opportunities by not planning appropriately. Treasured beaches are disappearing, valuable clam beds are being contaminated and storm damage is costing serious money. Poorly regulated and largely unplanned development has resulted in the destruction of ecologically significant coastal habitats. It has also led to the construction of homes, roads and other infrastructure that are extremely vulnerable to the impacts of climate change.



This beach does not have room to move and change! Development on the edge near Rushton Beach provincial park.

work as a climate change buffer, protecting inland areas against coming impacts such as accelerated erosion, ice damage, flooding and damage from storm surges. The more we develop and alter our coast-lines though, the more we diminish their natural adaptability and increase our vulnerability to climate change impacts.

Tedious to some, planning is one of the best ways to strengthen the ability of coastal ecosystems and communities to adapt. Well considered, adaptive land use plans also allow the best opportunities for increasing community resilience, Now is the time to dispel the notion that Bluenosers are slow to adapt in changing times. Let's use our legendary Nova Scotian wits to envision creative and cost-effective opportunities to adapt to the effects of climate change and create stronger, more resilient coastal communities.

Let's not wait until we are at our wits' end....

Sadie Beaton works on sustainable seafood issues with the Ecology Action Centre but cares about our coasts too. So far she has been getting along pretty okay living by her wits.

Photo cred

ENVISIONING ADAPTATION OPPORTUNITIES....

Vistaville is a make believe coastal town that is popular with tourists who rent or own summer cottages nearby. A long sandy beach along the edge of town is the main attraction, along with an exclusive seaside golf course.

Luckily Vistaville is blessed with a forward-thinking municipal council. As cottage developments began to creep closer and closer to the beach, sea level rise began to inch up on the other side. Recognizing the threat of coastal squeeze, Vistaville's councillors were able to agree on a detailed land-use plan that mandates vertical and horizontal setbacks from the shore, which means people can only build a certain distance from the shore and on land that is above a certain height. Additionally, cottages and homes alike have well-maintained wastewater treatment that does not compromise local wetland or water quality.

Thanks to new zoning by-laws, the golf course planted a wide vegetative buffer next to the shore and weaned itself off of the nasty pesticides and artificial fertilizers that had been running off into the coastal estuary.

All of this means that Vistaville's gorgeous jewel of beach has room to move and adapt as sea level rises, allowing it to act as a buffer against the impacts of climate change instead of eroding away. Cottages are built back from the beach, where they are safe from storm damage and coastal water quality is protected for future generations of swimmers and other marine life.

Pollockton is an imaginary coastal village with a strong fishing heritage. In the old days, most local livelihoods involved handlining for cod, but since the groundfish collapse, trapping lobster has become the economic mainstay.

In recent years fall storm surges have damaged the boulder-lined road that snakes along the shore and provides access to the community fishing wharf. Boulders have even been thrown onto the road, blocking access, and nearby properties have been flooded. Road repairs have been considerably expensive, as have lost days of fishing.

Recognizing the need to protect their coastal access in a cost-effective manner, the local community decided to forge partnerships with federal and provincial authorities to leverage funding opportunities. They also needed accurate information about future impacts of storms and storm surges – partnering with a nearby university helped produce that research.

After securing funding to experiment with softer approaches to "coastal defence", one thing they tried was simply reconstructing the boulders along the shore-side of the road. Instead of following a straight line, the boulders were placed carefully to mimic the gentle curves of a natural shoreline. This helped deflect the force of wave action in storm surges, reducing damage.

They also used some of their funding to widen a culvert under the road, allowing the tidal waters to reconnect with a long-forgotten salt marsh on the other side. In no time, salt marsh vegetation had regenerated, resurrecting an effective flood buffer. This also delighted local naturalists who began noticing the return of several wildlife species, including the salt-marsh sparrow.



Righting Wrongs in Lincolnville

By Candace Baldwin and Mark Butler

Lincolnville, a small black community on the road between the Trans-Canada Highway and Canso, has been stuck with two landfills over the last 35 years. Some Lincolnville residents, including James Desmond, have sought justice all their adult lives—asking why black communities and landfills so often seem to go together.

When the second landfill was foisted upon them in 2006, they launched the Save Lincolnville campaign. Joined by the Nova Scotia Public Interest Research Group, the EAC, the Canadian Union of Postal Workers and other groups they have gained the attention of the media, public and politicians.

