Geographers without Borders

by Charles Burke

While other academic disciplines have clearly understood skills which benefit the community and clearly defined entities like Doctors Without Borders or Engineers Without Borders, or various Business and Law groups, Geographers have never had an organization that directly connects their skills with the world around them. In January of this year myself and a group of SGES graduate students came together with the goal of bettering the student experience through interactive learning, community outreach, and developing geographer organized and operated 'start-up' projects - we call this group Geographers Without Borders. Over the past 6 months GWB has undertaken and completed work on creating a Pan Am legacy for the new Cannon Street Bike Path in Hamilton, in conjunction with SPICES started a 'MAC Talks' Lecture Series on Planning (Urban, Environmental, Transportation, Certification, Advanced), aimed at interdisciplinary audience and culminating in a certificate of completion, and created a start-up non-profit based out of the McMaster Innovation Park 'Forge Program' that will become the first Bike Share program tailored at youths under the age of 18 in North America (www.startthecycle.ca).

As Co-founder my experience is only one of many; we have a group of eleven students which have put in nearly all their free time to start this organization from scratch. I can speak for everyone however in saying how rewarding it has been to see us grow in such a short period, not only is it a testament to our hard work but this reinforces the need for a group like ours to exist. To continue to flourish we need the help of interested faculty and other enthusiastic students to accomplish something great.

If you would like to contact me to discuss GWB or join the organization email me at burkecm@mcmaster.ca.

Geographers without Borders needs your guidance, passion, and expertise.

Research Spotlight: Dr. Bill Morris and Dr. John Eyles

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Hamilton Envirothon

Page 9
Director’s Corner
by Dr. Bruce Newbold

It’s hard to believe that another academic year is upon us already. Much of the past year was consumed with preparation for the Institutional Quality Assurance Process (IQAP) review of the School’s undergraduate and graduate programs. The IQAP process ensures that our programs remain relevant by reflecting on our mission and degree level expectations. I’m pleased to report that the review was successful and that our reviewers left with a positive impression of our program, with the reviewers commenting that our “undergraduate programs is exemplary and of very high quality”. While a positive review, SGES will act on the recommendations laid out in the final report so that SGES can continue to respond to the teaching needs of our students and the changing environment within which we work. My thanks to the reviewers, as well as all that were involved in preparing the documents and participating in the review process.

While the academic environment remains a challenging one, SGES has received recognition for its programs in other areas. Recognizing our popular GIS courses and our Minor in GIS, Esri Canada (Environmental Systems Research Institute) recently selected SGES as a ‘Centre of Excellence in Geographic Information Systems’ (GIS). The Centre of Excellence recognition will further our use of GIS in teaching and research, and will provide students with access to scholarships, competitions and conferences. More information can be found at http://dailynews.mcmaster.ca/worth-mentioning/esri-selects-mcmaster-as-gis-centre-of-excellence/

While the IQAP review and Esri designation recognizes the strength of our teaching and academic programs, research by faculty, staff and students in SGES speaks for itself. Research within SGES has been featured on McMaster’s Daily News webpage, through our social media forums, and also in the ‘Noteworthy News’ section of this newsletter. Be sure to take a moment to read about the exciting research and news and be sure to connect with SGES through Facebook or Twitter!

Finally, I have appreciated the opportunity to talk to our program alumni over the past year. Please don’t hesitate to contact me - I would love to hear from you and welcome you to visit SGES when in Hamilton.

Noteworthy News

Dr. Eduard Reinhardt’s research in Mexico’s Yucatan Peninsula has aided in the discovery of the ~12,000 to 13,000 year old Naia skeleton. DNA and craniofacial analysis of the skeleton indicates that differences between Paleoamericans and Native Americans were likely the result of in-situ evolution. The paper was published in Science and is titled ‘Late Pleistocene human skeleton and mtDNA link Paleoamericans and Native Americans’.

Dr. Sang-Tae Kim has co-authored a research paper that was published in the journal Nature. The research team studied the sulphur isotopic composition of sulphur-bearing minerals in Martian meteorites. Their results suggest that early atmospheric conditions on Mars were different than that on Earth. The paper is titled ‘Isotopic links between atmospheric chemistry and the deep sulphur cycle on Mars’.

