

Visit our website: www.mcgill.ca/mse/

The McGill School of Environment (MSE) was created by three McGill faculties: Agricultural and Environmental Sciences, Arts, and Science. We are now building co-operative relations with the faculties of Engineering, Law, Management, Medicine, and Religious Studies, and providing our students with more opportunities to gain field experience at McGill and other research facilities.

## IDEAS

CANSEE Conference hosted by the McGill School of Environment By Teresa Alper

The McGill School of Environment hosted the 4<sup>th</sup> Biennial Conference of the Canadian Society for Ecological Economics (CANSEE) from August 23<sup>rd</sup> to 25<sup>th</sup>, 2001. The two-day conference, entitled "Ecological Sustainability of the Global Market Economy" drew approximately 300 delegates from a dozen countries. Delegates were treated to a warm reception at Montreal City Hall, followed by a guided walking tour of Old Montreal.

The scope of the conference was broad enough to attract representatives from the non-academic world and scholars rubbed shoulders with government economists, business representatives and students. The presentations covered a wide range of topics, including Eco-pricing, Greening Government Budgets, and Industrial Ecology, to name only a few.

The keynote address was given by Lester R. Brown, founder of the Worldwatch and Earth Policy Institutes.

The McGill School of Environment seeks to provide a more permanent home to the CANSEE Secretariat and is currently seeking

three-year funding to support the efforts of the Canadian chapter of the International Society for **Ecological Economics** For more information please contact: Teresa Alper at 398-5826 and see http://www.ecologicaleconomics.org/.

CANSEE delegates at Montreal City Hall



Peter Brown Director of the MSE (foreground, centre) To his left, Tom Naylor Dept of Economics, McGill University and Frank Müller Economics, Concordia University the Cochairs of CANSEE

### IDEAS: Lectures at the MSE Lester Brown "Eco-Economy: Building an Economy for the Earth" CANSEE

**Kevnote Address** 

by Vicky Baker, MSE student, Biodiversity Domain, U2



On August 24, while still in the sweltering finale of summer vacation, Lester Brown took stock of humanity's relation with the environment. Brown is the founder of the Worldwatch Institute that has produced the State of the World reports since 1984. He has also recently founded the Earth Policy Institute. His vast knowledge of regional and global environmental issues was reflected in his description of the challenges that face the planet.

Brown spoke of the need for a shift from the current perspective of economic growth to one which recognizes the limits of the environment. A particular problem is the "time lag" between what is

happening now and what the future effects of our actions will be. Brown cited the depletion of ground water for agriculture as an example. On a global level, "480 million out of the 6.1 billion are being fed by using water that belongs to our children."

Brown also addressed the need for markets to reflect the true costs of ecological degradation and to recognize the value of the services which nature, when healthy, provides us free of charge. He provided the audience with a vision of a new economy; one in which polluters would be heavily taxed, recycling plants would replace manufacturing plants, and the potential of solar, and especially wind, energy would be developed.

For the entire transcript of Lester Brown's presentation go to www.mcgill.ca/mse.

#### Dr. David Waltner-Toews DVM, Department of Population Medicine, University of Guelph, "An Ecosystem Approach to Human Health: What is it? Who needs it?"



Dr. David Waltner-Toews is a poet, short story writer, essayist, veterinarian, and epidemiologist "specializing" in the epidemiology of zoonoses and food- and water-borne diseases, and in communitybased ecosystem approaches to health.

His lecture at Redpath Auditorium on October 21 dealt with issues including: problems with various definitions of health, limits to the biomedical approach to health, the need for health to be embedded in

a more holistic socio-ecological context, the nature of science, and how the complexity of systems must be taken into account when dealing with health. He also spoke of his international work in the Peruvian Amazon, Central America, Africa and Nepal, where he is part of an international network of scholars working to integrate complex systems theories with practice to promote sustainable health and development. For more about Dr. Waltner-Toews and his work please see: http://www.ovcnet.uoguelph.ca/popmed/ecosys/index.html.

