



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



Director's Message

by Marilyn Scott, Director of the MSE

The fall semester has flown by. This shouldn't come as a big surprise – it happens every year! I thought I would share just a few highlights that are on my mind at the moment.

First, I'd like to "introduce" you to one of our undergraduate students, Jonathan Glencross. You may have heard him recently on CBC Radio, or read of him in the front section of the Montreal Gazette. I first met Jonathan shortly after becoming Director of the MSE. He has made it his personal mission to help move McGill forward in efforts to bring sustainable practices to all dimensions of McGill, and he is well on his way! His most recent achievement has been the establishment of a Sustainability Projects Fund at McGill University, with an estimated annual income of \$840,000 or \$2.5 million over the next three years. After convincing McGill's Provost to make a commitment to raise \$1.25 million up front, conditional on matching funds from students, Jonathan along with a group of highly dedicated students spearheaded a university-wide campaign to establish a \$.50 per course credit sustainability fee to be paid by each student. You can read more about this amazing achievement in an interview of Jonathan by our undergraduate journalist, Melanie Lefebvre, on page 5.



Prof. Marilyn Scott, Director, MSE

The MSE has initiated a series of grants and awards for the next three years. We are providing small grants to support research by our undergraduate students, we are providing an award to a graduate student entering our Graduate Option in Environment, and we have opened a fund to support visiting professors who agree to spend at least 4 months at the McGill School of Environment. We have also expanded our New Initiatives Grant program that supports a new research idea that involves professors from at least two different disciplines.

Finally, a huge word of CONGRATULATIONS to the 13 environment students who completed their degrees over the summer and graduated in the November Convocation. The MSE now has 787 alumni!

The McGill School of Environment completed its 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!

The MSE was pleased to host its first Mini-Enviro with great success.

You can view the lectures on Canal Savoir between December 16, 2009 and January 25, 2010.
<http://www.canalsavoir.tv/horaire.php?decalage=+7>



Front Cover Photo: courtesy of Sophie Johnsson, U3, BA&Sc, Interfaculty Program Environment, Art History

"Hello from Abisko, Sweden,

Calfmarking takes place at night, up in the mountains in the light of the midnight sun, and this corral was in such a beautiful fjäll setting right by the Norwegian border. What a feeling it was to stand amongst at least a thousand running beasts!"

Back Cover Background Photo: courtesy of Maggie U2, BA&Sc, Interfaculty Program Environment, Economics

Maggie surrounded by her natural habitat in Victoria, B.C.
 Photo credit: Frances Litman



Alanna Mitchell Brings You the Ocean

Sea Sick: The Hidden Crisis of Global Ocean Change

by Melanie Lefebvre, MSE Reporter



Alanna Mitchell brings us the bad and good news on the current ocean crisis. What comes to mind when you think about the ocean? Serenity? Marine mammals? Oceanic cycles? For Alanna Mitchell, it's a feeling of urgency over a major crisis of what covers most of the planet. "The ocean is invisibly ill" Mitchell, who Reuter's called the best environmental reporter in the world, said during an interview on September 16th.

In her recently published book "Sea Sick", Mitchell brings us on her vast research journeys over the span of 2 and a half years to learn more about the wide and open sea. "Before writing this book, I knew nothing about the ocean or its biological importance to the planet", Mitchell confessed "but that's why I wanted to write it. I thought the world was just what I could see. I was ignorant". Most of us unfortunately find ourselves in this category, and we are lucky to have Alanna Mitchell bringing the ocean to us.

The McGill School of Environment was very fortunate to be Mitchell's host of two days. She was featured in two MSE courses, gave a public presentation and this interview on a whirlwind tour of McGill.

Written in a highly accessible fashion, Alanna Mitchell explains the problems, and solutions for our ocean, bringing us on the many adventures that laid the foundation for this fascinating account on our troubled seas. Her most frightening experience was while she was 3,000 feet deep in a submersible looking for deep-sea creatures with potential benefits for human diseases. "I was paralyzed with fear, and I didn't see the point anymore. I had lost all hope", Mitchell admitted after having traveled the world receiving grim reports on the state of the ocean.

After two hours of being submerged, terrified and hopeless, she had an epiphany. "I decided to have hope. It was a big turning point for me", she said of her powerful experience. "Like forgiveness, hope can be a very powerful thing; very human, and very hard to find, but once you find it, can be incredibly transformative."

The blood in our bodies is saline; an ancient link to our oceanic beginnings on this planet, and as we only have one blood stream in each of us, so the planet only has one ocean. Alanna Mitchell wants us MSE students to "keep going", "the MSE is great because it is interdisciplinary, and that's where the future lies," she encouraged. Whatever your domain, as Mitchell said, look through our great window of opportunity, and go full steam into a future which has a vibrant and healthy ocean system.



