

2021 Research Symposium—Preliminary Schedule

Title	Summary	Presenters	Date	Begin Time (Eastern Daylight Time)	End Time (Eastern Daylight Time)	Session Format	Presentation Mode
<p><i>This is a preliminary schedule; sessions, times, and presenters are subject to change. All times are Eastern Daylight Time. The final schedule will be available through the conference platform when it launches in mid-September. The platform includes the opportunity to add sessions to your personal calendar.</i></p>							
Research Posters							
A Place-Binding Knot Map. Phronésis as Outdoor Learning	This philosophical reflection on outdoor learning invites consideration of wider horizons of possibility around the constructs of when and where we learn in relation to phronésis, practical wisdom, and notions of kairós and tópos. The work re-infuses the three back into broader educational aims through practices of local learning outdoors.	Hart Banak, UNBC	Thursday, October 7– Friday, October 8	24-hour access		Research Poster	On-Demand
Advancing Community Connectivity: Developing a Nature Park Master Plan	Leveraging novel nature-based environments and building human capacity requires intentional design, responsible use, and evidence-based management. Our collaborative team explored diverse social elements prudent in planning for a new 184-acre public nature-park in Valdez, AK. Modern engagement and analysis techniques proved efficient in capturing stakeholders' values, uses, and park preferences.	Hunter Holland, UNCW; Kathleen Holland, UNCW	Thursday, October 7– Friday, October 9	24-hour access		Research Poster	On-Demand
An Action Research Approach for the Development of Children's Environmental Motivation	We describe the attempt of a teacher/researcher and her fellow co-workers to increase the motives of a group of students living in vulnerable social conditions, through gardening. An action research framework was adopted and basic principles of motivation's theories was followed	Konstantinos Korfiatis, University of Cyprus	Thursday, October 7– Friday, October 10	24-hour access		Research Poster	On-Demand
Assessing Campus Sustainability Literacy and Culture: How Are Universities Doing It?	Higher education institutions struggle with conducting sustainability literacy and culture assessments to assess their populations' sustainability knowledge. I examined the impact of organizational learning capability to use the assessment data for bringing programmatic- and institutional-level changes. I present practices that educators can adopt to ensure meaningful outcomes of these assessments.	Nikita Lad, George Mason University	Thursday, October 7– Friday, October 11	24-hour access		Research Poster	On-Demand
Assessing the Effects of Expeditionary Field Science Courses on Student's Environmental Literacy	The purpose of this project was to identify changes to the environmental literacy of students local to the Greater Yellowstone Ecosystem after participation in a 5-day expeditionary field science program. Traditional and non-traditional methods of assessment were used.	Adam G. Bavier, EUREKA! McConnell Science Museum	Thursday, October 7– Friday, October 12	24-hour access		Research Poster	On-Demand
Assessing Undergraduate College Students' Values and Conceptions of Sustainability	Prior research has shown that the term 'sustainability' is perceived in several distinct ways. In this study, we examine how undergraduate students define sustainability and if their personal values can predict a more inclusive definition of the term that recognizes the role of sustainability in creating social equity.	Jennifer Gribben, University of Southern California	Thursday, October 7– Friday, October 13	24-hour access		Research Poster	On-Demand
Building Sense Of Place And Community In A Virtual Space	This qualitative study examined how community and place served as central foci of professional work with teachers from two urban districts as part of a larger Design-Based Research program and shaped later face-to-face work in a summer institute. Implications for practice and theory are discussed.	Roberta Howard Hunter, Michigan State University	Thursday, October 7– Friday, October 14	24-hour access		Research Poster	On-Demand
Captain Coleslaw Outdoors: A Youtube-Styled Outdoorsman Vlog As Means For High-School Environmental Education	When faced with a pandemic, environmental education required novel virtual pedagogy to stay relevant. This project used mixed-methods to explore student experiences with a teacher-created YouTube channel as supplementary literacy in their high-school science curriculum. The channel used consumptive hunting, fishing, and foraging strategies to teach environmental/biological concepts.	Gino Colella, Slippery Rock University; Rebecca Thomas, Slippery Rock University; Mohamad Khalifa; Joshua Magyar, Slippery Rock University	Thursday, October 7– Friday, October 15	24-hour access		Research Poster	On-Demand