Graduate student Michelle Reid won first place in McMaster’s Three-Minute-Thesis (3MT), a competition where participants have just 3 minutes to explain their research and its implications to a broad audience. Michelle presented her research on wetland reclamation in Alberta’s oil sands.

Congratulations to all of the undergraduate students that recently graduated during spring convocation in June, 2014!

Congratulations to all of the graduate students who recently completed their Master’s or PhDs!
Research Spotlight: Dr. Bill Morris

by Lisa Leoni

Dr. Bill Morris started his career at McMaster in 1989 with a contract teaching position. Then in 1990 he was appointed a tenure-track faculty member with the then McMaster Geology Department. His research has covered a variety of projects in the field of geophysics. Past projects include paleomagnetic analysis of the Paleozoic strata from the Appalachian Mountains, the Sudbury impact structure, and latitudinal distribution of glacial events linked with the Snowball Earth theory. He has used hyperspectral imagery to map acid generation in mine-tailings, rock magnetism to study urban particulates as a means of mapping air contamination and borehole geophysical studies of meteorite impact craters in Mexico and Ghana. Most of his time though has been spent on interpreting magnetic and gravity data in the search for mineral deposits including diamonds.

Bill’s current research focus is called ‘Footprint recognition targeting’ which uses a combination of ground and airborne geophysics, satellite imagery, topography and geochemistry to predict the location of Porphyry Copper deposits, Athabasca Uranium deposits, and Abitibi gold. Bill says his current research “…is an extension of the idea of remote predictive geological mapping. First one needs to recognize a specific type of geological terrain, then map lithological boundaries, and then try to find the mineral deposit hidden among all the details. [Like] searching for a needle in a haystack, when you know the needle is magnetic, conductive, more dense than hay, has an elongate shape, is more resistant to erosion and when exposed to water will have a distinctive rusty signature.”

Bill says his area of research is moving toward 3D data integration: “Following on from the ‘computer revolution’ we have also recently experienced an ‘instrumentation revolution’. Over the past twenty years we have seen a dramatic increase in the development of ‘tools’ capable of providing us with information regarding aspects of the Earth’s surface and subsurface. GPS and Google Earth…mineral mapping of the Earth’s surface from satellites and drones at a scale of centimeters and detection of buried ore bodies and oil reservoirs from integration of information acquired by a suite of airborne detectors.” One of the biggest challenges of his research is the current era of ‘big data’. He says “When I first joined McMaster I was the second person after Gerry Middleton to have a desktop computer. Now we live in an era of ‘big data’. It is a big challenge keeping up with all new sources of information while at same time attempting to learn AND understand new methods of data analysis”.

Aside from his research, Bill has taught a variety of undergraduate and graduate classes. Bill most enjoys teaching classes such as field camp where students are actively involved in the learning process. He enjoys working with students helping them understand how to interpret ‘clues’ in rocks using first principles, and to see that ‘aha’ moment when a student suddenly understands a new concept. He enjoys knowing that his teaching is helping to advance the career of a young scientist. For many years Bill was involved in running the 3rd year Whitefish Falls Field Camp, a course very near and dear to him. “Teaching for me will always be linked to Sue Vajoczki. When she and I were running field camp together it was a magical time for me. I have so many positive memories of teaching parts of that course; Kenny and the mine tailings, the North Range trip, the cross-cutting dikes on the third finger, the Landbridge, and the treasure hunt. Sue’s input and support made that course truly memorable.”

Bill has also had many other people in his life who were instrumental in shaping his career. Bill says “I would like to mention how important it is at points in my career to have people that have gone out of their way to give me that extra level of support that made other things possible. At High school my geography teacher Mr. Grapes suggested that I was good enough to go to University. At Leeds University Jim Briden believed I was capable of doing a PhD. At Energy, Mines and Resources in Ottawa, Jean Roy set up a research contract that lead to the formation of Morris Magnetics Inc. Alf Latham, a guy I knew initially as an undergrad at Leeds, a post-doc in Ottawa, and then a post-doc at Mac was instrumental in me joining the Faculty at McMaster. And finally my graduate students, they all drove me to try something different.” One piece of advice Bill has carried with him throughout his career is “If at first you don’t succeed, try, try again. Repeat.”
Research Spotlight: Dr. John Eyles
by Paulo Gallarza

John Eyles is a University Professor at McMaster whose research ranges from science policy, evaluation of health care systems, urban planning, health and illnesses and the geography of everyday life. He came to McMaster in 1988, as he felt it was a good time to leave the UK and was interested in residing in Canada or Australia. His decision to come to McMaster was because of the research intensity, its interests in health research and its camaraderie.