Photo credit: Mathew Waltner-Toews

### Ideas (continued)

## **Désirée McGraw**, International Environmental Negotiations and Communications "**The Biodiversity Convention and the Politics of Science in International Environmental Diplomacy**"

Désirée McGraw spoke at the MSE on October 24. Her presentation provided a historical, political and organizational overview of the Convention on Biodiversity and its decision-making bodies. McGraw's presentation was particularly timely as the UN Secretariat on the Convention on Biodiversity, located in Montreal, held the seventh meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA-7) from November 12-16. For more information please visit <u>www.biodiv.org</u>.

Elizabeth May, Executive Director of the Sierra Club of Canada (<u>www.sierraclub.ca/</u>)

#### "Women Health and the Environment: Making the Link"

2001 Muriel V. Roscoe Lecture delivered on October 30, co-sponsored by The McGill Centre for Research and Teaching on Women, the McGill Women's Alumnae Association, and the McGill School of Environment.

Elizabeth May, Executive Director of the Sierra Club of Canada, is an environmentalist, writer, activist and lawyer who first became involved in environmental issues in the mid-70's, fighting insecticide spraying on forests near her home on Cape Breton Island, Nova Scotia. She was instrumental in the creation of several national parks, including South Moresby, as well as in drafting new legislation and pollution control measures. May is the first holder of the Chair in Women's Health and Environment at Dalhousie University, a position named and funded in her honour. She sits on the MSE Advisory Board in addition to many others.

May spoke to a packed house on how we must make the connections between the health of our environment and human health. May noted the huge increases of toxic substances in our environment since World War Two. She spoke passionately of the massive contamination present in Sydney, Nova Scotia and the impact it has had on the health of the community citing much higher rates of cancer, Alzheimer's and birth defects. With respect to the link between women, health, and the environment May said, "Women's bodies are, for all human beings, the first "environment". And that environment is no longer pristine. A human being's largest exposure to toxic chemicals is in utero. And when the babies are born, we nourish them with mother's milk, which is now the most toxic human food." On women and environmental action, May stated, "Women are the heart and soul of the grass roots environmental movement, anywhere you go. They'll do whatever it takes to protect their children."

**Prof. James Kay**, Environment and Resource Studies, University of Waterloo "Complex Systems Thinking: What is it? What is its relevance to environmental issues?"



James Kay studied Physics at McGill University and Systems Design Engineering at the University of Waterloo. His research, over the last twenty-five years, has focused on complexity and systems theory and their application to the development of an ecosystem approach as a way of understanding and managing our role in the biosphere. His lecture, delivered on November 21, explained what complex systems theory is and illustrated how it should be incorporated into policy making with respect to the environment. For more on Kay and his work please visit

http://www.fes.uwaterloo.ca/u/jjkay/ .

### Ideas (continued)

#### **Prof. Anthony Ricciardi,** Biodiversity and School of Environment, McGill University **"Global Swarming: The Causes and Consequences of Biological Invasions**

Anthony Ricciardi, one of the MSE's latest joint appointments delivered a public lecture sponsored by the Redpath Museum on invasive species. Ricciardi gave a fascinating and sobering talk about the global implications of biological invasions. He explained, that while invasions have occurred throughout the history of life on Earth, the current rate of species introduction is unprecedented (about a million times higher than historical levels). This rapid increase in species introductions has been driven by the expanding global commerce and travel which have rendered geographical barriers virtually irrelevant. While he carefully explained that

not all invasions are harmful, Ricciardi provided numerous examples of introduced alien species which have caused serious economic and ecological disruptions, including extinctions. Furthermore, Ricciardi argues, human health is also at risk as vectors of disease proliferate; for example, the West Nile virus (previously unknown in the New World) recently appeared in North America. Cholera bacteria are being transported around the globe in the ballast tanks of ships; a ship from the Indian subcontinent probably introduced cholera to Peru in 1991, causing an outbreak that infected over a million people and resulted in 11 000 deaths.



