

32nd Annual Harold W. Borns, Jr. Symposium **300 Bryand Global Science Center, Harold W. Borns Jr. Polar Facility**

Conference Schedule

APRIL 16, 2025

12:00 PM: COFFEE / TEA / WATER (No food) – ROOM 307

NO FOOD OR DRINKS EXCEPT WATER IN ROOM 300

12:30-12:40 PM: Welcome Address: Introduction by Dr. Paul Andrew Mayewski, Climate Change Institute, Director and Professor.

SESSION 1 – Session Moderator: Leonardo Villacís

12:40 PM: Thermal Windows in the Southern Flying Squirrel (*Glaucomys volans*)
Eric A. Brown

12:52 PM: A Glacial Chronology from Lysefjord, Southwestern Norway – Evidence for a Cold Reversal During the Termination of the Last Ice Age
Tricia Hall Collins

1:04 PM: Using Paleolimnological Approaches to Disentangle the Long-term Nutrient and Climate Drivers of Harmful Cyanobacterial Blooms
Avery N. Lamb

1:16 PM: Evidence of a Late Glacial Readvance in North-Central Maine
Maraina Miles

1:28 PM: Allan Hills, Antarctica Climatic Shift Indicated by Water Isotopes, Dust, and Iron
Samantha Baumgartner

1:40 PM: Aligning Circularity and Climate Reduction Goals in Packaging EPR Schemes
Erin Victor

1:52 PM: Possible Teleconnection Between the January 2022 Tonga Eruption and Climate Extremes Observed in 2023
Ana Trueba

2:04 PM: Liquid Water Distribution Within and Beneath Temperate Ice on the Juneau Icefield, Alaska
Renée Clavette

2:16 PM: Transition of Marine-terminating Glaciers to Land under a Warming Climate: Implications for Driving Stress
Mathilde Børch

2:30 – 3:00 PM: BREAK WITH REFRESHMENTS – ROOM 307

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SESSION 2 – DAVE CLAYTON SMITH LECTURE

3:00 PM:

**Bonnie Newsom, Ph.D., Associate Professor of Anthropology and Faculty Associate,
Climate Change Institute, University of Maine.**

***A Million Sunrises at Schoodic: Archaeological Research on the Muted Histories at Frazer
Point, Acadia National Park, Maine***

3:45 PM Jacobson CCI Distinguished Service Award

2025 Jacobson committee: Madeleine Landrum, Elizabeth Rodgers, Alexzander Roman

SESSION 3 - Session Moderator: Thomas Grindle

3:51 PM: Spatial Distribution of Trace Metal Chemistry in Saline Surface Water in West Greenland

Cory Limberger

**4:03 PM: Multi-scalar Approach Towards a Holistic Understanding of Lake Level in an Agricultural,
Drought-Prone Sub-Arctic Landscape**

Amanda Gavin

**4:15 PM: Spatial and Temporal Variability in Density and Liquid Water Content in Wet Firn on
Juneau Icefield, Alaska**

Mikaila Mannello

**4:27 PM: Impact of Temperature and Precipitation on Growth and Survival of Tree Seedlings: A
Comparative Analysis of Conifer and Deciduous Species**

Pratima Pahadi

4:39 PM: Polluter Pays and Climate Superfund Law

Anthony Moffa

4:51 PM: COP29 Week 1 Delegation

Jamie Dalglish, Holly Fain, Hailey Rizzo

5:03 PM: COP29 Week 2 Delegation

Nicholas Micinski, Sarah Ball, Clea Harrelson

–GROUP PICTURE–

SESSION 4 – 5:15 PM: POSTER SESSION - HALLWAY / CASH BAR – ROOM 307

**Human Behavior in the Northeast Landscape of the Little Ice Age: A Faunal Analysis of Long Point
Preserve, Machiasport, Maine**

Mackenzie Andersen

Uncovering Long-Term Responses to Climate Change in the Gulf of Maine

Morgan E. Anderson

Meteorology Starts with Weather Observations

Nikki Becker

Investigating the Spatiotemporal Patterns of *Asimina triloba* since the Last Glacial Maximum

Elijah Bradshaw

Advancing Wind Modeling in Complex Terrain with a Particle-Based Physics Framework

Jay Broccoli

Vulnerability to Climate Change and Effects of Circadian Rhythm and Rest-Site Selection in Small Tropical Mammals
Claudia N. Saldaña DeCamillis

Development of Artificial Ice Standards for LA-ICP-MS Analysis
Lela Gadrani

Developing a ^{10}Be Chronology of a Late-Glacial Moraine Complex in Whale Stream, New Zealand
Mike Goodwin

Nutrient Shifts in Lakes Located in Central Norway: From Acidification to Browning
Kayla Guthrie

Characterizing Fish Sedimentary DNA Accumulation and Degradation Rates to Better Monitor Species on the Move
Grayson P. Huston

Calibrating Isotopic and Trace Element Analysis of *Trachycardium* Shell Material as a Proxy for ENSO Behavior in North Coastal Peru
Katelyn Johnson