He grew up in a medium-sized town in England, Northampton. John explains that it is a blue-collar town that has shaped some of the ways he thinks. He started his studies in England, where he won a place by exam in a ‘Grammar School’, an academically-oriented public (in the Canadian sense) school. After this he went to the London School of Economics for a BA and MSc. His first full-time job was as a teacher of ‘social analysis’ at the University of London. When John is away from work he enjoys exploring cities – especially places with 19th and 20th century architecture.

Currently, John holds appointments in Clinical Epidemiology and Biostatistics, Sociology and the Centre for Health Economics and Policy Analysis. With these three appointments, John has interests in challenging policy questions that require inputs from various disciplines, theoretical frameworks and different methodologies. The focus has always been on two elements; access and equity in the delivery of healthcare and the relationship between environment and health. With John’s team of undergraduate students, graduate students, postdoctoral fellows, and colleagues, John has been able to tackle on projects such as Canada’s chemical management plan, socio-economic impacts of coral destruction in Indonesia, flood monitoring in Canada, blood safety and access to necessary medical treatments in South Africa.

John has been a part of the SGES community for the past 26 years, where he teaches courses involving urban planning and health at the undergraduate and graduate level. Recently, John has reintroduced urban places, urban dreams – a hobby project John is passionate about as it links architecture and design ideas to society and culture. John’s inspiration to teach stems from the fact that the sketches and their accompanying captions provide respectful and light-hearted insights into the way these professors were perceived by their students. On a personal note, these items bring back fond memories of my undergraduate years. We are thankful that Peter Hill saw fit to donate these sketches to our archive of McMaster geography memorabilia. If you should happen to be in possession of any items which you think belong in our small but growing archive, please contact Dr. Walter Peace peacew@mcmaster.ca (By the way, did you know that in 2017 we will celebrate the 70th anniversary of the founding of McMaster’s Department of Geography?)

Geography Professors from the Past
by Dr. Walter Peace

Have you ever wondered how students perceive their professors? McMaster geography grad Peter Hill (BA ’59; MA ’64) recently donated sketches of four professors in the Department of Geography circa 1959. The sketches were drawn by Ted Spearin, a geography major at that time. Some of you may recall that framed copies of these sketches used to hang in the famous ‘Purple Room’ (BSB 341). The sketches reproduced here depict the following professors: Dr. Lloyd G. Reeds (caption – “However I don’t think that is too important.”); Dr. Harold Wood (caption – “Now gentlemen, if you will bear with me.”); Dr. Hugh Thompson (caption – “And the glacier thrusts forward.”); and Dr. R. Louis Gentilcore (caption - “And now I would like to recommend.”)

Having been taught by Dr. Reeds and Dr. Gentilcore (some time after these sketches were drawn, I hasten to add), I can attest to the fact that the sketches and their accompanying captions provide respectful and light-hearted insights into the way these professors were perceived by their students. On a personal note, these items bring back fond memories of my undergraduate years. We are thankful that Peter Hill saw fit to donate these sketches to our archive of McMaster geography memorabilia. If you should happen to be in possession of any items which you think belong in our small but growing archive, please contact Dr. Walter Peace peacew@mcmaster.ca (By the way, did you know that in 2017 we will celebrate the 70th anniversary of the founding of McMaster’s Department of Geography?)

Dr. Lloyd G. Reeds Sketch: ‘However, I don’t think that is too important’
Maps, Maps, and more Maps

by Dr. Walter Peace

In the summer of 2011 I was given the opportunity to teach my ‘dream course’ - a course about maps. Since then I have taught GEOG 2RM3 (Mapping Our World) a total of five times. One of the most remarkable things I have learned as this course has evolved is that there seems to be a limitless interest in maps. Geographers and non-geographers seem to be fascinated by the beauty and the power of maps. In the past few years numerous books about maps have been published. Among the recently published popular titles are “On the Map” by Simon Garfield and “Maphead” by Ken Jennings of Jeopardy fame. The sensational world of cartographic theft was the subject of Michael Blanding’s “The Map Thief”. And of course there have been many academic treatments of maps. One of the more noteworthy of these titles is Jeremy Broten’s “A History of the World in Twelve Maps”. I would highly recommend all of these titles.

