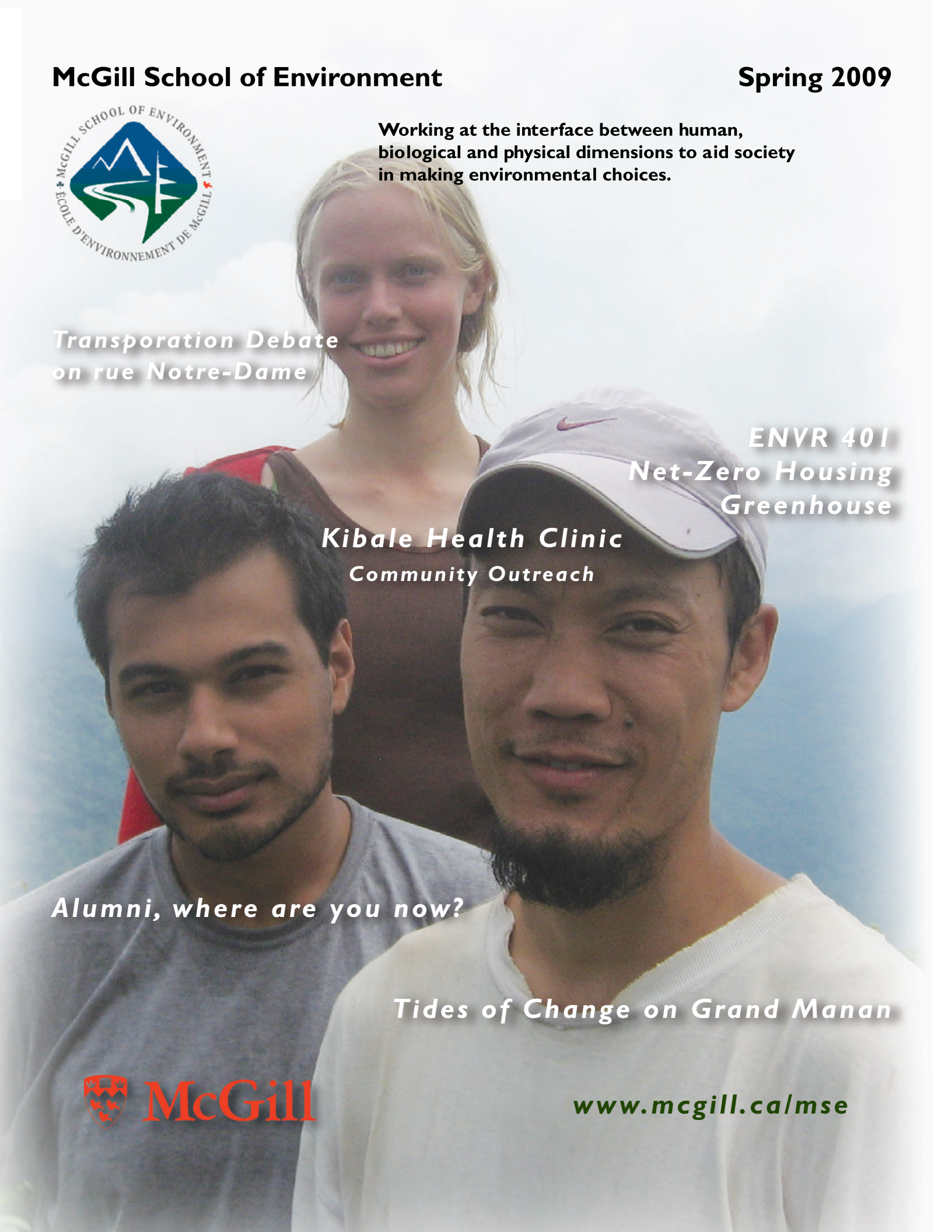
McGill School of Environment

Spring 2009

Working at the interface between human, biological and physical dimensions to aid society in making environmental choices.



Transporation Debate on rue Notre-Dame

ENVR 401 Net-Zero Housing Greenhouse

Kibale Health Clinic

Community Outreach

Alumni, where are you now?

Tides of Change on Grand Manan

McGill

www.mcgill.ca/mse

Director's Message

by Marilyn Scott, Director of the MSE

One thing about the McGill School of Environment – there is never a dull moment! I cannot begin to list the variety of opportunities that come by each week … or the challenge of trying to decide which among all the important and exciting ones we should pursue!

Much on my mind these days is the interface between infectious diseases and environment. I teach a course to our undergraduates on this topic each winter, and this year's course is just coming to end. Imagine a group of 30 students, with interests and backgrounds ranging from world religions to political science to nutrition to health to gender, all talking about how urbanization is increasing the risk of dengue fever, or simulating the impact HIV-AIDS on societies in sub-Saharan Africa. As with all classes in the MSE, students are asked to step outside the box, not just one step, but another and another. You can't imagine how rewarding it is to see this process in action and their delight as links become clearer and clearer.

