



Science Atlantic

Conference Program
Science Atlantic Environment
Conference 2024
March 22-24



UNIVERSITY
of Prince Edward
ISLAND

Sponsors

Red Oak Level



UNIVERSITY
of Prince Edward
ISLAND



PEI BAG CO.
PACKAGING SINCE 1935



Blue Jay Level



Thank you to our sponsors for their contributions.

Welcome from the Conference Planning Committee.

Welcome to the University of Prince Edward Island and the 2024 Science Atlantic Environment Conference (SAEC)! We are very excited to host SAEC for the first time at UPEI. It is also the first in-person conference since 2019. We look forward to welcoming to the Island environmental students and faculty from universities across Atlantic Canada. The scholarship in the environmental field is diverse, and the 49 undergraduate and graduate student presentations at the conference will reflect that diversity. Conference participants will also have the opportunity to learn from 2 engaging keynote speakers; one focused on regenerative agriculture, and the other focused on the application of GIS tools to the environmental histories of energy transitions. The pre-conference field trip will allow participants an opportunity to understand the impact of climate change on PEI from various perspectives. The Career panel on Saturday night will give you insight into interesting careers in the environmental field.

The best part of any conference is the opportunity to meet new people and forge new connections. We hope that you will join us for the opening social event on Friday night at the Fox & Crow, as well as the banquet on Saturday evening.

Wishing you all a great conference!

Planning Committee Members

Dr. Carolyn Peach Brown, Professor and Director of Environmental Studies (Chair of Organizing committee)

Laura Apblett

Akshay Bhaskar

Rachael Chigier

Jehaan Cooper

Thejan DeCosta

Catherine Kennedy

David Morgan

Yann Nkunda

UPEI Science Atlantic Environment Conference Schedule, March 22 – 24, 2024

Friday, March 22, 2024

Time	Event	Location
11:54 am	Pre-conference Field Trip - Leave UPEI for St. Peter's	T3 Transit , leaves from UPEI bus stop
12:51 pm	Arrive at St. Peter's	Bus stop is at CCCA
1 – 4 pm	Canadian Centre for Climate Change Adaptation (CCCA)	St. Peter's Bay
4:15 pm	Leave St. Peter's to return to UPEI	T3 Transit, leaves from CCCA
5:08 pm	Arrive UPEI, Charlottetown	
6 – 7 pm	Registration	Foyer, Murphy Student Centre
7 – 9 pm	Welcome Social event (Light snacks will be available)	Fox & Crow, Murphy Student Centre
8 – 9 pm	Science Atlantic Environment faculty committee meeting	MacMillan Hall, Murphy Student Centre

Saturday, March 23, 2024, All presentations will take place in MacDougall Hall (MCDH)

Time	Event	Location
8 – 8:30	Poster set up & late registration	Market Street, MCDH
8:30 – 9:00 am	Welcome and Opening Remarks	MCDH, 242
9 – 10:00 am	Keynote speaker Dr. Judith Nyiraneza, <u>Research Scientist, Agriculture and Agri-food Canada</u> <i>Soil regenerative management practices to enhance PEI soil health</i>	MCDH, 242
10:00 – 10:30 am	Nutrition break	Schurman Market Square, MCDH
10:30 – 12:30 pm	Oral presentations	MCDH, 243 & 246
Presentation #	MCDH, 243 (Undergraduate)	MCDH, 246 (Graduate)
1	Holly Turner, Acadia University: Examining temporal trends in the production and bioaccumulation of methylmercury in a restored wetland habitat	Jeneya Smith, University of New Brunswick: Evaluating tree species' growth sensitivity to seasonal temperatures
2	Laura Apblett, University of Prince Edward Island: Using organic amendments to improve phosphorus availability	Ilya Dimitrovas, Mount Allison University: Watershed applications of DDT and legacy impacts to benthic invertebrates in lakes from New Brunswick, Canada
3	Matthew Dean, Cape Breton University: Effects of shelter belts on insect biomass and biodiversity in lowbush blueberry, <i>Vaccinium angustifolium</i> fields	Vincenzo Marin, University of Prince Edward Island: Analysis of stream flow in response to surface water irrigation and its effects on TSS
4	Alexe Indigo, Dalhousie University: Can introduced dung beetle <i>Onthophagus nuchicornia</i> effectively use dung from mammals	Emily Gibbons, University of Prince Edward Island: Influence of giant Irish moss-blue mussel clumps on local biodiversity in a Marine