Important Monkey Business

with Prof. Colin Chapman, Professor at the MSE

by Melanie Lefebvre, MSE Reporter

I had the pleasure of hearing Dr. Chapman, give a lecture for the McGill School of Environment's Mini-Enviro lecture series. There is a surprising amount of diseases that humans and primates have in common, such as Ebola, HIV/AIDS, E.Coli, Giardia, Salmonella, Elephantiasis and more. HIV was actually first spread because of a human-primate contact, originating in chimpanzees and mangabeys. One of the principle problems fueling increased disease spread is the rapid elimination of primate habitat. Natural resources, such as the forests of Uganda are being consumed at an unprecedented rate. If the forest is being logged, burned and harvested, there is incrementally less space for groups of monkeys to rove, eat, sleep and procreate.



"An area the size of Florida is cleared in tropical countries every year". This area supports 32 million primates. By clearing this land, we are committing 32 million primates to death every year."

The basis of Dr. Chapman's lecture was to inform us how we can learn about the spread of emerging infectious diseases from primates. "This is a field I find fascinating, but

also scary," were Dr. Chapman's opening lines, "there are social and ecological impacts, and I explore the ecology of infectious diseases." Looking at how quickly HINI has spread, one can only imagine how quickly new forms of HIV could span the globe. ...cont'd...



Like the stories you hear about bears roaming urban regions, raiding garbage cans, so it is for the people in and around Kibale National park, Uganda where Dr. Chapman witnesses many of these realities. It may be cute to see monkeys eating bananas in a tree, but not when you were saving those bananas to feed your own children and not if the increased contact with that monkey spreads an infectious disease. Conservation of primates and primate ecosystems are two of Dr. Chapman's main focuses in his research as a McGill professor.

"Whole communities of gorillas can be wiped out (when people get too close). There is a major decline in primate populations in all of central Africa," Dr. Chapman noted. One documentation shows that 93% of a population was wiped out within several months because of Ebola. The people who are most drastically infected with trans-species diseases are those who get close to them, like illegal bushmeat hunters.

Dr. Chapman and other experts in the field believe that emerging infectious diseases are on the rise. This could be a sign that we're getting better at discovering new genetic varieties of diseases we already familiar with, or it could be a bad sign of a world in decline. One good way of ensuring that the wheels of change move in a positive direction is to visit the Kibale Health and Conservation Project website: <http://kibale-health-conservation.mcgill.ca>, and learn more about the on-going research and developments in local health care.

Third McGill School of Environment Symposium on Biodiversity Environmental Research



The MSE is pleased to announce our third McGill School of Environment Symposium on Biodiversity Environmental Research In Collaboration with the Convention on Biological Diversity, December 7 and 8, 2009.

This event is motivated by the growing need to bring together ideas and research findings from different disciplines to develop new approaches to environmental research.

The Opening Address will be given by Ahmed Djoghlaif, Executive Secretary of the Convention on Biological Diversity, under the United Nations Environment Programme (UNEP).



Ladies and Gentlemen, please mark your calendars!

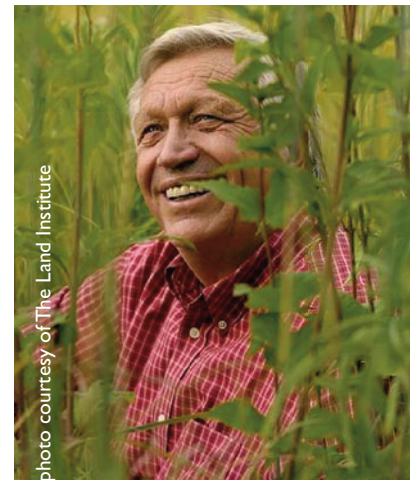
MSE Annual Environment Public Lecture

February 10, 2010, at 6:00pm, New Residence Ballroom, 3625 ave du Parc, Montreal
Admission is free; no registration is required.

Special guest speaker will be the brilliant geneticist philosopher, Wes Jackson

Dr. Jackson is the founder and president of The Land Institute www.landinstitute.org. He established and served as chair of one of the United States' first environmental studies programs at California State University-Sacramento. Jackson then chose to leave academia, returning to his native Kansas, where he founded the non-profit The Land Institute in 1976, with the main goal of developing Natural Systems Agriculture; it also publishes The Land Report, a newsletter about American sustainable agriculture and agrarianism.