Photo of zebra mussels by Anthony Ricciardi

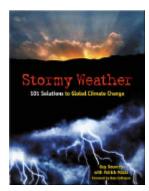
With the global economic cost of species invasions probably somewhere in the range of trillions of dollars (e.g. the cost of invasive species in the U.S. is estimated to be at \$137 billion per year), Ricciardi says we must treat this issue with the same concern as global warming. He proposed several strategies including the formation of a Canadian national task force and legislative recognition of invasive species as "biological pollution" that must be regulated. For more on Ricciardi, visit his website at http://ww2.mcgill.ca/Redpath/ricciardi/.

#### Guy Dauncey "101 Solutions to the Climate Chaos"

Guy Dauncey's lecture, November 26, was co-sponsored by the MSE and the Centre for Climate and Global Change. Dauncey spoke in The Global Environment class in which climate change is one of the topics dealt with.

Guy Dauncey is co-author with Patrick Mazza of the new book 'Stormy Weather: 101 Solutions to Global Climate Change" (New Society Publishers, July 2001). Mr Dauncey emphasized the need for action from every level of society, emphasizing the need for citizens to pressure for policies that will favour greenhouse gas reductions such as the development of alternative energy, retrofitting, design for efficiency, and vegetarianism amongst many others.

Dancey's presentation was inspiring as was his example of personal involvement in bringing about action on the climate change front. He described his work in the environmental field as a "commitment path" rather than a career path. To learn about Guy Dauncey's work and for links to other information about climate change and sustainability please see www.earthfuture.com.



### Teaching

The MSE is working on increasing opportunities for students at the Bellairs Tropical Institute in Barbados, the Subarctic Research Station in Schefferville, Quebec, and the Gault Estate on Mont St. Hilaire, Quebec. Students can also follow a field semester in

Panama, or on the Bay of Fundy based at the Huntsman Marine Centre in St. Andrews N.B.

#### A New MSE Field Semester: Environmental and Social Change on the Bay of Fundy by Prof. Gail Chmura, Program Director (pictured to the right)



This fall nine students participated in the first Bay of Fundy Field

**Semester**. Our students are B.Sc and B.A. majors in Environment, Biology, and Geography who were interested studying the coastal environment and the rural, resource-based communities that depend upon it. Our field courses are offered by three different departments: Canadian Studies, Geography, and the MSE. This fall classes in the Canadian Studies "Understanding Atlantic Canada" were integrated with field trips around the Bay where students learned about the history and economics of Maritime agriculture (particularly Fundy's unique dykelands), fisheries, and even new endeavors in viticulture. Geography's "Ecology of Coastal Waters" course gave students first hand experience in field studies of salt marsh production, laboratory studies of lobster reproduction, and an overview of fisheries and aquaculture in the region. Student teams prepared digital field trip reports that will be posted on our web site as of Dec 12. **Prof. Joan Marshall** provides an overview of her course "Environment and Social Change" in an accompanying article on p.6.

Each student also participated in one of **four six-credit research projects**:

**1."Trans-Canada trail"** One student team assisted the New Brunswick Trails Council develop a final segment of the Province's portion of the Trans-Canada Trail – an abandoned railroad bed that passes through a number of sensitive ecological areas including Musquash Estuary (what will be Canada' first National Marine Sanctuary). The "trails group" is trying to help the Council mitigate future impacts in sensitive areas.

**2. "Mercury"** Students work with an interdisciplinary group of scientists from provincial and federal agencies, and the University of New Brunswick, studying mercury in everything from fog to food chains. This student team is translating the research initiatives into a series of web and newspaper articles for the general public.