On the research front, we received terrific news of funding of a major new transdisciplinary research initiative funded by the Social Sciences and Humanities Research Council of Canada and headed by Peter Brown. Together with two of our Associate Members, Richard Janda from the Faculty of Law and Mark Goldberg from the Department of Epidemiology and Biostatistics, along with an ecological economist from York University (Peter Victor), they have funding for 3 years to develop a new foundation for ecological economics and the tools for its assessment. Given the critical state of the earth's environment together with the current economic crisis, the need for a new way to conceptualize our economy and its relationship to our environment is urgently needed. Peter, Mark, Richard and Peter, we await your results with not a little impatience!

On the staffing side, we are DELIGHTED to welcome a new Assistant Professor who starts her joint appointment between the MSE and the Department of Geography on June 1. Jeanine Rhemtulla received her Ph.D. from the University of Wisconsin-Madison, and her research focuses on understanding the long-term interactions between human land use and landscape structure and function. This work is critical to maintaining both human livelihoods and sustainable flows of all ecosystem services through time, services such as soil fertility, biodiversity and climate regulation.

Jeanine's appointment, the new transdisicplinary research grant award to Peter Brown and his team are just two signs of HOPE at the MSE. Keeping on the theme of hope, we welcomed Chris Turner to the MSE. Author of the recent book "The Geography of Hope", he spoke to students and he gave a public lecture in which he gave example after example of initiatives around the world where people are showing that they CAN make a difference. If you are looking for an uplifting book to read this summer, I highly recommend his book. It is delightful read, and informative too!

Do think of our graduating class during the last week of May! We can look with confidence to the future, knowing that such passionate, energetic and smart young people will be in guiding the way!

Students' Society of McGill University Five Year Sustainability Plan

On March 19, 2009, SSMU Council passed the Five Year Plan for Sustainability, developed by the SSMU Environment Committee. In light of the sustainability assessment that was conducted of the SSMU during the year of 2007-2008, the SSMU has been given a comprehensive analysis of its strengths and weaknesses regarding the environmental sustainability of its building and operations. The Five Year Plan for Sustainability is a clear, focused, and specific plan for implementing the recommendations of the sustainability assessment and more by establishing strong yet realistic goals for achievement. The Five Year Plan and its implementation works to harness the enthusiasm and ingenuity of students in creating a culture of environmental sustainability at McGill University.

PDF file of the plan:
http://ssmu.mcgill.ca/environment/?q=comment/reply/320
SSMU Homepage: http://ssmu.mcgill.ca/

On the cover:
Photo of MSE jointly-appointed Prof. Brian Leung (white cap on right), Dept. of Biology, and McGill students Abhi Sethi (left), and Melina Puley (top), in Uganda, Central Africa. This photo was taken at the foothills of the Mountains of the Moon, a mountain range once believed to be the source of the Nile River. James Grant and John Speke in 1862 found that the source was not primarily in the mountains but rather in the Great Lakes. Today known as the Rwenzori Mountains, the peaks are the source of some of the Nile's waters, but only a small fraction.

Kibale Health Center and Conservation Project

Connections in Kibale, Uganda, East Africa

by Hilary Best, B.A. (Hons) Geography, double Minors in Environment and Economics

On February 1, 2009, MSE Professor Colin Chapman, Biology Professor Lauren Chapman, and their colleagues cut the ribbon on the Kibale Health and Conservation Centre in Uganda. Over a year in the making, the Health Centre project is symbolic of the dedication and commitment that the Chapmans bring to their involvement in the Kibale region. "I first became involved in research in Kibale as a post-doc," Chapman recalls. "Lauren nd I were applying for post-docs in many different locations. The program at Harvard came through which took us down to Massachusetts and then over to Kibale." That twist of fate eighteen years ago has changed the course of Chapman's career and the experiences of many McGill students.

As Chapman will attest, Kibale is a researcher's dream: "The park is primarily thirty to forty metre tall trees. It's a moist evergreen forest so it is quite lush. The field station sits right on the edge of the park so as students you can either go out of the forest to interact with local communities, examining parks-people conflict and the many problems that the local communities face, or you can go into the forest and work on the animals or you can go somewhere in between and look at people-animal conflicts."

