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This newsletter is electronically sent to MSE registered students on a bi-monthly basis. If you are not an MSE student, and wish to receive future copies, contact me and I will be happy to add you to our mailing list.

What is listed here are only those items, listed by date, which do not live on specific websites. The balance of the items appear on the newsletters themselves.

January 2009

Chris Turner, Special Guest Speaker at the MSE Annual Public Environment Lecture.
by Shannon Scott, MSE Administrative Officer

Yes, the one and only Chris Turner is coming to the MSE, Thursday, February 5, at 6:00pm. Are you getting the idea that you should know this man?

More information

Chris Turner is the MSE's guest for our Annual Public Environment Lecture. Chris Turner is the author of the national bestseller The Geography of Hope: A Tour of the World We Need (Random House, 2007), which was nominated as finalist (non-fiction) for the 2008 Governor General's Literary Award and named as one of the Globe & Mail's Best Books of the year.

Read more about this interesting person and our public lecture here.

Chris has graciously agreed to host two student roundtables during his visit.

Thursday, February 5th @ 2:00 pm (downtown campus – MSE conference room) – RSVP Christina

Friday, February 6th @ 1:30 pm (Macdonald campus – Rowles House) – RSVP Danielle

Please RSVP the appropriate person to attend these student events.

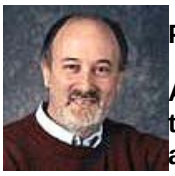
David Bornstein, Special Guest Speaker at the Annual Macdonald Campus Founders Day celebrations.

The Faculty of Agricultural and Environmental Studies has invited journalist and author, David Bornstein, *BCom '85*, to speak at the Macdonald Campus Annual Founder's Day celebrations, which will commemorate the 178th birthday of Sir William Macdonald, the philanthropist who gave the land and his name to McGill's West Island campus.

More information

The festivities will kick off with a wail and skirl of bagpipes, followed by presentations of the Golden Key Awards that recognize outstanding students in the faculty of Agricultural and Environmental Sciences. These are followed by a presentation by the keynote speaker, which this year is David Bornstein, who will speak on "How to Change the World, Social Entrepreneurs and the Power of New Ideas.

Everyone is invited. Read more about David Bornstein.



Peter Victor, Special Guest Speaker at the MSE Speakers Series.

And last, but not the least, is another author you should get to know. Come meet Peter Victor, Professor at the Faculty of Environmental Studies at York University, who will be speaking to us on Monday, February 9, at 12:30pm, at the Redpath Museum Auditorium, as part of the MSE Speakers Series.

He will also be available to you at Librairie Paragraphe Bookstore for the signing of copies of his book *Managing Without Growth, Slower by Design, Not Disaster*, on Monday, February 9, at 6:30pm, along with our own author in residence, Professor Peter Brown, with his book, *Right Relationship: Building a Whole Earth Economy*.

More information

Peter Victor is an economist who has worked on environmental issues for over 30 years as an academic, consultant and public servant. He was the first economist to apply the physical law of the conservation of matter to the empirical analysis of a national economy and was one of the founders of the emerging discipline of ecological economics. His current research includes a systems analysis of the Canadian economy exploring the interplay of growth, employment, poverty and the environment. Read more here.

April 30, 2009: Deadline for MSE Award for Teaching Assistance Excellence

Now is the time for all good students to nominate their favourite TA for an MSE award. The TA can be chosen from this term, winter 2009, or from fall 2008.

More information

The McGill School of Environment recognizes the contributions of our Teaching Assistants (TA) through our Award for Teaching Assistant Excellence. This award is given to an outstanding TA who has helped students in an effective and stimulating manner or has excelled in the quality of feedback during marking of written work and oral presentations.

Nominations will be accepted for TAs of any ENVR course. The name of the recipient will be announced in May of each year. Recipients will receive a letter of commendation along with a cheque of $200.

Print out a nomination form MSE TA Award of Excellence Nomination Form , scan and save it, and then Email my MSE TA Award Nomination to Danielle .

Or, you can print it out and fax it to Danielle Lefebvre at (514)398-7846, or send it in the McGill internal mail system to:

Danielle Lefebvre
Administrative & Student Affairs Coordinator
MSE TA Award Nomination
McGill School of Environment, Rowles House
21,111 Lakeshore Rd.
Ste-Anne de Bellevue, QC H9X 3V9

Neuroethology of Marine Invertebrates Course, and Summer School at the Bamfield Marine Sciences Center, Vancouver Island

March 2, 2009, is the deadline for applying to this course, or any of the other 14 courses offered during the summer, at the Bamfield Marine Sciences Center, Canada's premier coastal research and training facility for a unique hands-on learning experience.

