TerreWeb – Social Media

Mix Report

March-April 2012

Contents

Original Mix Proposal

APPROVED: STUDENT HIRE

Project: Promoting the TerreWEB Seminar Series using social media and more and bringing together the community of UBC and beyond Mix partners' names, departments, faculties, and contact information

Main Contact:

Dr. Julia Dordel, Project Director and Liaison Officer
TerreWEB (Terrestrial Research on Ecosystems & World-wide Education & Broadcast)
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Ph: 604-822-0457, E-mail: Terre.WEB@ubc.ca

UBC Mix Partners:

- Sally Aitken, Faculty of Forestry
- Andrew Black, Faculty of Land and Food Systems
- Gary Bradfield, Faculty of Science (Botany)
- Candis Callison, Faculty of Arts
- Andreas Christen, Faculty of Arts (Physical Geography)
- Mark Johnson, Institute for Resources, Environment and Sustainability / Faculty of Science
- Maja Krzic, Faculty of Land and Food Systems / Faculty of Forestry
- Cindy Prescott, Faculty of Forestry
- Terre Satterfield, Institute for Resources, Environment and Sustainability
- Suzanne Simard, Faculty of Forestry
- Rachel Talalay, Faculty of Arts

Plans for Mix activity, Mix funds, and student participant evaluation

Activity

TerreWEB (terreweb.ubc.ca) is a cross-disciplinary graduate program focusing on global change/terrestrial ecosystems research that integrates domain science, behavioural, design and social sciences research, and communications research to develop innovative communication strategies for multiple stakeholders. One of the key ways to achieve the program goals is though organization of weekly free public seminars. In the past year, we hosted renowned speakers such as former UBC president Martha Piper and Vancouver Sun columnist Vaughn Palmer; however, due to insufficient marketing we had relatively small turnouts. We believe that due to the interdisciplinary nature of our seminar series and the timely topic of global change/climate change, as well as the variety of speakers with backgrounds ranging from scientists, journalists, politicians, to filmmakers and others, the seminars are of wide interest and benefit to the UBC community. Some future speakers will include documentary film-maker Mark Terry ("The Medium Delivers the Message: Bridging the Gap Between Science and Policy with Film"), Agriculture and Agri-Food Canada's Shabtai Bittman ("How Green is Our Valley? – Food Production Today and Tomorrow"), and a special panel consisting of experts from the oil industry, government, NGOs and academia on the Alberta Oil Sands (" Local Impacts, Global Realities").

Request for an Honorarium for community service learning projects:
To promote the weekly UBC TerreWEB Seminar Series (run from January 19th to April 5th) featuring global change topics from various perspectives, we would like to hire an undergraduate student from February 1st to March 31st, 2012.

Mix funds
The Seminar Series is fully sponsored by the UBC TerreWEB program. A UBC Mix honorarium would be used to hire an undergraduate student who would help us with targeted promotion of the TerreWEB Seminar Series by using social media, print media, the Internet, radio and other means of communication to reach out to the UBC community and beyond. We would like to hire the student for total of 30 hours (salary based on current Career Services Student WorkStudy/WorkLearn program for $16.16/hr).

Student participant evaluation
The outcome of the student's activities will be measured directly by seminar attendee numbers and compared with numbers from the previous year. Outreach activities and seminar attendance numbers will be summarized in a brief report, prepared by the undergraduate student, and shared with UBC Mix.

Report

Compiled by Ashley Dobko, TerreWEB student hire; revised with charts and TerreWeb webpage details by Natalie Baloy.

TERREWEB SEMINAR LECTURE SERIES WRITE UP

The TerreWEB seminar participation numbers have varied within a range of about ten people.

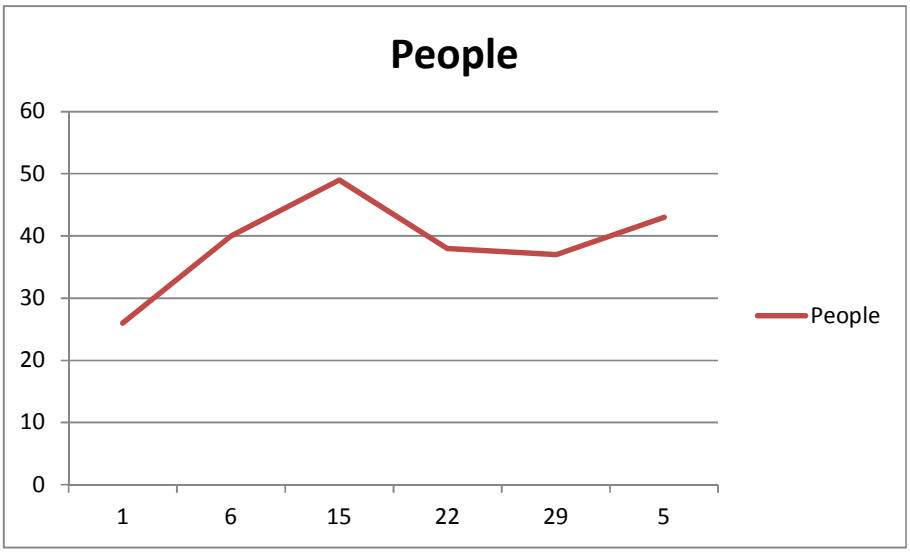


Figure 1: Date VS Amount of People

To increase the number of people attending both physically and watching online, I used facebook, reddit and twitter as the main social media types. Each week an event was created inviting people to the seminar. During popular seminar topic weeks up to 130 people were invited to the event. Each week under the lecture and science categories in reddit, I posted information about the lectures so that viewers worldwide would be able to attend. I also tweeted each week to inform people of the upcoming lectures. In addition to these weekly tasks, I got the seminars put into the science distillation each week, contacted numerous newspapers and online science magazines to see if there was interest in featuring TerreWEB and made a facebook ad.

Below is the weekly information on the results of the feedback forms that were handed back.

Courses

(Note: Very few people filled this section in, these are the courses from all of the feedback forms)

- CEEN 502
- CONS 330: Conservation Policy
- Cons 425: Energy Policy with George Hobert
- ECON 371: Environmental Economics
- ENVR 200
- FRST 211: Forest Classification and Silviculture
- FRST 386
- SOIL 200

March 1: Robert Evans

Event Description

Our Energy Future: Can We Make it More Sustainable?

Thursday March 1st, 1:00 – 2:30 pm
Forest Sciences Centre 1003
Open to the public

If you cannot make it in person, you can access the live webinar link here. Please log in 5 minutes early.

Abstract: Energy use, and its impact on the environment, is one of the most important technical, social, and public-policy issues that face mankind today. This presentation introduces a systems approach to energy use, and the complete energy conversion chain is introduced to link energy resources through to the ultimate end-use. Our energy needs are met by just three primary energy sources; renewable energy, nuclear power, and fossil fuels which today account for 80% of total energy consumption. The challenging problems of developing a more sustainable energy system are addressed, and a comparison is made of alternative energy carriers for transportation. Finally, some projections are made about how the transition to a more sustainable "Electricity Economy" might be achieved over the remainder of this century.

Speaker Bio: Robert Evans is Professor of Mechanical Engineering at The University of British Columbia (UBC). He obtained a B.A.Sc. degree in mechanical engineering from UBC, an M.A.Sc. from the University of Toronto and a Ph.D. from Cambridge University. Dr. Evans has served as Head of the Department of Mechanical Engineering, and was founding Director of the Clean Energy Research Centre at UBC. He is a Fellow of the Canadian Academy of Engineering, the Institution of Mechanical Engineers, and the Society of Automotive Engineers. Dr. Evans is the author of *"Fueling Our Future: an Introduction to Sustainable Energy"*, published by Cambridge University Press. The book is also available in Chinese, Arabic, and Turkish, and was short-listed for the 2007 Donner Prize for the best book on public policy published by a Canadian author.

