

Loyola Sustainability RESEARCH CENTRE

INSIDE



Photos courtesy of Ryan Young

Partnerships for the Living City: Promoting Urban Biodiversity Conference

Friday March 7, 2014

Concordia University, Montreal, Quebec

On behalf of the Loyola Sustainability Research Centre, it is a great pleasure to welcome you to the Partnerships for the Living City: Promoting Urban Biodiversity conference. We have several goals related to this event, including engaging local political leaders in the discussion, showcasing Concordian researchers, and achieving some genuine public outreach with the active presence of NGOs and concerned citizens. Break-out sessions in the afternoon will serve to gather public input on the burning questions of our time: how can cities get greener while growing in size? How can urban biodiversity, which is all around us yet is rarely recognized, be promoted? Hopefully, this conference and others like it will make a contribution to the important tasks ahead. In collaboration with the Secretariat of the Convention on Biological Diversity and the Montreal Centre for Biodiversity Science, the Centre is proud to deliver this event and hopes to see you at many similar occasions here at Concordia University in the future.



Dr. Peter J. Stoett
 Director, Loyola Sustainability Research Centre

Special Thanks to our Partners !



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Alan Shepard
President, Concordia University

When we hear the word “biodiversity,” we usually think of vast natural spaces. We seldom consider the incredible variety of life that surrounds us every day in our urban environment — a richness we need to conserve.

Concordia University’s Loyola Sustainability Research Centre (LSRC) is proud to create the space for discussion on this vital topic by hosting *Partnerships for the Living City: Promoting Urban Biodiversity* on March 7. This one-day conference is coordinated by Concordia’s LSRC, along with the UN’s Secretariat of the Convention on Biological Diversity (CBD) and the Quebec Centre for Biodiversity Science.

By bringing together leading academic, government, urban planning and NGO stakeholders from Montreal and abroad, participants will see different perspectives on the field’s latest research and best practices.

And Montreal is the perfect location. As the site of the CBD Secretariat’s head office and a member of the Advisory Committee on Cities and Biodiversity, our city is a leader and model in this field.

We look forward to hosting you at this much-anticipated conference. And we invite you to join us for the gala dinner and keynote address by internationally renowned researcher and author Holly Dressel, one of Canada’s most recognized names in environmental studies, health care and aboriginal issues.

“We seldom consider the incredible variety of life that surrounds us every day in our urban environment — a richness we need to conserve.”

Braulio Ferreira de Souza Dias
Executive Secretary, Convention on Biological Diversity

I am pleased to associate the Secretariat of the Convention on Biological Diversity (CBD) with Concordia University’s “Partnerships for the Living City” Conference, organized by its newly-established Loyola Sustainability Research Centre. Meetings like this help draw attention to the importance of cities in stemming the tide of global biodiversity loss.

The Secretary-General of the United Nations has said “*the road to global sustainability runs through the world’s cities and towns*”. Cities utilize most of the world’s resources and therefore present the greatest need for positive action for biodiversity. But they also provide the greatest source of innovation and dynamism to effect such action. At the same time, the biodiversity *within* cities helps to connect us with nature and contributes to our health and wellbeing.

Cities have a key role to play in national efforts to achieve the goals and targets of the Strategic Plan for Biodiversity 2011-2020. This essential, collaborative approach is guided by the Plan of Action on Subnational Governments, Cities and Other Local Authorities for Biodiversity that was endorsed by the Conference of the Parties to the CBD; is supported by the work of the CBD Secretariat and its partners; and is applied by progressive cities and subnational governments worldwide.

At this conference we look forward to learning from a leader in urban biodiversity management, the City of Montreal, in creating greener, more livable urban environments. Join me and stakeholders from civil society, academia, policy and urban planning in exploring local and international solutions to support living cities.



“the road to global sustainability runs through the world’s cities and towns”

Conference Schedule

D.B. CLARKE THEATRE
(HENRY F. HALL BUILDING 1455 DE MAISONNEUVE BLVD. W)

8AM Registration

9AM WELCOME AND OPENING ADDRESS

- Benoit-Antoine Bacon, Provost and Vice-President, Academic Affairs, Concordia University
- Braulio Dias, Executive Director, *Secretariat of the Convention on Biological Diversity*
- Andrew Gonzalez, Director, *Quebec Centre for Biodiversity Science*

9:40AM SINGAPORE INDEX: LESSONS FROM MONTREAL AND ABROAD

- R al M nard, *City of Montreal, Executive Council, Responsible for Sustainable Development, the Environment, Large Parks and Green Spaces*
- Panel of Montreal Municipal Representatives (Moderator: Tim Sargeant)
 - Mayor Alan DeSousa (Saint Laurent)
 - Mayor Anthony Housefather (C te Sainte-Luc)
 - Mayor Paola Hawa (Sainte Anne-de-Bellevue)
 - Borough Councillor Marianne Gigu re (Plateau Mont-Royal)

11:15AM

BREAK

11:30AM SHOWCASING THE LOYOLA SUSTAINABILITY RESEARCH CENTRE

- Academic Panel
 - Melanie McCavour, PhD. (Biology)
 - Katja Neves, PhD. (Sociology/Anthropology)
 - Jochen Jaeger, PhD. (Environmental Sciences)
 - Owen Temby, PhD. (Loyola Sustainability Research Centre)
 - Selvadurai Dayanand, PhD. (Biology)
 - Laura Shillington, PhD. (Geography)

**Please show your Support to our Masters and PhD Students
who are Presenting their Graduate Posters
Throughout the Day!**

Conference Schedule continued

1PM LUNCH

H-763, H-765, H-767; 7TH FLOOR OF THE HALL BUILDING (1455 DE MAISONNEUVE BLVD. W)

LUNCH KEYNOTE ADDRESS

David Maddox, PhD., Founder and Editor of *The Nature of Cities*

“Human. Habitat. Creating Resilient Sustainable and Livable Cities that Work for People and Nature”

2-5PM SHOWCASING LEADERS IN URBAN BIODIVERSITY: NGOs

- Over 20 NGO Kiosks
- Networking, Public Engagement and Discussion
 - Achievements in Urban Biodiversity
 - Challenges in Urban Biodiversity
 - Biodiversity as a social issue, critical for the health and well-being of citizens
- Public Engagement Break-Out Sessions
 - Environmental Education and Community Health
 - Urban Agriculture and Food Security
 - Citizen Engagement around Nature
 - Political Engagement and Stakeholders

GALA-DINNER AND KEYNOTE ADDRESS

H-763; 7TH FLOOR OF THE HALL BUILDING (1455 DE MAISONNEUVE BLVD. W)

5-6PM Networking Cocktail

6PM OPENING ADDRESS (MC: Jessica Laventure)

- Andrew Gonzalez, PhD., Director, *Quebec Centre for Biodiversity Science*
- TBC, Concordia University
- Oliver Hillel and Andre Mader, Program Officers, *Secretariat for the Convention on Biological Diversity*

6:30PM Gala Dinner

7:30PM KEYNOTE ADDRESS

Professor Holly Dressel, Award-winning Researcher and Environmental Author
"Urban Biodiversity: Beyond City Borders"
Photos by Ryan Young

CLOSING ADDRESS

Peter Stoett, PhD.
Director, *Loyola Sustainability Research Centre*

8PM Book Sale and Signing

Ten Key Messages from the Cities and Biodiversity Outlook (CBO) Report

1 Urbanization is both a challenge and an opportunity to manage ecosystem services globally.

2 Rich biodiversity can exist in cities.

3 Biodiversity and ecosystem services are critical natural capital.

4 Maintaining functioning urban ecosystems can significantly enhance human health and well-being.



5 Urban ecosystem services and biodiversity can help contribute to climate-change mitigation and adaptation.

6 Increasing the biodiversity of urban food systems can enhance food and nutrition security.



7 Ecosystem services must be integrated in urban policy and planning.

8 Successful management of biodiversity and ecosystem services must be based on multi-scale, multi-sectoral, and multi-stakeholder involvement.

9 Cities offer unique opportunities for learning and education about a resilient and sustainable future.

10 Cities have a large potential to generate innovations and governance tools and therefore can—and must—take the lead in sustainable development.

Source: *Cities and Biodiversity Outlook*, Convention on Biological Diversity

<http://www.cbd.int/doc/health/cbo-action-policy-en.pdf>



KEYNOTE SPEAKERS



Holly Dressel

Best-selling author, speaker, environmentalist and researcher

Best-selling author and researcher, Holly Dressel, Adjunct Professor at McGill University's School of the Environment, is one of Canada's most recognized names in teaching, environmental studies, health care, economic concerns and aboriginal issues.

Dressel is best known for her work with celebrated environmentalist and television host David Suzuki on film and radio programs, as well as the three best-selling books they have written together: *From Naked Ape to Super-species*, *Good News for a Change* and *More Good News*.

All of these books include analysis of problems specific to urban environments, and argue for the extreme importance of biodiversity in the healthy survival of all systems, from water and carbon cycles to climate and social cohesion. Dressel is also the writer, producer, broadcaster or researcher for many radio and television series and documentaries, mostly done for CBC and the NFB. In addition to her involvement with environmental subjects, Dressel wrote *Who Killed the Queen? The Story of a Community Hospital and How to Fix Health Care*, the most complete book on the history and status of the Canadian health care system. Professor Dressel is in demand as a journalist, speaker and media expert on a variety of issues, including both human and ecosystem health, economic systems, biodiversity and habitat preservation, indigenous and traditional systems, and genetic engineering.

David Maddox is committed to the health of the natural environment, urban resilience, the application of ecosystem services for human welfare and livelihoods, and the effective and efficient monitoring and evaluation of these issues. As the founder and editor of *The Nature of Cities*, a discussion site devoted to cities as ecological spaces, and Chief Scientist for Sound Science LLC, his current work is in the development and dissemination of useful knowledge for design and management of social-ecological systems in urban landscapes.



Human. Habitat. :

Creating Resilient Sustainable and Livable Cities that Work for People and Nature

Cities are ecological spaces. They are human habitat. How can we make them more resilient, sustainable and livable — that is, better for both people and nature? This is a worldwide issue that needs worldwide attention. Good science and policy is essential. So too is public involvement. Urban social-ecological initiatives involve ecologists, designers, lawyers, architects, technologists, and policy makers. But, they must also include the public, which use and benefit from urban green spaces. Useful and mainstreamed knowledge is key to creating a truly biophilic urban ethos, and the exchange must be facilitated at all levels of public dialog.