**3. "Salmon**" An international NGO, the Atlantic Salmon Federation needed help to investigate the impact of salmon aquaculture on the endangered native salmon populations. This student project compares the growth rates of "wild" salmon before and after the genetically distinct aquaculture stock began to escape and interbreed with local populations.

**4. "Globalization"** The final project designed by Katie Graham, who is interested in the impacts of globalization on a local community - where new job opportunities have encouraged an influx of folks "from away." Katie is scheduled to present her project in January 2002 at a Geography Department seminar.

More information on the Bay of Fundy Field Semester can be found on its webpage: <u>www.geog.mcgill.ca/fieldsemester.html</u>. We'll soon be posting a series of photos depicting the "Bay of Fundy Semester Experience."

### McGill Students Get Their Feet Wet

by Marie-Caroline Badjeck, B.A. Environment and Development, U4



This learning experience started with an orientation trip around the Bay. Our little caravan traveled through Nova Scotia and New Brunswick for ten days of camping, tours, informal classes in salt marshes, visits to historical sites, campfires and invigorating swims in the cold Salmon River. Unforgettable experiences include lectures in three-foot deep mud, walking on the sea bed at low tide knowing that a few hours later 14 metres of water would be there, singing in the dim light of a campfire, and discovering that "aboiteaux" was not a

fancy French dish, but a complex system of dykelands across the coast. Back at Huntsman we juggled our time between classes and fieldwork while discovering our new home, the small town of St. Andrews. Some of us also discovered that being a scientist is not always easy, especially when sampling in six-foot waves and cold weather. One of the highlights of our semester was the time we spent on the island of Grand Manan. The people in this bird and whale watcher's paradise welcomed us with open arms and we were able to experience the joy of social science research: meeting amazing people willing to share their experiences with us. We left the Maritimes with our hearts full of memories of the people we met, the places we have been and the things we saw and learned. And, as the saying goes: "Having fun in Fundy" is what it's all about.

#### Environment and Social Change by Prof. Joan Marshall

Environment and Social Change taught by **Prof. Joan Marshall**, focuses on Grand Manan Island as a case study. The course, designed in two sections, corresponds to the rhythms of the seasonal fishery on the island. During the first session in September, students saw two of Grand Manan's most historic fisheries, the weir fishery for herring and dulse (seaweed) harvesting, and talked to the fishers involved in them. One dulse harvester described the special features of Grand Manan's environment that produce "the world's best dulse", and how he has developed a worldwide export



market for a variety of seaweeds. After touring a large fish packing plant in Black's Harbour, the students spoke with a women who works on the assembly line at the plant in Seal Cove, who described what the work is like and why it is so important to the community. The students learned that the traditional wild fishery is not the only important economic activity on Grand Manan. A five-hour visit to a salmon aquaculture site introduced them to the reality of cold hours on the water feeding caged fish, and the procedures for checking

for diseases and lice. They talked with several local men in aquaculture, about their working conditions, the impacts upon the environment, government regulations, and the impacts on the island's social and economic structures.

The second session of the course focused on the high value fisheries, that is the shellfish: lobster, seas urchins and scallops. The students visited a sea urchin experimental facility, witnessed the opening day of lobster season, and spoke with a DFO (Department of Fishries and Oceans) officer there to ensure regulations were enforced. They also met with the head of the Fisherman's

Association and learned about the local tensions between the lobster fishers and those involved in aquaculture, and were able to question several local people about how community politics responds to government regulations and changing market structures. The students realized there are no simple answers to these important environmental problems.

### Panama

This winter a group of MSE students will be studying and gaining hands-on experience in Panama. This field semester is the result of an ongoing partnership between McGill and the Smithsonian Tropical Research Institute (STRI). The students will complete courses and work in multidisciplinary teams on environmental projects with local institutions. The success of the Panama field semester has helped make the development of the Bay of Fundy Field Semester possible.