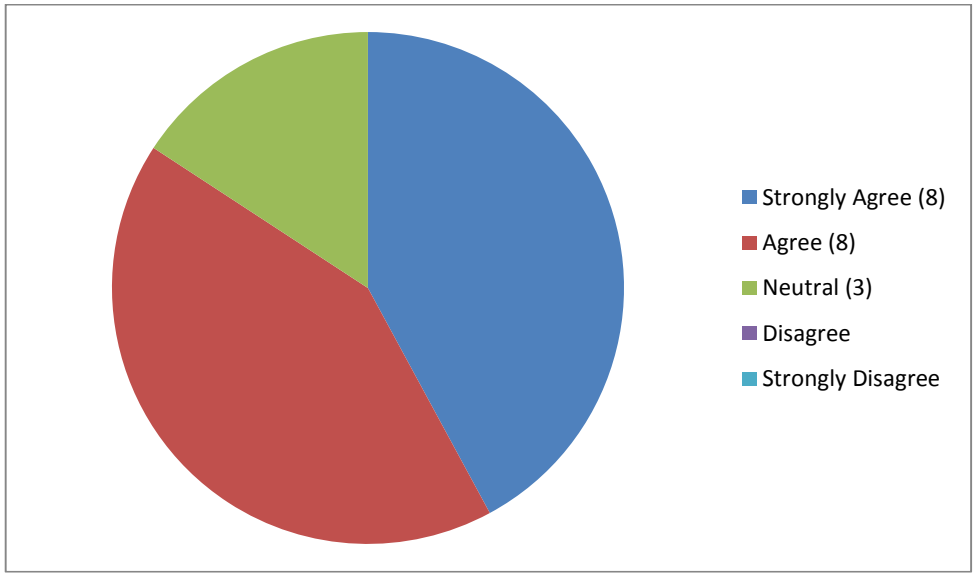
Feedback

Total People: 26
Total feedback forms returned: 19

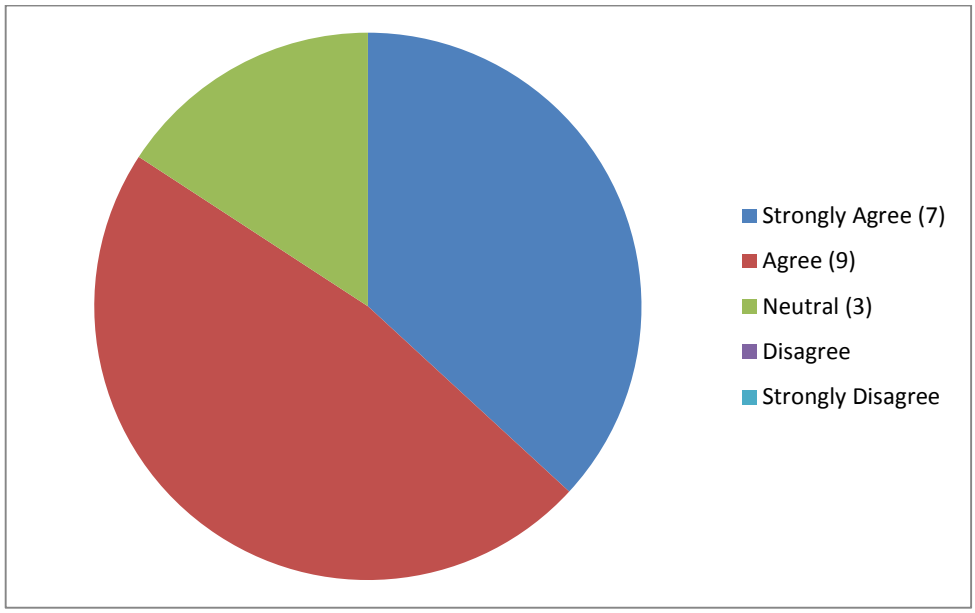
Interdisciplinary values

Please indicate your agreement with the following statements.

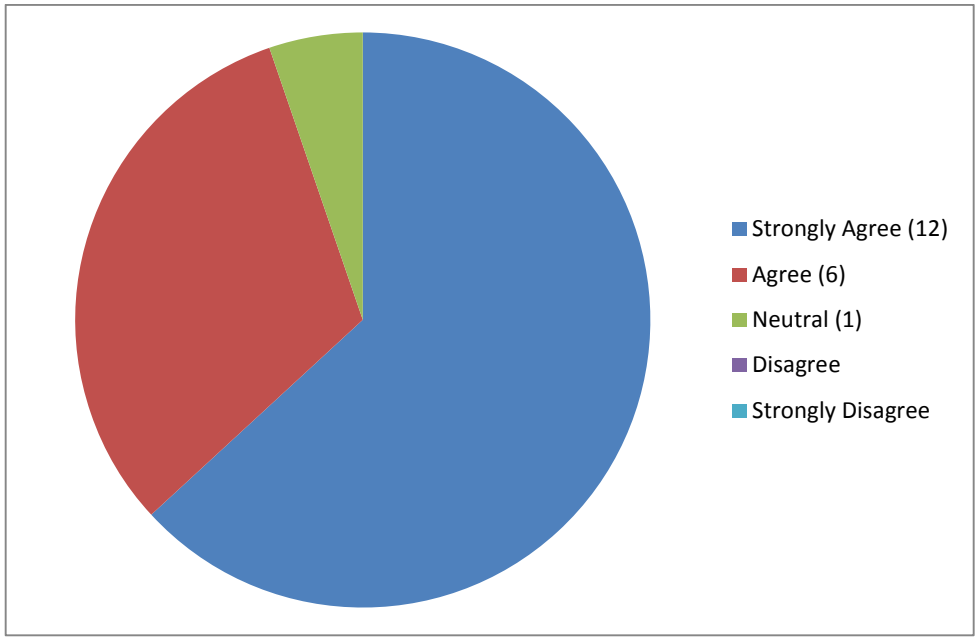
This event was educationally valuable to me.



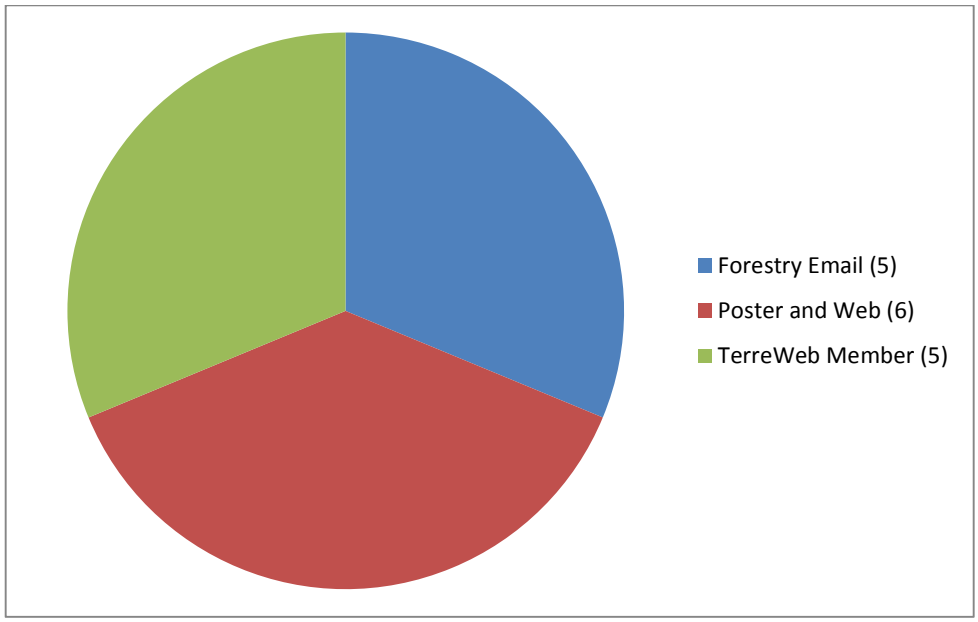
The interdisciplinary nature of this event enhanced my learning.



In general, connecting with students and instructors in other disciplines enriches my education.



Where did you hear about this event?



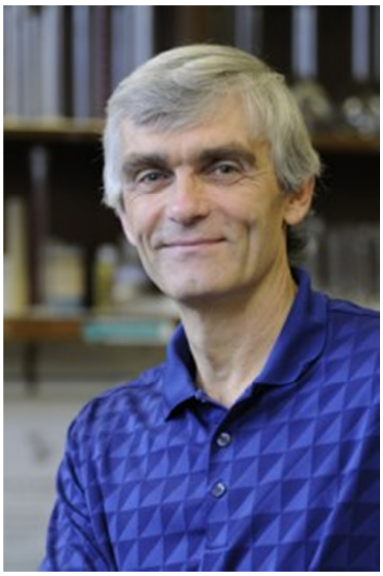
Suggestions for improving this event:

- Snacks
- Increased attendance
- More promotion
- Having more notice that they are going on
- More advertisement
- Talk was outdated
- Refreshments

March 8: Tony Farrell

Event Description

Fishing for Answers: Salmon Facts & Fiction



Thursday March 8th, 1:00 – 2:30 pm
Forest Sciences Centre 1003
Open to the public

If you cannot make it in person, you can access the live webinar link here. Please log in 5 minutes early.

Abstract: My research program has the aim of discovering how fish work and communicating this knowledge to the scientific community. Where possible, we also inform problems in fish management. Although we work on a wide variety of fishes, I will present two research vignettes related to salmon in British Columbia. Both topics fall within the broader realm of global climate change. One vignette will describe some of what we are discovering about the current and future impacts of a warmer Fraser River on adult sockeye salmon migration. The second vignette will describe what we are discovering about the potential impact of sea lice on baby pink salmon. These two topics juxtapose the need for a secure, healthy food supply for a growing population with that for fish conservation. The subtext will be that detailed facts cannot be ignored in larger public debates. The secondary dilemma then becomes one of accurately and effectively communicating critical information to the public, and allowing them to make properly informed decisions about the shape of their future.