What is it about maps that captures our attention and imagination? In a recent essay entitled “The Allure of the Map” which appeared in The New Yorker, Casey Cep opines that “maps are the standard of adventure, fantasy, and science fiction.” Cep notes that Robert Louis Stevenson’s “Treasure Island” began with a map Stevenson drew before actually writing the story. After citing other examples of maps in literature, Cep concludes his essay by noting that “Literary cartography fascinates and guides the way that actual cartography does; that’s why we keep and carry stories in the same places we carry and keep maps: on our walls, in our pockets, and on our phones.”

A quick perusal of the various media through which we get our news readily reveals the importance of maps. Consider, for example, the current conflicts in Ukraine, Syria, Iraq, and Palestine. It is impossible to visualize and understand the nature of these conflicts without maps. Furthermore, the outcomes of these conflicts certainly have the potential to literally redraw the maps of these regions. This summer the Government of Canada sent two icebreakers to the High Arctic in order to gather scientific data in order to support its intention to gain control of the sea floor under the North Pole. Central to these initiatives is the need for detailed maps of the region. The forthcoming tenth edition of the National Geographic Atlas of the World is being promoted as “…the essential resource you need to make sense of our fast-paced, ever-changing world.” This edition of the atlas commemorates the 100th anniversary of National Geographic cartography.

Meanwhile, back at McMaster in my Regional Geography of Canada course (GEOG 2RC3) Google Earth presentations dealing with Montreal and Hamilton enabled students to take virtual tours of those cities in the classroom. A third Google Earth presentation traced the cartographic history of Canada by combining historic maps with contemporary scenes of locations across the country.

In closing, I feel compelled to draw attention to a recent essay in the New York Times written by Steven Kurutz. Entitled “Real Adventurers Read Maps”. The essay recounts the writer’s struggle to convince his wife that real maps are better than a GPS for a variety of reasons. Kurutz notes that “Travelling in a strange place by map alone builds confidence that I can get around the world. GPS may eliminate a big source of travel stress- getting lost- but it also removes some of the thrill and personal challenge.” To that sentiment I would also add that it would be a cartographic tragedy if the art of folding a map were to be lost.

Islandia (Iceland) - Abraham Ortelius, 1585

Abraham Ortelius was a Flemish cartographer who is considered to be the father of the modern atlas.
McMaster Center for Climate Change

Inspiring the future generation of SGES graduates

by Myroslava Khomik & Michelle Kula
MCCC coordinators 2013-2014

The McMaster Center for Climate Change (MCCC, http://climate.mcmaster.ca/) is housed within the SGES. One of the Centre’s missions is to promote and facilitate education related to the processes of the Earth’s climate system and the impacts of climate change on ecosystems, water resources and human health.

Following our mission, MCCC developed a curriculum-based outreach program for high school students in Hamilton and surrounding areas. The purpose of the program is to raise student awareness about environment and climate related issues and provide opportunities to engage with MCCC researchers.

This year’s program (2013-2014) has been our most successful and largest to date. We had three enthusiastic SGES interns join our team to coordinate and lead the program: Tianwen Zhou, Natasha Pardhan, and Arthur Szybalski.

Our team put together an exciting program for the students, which included an overview of climate change, the greenhouse effect, and related historical trends. These introductory presentations were followed by two, ten-minute presentations, from McMaster graduate students.

This year’s roster of graduate students was also impressive and included: Kelly Baigi (“To the end of the Earth and back – exploring Antarctica”); Alyson Brown (“Where did all the Salmon go?”); Francesca Cardwell (“Exploring climate change and health in your team sport in Ontario”); Melissa Gallina (“Perception of air quality in Hamilton”); Rachel Skubel (“Climate change and forest water use” & “Oceans and climate change”); Jillian Wyman (“Earth’s changing climate: developing a seawater paleo-pH proxy”).