The Nature of Cities is a collective forum on cities as ecosystems as designed and natural human habitat intimately connected to resilience, sustainability, and liveability.

Bios



Benoit-Antoine Bacon was appointed provost and vice-president, academic affairs, by Concordia's Board of Governors for a five-year term, effective July 1, 2013.

Born in Montreal, Bacon is an alumnus of Concordia where he completed his B.A. Honours degree in Psychology. He also holds a M.Sc. and a Ph.D. in Neuropsychology from the University of Montreal, and he has completed a two-year NSERC-funded post-doctoral fellowship at the University of Glasgow, UK. Upon returning to Canada he taught for one year at Concordia before joining Bishop's University. At Bishop's he was appointed chair of the Department of Psychology in 2008.

He was academic chief negotiator for the association of professors on key collective agreements from 2008 to 2010. He was dean of the Faculty of Arts and Science from 2011, and in addition was associate vice-principal of research from 2012. He was granted full professorship in 2012. In addition to his administrative responsibilities, Bacon has continued to teach and to be involved in research. His work in cognitive neuroscience centers on the links between brain activity and perception in the visual and auditory systems, as well as on multisensory integration. He is a member of the FRSQ-funded Center for Research in Neuropsychology and Cognition (CERNEC). At Bishop's he was granted the University's Merit Award on three occasions for exceptional performance in teaching and research.

Braulio F. de Souza Dias, *Executive Director, Secretariat of the Convention on Biological Diversity*, has over three decades of experience in biodiversity science and policy and its implementation at national and international levels. He brings a unique combination of scientific training and extensive experience in negotiation. He obtained a BSc in Biological Sciences from the University of Brasilia and went on to obtain his PhD in Zoology from the University of Edinburgh in 1981. He has occupied leading positions in the Brazilian Federal Government administration.



Before joining the Secretariat, he was Secretary of Biodiversity and Forests at the Brazilian Ministry of the Environment since September 2010, and before that was Director for Biodiversity Conservation since 1999, overseeing national biodiversity and forest programs directly implemented by the Ministry of the Environment and the national programs implemented by institutes subordinate to the Ministry. Mr. Dias joins the Secretariat at the beginning of the United Nations Decade on Biodiversity and the first years of implementation of the Strategic Plan for Biodiversity 2011-2020.



Andrew Gonzalez, *Director, Quebec Centre for Biodiversity Science*

My research is broadly focused on the causes and consequences of biodiversity loss and the stability and functioning of ecosystems. As a corollary I hope to gain a better understanding of how the impacts of anthropogenic environmental change can be mitigated. We use experiments in the field and lab, theory, and databases to tackle the following research questions: Biodiversity, ecosystem functions and landscape connectivity; Ecological networks: The structure and function of ecological interaction networks in space (i.e. metacommunities); Eco-evolutionary dynamics of environmental change; and the ecological impacts of economic inequality.

Oliver Hillel, *Programme Officer, Secretariat of the Convention on Biological Diversity*

Oliver Hillel has been a Programme Officer at the Secretariat of the Convention on Biological Diversity (SCBD, administered by the United Nations Environment Programme) in Montreal, Canada, for the last 7 years. In the Division of Mainstreaming, Partnership and Outreach, he is responsible for stakeholder engagement, including on issues of sub-national implementation (involvement of States, Regions and cities),



A biologist with a Master's Degree in Environmental Education and MBAs on Managerial Accounting and Hotel Management, Oliver has over 25 years' experience on international cooperation and negotiations on sustainable tourism, event organization, and training and capacity building programs across many themes and issues related to sustainable development. Previously, he was the team leader for a tourism development cooperation project in the Philippines, Tourism Programme Coordinator for UNEP's Division of Technology, Industry and Economics based in Paris, France, and Ecotourism Program director for Conservation International. He also worked for SENAC, a professional training institution in his home country Brazil, where he created and managed training and consulting services for hotels, restaurants, and theme parks. Oliver has coordinated the SCBD's activities involving cities and subnational authorities since their inception, supporting negotiations that led to the adoption of a Plan of Action for Subnational Governments, Cities and other Local Authorities, and the Global Partnership for Subnational and Local Action for Biodiversity. He has also co-organized more than 25 meetings including three Cities and Biodiversity Summits parallel to meetings of the Conference of the Parties, and co-managed the production of the Cities and Biodiversity Outlook, a reference publication on the links between urbanization and biodiversity.



André Mader is a South African conservation biologist, who focuses on the interface between biodiversity policy and practice. He has worked in South Africa, the Middle East and Canada as researcher, manager, trainer and advocacy expert – the objectives of his work always aligned with those of the United Nations' Convention on Biological Diversity (CBD). Since 2006, Andre has played a leading role in technical and advocacy aspects of ICLEI's Local Action for Biodiversity programme, which led to his current secondment to the Secretariat of the CBD in Montreal. There, his focus is on bridging the gaps in biodiversity planning and management between levels of government, to facilitate implementation of the CBD where most implementation happens – locally.

Réal Ménard a été élu maire de l'arrondissement de Mercier–Hochelaga-Maisonneuve lors de l'élection municipale de novembre 2009 sous la bannière de l'équipe de Vision Montréal.

Monsieur Ménard est né le 13 mai 1962 dans le quartier Hochelaga-Maisonneuve. Il a fréquenté l'école Sainte-Jeanne-D'Arc et l'école secondaire publique Saint-Émile. Il poursuivra des études universitaires à l'Université de Montréal. Il a obtenu un baccalauréat en histoire et ensuite, une maîtrise en science politique. Il a aussi obtenu un certificat d'études supérieures en éthique municipale à l'Université Saint-Paul et une licence en droit à l'Université d'Ottawa.



Ancien attaché politique de Louise Harel de 1988 à 1993, Monsieur Ménard est devenu député fédéral de la circonscription d'Hochelaga en 1993 jusqu'en 2009. Au cours de ses 16 ans de députation pour le Bloc Québécois dans Hochelaga, il a notamment occupé les postes de porte-parole en matière de travail, porte-parole pour les dossiers de la région de Montréal, du logement social et des relations avec les partenaires, porte-parole en matière de citoyenneté et immigration, porte-parole pour la stratégie nationale sur le sida, porte-parole en matière de santé et porte-parole pour les questions touchant la justice et le procureur général. Réal Ménard est le premier parlementaire à avoir déposé un projet de loi antigang à la Chambre des communes, en 1995. Rappelons par ailleurs que Réal Ménard s'est fait le défenseur des droits des personnes homosexuelles. Le 26 juin 2009, il a annoncé son intention de quitter la scène politique fédérale pour se consacrer à la politique municipale montréalaise. Il est élu maire de l'arrondissement de Mercier–Hochelaga-Maisonneuve lors de l'élection municipale de novembre 2009 avec l'équipe de Vision Montréal. À l'élection municipale de novembre 2013, il se présente avec l'équipe de la Coalition Montréal–Marcel Côté où il est réélu maire de l'arrondissement de Mercier–Hochelaga-Maisonneuve.

Monsieur Ménard a été membre du comité consultatif sur l'avenir des installations olympiques de 2011 à 2013. Il a aussi été vice-président de la commission permanente de la sécurité publique au conseil municipal et membre du comité exécutif de la Ville de Montréal à titre de responsable du Transport jusqu'à l'élection de novembre 2013. Depuis cette élection, le maire Coderre a nommé Réal Ménard au comité exécutif de la Ville de Montréal à titre de responsable du développement durable, de l'environnement, des grands parcs et des espaces verts.



Marian Pinsky, M.A., Sociology, is the Coordinator of the *Partnerships for the Living City: Promoting Urban Biodiversity Conference*, which showcases the research talents of the Loyola Sustainability Research Centre at Concordia University. Previously working in Aboriginal youth leadership programming at Canada World Youth, a leader in international education programs, Marian was directly involved in programs focused on international development and Aboriginal youth empowerment in Peru, Tanzania and South Africa.

Having recently completed her Masters in Sociology, Marian has been published several times on her work on the World Social Forum, the global food crisis, and development in Kerala, India. She is also involved in numerous ventures ranging from Montreal's Social Justice Committee, to her most recent engagement as a Theme Team Researcher for the Montreal World Health Organization (MonWHO) Simulation on Access to Global Health. Marian enjoys hiking, swing dancing, and recently joined a dragon boat team, the Jade Dragons.

Peter J. Stoett is a Professor in the Department of Political Science and Director of the Loyola Sustainability Research Centre at Concordia University in Montréal. His main areas of expertise include international relations and law, global environmental politics, human rights, and Canadian foreign policy. Recent books include *Global Ecopolitics: Crisis, Governance, and Justice* (University of Toronto Press, 2012); *Environmental Challenges and Opportunities: Local-Global Perspectives on Canadian Issues* (Emond Montgomery, 2009); *Bilateral Ecopolitics: Canadian-American Environmental Relations* (Ashgate, 2006); *International Ecopolitical Theory: Critical Reflections* (UBC Press, 2006); and *Global Politics: Origins, Currents, Directions*, Fifth Edition (ITP Nelson, 2013).



Professor Stoett has conducted research in Europe (including the Balkans), Eastern, Southern and Western Africa, Central America, and Asia, and he also teaches at the United Nations' University for Peace in San Jose, Costa Rica; and the IMT Institute for Advanced Studies in Lucca, Italy. He was the 2012 Fulbright Research Chair for Canadian-American Relations at the Woodrow Wilson International Center for Scholars in Washington, D.C.; and the 2013 Erasmus Scholar at the International Institute for Social Studies at The Hague, Netherlands.



Ryan Young is a city councillor in Ste-Anne-de-Bellevue. He is the president of the Environment Committee of Ste-Anne-de-Bellevue and holds a Master's degree in Environmental Studies from York University. Ryan led the creation and implementation of a 10-year sustainable development plan for the municipality that was completed in 2012. He is also a naturalist, and the primary host and producer of CKUT 90.3 FM's *Ecolibrium*, the only English-language environmentally-themed radio show in Quebec. Ryan Young teaches film, television and radio production courses at John Abbott College, where he is known as a passionate educator. He is also locally known as an environmental educator and was nominated in 2006 for a Canadian Geographic Community Environment Award in the category of environmental education. Ryan also provided the beautiful nature photographs you see throughout the Conference!

Panel of Montreal Municipal Representatives



Alan DeSousa, Mayor, Saint-Laurent

First elected as councillor to the City of Saint-Laurent in 1990, Alan DeSousa has served three terms as city councillor and three terms as Mayor of Saint-Laurent borough. A chartered accountant by profession, he served on the City of Montréal's executive committee for 11 years, most recently as Vice-Chairman. His responsibilities have included the environment, sustainable development, economic development, finance and administration. He has also served on the agglomeration and Montréal metropolitan community councils and committees.