# Environmental Research Course by Brian Sarwer-Foner, Teaching Assistant

Environmental Research (170-401A) is the MSE's "capstone" course for students in their final year of studies. Students in interdisciplinary teams work on real-world research projects to address issues defined by client organizations. This experience challenges students to apply the science, lessons and tools taught at the MSE and to learn and develop skills associated with performing research, fulfilling contracts and working in groups. At the end of the session students make formal presentations of their research results and submit written reports. This course is taught by **Professors Renée Sieber (Chair), Madhav Badami, Sylvie de Blois, Bruce Case, Jaye Ellis,** and **Frédéric Fabry.** 

The students of this year's 401 class were divided into five project teams, each of which presented their research results on Tuesday, December 4, 2001 from 4:00 - 7:00 PM in the Redpath Museum Auditorium. The five 401 research projects this year were:

**1. "Biodiversity"** – an analysis of the biological and ecological requirements of focus species on the Isle à l'Aigle Archipelago of the St. Lawrence River and recommendation of a management plan for the islands. Client: The Nature Conservancy of Canada (NCC). Supervised by **Prof. Sylvie de Blois**.

**2. "Free Trade"** – an analysis of public participation and dispute resolution mechanisms within existing free-trade regimes (e.g. NAFTA) and recommendations on how to improve both aspects and apply them to the FTAA, which is currently under development. Client: Quebec Environmental Law Centre (QELC). Supervised by **Prof. Jaye Ellis**.

**3. "Indicators"** –analyses of soil samples from plots of land in the Park Extension area of Montreal to assess the chemicals and pollutants present and use of the results as indicators for resource allocation and land use planning. Client: Le Regroupement en Aménagement de Parc Extension (RAMPE). Supervised by **Prof. Bruce Case**.

**4. "Paper"** – a comparative analysis of the production process of paper from virgin pulp and recycled sources of fiber and the costs and environmental impacts associated with both processes. Client: Co-op La Maison Verte (CMV). Supervised by **Prof. Frédéric Fabry**.

**5. "Sustainable Development"** – an analysis of how certain cities have incorporated elements of urban sustainability into their municipal strategic development plans and recommendations for the incorporation of sustainability principles in a new master plan for the newly amalgamated city of Montreal. Client: Société du Développement Communautaire de Montréal (SODECM). Supervised by **Prof. Madhav Badami** 

# MSE Enrollment is up by 27% in

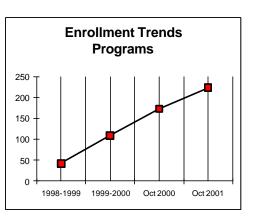
### the Major Program

Enrollment figures are on the increase in all MSE programs. The Major Program has seen a 27% increase.

## Scholarships at the MSE

The MSE is pleased to announce the recipients of last year's MSE student scholarships!

### **Diane Hasley Scholarship:**



Last year's **Diane Hasley Scholarship** - awarded to a current MSE student based on academic excellence - was awarded to **Adam Shevell**. Congratulations Adam!

### Judith Mappin Annual Scholarship:

Congratulations goes-out to **Stacey Byers**, last year's recipient of the **Judith Mappin Scholarship.** This scholarship is awarded annually to a student who has completed one year of study at the MSE and has achieved academic excellence.

Stacey is currently studying in Australia on a year long exchange to the University of New South Wales in Sydney. She is enjoying her first semsester and wrote this about her activities: "Taking a mixture of both environmental science and Australian studies courses, I have gotten a feel for both pressing environmental issues in Australia and the culture, values, and beliefs of both indigenous and non-indigeous Australians. By volunteering at the organic food cooperative on campus and the community permaculture garden, I have learned a lot about the campus environmental initiatives and the Australian environmental movement." Stacey will return to McGill to complete her final year.

