

Curriculum Vitae

KATE LISS

BIOGRAPHICAL

Date of Birth: March 23, 1987
Current Address: 8-1935 Rue Tupper, Montreal, QC, Canada, H3H 1N6
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EDUCATION

McGill University (2010-present)

M.Sc. candidate, Department of Natural Resource Sciences, Thesis in Renewable Resources
Advisor: Dr. Elena Bennett
CGPA: 4.0

Modelling Courses

NRSC 684: Quantitative Methods in Ecology

- Development of systems thinking and systems dynamics models
- Model building in Stella

GEOG 501: Modelling Environmental Systems

- Workshop-based course on current approaches for building, fitting and comparing models
- Statistical computing and programming skills in R

University of British Columbia (2004-2009)

B.Sc. in Geographical Biogeosciences (Conc.: Climatology, Hydrology)
Advisor: Dr. Andreas Christen (NSERC USRA Research)
Graduating Average: 92.4%

Field Courses

GEOB 309: Field Techniques in Physical Geography

- Independent project on topography and substrate as controls on ecosystem respiration
- Group projects in hydrology, surveying, microscale/synoptic climatology, and biogeography

EOSC 428: Field Techniques in Hydrogeology

- Slug tests, multiscale pumping tests
- Groundwater sampling for water quality analysis
- Measurement of nutrient concentrations, groundwater salinity, metal content

SELECTED AWARDS AND SCHOLARSHIPS

- McGill Provost's Award. 2010, 2011
- Schulich Fellowship (McGill). 2011-2012
- Faculty of Agricultural and Environmental Science Scholarship. 2010
- Julie Payette-NSERC Research Scholarship. 2010-2011

- Canadian Association of Geographer's Prize. 2010
- UBC Wesbrook Scholar. 2009
- American Society of Photogrammetry Robert Bruce Scott Prize. 2009
- NSERC Undergraduate Student Research Award. 2008, 2009
- Walter G. Hardwick Scholarship in Urban Studies. 2007
- UBC Geography Alumni Scholarship. 2007
- Canada Millenium Scholarship Foundation Excellence Award. 2006, 2007
- Trek Excellence Scholarship for Continuing Students. 2005-2009
- Undergraduate Scholar Program Scholarship. 2004
- Governor General's Academic Medal. 2004

RELATED EMPLOYMENT

Research Intern (2010)

GIS and Remote Sensing Lab at the University of Toronto Center for Global Change Science
Supervisors: Dr. Jing M Chen, Dr Liming He

Field and Laboratory Techniques:

- Analysis of global remotely sensed data sets for applications in Global Carbon Cycle models
- Field measurement of Leaf Area Index and forest canopy clumping

Research Assistant (2008-2009)

Land-Atmosphere Interactions Research Group at the University of British Columbia

Supervisor: Dr. Andreas Christen

Field and Laboratory Techniques:

- Closed chamber measurements (soil respiration and photosynthesis)
- Support for urban, and forest eddy covariance and radiation measurement campaigns
- Soil physical analysis and soil climate station maintenance
- Measurement of leaf photosynthesis and transpiration using Li6400 system

Laboratory Assistant (2005-2006)

Diamond Environmental Research Group at the University of Toronto

Supervisor: Dr. Miriam Diamond

Laboratory Techniques:

- Laboratory analysis of environmental contaminants in soil, water and air samples from urban environments
 - Extractions
 - Sample preparation for Gas Chromatography/Mass Spectrometry analysis
- Soil physical analysis

TEACHING

TEACHING ASSISTANT, ENVB 501 (MCGILL): Quantitative Methods in Ecology, Winter 2012

SELECTED SERVICE

UBC GEOGRAPHY STUDENTS' ASSOCIATION –	Vice President	2008-2009
	Special Projects	2007-2008
UBC LEARNING EXCHANGE –	Program Assistant: Communications	2005-2007
UBC LEARNING EXCHANGE –	Volunteer: Quest Community Kitchen	2006-2008

Volunteer: Hastings Elementary KidsFirst Program 2006
Volunteer: Dickens Elementary Art in the Classroom 2005

PUBLICATIONS

Articles published in refereed journals

Christen A., Coops N.C., Crawford B.R., Kellett R., **Liss K.N.**, Olchovski I., Tooke T.R., van der Laan M., Voogt J.A. (2011): Validation of modeled carbon-dioxide emissions from an urban neighbourhood with direct eddy-covariance measurements. *Atmospheric Environments*. 45: 6057-6069. (B.Sc.).

Liss K. (2008): Casting for lessons from the past: Sustainable management for the future of Peruvian anchoveta. *Trail Six: An Undergraduate Journal of Geography*. 2: 68-76 (B.Sc.).

Non-refereed contributions

Poster Presentations (* indicates presenting author)

Liss K.*, Bennett E.M., Raudsepp-Hearne C. (2011): Relative contribution of landscape configuration and landscape composition to provision of ecosystem services. McGill School of Environment Symposium on Global Environmental Change. Montreal, QC, April 13-15, 2011.

Liss K.*, He L., Chen J.M. (2010): Quantifying forest structure at multiple scales. University of Toronto Center for Global Change Science Research Symposium. Toronto, ON, August 12, 2010.

Leitch A.*, Nesic Z., Black T.A., Christen A., Bruemmer C., Jassal R., Renata-Motta S., Grant N., Ketler R., Lessard D., **Liss K.** (2009): Demonstrating the incidence and coherence of horizontal carbon dioxide advection due to katabatic flow in a dense forest canopy. American Geophysical Union Fall Meeting. San Francisco, CA, December 14-18, 2009 (submitted).

Liss K.*, Christen A., Crawford B., Siemens C. (2009): Green cities: Environmental controls on carbon dioxide flux from urban turfgrass. Rising Stars of Research National Undergraduate Science and Engineering Research Poster Competition, Vancouver, BC, August 19-22, 2009. Honourable Mention Distinction (Physical and Earth Sciences).

Christen A.*, Coops N., Crawford B., **Liss K.**, Oke T., Tooke R. (2009): The role of soils and lawns in urban-atmosphere exchange of carbon dioxide. The 7th International Conference on Urban Climate, Yokohama, Japan, June 29-July 3, 2009. Poster pres., int. conference.

Liss K., Crawford B.*, Jassal R., Siemens C., Christen A. (2009): Soil respiration in suburban lawns and its response to varying management and irrigation regimes. Proc. Of the American Meteorological Society Eighth Conference on the Urban Environment, Phoenix, AZ, January 11-15, 2009.

Presentations

Liss K.*, Bennett E.M., Raudsepp-Hearne C. (2011): Influence of landscape structure on ecosystem service provision. Quebec Center for Biodiversity Science Annual Symposium, Montreal QC, December 8-10, 2011.