More information

Course Description

Neuroethology is an integrative approach to understanding the neural control of behaviour by studying environmental stimuli, sensory systems, nervous system structure and function, motor systems, and behaviour. This course will (in 3 short weeks) provide an introduction to invertebrate neuroethology and some of the neurobiological and behavioural methods used by researchers. Lecture topics will cover neural conduction, synaptic transmission, neural circuitry, sensory and motor systems, and behaviour . The bulk of the class will be in the laboratory, working with marine invertebrates to learn several techniques: behavioural analysis, neuroanatomy (microscopy), extracellular recordings and intracellular recordings. Students, whether senior undergraduates or beginning graduates, will gain both knowledge and technical expertise useful to pursuing their own neuroethological research questions.

Location and Costs

The course is being taught at Bamfield Marine Sciences Centre on Vancouver Island, British Columbia, which boasts modern research facilities, hands-on experiential learning, and an unparalleled natural environment. Full costs for the 3-week course, including room and board are ~$Can1700 (this varies depending on the student's home institution, so please follow the link below for more detailed information). Scholarships may be available on a competitive basis ($100 to $1000).

Application and Further Information

Application deadline for this (and the 14 other courses offered at BMSC this summer) is Mar 2, 2009.

www.bms.bc.ca, or contact one the instructors:
Russell Wyeth
St. Francis Xavier University
rwyeth@stfx.ca
James Murray
California State University, East Bay
tritoniadiomedea@mac.com

The 5th Annual McGill Montreal Thankathon

February 19, 2009 at 5:30pm., Martlet House, 1430 Peel St.
Thank you! Thank you! Thank you!

More information

The McGill Alumni Association is conducting its fifth Annual Montreal Regional Thankathon. Help us thank generous alumni for their support and continued commitment to the University. Join us for an evening of fun, food, prizes, and phoning.

Keeping it Real and Keeping it Green
Sustainable Studying *by Vanessa Farquharson, National Post, January 7, 2009*

Sustainable studying: How Canadian campuses are keeping it green.

Environmental crusader Beth Savan hopes to develop a "culture of sustainability" on the University of Toronto campus.

The academic environment tends to be a sustainable one, for various reasons. Students surviving on government loans are usually forced to share living space, cook their meals at home, walk or cycle to

class and lug around coffee Thermoses and reusable water bottles to save money. Also, whether you're learning or teaching, there's generally a heightened level of awareness about global issues, such as climate change.

More information

At the same time, however, there are other aspects of university life that are inherently un-green, such as the paper waste that comes from thousands of essays, tests and notebooks, the energy that's drained from 24-hour computer labs and science equipment, the junky cafeteria food, vending machines and so on.

But because the population on campus tends to be a self-conscious one, these issues usually get noticed quickly. And thanks to the informed, close-knit community of eager students and erudite faculty who generally don't have to contend with too many layers of bureaucracy, things can start changing at a faster rate than usual.

Take the University of British Columbia. It offers more than 300 sustainability-related courses, was the first Canadian university to receive Green Campus Recognition from the U.S. National Wildlife Federation and was also first to sign the Talloires Declaration back in 1990, a 10-point action plan for promoting environmental awareness throughout the university, from teaching and research to operations and infrastructure.

Further north, the University of Northern British Columbia boasts similar claims of being environmentally driven and has officially trademarked the moniker, "Canada's Green University."

In Ontario, there's the University of Guelph, a long-time pioneer in sustainable living. Students and faculty there have been recycling and composting for more than a decade, and the cafeteria has almost always offered both local and vegetarian options. Now, it's partnered with Zerofootprint and has a five-year plan to reduce its carbon emissions.

But where sustainability matters most in this country is arguably at the University of Toronto, which has a population of almost 100,000 - the size of a small town.

Like UBC, it has its own sustainability office, which recently moved into a larger space after its staff launched a series of successful eco-initiatives on campus. There's Bikechain, for instance, a complimentary bicycle repair service run by students, as well as a program called Rewire, which uses social marketing strategies to reduce individual electricity consumption in residences (this is now being adapted and expanded to departments, offices and labs). They also started a Ban the Bulb campaign and an effort to retrofit all the outdated chillers in the older university buildings.

"Our long-term mission is to develop a culture of sustainability on campus," says Beth Savan, who heads up the office. "So we're interested not just in short-term measures but in really changing the face of the university."

Sitting at her desk on a cold January evening, surrounded by fluorescent lighting, Sigg bottles and used furniture, Savan explains the advantages of testing new green initiatives within the confines of U of T's campus.

"We treat the university like a lab," she says. "Once we've developed a model, if it succeeds, then we can spin it off to other locations in the province and country. Chances are if something works here, it's very likely to work elsewhere.

"The city [government] is already familiar with the work we're doing, particularly on climate change, and we have close relationships with the hospitals as well."

Indeed, almost any business, organization or institution in Toronto could learn a few things from U of T when it comes to practices that are not only environmentally friendly but also cost-effective. For example, its cafeterias are working with Local Food Plus to incorporate seasonal, locally grown produce into as many meals as possible. And, while most streets in Toronto offer three-holed garbage bins with slots for glass and paper recycling, U of T's bins include additional slots for food waste, polystyrene and batteries.