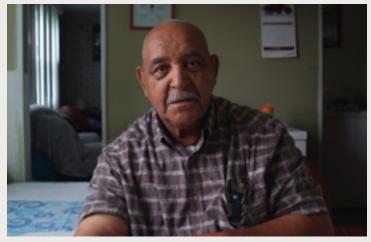
The protest was a family affair. Like many rural communities, young people are leaving. The landfill hasn't helped as residents shoulder all the impacts and receive little or no benefit. Of the approximately 15 people who work at the landfill, only one, a part-time cleaner, is from Lincolnville.



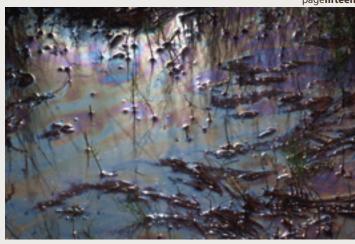
On a very cold morning in February 2008, Lincolnville residents and supporters marched from the Community Centre to the Landfill entrance to protest the landfill and to raise awareness about environmental racism. Wendy Campbell, a key community organizer, holds a sign aloft.

Candice Baldwin is a Halifax-based photographer who focuses her work on issues of race and cultural identity. Her previous body of work was an interpretative study of the citizens of Africville.

pagefifteen



Wilfred Desmond, a long-time resident and community advocate, talks to a BTI reporter at his home.



In Fall 2009 EAC staff, landfill staff, provincial officials and Lincolnville residents conducted a visual inspection of the berm surrounding the first generation landfill. In three locations where water was seeping through an oily film was noted on the surface as well as an orange covering on the submerged soil and vegetation. This phenomenon can be caused by acidic soils or by pollution. The EAC has asked that tests be conducted.



The community is currently in discussions, facilitated by the Office of African Nova Scotian Affairs, with the Municipality of the District of Guysborough. Unfortunately, municipal officials still do not seem to get it as they try to attract a tire recycling operation to Lincolnville without talking and working with residents. However, as you can see from the faces of the protesters—the residents of Lincolnville will prevail.



James Desmond looks out over the first generation landfill. Since his early twenties James has opposed the siting of the first and second generation landfills and fought for justice for his community.

How Green are Your Blue Jeans?

By Sally Erskine Doucette



We all love blue jeans; they are an icon of western civilization and they look good, too. However, there are many hidden costs, both social and environmental, lurking in the life story of your blue jeans.

Cultivation

Let's start with the basic ingredient in blue jeans: cotton. Cotton is a 'thirsty' crop – it requires a lot of water to cultivate. And unfortunately, many of the regions where cotton is grown, such as Africa, China and the United States, suffer from chronic or periodic water shortages. It is estimated that by 2050 approximately 40 percent of the world's population – some 4 billion people – won't have enough water, hence eco-conscious companies and consumers should be looking at textile alternatives that reduce our need for this thirsty crop. In addition, many cotton seeds are genetically modified, a process which raises a whole host of other ethical, social and environmental issues.

Cotton growers also use a lot of chemicals. For example, between 25-50 percent of the world's pesticides are used on cotton crops. What about choosing jeans made of organic cotton? Unfortunately, organic cotton currently makes up only 1 percent of all cotton grown. In addition, even harvested cotton sprayed with fumigants may still retain the "organic" label because the

chemicals were not applied during the growing process. Also, the "made with organic cotton" label can be used on garments that include less than 100 percent organic cloth. As with many other crops, consumers need to demand more rigourous standards and labelling regulations for organic cotton.

Weaving and Dying

Next, let's look at the costs tied up in the process of turning raw cotton fibre into denim. Raw cotton is transported to factories and spun into yarn, which is dyed using synthetic petroleum-based indigo dye. Significant amounts of toxins such as cyanide are released into surface waters during the production of 20,000 tons of indigo dye each year.

Dyed yarn is then woven into denim cloth. After the denim is sewn into jeans, finishing processes are applied to soften and fade the jeans. Bleaches and repeated washing produce more toxic waste water. And buyer beware – organic cotton jeans produced with the same finishing processes as regular jeans can still retain their organic label because the cotton itself was grown organically.