Marianne Giguère, Plateau Mont-Royal City Councillor

Conseillère d'arrondissement, Plateau-Mont-Royal

Élue pour la première fois en novembre 2013, Marianne Giguère représente le district de De Lorimier. À l'arrondissement, elle siège au Comité consultatif d'urbanisme et s'occupe, entre autres, des dossiers du développement durable, des sports et loisirs et de l'animation de l'espace public. Au sein de Projet Montréal, elle est porteuse des dossiers du verdissement, du cyclisme et de l'agriculture urbaine. Enfin, à la Ville de Montréal, elle siège sur la Commission d'examen des contrats. Mère de deux jeunes enfants, Marianne est une militante de longue date pour le verdissement de son quartier, pour les transports actifs et pour l'apaisement de la circulation. Diplômée en géographie et en éducation, elle a travaillé comme conseillère pédagogique spécialisée en univers social et en technologies.



Paola Hawa, Mayor, Sainte-Anne-de-Bellevue

Paola Hawa has sat on the Municipal Council of Sainte Anne de Bellevue since 2009, first as Councillor and recently elected as Mayor in 2013. Ms Hawa has been a vocal advocate of conservation initiatives for Sainte Anne de Bellevue which includes within its territory one of the last natural spaces - rich in biodiversity - on the island of Montreal. She believes in the "democratization" of natural spaces and in the power of a community to "effect change". Lawyer by trade, she is a member of the Barreau du Quebec as well as the Massachusetts Bar Association. Ms Hawa practices law at the Montreal based firm, Mitchell Gattuso S.E.N.C. She is also a member of the Montreal permanent commission: Commission sur l'eau, l'environnement, le développement durable et les grands parcs.

Anthony Housefather, Mayor, Côte Saint-Luc

Anthony Housefather has 2 law degrees from McGill University and an MBA from Concordia University and serves as Executive Vice President and General Counsel of Dialogic a multinational technology company. Anthony was first elected as a City Councillor 20 years ago at the age of 24 and has been Mayor of the City of Cote Saint-Luc for the last 9 years. He competes actively in masters swimming and will swim at the World Masters Swim Championships in Montreal this summer and believes very strongly in the important role of the municipality promoting the health and well being of residents.



Loyola Sustainability Research Centre: Research Abstracts and Professor Bios

Urbanization and City Partnerships for the Maintenance of Biodiversity

Selvadurai Dayanandan, PhD., Department of Biology, Concordia University

The impacts of urbanization on the maintenance of biodiversity are profound and affect at both local and global levels. While urbanization associated changes in the land cover and built environments directly impact the local biodiversity, the increased resource demands of urban dwellers indirectly affect the biodiversity at locations far removed from the boundaries of cities. These impacts often lead to reduction in genetic diversity and compromise the evolutionary and adaptive capabilities of species under a changing environment. Through drawing examples from our own research, we show that 1) global demand for pharmaceutically important compounds escalated harvesting of medicinally important plant species in the Western Ghats biodiversity hotspot leading to reduction in genetic diversity, 2) genetic improvements of rice to meet global food demand led to reduction in genetic diversity in genetically improved rice varieties as compared to traditionally cultivated rice varieties in the Eastern Himalayan region, and 3) forest trees in the eastern North America have migrated in response to changes in the climate during the post-glacial era maintaining the regional biodiversity. These challenges provide opportunities for cities to take actions for minimizing ecological footprints and build a variety of partnerships to make far reaching positive impacts on the maintenance and sustainable use of biodiversity. These partnership opportunities include 1) industrial partnerships promoting development of alternative sources of pharmaceutical compounds, 2) partnerships with gene banks and native communities to promote conservation of indigenous crop cultivars, and 3) partnerships with neighboring cities to maintain habitat connectivity facilitating species migration to maintain biodiversity under changing climatic conditions.

Selvadurai Dayanandan is an Associate Professor and the Graduate Program Director in the Biology Department at Concordia University. He received his PhD in Biology from Boston University and joined Concordia University after completing postdoctoral training at the University of Massachusetts and the University of Alberta. He was a recipient of Man and Biosphere young scientists award from UNESCO, Deland Award from Harvard University and Killam postdoctoral fellowship from the University of Alberta. He was a member of the ITTO Borneo Biodiversity Expedition team to establish a trans-boundary nature reserve in the island of Borneo.



His biodiversity research work ranges from socio-economic factors and tropical deforestation through population, conservation and evolutionary genetics of tropical and temperate plants covering numerous countries including Canada, China, Costa Rica, India, Malaysia, Sri Lanka and USA. He has served as the Vice-President, member of the Board of Directors and Webmaster of the Canadian Botanical Association. He is a member of the Quebec Centre for Biodiversity Sciences, Centre for Structural and Functional Genomics at Concordia, and the Loyola Center for Sustainability Research.

Measuring Urban Sprawl in Montreal and Assessing the Potential to Increase Connectivity of Natural Areas to Promote Biodiversity

Jochen Jaeger, PhD., Associate Professor,
Department of Geography, Planning and Environment, Concordia University
Landscape Ecology and Environmental Impact Assessment Lab

Urban sprawl has many negative consequences on the environment, including biodiversity, which has made it a topic of great debate. We developed a new metric of urban sprawl called Weighted Urban Proliferation (*WUP*) and applied it to Montreal and Quebec City. It is suitable as an indicator in monitoring systems of biodiversity (pressure indicator) and as a tool for scenario assessment. Urban sprawl in Quebec City has increased 11-fold between 1971 and 2011, and more than 29-fold between 1971 and 2011 on the Island of Montreal. Urban sprawl in Montreal has never before increased as fast as it has increased in the last 20 years and is increasing today. We are currently conducting a project on urban sprawl in Europe and its driving forces in collaboration with the European Environment Agency. We recently developed a measure of connectivity of natural areas in cities, which is now included as one of 23 indicators of the City Biodiversity Index (CBI) of the CBD, also called Singapore Index, and applied it to Montreal and Lisbon. Our study of Meadowbrook as an example demonstrates that there is a large potential for increasing connectivity in Southwest Montreal. Developing Meadowbrook would strongly reduce this potential.



Jochen A.G. Jaeger received his PhD in Environmental Sciences from the Swiss Federal Institute of Technology (ETH) in Zurich, Switzerland. He worked as a postdoctoral fellow at Carleton University in Ottawa 2001-2003 and again in Zurich at the ETH 2003-2007. He joined the Department of Geography, Planning and Environment at Concordia University in Montreal in 2007. He is working in the fields of landscape ecology, road ecology, urban sprawl, ecological modeling, environmental indicators, environmental impact assessment, and trans-disciplinary research concepts. His lab is currently investigating the effectiveness of wildlife passages along a major highway in Quebec, the role of uncertainties in environmental impact assessment in Canada, and drivers of urban sprawl in Europe. His research team received the IENE Project Award 2011 for their project "*Landscape Fragmentation in Europe*" from the *Infra Eco Network Europe* (IENE) in 2011.

Flowering Plants and Pollinators: Promoting Biodiversity and Food Security in Urban and Peri-urban Ecosystems.

Melanie J. McCavour, PhD.,

Loyola College for Diversity and Sustainability, Concordia University; Le Centre d'étude de la forêt, Département des sciences biologiques, Université du Québec à Montréal; North American Pollinator Protection Campaign, San Francisco, California

Maintenance of ecosystem services is increasingly viewed as integral to sustainable management of natural and built environments. Pollination by animals is a crucial step in the production of much of the world's food supply, and the great majority of our most nutritious foods. However, domesticated honeybees are in decline, and the diverse set of proximate reasons for the decline is ultimately linked to overdependence of industrial agriculture on this single species. One solution is to augment crop pollination by increasing wild pollinator resources, habitat and connectivity in forested, agricultural, peri-urban and urban landscapes. For example, we show that retention of aggregated forest harvest residue in farm adjacent short rotation plantations on sandy loam can augment soil N and P and greatly increase pollinator resources. Likewise, in urban environments, urban agriculture plots such as those found in rooftop, terrace or community gardens can be useful habitat for wild pollinators, thus increasing the security of our food supply, and biodiversity maintenance through the provision of wild food resources to pollinators and frugivores. We propose that agriculture could be established in sites historically avoided for reasons of soil contamination, such as road or railroad verges and cemeteries, if planting is guided by knowledge of which species sequester heavy metals in their leaves or reproductive parts. Finally, selection of urban trees can focus on fruiting, animal-pollinated species rather than wind-pollinated species, which cause allergic reactions for over 10% of the population.

Melanie J. McCavour is a PhD Candidate at the Université du Québec à Montréal (UQAM), Department of Biology and teaches Biodiversity, Sustainable Forest Management and Reproductive Plant Ecology for Concordia University's Loyola College for Diversity and Sustainability, and for the Department of Geography, Planning and Environment. In her teaching she looks at the importance of biodiversity maintenance from a holistic perspective and emphasizes the connections between sustainability and health. In her research, she explores the effects of forest fine woody debris in hybrid *Populus* spp. plantations on soil fertility, tree yield, diversity and precocity of fruiting plant



species and pollination success. Melanie has been working with the North American Pollinator Protection Campaign to find legislative ways to protect pollinator diversity and abundance in North America under NAFTA since 2009; first in Washington, DC as an intern with the USDA Forest Service and since 2010, from Montreal, Quebec. She is now exploring ways in which pollinators might be best protected through other legislative and non-legislative (certification, environmental assessment, BMPs) means and hopes to link existing pollinator protective measures to current sustainability criteria under the Convention on Biological Diversity and other bodies.

Partnering-Up for Sustainable Futures: Eco-Citizenry and the Governance of Urban Biodiversity Conservation

Katja Neves, PhD., Department of Sociology and Anthropology, Concordia University

At the current juncture of environmental concern and economic austerity the governance of socio-ecological sustainability is a key challenge for governmental constituencies at international, national, and local levels. In such a context, currently burgeoning “big society” logic - whereby it is suggested that citizen-consumers and/or crowdsourcing might play a role in off-setting the financial cost of urban biodiversity conservation - can appear to constitute a viable strategy to overcome the limitations of national and municipal budgetary constraint impeding urban biodiversity conservation. Relying on first hand data collected at botanic gardens in urban centers in Europe and in north America working under the umbrella of the international organization Botanic Gardens Conservation International, this paper argues that, alternatively, rethinking classic notions of citizenry and its relation to the “polis” under the aegis of the concept of eco-citizenry provides much more solid foundations on which to build sustainable urban futures.