This sense of curiosity that inspires great research also got the ball rolling on the Health Centre project. "We already knew that the local community wanted a local health care facility because it's a relatively poor community and going to a clinic is quite expensive," says Chapman. "At another site, some of the students on the Canadian Field Studies in Africa program were talking to members of the local community about water issues and they asked, 'Is it difficult for you to get water?' The locals replied, 'In the rainy season, we can get water but in the dry season we have to walk a long way.' The students kind of naively said, 'Why don't you put in a well?' And they said, 'Well, we can't afford it.' The students asked how much it costs and the local villagers didn't have a clue. So we asked a couple of our Ugandan students to figure out the price of a well." Chapman and his team raised the $3000 required, put in the well and had students help with it the following year. "That experience made me realize just how much the students can really do. After that success, we thought maybe we could take this a step up and build the Health Centre. So with Dr. John Geddes, the African Field Semester's medical doctor, providing medical expertise and my wife and I figuring out the logistics, we took the idea from there and built it."

Staffed by a local nurse, the Health Centre provides much-needed health care to the community and has improved local connections to Kibale National Park. "By entering the park to access the clinic, locals will hopefully see these services as a benefit of the park." Chapman's friendly nature allows him to downplay the challenges of bringing the Health Centre to fruition: "We try to help out where we can – with the health centre being the latest example of something we thought we could do to help." He credits Kibale with helping him to see things in a different light. "When I started to do research I was only interested in the academic side of things. But I really started to get involved with conservation initiatives when we moved to Uganda and got to know local communities."

As local communities benefit from the Health Centre in the coming years, Chapman and his colleagues will work to support the project into the future. Backed by a partnership of local community members, Dr. John Geddes and McGill students and faculty, this lasting connection will continue to make a positive difference in the lives of those native to Kibale and those lucky enough to get the chance to call it home.

100% of the funds donated will go to the Kibale Health Centre directly. If you would like to help by making a donation, tax deductible, please make out a cheque to McGill University, in care of: Dr. Colin Chapman, Dept. of Anthropology, 855 Sherbrooke St. W., Montreal QC, Canada H3A 1T7

Tides of Change on Grand Manan Island

Joan Marshall, Faculty Lecturer at the MSE, and the Delicate Balance between Change and Constance

by Hilary Best, B.A. (Hons) Geography, double Minors in Environment and Economics

"I am native, rooted here
By familiar fields,
Marsh and sand,
Ordinary streets
Prevailing wind…
And by the kindness
Of a casual glance." – Benjamin Britten

In an age of perpetual motion, many of us long for a place to take root. In speaking with Prof. Joan Marshall, MSE professor and author of the recent book, *Tides of Change on Grand Manan Island,* it is clear that Grand Manan has been such a place for her. *Tides of Change* is the culmination of twelve years of meticulous research and passionate devotion to a New Brunswick island struggling with the challenges of modernity.

Over the course of her studies, Marshall returned over and over to the central theme of change. "Change was a constant", she writes, "in the details of alterations in the landscape, in the nature of business, and in the daily lives of the people." Marshall focuses specifically on changes to the nature of work for Grand Mananers, and the effects this has on their cultural identity.

For a place so intimately tied to local fishing resources, it is little wonder that Grand Mananers have a special relationship with their craft. But for an industry which has been the lifeblood of this community for centuries, change has been fast and furious. "In twelve years, the island has experienced every symptom and problem that the new globalized economy represents," she writes. New technologies, corporate actors and government policies have fundamentally altered economic and social relations on the island.

Marshall points to the introduction of aquaculture as an example of islanders' powerlessness in the face of these changing tides. "Aquaculture was very much encouraged by the provincial government who offered high levels of subsidies, for foreign and then domestic mainland companies. But these companies are not investing in other ways in the community. They hire wage labour, they may or may not make the nets on the island and the economic spinoffs, which initially seemed to be significant, may not be long term."

Marshall writes of the loss of family involvement and informal gatherings which characterized the early fishery. "This teamwork reflects an attachment to the sea formed of shared experiences, hopes, frustrations, and struggles. None of which is replicated on the [aquaculture] sites. In the transformation from a wild fishery to a livelihood that is increasingly dependent on industrial grow-out process – it has redefined islanders' sense of themselves."

Marshall emphasizes that Grand Manan is not alone in its challenges. Rural Canadian communities are fundamentally different from their urban counterparts, she argues, and deserve the ear of their federal and provincial representatives. Through her writing and community engagement, Marshall is helping to give Grand Manan a voice; though her formal research is complete, she continues to return to the island and serves on a local economic commission.

In return, Grand Manan has taught Prof. Marshall some valuable lessons about coastal living. "I did a lot of hiking on the island," she recalls. "We're always told to carry tide books with us and to be aware but I had a couple of episodes where I quite literally was clambering up cliffs and trying to find ways off an island at high tide under very treacherous conditions. Those adventures touched me personally. I gained some experiential understanding of the many dimensions of living within an island marine environment and the dangers that are always around us."