Climate Youth Engagement: From Deliberation to Action	We hypothesized deliberation using NAAEE's Environmental Issue Forums (EIF) would promote knowledge, awareness, hope, and trust among participants regarding climate change. Program effectiveness was measured using pre-and post-test instruments. Our results suggest EIF deliberation is a useful education and communication process for effectively engaging high school students with climate change issues.	Christine Jie Li, University of Missouri	Thursday, October 7– Friday, October 16	24-hour access		Research Poster	On-Demand
Connecting EE & Citizen Science to Move Youth from Awareness to Stewardship	Citizen Science and environmental education offer complementary approaches to move participants towards environmental literacy, yet little research exists on their intersection. This study integrated and connected EE and CS activities to move youth participants from awareness to environmental stewardship as they engaged in a water quality monitoring citizen science project.	Dave Smaldone, West Virginia University	Thursday, October 7– Friday, October 17	24-hour access		Research Poster	On-Demand
Connection To Nature Boosts Adolescents' Mental Well-Being During COVID-19	This research explores the role that connection to nature plays in enhancing the mental well-being of adolescents before and during the COVID-19 pandemic. We found that connection to nature mediates the relationship between outdoor activity participation and mental well-being, and that the mediating relationship was stronger during the pandemic.	Steven B. Jackson, Florida Gulf Coast University; Kathryn Stevenson, NC State University	Thursday, October 7– Friday, October 18	24-hour access		Research Poster	On-Demand
Do Online Classes Connect Children with Nature?	Online classes and nature-based programs don't normally go together. But in a situation like the pandemic, is it better to provide something rather than nothing?	Batool Ishaque, Early Years Learning And Research	Thursday, October 7– Friday, October 19	24-hour access		Research Poster	On-Demand
Examining Extension Professionals' and the Publics' Conceptions of Water Systems	The connection between humans and their environment is often misunderstood, particularly when talking about water in human-engineered and natural systems. This presentation will examine Extension professionals' and the publics' conceptions of water systems and discuss how practitioners can build upon participants' water knowledge and further develop their system thinking skills.	Gabriela Sullivan	Thursday, October 7– Friday, October 20	24-hour access		Research Poster	On-Demand
Exploring Elementary Science Teachers' Experiences Implementing Outdoor Instruction	This study explores elementary teachers' perceptions of and experiences with incorporating outdoor learning experiences in their science instruction. This includes the factors influencing their pedagogical decisions, barriers to their use of outdoor spaces, and the topics and teaching strategies they believe are best-suited for outdoor science instruction.	Sagan Goodpaster, University of Kentucky	Thursday, October 7– Friday, October 21	24-hour access		Research Poster	On-Demand
Faith Integration in Environmental Sciences in Evangelical Christian Higher Education	Conducting interviews and through analysis and comparison of course syllabi for "Evangelical Christian" higher education institutions, this study seeks to share more of the narrative of how faith is integrated into the environmental sciences when compared against "Establishment Christian" and "secular" higher education institutions.	Nicholas Green, University of Wisconsin-Madison	Thursday, October 7– Friday, October 22	24-hour access		Research Poster	On-Demand
How Field Experiences Influence Students' Connections to Community and Environment	Summer field experiences facilitate positive outcomes for students including increased content knowledge, confidence in scientific skills, and understanding of careers. Additionally, the unique tiered mentorship structure of the Mid-Hudson Young Environmental Scientist program facilitates deepened connections to community, to peers and mentors, as well as to their local environment.	Ashley Aled, Cary Institute of Ecosystem Studies	Thursday, October 7– Friday, October 23	24-hour access		Research Poster	On-Demand

2021 Research Symposium—Preliminary Schedule

Title	Summary	Presenters	Date	Begin Time (Eastern Daylight Time)	End Time (Eastern Daylight Time)	Session Format	Presentation Mode