Katja Neves, PhD Sociology/Anthropology

Katja initiated her career as Invited Assistant Professor of Anthropology at the Institute of Anthropology, University of Heidelberg, Germany, after receiving her PhD degree in Anthropology from York University, Ontario, with distinction. She is currently Associate Professor of Sociology of the Environment and Social Sustainability at Concordia University, Montreal. The Junta Nacional de Ciencia e Tecnologia (Portugal), the Fonds Quebecois de Reserche Sur la Societe et La Culture (Quebec), and Concordia University, financed Dr. Neves' early research.

She currently holds 2 research grants from the Social Sciences and Humanities Research Council of Canada (SSHRC) to investigate the contemporary reinvention of botanical gardens as agents of social and ecological biodiversity conservation. This research builds on her research on neoliberal conservation and on socio-ecological sustainability, which has been published in top-rated journals. Some of these articles are now considered top-cited articles within the scholarly literature. Dr. Neves has served on numerous scholarly committees. She has been senior member at large of the executive board of the Environment and Society Section of the American Anthropological Association, executive board member of the Canadian Association of Sociology, and Associate Editor of the Environment and Society Journal. She served as a regular committee member of a SSHRC Insight Development Grant Committee in 2012, and chaired a SSHRC Insight Development Grant Committee in 2013.

Everyday Life and the Politics of Nature in Cities

Laura Shillington, PhD, Department of Geography, Environment and Urban Planning

My research programme broadly explores urban social-nature relations. It addresses two interrelated issues. First, there is a need to understand cities as both social and 'natural' (ecological) spaces. Second, cities are produced through socio-ecological processes, but the resulting urban natures are uneven (both within and outside city limits). My research attends to these issues by asking how we can alter the uneven production of urban natures to create more socially and ecologically just cities. In particular, I am interested in understanding how everyday life in urban areas, especially in mundane spaces such as the home, is embedded within multi-scalar ecological politics – from gendered human-nature relations in the household to uneven urban environmental governance processes – and how paying attention to this embeddedness might help inform more just sustainability efforts. I concentrate in particular on gendered and racialised experiences and knowledges of urban natures. In this regard, my research draws on urban political ecology, environmental justice, critical urban theories, and feminist geographies (especially feminist science studies). My current research focuses on three areas of urban social-natural relations: urban food systems (including urban agriculture in Managua, Nicaragua and Montreal), urban metabolism of sanitation and garbage (in Managua, Nicaragua), and children and nature in urban planning (in Managua, Havana and Montreal).

Laura Shillington, PhD Geography

Laura Shillington has a B.Sc. (Geography, 1997) from the University of Victoria, a M.Sc. (Forestry 2002) from Virginia Polytechnic Institute and State University, and completed a Ph.D. in Geography from York University. In 2008-09 she held a postdoctoral fellowship in Mexico City at the Instituto de Geografía, Universidad Nacional Autónoma de México (UNAM). She has taught geography and urban studies at York University (Toronto) and Carleton University (Ottawa). She is also faculty in Geosciences at John Abbott College. Dr. Shillington's research programme broadly explores urban social-nature relations. She focuses



on several urban environmental issues: urban agriculture and urban food justice; the politics of water, garbage and sanitation; and children and nature. In addition to her academic experience, she has also worked as a consultant in gender, environment and development, and is an active member in community social-environmental issues. At present she is assisting in the development of a local food charter for a NDG in Montreal. She is also currently Vice-Chair of the Geographic Perspectives on Women (of the American Association of Geographers) and co-manages the gender and geography bibliography.

The Political Economy of Urban Biodiversity

Owen Temby, PhD. Public Policy and Administration

My research focuses on urban environmental policy and planning in the context of the ongoing socio-economic transformation of North American cities. I am interested in the interaction of local activism, urban spaces, and global capitalism in determining how decisions take place. In my presentation I will focus on the following questions: Why do we care about urban biodiversity? How have concern for this and other urban environmental issues changed over time? What are the political and economic constraints that efforts to conserve natural resources in an urban setting bump up against?



Owen Temby, PhD Public Policy and Administration

Owen Temby (PhD, Carleton University) is a postdoctoral fellow at the School of Public Policy and Administration, Carleton University. Previously, he was a postdoctoral fellow in the Department of Natural Resource Sciences, McGill University. One of his recent articles won the 2012 Riddell Award (Ontario Historical Society).

Graduate Students' Research Abstracts and Bios

Measuring the Connectivity of Natural Areas in Cities as an Indicator in the City Biodiversity Index of the CBD

Adrienne Asgary and Jochen Jaeger,
Concordia University, Department of Geography, Planning and Environment

Cities can contribute significantly to global efforts to reduce the rate of biodiversity loss. The City Biodiversity Index (CBI) was developed as a tool to evaluate the state of biodiversity in cities and to provide insights for improving conservation efforts. It was proposed at the 9th Meeting of the Conference of the Parties (COP-9) to the Convention on Biological Diversity (CBD) in May 2008. Three expert workshops in 2009, 2010 and 2011 were organized by the National Parks Board of Singapore and the Secretariat of the CBD in collaboration with the Global Partnership on Cities and Biodiversity to develop the index.

The CBI includes 23 indicators such as the proportion of natural areas in the city. We present the CBI with a focus on indicator 2, which measures the connectivity of natural areas in cities. Connectivity is “the degree to which the landscape facilitates or impedes movement among resource patches” and it “can be measured by the probability of movement between all points or resource patches in a landscape”. However, the previous method suggested for this indicator in the CBI was inconsistent. We present an improvement that produces more reliable results without compromising practicality in the application of the metric. The new version applies the effective mesh size method, which is based on the probability that any two randomly chosen locations in the landscape are connected and not separated by any barriers. It includes both within-patch connectivity and between-patch connectivity. We applied the old and new versions of the connectivity metric to Montreal (in collaboration with the Ville de Montreal, Direction des grands parcs et du verdissement) and Lisbon. Montreal and Lisbon agreed to test the CBI, among various other cities. The improved method has been implemented in the CBI in collaboration with the National Parks Board of Singapore and the Secretariat of the CBD. It provides a better account of the state of connectivity of natural areas, which may have implications for cities' conservation efforts. The CBI is supposed to be applied by many cities in the world for monitoring their efforts and successes in halting the rate of biodiversity loss.

Adrienne Asgary graduated from Concordia University in 2013 with Honours B.A. Human Environment. Her Honours essay, “Measuring the connectivity of natural areas in the City Biodiversity Index (CBI) using the effective mesh size (meff)” was a quantitative analysis of the connectivity of natural areas on the island of Montreal. She thoroughly enjoyed coordinating the project with the City of Montreal and with her supervisor Professor Jochen Jaeger, who was responsible for developing the topic of study due to his connection with the Convention on Biological Diversity (CBD).



Adrienne maintained a strong academic standing throughout her studies and was an engaged and passionate student. She is currently working as a Business Travel Coordinator at an engineering-consulting firm in Montreal. She remains passionate about her field of study and is interested in applying her skillset to the Environmental field, as well as furthering her education.

If you have any questions or inquiries, Adrienne may be contacted at adrienne.asgary@gmail.com.

Climbing towards the Light: Liana Distribution and Diversity in Urban Ecosystems

Marie-Hélène Brice, Alexandre Bergeron and Stéphanie Pellerin

Institut de recherche en biologie végétale, Quebec Centre for Biodiversity Science Working Group

This study aimed to evaluate the impact of urbanization on liana distribution in temperate forests and was conducted in 50 forests of the Hochelaga Archipelago (Montréal area, Québec). Potential drivers of liana abundance at the landscape scale (e.g., land use, isolation, urban heat islands), were quantified using satellite images and land use maps. The four most common lianas, *Vitis riparia*, *Parthenocissus quinquefolia*, *Toxicodendron radicans* and *Solanum dulcamara*, were the main focus of this study and their distribution was analysed through multiple linear regression. At the landscape scale, lianas benefited from urbanization, particularly through urban heat islands, which creates a warm and dry microclimate favorable for lianas. At the forest scale, lianas were more abundant in edge habitats due to increased light availability and disturbances. Our results suggest that urbanization will lead to an increase in liana abundance and, thus, increased their role and impact in temperate forests.

Marie-Hélène Brice



I am currently a Master student in plant ecology (Biological Sciences) at the University of Montreal, studying under the supervision of Dr. Stéphanie Pellerin. My research interests focus on the influence of anthropogenic activities on vegetation patterns. For my Master thesis, I study the impact of urbanization on riparian forests in order to improve the management and conservation strategies of these ecosystems. More specifically, I seek a deeper understanding of the distribution patterns of plant species and functional traits in urban riparian forests.

Closing the Loop: Converting Food Waste to Energy and Nutrients in the Urban Environment

Nathan Curry, Concordia University, Electrical and Computer Engineering

In the next 20 years, the UN predicts that global urban populations will increase by 1.5 billion, generating more waste and causing an increase energy demand. Landfills around the world are currently running out of space at an alarming rate and are the third largest contributor of human-related methane emissions in North America. Globally, approximately a third of all food produced from human consumption goes to waste. This wasted food represents around \$750 billion USD, 3.3 billion tonnes of CO₂ emissions, 250 km³ of surface groundwater, and 30% of global agricultural land. If all of this wasted food was used for energy reclamation via the anaerobic digestion process, it could generate about 850 TWh of thermal energy or the equivalent of 30 nuclear power plants in electrical energy. Anaerobic digestion of the organic fraction of municipal solid waste is feasible at smaller scales than currently being employed on farms and wastewater treatment facilities and can be adapted to different urban environments. As fossil fuel prices continue to increase, the cost of trucking organic waste to landfills will increase as well. The on-site treatment of organic waste will become more prevalent and cost efficient and the design and planning of these systems should take place now. If urban anaerobic digestion systems are coupled with urban greenhouses, the excess solar heat gains from the greenhouse can be used to keep the digestion process at the required temperature, and the output from the anaerobic digestion process – compost and a nutrient-rich liquid fertilizer – can be used for growing food and plants in the urban environment.

Nathan Curry is a PhD candidate in the electrical and computer engineering department but his research on converting food waste into energy takes place in the environmental engineering laboratories. His electrical engineering skills come into to play at home where he is building an analog synthesizer from scratch. He hopes to one day make a song with all of the capacitors and resistors that are currently cluttering his desk.