Both these initiatives are clearly effective and, with a bit of planning, could be easily applied to another setting, such as an office or a condo tower.

Again, though, as Savan points out, U of T is really its own entity. The green goals of those living and working on the downtown campus may differ from the objectives of people living in rural communities. And while its sustainability office may be predominantly concerned with retrofitting old buildings, other cities and universities are looking at how to create new buildings with as small a carbon footprint as possible.

One of these is Lakehead University, in Thunder Bay, Ont., which has plans to construct the first LEED-Platinum certified campus in Orillia, Ont., by the fall of 2010.

"I believe universities have an obligation to provide direction and set standards," says Lakehead's president, Fred

Gilbert. "So when we decided to go ahead with a new campus, it became clear that we also had to be consistent with the academic programming being rolled out there, like environmental science."

Much like Savan, he also believes the whole campus-as-guinea-pig factor is crucial, and that universities should start playing an even bigger role in advancing the green movement.

"It can be truly experimental in that we can provide the opportunity to test out different modalities that are still unproven," he says. "Students will have a living laboratory right at their fingertips, and they'll also have the sense that this is something new, something they can help shape - and as a result, there's greater engagement."

And engagement is key. As Savan and her team at the sustainability office have learned, bombarding people with information only achieves so much.

"It isn't as if we're having a big uphill struggle convincing people that sustainability is an important issue," she says. "Most people are open and interested in changing their behaviour. The biggest impediments are that they don't know what they're allowed to do and what they're able to do that can actually make a difference.

"But once they start making changes," she adds, "it's rare that they stop."

Close

Presented by: Shannon Scott, Administrative Officer, McGill School of Environment

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WEEE, Waste Electrical and Electronic Equipment
by Dennis Fortune, Sustainability Director McGill University

Waste Electrical and Electronic Equipment (WEEE) is a waste type consisting of any broken or unwanted electrical or electronic appliance. As electronic equipment becomes obsolete the regulations surrounding the disposal of electronic equipment may be the first time an individual or department has to think about this type of waste.

More information

Cathode-ray tubes (CRTs) used in computer monitors contains lead, mercury, cadmium and phosphorous as well as many other toxic elements found in smaller quantities. Larger CRTs can contain up to 2 kg of lead, used to make a clearer picture and to provide a shield from the radiation inside the monitor.

McGill has established a management program www.mcgill.ca/wmp for hazardous material and will pick up old electronic equipment for proper recycling www.mcgill.ca/wmp/electronic/. We don't want electronic equipment ending up in our collection bins for non-hazardous solid waste. To achieve a sustainable future, environmental protection must constitute an integral part of our actions today. We as responsible members of the McGill community must demonstrate the transfer of knowledge to our daily actions. Thank you in advance for your cooperation.

Finding the Energy: Facilities and Operations presentation gets McGill fired up about Energy Management
by Hilary Best, BA(Hons) Geography, Double Minors in Environment and Economics, MSE Journalist

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.

More information

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."

Marilyn Scott, Director of the McGill School of Environment (MSE) was impressed by the wide array of McGillians who

came to learn more. "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."

Presented as a nine-point plan, Mr. Aylwin and his team have targeted the following areas for improvement:

1) Developing and adopting an energy action plan requested by the Ministry of Education, Leisure and Sports.

2) Developing of an energy plan for every building. This step has included measuring energy consumption for each building and implementing savings projects at McLennan/Redpath Library and James Administration.

3) Assigning of responsibility for plan implementation, a particularly important step in a disjointed and often insular campus.

4) Determining the quantity of greenhouse-gas emissions for McGill energy production systems.

5) Achieving a 12% reduction in energy intensity and 30% reduction in GHG emissions relative to 2002-2003 by 2010. Facilities and Operations proudly reported that McGill has met this target.

6) Implementing energy saving projects to achieve selected targets.

7) Adopting sustainability standards for the construction of new buildings or facilities.

8) Adopting sustainability practices for the retrofit of facilities and their use by occupants.

9) Developing a training program for McGill employees to promote sustainable practices.

While pragmatic, the Energy Plan still faces some key obstacles. "Incentives are still a big problem", reports Poisson. McGill has had trouble justifying the investment in energy saving initiatives because much of the financial payback goes into government coffers. "But these challenges are NOT excuses for inaction," says Poisson. "Various private and public programs exist to support this kind of work."

Poisson also points to a gap between building management and users that prevents optimal energy conservation. "Facilities will continue to have escalating costs and funding problems if they don't engage the community, and we will still be uncomfortably hot or cold and irresponsible energy consumers if we don't demand more." A successful plan requires better communication and collaboration between these groups.

Poisson affirms, "there is a significant shift in thinking, but the outcome is still ambiguous. Generally speaking, people need to be more creative, expect more from themselves and their peers, and look to McGill's own teaching, course work and research capabilities as part of the solution to these challenges."