In Lesotho, the blue jeans capital of Africa, the environmental and social costs of blue jeans are hard to ignore. Lesotho has eight blue jean factories, which produce 7,000 tons [tonnes?] of denim and 26 million pairs of jeans per year. Almost 98 per-

istration by La

cent of Lesotho-made jeans are sold in USA. The rest are sold in Europe, Canada and South Africa. Most of the workers in the Lesotho jean factories are women, and 43 percent of them have HIV/AIDS.

In August 2009, a Sunday Times Online story exposed the environmental stain left by blue jean factories in Lesotho. Dark blue effluent from a Taiwanese-owned factory was pouring into a river from which people drew water for cooking and bathing. Denim off-cuts, harmful chemicals, and industrial waste were also being dumped into unsupervised waste sites. Children who recycle found materials at the dump sites suffer from respiratory problems, weeping eyes, and skin complaints. The jean off-cuts are burned by locals for cooking fuels, releasing toxic fumes into their homes.

Journey 'Round the World

Finally, jeans manufacturers have to get their products to you, the consumer. By the time you buy jeans in Nova Scotia, those jeans have travelled around the world in trucks, trains and ships, accumulating a heavy carbon footprint in the process.

Take Action

Buy organic cotton jeans, dark wash blue jeans or jeans made of a sustainable fibre, like hemp.

Wash new jeans several times before wearing.

Wash your jeans in cold water (as little as possible) and line dry them – they soften up fast!

Buy fewer new jeans, or buy recycled jeans. Buy good quality jeans that you can wear for the rest of your life.

And then there's the costs that come with caring for your favourite pair of jeans. Of all the energy used for cotton clothes, 65percent is used during the at-home laundry phase. Clothes dryers use five times the energy of washers. Frequent washings use more water. And, finally, how long you wear your jeans, and how you dispose of them, recycled or trashed, contributes to the environmental footprint as well. Buying fewer jeans, or getting them at thrift stores or vintage boutiques can save money and the environment.



The environmental and social devastation in Lesotho has inspired local artist Emma Fitzgerald, a member of the EAC's Clothing and Textile Action Group, to create an art project using donated denim from Nova Scotia and denim off-cuts from Lesotho. When Emma heard her friend describe blue jean factory run-off in Lesotho, she was propelled into action. The art project will incorporate traditional Basotho patterns called 'Litema', which are usually painted on homes. "The aim is to maintain craft but address the current situation," she says, "and potentially create new markets for recycled items."

Emma needs as many pairs of blue jeans, light or dark, as she can get a hold of. Scraps are also welcome. People can drop off donations at The Artists' Quarter, 2594 Agricola St., Studio 7, Monday, Tuesday or Thursday, 2-5pm, at the Ecology Action Centre, 2705 Fern Lane, Monday to Friday, 9-5pm, or arrange pickup by emailing emma.margaret. fitzgerald@gmail.com.

When people drop off the denim they will also be able to sign a petition in support of a letter Emma will be sending to the Lesotho government, asking them to take ownership for the issues at hand.

Using Your Power as a Consumer

Clearly, there are many hidden costs associated with producing a pair of jeans. Understanding your clothes' life cycle gives you more power as a consumer because ultimately, what you buy determines what goes on store shelves. As consumer awareness grows and the demand for transparency strengthens, improvements will be made. That's why the term "ethical sourcing" now pops up on clothing websites. There are companies out there working to make their products greener; they are taking into account the impact of their products on the environment, communities and their bottom line. In turn, it's up to each of us to decide which factors are important to us when we head out to get that new pair of jeans.

Sally Erskine Doucette looks at the world with a bird's eye view from her perch overlooking the Dartmouth lakes. She is a member of EAC's Clothing and Textile Action Group.

Story of a House

By Aaron Murnaghan



Planning the move of the Hollis Morris house.

If you've passed by the south end of Hollis Street in Halifax lately, you may have noticed a strange sight. Tucked away in the far corner of a gravel parking lot is a blue two-storey house that wasn't there two months ago. That house, however simple and plain it appears, has become the object of much debate, controversy, and dedication for many people around Halifax.