# Introducing New Staff

### Sari LaBelle

Development and Alumni Relations Associate

We would like to welcome Sari LaBelle, the newest member to the MSE team, as the first Development and Alumni Relations Associate at the School. In her career as a fundraiser she has worked with a diverse number of grassroots organisations concerned with issues ranging from the environment to native rights to employment. She has a B.A. in Anthropology and is currently pursuing her Masters in Human Systems Intervention. Welcome aboard Sari!

### Christina Zhu

Secretary to the Director

Christina is one of the newest members of the MSE family, having joined in September 2001. She has been a part of McGill's community since 1997, having worked for Facilities Management and Development, the Office of the Vice-Principal (Administration and Finance) and the Office of the Dean of Students. She has a BA in Hispanic Studies from McGill University and is pursuing a Certificate in Translation at Continuing Education. She enjoys traveling and Latin dancing.



### **Community Outreach**

#### MSE participation at the United Nations University

Symposium: Managing Biodiversity in Agricultural Systems Students and faculty participated in the UNU Symposium held November 8-9 at the ICAO Building. **Dean Deborah Buszard**, Faculty of Agricultural and Environmental Sciences welcomed the delegates and a session at the conference was sponsored by **Prof. Don Smith**, New Sun Professor, Plant Science at Macdonald Campus, MSE Associate Faculty Member. McGill presenters included **Prof. Colin Duncan** MSE, Dept History, **Prof. Oliver Coomes**, Department of Geography, MSE Associate Faculty Member and **Prof. Tim Johns**, Dietetics, MSE Associate Faculty Member. Many student volunteers helped with registration and had an opportunity to attend sessions and make contacts. **Prof. Sylvie de Blois**, MSE and Plant Science also attended.

#### Biodiversité et Agriculture

par Prof. Sylvie de Blois, MSE et Département de phytologie

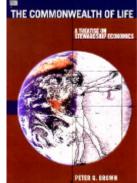
Partout sur la planète, il est clair que la biodiversité se trouve de plus en plus menacée par l'intensification de l'agriculture. C'est du moins le constat fait récemment lors du Symposium *Gérer la biodiversité des écosystèmes agricoles* organisé à Montréal par l'Université des Nations unies en collaboration avec le Secrétariat de la Convention sur la diversité biologique et l'École d'environnement de McGill. La biodiversité dont il est question ici est autant celle associée aux pratiques culturales que celle des habitats naturels. D'abord, l'agriculture intensive (souvent une monoculture) axée sur l'accroissement des rendements contribue à l'élimination des variétés locales considérées comme moins productives mais souvent mieux adaptées aux conditions du milieu. Il en résulte une érosion génétique, une diminution de la diversité des ressources alimentaires et une dégradation de l'environnement associée à l'usage plus intensif de fertilisants et de pesticides.

De plus, selon un rapport publié par Future Harvest et The World Conservation Union, l'agriculture envahit plus de la moitié des réserves naturelles de biodiversité dans le monde. Cette progression répond à un besoin croissant de nourrir les populations locales, particulièrement dans les pays en voie de développement. Pour résoudre ces problèmes, on veut encourager les pratiques qui favorisent une agriculture diversifiée et durable basée sur les connaissances traditionnelles et les concepts écologiques. Il faut aussi assurer à l'échelle du paysage la pérennité des habitats et la conservation de la biodiversité à l'intérieur même des zones agricoles. C'est à cette dernière tâche que s'adressera particulièrement la professeure Sylvie de Blois, écologiste du paysage nouvellement arrivée à l'École d'environnement et au département de phytologie de la Faculté d'agriculture et d'environnement de McGill.