Wes Jackson is recognized as a leader in the international sustainable agriculture movement. He was a 1990 Pew Conservation Scholar, in 1992 became a MacArthur Fellow, and in 2000 received the Right Livelihood Award. Life magazine named Jackson one of 18 individuals it predicts will be among the 100 "important Americans of the 20th century." He was named one of Smithsonian magazine's "35 who made a difference" in November 2005.



The Good that Comes from Saying 'No'

Jonathan Glencross and the Sustainability Project Fund"

by Melanie Lefebvre, MSE Reporter

Every now and then, you have the opportunity to meet incredibly inspiring individuals who you know will make great change in the world. One of these individuals is visionary Jonathan Glencross, a 3rd year MSE student in environment & development, minoring in philosophy. Sharp as a tack and won't take no for an answer, Jonathan has put in significant work to bring McGill up to speed regarding sustainability and bridging the gap between students and administration.

The Sustainability Project Fund (SPF) is his most recent contribution, which has been a record breaker for McGill regarding the vote alone. More than twenty-five percent of the undergraduate student body (5,700) voted, and of those, 79% were in favor of the sustainability fund downtown, with 88% on Macdonald campus. This was the second biggest turnout for a vote in Students' Society of McGill University (SSMU) history. Nineteen percent of the students who voted were against the fund, but Jonathan is not discouraged by this, "an overwhelming majority, I would love to see Stephen Harper get 79% on anything he ever did" he said during an interview with the MSE journalist in Montreal this week.

Jonathan has also taken a lead role in the McGill Food Systems Project, is the coordinator for the Sustainable McGill project, is involved with the sustainability working group, attends SSMU environment commission meetings, and sometimes goes to the four classes he is registered in this semester. "I skipped my class this morning to work on this fund because it's clearly more worthwhile, and I will continue making decisions in the sense of asking where I am most effective. I find it hard learning things in the classroom when you're not effecting change locally, too."

Jonathan's 215 person campaign team for the SPF contacted about every environmental and social group on campus and made over 100 class announcements. The team also created a 2,450 member-strong facebook group in 6 days during the campaign, which is impressive in itself. "There has been an overall positive reaction from everybody. There have been reservations and hesitations, but no significant opposition."

The fund will charge a \$0.50 per credit, non-opt-out-able fee through tuition over a three year trial period. Funds will be available to students, administration and staff alike. All funds from students will be matched to the cent by the University. "If students are willing to pay up front, it needs to be recognized that it's a meaningful thing to do, and that is by a matching component."

The fund is up for review in three years. By then, an estimated \$2.5million will have been raised. "It's a lot of money, and is the biggest sustainability fund of its kind in a North American University to date. By then, you will have to question if it is responding to the needs of what we originally set out to do."

Further development of SPF took place when Jonathan began researching the different ways other universities have run sustainability funding projects, and then began forming a proposal which led into negotiations. "It became obvious that as students, we weren't going to move forward on a self-operating model. We felt it was more meaningful to have a matching component with administration. The polarized culture of "us vs. them" that we have right now at McGill is less than trusting, and the proposal addresses this. Trying to break down this mentality will bring out the best in people. Trust is integral, and consensus and parity are really important aspects of this fund."

Jonathan's biggest hope is that a sustainable campus and a culture of sustainability will be created at McGill where applied student research can take place. "If we create an environment where students focus their coursework on making change locally, and if people commit to the idea of transforming this campus and their lives to be sustainable, and continue to be a sustainable citizen when you graduate, then you are transcending the many obstacles."

To learn more about funding details, and about the project itself, please visit: www.votesustainablemcgill.ca/about.php and www.ssmu.mcgill.ca/environment .



Jonathan Glencross, U3,
B.A., Environment &
Development, Philosophy

photo courtesy McGill Alumni



The Power of One

Maggie Knight and the Climate Movement

by Melanie Lefebvre, MSE Reporter

Maggie is a U2 BASc Environment student minoring in Economics. She has been involved with many environmental initiatives on campus, including Greening McGill, The Plate Club, the McGill Food Systems Project, Gorilla Composting, and Journalists for Human Rights. Maggie is also in her third year working for SSMU as one of their Environment Commissioners, where she helps connect and support sustainability initiatives on campus, runs a website representing sustainability concerns to Administration, and works on SSMU sustainability policy such as the recently passed Five Year Plan for Sustainability.

If that juggling act isn't impressive enough, then she is also currently doing an internship with Professor James Ford. This research entails increasing awareness about the impacts of climate change in Canada's North and the lack of adaptation measures to help communities cope with the already significant changes they are experiencing.