Speaker Bio: Tony holds a joint appointment in the Zoology Department & the Faculty of Land and Food Systems, and he also serves as the Associate Dean for Postdoctoral Fellows at UBC. He is a Canada Research Chair (Tier 1) in Fish Physiology, Culture and Conservation. Tony's research passion is studying how animals are physiologically adapted to their environment. He is particularly fascinated by the cardiac and respiratory life support systems of fishes and has studied nearly 100 different species, from primitive hagfish and sturgeon through to athletic salmon and tuna. He has published over 340 peer-reviewed research articles. Tony's involvement in pioneering and influential research on the behavioural and physiological ecology of Pacific salmon was given the 2005 Award of Excellence in Fisheries Management from the American Fisheries Society. He was also a member of the scientific

advisory committee of the BC Pacific Salmon Forum, which was charged by the Premier to investigate wild and cultured fish interactions in the province.

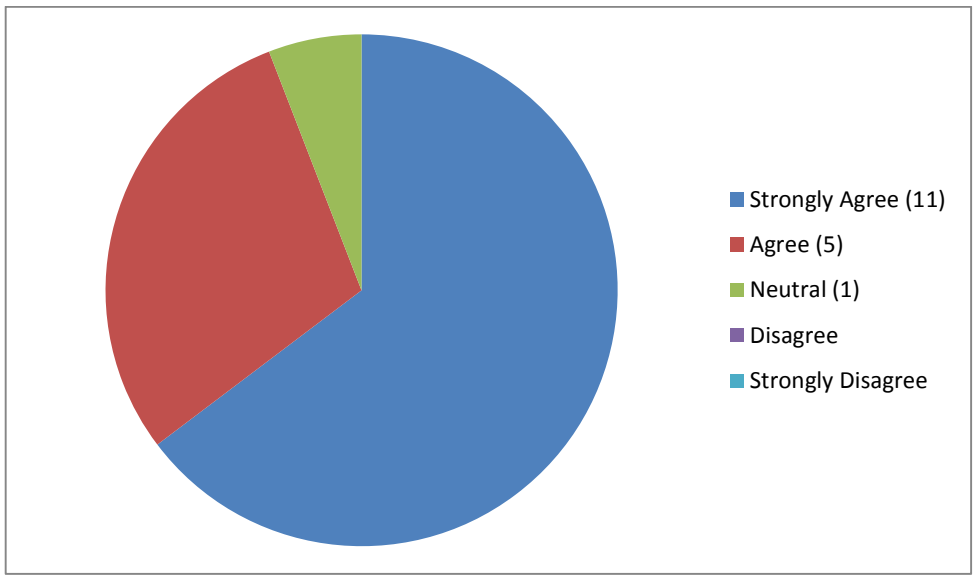
Feedback

Total People: 40
Total feedback forms returned: 17

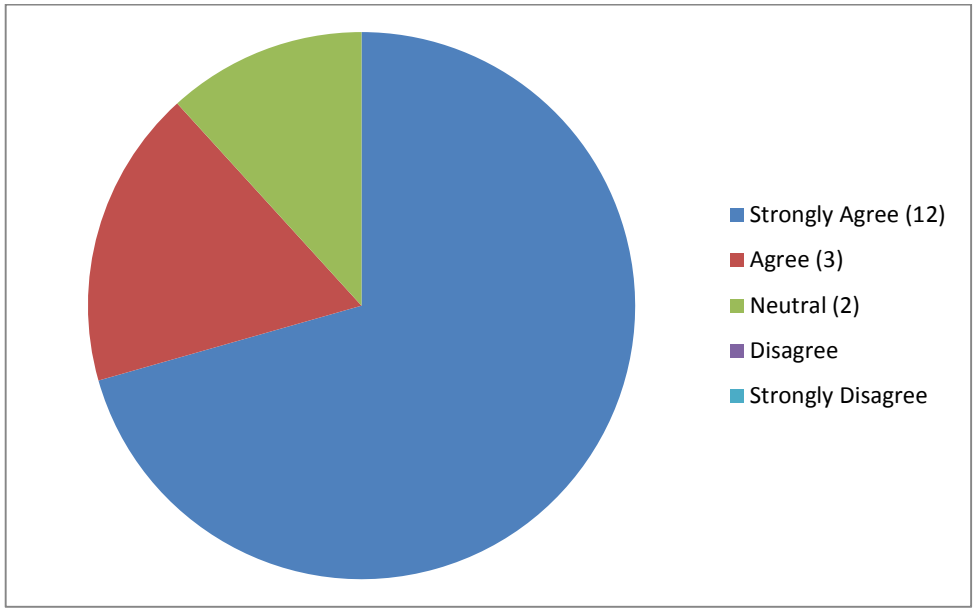
Interdisciplinary values

Please indicate your agreement with the following statements.

This event was educationally valuable to me.



The interdisciplinary nature of this event enhanced my learning.



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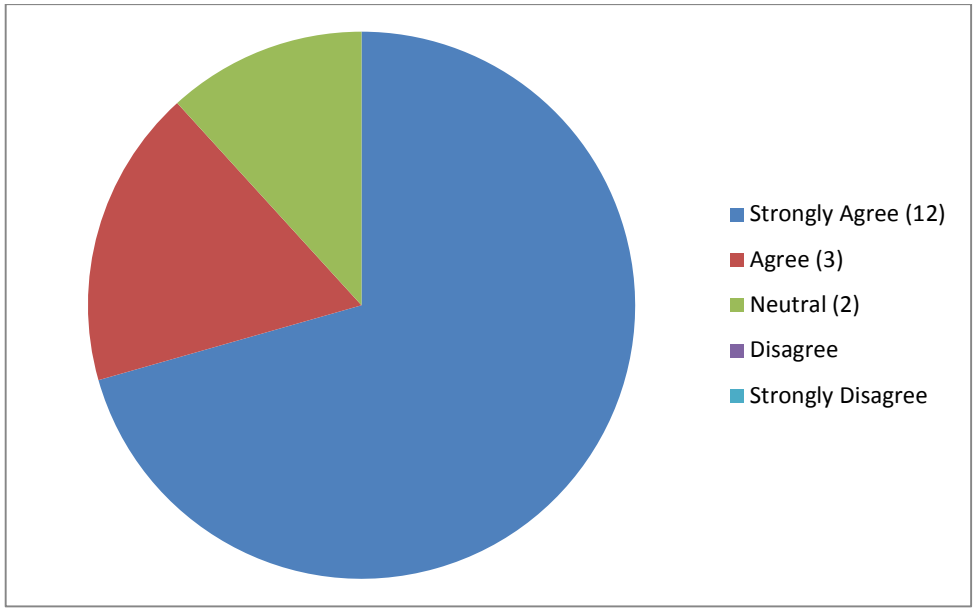
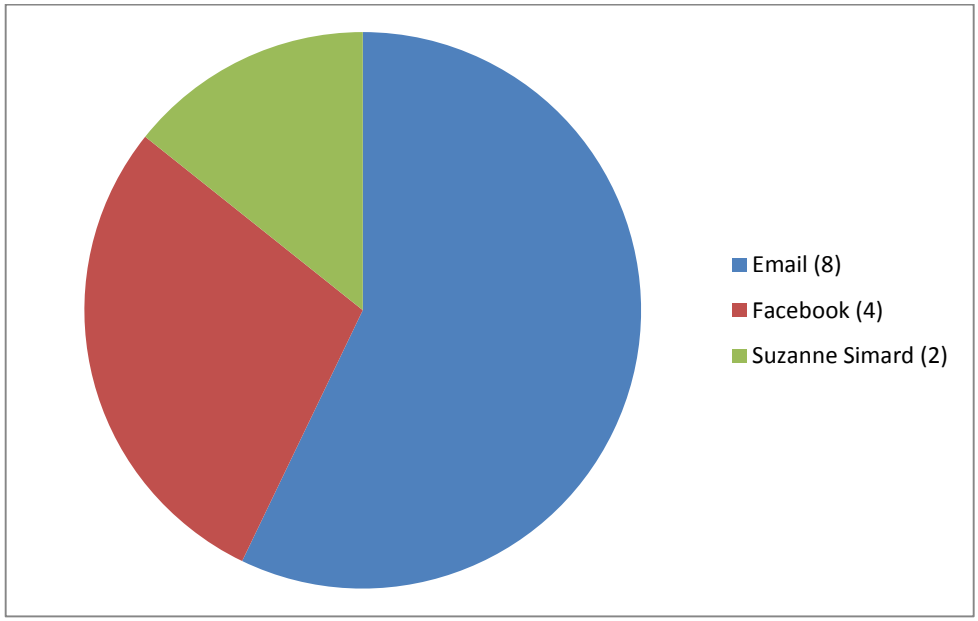


Where did you hear about this event?



Suggestions for improving this event:

- Cookies
- More promotion
- Food
- Should have talked about the role of winterfehet [?] in the salmon returns

March 15: Alberta Oil Sands

Event Description

Alberta Oil Sands – Local Impacts, Global Realities

Thursday March 15th, 1:00 – 3:00 pm
Forest Sciences Centre 1003
Open to the public

You can find the recorded Seminar on the TerreWEB YouTube channel Click Here
TerreWEB is pleased to host a special panel of speakers that will provide a multifaceted discussion about the Alberta oil sands developments today and into the future. Moderated by Lois Boxill.