Tides of Change on Grand Manan Island is published by McGill-Queen's University Press.

You can listen to a very interesting interview of Joan's work by Steven Webb, of CBC Radio One, Information Morning Saint John, at this location: http://www.cbc.ca/informationmorningsaintjohn/int_archives/feb.html .

Reception for Joan Marshall (second from left) by Mount Allison University, Sackville, Nova Scotia. Accompanied by Joanne Gnassi of Tidewater Books, Michael Fox, Dept. of Geography, and Barry Dane, Owner of the Marshlands Inn.

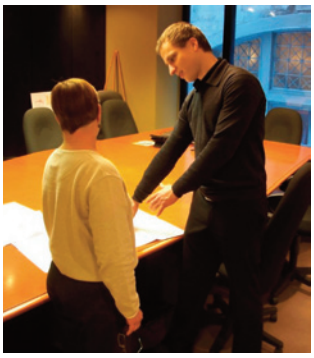
Our most precious natural resource - MSE Alumni... Where are they now?

Shu-Yi Chu, BA'06, Environment and Development

I am delighted to inform you that I graduated today (Sept. 2008) from Oxford's M.Sc. programme in Environmental Change and Management, fortunately with distinction. My experience at Oxford had been very positive. It not only taught me how to learn, but reinforced my interest in environmental management while allowing me to meet life-long friends during the process.

My current situation is that I have accepted an offer to be a research assistant for the Tyndall Centre on Climate Change from October 1st to December 1st 2008 with the possibility of further extension. This short-term research focuses on greenhouse gas emissions strategies in developing countries and corporations, and is a continuation of my summer thesis project which I conducted in Hong Kong. I shall be in Oxford for this internship. Therefore, please let me be your guide if you ever visit London or Oxford in the next several months.

Joel Thibert, BA'04, Environment and Development; MA'07 Urban Planning



After completing my BA at the MSE, I taught environmental science in Colombia for a year, and then came back to McGill to pursue a Master of Urban Planning. I now work for a small non-profit project management firm specializing in urban revitalization projects, the Quartier international de Montréal, advising on issues related to urban planning and sustainable development. I am currently completing a graduate diploma in Environmental Education at UQAM, and working on an ecological summer camp project with MSE graduate Alanah Heffez.

Laura Pfeifer, BA&Sc '07 (Hons) Environment

I am currently completing my master's degree from the Department of Natural Resource Sciences and the McGill School of Environment. Ecological processes in urban areas really interest me, especially how human actions affect ecological integrity in cities. In my thesis, I am exploring how the physical, biological, and socio-economic characteristics of urban watersheds influence phosphorus flux in streams. In particular, I want to know if the amount of money that people spend on home fertilizers is correlated with phosphorus concentration and flux in urban streams.

Studying Phosphorus Flux in Urban Streams

I recently returned to my home in Regina, Saskatchewan, to finish writing my thesis and spend time with my new nephew! Along with writing, I am doing contract work for Inner Circle Creative Cities Development Corp., a non-profit organization that focuses on inner city revitalization and sustainability through arts and culture. In addition, I serve on the board of the Regina Car Share and I am organizing a series of free public walks designed to reconnect residents with each other and their local environment.

MSE in Sustainable Housing Bid

"How to Integrate Home-Scale Agriculture into Net-Zero Energy Houses"

by Jonathan Bruderlein, BSc Agriculture and Environmental Science, Food Production & Environment, and Isabelle Larocque, BSc Agriculture and Environmental Science, Land Surface Processes & Environmental Change

As their ENVR-401 research project, a group of seven MSE undergraduate students took part in a multi-disciplinary effort to take housing in a new direction. "A house is not just a home. If designed intelligently, a house and be the enabling backbone that supports a household's needs for shelter, mobility, and food solely through a reliance on solar energy and without any associated GHG emissions." (Sevag Pogharian Design 2008.)
In 2007 the Canadian Mortgage and Housing Corporation (CMHC) launched the Equilibrium initiative. Under this initiative, 12 architectural firms were selected to construct demonstration NetZero Energy Houses. A netzero house in one that produces as much energy as it consumes in any 12 month period, thus making it "net-zero" energy. This is done using an array of solar and geothermal technologies combined by intelligent systems integration.

The MSE team collaborated with Sevag Pogharian to help integrate homescale agriculture into his project. The task set before these seven students was to investigate exactly what proportion of a family of four's diet could be produced on site at the Alstonvale Netzero house. Working within the constraints of municipal regulations, available area, and nutritional requirements the students developed a garden plan using a biological approach to gardening. This involved planning the garden layout and planting schedule, estimating crop yields using harvest data from a local organic CSA farm, and comparing the estimated nutritional value of the food produced to the recommended dietary requirements.