Increasing the Connectivity of the Greenway Network in Southwest Montreal: Scenarios for Enhancing the Wellbeing of Biodiversity and Humans

Megan Deslauriers and Jochen Jaeger,

Concordia University, Department of Geography, Planning and Environment

Connectivity is the "degree to which the landscape facilitates or impedes movement among resource patches" (Taylor et al. 1993) and can be used to assess the extent to which the built environment permits wildlife and humans to move between habitats and recreational sites. In Southwest Montreal, a greenway network has been proposed to improve access to these spaces. Plans for residential development on the site of the Meadowbrook Golf Course may however, compromise the viability of this network by decreasing access to high quality habitat and public space. Connectivity for this network was measured using the effective mesh size (meff); a metric implemented as Indicator 2 of the City Biodiversity Index (CBI) (see poster by Asgary and Jaeger). We applied this method to assess the role of the Meadowbrook golf course for the connectivity of the greenway network in Southwest Montreal and the effect that its development would have, comparing various scenarios. Current and potential future levels of connectivity were measured for spaces used by wildlife and by urban residents. Presently, spaces available for wildlife are limited and somewhat isolated due to large distances and structures, such as roads, that impede movement between them. However, the identification of sites to be enhanced or established as habitats or recreational zones in the future exposed the possibility to increase connectivity substantially in the network. The destruction of Meadowbrook would eliminate its large potential to serve as a vital component of this greenway network in the future. It is therefore, recommended that city planners and government officials consider the possibility offered by this site before decisions regarding its fate are finalized.

Megan Deslauriers



In 2013, I completed a BA in Honours, Human Environment from the Department of Geography, Planning and Environment at Concordia University. Under the supervision of Dr. Jochen Jaeger, I was given the opportunity to undertake research concerning the benefit of urban greenway networks to wildlife and residents both. I am now continuing to follow my interests in the environmental field, working with Canadian Wildlife Services at Environment Canada in Ottawa, Ontario.

Water Ethics and Water Education for Urban Biodiversity

Kristy Franks, M.A., Special Individualized Program, Concordia University

Sustainable biodiversity depends largely on sustainable water practices which are guided by our cultural water worldviews. In July 2014, using a community-based participatory research approach, I will accompany a group of 30 Cree youth on an annual canoe expedition down the Old Factory River of the Wemindji territory, James Bay. The group will participate in the development of a curriculum geared for urban youth that reflects and reinforces their understanding of, and aspirations for, a sustainable water worldview. Research questions include: 1) What underlying water worldview needs to inform and guide water education curricula in order to promote sustainable biodiversity and water practices? 2) What curriculum content and methods regarding water education meet the cultural needs of rural Cree learners as well as those of urban Western science-centric learners? 4) How does one's bioregion and the surrounding biodiversity influence one's water worldview?

Kristy Franks

Kristy's environmental interest began at 12 years old when she founded a children's group called the HOME (Help Our Mother Earth) Club. A decade later she graduated from the McGill School of Environment and then years later co-founded a community group called Canal Bleu who regularly cleans up Montreal's Lachine Canal. Several people call her "the Smoothie girl", a reputation that stems from her energy-



awareness project involving bikes that are connected to blenders which offer people the chance to use pedal power to mix Smoothies. She worked at Canada World Youth for seven and a half years coordinating their sustainable development projects including their Green Miles carbon responsibility project and their Rio+20 Earth Summit initiative. Kristy's passions are currently being channeled into a Masters degree focused on Water Ethics through Concordia's Individualized Program.

**Denouncing the Tar Sands and Pronouncing the Virtues of Sustainability:
Prospects for Breaking the Carbon Dead-lock by Bridging Two Approaches to Social Change**
Kristian Gareau, Concordia University

Two major tar sands pipeline projects are slated for Quebec. A massive transition from conventional to more expensive and polluting unconventional fossil fuel sources is underway due to higher oil prices, improved technologies and diminished supply. Shale oil, shale gas and tar sands are the friendly new faces of a new energy economy, for which there is little public debate, especially considering high environmental risk due to higher GHG emissions, increased habitat destruction and water pollution. Beyond being about saying YES or NO to oil, it is about what kind of future we want -- there is more at stake here than just carbon and the environment; organizing society around consumption destroys minds and erodes the desire for the simpler trappings of a low-carbon way of living. Therein, the city becomes a key strategic front in the fight for reparation, reconciliation, genuine restoration and transformation (Purcell, 2006).



In Montreal, the buzz surrounding urban agriculture and sustainability is almost deafening. Citizens are experimenting with alternative food systems, students are pressuring their university food providers to buy local and organic, and public health administrators are funding community organizations to start up gardens to combat 'food deserts' and the 'heat island effect.' While pipeline politics is portrayed in the media as being angry and confrontational, my research project will draw the links between the critique of existing energy politics and power relations, and the possibilities for an alternative sustainability more closely coupled with ecological systems. Through an exploration of the pipeline debate and the citizen movement that is building around it via interviews with key participants and an auto-ethnography of my own participation, I will demonstrate that confrontational environmentalism, along with more 'positive,' local actions that foster resilient food systems and reconstitute ecosystems, are co-constitutive of the necessary re-politicization of the environmental question and the requisite social desire to engage therein. Thinking through these two approaches might work to move beyond our current carbon lock-in, or "post-ecologist paradox," whereby "on the one hand, people want consumerism and capitalism more than ever; on the other hand, knowledge of the need to change the system has never been greater" (Bluhdorn, 2013).

**Biodiversity Landscape Planning in Environmental Assessments (EAs):
A Look at the Don Mouth Naturalization and Port Lands Flood Protection Project (DMNP) Case Study, According to the Convention on Biological Diversity (CBD) Standards**

Valérie T. Gravel, Department of Geography, Planning and Environment, Concordia University

In the context of my on-going Master in Environmental Impact Assessment (MEnv), the topic is following a 4 months internship, completed at the Secretariat of the Convention on Biological Diversity (SCBD) in 2013. Biodiversity planning and landscape planning both have different languages that are uneasily talking to each other. Through the CBD standards in Biodiversity Planning, I'm analyzing the biodiversity landscape planning strategies of the *Don Mouth Naturalization and Port Lands Flood Protection Project (DMNP)*, mainly developed in its EA process. Being part of the 25-year Toronto Waterfront Revitalization project, the DMNP will transform the existing mouth of the Don River, including the Keating Channel, into a healthier, more naturalized river outlet to the lake, while at the same time, removing the risk of flooding to 240 hectares of urban land to the east and south of the existing river.



Valérie T. Gravel is interested in the design and the planning of landscapes, with a special attention to ecological principles. She is currently completing her Master's degree in Environmental Impact Assessments at the Concordia University and is a landscape architect, graduated from the University of Montreal. Her present research focuses on the integration of biodiversity through blue-green infrastructures projects. In past experiences, she has worked within innovative and creative projects in the landscape design, planning and environment fields. She has also realized numerous exhibitions and public art installations. Adept of discoveries and challenges, Valérie has travelled in more than 20 countries. (online portfolio : valerietg.com)

Urban Biodiversity and Agroterrorism

Richard Greco, Simon Fraser University

Urban-based food supplies are a step away from the several decade long trend of the increasing industrialization of food. And it is a step in the right direction, considering that industrial food production as we know it has been systematically increasing food vulnerability.

There are three main components to food vulnerability, as defined by Evan D.G. Fraser: Low Biodiversity, High Biomass, and High Connectivity. Each of these attributes affects how at risk a crop is to dangers such as natural infestations and molds, as well as contaminations contrived by man. Having such vulnerabilities invites the risk of large crop loss and a massively disrupted economy. The larger the size of any given crop, in absolute terms as well as relative to other crops in the economy, the more impact any single contamination could have. In addition, the more geographically connected those crop lands are, the more likely molds and pests are to spread and propagate. Having such vulnerabilities in a food supply leaves a country's economy and population at risk for major market shocks, as opposed to smaller and less volatile ones. Whether introduced by accident or intentionally, monoculture is especially problematic when considering invasive species. Identified by Jim Monke in his book on Agroterrorism, he mentions several molds found in India that are known to be especially virulent and are able to wipe out up to 70% of the crop they infect. In this example, it is how the Brown Downy Mildew can decimate a corn crop, which is one of the largest monocultures in the world. So long as crops are grown in such dense monocultures, there are increased risks of large and unexpected collapses in the food markets.

Considering how urban agriculture fundamentally operates to increase biodiversity, and is decentralized, at least two of the factors of food vulnerability are impeded by this growing practice. Additionally, the urban food supply chain is shortened and goes through a greater variety of direct paths than the industrial methods. This means no single supply chain is vital to the plate-bound food and that there are fewer opportunities to disrupt the food supply since the locations of growth and consumption are in extremely close proximity. As such, any support of urban biodiversity would begin to reduce the risk taken when food growth is concentrated in area, devoid of biodiversity, and extremely dense with production.

Richard Greco completed his Undergraduate degree in Political Science at Concordia University and continued on to do a Master's in the same field at Simon Fraser University in B.C. His Master's research focused on the timely subject of Food Security in the U.S., with a focus on their largest and most vulnerable crop: corn. With the help of his supervisor, Alexander Moens, he was able to complete all the requirements to graduate - including courses and writing and defending a research project - faster than any other student to date. He is currently working at Concordia University in Counselling and Development (H-440) as a Strategic Learning Supervisor and working to get his research published.



Outside the Box with the WWViews: A Policy Role for City Slickers in Global Biodiversity Issues

Patricia Hanney¹, David Secko^{1,2}, Ernest Hoffman² and Shirley Tran²

¹Centre for Structural and Functional Genomics, ²Department of Journalism, Concordia University

The World Wide Views (WWViews) on Biodiversity was an international public engagement project that gave citizens the chance to communicate their views on biodiversity issues to policy makers at the United Nations eleventh meeting of the Conference of the Parties to the Convention on Biological Diversity, more familiarly known as COP-11. On September 15th 2012, 3000 citizens across 25 different countries took part in this global event. WWViews on Biodiversity set out to engage citizens in the process of policymaking by providing them with a unique opportunity to share their experience of sustainable living and discuss the topic of biodiversity. The Canadian arm of the project held events in Calgary, Toronto and Montréal. In this poster, we focus on the results of the Montréal event, with brought together 71 people for a day long discussion, voting on policy issues and interaction with an art installation. The results were disseminated 'live' online and showed that Canadian participants are "very concerned" about the loss of biodiversity (89%) and how it will affect "most people in the world" (91%). After the event, a 17% increase in participants' level of awareness of biodiversity issues was noted. Overall, we highlight the unique strengths and challenges of the WWViews model as a method of public engagement that seeks diverse input on biodiversity issues.