<p align="center"><i>This is a preliminary schedule; sessions, times, and presenters are subject to change. All times are Eastern Daylight Time. The final schedule will be available through the conference platform when it launches in mid-September. The platform includes the opportunity to add sessions to your personal calendar.</i></p>							
Inter-Species Communications: Personal Stories and Insights for Environmental Education	The world is full of voices - human voices, animal voices, voices of the land. This project brings personal stories of communicative encounters with animals, nature, and places into the discourse around nature connection to support the exploration of the more-than-human voice in environmental education programming.	Deb Matlock, Wild Rhythms, LLC	Thursday, October 7– Friday, October 24	24-hour access		Research Poster	On-Demand
Is There Really a Difference: Exploring Rural Attitudes and Behaviors Relating to Community Appearance	How do leaders identify conditions that may be causing environmental, economic, and aesthetic challenges and address them? Research conducted in a rural location examined the residents' and leaders' attitudes, behaviors, and influences in the built and natural environment to assess what may inspire civic action to enhance the community.	Cecile Carson, Carson Consulting	Thursday, October 7– Friday, October 25	24-hour access		Research Poster	On-Demand
Linking Education For Outdoor Recreation Specialization To Pro-Environmental Behaviors	The presented study explores how environmental educational programming designed to encourage prescriptive outcomes can also promote generalized behaviors of interest. By understanding how environmental identity mediates the relationship between outdoor recreation specialization and pro-environmental behavior, direction is provided on how to facilitate learning experiences that have expanded outcomes.	Tim Mateer, Shaver's Creek Environmental Center and the Pennsylvania State University; Danielle Frank Lawson, The Pennsylvania State University	Thursday, October 7– Friday, October 26	24-hour access		Research Poster	On-Demand
Mentions of Environmental Education in Cryptocurrency Regulation	This study aims to evaluate mentions of environmental education in policies surrounding the regulation of cryptocurrency. As cryptocurrencies become increasingly used worldwide, it is crucial to consider the environmental impacts of computing and environmental education concerning the public's understanding of these issues.	Stephanie Quon, The Sprouts Initiative	Thursday, October 7– Friday, October 27	24-hour access		Research Poster	On-Demand
Nature Exposure and Well-Being During the COVID-19 Pandemic	This study examines the role of nature engagement and its association with human well-being during the COVID-19 pandemic. We ask whether connection to nature and different forms of nature engagement are associated with self-reported measures of well-being including loneliness, rumination, emotional impact, and mental health.	Jordan Tralins; Abigail Brown, Cornell University; Tina Phillips, Cornell Lab of Ornithology	Thursday, October 7– Friday, October 28	24-hour access		Research Poster	On-Demand
Nature-based Professional Development for Educators of Young Children in Poverty	The results are here! Following the delivery of a comprehensive, web-based, professional development training package, a recent dissertation study examined the knowledge, perception, and application of nature-based teaching practices among early childhood teachers in a minority-serving, high-poverty community. Findings will be presented along with implications for future research.	Sylvia Collazo, Florida Atlantic University	Thursday, October 7– Friday, October 29	24-hour access		Research Poster	On-Demand
Online Environmental Education: Effective Strategies and Shifting Perspectives	Is online learning a barrier in environmental education, or is it a realm of new opportunities? Educators were surveyed and interviewed to better understand their perceptions of online education, as well as the most effective strategies they have used to engage their students in meaningful environmental activities amidst the pandemic.	Katrina Vickery, University of New Haven	Thursday, October 7– Friday, October 30	24-hour access		Research Poster	On-Demand
Reaching Participants in a COVID-19 World: Innovations in Data Collection and Outreach	As "social distance" and "remote learning" become societal norms, researchers struggle to find methods for collecting rich quantitative and qualitative data with children remotely. In this poster, I highlight innovative methods used in my dissertation research that engaged preadolescent participants in both my qualitative and quantitative phases.	Ann Rossmiller, The University of Cincinnati	Thursday, October 7– Friday, October 31	24-hour access		Research Poster	On-Demand