Representatives of the group also attended a "Design Charrette." This was an intensive day-long brainstorm regarding the design of the greenhouse that will be build at the site to extend the growing season. People from many different fields were involved in this "Charette" including engineers, gardeners, lighting specialists, the designers of the well known Brace Centre greenhouse. Each participant gave a presentation about their expertise and explained how this was relevant to a net zero greenhouse. Representatives of the MSE team presented the garden plan.
For more information, visit: www.spd.ca .

Finding the Energy

"Facilities and Operations presentation gets McGill fired up about Energy Management"

by Hilary Best, B.A. (Hons) Geography, double Minors in Environment and Economics

Could you describe McGill's approach to energy management? It's surprising, isn't it: we're all a part of the McGill community, all concerned about the environment and yet, frighteningly uninformed about how this institution operates and what impact it has on our world. In January, faculty, staff and students came together to get a better understanding of this issue. With the help of Director of Facilities & Operations, André Aylwin and former MSE student, Alexandre Poisson, the community (including those at Mac campus via weblink) had an opportunity to learn more and ask questions. McGill's Energy Management plan has been in existence for a couple of years, but until this month not many knew what the plan was really made of. "It's not that Facilities and Operations weren't doing anything before," says Poisson, "It just hasn't been transparent and involving the whole community."

Prof. Marilyn Scott was impressed by the wide array of McGillians present. "I was delighted to see the combination of non-academic and academic staff and students, as well as the engagement with Mac Campus. This is really what we need – an opportunity to learn from the people at Facilities and Operations and to open the lines of communication so that we can be working together."

Further information can be found on the following website: http://blogs.mcgill.ca/mse/2009/01/

MSE Students Tackle Local Transportation Debate on rue Notre-Dame:

"Alternatives to a proposed Ministère des Transports du Québec (MTQ)/Ville de Montréal joint modernization plan."

by Jason Synnott, BA, Faculty Program Environment - Environment & Development - Economics

A group of Fall 2008 ENVR 401 students tackled the issue of transportation in Montreal as their senior undergraduate research project, under the supervision of Dr. Gregory M. Mikkelson. Commissioned by l'Association Habitat Montréal (AHMtl), inquiry was requested into alternatives to a proposed Ministère des Transports du Québec (MTQ)/Ville de Montréal joint modernization plan for a 9 km stretch of rue Notre-Dame, a major artery in Montréal's industrial east. AHMtl is a non-profit volunteer organization dedicated to defending issues that affect the well-being of residents in the old and central neighbourhoods of the city. It is particularly concerned with the problems of chronic congestion, pollution, and safety felt by local residents. It has voiced a need to rethink how transportation plans such as this one, mainly focused on increasing vehicle capacity, are carried out.

Over the past few decades, the most prominent investments in road infrastructure have had as an ultimate goal to increase the capacity for motorized vehicle circulation. The student's initial analysis involved assessing the governmental plan and taking note of weaknesses in the public transport component. An alternative proposition was then elaborated based on concepts and ideas gathered from various stakeholders, including the Montreal Port Authority, the borough of Hochelaga-Maisonneuve, the Canadian National (CN), citizen groups and municipal political party platforms. Rudimentary in terms of its practicality of implementation for this specific project, it nonetheless demonstrated that light rail transit (LRT) can accommodate commuters and provide a viable alternative to increasing vehicle capacity near Montreal's downtown core. The students' results further determined that net socio-economic advantages exist with promoting public transit-focused plans. The assessment criteria (greenhouse gas emissions, mobility and accessibility, and quality of life) balanced in favour of the advantages of public transit infrastructure for users and local residents.

Transportation projects have been traditionally judged in terms of travel time for commuters, reliability, and cost/benefit analyses. Infrastructure projects in general, as it has been proven time and time again, put high demands on the Earth's resources, renewable and non-renewable alike. An emerging trend in projects including the concept of urban sustainability reflects the overall desire to include environmental considerations in policy that will determine the future of our cities. The Notre-Dame dilemma is an example of a ubiquitous transportation problem that all urban areas in North America have faced, or will eventually face: the choice of whether to continue to invest in infrastructure that supports private vehicle use or design new visions for urban mobility. Cities such as Portland, San Francisco and even Toronto have stood up to governments after the realization that building highways was not the most sustainable long-term solution and did not fit their constituents' desire for innovation in city transport. In some cases, this has led to a complete overhaul of the transportation system. Saying no to the C$750 million project to increase vehicle capacity on this artery (from 2 to 4 lanes in each direction) is a unique opportunity to create such a movement for change.