	native to eastern North America beyond agroecosystems?	Protected Area (Basin Head, PE)
5	Clara Ryan, Acadia University: Effects of biochar and <i>Rhizophagus irregularis</i> on <i>Malus domestica</i> , variety Honeycrisp, in the presence of apple, replant disease pathogens	Nadia Zahabi, University of New Brunswick: Case studies on the cradle-to-gate life cycle analysis of softwood lumber production
6	Hayley Newel, Acadia University: MeHg and THg concentrations of Hawaiian invertebrates and surface soils: potential volcanogenic influence	Marlene Chapman, University of Prince Edward Island: Fisheries management in a changing climate: insights from the Prince Edward Island lobster fishery
12:30 – 1:30 pm	Lunch	Wanda Wyatt Dining Hall
1:30 – 2:30 pm	Keynote speaker: Dr. Josh MacFadyen, <u>Research Scientist, Agriculture and Agri-food Canada</u> <i>Mapping Eastern Canadian Energy Transitions in City, Field, and Forest</i>	MCDH, 242
2:30 – 4:00 pm	Poster session	Market Street, MCDH
3:15 - 3:45 pm	Nutrition break	Schurman Market Square, MCDH
4:00 – 5:30 pm	Oral presentations	MCDH, 243 & 246
Presentation #	MCDH, 243 (Undergraduate)	MCDH, 246 (Graduate)
1	Macartney Wormington, Mount Allison University: Casting light on mercury: a comparative analysis of brook trout in New Brunswick	Barbara Rousseau, University of Prince Edward Island: Shifting sands: changing perceptions of Prince Edward Island's gulf shore dunes
2	Sarah Macdonald, Dalhousie University: Characterization of lake trophic state and cyanobacteria presence in Kejimikujik National Park	Cecilia Lancarte, Université de Moncton: Photovoice as a tool for community building among social and environmental movements
3	Rosie Bleyer, Dalhousie University: Identifying barriers to connectivity for Atlantic salmon in the St. Mary's River using a field validated remote sensing framework	Tristan Atkins, University of Prince Edward Island: Improving sustainability efforts in NunatuKavut by empowering Inuit communities through community based participatory action research
4	Emilie LeBlanc, Université de Moncton Comparaison des niveaux de stress physiologiques chez <i>Homarus americanus</i> par identification de biomarqueurs	Catherine Kennedy, University of Prince Edward Island: Evaluation of erosion mitigating infrastructure across Prince Edward Island
5	Kate Metcalfe, Dalhousie University: Mapping Lobster Habitat in the Northumberland Strait Using Multibeam Echosounders.	Greg Ellison, University of Prince Edward Island: The path to carbon neutrality: community based renewable energy on Prince Edward Island
5:30 – 7:00pm	Free time and Adjudication committee meeting	
7:00 – 9:00 pm	Banquet and Career panel	MacMillan Hall, Murphy Student Centre

Sunday, March 24, 2024, All presentations will take place in MacDougall Hall (MCDH)

Time	Event	Location
8:45 – 10:45 am	Oral presentations	MCDH, 243 & 246
Presentation #	MCDH, 243 (Undergraduate)	MCDH, 246 (Graduate)
1	William Chapman, Mount Allison University: Scientific communication in a vulnerable language	Meghan Oliver, University of New Brunswick: Bobolink (<i>Dolichonyx oryzovoroux</i>) breeding and habitat in the Wolastoq/Saint John River Valley.
2	Sadie Russell, Dalhousie University: Halifax residential air quality: public perception and PM2.5 concentrations	Brandon Vriends, University of Prince Edward Island: Direct and indirect trophic interactions in a marine sedimentary bottom: can habitat complexity play a role in prey survival rates?
3	Jara de Hoog, Acadia University: Technology and capitalism in Nova Scotia's new climate change plan	Gaël Doussou, Université de Moncton : Variation de la qualité de l'eau sur 20 ans d'une rivière du nord-est du Nouveau-Brunswick et influence des facteurs environnementaux.
4	Arwen Estrada, Acadia University: Utilization of marine and coastal fungi as bioremediation tools for plastic pollution	Katlyn Morrow, Mount Allison University: Sedimentary PEC-Qs of legacy DDTs and the risks to lake benthos in New Brunswick, Canada
5	Ethan Copp, St. Francis Xavier University: The potential health impact of airport pollutants on recreation in Kincaid Park in the winter of 2023 to 2024	Annie Dysart, University of Prince Edward Island: Using eDNA to assess fish populations in aquatic environments of Prince Edward Island, Canada
6	Josie Mallett, St. Francis Xavier University: Regional marine trends following the cessation of carbon emissions: what will be the future of warm coral reefs?	N/A
10:45 – 11:30 am	Nutrition break and Adjudication committee meeting	Schurman Market Square, MCDH Adjudication committee meeting, TBA
11:30 - 12:00pm	Awards and Closing Remarks	MCDH, 242
12:00–1:00 pm	Lunch	Wanda Wyatt Dining Hall