Prof. Scott couldn't agree more: "We need to think more aggressively about how we can be involved. I've already had conversations with [Associate Vice-Principal, University Services] Jim Nicell and [Sustainability Director, University Services] Dennis Fortune about the ways that the MSE can support these initiatives through courses and extra-curriculars, and trying to find a way that we might help with providing continuity for multi-year projects. I'm very interested to see how we can incorporate more sustainable energy practices in our activities at the MSE."

And that's where students may play a tremendously important role in bringing this plan from good to great.

Alywin suggests that individual actions are an important step. Turning off the lights, using the stairs and reporting overheating to Facilities and Operations can make a difference to the overall numbers if enough people take up the cause.

"Get involved, share and explore ideas and become an ambassador of sustainability and energy saving," says Alywin, citing a number of student projects which have helped his department to improve the plan.

Bridging the gap between knowledge and action is a point of passion for Poisson: "It is obvious to me how solving these types of complex local problems could be beneficial to the learning experience at McGill," says Poisson, "but we need to show that we want to be included and work together on mutually beneficial projects."

"If enough of the right people believe in this vision of improving the learning experience by collectively transforming our common surroundings, as a reflexive process and are willing to act on it, with strong leadership, then the future looks great. Otherwise, nothing significant will change."

Points, Problems and Propositions - The Take Home from AASHE 08'
by Jonathan Glencross, BA (Environment & Development) and David Gray-Donald, BASc (Environment)

It was AASHE's largest conference with close to 1700 participants, having have tripled their membership over the past two years. With growth comes energy, enthusiasm and complexity, but we will speak to that later.

The conference began with a student summit, which was a series of breakout groups and discussions. The themes were:
- Green Funding Mechanisms
- Greenhouse Gas Inventories
- Power Shift 2009
- National Teach-In
- "Everybody Eats" (Brainstorm session for Sustainable Campus Food Services)

More information

We arrived just in time for the second half of the session. After hearing the list of discussion topics, a few students took the stage to suggest open space topics. The open space session of the summit designed to encourage conference attendees lead topics of their choice. By far the largest discussion group, close to 50 students formed a circle near the front of the room and began an informative but free flowing conversation about environmental justice, anti-oppression and diversity. The group focused on higher educations role in maintaining the concept of equity throughout all discussions of sustainability.

Oh, and did we mention that before the end of the first day the students had made a video which was later sent to Barack Obama? Although the original copy is not yet available online, someone was able to capture part of it on their personal camera. See it here.

Keynotes

Lester Brown
The first of four keynote speeches, highlighting points from his book Plan B 3.0 'Mobilizing to Save Civilization". Primarily focused on the American transition to wind energy. We got a copy of the book for free!

Van Jones

Invent, invest, include. By far the best part of the 3 days in Raleigh. An inspirational, funny and motivating talk about inclusion. He spoke about low cost weathering projects to improve energy efficiency in the 'low-hanging fruit' of American slums, creating jobs and reducing consumption. Click here to watch. He held strong that you cannot have a vision for the future without a movement, a message we would take home to McGill.

Peter Senge

Spoke about the mechanization of language and culture, the industrialization of education and workplace – and the consequences on the living environment. He discussed how the excessively goal oriented and uniform institutional practices have lead to a severe loss of creativity, citing the standardization of exams as one example. He also gave parallel examples of the consequences of target-setting approaches in corporate culture which have severely debilitated many businesses and the environments in which they work. "When youth come to the table, we should listen." Would be a great keynote speaker for the McGill Sustainable Business conference or guest lecturer in any faculty.

Vanada Shiva

We decided to walk the talk on the last night of the conference, sampling only LOCAL beers at a neighbourhood pub called the Flying Saucer (possibly the most deceiving name for a quality local hotspot we have ever encountered). As a result, we missed the 8:00 am keynote. Fortunately it will be made available online. In the short excerpt that has been made available online, Shiva called for all post-secondary institutions to be examples of a community within a sustainable food system. This being the goal of the newly emerging McGill Food Systems Project, individuals can take on this challenge by contacting Beth Savan at: b.savan@utoronto.ca.

Keynote videos are available here.

Presentations, Panels & Workshops

Creating a Roadman Green Purchasing Policy

Brian Yeoman,
Director of Education and Development,
National Association of Educational Procurement

By Far the best workshop we attended. The workshop gave a detailed 7 step process and framing questions for creating a Green Purchasing Policy.

1. Who are the technical and policy resources? (i.e., peers, professional organizations, consultants, other public resources)

2. What information and data are required to begin this task? (commodities, dollars, transactions, policies, procedures, Provincial/Federal laws and regulations)

3. When is it likely that the "green purchasing program" can be implemented?

4. How will non campus stakeholders be included in the formulation of the program? (i.e., regents, political subdivisions, vendors, regulators)

5. What approaches will be used with students? Faculty? Staff? (i.e., tactics, techniques, policies, procedures)

Mr. Yoeman emphasized this as the most important element of the entire process. He explained that his success in getting Green Puchasing off the ground and his career as VP Operations in general resulted from a concerted effort engage students, whose scepticism was easily overcome through transparency and delegation of responsibility: if you can show students that the administration is willing to lead by example, they can achieve things which the professional boundaries of administration and staff prohibit.