Honouring our Accomplishments

Madhav Badami, MSE Professor, was celebrated in Bangalore, India, for his talk at the Bangalore International Centre on urban transport planning, which highlighted the fact that "pedestrians did not contribute to congestion on roads nor did they benefit from motorisation, but were hugely affected adversely by both factors". The irony that Bangalore, known as a "garden city" ranking twelfth among 30 cities on the "walkability" index, is "pedestrian-unfriendly" was not lost on the BBMP which has since constructed pedestrian subways, skywalks and bicycle paths on major roads, and established zone-wise programmes to evacuate encroachments on footpaths and clear debris. It is talks like this one which help to awaken planners to the need to take pedestrians into account.

MSE Speakers Series

The MSE Speakers Series brings to campus an outstanding array of environmental speakers to discuss major environmental issues of the day, and to provide students and faculty with opportunities to interact with some of the people who are shaping our world. Our Spring 2009 line-up did not disappoint!

Laura Pfeifer began the New Year with a presentation of her final research seminar in which she described the inputs and movement of phosphorus through urban streams on the Island of Montreal. She is currently a master's student at McGill University in the Department of Natural Resource Science and the McGill School of Environment, studying under the direction of Prof. Elena Bennett.

Rene (Irene) Gregory-Eaves is a limnologist/paleolimnologist, and Assistant Professor in the Department of Biology at McGill University. She described how she uses paleolimnetic tools as well as stable isotopes to track the role that wild salmon play in nutrient exchange between the ocean and river systems.

Peter Victor is a Professor in Environmental Studies at York University where he teaches an undergraduate course in environmental management and graduate and undergraduate courses in ecological and environmental economics. He has worked on environmental issues for many years as an academic, public servant and private consultant. In his latest book, "Managing without Growth. Slower by Design, not Disaster", Peter challenges the priority that rich countries continue to give to economic growth as an over-arching objective of economic policy. He puts economics in its proper place within the real world and points the direction we must go in confronting the ecological crisis of the planet. A fascinating speaker and scholar!

Claude Drolet and Myriam Grondin presented a brief overview of Mount Royal and **Les amis de la montagne**, conservation activities and scientific studies on Mount Royal, and a guided tour of "Mount Royal: A Territory to Discover", Les amis' new interactive map on the mountain's historic and natural heritage.

les • amis de la montagne

Citizen-founded in 1986, Les amis de la montagne is a registered charitable organization dedicated to the protection and enhancement of Mount Royal through community involvement and environmental education. Volunteers are currently being sought to help conduct environmental activities during May and June, and at the Corvee du Mont-Royal mountain clean-up, to be held Sunday, May 10, 2009. More information can be had at: http://www.lemontroyal.com/en/learn-about-mount-royal/homepage.sn . The MSE is engaged in wide-ranging discussions about ways in which it might partner with Les amis.

Colin Scott, Associate Professor in the Department of Anthropology at McGill University, and Associate Member of the MSE, spoke about the transdisciplinary, multi-university team research project, in partnership with Cree, Quebec, and Canadian government agencies, on culturally appropriate environmental protection at the James Bay community of Wemindji. This was an amazing example of the type of research that the MSE aspires to: www.wemindjiprotectedarea.org .

Harvey A. Feit, Emeritus Professor of Anthropology at McMaster University, also spoke about the James Bay area. He focused on the historical approaches that the Cree have used in their interactions with governments and corporations over access to resources, "Varieties of Environmental Co-Governance at James Bay: Indigenous State/Market Ventures and Struggles, from Mercantilism to Development to Neoliberalism".

Hope Springs Sustainable

Chris Turner plots Montreal on his "Geography of Hope"

by Hilary Best, B.A. (Hons) Geography, double Minors in Environment and Economics

Sitting down for coffee with environmental journalist, Chris Turner, I was struck by how much he seemed like an old friend. Turner visited the MSE this February, speaking with MSE faculty and students, participating in roundtable discussions at both campuses and delivering a public lecture to a packed house. Donning a blazer and button down for the occasion, his unique combination of thoughtful idealism and down-home practicality was instantly appealing.

Of course, the reason for our conversation is anything but. Though Turner recently published the positively titled, The Geography of Hope, his hopeful take on a sustainable future is grounded in the reality of the enormity of the climate change challenge. Turner runs down the list of impending disasters for which we are mounting nowhere near an adequate response. Acidification of the oceans, species extinction, massive sea level rise, decline of sea and land ice: the picture is grim.

"The system we have built from the economy on down is incapable of seeing, let alone responding to, the problem properly," says Turner. "We have built an economic system predicated on the idea that we could have endless growth. [With the discovery of oil], energy was so cheap as to be almost free, allowing us to imagine that we could constantly expand our economy. What we're seeing [with the global financial crisis is this system reaching its] logical endpoint."