Synchronous Sustainability Education for Remote Learning	Educators have had to get creative during the pandemic era of teaching. This poster describes how sustainability education pedagogies were applied to remote, community-based learning senior undergraduate capstone courses at Portland State University. Synchronous meetings allowed for student and instructor connection, despite being remote.	Megan Schneider, Portland State University	Thursday, October 7– Friday, October 32	24-hour access		Research Poster	On-Demand
Teachers' Perceptions Of Using Outdoor Spaces For Learning During A Global Pandemic	The aim of this study is first to explore teachers' perceptions of outdoor learning as a response to COVID-19 and second, to identify teachers who are taking students outdoors for any reason and learn more about their current and prospective future practices relative to outdoor learning.	Annette Schmidt, Arizona State University; Andrea E Weinberg, Arizona State University	Thursday, October 7– Friday, October 33	24-hour access		Research Poster	On-Demand
The Impact of COVID-19 Lockdowns on Young People's Relationships with Nature: A Socio-Spatial Perspective	We explored whether COVID-19 lockdowns impacted the locations of young people's relationships with nature. Two groups of young people—one before, one during lockdown—created qualitative, spatially referenced "story maps" about their relationships with nature. As young people's circumstances, environments, and needs changed, so did their dynamic relationships with nature.	Corey Martz, University of Denver	Thursday, October 7– Friday, October 34	24-hour access		Research Poster	On-Demand
The Impacts of Environmental Identity on People's Awareness on Local Marine Issues	Museums and aquariums provide a good environment to study how EID constructed by previous knowledge, worldviews, and culture affects learning experience concerning complex environmental issues and the interpretation or awareness of these issues. This project targets adolescents who visit museums and aquariums internationally seeing how EID affects their learning of local marine issues.	Shu-Min Yang, Oregon State University	Thursday, October 7– Friday, October 35	24-hour access		Research Poster	On-Demand
The Power of a Profound Experience with Nature	My research explored the long-term influences of a profound experience with nature—an experience that shifts an individual's view of or relationship with the natural world. Little is known about the long-term effects of a single, memorable experience with nature or how individuals use the associated memories in their lives.	Becky Mathers, n/a	Thursday, October 7– Friday, October 36	24-hour access		Research Poster	On-Demand
The Role of Place-Based Education in Strengthening Community Resilience against Climate Change	Qualitative research was conducted on informal learning and activities of a neighborhood association in Joso City, Japan, one of the affected areas of the 2015 Kantō-Tohoku Torrential Rain Disaster. In this session, we discuss what is the role of Place-Based Education in strengthening community resilience against climate change impacts.	Nonko Hata, Tsuru University; David Allen, Texas Christian University; Junko Kondo, Kyoto University;	Thursday, October 7– Friday, October 37	24-hour access		Research Poster	On-Demand
Using Digital Storytelling to Explore Climate Futures with Youth	Learn how digital storytelling was used in a climate education research project with secondary school students in the UK and Ireland to explore positive and negative visions of the future. As a participatory research methodology, digital storytelling results in rich qualitative data while engaging young people with constructive hope.	Bill Finnegan, University of Oxford	Thursday, October 7– Friday, October 38	24-hour access		Research Poster	On-Demand

2021 Research Symposium—Preliminary Schedule

Title	Summary	Presenters	Date	Begin Time (Eastern Daylight Time)	End Time (Eastern Daylight Time)	Session Format	Presentation Mode
<p align="center"><i>This is a preliminary schedule; sessions, times, and presenters are subject to change. All times are Eastern Daylight Time. The final schedule will be available through the conference platform when it launches in mid-September. The platform includes the opportunity to add sessions to your personal calendar.</i></p>							
What We Bring to the Table: Influences on Youth Agricultural Literacy in North Carolina	Understanding youth agricultural literacy prior to a learning intervention allows for more responsive educational approaches. Results of this quantitative study highlight the importance of knowing a farmer and regular engagement between parents and youth in predicting youth agricultural literacy. Limited demographic variation indicates interest in food systems across broad audiences.	Caitlin Reilly, North Carolina State University	Thursday, October 7– Friday, October 30	24-hour access		Research Poster	On-Demand