Access this session via live webstream on your computer or mobile device! Go to the appropriate link below before 1:00. If you have a question you would like to pose to a panel member, do so via Twitter and include @TerreWEB in your tweet!
Desktops/Laptops
http://ubcctlt.insinc.com/
Mobile devices

http://m.insinc.com/ubc/

Panel Members:

Darrell Martindale, MSc.
Portfolio Manager of Environmental Performance for Heavy Oil, Shell Canada Ltd.
In his current role, Darrell develops and establishes environmental performance targets for Shell's heavy oil operations. Darrell is responsible for ensuring that these targets are endorsed by Shell's Heavy Oil Leadership Team and that the targets are communicated to all site Environment Managers for implementation. The three areas of focus are to reduce fresh water use, reduce carbon dioxide intensity and accelerate land reclamation at Shell's Oil Sands operations. Prior to his current role, Darrell served for 10 years as the Manager for Environment and Regulatory Compliance for Shell's Muskeg River and Jackpine Mines in Fort McMurray, AB.

Martin Davies, MSc., RPBio
Partner & Senior Environmental Specialist, Hatfield Consultants
Martin is an aquatics specialist whose professional career has been focused on the development of monitoring and fisheries compensation programs in both forestry and the mining industry. He was one of the Principal Investigators of the Regional Aquatics Monitoring Program (RAMP) which had the stated objectives of: monitoring the aquatic environment in oil sands areas; collecting data to better understand the affected watersheds; comparing monitoring data with EIA predictions; and responding to community concerns.

Brett Purdy, PhD
Reclamation Research Specialist, Oil Sands and Energy Policy, Government of Alberta
Brett is responsible for the development and implementation of reclamation policy for Oil Sands projects. Under his watch reclamation and closure guidelines for Oil Sands projects have been developed. Brett is primarily focused on the restoration of Upland Boreal forest and is responsible for reviewing and approving the reclamation and closure plans for oil sands operators.

Carol Jones, MSc., P.Ag.
Principal, National Service Area Leader Ecosystem Restoration, Stantec
Carol serves as the lead consultant on reclamation and ecosystem restoration for the Fort McKay First Nation – the First Nation whose lands are most affected by surface Oil Sands development. Carol has a long professional history in the integration of closure/reclamation planning and mining operations. Carol will speak about the role of science in informing how the Fort McKay First Nation engages Oil Sands operators and establishes monitoring and reporting criteria.

Moderator: Lois Boxill
Lois Boxill is a Senior Consultant with SRK Consulting based in the Vancouver office where she is a member of the GeoEnvironmental group. Lois is geotechnical engineer with over 9 years of experience primarily in the areas of: geotechnical soil characterization; tailings dam design; mine waste management and associated water management planning; mine reclamation, closure planning, and closure cost estimation. Lois is currently enrolled in the PhD program at UBC's school of mining engineering where, in collaboration with faculty from the School of Civil Engineering and Land and Food Systems, she is exploring development of a physicochemical model to enhance understanding of the behavior and long-term management issues associated with mature fine tailings – a waste stream of great importance in current surface Oil Sands operations.

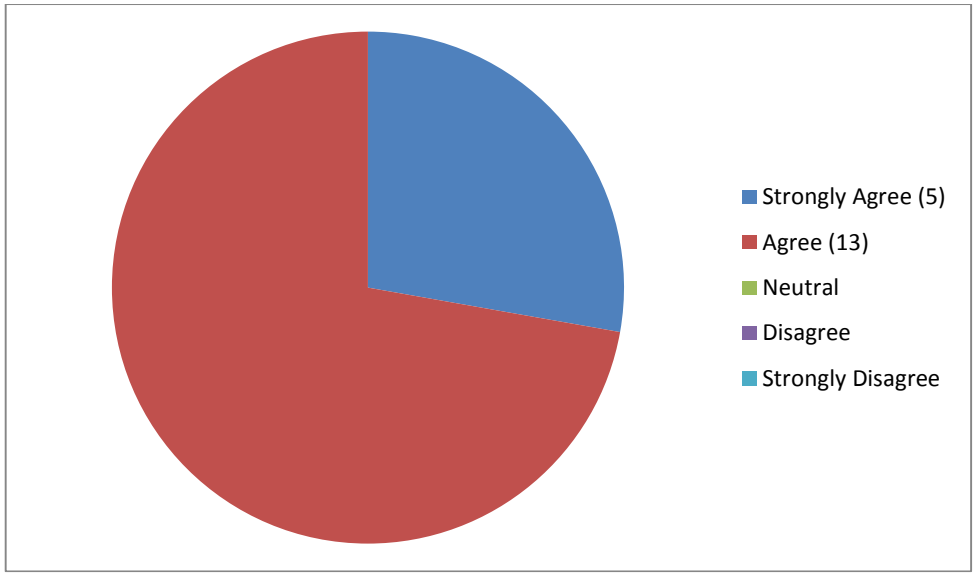
Feedback

Total People: 49
Total feedback forms returned: 18

Interdisciplinary values

Please indicate your agreement with the following statements.

This event was educationally valuable to me.



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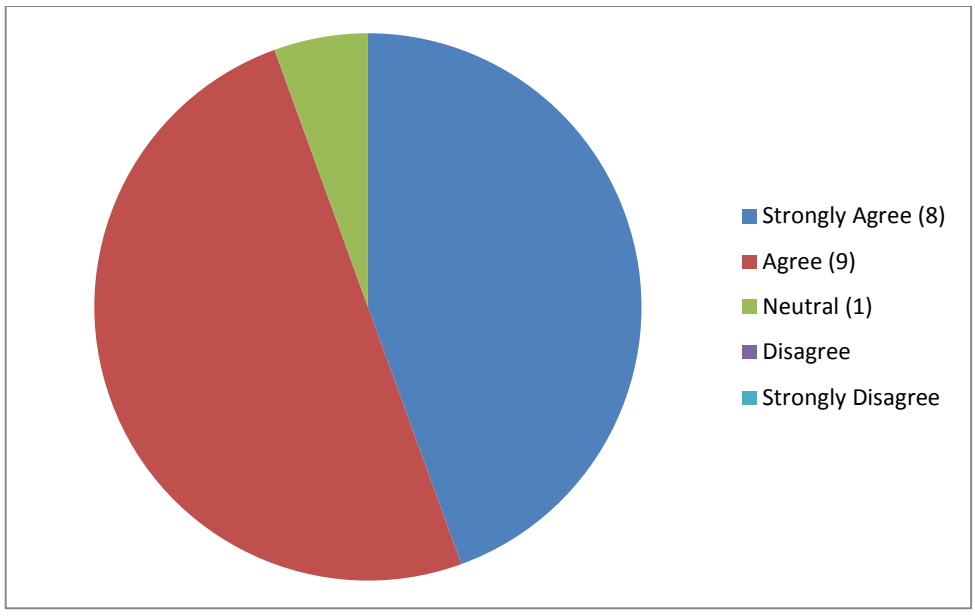

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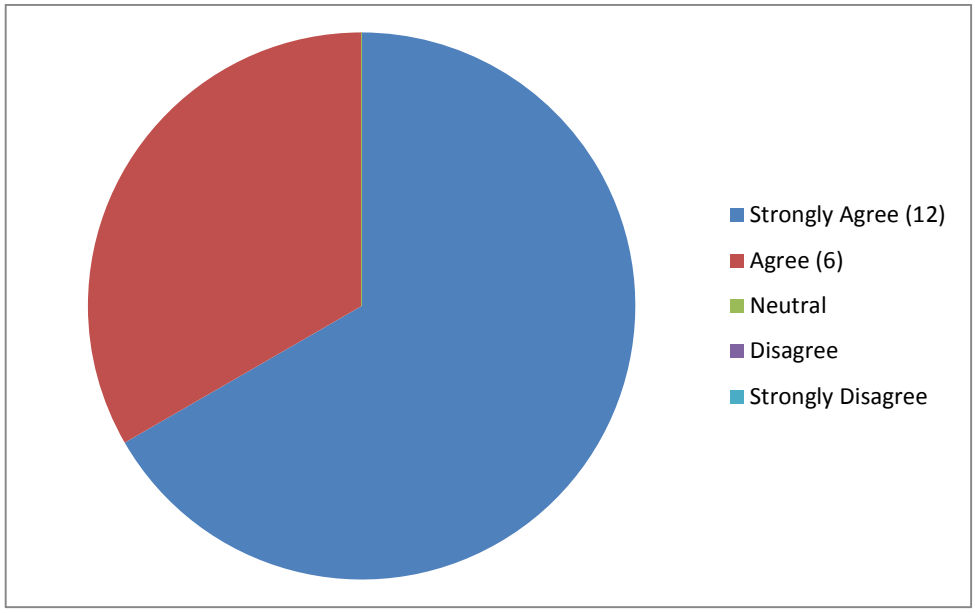
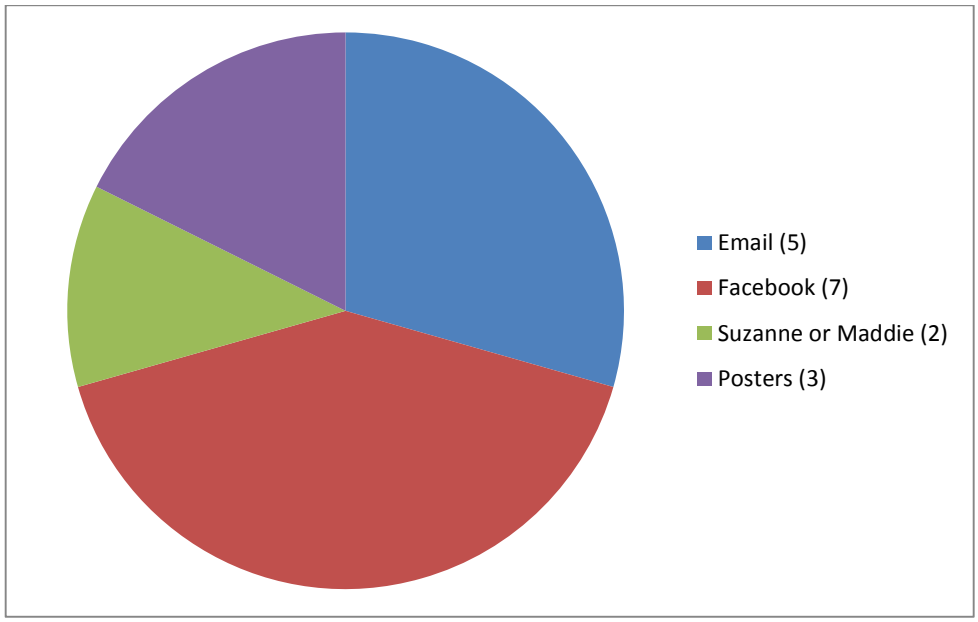