And the above was not all! We also had hands-on components for the students. This year we partnered with the McMaster Bee-Team and Plug and Drive Ontario (http://www.plugndriveontario.ca/). The Bee team presented to students about McMaster’s very own beehive (http://dailynews.mcmaster.ca/article/whats-that-buzzing-sound/), which was very well received. Plug and Drive Ontario, a NGO, that promotes electric vehicle use in Ontario, trained our intern on the benefits of electric vehicles and their capacity for use in Ontario. Using their information to complement his own research on electric vehicle mobility, Arthur presented to high school students his findings on the pros and cons of electric vehicle usage. Not only that, Plug and Drive introduced us to a local electric vehicle dealership and together with their dealer, Ben Faiola (Hamilton Mitsubishi Car Dealership), we were able to bring an actual electrical vehicle to each school for show and tell.

The vehicle got both students and teachers quite excited. We could even park and turn-on the vehicle inside the schools, since electric vehicles produce zero emissions.

Overall, this year’s program was a great success and we thank everyone who participated! We reached out to 8 schools in total, which was double the amount in previous years of the program. This year, we also conducted a feedback survey on our program at each school visited and found that both students and teachers really appreciate such efforts and programs.

Given that the next academic year is soon upon us, we encourage our SGES researchers and students to collaborate and participate in our outreach program. This is an excellent opportunity to reach out to, encourage and inspire the future generation of earth science and geography graduates!

Left Top: Students inspecting an electric vehicle

Left Bottom: MCCC interns: Arthur Szybalski, Tianwen Shou, Natasha Pardhan
Nancy Worth: ‘Working Lives’

Nancy Worth joined the School in October 2013 for a two year Bantering Fellowship following a PhD (Leeds) and several years of lecturing in the UK. She is a social geographer who is broadly interested in social differences and identity, youth and geographies of the lifecourse, and feminist geography. While focused on research while at McMaster, Nancy is interested in connecting her research to her teaching in various ways, including recent pedagogical research on making higher education more student-centred—from how students are assessed to what happens in the classroom. She has published on temporality, sociality, mobilities, lifecourse research praxis and young people’s transition to adulthood in journals such as Area, Geoforum, the Journal of Geography in Higher Education, Social & Cultural Geography, Urban Studies and has co-edited a forthcoming collection called Intergenerational Space (Routledge).

Nancy’s research during the Bantering Fellowship is the project ‘Working Lives’. She's speaking with Canadian women born in the 1980s about their experiences of work, and how work fits into the rest of their lives. The project interrogates both gender and age— (Bos babies are the first half of the ‘millennial’ or ‘gen y’ generation). A key focus of her approach is the experience of flexible/precarious employment. This includes contract and part time work, internships, volunteering and self-employment as well as the feeling of insecurity that many now experience even in full time/permentanent jobs. Beyond the workplace, the research is concerned with the social and personal consequences of an increasingly insecure labour market and the impact of gender and generational change, including diverse family dynamics (lower rates of marriage, delaying children), a prohibitive housing market (where many are priced out of the market) and expansion in the education sector (more higher/further education). The new realities of young women’s working lives are part of the shifting terrain of modern social life and it’s worth considering what it means to be ‘successful’, or even what it means to be ‘OK’, now that traditional markers of adulthood (a full time job, a house, a settled family life) are less likely to be part of young adulthood and in some ways are also less desired. The aim of the research is to offer insight on work and adulthood through the narratives of young women—highlighting how much work is still a gendered experience as well as the critical importance of finding meaningful work as a young adult.

If you’re a Canadian born in the 80s Nancy would love to hear about your experiences of work. A short questionnaire is available at www.workinglives.squarespace.com.

At the end of the questionnaire there’s a space to leave your contact info if you’re interested in being interviewed. If you’d like more information, get in touch with Nancy at nworth@mcmaster.ca or @nancymworth

McMaster Institute for Transportation and Logistics

by Deane Maynard

MITL is a non-profit academic institute created in 2007 by private and public sector investors. It works with business and government partners to address real-world transportation issues and challenges relating to the movement of people and goods. MITL’s mission is to “help move Canada and the World toward transportation patterns that are measurably more sustainable -- economically, socially and environmentally.” Partnership and collaboration has been at the core of MITL’s development since its inception.