Thursday, October 7, 2021							
Where is Antiracism in Environmental Education?	In the past year, there has been increased worldwide attention on racial injustice, systemic inequality, and white supremacy. In this interactive session, five panelists will share their perspectives, experiences, practices, and research explicitly related to antiracism and environmental education.	Sheila Ridge Williams; Sprinavasa Brown, ELSO, Inc.; Ming Kuo, UIUC; C. Parker McMullen Bushman, Butterfly Pavilion; Dani Toma-Harold; (Moderator) Scott Morrison, Elon University	Thursday, October 7	11:30am	12:15pm	Panel Presentation	Live
Nature's Services And Contributions: The Relational Value Of Childhood Nature Experience	People depend on functioning ecosystems to meet needs and support well-being across the lifespan. This presentation will address interest in ecosystem services valuation and EE for children. If children and EE are to be better represented in policy, then we must find ways to connect ecosystem services valuation and EE.	Thomas Beery, Kristianstad University	Thursday, October 7	11:30am	12:15pm	Research Roundtable	Live
Using Data to Visualize Connections Across the Maine Environmental Learning Community	This session will showcase an interactive network map of the environmental learning sector in Maine. Learn how schools and organizations are connected regionally through a powerful software program called Kumu and explore how this data is helping us better understand collaborations across the EE field in Maine.	Alexandria Brasili, Maine Mathematics and Science Alliance; Ruth Kernish-Allen, Maine Mathematics and Science Alliance; Olivia Griset, Maine Environmental Education Association	Thursday, October 7	11:30am	12:15pm	Research Roundtable	Live
Wearing Theory Goggles: Interpreting Youth Agency in Environmental Citizen Science	A discussion of the methodological techniques and challenges of studying learning and agency in youth-focused environmental citizen science initiatives. We represent youth agency as the meaningful actions and small changes that emerged in youth as they developed knowledge and identity with environmental science.	Ana Benavides Lahnstein, National History Museum, Angela Marmont Centre for UK Biodiversity	Thursday, October 7	11:30am	12:15pm	Research Roundtable	Live
Budding birds: Shared birding experiences between urban and rural preschool programs	In a collaboration between researchers, teachers, and children at urban and rural university-based preschools, Project FeederWatch was implemented in classrooms. Children also engaged in specific species research and contemplated what diversity means in both the avian and human realms. Technology allowed children to communicate across classrooms and share	Meg Gravit, University of Louisville; Rebecca Crawford; Tamala North, Eastern Kentucky University	Thursday, October 7	12:30pm	1:15pm	Research Roundtable	Live
Exploring Pathways Through the Field of Environmental Education	Career pathways have been widely adopted across many professions, including education (e.g. Parker, Keleher, Francis & Abdulwadud, 2009; Shapiro, 1998). Career pathways present common skills, knowledge, interests, and needed competencies across related occupations. Let's talk about an EE career paths study with a special eye toward training needs at career junctures.	Joe E. E. Heimlich, COSI; Rebecca Kemper, COSI CRE; Laura Weiss, COSI CRE	Thursday, October 7	12:30pm	1:15pm	Research Roundtable	Live
Intergenerational Learning for the Advancement of Environmental Education	Intergenerational learning (IGL) from youth to adults is a fairly young education approach with limited examples in environmental education (EE). Our session will review how IGL can be used in youth EE programs to reach the wider community and address the barriers practitioners may face.	Amy Eldredge, The Pennsylvania State University; Danielle Frank Lawson, The Pennsylvania State University	Thursday, October 7	12:30pm	1:15pm	Research Roundtable	Live
Land-based learning- Making connections through STEM field studies within a teacher education semester	Our research investigates how teacher candidates' experiences in STEM field studies with community partners can inform an integrated practicum semester based on a curriculum of place. We develop a shared understanding of our co-responsibility within Indigenous Treaty-7 relationships. Our project considers varying perspectives of place as it informs STEM TE pedagogy.	Kevin O'Connor, Mount Royal University	Thursday, October 7	12:30pm	1:15pm	Research Roundtable	Live