Patricia Hanney grew up in Dublin, Ireland where she completed her higher education. She received her Bachelor's Degree in Sociology and Social Policy from Trinity College Dublin in 2005. She went on to pursue her Masters of Science in Sustainable Development at *The Dublin Institute of Technology* and successfully completed her thesis on 'The impact of an environmental organization on a community's environmental awareness' in 2008. Her interest in environmental sustainability led her to Montréal where she has been living for the last 6 years. Patricia has been working in a research capacity with Dr. Secko and Dr. McIntyre on the Genozymes / GE³Is project, a renewable energy and public engagement project for the last four years. It has proved to be both a rewarding and fruitful experience for her. In 2010, Patricia sat on the Board of Directors for Sustainable Concordia where she gained a strong insight into campus actions towards sustainability. Her special fields of interest include public policy, stakeholder engagement and the impact we have as individuals on our environment.

Increasing Threats to Biodiversity: How Can Urban Sprawl and Its Drivers be Addressed?

Ernest Ireneusz Henning, Jochen Jaeger et al., Department of Geography, Planning and Environment, Concordia University

Urban sprawl is an important threat to biodiversity and it has strongly increased in many parts of the world in recent decades. Natural and semi-natural landscapes are increasingly built over and fragmented, which potentially reduces the resilience of ecosystems and enhances the risk of invasive species. Due to the dramatic loss and homogenization of biodiversity in urbanized landscapes, ecosystem services are also negatively affected. Monitoring systems of biodiversity should include pressure indicators, and therefore, urban sprawl should be included in monitoring systems of biodiversity. For the first time, we provide data about urban sprawl on a continental scale using the novel method of Weighted Urban Proliferation (WUP) and evaluate socio-economic, cultural, geophysical, and demographical drivers of urban sprawl. In order to protect biodiversity from the threat of urban sprawl, we need to identify the relevant drivers of urban sprawl and study their relative importance.

Ernest I. Hennig studied ecology in Essen, Germany, and received his PhD in Environmental Sciences from the Swiss Federal Institute of Technology (ETH) in Zurich, Switzerland. He completed a statistical post-diploma course at the ETH and is now working as a Postdoctoral Fellow at the Department of Planning, Geography, and Environment at Concordia University (since August 2013). His main research interests cover biodiversity in urban environments, landscape ecology, urban sprawl, plant-animal interactions, ecosystem services, and statistics.



Kids Biodiversity: A Website for the UN-CBD

Einat Idan, Concordia University

One of the main concerns of the Convention on Biological Diversity (CBD) has been education and public awareness. In 2005, the UN-CBD specified that it was interested in providing children with an interactive and engaging online environment to learn about biodiversity. The Biodiversity Kids website (2006) was a joint project of the UN Convention on Biological Diversity and the Centre for the Study of Learning and Performance (CSLP) at Concordia University. The CSLP designed an educational website for 6 to 14 year olds, that could function as a stand-alone website but which could also be used in a classroom setting. The two main guiding questions were “how is biodiversity threatened across the globe?” and “what can children do in their context to help preserve biodiversity?” These themes were approached, indirectly, through three games that focus on habitat-species interdependence (Make Me A Home), evolution and diversity (Super-Animal Creator), and global threats to biodiversity (Mission: Cat Rescue).

The project team opted to employ a goal-based, ill-structured problem solving approach. This approach is based on the assumption that by presenting complexity and an authentic problem first, the simpler concepts will be acquired (with support) in the process of finding a solution to the more complex problem. The activities were designed to be relevant to children from a wide variety of cultures and background, technical capacities and cognitive and developmental skills, thanks to informative, differentiated feedback and scaffolding.

Alongside the three interactive games, the website included professional support for educators or parents with ideas for complimentary offline activities, as well as suggestions on how to use the games to explore other themes. There are Animal Profile cards, age-appropriate embedded support within the games, a variety of cognitive scaffolds and meaningful feedback. The final product was released to the CBD server on June 30th, 2006 following a successful presentation of the website to the Conference of Parties in Brazil in March 2006.

Einat Idan has been an Instructional Designer for the CSLP since 2006. She has a B.A. in English Literature and Education from Hebrew University, Jerusalem and a M.A. in Educational Technology from Concordia University. Einat has been involved in a variety of evidence-based educational projects developed at the Centre for the Study of Learning and Performance, with a special focus on self-regulated learning. Currently, she is learning more about educational technology theory music and self-regulation, and early mathematics development.



Does the Marten Cross the Road?:

Spatial Behavior of American Martens in Relation to a Four-lane Highway

Rodrigo Lima and Jochen Jaeger, Department of Geography, Planning and Environment, Concordia University

We study the spatial behavior of American martens along a section of Highway 175 to uncover how this species responded to the widening of the highway from 2 to 4 lanes. Previous monitoring has shown that martens do not normally use wildlife passages in the study area, therefore it is necessary to examine if and how often martens cross the road to understand the degree of isolation of populations on opposite sides of Highway 175. Highways are an important cause of direct mortality and habitat fragmentation for wild mammals, therefore posing a threat to biodiversity conservation. With increasing urban sprawl more wildlife harbouring areas are crossed by highways. Also, areas proposed as ecological corridors (including urban ecological corridors) may be bisected by highways featuring or not wildlife passages. In this sense, the relation of wildlife species with highways and wildlife passages must be better understood to mitigate the loss of biodiversity in urban areas.

Rodrigo Lima is a biologist interested in biodiversity conservation and mammal ecology. He has conducted studies on endangered species in the tropics and more recently has focused his research on Canadian mammals. Rodrigo obtained his MSc. degree from McGill University in 2012 and currently works as a research associate at Dr. Jochen Jaeger's lab in the Geography Department of Concordia University. On his free time he enjoys travelling, camping, and trekking.



Comparison of the Increase in Urban Sprawl in the Metropolitan Areas of Montréal, Québec, and Zurich: How do they Differ, and Why?

Naghmeh Nazarnia, Jochen Jaeger et al,

Department of Geography, Planning and Environment, Concordia University,

Urban sprawl has many negative consequences on the environment, including biodiversity. During the past decades, increasing awareness of the negative effects of urban sprawl made this phenomenon a topic of great debate. However, so far, there is no agreed method of measuring this phenomenon as an indicator in monitoring systems of biodiversity. We compare the patterns of increase in sprawl in the Montreal and Quebec census metropolitan areas in Canada with the Zurich metropolitan area in Switzerland. We use the recently developed metrics of urban permeation (UP) and weighted urban proliferation (WUP) for the quantitative measurement of urban sprawl. Quantitative time series are presented for the period between 1951 and 2012. For example, weighted urban proliferation in Quebec City increased 11-fold from 1.81 UPU/m² to 20.33 UPU/m² from 1971 to 2011, and more than 29-fold from 0.33 UPU/m² in 1971 to 9.74 UPU/m² in 2011 on the Island of Montreal, indicating a dramatic increase in the level of urban sprawl. In contrast, the level of sprawl in the Zurich region increased less than 3-fold from 3.1 UPU/m² in 1960 to 8.9 UPU/m² in 2010, i.e., it was significantly higher than in Montreal and Quebec in the years before 1980, but it increased less quickly. It was rapidly surpassed by Montreal and Quebec during the last 20 years. The comparative assessment of urban sprawl in this study can be used as a tool for scenario analysis and decision-making and as an indicator in monitoring systems of biodiversity (pressure indicator). Results would greatly help land-use and city planners conduct a critical assessment of projected plans and provide a basis for controlling urban sprawl and its negative consequences.



Naghmeh Nazarnia received her BArch in 2010 from Azad University in Iran. After graduation she directly worked as an urban and architectural design specialist for a major consulting engineers as her first professional post. Due to her passion towards cities and the environment, she pursued her studies in the field of urban and environmental studies in Concordia University. During her MSc program, Naghmeh conducted a comprehensive research on urban sprawl in the metropolitan areas of Montreal and Quebec and wishes that, land-use and city planners could utilize the results of her research as a tool for their decision-making and also as an indicator in monitoring systems of biodiversity. Naghmeh's research focuses on land-use planning, urban sprawl, sustainable architecture and their linkages and her goal is to continue to progress her passion for making cities, communities and public spaces a better place to live, play and work.

Monitoring an Ecosystem at Risk: What is the Degree of Grassland Fragmentation in the Canadian Prairies?
Laura Roch, Department of Geography, Planning and Environment, Concordia University

Increasing fragmentation of grassland habitats by human activities is a major threat to biodiversity and landscape quality. Monitoring their degree of fragmentation has been identified as an urgent need. This study quantifies for the first time the current degree of grassland fragmentation in the Canadian Prairies using four fragmentation geometries (FGs) of increasing specificity (i.e. more restrictive grassland classification). The grassland area remaining amounts to 87,568.592 km² in FG4 (strict grassland definition) and 183,241.176 km² in FGI (broad grassland definition), out of 461,503.97 km² (entire Prairie Ecozone area). The very low values of m_{eff} of 14.23 km² in FG4 and 25.44 km² in FGI indicate an extremely high level of grassland fragmentation. The m_{eff} method is supported in this study as highly suitable and recommended for long-term monitoring of grasslands in the Canadian Prairies; it can help set measurable targets and/or limits for regions to guide management efforts and as a tool for performance review of protection efforts, for increasing awareness, and for guiding efforts to minimize grassland fragmentation.

My name is **Laura Roch** and I am doing my MSc in Geography, Urban and Environmental Studies at Concordia University under the supervision of Dr. Jochen Jaeger. My main research interests include studying landscape ecology and road ecology. I am interested in looking at the relationships and interactions between ecological and social processes and particular ecosystems and landscapes, at various spatial and temporal scales. The main tools I use to visually and statistically analyze these aspects are models (e.g. habitat suitability and landscape connectivity models) and Geographic Information Systems (GIS), which uses software to format and compare spatial information, and run various analyses. I hope that my research will be able to help contribute towards creating better monitoring and management systems and aid overall in conservation efforts. I am also the VP Finance for Geograds, the geography, planning and environment graduate student association. One aspect of Geograds is to organize and help support many academic and social events ranging from speakers and documentary screenings to wine and cheeses and trivia nights. Aside from academics, what there is to know about me is that I am a very outdoorsy person, and have always been in love with exploring various environments, be it through snowboarding, hiking or biking, I love being active and being outside. I am also very much into group sports, I play soccer and basketball on a regular basis.