All of this leads Turner to one stark but important conclusion: "The economy is a wholly owned subsidiary of the climate and the environment generally. You cannot possibly have a successful economy that has not reconciled itself on a sustainable footing within the climate that we now live in."

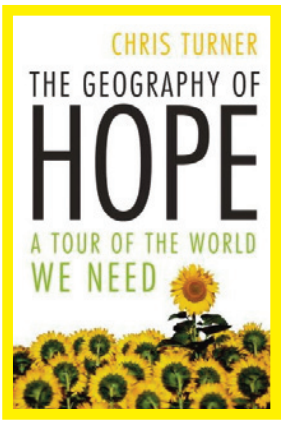
But rather than continue to harp on the many ways that we are getting it wrong, Turner sets himself apart by reporting on the places and people who are getting it right. Inspired by the revolutionary economist Kenneth Boulding's mantra "anything that exists is possible", Turner traveled the world, creating a geography of hope for those of us hungry for signs of change. From sheep-maintained solar panels in Denmark to LEED Platinum certified buildings in India, Turner offers countless examples of individuals and communities making a conscious commitment to "a lifestyle designed for permanence". This is a different way of solving problems.

The beauty of the geography Turner presents is that a congress of technologies and approaches, rather than one kind, offer avenues of possibility. This makes the sustainable destination of every community unique. This approach recognizes and celebrates local perspectives, navigating the challenges while remaining committed to the opportunities of civic engagement.

"The conversation is going to look different in different places. The answers will look different but they begin from the same place," notes Turner. He congratulated Montreal on its own answer to the sustainable transportation question - Bixi, a shared bike system to be unveiled this spring. Quoting fellow journalist, Rebecca Solznit, Turner says "hope is an axe you break down doors with in an emergency." Opening up new possibilities, the "rational exuberance" of post-carbon development, says Turner, gives us reason to be excited.

This excitement was not lost on U3 B.Sc. (Biodiversity and Conservation) & B. Mus. student Leah Edgerton; "It's inspiring to see that people all over the world care about the same issues that we are concerned about at the MSE. I especially liked [Chris Turner's] hopeful stories from Denmark, because these were changes that were made in a climate similar to ours in Montreal, and could be used as examples for us to learn from."

Prof. Madhav Badami echoed this sentiment "I believe it is important not merely to talk about how bad things are, and how much worse they are likely to get, but to also show how change is possible, and perhaps most importantly, to show that change is in fact being made to happen, in countless small but significant ways, across the world, including in circumstances that are far less favourable than our own."



Available at bookstores and on-line.

With our feet firmly planted in Turner's geography of hope and armed with an understanding of the problem at hand, we at McGill are poised to begin the process of creating change worth getting excited about.

MSE Honours Students Presentations 2009

Our first group of Honours students presented their research results December 2nd, 2008, and the second group on April 14, 2009. True to MSE form, the research covers a wide range of topics, from climate change to religion to infectious disease. This program gives our students the opportunity to pursue a directed, focused, and individual research project over the course of a full year, under the supervision of a professor.

Lesley Winterhalt, B.Sc. – Land Surface Processes & Environmental Change Domain
Supervisor: Nigel Roulet, MSE and Geography
"Light use Efficiency for a Wetland in the James Bay Region of Quebec"

Erica Lamb, B.Sc. – Land Surface Processes & Environmental Change Domain
Supervisor: Nigel Roulet, MSE and Geography
"Relationship between Peat Moss Density and Decomposition Rate"

Irina Rozin, B.Sc. – Biodiversity & Conservation Domain
Supervisor: Colin Chapman, MSE and Anthropology
"First Evaluation of the Parasite Community Hosted by a Spider Monkey Populatin in Mexico"

Valerie Francella, B.Sc. – (Ag.Env.Sc.) Renewable Resource Management Domain
Supervisor: Elena Bennett, MSE and Natural Resource Sciences
"Nitrogen Budgets for the St. Lawrence Sub-Basin: 1901-2001"

Annie Merritt, BA&Sc Interfaculty Program – Biology Minor
Supervisor: Ismael Vaccaro, MSE and Anthropology
"The Social Construction of Knowledge in an Environmental Management Context"

Hanchu Chen, BA&Sc Interfaculty Program – Political Science Minor
Supervisor: Madhav Badami, MSE and School of Urban Planning
"The Saga of Toronto's Garbage Woes: Lessons for Environmental Decision-Making"

Zakir Jafry, BA&Sc Interfaculty Program – GIS Minor
Supervisors: Navin Ramankutty, Margaret Kalacska, and Jeanine Rhemtulla, Geography
"Estimating Changes in Clear-Cut Area between 1992-1999 Using Landsat Imagery in British Columbia, Canada"