Ethics, Economics and International Relations: Transparent Sovereignty in the commonwealth of Life now Published in Canada by Black Rose books under the title The Commonwealth of Life: A Treatise on Stewardship Economics By Peter G. Brown, Director of the McGill School of Environment

**Convincing analysis; empowering vision** -David Suzuki, Scientist and Host of the CBC's The Nature of Things

Peter Brown has given us a structure that unites an economics of stewardship with a politics of trusteeship, based on an ethics of rights and corresponding duties. Highly recommended! -Herman E. Daly, University of Maryland Ordering information Canada and the USA: 800 565 9525 Black Rose Books C.P.1258 Succ. Place du Parc Montreal, H2W 2R3 Canada (514) 844 -4076



### Earth Summit 2002 Canadian Secretariat Roundtable consultations on Sustainable Development in Montreal co hosted by the MSE



and the CISDL (Centre for International Sustainable Development Law)

With the upcoming World Summit on Sustainable Development in Johannesburg 2002, the Earth Summit 2002 Canadian Secretariat is holding cross-Canada roundtables to consult with citizens. The Montreal Roundtable, held on November 16 at Thompson House on the McGill Campus, assembled over 60 academics, students, NGO representatives and members of the business community. **Peter Brown, Director of the MSE**, and **Linda Goldthorp, Executive Director of the Secretariat**, welcomed the participants. The day's discussions centered on evaluating the progress since the 1992 Rio Summit and making recommendations for the Canadian government's position on sustainable development going into the Johannesburg Summit of 2002. For more information on the Secretariat and the upcoming summit please see : <a href="https://www.canada2002earthsummit.gc.ca">www.canada2002earthsummit.gc.ca</a>.

MSE students attend SCBD Session on the occasion of the SBSTTA-7 meetings on Forestry and Forest Biodiversity November 12-16

A Student's day at the Secretariat on the Convention on Biodiversity by Jeremy Labreque, MSE student, Biodiversity Domain

Our day started with a brisk walk to the office of the secretariat where we were briefed on the background of the CBD, SBSTTA and the format of the conference. This was very important as it allowed us to understand what was happening at the conference. Students from McGill, Concordia, Université de Montréal, and UQAM all attended this meeting and received an information package containing pertinent material.

The opening plenary session of the SBSTTA consisted of welcoming the participants and describing the tasks to be accomplished at this meeting. It was very interesting to see delegates from 182 countries and representatives of various NGO's and IGO's. Between the morning and afternoon plenary sessions, workshops were given on various topics related to biodiversity ranging from human health and biodiversity to incentives in the reforestation industry. I attended the latter which consisted of a panel of speakers from different parts of the world reporting on the reforestation industry in their respective regions.

During the afternoon plenary material covered in the document prepared by the secretariat was discussed. It was a relatively straightforward process as most of the proposals were accepted without much ado.

Overall, the day was a fantastic learning experience. I appreciated the opportunity to see the way the U.N. functions, see where and how conferences like COP get their scientific information, and meet people like Hamdallah Zedan, the Executive Secretary of the SCBD. Something like this needs to be experienced first hand in order to truly understand the process of defining and agreeing upon international conventions. For more information on biodiversity see www.biodiv.org.

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### Community Action The Greening of the MSE by Victoria Baker

The creation of the garden behind the MSE at 3534 University was an initiative by students, with help from the administration, to encourage and explore urban ecology, and to locally grow organic vegetables and flowers. Besides giving the students practical experience in the creation and maintenance of a garden, we also learned first hand of the potential for waste reduction through composting. We knew that compost is a natural fertilizer that would give the garden much-needed nutrients, but we needed a source of organic material to compost. We found an excellent source in a nearby vegetarian restaurant, Lola Rosa's. We were able to recycle 100% of the food wastes they generated. While they were temporarily closed for the summer, the composters were kept active by donations of coffee grounds and veggie scraps from the Tim Horton's in the basement of the Redpath Building.

This fall the garden has been enlarged and mulched with leaves collected from around campus. Plans are underway to keep the composters going all winter, maintain involvement with the community and continue leading by example.