Urban Prosumerism

Aurelia Roman, Interdisciplinary PhD and MA in Human Systems Interventions, Concordia University

In the midst of multiple global crises affecting human and environmental health, the principles and practices of agroecological interventions provide effective ways to create sustainable futures, reduce food insecurity and improve health outcomes. By using high levels of diversity, systems thinking, and sustainability – features that characterize agroecology - we can start shifting from a consumer to a prosumer mindset, rethink our responses to climate change, and redesign our food production, distribution and consumption processes. Agroecology helps us envision a local economy rooted in the principles of reciprocity, redistribution and exchange in which food prosumers use ecological learning to grow their own food or are involved in its production in an active way. In this presentation we will explore how urban prosumerism based on agroecological principles connects the urban space to alternative food systems attempting to redefine how they intersect.



Aurelia Roman is an interdisciplinary researcher doing her doctoral studies at Concordia University, holds a master in human systems interventions and undergraduate degrees in law and applied human sciences. She is passionate about health, alternative food systems, and how peoples' stories and collective action intersect and redefine each other in the pursuit of social change. Aurelia promotes ecological learning through multiple roles: as an international councilor with the Centre for Civil Society, as a North-American colleague of the Sustainable Future Planning and Design, as a fellow researcher for the Adaptive

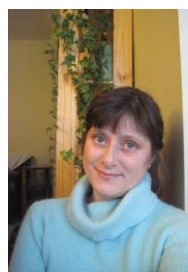
Communities Network, and as a volunteer with several grassroots organizations in Montreal. She is the happy mother of a teenage boy, loves to dance tango and cook healthy meals.

Growing Herbs at Concordia: Learning through Tradition

Tsveta Krasteva, Educational Studies, Concordia University

In many countries, the process of growing, picking and applying herbs is a subject of transmission of tradition developed over centuries. Herbs, as elements of biodiversity, have played a significant role in the survival of people for thousands of years. Nowadays, we have lost our relations with the herbal tradition, mainly due to living in the big city. The structure of economically developed societies and their way of commodification of health, together with the prevailing science paradigm, has seriously damaged the previously natural interaction between humans and plants.

Today, Concordia students volunteer to grow herbs in the Loyola City Farm and in the Concordia Greenhouse as part Sustainable Concordia. Last year, the City Farm School created the first hands-on internship program on herbal usage. This engagement with sustainability provides students with many opportunities for experiential and transformative learning. The main purpose of this qualitative research, based on interviews with both volunteers and participants in the Internship program, aims to discover what students learn through this particular form of work with herbs. What value does it bring to their life? Does it increase their consciousness in terms of health and well-being? How is it viewed through the prism of sustainability? How does tradition make meaning to Concordia students today? What do they learn about our society? Collected data will examine the link between experience, knowledge, critical reflection and changes of the frame of thinking, feeling and doing.



Tsveta Krasteva: I am a Masters student in Educational Studies at Concordia University, working with Professor Arpi Hamalian. My interest interests are herbs, students learning about the cultivation of herbs, herbal medicine, education as a tool for liberation, and community engagement. Herbs have always fascinated me. Perhaps because I grew up in a country with a rich herbal tradition, which is still alive (Bulgaria), and every year in the Summer I was gathering my herbs in the mountains. As a graduate student in Concordia, I wrote a paper on the regulations on natural products in the European Union and North America. I chose the topic because our

Professor told us to write about something that we love. Well, I loved herbs and wanted to know more about their place in developed countries. This is how it started. Later, when I discovered that students grow herbs in the Greenhouse and Loyola garden, this triggered my research interest again. I was wondering why they do it, and how they perceive herbs – as part of tradition (but which one), with regard to nature, as a tool to sustain their well-being, or else? And mainly, I was interested in discovering what they learn about themselves and society during their interaction with herbs, and if and how it changes their way of being. Maybe in the heart of my desire was to see how herbs are viewed and used in a culture and society different from these I was familiar with. I look forward to continuing in this research focus by taking a deeper look at the reasons behind the recent revival of interest in natural products, in the context of our society's complex development – food, migration of people, health system and commodification. I am particularly interested in herbal usage as a way of prevention and keeping good health among the immigrants in Canada, and in herbal traditions of the Indigenous peoples. And not to forget to mention: one day I will have my own big garden with herbs, too!

Showcasing Leaders in Urban Biodiversity and Sustainability

Action Communiterre

<http://www.actioncommuniterre.qc.ca/about-us/mission>

Action Communiterre is a non-profit organization promoting food security through a network of collective gardens, workshops, and activities that create better awareness of – and more widespread access to—fresh, healthy food. Our vision is to reinforce social solidarity and build community to deal with the issue of food security in ways that ensure both equality and environmental sustainability.



Canal bleu

<http://canalbleu.org>

Canal Bleu is a group of concerned citizens who want the Lachine Canal to be clean. In order to accomplish this objective, we organize cleanups by volunteers, promote a clean canal through various means, and collaborate with any others who have the same goal.

CEC- Commission for Environmental Cooperation

<http://www.cec.org>



Three countries working together to protect our shared environment.

The Commission for Environmental Cooperation facilitates collaboration and public participation to foster conservation, protection and enhancement of the North American environment for the benefit of present and future generations, in the context of increasing economic, trade, and social links among Canada, Mexico, and the United States.

CEUM – Centre d'écologie urbaine de Montréal

<http://www.urbanecology.net/>

The Montréal Urban Ecology Centre is an independent, non-profit organization, and was established in 1996. Deeply rooted in the Montréal community, the Montréal Urban Ecology Centre is located in the heart of the Milton-Parc neighbourhood, home to the largest stock of cooperative housing in Canada. The Montréal Urban Ecology Centre has a long history filled with a series of urban activist campaigns led by residents of the Milton-Parc neighbourhood who have rallied on several occasions for issues such as housing, green spaces, and democracy. This has given residents a strong feeling of solidarity and the will to take their neighbourhood's future in their hands. It has also turned Milton-Parc into a breeding ground for the experimentation of innovative ecological solutions.



City Farm School

<http://concordialoyolacityfarm.wordpress.com/>



The City Farm School is an initiative to develop partnerships and expertise in urban agriculture on the island of Montréal. Our aim is to promote a cultural shift towards more resilient communities able to meet the challenges posed by climate change by focusing on local food autonomy.

Community Intervention Project

We are a group of three Applied Human Science students, who, for our seminar on Community Development Intervention, have chosen to volunteer at the Partnerships for the Living City Conference on Urban Biodiversity. You will see us wandering around the Conference, identified by a green name-tag, and we encourage you to approach our table at the public engagement component of the conference! We are curious to see what your perspectives are on urban biodiversity, with questions like, how would you define biodiversity? Is sustainability important to you? Do you feel that your neighborhood is a green neighborhood? Do you think Montreal needs to expand its green spaces? Why or why not? All data collected will be analyzed and summarized into a newsletter that will follow the conference. We look forward to meeting and speaking with you!

Concordia Greenhouse

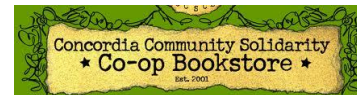
<http://concordiagreenhouseproject.wordpress.com/>

The Concordia Greenhouse Project is situated in the rooftop greenhouse of the Hall building (13th floor). It is an innovative urban design that addresses socio-political and environmental issues such as public access to urban green space. We have created an all-organic space geared towards education and research into urban sustainability, community building and food security.

Coop Bookstore

<http://www.co-opbookstore.ca>

The Concordia Community Solidarity Co-op Bookstore, a not-for-profit alternative to corporate bookstores, conveniently located right on Concordia's downtown campus at 2150 Bishop.



- Offers a viable alternative to the corporate structure, putting students' best interests above and beyond our own bottom line
- Offering both new and used books, in addition to a wide variety of artisan consignments, with the largest selection of sex and gender studies titles anywhere in Montreal.

CRAPAUD-UQAM

<http://www.crapaud.uqam.ca/>



CRAPAUD (Collectif de recherche en aménagement paysager et agriculture urbaine durable) aims to develop and promote accessible, creative and viable urban agriculture through experimentation, self-management, research, dissemination and policy action.

CRE

<http://www.cremtl.qc.ca>

The Regional Environmental Council of Montreal works in the field of environmental protection and the promotion of sustainable development on the island of Montreal and contributes to improving the quality of living environments and social equity.



CSL Grown

<http://www.cotesaintluc.org/CSLGrown>



The Côte Saint-Luc Food Charter demonstrates the City's commitment to a healthy and sustainable future for its residents. It is a multi-faceted and coordinated approach to health and wellness, food, community, and the environment that touches on all aspects of the food system and involves numerous partners.

Eco-Quartiers

<http://www.eco-quartiers.org>

Éco-quartier is a program of action and environmental education rooted in local communities. The objective is to

promote environmental citizenship and improve the living environment of Montreal through environmental actions carried BY citizens.

Four intervention components characterize the program:

- The cleanliness (improved streets, cleaning chores with residents)
- The ecological waste management (distribution of recycling bins, awareness 3R, workshops).
- The embellishment (distribution and planting flowers, wall, etc.).
- Nature in the City (promotion of biodiversity, urban agriculture, tree and shrub planting, greening of vacant spaces, revitalization of the waterfront, green alleys, etc).



Green Coalition Verte

<http://www.greencoalitionverte.ca>

The Green Coalition is a non-profit association of groups and individuals with a mandate to: promote the conservation, protection and restoration of the environment and to promote the wise use of green and blue spaces.



JAM-Justice Alimentaire Montréal

<http://convergence.jamontreal.com>



Justice Alimentaire pour Montréal (JAM) is a hub that aims to connect a collaborative non-hierarchical network of community and university-based individuals and groups interested in transitioning to a just, accessible, nutritious, participatory and ecologically resilient food system. We focus on exchanging information and resources, organizing meetings and events, providing support to organizations that need it, and encouraging new projects, actions, and applied university research related to food systems.

Les Amis du Parc Meadowbrook

<http://lesamisdemeadowbrook.org>

Our mission is to protect Meadowbrook from development and transform it into Meadowbrook Park, a new 57-hectare nature park open and accessible to all Montreal Islanders and connected through a greenway to a network of parks including the falaise Saint-Jacques.



Micro-Recyc Coop

<http://www.microrecyccoop.org/>

Social solidarity organization to reduce the digital divide by collecting used computers and devices to refurbish and distribute them in developing countries.



The main beneficiaries of its programs are schools and nonprofit organizations.