The 250-year old house is known as the Charles Morris building and is counted among the oldest structures in

Nova Scotia. It was supposed to be torn down in December along with several neighbouring buildings to make way for a new high-rise condo development. Following three weeks of fundraising, negotiating and hard work, however, the house was moved about 50 metres to a new temporary location. The fact that it is still around is a testament to the hard work of EAC staff and volunteers, as well as volunteers from the Heritage Trust of Nova Scotia who cooperated to save a piece of Halifax history from go-

ing to the landfill and are still working hard to bring the building back to life.

Far too often over the last few years we have been forced to watch as demolition crews pull down buildings that have added charm and permanency to our streetscapes, when renovation and adaptive reuse could bring these structures back into a useful state. According to the Building Materials Reuse Association the demolition of a 2000sq/ft house can produce up to 60 tons [tonnes?] of waste material, 85 percent of which could have been reused. Nearly 30 percent of the material in Nova Scotian landfills is made up of construction and demolition waste. Although some of the components of the Morris building would have been recycled, most of the 80 tons [tonnes?] of material it represents would have headed for the dump.

The Built Environment Committee's Kim Thompson saw great opportunities in the Morris building and didn't hesitate to get involved. Kim recognized that this little house could act as a strong case study for the latest undertaking of the EAC issue committee, which is a resource for homeowners and individuals in the building trades to help them cut down on waste when constructing, demolishing or retrofitting buildings.

This resource, known as Waste? NOT! A Construction and Demolition Toolkit will also suggest alternatives to demolition, such as adaptive reuse, which is where the Morris building comes in.

Saving the Morris house has been a great learning opportunity for all involved, and has allowed the EAC to gain some valuable first-hand knowledge that we can work into the toolkit project", explains Thompson. "By using this project as a case study we can inspire and educate homeowners and builders about the benefits of adaptive reuse."

The vision is that the building will be on the move to its new home before the fall. Several organizations have come forward with interest in using the building for various projects ranging from a local foods outlet and garden to affordable housing units and NGO offices. Halifax Regional Municipality is assisting with the search for a permanent home for the building where it can best meet the needs of its future owners. Once that's established, the hope is to give the building a green retrofit. A management committee consisting of EAC and Heritage Trust volunteers and HRM staff has been set up to plan for the future of the Morris building, and that future looks bright.

The preservation of the Morris Building has sent a clear message that a different approach to demolition and development is pos-



The Hollis Morris house awaits its new home.

sible and this new approach brings with it social and environmental benefits for the whole community. A report by the UN-sponsored Brundtland Commission in 1987 defined sustainable development as "development that meets present needs without compromising the ability of future generations to meet their own needs." By saving the Morris building and developing an educational resource to help others to adaptively reuse their buildings and houses, we're not only practicing sustainable development but showing other people they can do the same.

Aaron Murnaghan is a graduate of the Urban Planning program at Dalhousie and is currently working for the Nova Scotia Museum. He is a volunteer with the EAC's Built Environment Committee and is interested in urban environmental issues.



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La Vie en Vert

Welcome to our "green society page" where we provide you with an inspiring (and pleasantly green-tinged) view of recent happenings in the EAC community.



Cold Feet... Warm Hearts

We were all inspired this December by the busiest organic Christmas Tree pick up day ever... and the wonderful volunteers who braved the cold to help us make the day (and the whole fundraiser) a brilliant success. This year we sold a record number of trees – 438! EAC Office Coordinator Amy Hawke was the brains behind the operation. "The best part of the day was the pre-dawn hours unloading the trucks with our awesome Katimavik volunteers," she said. "The day was still full of anticipation and the Katamivik folks made all the heavy lifting go really smoothly!" Thanks to everyone who made an organic tree part of their holiday season.

EAC's Shower... Slow but Solar

How many environmentalists does it take to install a shower? Well, despite our passion for creating workplaces that make active transportation a cinch... it took us a few years and a few dozen volunteers to get this last detail of our green renovation complete. It was thanks to the knowledge and eagle eye of stellar front desk volunteer Brad MacInnis that the final piece was completed: he found the exact part we needed discarded on a nearby sidewalk. As you can imagine, things here will never be the same. Imagine the joy of arriving at work from a long bike commute and being able to start your day with a solar heated shower!





