

Annual conference of CCUEN in Vancouver, BC on May 22 and 23, 2014 sponsored by Capilano University, Simon Fraser University, Douglas College, University of British Columbia and Yukon College.

(Attendees staying at the Holiday Inn, North Vancouver will have bus transportation provided with 8:00 am departure)

May 22 at Simon Fraser University Wosk Centre for Dialogue (580 West Hastings Street, Vancouver)

Speakers Series and Panels:

Morning Session:

Science Behind the Issues: British Columbia Perspectives on Environmental Change

Historical and contemporary environmental change has had a strong influence on humans and their associated ecological systems in British Columbia (BC). This session will provide the scientific background that informs critical environmental issues for BC. How was BC first settled by indigenous peoples? How is global climate change affecting the structure and function of agricultural insect communities? What are the causes of currently observed pollinator declines? What do we know and not know about BC's mountain pine beetle epidemic and what is the potential for spread to Alberta and beyond? Join us as four BC experts present their perspectives on the science behind the issues.

Dr. Brent Ward, Associate Professor, Department of Earth Sciences, Simon Fraser University

The peopling of the Americas during the Ice Age - Archaeologists have long argued over the route the first people took to North America: by land, or by sea. This talk will discuss the geologic and paleoenvironmental evidence that relates to the viability of these two routes during the last ice age.

Dr. David Gillespie, Research Scientist, Agriculture & Agri-Food Canada

Biological control in the face of climate change - The phenomenon of global climate change (GCC) is likely to have a dominant impact on agriculture, food supply and food security in the coming decades. This presentation will summarize recent work on the effects of extreme temperatures on an experimental biological control community in the context of the two key GCC trends: carbon dioxide and average growing season temperature.

Dr. Elizabeth Elle, Professor and Chair, Department of Biological Sciences, Simon Fraser University

Pollinator declines: food security and wild bee conservation - Declines in honeybee populations have raised awareness about the central place of pollination in food production. Although honeybees are facing many challenges, wild pollinators are also declining and, in some cases,

facing extinction. In this presentation, you'll learn about the major challenges for both honeybees and wild bees, and the latest information on how you can contribute to wild bee conservation.

Dr. Dezene Huber, Canada Research Chair in Forest Entomology and Chemical Ecology, University of Northern BC

The "known knowns and known unknowns" of the mountain pine beetle infestation - The massive mountain pine beetle infestation in BC prompted a great deal of research making this one of the most-studied insects in the world. New genomics research on this beetle has begun to reveal some of its heretofore well-kept secrets. Further development of our understanding is vital in the face of potential spread to Alberta and beyond.

Afternoon Session:

Addressing the Issues: Teaching Across Disciplines

The world of environmental studies is by nature interdisciplinary, often showing up the complex relationships and interdependence of economic, cultural and biological wealth. To gain a deep understanding of the issues and a fuller toolkit to address them, students today need both scientific depth and social sciences and humanities breadth. A tall task and one that might also be supported by a timely paradigm shift in the discipline of economics.

Dr. Anne Salomon, Assistant Professor, School of Resource and Environmental Management, Simon Fraser University

The Sea Otter: A Story of Interconnections – Dr. Solomon's research interests include how human disturbances alter the productivity, biodiversity and resilience of coastal marine ecosystems.

Dr. Nicholas Coops, Director, University Sustainability Initiative (USI) Teaching and Learning Office, University of British Columbia

Sustainability Education Across Curriculum – as Director of Teaching and Learning at the UBC Sustainability Initiative, Dr. Coops will be speak to UBC's process of building sustainability pathways to integrate sustainability education in all undergraduate programs.

Dr. Aurelea Mahood, Instructor (English) and Coordinator Liberal Studies BA, Capilano University

As the Convenor of the Liberal Studies Degree Program at Capilano University, Aurelea will explain how semester themes, such as sustainability, tutorials and course collaborations bring together expertise from a variety of disciplines across campus in offering students an enriched, interdisciplinary learning experience.

Cheryl Schreder, Instructor (Geography), Capilano University

Capilano University Campus Waste Audit – For the past three years, Capilano University has held an annual campus waste audit. The benefits of such an exercise include student participation in a 1-day waste audit, collaboration of many faculties and departments from Capilano University campus and the community, and improvement of our waste management practices on campus. This event supports the study of waste in many different contexts and students are the leaders in diverse projects on the theme of waste as the waste audit is integrated into the curriculum.

Keynote Speaker: Dr. Bill Rees, Ecological Economist

Rethinking Economics: Ecological Economics – Dr. William Rees is a human ecologist, ecological economist, Professor Emeritus and former Director of the University of British Columbia’s School of Community and Regional Planning in Vancouver, where his research and teaching focused on the biophysical prerequisites for sustainability in an era of accelerating ecological change. Within this envelope developed a special interest in ecologically-relevant metrics of sustainability and their interpretation in terms of complexity theory and behavioural ecology. Professor Rees is perhaps best known in ecological economics as the originator and co-developer of ‘ecological footprint analysis’. Active across disciplines, Doctor Rees is a long-term member of the Global Ecological Integrity Group, a Fellow of the Post-Carbon Institute, a founding member and past President of the Canadian Society for Ecological Economics and founding Director of the OneEarth Initiative. He is the recipient of both the 2012 Boulding Prize in Ecological Economics and a 2012 Blue Planet Prize.