6. What financial and human resources are required to implement the program?

7. What are the critical success indicators regarding this green purchasing program? (i.e., metrics, outcomes, costs, feasibility)

AASHE members are encouraged to obtain a copy of the monograph here.

Each of these questions has a detailed series of points and advice, all of which can be found in a PDF of the presentation available on the conference website. See here.

The 'Canadian' perspective
Beth Savan , U of T Sustainability Director
b.savan@utoronto.ca.
Ashley Taylor , U of T Sustainability Office
ashley.taylor@utoronto.ca
Doug Wortherspoon , SustainableCampus, Senior Partner
doug.wortherspoon@gmail.com

This session was dedicated to the general trends of Canadian institutions. After the presentation, breakout groups were assigned to discuss the topic of creating a national network for sustainability in higher education, communicated through office's of sustainability across Canada. Goal: Build partnerships, share best practices. Need to focus groups around specific areas of the university to facilitate communication (e.g. transportation, food, energy). If interested, contact Beth or Ashley. However, it was brought up that networking is often hard enough within one institution and that if we are going to start opening the lines of communication on a national scale we need to share what we do wrong. Brutally honest and transparent sharing helps foster trust and is an indication of the genuineness/motivation of all parties, and allows for us to build off the failures of others. There was also a suggestion to have our own Canadian version of AASHE, to lesson our footprint and compare apples with apples.

Sustainable Endowment Practices
Morgan Simon , Executive Director of Responsible Endowments Coalition
morgan@endomentethics.org
Heidi Welsh , Head of Sustainability Research & Outreach, RiskMetrics Group
heidi.welsh@riskmetrics.com

Unfortunately no presentations are currently available from the Green Endowment session, but contact information of the endowment panel was. We should note that this could be particularly relevant to McGill given that the investment/endowment section of the 2008 Sustainable Report card received a D, the lowest mark of all areas considered.

Environmental Justice
Lessons and Suggestions from the "Open Session" discussions

It became apparent after the third open space session that action needed to be taken immediately if we wanted things to change. So Jonathan volunteered to bring the lessons and suggestions of our series of meetings to the only closed-door meeting of the entire conference on the morning after the closing ceremony. A graduate student from Berea University agreed to join. We premised the polite interruption by stating that keynote Peter Senge invited us to the conversation by saying that we should be a society that listens when youth come to the table. Also, we acknowledged that AASHE has done a fine job supporting the environmental aspect of sustainability, and has also shown support for the economic leg of the stool, but that there is much work to do on advancing the social justice aspect. We thanked them for bringing such inspiring keynote speakers and challenged them to support an EJ working group to increase the diversity of discussion and membership of AASHE, and continue to support and inspire EJ work in the future.

The goal is not to create a working group but to institutionalize the justice aspect of sustainability into;
1) their operations
2) the planning for, the direction and format of future conferences

- Increased diversity could be achieved through things like: outreach (both centralized and decentralized), in terms of communication and financial support, particularly for the local grassroots/community based movements where accessibility was an issue.

- The role of local indigenous groups as a priority for future conferences, following the example of a Sustainability conference in Montreal conference, where a leader of the local indigenous group gave a keynote where he welcomed everyone to Turtle Island Montreal.

- That both institutional ego and the push for examples of best practices lead to a lot of PR style presentations, rather than discussions. We recognized the need for motivating success stories but argued that transparency was a two way street, and we need to learn how to share our failures. It was also brought up how the emphasis on presenting rather than sharing/discussing and was obvious, and reflects the lack of progress in some central components of sustainability. No one likes to be talked at. For future presenters: leave time for discussion, but also prepare questions for the audience to spark it.

- We explained that our intentions were not to point figures but lend a hand. We want to be a part of the process and continue to support what AASHE has initiated. We also told them that the fact that we were standing in front of them that morning was an indication that process they had started was working, and that we would be following up with a formal letter. The reception was overwhelmingly positive, which was very encouraging and served as a bit of a surprise. A few board members offered coordination support, and even as we left the room one board member ran out to say that these issues have been discussed previously by the board, and that although they were working on it he said "hold us accountable", and ran back into the meeting. Jonathan did not stop smiling for the rest of the week.

- These same lessons can be applied to McGill's annual Re-Think Conference, which we have started to bring into discussion at Senate-Subcommittee on the Environment meetings.

Sustainability and Curriculum

There were so many presentations and workshops on the topic of "Curriculum" that it is hard to pick one to focus on. The overall idea is that sustainability should be something present across the curriculum and something that students can be involved in projects on, regardless of their area of study.