Where did you hear about this event?



Suggestions for improving this event:

- More visuals
- Bit shorter (1hr)
- More signs outside event room
- Have a First Natiosn representative who has been effected by Oil Sands
- Handouts with a short speaker bio
- Balance with an academic
- Like panel style
- Have the event in a space with more natural light

March 22: Canadian Energy Policy, Oil Sands, and Climate Change

Event Description

Thursday March 22nd, 12:30 – 2:00 pm
Forest Sciences Centre 1003
Open to the public

You can find the recorded Seminar on the TerreWEB YouTube channel Click Here
As a follow-up to last week's special panel on the role of science in the Alberta Oil Sands developments, TerreWEB is hosting a panel session that will cover a broader discussion of current energy policies and their implications for Canada and beyond. This panel will include perspectives from academics, NGOs, think-tanks, and more. Moderated by Marlene Cummings.

Access this session via live webstream on your computer or mobile device! Go to the appropriate link below before 12:30. If you have a question you would like to pose to a panel member, do so via Twitter and include @TerreWEB in your tweet!

Desktops/Laptops http://ubcctlt.insinc.com/

Mobile devices http://m.insinc.com/ubc/

Panel Members:

George Hoberg
George Hoberg is a Professor in the Department of Forest Resources Management at UBC where he teaches courses on sustainable energy and forest policy. He has a PhD in Political Science from MIT. His current research is focused on BC electricity policy and environmental governance of the oil sands. He is co-author of the recent book *Policies for Sustainably Managing Canada's Forests*. He has also edited two books on comparative Canada-US policies and the US influence on Canada, and written books on BC forest policy, environmental policy in the US, and toxic substances regulation. He's had a recent turn from analyst to advocate and has helped to found UBCC350.

James Glave
James Glave is the Conversations Manager for the Energy Initiative at Tides Canada. As a seasoned communications professional, James has worked on some of North America's leading media brands. His 20-year media career in Canada and the United States included staff editor positions at *Wired.com* and *Outside* magazine. He is the author of the critically acclaimed comic memoir *Almost Green: How I Saved 1/6th of a Billionth of the Planet*, and a former director of the BC Sustainable Energy Association. James has helped support a variety of green-economy companies, organizations, and campaigns including the TckTckTck.org alliance that in late 2009 united more than 15.5 million people for action on climate change. In 2010, he won a Western Magazine Award for his profile of ecological footprint co-creator and TerreWEB member, William Rees.

Jacob Fox
Jacob Fox is a graduate student and transportation specialist in the Energy and Materials Research Group at the School of Resource and Environmental Management at Simon Fraser University. Since 1986, the Research Group has been directed by Dr. Mark Jaccard, who has served on both the International Panel on Climate Change and the Global Energy Assessment, among many other significant collaborations. The Energy and Materials Research Group analyses greenhouse gas reduction and other policies to move Canada towards a more sustainable energy system. The group's research using the CIMS energy-economy simulation model has served a prominent role in the development of Canadian climate change policy, including the implementation of British Columbia's carbon tax. Jacob

holds a Socials Sciences and Humanities Research Council of Canada Graduate Scholarship as well as as a Pacific Century Graduate Scholarship from the Government of British Columbia.

Greg Stringham
Greg Stringham is the Vice President of Markets and Oil Sands for the Canadian Association of Petroleum Producers (CAPP). He holds a B.Sc. in Chemical Engineering and a Masters in Business Administration and is also a professional engineer. Greg has had a broad exposure to the energy industry in his career thus far. He joined CAPP in 1995 and in his current role as Vice President of Markets and Oil Sands, his responsibilities include oil and gas markets, pipelines and oil sands issues in Canada, the US and the oil sands issues in Europe and Asia. Greg is an active spokesperson for the industry; providing industry and public presentations, appearing before government committees and regulators in Canada and the US, and working frequently with the media. This role at CAPP builds on several years' experience with the Alberta Department of Energy where he dealt with a broad spectrum of energy policy in natural gas, oil and oil sands from royalties to megaprojects. Prior to government, Greg held several positions at Syncrude Canada Ltd. in areas ranging from research to project development.

Matt Horne
Matt Horne has been with the Pembina Institute since 2003 and is currently the acting director of the Climate Change program and director of the B.C. Energy Solutions program. His focus is on policy change that will reduce greenhouse gas emissions in British Columbia and provide replicable models for the rest of Canada. In pursuit of this goal, he has worked on initiatives with the province, municipalities and First Nations. Prior to joining Pembina, Matt worked extensively with energy-economy models on projects attempting to estimate the costs and benefits of climate change policy in Canada. Matt holds a Bachelor of Engineering from Dalhousie University and a Master of Resource and Environmental Management from Simon Fraser University.

Moderator: Marlene Cummings
Marlene has been working with ForestEthics, an environmental non-profit organization, since 2008 as their BC Forest Campaigner. ForestEthics' campaigns, such as implementing ecosystem-based management in the Great Bear Rainforest, and work to stop the Northern Gateway Pipeline and Alberta Tar Sands, consider all of the issues that affect wild places and the wildlife and people that depend on them—from biodiversity to air and water quality to climate change. Marlene sits on the Advisory Committee of the TerreWEB program. Marlene has an MSc in Environmental and Natural Resources Planning from UBC's SCARP program, with a focus on building resilience on our land base to conserve biodiversity. She brings a wealth of knowledge, relationships, and experience to ForestEthics' conservation and climate work through her involvement in campaigns for the protection of Canada's old growth forests since 1993 – most notably in BC's coastal temperate rainforests of Clayoquot Sound and the ancient pines of northern Ontario. With her passion for forests, nature and wildlife, and expertise in climate change adaptation, Marlene is leading ForestEthics' work to expand and connect conservation on BC's land base as an important part of climate action and healthy communities.