Don't Leave Feeling Hollow: Methods for Successfully using Small Hollows to Reconstruct Anthropogenic Fire History
Madeleine Landrum

Investigating Microbial Community Composition in Freshwater Systems in West Greenland
Miranda Herschel Seixas

Glacier Retreat and Readvance near Mount Waesche, West Antarctica
Sicely Sohn

Investigating Snowpack Thickness Variations in Temperate Regions: Integrating High Accuracy LiDAR Snow Surveys
Wyatt Stanley

April 17, 2025

8:00 – 8:15 AM: COFFEE / TEA / WATER (No food) – ROOM 307

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8:15 AM: Welcome: Dr. Paul Mayewski

SESSION 5 - Session Moderator: Mikaila Mannello – Churchill Talks(1st 5 talks)

8:20 AM: “Site-seeing” Archaeological Features on the North Coast of Peru
Emily M. Blackwood

8:32 AM: How do Lakes in West Greenland Recover from Abrupt Lake Browning Following a Compound Climate Extreme Event?
Thomas Grindle

8:44 AM: Geochronologic Record of Ice Extent During the Antarctic Cold Reversal at Bahía Penhoat, Chile
Sera Thomas

8:56 AM: Using Geophysical Survey to Reveal Patterns in Monumental Construction at Los Morteros, Peru
Kelly E. Hoover

9:08 AM: Cordillera Darwin Icefield Extent During the Last Termination
Meghan Spoth

9:20 AM: Interhemispheric Comparison of the Late Glacial Climate Reversal
Katherine Westbrook

9:32 AM: Little Ice Age Glacial Advances Found in the Southern Alps of New Zealand at 43°S Suggesting a Global Extent
Alexzander Roman

9:44 AM: Surface Water Dynamics at Echo Glacier, Lingít Aaní
Tahi Wiggins

10:00 – 10:30 AM: BREAK WITH REFRESHMENTS – ROOM 307

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SESSION 6 Session Moderator: Tahi Wiggins

10:30 AM: Birdsong: Multivocality in Human-Bird Relationships during the Ceramic Period in Wabanaki Homeland: A Case Study at Frazer Point (ME 44-49, ACAD 00110), Schoodic Peninsula, Maine
Olivia L. Olson

10:42 AM: Comparing Measured and Modeled Glacier Ice Thicknesses Using In-Situ Ground Penetrating Radar Measurements on Jarvis Glacier, Eastern Alaska
Mari Fromstein

10:54 AM: At Macroecological Scales and Across Coarse Climate Gradients the Realized Climatic Niche of U.S. Trees is Conserved Across Life History
Bailey P. McLaughlin

11:06 AM: Analyzing Bubbles in Hyperspectral Images of Ice Cores
Roisin Rumsey

11:18 AM: The Influence of Fjord Dynamics on Iceberg Distributions in NW Greenland
Allie Berry

11:30 AM: Capturing Temporal and Spatial Dynamics of Diatoms in Crawford Pond, Northern Maine, for Ground-Truthing Stratigraphic Records Involving *Aulacoseira*
Leonardo A. Villacís

11:42 AM: A Natural Experiment from the Alpine to the Arctic: Evaluating Local Adaptation in Herbarium Specimens Using Spectroscopy
Andrea J. Tirrell

11:54 PM: Research as Heritage Work: A Participatory Action Case Study of Wabanaki Pottery Traditions
Elizabeth L. Rodgers

12:15 PM – 1:00 PM: BUFFET LUNCH – ROOM 307

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SESSION 7 Session Moderator: Emily Blackwood – Faculty Talks

1:00 PM: Quantifying Changes in Iceberg Response During Extensive Glacier Retreat

Kristin M. Schild

1:12 PM: Short-Term Impacts of Biochar Soil Amendment Include Increased Carbon Loss

Kennedy F. Rubert-Nason

1:24 PM: Lava Loading and Melting on Martian Glaciers: Moulin Formation and the Fate of Meltwater

James L. Fastook

SESSION 8 – INVITED UNIVERSITY OF MAINE ALUMNA LECTURE

1:30 PM:

Rachel A. Fowler, PhD., Biology Laboratory Coordinator, School of Biology & Ecology, University of Maine.

Harmful Algal Blooms (HABs) on the Horizon: Building a Risk Scorecard for Lakes in Acadia National Park

2:15 PM:

CLOSING REMARKS – Dr. Dan Sandweiss

AWARDS -- AWARD PICTURES

PRE RECORDED VIDEOS OF PARTICIPANTS WHO COULDN'T BE HERE THIS YEAR HAVE BEEN UPLOADED TO THE CCI YOUTUBE CHANNEL FOR VIEWING

Thank you to all the CCI graduate students who participated in moderating sessions, taking photographs, and assisting with event setup and clean up activities.

Special Thanks to Andrei Kurbatov for his assistance with the audio-visual component for this event.

A big thank you to our Borns Symposium judges.

THANK YOU!!