The AASHE Sustainability Across the Curriculum Workshop aimed to provide teachers with the tools needed to help students address the complex issues of sustainability in their careers. The AASHE Workshop showed teachers how they can use examples of sustainability issues from the real world to teach students the learning objectives that must be taught in each course. The results have been impressive. Often a core of faculty emerges where the AASHE Workshop or similar workshops are held, and this core faculty open discussions with their colleagues and develop a community where sustainability can be constructively addressed throughout the many curricula at the university. Although an English professor may not normally think to bring up sustainability issues in a literature course, they may feel more comfortable doing so after having talked to an ecological philosophy professor on the subject of systems theory. The conference brought up and examined several methods for making students more effectively aware of sustainability issues in there area of study.

A very powerful way of developing this awareness, and also of understanding how the student can effectively make a difference in the world, is through service learning and other hands-on projects. "Service learning" has many definitions, but can be understood as a method of teaching that combines the academic curriculum with meaningful work in the

community. The main idea that we took back to McGill is that, in terms of sustainability, this is not something that should be limited to the ENVR 401 project course. Service learning is something that can be a powerful experience both for students at lower level courses and for the community that the students are working with. The service learning approach opens opportunities to many different areas of the universities curriculum. Students in linguistics, language studies, marketing, sociology, chemistry, urban planning, engineering, etc. could all find projects with local communities. Projects need to be achievable within reasonable time frames or have smooth continuity from term to term to be successful. But only working with successful projects limits student learning as they need to be exposed to unsuccessful sustainability projects, which abound in the real world, in order to learn what works and what does not work. Students also need to learn how to deal with circumstances preventing the fulfillment of their goals. It is essential that there be good communication between those at the university and the community groups where projects may be possible. That, and faculty hesitation or uneasiness, may the greatest factors limiting the use of service learning at McGill currently. As a note, the website www.appropedia.org is a great location to build and learn about service learning projects. It can even act as a location to host an entire course (on www.appropedia.org, caution must be taken to control academic integrity and protect patentable projects when they arise).

Similar to service learning is the development of "appropriate technology." Appropriate technology involves the development of projects where a simple concept from a course is applied in a project to help fix a problem either in the community or somewhere distant where there are limited natural and financial resources. This approach can be concrete, where something is actually made, or it can be somewhat abstract, where a concept from the course is beneficially applied to a theoretical situation.

Another overriding idea from the conference was that students should be exposed to sustainability issues early on in their degree. We are not saying that McGill should model itself after Furman University where all first year students must take a seminar course in small groups (10-12 students each) examining many of the interactions between humans and the natural environment for two terms. While this would be terrific, McGill is a bit too large and we are a bit less naïve than we used to be. Instead, it would be nice to give opportunities in lower level classes for students to do meaningful projects and research, such as service learning and research on the effects of various factors on electricity usage (once we have more buildings properly monitored).

Food Services

In terms of food services, one presentation explored how an institution started tracking food by mass, something potentially useful for McGill.

Food Waste Tracking: The First Step Toward Food Waste Minimization
Andrew Shakman
President, Leanpath Inc.
ashakman@leanpath.com

With rising food prices, it is obvious that minimizing food waste is essential. What is less obvious is how to do that and how, in doing so, a whole range of research opportunities present themselves. Creating a system where all masses of food are measured and monitored through software, such as a well formulated Excel document, would allow us to see exactly how much food is being used and wasted, where and when. By taking and recording masses, we can understand better how to first reduce, then reuse, and then collect and compost the food we buy more effectively. The university's consumption habits change over space and time and having a good understanding of this can help minimize our waste. It can also provide a highly visible and easily manipulated area for research at low and high course levels.

Composting was the topic of several presentations but surprisingly few of them were very progressive. Many "successful" cases are simply universities that happen to be beside large independent or municipal composting facilities or they are so far from an urban center that smell is not an issue, such as UBC. Gorilla Composting, with its work on acquiring machinery to process food waste into a usable compost product right on the downtown campus seems to be breaking ground compared to the universities present at the conference. The idea that did emerge is that while Gorilla Composting is working on building up capacity on the two campuses, the downtown campus may want to investigate using a nearby composting facility to divert food waste from landfill. The Saint-Basile-le-Grand site run by GSI Environment is currently being looked into.

A presentation on implementing reusable containers for take-out orders at food vendor locations on campus was also interesting.

Beyond Disposables: A Reusable To-Go System
Audrey Copeland
Environmental Research and Education Foundation
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Audrey helped design a plastic, dish-washable package similar to a Styrofoam box, dubbed the "Eco-clamshell" to be used for "to-go" orders. The packages were given out once the student had had their ID card swiped and the packaging was out on a loan analogous to a library book. Once they return the package they can use another one and the returned package gets put into the dishwasher. The only problem is building the dishwashing capacity and making sure there is not a better biodegradable alternative given all the inputs to dishwashing. The Plate Club is currently working on these issues at McGill.