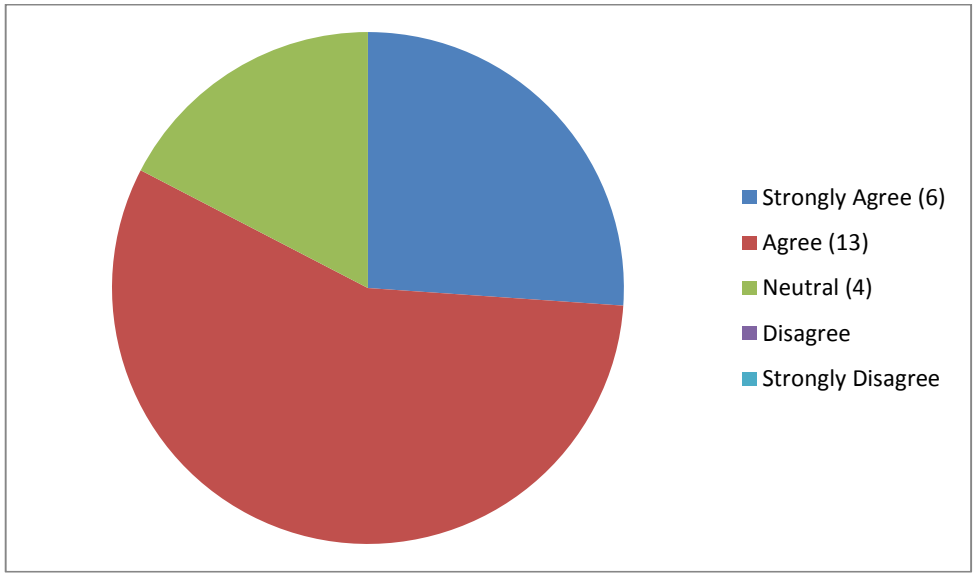
Feedback

Total People: 38
Total feedback forms returned: 23

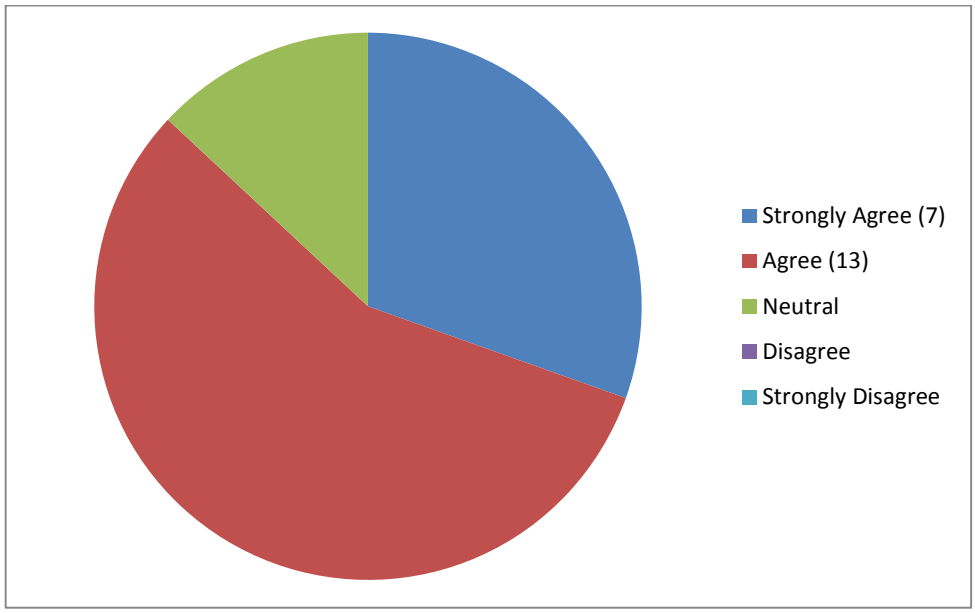
Interdisciplinary values

Please indicate your agreement with the following statements.

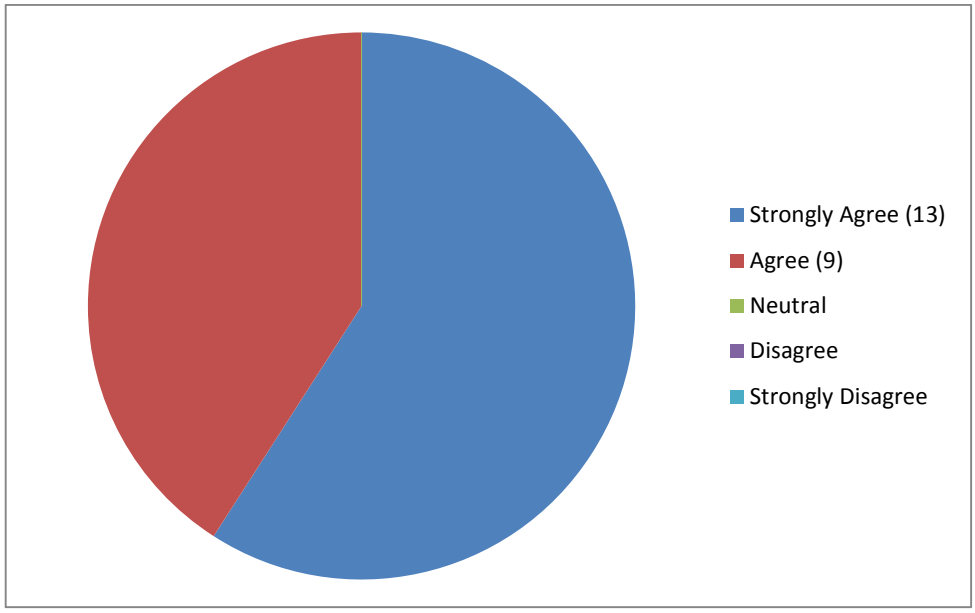
This event was educationally valuable to me.



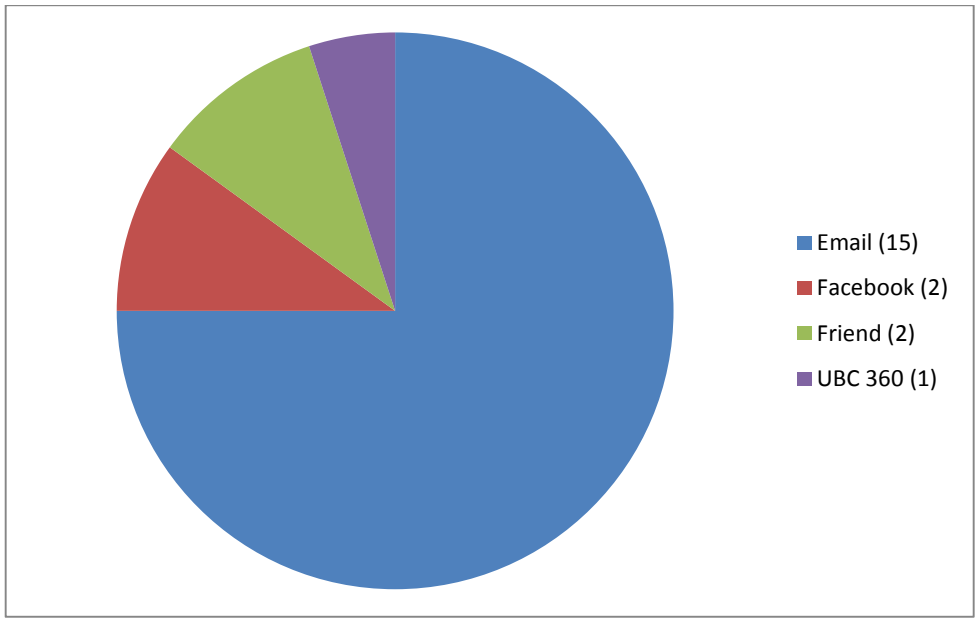
The interdisciplinary nature of this event enhanced my learning.



In general, connecting with students and instructors in other disciplines enriches my education.



Where did you hear about this event?



Suggestions for improving this event:

- More info that these events happen
- Coffee
- Aftertalks
- Inform speakers in advance about the audience
- We don't want every TerreWEB speaker to give an introduction to climate change (it is not necessary for an educated university audience)

- Preferred this week's format of panel over last weeks (maybe declare positions of each panellist toward the topic at the beginning)
- Mics for all speakers
- Invite speakers from the pro sand side to enhance the discussions

March 29: Burying It Out of Sight? Carbon Capture and Storage

Event Description

Thursday March 29th, 1:00 – 2:30 pm
Forest Sciences Centre 1003
Open to the public

If you cannot make it in person, you can access the live webinar link here. Please log in 5 minutes early.

Abstract: One of the options being considered for reducing global emissions of greenhouse gases into the atmosphere is to capture carbon dioxide, compress it, transport it to a suitable site and then dispose of it in a location from which it is intended to never escape. My seminar will begin by outlining the context for the CCS option and why it is looked on with some favour by the Alberta and Canadian governments. I will next look at some key technical and economic issues underlying capture from stationary sources and the atmosphere, assessing the major alternative processes for capture. Alternative sequestration sites and associated risks will then be considered. Major CCS projects in Western Canada will be summarized, and some comments offered regarding the viability and future of the CCS option relative to other climate change strategies.

Speaker Bio: John Grace is a professor in the Department of Chemical and Biological Engineering at UBC. He completed undergraduate studies in chemical engineering at the University of Western Ontario and a Ph.D. from Cambridge University. From 1968-79 he was faculty member at McGill University, and then moved to the University of British Columbia where he served as department head (1979-87), Dean of Graduate Studies (1990-96) and Acting Director of the Clean Energy Research Centre (2008-9). He has more than 500 publications, mostly on fluidization, related fluid-particle systems and environmentally friendly energy processes. He has supervised ~100 graduate students as well as many post-doctoral fellows and visiting scholars. With his students and colleagues, he has worked on a wide range of topics, both fundamental and applied, including hydrodynamics, heat transfer and mass transfer in fluidized beds, reactor modeling, scale-up, combustion and gasification, capture of CO2 and SO2, biomass processing, steam reforming, spouted beds and removal of particulates from gas streams. He has also served as a consultant, chaired international conferences, served on national committees and won a number of awards and honours. He has held a Canada Research Chair since 2001, was the founding Director of UBC's Fluidization Research Centre, and is a Theme Leader for Carbon Management Canada, a National Centre of Excellence.

Feedback

Total People: 37
Total feedback forms returned: 11

Interdisciplinary values

Please indicate your agreement with the following statements.