Maggie focuses a lot of her attention on the issues surrounding climate change, and is involved with one of the biggest Canadian youth movements for the climate. Most recently, this brought her to Ottawa for Powershift Canada in the biggest gathering for the environment ever recorded on Canadian soil. The following interview should leave you impressed and ready to step up to the challenge as Maggie has.

How did you first get involved with Power Shift Canada and why?

I've been involved with the youth climate movement, primarily through the Sierra Youth Coalition (SYC), for several years. In the winter of 2009, I coordinated the McGill delegation to Power Shift US. It was such an inspiring experience to see how much we all grew from that experience and how many new ideas we brought back to Montreal, so I jumped at the opportunity to get involved with bringing Canadian youth together for Power Shift Canada. I decided I could best help out with Recruitment because I love talking to people, building capacity, and communications—and I already had connections with many people across the country through SYC! I ended up coordinating a team of over 200 people in every province and territory, supporting them with their outreach, fundraising, and logistical efforts.



Maggie surrounded by her natural habitat in Victoria, B.C.

photo credit: Frances Litman

What are your plans after McGill?

I'm hoping to work in environmental policy. I'm particularly interested in how federal and provincial legislation can support and integrate community-based solutions to sustainability issues. Different communities have different resources and challenges—different ecologies, different demographics, different skill sets. I think if we are to truly revolutionize our society into something sustainable, we need to be able to find solutions that make sense for each community, and draw on the strengths and ideas of each community to make that happen.



MSE Speakers Series

The MSE Speakers Series again this fall brought 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.

Prof. Colin Chapman and Prof. Ismael Vaccaro

Department of Anthropology and School of Environment
Like herding fish: overfishing, free riders and reinventing collective action in Eastern Africa's lakes

Neil Craik

Centre for Environment and Business, University of Waterloo
Subsidiarity and environmental Federalism: The emergence of 'new governance' in finfish aquaculture in Canada

Mark Purdon

Lecturer, McGill School of Environment
Is the carbon market failing? - The moral limits of climate change policy

Holly Dressel

Emerging and re-emerging diseases as a function of failed paradigms. H1N1, avian flu, hoof and mouth, mad cow and the lessons of history

Nicholas Ogden

Infectious diseases and the environment: Lessons learned and lessons skipped



Your donations can help us support awards and grants such as:

Vivien Lewin Field Study Endowment Award 2009 -2010

To be awarded to meritorious MSE undergraduate students on a 3 year rotational cycle basis. The award supports students who wish to take a McGill recognized field study abroad program or have a pre-arranged independent course or honours course that involves field research abroad.

We are pleased to announce this year's winners:

Tatiana Orozco, U3, B.Sc., Biodiversity & Conservation
Kathleen Whysner, U3, B.A., Environment & Development, International Development Studies

Both winners will be working on the environmental impacts and geographical context of mining in Latin America (Panama).



McGill School of Environment Visiting Scholar Award

The MSE has established an award which would invite applications from visiting scholars who would like to spend between 4 months and 1 year at the MSE.

Portrait of a Scholar, Domenico Fetti (1589-1623)

MSE Undergraduate Research Grants 2009 -2010

The funds are designed to support interdisciplinary environmental research undertaken for course credit.

We are pleased to announce this year's winners:

- 1) Philippe Brunet, U3, B.Sc., Ecological Determinants of Health Domain - Population, International Relations, Hispanic Languages (Supervisor: Catherine Potvin)
- 4) Lachlan Crawford, U3, B.Sc., Ecological Determinants of Health Domain - Cellular, Human Nutrition (Supervisor: Marilyn Scott)
- 2) Cayleigh Eckhardt, U3, B.A., Honours Environment - Environment & Development, Political Science (Supervisor: Ismael Vaccaro)
- 3) Katherine Milbers, U3, B.Sc., Ecological Determinants of Health Domain - Cellular, (Supervisor: Colin Chapman)

Erratum:

Spring 2009 edition, Mount Allison University is in New Brunswick and not Nova Scotia as seen in page 4 photo caption. Thank you Anne Murdoch for picking up on this error.

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)

Jeanine Rhemtulla (Geography)

Anthony Ricciardi (Redpath Museum)

Raja Sengupta (Geography)

Renée Sieber (Geography)

Ismael Vaccaro (Anthropology)

Faculty Lecturers

George McCourt

Joan Marshall

Kathryn Roulet

Staff

Danielle Lefebvre

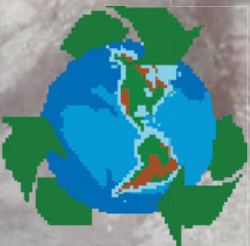
Shannon Scott

Christina Zhu





photo credit: Frances Litman



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*"Your support
helps us to address
the environmental
challenges
of our time"*