- Works to promote information solidarity, allowing the less fortunate to access new information technologies and communication.
- Supported by many partners, donors and volunteers, the organization has collected more than 8684 computers from businesses, governments and citizens of Quebec for distribution to partners in the following countries: Cameroon, Guinea, Niger, Democratic Republic of Congo, Tanzania, Haiti and Cuba.

MUSE – Montreal’s Urban Sustainability Experience, McGill School of Environment

<http://musemcgill.wordpress.com>

Montreal’s Urban Sustainability Experience (MUSE) is a summer field semester based on the island of Montreal. MUSE focuses on exploring and establishing aspects of urban sustainability while emphasizing a healthy balance of theoretical and practical knowledge. By encouraging student-driven learning, MUSE creates a learning environment with a high level of engagement amongst students, professors, and the local community. MUSE students help create a hands-on, integrated, and interdisciplinary learning experience that transcends the boundaries of traditional undergraduate education.



Quebec Centre for Biodiversity Science

<http://qcbs.ca>



CENTRE DE LA SCIENCE DE LA BIODIVERSITÉ DU QUÉBEC
QUEBEC CENTRE FOR BIODIVERSITY SCIENCE

The objective of the QCBS is to foster the emergence of an integrated biodiversity science in Quebec, the general scientific principles of which will allow the discovery, study, and sustainable use of the Quebec biodiversity.

Sierra Youth Coalition

<http://syc-cjs.org/>

The Sierra Youth Coalition is an organization run by youth for youth, serving as the youth arm of Sierra Club Canada. Our mission is to empower young people to become active community leaders who contribute to making Canada a better society.



To this end, we educate young people about ecological and social sustainability; we challenge unjust and environmentally destructive systems by using a hope-based approach; and we advocate for the new generation of youth in Canada who want to inherit a world worth inheriting: one where social justice and the environment are at the center of everyone's

Sustainable Concordia

<http://sustainable.concordia.ca>



Sustainable
Concordia

An organization that builds and measures culture and practices of sustainability at Concordia University in solidarity with the global community. By acting locally and networking globally, we achieve sustainability by exploring, creating, and institutionalizing models that function within the earth's carrying capacity.

Urban Biodiversity: What's Your Perspective?

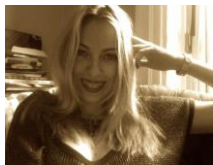
Community Intervention Project

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We would also like to learn what brings You to this conference – is it the speakers? Your current involvement in sustainability or biodiversity initiatives, or lack thereof? What are your expectations of the conference, what did you see as the highlight, and did anything in particular leave an impression on you, in what we like to call the 'aha' moment? All data collected will be analyzed and summarized into a newsletter that will follow the conference.

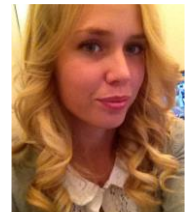
We look forward to meeting and speaking with you!
AHSC team, Shannon, Melanie and Ray

Ray Shami is a third year Applied Human Sciences student and a teacher assistant at Concordia University. Ray is a visual and fine artist with great interest in graphic design, photography and writing. Previous to Concordia University, he studied art and design at Centennial College in Toronto, Ontario. Currently, Ray is the vice-president of Helem Montreal (an LGBTQ NGO that fights against homophobia and contributes to the protection of LGBTQ facing discrimination in the Arab community). Growing up by the Mediterranean Sea in a Middle Eastern environment, Ray developed great interest in the environment and its variations, as well as biodiversity and sustainability. He will be participating in the Urban Biodiversity Conference along with two other Applied Human Sciences students as a part of a community development project. He is looking forward to speaking with you.



Shannon Day is a third year Concordia student specializing in Human Relations. She graduated from Dawson College in Social Sciences and previous to Dawson, obtained a diploma as a cook. She grew up in a small town on the Gaspé Peninsula with a population of 1200 people. Being surrounded by beautiful nature makes her care for the environment and have a compassion for animals, as well as curiosity for astronomy and for astronomy and the cosmos. Shannon will be participating with two others at the conference as a part of a Community Development class in the Applied Human Sciences Department. She will be helping to gather feedback from the participants about Biodiversity. Your feedback is important to them, and they are excited to hear your thoughts and opinions about this very pressing matter.

Melanie Sylvia is a fourth year Concordia Student in the Applied Human Sciences Department, currently finishing an undergraduate degree in the Specialization in Human Relations. She is also a professional Figure Skating Coach for skate Canada. Melanie is interested in acquiring knowledge on sustainability and biodiversity in the Montreal area. She is participating in the Urban Biodiversity Conference as part of an intervention for a Community Development project. Melanie will be seen actively while doing interviews and collecting data throughout the duration of the conference. Please, feel free to stop by and say hello!



Thank you to our Partners

The **Loyola Sustainability Research Centre (LSRC)** integrates the scholarly study of science, policy, and values in the pursuit of environmental and community sustainability. Since its creation in 2012, the Centre's thematic focus has been on two of the biggest challenges of our time: biodiversity conservation and climate change mitigation and adaptation. Based in

Concordia University's *Loyola College for Diversity and Sustainability*, we aim to make a lasting contribution to the trans-disciplinary dialogue that is shaping our collective understanding of sustainable futures. <http://loyc.concordia.ca>



The Convention on Biological Diversity (CBD)

<https://www.cbd.int>; UN Decade on Biodiversity: www.cbd.int/2011-2020

Opened for signature at the Earth Summit in Rio de Janeiro in 1992, and entering into force in December 1993, the Convention on Biological Diversity is an international treaty for the conservation of biodiversity, the sustainable use of the components of biodiversity and the equitable sharing of the benefits derived from the use of genetic resources. The Convention seeks to address all threats to biodiversity and ecosystem services, including threats from climate change, through scientific assessments, the development of tools, incentives and processes, the transfer of technologies and good practices and the full and active involvement of relevant stakeholders including indigenous and local communities, youth, NGOs, women and the business community.

Quebec Centre for Biodiversity Science

<http://qcbs.ca>



The objective of the QCBS is to foster the emergence of an integrated biodiversity science in Quebec, the general scientific principles of which will allow the discovery, study, and sustainable use of the Quebec biodiversity.



Thank you to our Partners

Gestion immobilière Quo Vadis is a multi-disciplinary, mission-based, responsible real estate developer specializing in redeveloping historically relevant buildings into entrepreneurial eco-systems. As the Quebec leader in the B Corp movement (Business For Good, featuring the model "Profit, People, and Planet") we manage over 1.4 million square feet with more than 500 SMB's and offer value added services to assist our clients in concentrating on their core competencies. As this year marks our 20th anniversary, we celebrate our contribution to the sustainable economic development of communities throughout Montreal. www.lofts-mtl.com



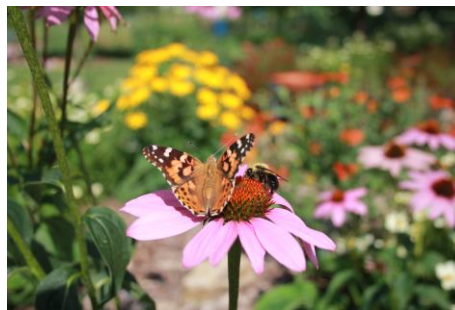
JOHN ▼ MOLSON
SCHOOL OF BUSINESS

David O'Brien Centre for
Sustainable Enterprise

The mission of the **David O'Brien Centre for Sustainable Enterprise (DOCSE)** is to be the leader in developing business practices that support corporate social responsibility, environmental health and safety, environmental management, community, and green activities in a holistic and systemic way.

www.johnmolson.concordia.ca/en/faculty-research/research-centres/david-obrien-centre-for-sustainable-enterprise

The Office of Community Engagement offers students at Concordia University opportunities for social engagement in the community, with a prime example being the innovative University of the Streets Cafés. www.concordia.ca/about/community/community-initiatives.html



Coordinating Team and Thank You's!

Coordinating Team

Marian Pinsky, Conference Coordinator
Dr. Peter J. Stoett, Director, Loyola Sustainability Research Centre
Adan E. Suazo, Assistant to the Principal, Loyola College for Diversity and Sustainability
Lynn Roy, Communications Advisor, Faculty of Arts and Science
Enza De Cubellis, Director, Office of the Vice-President, Development and External Relations, and Secretary-General
Kevin Dobie, Coordinator, Government Relations, Office of the Vice-President, Development and External Relations
Eryn Fitzgerald, Community Relations Coordinator, Office of the Vice-President, Development and External Relations,
Chantal Forgues, Sustainability Coordinator, Environmental Health and Safety
Nancy Curran, Event Coordinator, Hospitality Coordinator
Oliver Hillel, Program Officer, Secretariat of the Convention on Biological Diversity
Andre Mader, Program Officer, Secretariat of the Convention on Biological Diversity
Patricia Hanney, Volunteer Coordinator
Theresa Hensen, Volunteer Coordinator
Shirley Tran, Volunteer Coordinator
Shaniqua Elliott, Volunteer Coordinator



Special Thanks to:

Ryan Young, for providing us with beautiful nature photographs
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Derek Linetsky, Development Officer, Advancement and Alumni
David Ainsworth, Information Officer, Secretariat of the Convention on Biological Diversity
Philippe Auzel, Coordinator, *Quebec Centre for Biodiversity Science*
Nicolas Brunet, Research Professional, *Quebec Centre for Biodiversity Science*
Dave Secko, Associate Professor, journalism, Concordia University
Garnet Key Society – Janice LaGiorgia, Asaf Hatty, Mohammad Youssef, Amanda Arella, Brahim Abdenbi
Randy Pinsky, M.A., Public Policy and Public Administration
Philippe Tousignant, Public Education Coordinator, *Social Justice Committee of Montreal*
Joanna Baldwin, Customer Service Coordinator/Estimator, Digital Store, Concordia University
Kim Barbier, Marketing Coordinator, Campus Retail Stores, Concordia University
Moderators: Tim Sargeant, Jessica Laventure, Andrea Rosenfield, Mariève Isabel, Carol Gray
Kelly Pereira, Special Events and Catering Manager, Impressions Catering
Andreas Kessar, Paragraphe Bookstore

Sustainable Concordia

Volunteer Team

Laura Francois
Charleen Kotiuga
Alexandra Chowne
Gemma Acco
Shirazi Rameh
Shirley Tran
Sean Starkman
Lauren Farmer
Billy Tsekos
Tess Kuramoto
Chris Zuk

Thank you our speakers, participants, keynotes, and esteemed guests!