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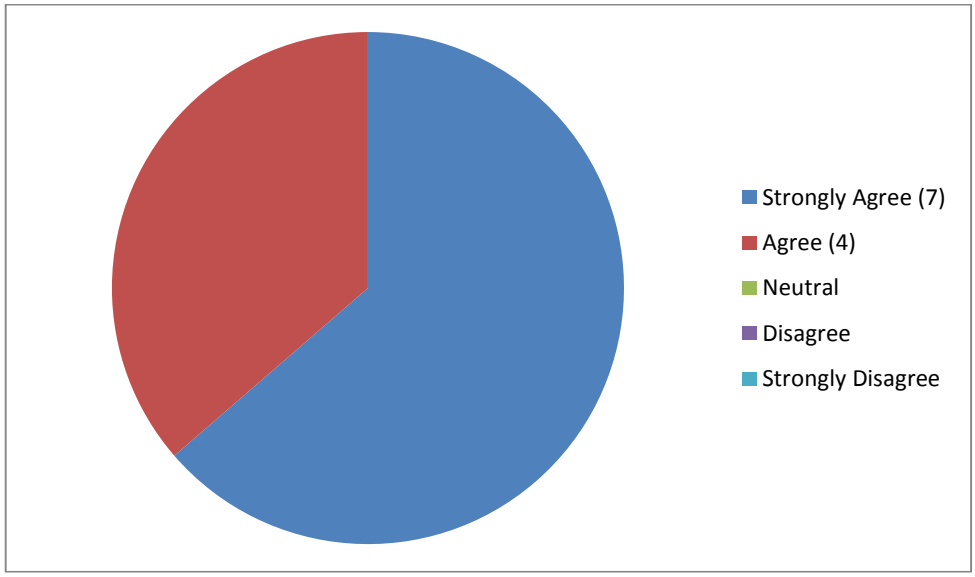
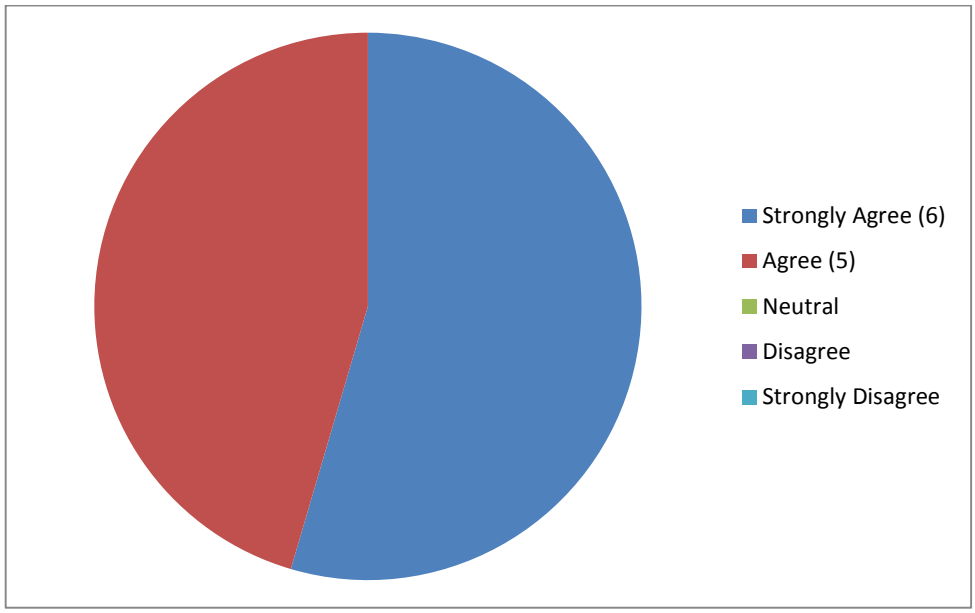
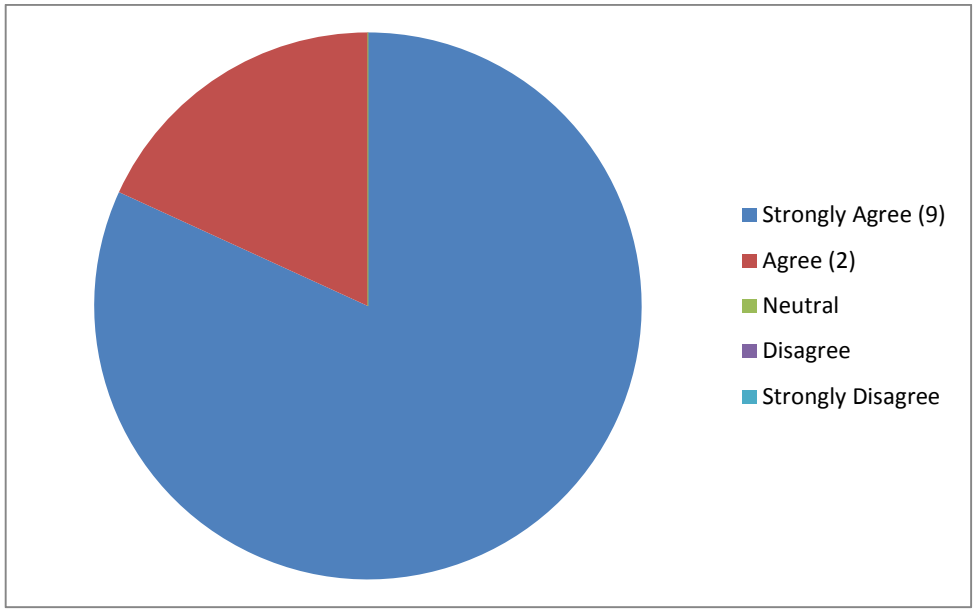


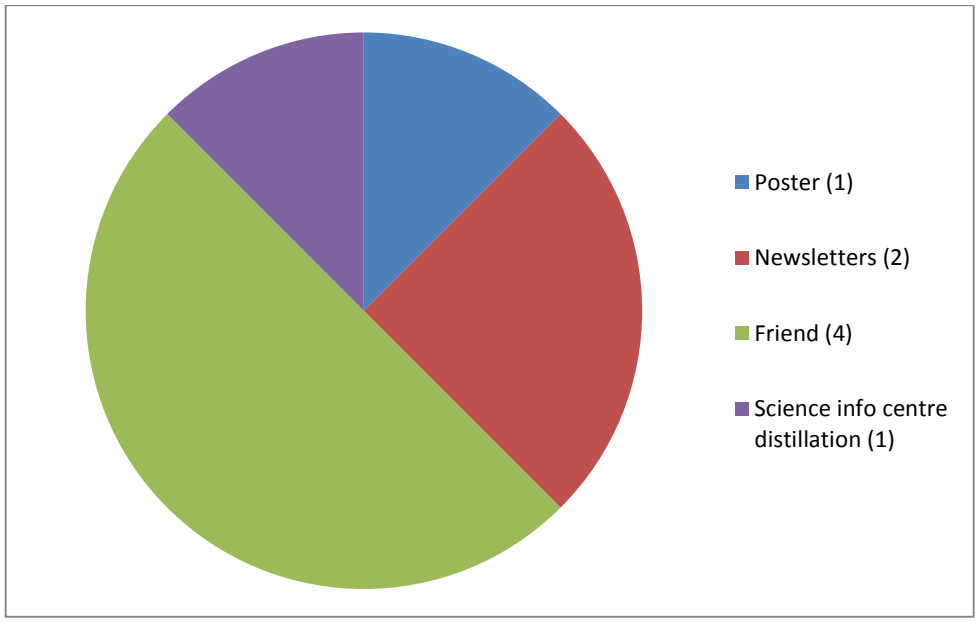
The interdisciplinary nature of this event enhanced my learning.



In general, connecting with students and instructors in other disciplines enriches my education.



Where did you hear about this event?



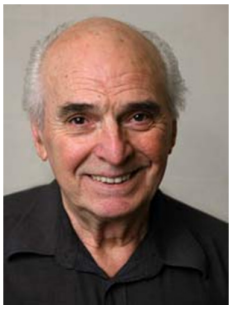
Suggestions for improving this event:

- More awareness of the seminar in environmental community
- Please send announcement to graduate secretaries and related departments to forward it to their students

April 5: Ramblings of a Frustrated Academic

Event Description

Integrating Science, Environment, and Equity (or, Ramblings of a Frustrated Academic)



Thursday April 5th, 1:00 – 2:30 pm (Last seminar of the Spring term!)
Forest Sciences Centre 1003
Open to the public

If you cannot make it in person, you can access the live webinar link here. Please log in 5 minutes early.

Abstract: Communication is the most important biological activity that allows species, including *Homo sapiens*, to survive. In our complex, and some might argue, "detached from nature" world, academic communication has not kept pace with population growth, affluence and technology. The human desire is for more but the Earth from a human dimension is finite. Human impacts on our natural environment are increasing in intensity, in geographic space and in ways that are not predicted. There is a recurring sentiment that we are heading for a place we do not want to go! Science education and effective communication provides a framework for informed debate to facilitate the emergence of shared, equitable values and governance policies that could change our future direction. We must understand what is natural science, how we interpret science and how we use science to sustain the human enterprise. Emergent technologies help in understanding science and through communication, its equitable applications. We need tomorrow's thinking to solve today's problems caused by yesterday's actions.