MITL has an applied research focus but has the means to utilize cutting edge approaches in projects as needed. In addition to a core research staff, MITL can draw in academic experts from many faculties and even other universities, if required, to solve particular research problems. McMaster alone boasts more than a dozen transportation and logistics researchers across the faculties of Science, Business and Engineering. Their links to other academic institutions provide access to the best and brightest transportation researchers in the country.

Under appropriate supervision, graduate students at the Masters and PhD levels work on certain research projects to further develop their skills, share their knowledge and to contribute to real world solutions.

MITL has worked on a wide range of transportation projects over its history for a wide range of stakeholders. Some particular themes of interest in past, present and upcoming projects include:

- Metropolitan Traffic Congestion in Canada
- the Role of Light Rail Transit in Urban Development
- Link-based Emissions from Mobile Sources
- Development of Logistics hubs/gateways
- Electric Mobility in Canada
- the Canadian Marine Regulatory Environment
- the Implications of “Complete Streets”

MITL is led by its Director, Professor Pavlos Kanaroglou, a Tier 1 Canada Research Chair in Spatial Analysis. Professor Kanaroglou is an innovative transportation researcher with extensive experience in the development of spatial analysis methods and in the interactions between land use, transportation and the environment. He combines several years of industrial experience with over 25 years of academic teaching and research.

In addition to applied research, MITL offers a biannual conference called TRANSLOG and research-focused presentations and events for the general public. Please visit http://mitl.mcmaster.ca for more information and to view completed research reports.
Events in Review

Holiday Festivus

This year's Holiday Festivus was a great success. Over 100 members and families of the SGES came together at Collin's Brewhouse in Dundas to share a little Holiday cheer. The evening began with food and drinks. Mid-way through the evening there was a trivia game and rock – paper - scissors competition where competitors won great prizes.

Special thanks to the 2013/2014 Social Committee for planning the Holiday Festivus.

Have a Heart

This past year the Social Committee organized a campaign on Valentine's Day called, 'Have a Heart' at the Good Sheppard. The Good Shepherd is an organization which provides emergency and supportive housing, food and clothing to those in need. The manager that we worked with for the afternoon spoke to us about the McMaster community, and how there are a few departments across campus that also get involved a few times a year, with helping out at a few of their locations. For the afternoon, we helped organize and prepare toiletry items into individual bags that were donated from a few different companies, some of which included Dove, TreSemme, and AXE. The products that we prepared were going to be used in the following week for the food bank. It was a great feeling to help out in our community, and it is our hope to continue this campaign in the next year as well.

If you are interested in helping out and giving back to the community, please get in contact with the Social Committee, or Alyson Brown (browna22@mcmaster.ca).
2014 Hamilton Envirothon
by Alyson Brown

It was a beautiful, sunny day on April 23rd when local high-schools gathered at the Dundas Conservation Area to compete in the annual Envirothon. The Envirothon provides local high-school students with the opportunity to engage in real-life conservation efforts and to learn about current environmental issues. Several members of the SGES community; Maureen Padden, Alyson Brown, Lisa Leoni as well as several undergraduate students assisted with the day’s activities. Seven local high-schools competed in the event which consists of five stations: forestry, wildlife, water, soils and sustainable agriculture; the special topic for this year. Each school has 30 minutes at each station during which they perform a variety of environmental skills such as: measuring stream flow, collecting soil samples with an auger, completing a tree survey, or identifying evidence of wildlife. At the end of each station students are quizzed on what they learned pertaining to each topic. Although all of the students were excellent competitors, the team from Highland Secondary School was deemed the winner of the 2014 Local Envirothon. It was a pleasure to be a part of the day and it is refreshing to see the enthusiasm the students have for environmental issues, conservation efforts and the great outdoors! Hopefully this great event will continue on for many years to come.

Top: Elizabeth Aslin, Dr. Maureen Padden, Christine Yachouh, Rebekah Short at the water station.

Middle left: students preparing a stream gauge to measure water velocity.