CCUEN AGM

Conference Dinner: Grouse Mountain (pre-booking required)

May 23 at Capilano University (2055 Purcell Way, North Vancouver)

Speaker Series and Panels:

Morning Session:

Aboriginal Environmental Issues and Education

Keynote Speaker: Dr. Lorna Williams, retired Canada Research Chair, Indigenous Knowledge and Learning

Dr. Lorna Williams is a linguist, a retired professor, and a retired Canada Research Chair in Indigenous Knowledge and Learning, and a retired Director of Aboriginal Teacher Education at the University of Victoria. She is a member of the Lil’wat First Nation and is a highly respected leader in Aboriginal and First Nations education and Indigenous cultures and traditions.

This session will explore the integration of academic disciplines and cultural knowledge systems in addressing environmental complexity – a paradigm shift that is well-documented (Kulnieks, Longboat, Young, 2013).

- Indigenous environmental education

An accomplished panel of educators will share their experiences with bringing indigenous values into the realm of environmental education. Nancy Rich (2012) urges environmental studies and science programs to "consider a commitment to teach across academic disciplines, but also across different knowledges and ways of knowing." This discussion will consider how indigenous ways of learning and knowing can be incorporated into the classroom and into the teaching of environmental studies and sciences.

- Indigenous environmental issues

What environmental issues are most seriously impacting indigenous people and communities? Whether it's mining, pipelines, or resort development, indigenous communities are on the front line of environmental issues. How are these communities affected? How are they confronting the issues? And, importantly for environmental educators, how do we bring explore the intersection of indigenous/social and environmental issues?

Dr. Peter Cole, Assistant Professor, Department of Curriculum and Pedagogy (UBC)

Dr. Pat O'Riley, Associate Professor, Department of Curriculum and Pedagogy (UBC)

Dr. Rudy Reimer/Yumks, Assistant Professor, Department of Archaeology, Department of First Nations Studies (SFU)

Ernie Victor - Fisheries Manager, Sto:lo First Nation

Afternoon Session:

Citizen Science: How Universities can Mobilize Resources for Environmental Change

This session highlights how effective partnerships can enhance student learning, generate valuable research, and contribute to capacity by building from strengths-based partnerships in and with community. How do we bring partners together to create meaningful collaborations benefiting students, community and the university? What kinds of projects can students engage in? How do we embed community-based learning into our curriculums? Hear from facilitators, faculty and students who are actively involved in community-based educational experiences.

Susan Grossman, Director, Centre for Community Engaged Learning, University of British Columbia

Susan will introduce us to ways that resources can be mobilized within an institution to support relationships between the institution and the community. For the past 20 years, Susan has worked closely with community partners including parents, students, non-governmental

organizations, representatives of city government, and business leaders, to launch and sustain a number of community based initiatives.

UNIBUG: User Network for Insect Biology in the Urban Garden, Douglas College

The User Network for Insect Biology in the Urban Garden (UNIBUG) is the newest project of the Institute of Urban Ecology at Douglas College. UNIBUG staff work with community volunteers from school, community, and private gardens throughout Metro Vancouver to learn more about the ecology of urban gardens. Volunteers have been enthusiastically learning about insects in their gardens and have developed a new appreciation for garden ecology. In this session, UNIBUG staff and students will review the program and its findings, and demonstrate monitoring tools for biological control organisms and nesting sites for bees.

EarthWorks: Building Environmental Awareness and Community Connections, Capilano University

Faculty, students, and staff from a diverse collection of disciplines came together in 2011 to create EarthWorks, a network that facilitates awareness and action around environmental issues. Over the past two years the movement has increasingly provided opportunities to insert critical environmental issues into the curriculum, and build participatory learning opportunities with community partners. Faculty and students will report on the growing pains, and successes, of building an environmental network.

A Citizen's Guide to Environmental Monitoring, University of British Columbia

As part of their capstone experience, Environmental Science students at UBC have been working in partnership with the David Suzuki Foundation's Right to a Healthy Environment campaign. The students have created a comprehensive guide to environmental monitoring which aims to provide support for citizens interested in understanding the health of their local environment.

Needs of Employers in the Environmental Sector

A panel of environment industry employers will discuss what they look for, what they need and what gaps they have to fill in regards to new recruits. Discussions should cross over from business, to education and be supported by input from those working in the environmental field.

Grant Trump, President and CEO, ECO Canada

ECO Canada is the country's largest online resource for environmental jobs, training and certification. Since its foundation in 1992 as an industry-led, not-for-profit organization, ECO Canada has kept its finger on the pulse of the environmental sector through labour market research, hosting Canada's largest environmental job board, and providing a wide variety of resources to help professionals explore, find and advance their environmental careers.

The War on Science: Muzzled Scientists and Wilful Blindness in Stephen Harper's Canada

Keynote Speaker: Chris Turner, Author

In this arresting and passionately argued indictment, award-winning journalist Chris Turner argues that Stephen Harper's attack on basic science, science communication, environmental regulations, and the environmental NGO community is the most vicious assault ever waged by a Canadian government on the fundamental principles of the Enlightenment. From the closure of Arctic research stations as oil drilling begins in the High Arctic to slashed research budgets in agriculture, dramatic changes to the nation's fisheries policy, and the muzzling of government scientists, Harper's government has effectively dismantled Canada's long-standing scientific tradition.

Drawing on interviews with scientists whose work has been halted by budget cuts and their colleagues in an NGO community increasingly treated as an enemy of the state, *The War on Science* paints a vivid and damning portrait of a government that has abandoned environmental stewardship and severed a national commitment to the objective truth of basic science as old as Canada itself.