Speaker Bio: L.M. (Les) Lavkulich is professor emeritus of Soil Science and Resource Management and Environmental Studies at UBC. Born in Alberta, he received his B.Sc and M.Sc (1963) from the University of Alberta and Ph.D. from Cornell University (1966). He has offered a range of courses at UBC including soil chemistry and mineralogy, pedology and perspectives on resources and environment.
He helped develop the interdisciplinary Resource Management and Environmental Studies program and the Institute for Resources and Environment (1979-2004). He was Head of Soil Science from 1980 to 1990. His focus is on student education and student development. He has served on over 200 graduate student committees as supervisor, committee member, thesis examiner and is still learning. With his graduate students and colleagues he has published over 200 refereed articles. His adventures have taken him to Saudi Arabia, Nigeria, Morocco, Thailand, the Philippines, Brazil and Chile and several countries within the European Union. Les serves as the Chair of the TerreWEB Program.

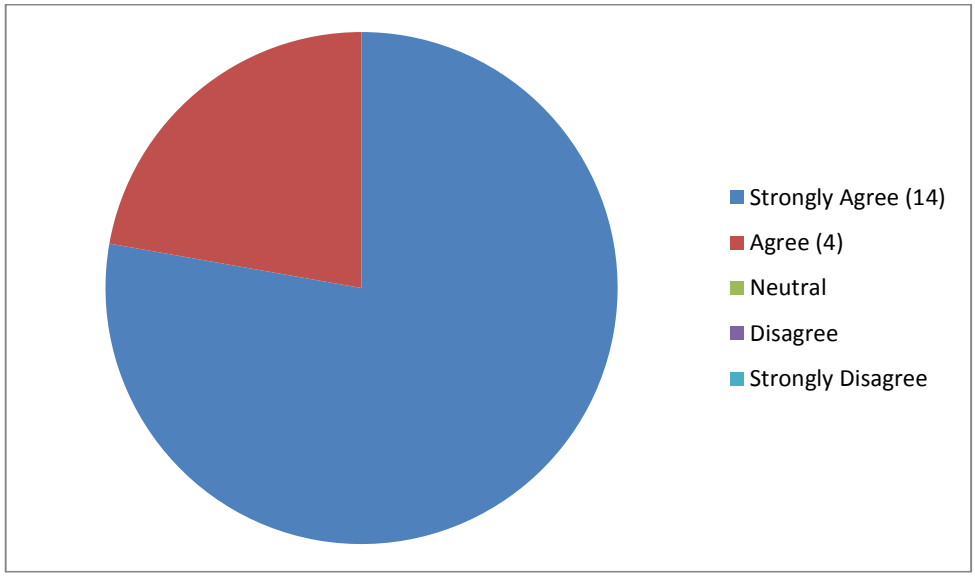
Feedback

Total People: 43
Total feedback forms returned: 18

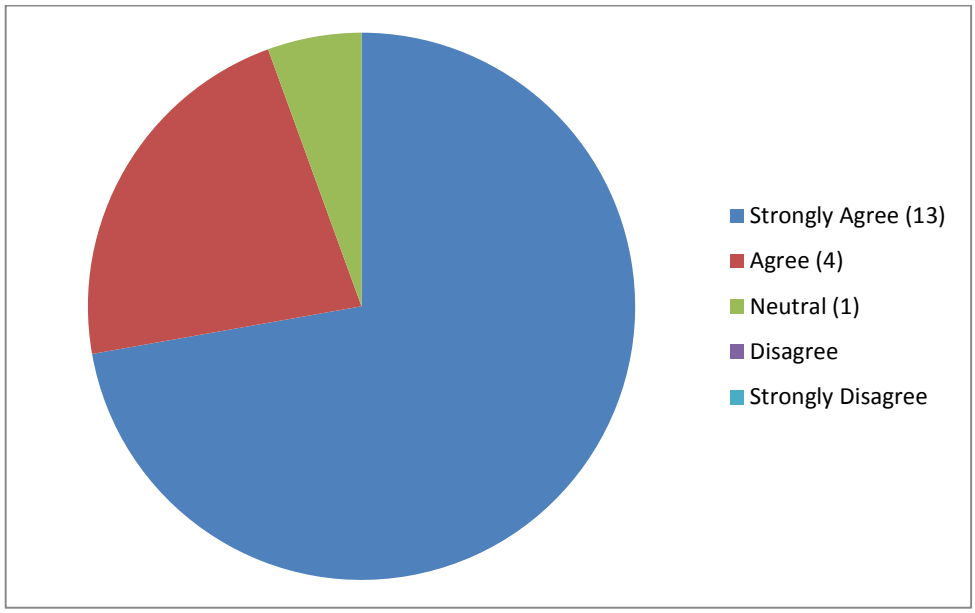
Interdisciplinary values

Please indicate your agreement with the following statements.

This event was educationally valuable to me.



The interdisciplinary nature of this event enhanced my learning.



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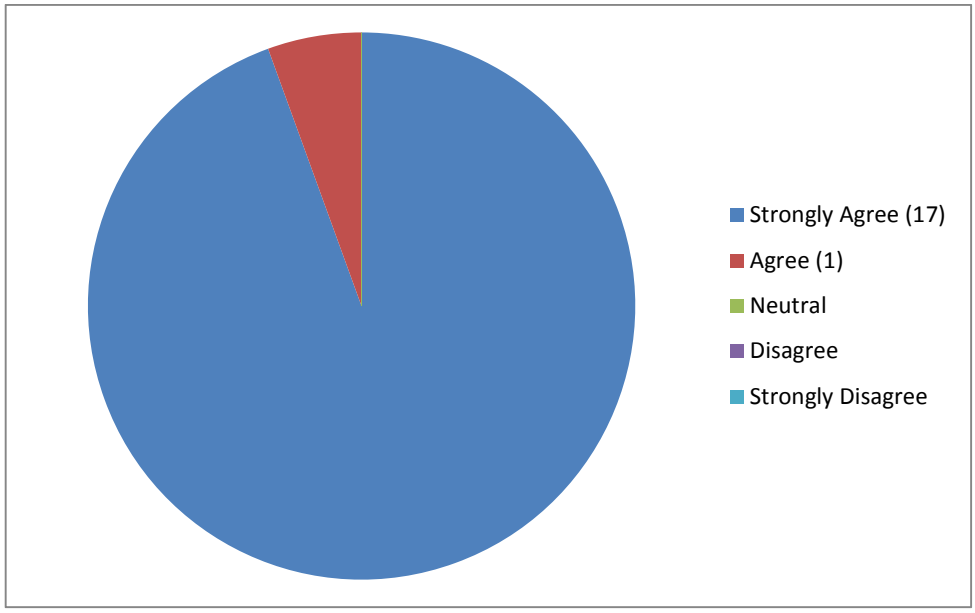

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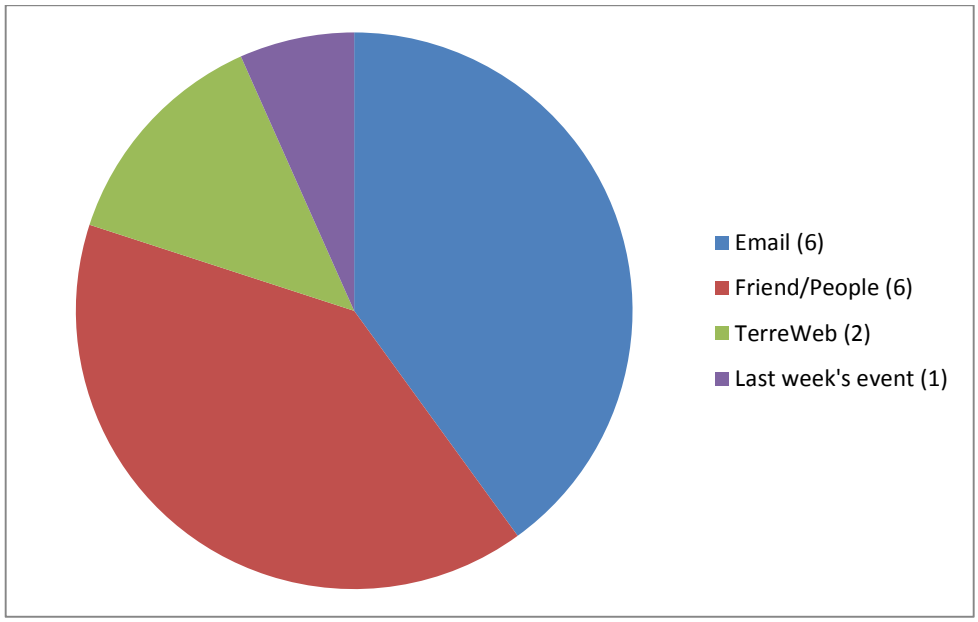

Suggestions for improving this event:

- This was fantastic
- Great finale to a great series
- Fantastic talk and discussion, thank you!
- Food
- Involve students more in an active way
- Outstanding