Middle right: 2014 Envirothon winners from Highland Secondary School

Bottom: School of Geography and Earth Science Envirothon volunteers- Alyson Brown, Rebekah Short, Doug VanRuyven, Aaron D’Amico, Rebecca Jahns, Dr. Maureen Padden, Elizabeth Aslin, Christine Yachouh, Lisa Leoni
Education in the Field

STUDYING LOCAL GEOLOGY

Level I Human Geography Field Work
by Michael Mercier

Geography, both human and physical (and earth and environmental sciences), is an inherently field-based discipline. Field work is at the core of most research conducted by faculty members and graduate students in the School, and there is a long tradition of field work in our senior undergraduate teaching (i.e. Level III and IV field camps, field-based courses, local field trips, etc.).

As a key component of teaching human (especially urban) geography, field work allows students to apply theoretical and conceptual knowledge to real-world situations (i.e. suburbanization, gentrification, redevelopment, globalization, etc.). And at the same time, field work influences student interpretations, and challenges their theoretical understandings, of their everyday world. As such, field work is critical to students developing an understanding of the importance of 'sense of place', appreciating difference, and becoming sensitive to the circumstances of others.

While field work courses have been a key part of our undergraduate programs for a long time, recent pressures towards ever larger class sizes at the more junior undergraduate levels has made it challenging to give students an opportunity to do field work as part of their McMaster education. In Level I human geography, for example, approximately 1800-2400 students go through our courses each year, making the use of experiential education via field work logistically difficult. However, without field work in our large introductory courses, we are not necessarily putting our best foot forward and showing potential students all that a geography program can entail.

It was with all this in mind that field work has recently been re-introduced in the Level I human geography classes, despite the logistical challenges. Students now complete TA-guided field work (on campus) during one lab/tutorial, conduct additional self-directed field work in preparation for another lab/tutorial, and most significantly, are required to conduct extensive field work as part of a major written assignment in each course. For example, students in GEOG 1HA3 (Human Geographies: Society & Culture) have the opportunity to get out into the neighbourhoods of Hamilton to see what makes each of these places unique and how they contribute to the larger fabric of the city. Similarly, students in GEOG 1HB3 (Human Geographies: City & Economy) have the opportunity to personally connect with a currently topical issue in the city, the development of a light rapid transit (LRT) system. In this course, students explore where the route would go, propose station locations and designs, and think carefully about the ways that the system would connect with the current urban landscape. The addition of field work has been well received by most students in both courses. These field experiences are frequently cited (in course evaluations) as the component that makes these courses most distinct from their other Level I experiences.

So, despite the logistical challenges of offering experiential field work opportunities to all of our junior undergraduate students (including those in our Introductory courses), I think it is something that we must continue to try to do to highlight all that a training in human geography has to offer.

EnvirSc 1G03 Field Work
by Lisa Leoni

Each year, students of EnvirSc/Earth Sc 1G03 take to the outdoors for a field lab at the Niagara Escarpment. In recent years, students have been visiting Rock Chapel, a site managed by the Royal Botanical Gardens. Rock Chapel is an educational playground. It has a stairwell on the face of the Niagara Escarpment where students can closely examine each of the rock units, paying careful attention to each rock type, grain size, and the presence of fossils. This field lab encourages students to use the skills they have developed in the classroom and apply them to real environments.

The field lab at Rock Chapel has always been one of the favourite labs among both teaching assistants and students. This year, however, there will be another field lab competing for top spot on the favourites list. The 1G03 teaching team will be introducing a new field lab utilizing McMarsh: McMaster’s wetland reclamation and restoration project.

The McMarsh Hydrology lab will have students measuring various water parameters of Coldwater Creek, a stream in McMarsh. Students will map the local area, measure the depth of the water table, and wade into Coldwater Creek to measure stream water chemistry and stream discharge. The 1G03 teaching team is excited to implement this new lab which will further develop student’s field work skills.

EnvirSc 1G03 students looking for fossils in the Lockport Dolomite at Rock Chapel
Reaching Out to Alumni

We’d like to hear from you. If you have ideas for the newsletter or a story/news that you would like to share with the SGES community, let us know! You can reach us at the following:

By mail:
SGES News
School of Geography and Earth Sciences
McMaster University
General Science Building 206
1280 Main Street West
Hamilton, On Canada
L8S 4K1

By email: sgesnws@mcmaster.ca

Dr. R. Louis Gentilcore Sketch (caption - “And now I would like to recommend.”)