Art and Artists for the Planet

We livened up the dull winter days this February with the first year of a new EAC fundraiser called On Canvas: Art for the Planet. On Canvas was the brainchild of EAC Board member and fundraising goddess Wendy MacGregor. Thanks to a brilliant team, including gallery partner extraordinaire FRED, the show got rave reviews. EAC member and art aficionado Mary MacLachlan, commented, "The installation is really lovely and the space perfect." One of the superb things about On Canvas was that we got to share the proceeds with a wonderful collection of local artists. Over 30 artists contributed pieces to the show and it was a chance for us to help promote and celebrate their work. Talented musical artist Ryan MacGrath is pictured here performing at the closing gala.

Staff Snippets

Like the world around us, our team of staff members is constantly evolving:

The farewells - At the end of 2009 we bid adieu to our much loved Membership and Outreach Coordinator Charlene Boyce-Young. Fortunately she still sends us plenty of great ideas and hilarious comments! Our excellent team of membership canvassers, including Canvass Coordinator Trudi Evans have hung up their gloves. We hope to see many of them again for our 2010 canvass. Never idle, our friend and Idleless Program Manager, Corey Clamp, has followed his passions to another job in the non-profit sector. Our dedicated and well-versed Energy Coordinator, Cheryl Ratchford, won't give up the fight against climate change. She'll be putting her talents to good use in the provincial government. In a case of au revoir, not adieu, Alex Curtis, our brilliant Sustainable Fisheries Scientist, is off to San Diego to further her research on large pelagics.

The welcomes - Transportation Issues Committee volunteer Mark Lasanowski made us all very happy by bringing his supreme competence to our Idleless team. Yousif Mehedi has joined our marine team to work on tidal power bringing a rich wealth of experience to the role. And at the beginning of 2010 we brought aboard some talented interns: NSCAD student Laura Kolnick and engineering student Sara Greenberg.

The welcome backs - In a pleasant case of plus ça change, plus c'est la même chose, we welcomed back some old friends recently! Marine dynamo and activist extraordinaire Susanna Fuller is back from maternity leave. Wayne Groszko returns to apply his considerable smarts to the problems of wind power and greening buildings. The ever delightful Robin Musselman will round out our Coastal team as a researcher. Janice Ashworth will apply her very positive energy to coordinating the NS Sustainable Energy Alliance. And canvass superstar and urban

Et aussi...

A huge thank you to the staff and customers at the Black Market in Halifax. As part of their 21st anniversary celebrations they generously donated proceeds from a day of sales to four great charities, including the EAC! Their donation to the EAC went to support our work to reduce the tragic bycatch of turtles, sharks and other endangered species in the swordfish fishery.





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askecoHead By ecoHead



Disclaimer: We strive to make Between the Issues a family-friendly magazine. However, in the interests of covering a wide range of environmental topics, we have decided to include an article of a more adult nature. Please note that the following issue of ecoHead may not be appropriate for sensitive younger readers. Or for the author's mom.

Dear ecoHead:

I've just started seeing the most amazing woman. We have a great sex life and healthy imaginations, but we're thinking about investing in some ... props. You know, toys. We're both pretty aware of the impacts of plastics and so on, and we're very environmentally conscious. What's our best option? Is there a good green sex toy?

-Making love, not waste

Well, kudos to you for thinking of the environment in every aspect of your life.

First of all, before you invest in more "stuff" - have you exhausted the more au naturel ways of enhancing your sex life? Yes, I'm talking about role-play, reading each other erotic literature, experimenting with positions, that sort of thing. The possibilities are endless, especially if your imaginations are as healthy as you say.

But if you do decide that props are for you, have no fear. It seems that environmentally-friendly sex products are becoming a bit of a niche market, so you have lots of choice. Even if you're shy, you can order everything from glass dildos to wind-

up vibrators on the internet. Or, if you live near a sex store, you can go in and get direct help in finding the right toy. Venus Envy in Halifax, for example, has knowledgeable staff and also offers a variety of workshops to help you improve your love and sex life.

So what should you look for?

If possible, choose dildos made from natural materials. Avoid plastics. Jelly rubber, a soft plastic from which many dildos are made, contains icky phthalates, which have been linked to health problems. Better materials include glass, rubber and silicone.

If it's a vibrator you're looking for, use rechargeable batteries with it, or better yet, choose a wind-up or solar-powered model.