### The MESS Stays Organized

by Leah Tivoli, MESS Co-president

This is the 4th year MESS, the McGill Environment Student Society, has been in existence, organizing a variety of events for the benefit of all those associated with the School of Environment. We kicked off the new school year with the annual Veggie BBQ at Rowles House on Macdonald Campus in Ste. Anne-de-Bellevue. The weather could not have been better for the busload of students and faculty that came to enjoy delicious food, fun and a beautiful setting. This event offered newcomers and other more seasoned students and faculty a chance to meet in an informal atmosphere. Other successful events this year included the Halloween Party hosted at Café Campus and a movie night at the MSE. Next semester we are planning on holding a workshop series on healthy living, a debate on a local environmental issue, and a winter camping and ski trip. In addition, we plan to finish renovating the student lounge so that MSE students have their own place to meet on campus. MESS also continues to administer the envirolist, a wonderful distribution list with weekly updates on environmental issues, events, speakers, and jobs. To subscribe, please see the MSE homepage: www.mcgill.ca/mse/

# "Quelque raisons d'espérer" - A Few Reasons to Hope by Jeremy Labreque

Pierre Dansereau beamed with pride after the premier screening of "Quelques raisons d'espérer", a look at the life and research of Quebec's premier ecologist. The film, partly shot at McGill's Redpath Auditorium with the participation of MSE students and faculty, consists of Dansereau visiting former colleagues and discussing the environmental problems facing us today. Dansereau and his "friends" tell us that although the present does not look very good, the direction we're headed in may be more positive than we think. Dansereau believes we are living at the beginning of a paradigm shift where people will learn the importance of the biological community. For this reason the film was one which fills the viewer with warmth and the idea that maybe the future is not so bleak, maybe we are headed in the right direction.

# Evidence of Climate Change in the Canadian Arctic by Cartter Patten

**MSE Advisory Committee Member Cartter Patten** spent the last two weeks of July canoeing the Thomsen River on Banks Island in the Northwest Territories. The Thomsen runs north from the middle of Banks Island through Aulavik National Park. Cartter flew out of Inuvik and refueled in Sachs Harbor, the only village on Banks Island. Below are his comments on signs of climate change in the Arctic.

As part of my registration with Parks Canada, I viewed a 45-minute video prepared by the Institute for the Study of Climate Change that captured Inuit observations about warmer winters, thinner ice, and less accessibility to former hunting grounds. The receding permafrost is causing the collapse of cliffs and parts of the island. An example of this is the cemetary outside of Sachs Harbour, pictured below, which is very vulnerable to collapse. In Inuvik, a community of 3 500 residents, the effect of the

receding permafrost could be seen with many homes on temporary platforms as owners had to replace the 20-foot pilings which serve as the foundations with 40foot ones. Human activity has caused this reduction in permafrost, both locally in the form of above ground utility lines, heated structures, and paved roads, and globally with warmer winters and summers due to climate change.



Cemetary outside Sachs Harbour photo: Carrter Patton

The appearance of thunder storms is another indication of climate change. The Inuit attendant who refueled our plane at Sachs Harbor said that "his kids had cried all afternoon and his dogs were still barking as they had never seen lightening or heard thunder before". As we came across the Mackenzie Delta toward Inuvik, we saw pontoon planes fighting three different forest fires caused by this lightening.

I was drawn to the unique mixture of expansiveness, fragility, sparseness and bounty in this Northern area. Seeing how Banks Island and its inhabitants are threatened by climate change makes one realize how global the problem really is and how environmental effects can be felt far from their source.

### Upcoming

**Prof. Donna Mergler, Université du Québec à Montréal** Co-director of Centre d'études des interactions biologiques entre la santé et l'environnement (CINBIOSE) **"An Ecosystem Approach to Human Health: From the Brazilian Amazon to the Canadian North"** Jan. 15 at 12:00 at Redpath Auditorium 859 Sherbrooke St.W. To find out more about upcoming events please visit our website <u>www.mcgill.ca/mse/</u>.

Sincere Thanks to all our contributors. Comments, ideas, and contributions are welcome. Contact: outreach@mse.mcgill.ca

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