Kim McGrath, B.A. – Environment & Development Domain
Supervisor: Bob Bonnell, Bioresource Engineering
"Management of Environment and Societies"

Ines Ribeiro, B.A. – Environment & Development Domain
Supervisor: Jeanne Wolfe, School of Urban Planning
"The Benefits of Urban Agriculture: How to Include Special Groups in the Rooftop Garden Project in Montreal"

Erica Lemieux, B.Sc. – Biodiversity & Conservation Domain
Supervisor: Gail Chmura, Geography
"Wetlands Support More Than Their Share of Canada's Biodiversity"

Maya Nadimpalli, BA&Sc. – Economics Minor, Chemistry Minor
Supervisor: Suzelle Barrington, Bioresource Engineering
"Evaluation of Carbon-Rich Wastestreams as Alternatives to Methanol in Wastewater Denitrification"

Charles David Mathieu-Poulin, B.Sc. – Atmospheric Environment & Air Quality Domain
Supervisor: Pavlos Kollias, Atmospheric & Oceanic Sciences
"Multi-Year Analysis of Wind Profiler Data from the ARM Program: Study of Convective Cloud Dynamics in Oklahoma"

Diane Hasley Field Studies Awards

The MSE academic program is founded on the belief that learning through real world problem-solving is one of the most effective teaching methods in higher education. Since it first opened its doors in 1998, the MSE has incorporated as many experiential learning opportunities as possible.
The generous donation of the Diane Hasley Environmental Field Activities Award allows the MSE to fund students, in high academic standing, in their U2 or U3 year of a BSc, BA, a BSc (AgEnvSc) program with a major in Environment, who are enrolled in a field course or semester associated with the McGill School of Environment degree program.

We are proud to announce the winners for 2008-2009:

Andrea Reid, Bachelor of Science
Full-time Year 3
Honours Environment - Biodiversity and Conservation

Tony Kovach, B SC Agricultural and Environmental Science
Full-time Year 3
Major Environment - Renewable Resource Mgmt

Kimberly Faldetta, Bachelor of Science
Full-time Year 3
Major Environment - Ecological Determinants of Health Domain - Cellular, Minor Concentration Classics

Alexandra Duchesne
B SC Agricultural and Environmental Science
Full-time Year 3
Major Environment - Biodiversity and Conservation

Ladies and Gentlemen, mark your calendars!

The McGill School of Environment will offer our first ever "Mini-Enviro" Series.

In its 5th year, the McGill Minis offer public lectures designed for maximum education fun. We know that people love to learn, especially when there are no prerequisites, no homework, and no exams!

What are McGill Minis?
They are faculty-based lecture series, originally started up by Kappy Flanders, a member of the Board of Governors and Co-Chair of Montreal's Council on Palliative Care, who got the idea while she was attending a conference in Dublin. She tracked down the inventor of the Mini forumula, John Cohen, and yes you guessed it, he turned out to be a McGill graduate. And, as they say, the rest is history!

So, pencil in six weekly Monday evenings starting at 6:00pm, beginning October 19.
Come and learn about interesting topics such as,
"Global Swarming: Biological Invasions in an Era of Globalization".

We'll be waiting for you!

The MSE is:

Director—Marilyn Scott

Faculty Members

Madhav Badami (School of Urban Planning)

Elena Bennett (Natural Resource Sciences)

Peter G. Brown (Geography)

Colin Chapman (Anthropology)

Sylvie de Blois (Plant Science)

Jaye Ellis (Faculty of Law)

Frédéric Fabry (Atmospheric and Oceanic Sciences)

Iwao Hirose (Philosophy)

Brian Leung (Biology)

Gregory Mikkelson (Philosophy)

Anthony Ricciardi (Redpath Museum)

Raja Sengupta (Geography)

Renée Sieber (Geography)

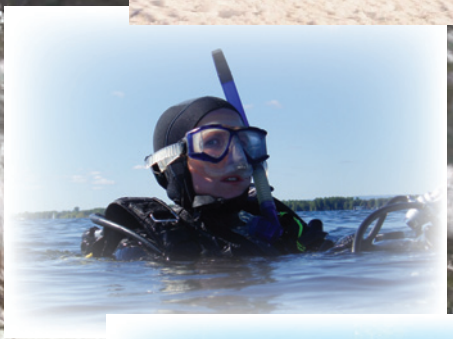
Ismael Vaccaro (Anthropology)

Faculty Lecturers

Colin Duncan
George McCourt
Joan Marshall
Kathryn Roulet

Staff

Danielle Lefebvre
Shannon Scott
Christina Zhu



McGill School of Environment; 3534 University
Montreal, Quebec, Canada; H3A 2A7; Tel: 514-398-2827