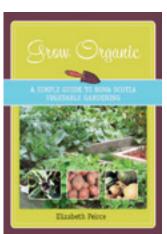
Interested in experimenting with kink? Be good to the environment while punishing a naughty lover, with items made from sustainably harvested wood, recycled rubber, or bamboo. Use beeswax or soy candles for a romantic ambiance...or whatever else you may enjoy doing with candles.

There are plenty of lovely organic massage oils on the market – so you should have no trouble finding some to treat your partner to a sensuous, and enviro-guilt-free, evening.

For lubricant, you should also have no trouble finding something you like that contains luxurious organic ingredients. If you're especially keen, search "flax lubricant" on YouTube for an instructional video by Grist on how to make your own! In solidarity for greener sex for all people,

-ecoHead

A simple guide to organic vegetable gardening in Nova Scotia



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By Katrina Ross

Wild Spring Fever

The days are getting longer and warmer. Soon the snow will be gone, indicating that spring is just around the corner. Over the next few months the first leafy vegetables of the season will start to poke their heads out of the ground and will be proudly displayed at the local Farmers' Market.

Most people discount the vitamin-rich dandelion green as a blemish in their manicured lawn. However, according to the United States Department of Agriculture's National Nutrient Database for Standard Reference, dandelions are a great source of vitamin A, vitamin K, vitamin C and the antioxidant Lutein. Not to mention beneficial for digestion, liver detoxification and weight loss.



Dandelion greens can be purchased at your local farmers' market and specialty stores but you can easily pick your own by following these guidelines.

Hint and Tips

The smaller the greens the better. These greens are quite bitter and are best picked before they flower.

Harvest off the beaten path. Stay clear of lawns that are treated with herbicides and pesticides or frequented by dogs.

Remove the core of the leaf before cooking.

Katrina Ross is a volunteer on the EAC's Food Action Committee, coordinator of "Eating by the Seasons" cookbook and avid seasonal cook.

Dandelion Stuffed Trout

(Recipe modified from www.anglingbc.com)

4 Tbsp. olive oil
1 cup of dandelion greens ripped
(spinach can be substituted)
½ cup of mushrooms diced
½ onion diced
½ tsp of lemon zest
1 clove of garlic minced
½ tsp thyme
2 whole recreationally-caught river trout cleaned*

Directions

Preheat oven to 350C

Sauté onions and garlic in olive oil until onions are transparent

Add mushrooms and dandelion greens until mushrooms darken in colour

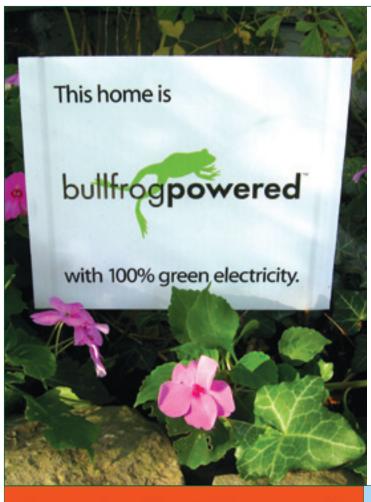
Remove from the stove and mix in thyme and zest

Stuff trout with greens mixture and cook for 20 minutes

To complete this seasonal feast, add steamed fiddleheads on the side and rhubarb crumble for dessert. Visit your local dandelion festival to learn more about this nutritious leafy green.

*If you are not lucky enough to fish recreationally or know someone who does, line-caught trout may be hard to find commercially. If purchasing farmed trout, select fish from a land based closed containment system instead of from an open net cage, which can have a negative impact on surrounding habitat.





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elect new Board Members

vote on our annual awards

For more information visit www.ecologyaction.ca/content/annual-awards

beinggreen

Jeremey Frith: Well Remembered

By Jamie Simpson, with selections from the Voluntary Planning website



Jeremy Frith pruning a yellow birch on his Cape Breton woodlot.

Jeremy Frith: Born June 3, 1945 in Bermuda, died December 8, 2009 unexpectedly at his home on Mountain Meadow Farm, St. Anne's, Cape Breton.