Other Cool Session Pertinent to McGill

Recycling During Move In and Move Out
University of Colorado at Boulder
Daniel Baril
Recycling Program Manager,
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Jessica Bradley
Program Supervisor,
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This presentation gave some interesting ideas and shed light on a lot of the problems involved with massive recycling events. Coordination with students, the recycling contractors, and residence staff are essential. Students, given their diverse backgrounds, especially at McGill, need very simple and very clear instructions. The recycling contractors need to have a very simple collection procedure or else there is a high risk of contamination, inevitably leading to the landfill. The residence staff held the whole operation together. The presenters recommend that there be student coordinators for the move in and move out periods to make sure students know where their recycling goes, to make sure there is clear communication everywhere.

The other idea that came from the presentation was that much of what the students in residence discard during the moving season might be very useful to students in the next move in period. A worthwhile initiative would be the creation and promotion of a system where unwanted items are stored after move out and then students about to move in can claim these items instead of buying new and bringing more of the same products. Perhaps a physical market set up at the end of August would be the best alternative. In any case, the idea of waste reduction and recycling during move in / move out should be explored further here at McGill, and has been discussed at the environmental residence council.

Final Notes & Future Conferences

The relevance of our trip and this report is contingent upon giving these ideas some legs. If you have any questions or are interested in discussing the ideas or experiences we have presented, please feel free to contact us.

We would like to thank the individuals and groups who supported our trip to the conference. It was a great experience, and we intend to help make it possible for these conferences to be frequented by many members of the McGill community in the future.

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What makes an environmentalist tick? MSE Profiler:
by Hilary Best, BA(Hons) Geography, Double Minors in Environment and Economics, MSE Journalist

Dr. Mark Goldberg, Epidemiologist, Dept. of Medicine, Royal Victoria Hospital, and MSE co-instructor of the Graduate Option course, ENVR-630, Civilization and Environment, and MSE Associate Member

In December, I met Associate MSE Faculty Member Professor Mark Goldberg for lunch after his routine trip to the gym.

Eager to learn more about Prof. Goldberg's work in the Department of Epidemiology, I kept my mouth full of questions rather than pad thai.

"You're not much of an eater, are you?" he asked.

Between bites of his well-deserved lunch, Dr. Goldberg offered insight into his journey at McGill, his research and life outside of McGill.

More information

Dr. Goldberg grew up in an English-Jewish ghetto in Montreal.

"I just hated it. So I got interested in the environment at a very young age. At that time, I received a book called The Environmental Handbook in which they talked about all of the same environmental problems that we've got today. Nothing has changed and forty years later, I'm still thinking exactly the same way."

In spite of his early interest in the environment, it was other worldly subjects that he pursued as an undergraduate at McGill.

"I wanted to be an astrophysicist," says Goldberg. "But it is very peculiar how things in life turn out. I started master's degree in astrophysics but soon decided that this wasn't for me. So I went to work and became a professional potter after that."

Later, Goldberg would find his way back into environmental issues at the height of debate over nuclear power in Canada.

"I got into the anti-nuclear movement in the mid 70s, where I met two epidemiologists, one of whom was doing research on radiation and before I knew it I was an epidemiologist."

After working at the Montreal Health Department and the Université du Québec à Montreal, Goldberg returned to McGill in 2000.

In the Department of Epidemiology, Goldberg has pursued environmental research topics focused on the health effects of ambient air pollution and toxic chemicals.

"In our latest project we've been looking at 500,000 people from Ontario. We're able to track where they live and can estimate air pollution levels. We then track them over time and record the health outcomes."

Closer to home, Goldberg is studying the effects of NO2 exposure on breast cancer in Montreal women.

"It's a major epidemic and nobody knows why. But it seems to be getting worse and the mixture of air pollutants also seems to be changing. It's the miner's canary hypothesis that ambient air pollution is behind this."

Conducting similar studies for prostate, lung cancer, and childhood leukemia, Goldberg hopes that his work can influence public policy.

Like the epidemiology department, Goldberg has found the interdisciplinarity of the MSE to be refreshing. Indeed, he sees this as a primary strength of the MSE education.

"Knowledge in lots of things – I equate that to wisdom. I think the very interdisciplinary education you receive here is really very useful."

For his part, Goldberg teaches ENVR 630 – Civilization and Environment with Prof. Peter Brown and he has been nothing short of impressed by the caliber of his students.

"Right now, the MSE's greatest strength is its students. When you are taking such a mixed program you have to have a very specific kind of mentality and if you are into environment than you have to care about these issues. In my experience, these are special students."

Combined with an exceptional faculty, Goldberg sees a great deal of potential for the MSE over the coming years. And never has this mission been more important:

"You change the education structure you change the way people think. The MSE has a key role to play in this."

As a proud Montrealer and hockey fan, Prof. Goldberg draws inspiration from McGill's men's and women's hockey teams.

"They are truly incredible. The men's team is mostly francophone. They come to McGill without any English and work incredibly hard to keep up their grades while training seven days a week. I've always found it absolutely astounding what

these kids can do. I've found that team to be very motivational."