Jeremy described himself as a farmer, self-taught forester, logger, saw miller, woodworker, ecologist, community economic development activist, public speaker, direct marketer of organic farm produce and proponent of a responsible approach to economic/ecological integrated land management for rural communities. On his Mountain Meadow Farm in the Highlands of Cape Breton, he grew certified organic vegetables sold

at the Cape Breton Farmers' Market in Sydney and to local hotels and restaurants. He worked tirelessly to restore his 400-acre woodlot to historic Acadia forest cover types and in 2005 was named the Department of Natural Resources' Woodlot Owner of the Year for the eastern region. Jeremy was also a poet and musician and published a book of poetry in 1996.

He held numerous volunteer leadership positions at the local and provincial level. At the time of his death, Jeremy was the President of the Farmers' Market of N.S. Co-operative and a past president and board member of the St. Ann's Bay Development Association. On August 24, Jeremy and his wife, Sue Browne, were honoured with the first annual Spirit of Nova Scotia Award in the Local Food Producers category for 2008.

In 2008, Jeremy was a member of Voluntary Planning's Natural Resources Public Engagement Committee, which traveled the province to hear and report on the thoughts and advice of Nova Scotians regarding the state of our natural resources. In 2009, the committee concluded that there is a resounding call for change in how we manage our forests and other natural resources and specifically noted that Nova Scotians want to see a move away from clearcutting.

I first met Jeremy in 1996, when he was chair of a committee developing a certification standard for good forestry practices in the Maritimes. He campaigned, meeting after meeting, for forestry practices that would benefit both the forest and the communities of the Maritimes. Some 10 years later, I found myself working for a spell on Jeremy and Sue's Mountain Meadow Farm as a 'wwoofer' – a willing worker on organic farms. Jeremy's love for the land was easily apparent by the level of care he invested in his well-run mixed-vegetable farm.

Jeremy was buried on his farm on December 12th, amidst a raging snowstorm, with voices rising in song as his friends, family and neighbours shared turns at the shovels, filling the grave. It was a scene I'm sure Jeremy would have given his complete approval.

He is survived by his wife, Sue; his two sons, Josiah and Alec; a stepdaughter, Laura Russell; and siblings, John, Michael and Wendy and their families... not to mention the canines Kipper and Lucy, and the horses and the goats.

Jeremy's poem, The Cathedral, published in 1996 in his book *Oh Gawd, I Vish Dis Ig'rance Vud Stop!*, begins like this:

My cathedral is the forest, the pews are mossy banks; there a scarlet-crested parson drums incessantly his thanks. I have no need of temples carved in stone by hands of man, my cathedral is the forest, my heaven is the land.

Jeremy's wife, Sue Browne, has requested that donations in Jeremy's memory be made to the Forestry Program of the Ecology Action Centre.

Jamie Simpson coordinates the EAC's Forestry Program. He's a forester, a woodlot owner and occasional arbourist. He's also the author of "Restoring the Acadian Forest: A guide to forest stewardship for woodlot owners in the Maritimes".



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Bike Again: Jyelle Vogel 431-8215 or Peter Rogers 404-5466 bikeagain@hotmail.com

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Standing Tall Researcher: Caitlyn Chappell 429-1335 caitlyn@ecologyaction.ca



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EAC Index: # of volunteers in our database: over 500 # of volunteer hours put into the Food Action Committee each month: around 200 # of volunteer hours donated per month by front desk volunteers: 135 # of active issue committee volunteers per month: approx. 115 # of new volunteer applications EAC gets in a week: 7 # of funding inquiries for Round 2 of the Green Mobility Grants: 50 # of grants given out: 12 Total granted: \$158,227 Total value of projects: \$392,256

Estimated annual emission savings from these projects: 741 tonnes of CO2-equivalent; 30 kg of particulate matter; 3,590 kg of Nitrous Oxide # of water strategies in NS: zero

of recommendations in the Blueprint for Water Management, directed the provincial government as it develops its long anticipated water strategy: 12 # of organizations signing onto these recommendations: 30

Recent EAC Successes:

- The provincial government launched a public consultation on a proposed ban on the sale and use of non-essential lawn pesticides. EAC has advocated for this ban as a member of Pesticide Free NS.
- A record number of attendees joined us and our partners at the 6th Annual Sable Island Update.
- The Five Bridge Lakes area of HRM was announced as a candidate for protected Wilderness Area designation by the provincial government. We have fought hard for this as a member of the NS Public Lands Coalition..

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