Professor Goldberg returns to McGill full time in September after a sabbatical this academic year.

Hilary's Best Updates: McGill's Environmental Groups
by Hilary Best, BA(Hons) Geography, Double Minors in Environment and Economics, MSE Journalist

So what do turnips and flat bikes have in common? Well, the hint "snow" is actually the answer! Read on...

More information

The frigid temperatures of January couldn't keep McGill's environmental groups from going green at this month's activities night. I caught up with many of McGill's environmental trailblazers for the scoop on what these groups are up to and how you can get involved.

Plate Club

An offshoot of Greening McGill, Plate Club continues to grow like a weed this semester. The club will continue to provide dishware to hungry patrons of the SSMU restaurants and student groups planning gourmet events. Reservations are already pouring in for events in this semester and Greening McGill is looking for volunteers to help McGillians enjoy green dining. You can reach them at theplateclub .

Campus Crops

What's a food-growing group to do during the harsh Montreal winter? Campus Crops says they'll be planning for the growing season ahead, of course. The group is working to build a bike trailer with McGill's very own bicycle collective, The Flat. The trailer will help the group to transport heavy items next semester. Campus Crops won't let the weather stop them from greening their thumbs and neither should you. Join them on their sustainability crusade by emailing campuscrops .

Organic Campus

Turnip soup for dinner again? Organic Campus is bursting with excitement about the winter season and wants you to catch root vegetable fever. Offering their famous baskets of vegetable goodness into mid-February, Organic Campus will be also be serving up educational events this semester including cooking classes and movie nights. This group is eager for volunteers to help them on their quest for excellent and sustainable food. If you're feeling organic, check them out at the Organic Corner on the second floor of the SSMU building on Tuesdays from 1-5PM.

Greenpeace

New to the McGill green scene this semester, Greenpeace McGill is the first university chapter of this international organization in Canada. After a semester spent charting the course for this new group, Greenpeace is plans to tackle unsustainable practices on the high seas by promoting sustainable fish consumption at McGill. The group will also participate in Greenpeace's Boreal campaign, advocating for McGill to green its purchasing policies on everything from Kleenex to chemistry swabs. Contact them at greenpeace , or their Facebook group if you'd like to get involved.

The Flat Bike Collective

Rolling into the Shatner building this year, the Flat Bike Collective's enthusiasm for all things two-wheeled remains strong even as the snow falls. This collective offers a variety of workshops led by volunteers to help you maintain your bike. The collective maintains an open atmosphere and hopes that any and all who are interested will stop by during their winter hours, Monday and Thursday 4:30-7:30 in the Basement of the SSMU building. Check them out at theflat.wordpress.com, or email them at theflat.bikecollective . Happy riding!

AUS Environment Committee

The AUS Environment Committee is showing us your waste – and it isn't pretty. This semester, the group is conducting garbage audits to demonstrate how atrocious our garbage habits really are. Look for their results in the Arts Lounge this semester. The AUS Environment Committee is also looking ahead to a sustainable Frosh Week 2009. The committee will be putting together Frosh kits complete with composting instructions and a re-usable water bottle to welcome new students sustainably. The committee will also be helping departmental associations to integrate the environment into their decision making. If you'd like to get involved, contact Drew dePanicis .

SUS Greenweek – ECOuture

Who says you can't have style and sustainability? This year, as a part of Greenweek, the SUS presents the second annual ECOuture fashion show on March 11. This event features the enviro-friendly wares of local Montreal designers. ECOuture is currently looking for models and volunteers to help the event run smoothly. If you're interested, contact: Amanda Frehr-Smith .

SSMU Environment Committee

The SSMU Environment Committee is excited for another busy semester of greening the student's society. The recently launched SSMU environment website will continue to provide a forum for news, discussion, blogs and collaboration between environmental groups on campus. This semester will also see the drafting of a five-year sustainability plan for the Shatner building in addition to a number of environmental conferences in Montreal and Washington. Interested? Check out ssmu.mcgill.ca/environment or send an email to environment.ssmu .

Sustainable McGill Project

They've been in the sustainability business for four years and it seems this semester that the Sustainable McGill Project is really hitting its stride. SMP is partnering with many of McGill's enviro-groups and has come up with some truly innovative initiatives for 2009. Mentoring the folks at McGill Food Systems Group, SMP is proving that green groups at McGill have got it together. SMP is also working with Gorilla Composting to create a workshop for professors to help them integrate sustainability in their curriculum. A great step towards give the needed paradigm shift a shove. Finally, the group is very excited to celebrate the opening of McGill's Sustainability Office on February 11th. If you'd like to get involved, contact the group at sm.project .

Greening McGill

Once again, Greening McGill is offering the whole McGill community ways to green their operations this semester. The group will continue its work with some ongoing initiatives including the McGill Food Systems Project as well as producing a green events guide. Stay tuned for a Greening McGill climate change panel later on in the semester. Looking to get involved? Contact: greeningmcgill .

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