Network Theory: Methodologies That Focus On Connections	EE research is in need of theory and tools to discuss connections between concepts, people, and organizations. In this session, we will explore and experiment with exciting ideas and tools for learning the impact of connections and flows. We will discuss ideas and some great graphing tools.	Naama Sadan, University of California Berkeley; Lauren Gibson, North Carolina State University; Oren Pizmony-Levy, Teachers College, Columbia University; Dafna Gan, Kibbutzim College of education technology and the arts; K.C. Busch, North Carolina State University	Thursday, October 7	12:30pm	1:15pm	Research Roundtable	Live
Supporting People from Marginalized Communities in Outdoor Experiential Education	In this presentation, we will share the preliminary findings of a research study that examines how outdoor experiential education programs support participants from marginalized communities. Data sources include surveys and interviews with leaders, facilitators, and administrators from a variety of programs across the United States.	Jacob Hyle, Elon University; Scott Morrison, Elon University	Thursday, October 7	12:30pm	1:15pm	Research Roundtable	Live
Perspectives on community-level environmental literacy: Theories and operationalization	Solutions for large-scale environmental problems require collective action, and yet, in environmental education, we often conceive of environmental literacy as an individual property rather than a collective one. In this panel, we unearth and explore core considerations and implications for research on community-level environmental literacy.	Aparajita Rajwade, North Carolina State University; Lauren Gibson, North Carolina State University; K.C. Busch, North Carolina State University; Kathryn Stevenson, NC State University; Heidi Ballard, School of Education, Univ. of California; Mele E.M. Wheaton, Stanford University; Alison Bowers, n/a; Nicole Ardoin, Stanford University; (Moderator) Chris Jadhallah, University of California, Davis - School of Education;	Thursday, October 7	3:00pm	3:45pm	Panel Presentation	Live
"Yuck, He Smells!" Impact of Teacher Talk on Children's Experience with Animals	At a farm-based nature preschool, teachers spoke to children frequently about animal bodies, lives, and [presumed] intentions. Despite positive pedagogical aims, teachers' messaging may interfere with child-animal relations. My research reveals patterns in teacher discourse and raises important questions about the implications of the role of the adult in child-animal relations.	Patty Bom, Hamline University School of Education	Thursday, October 7	3:00pm	3:45pm	Research Roundtable	Live
Abundance over Deficit: Promoting Responsive Approaches in Environmental Education	Deficit models continue to create barriers to a more inclusive and effective environmental education field. In this roundtable, we will address the current state of deficit thinking in environmental education and examine promising pathways for moving towards more responsive approaches in our research and practice.	Caitlin Reilly, North Carolina State University	Thursday, October 7	3:00pm	3:45pm	Research Roundtable	Live
Advancing Early Childhood Environmental Education Through Research	Learn about the latest research published in the International Journal of Early Childhood Environmental Education and the fall special issue, how you can become involved as a reviewer and contributor, and discuss ways we can advance the field.	Yash Bhagwanji, Florida Atlantic University; Christy Merrick, NAAEE; (Non-attending Contributor) Betty Olivolo, NAAEE	Thursday, October 7	3:00pm	3:45pm	Research Roundtable	Live

2021 Research Symposium—Preliminary Schedule

Title	Summary	Presenters	Date	Begin Time (Eastern Daylight Time)	End Time (Eastern Daylight Time)	Session Format	Presentation Mode
<p><i>This is a preliminary schedule; sessions, times, and presenters are subject to change. All times are Eastern Daylight Time. The final schedule will be available through the conference platform when it launches in mid-September. The platform includes the opportunity to add sessions to your personal calendar.</i></p>							
Advancing Environmental Literacy Leadership Academy: ELit Planning for School Administrators	This session explores the impetus for and initial results from the pilot implementation of the Advancing Environmental Literacy Leadership Academy. The course supports school administrators' role in systemic integration of EE via development of a LEA level environmental literacy and sustainability plan that addresses curricular integration, health, and facilities management.	Tamara E Peffer, PA Department of Education; Steve C. Kerlin, Stroud Water Research Center; Nanette Ivory Marcum-Dietrich, Millersville University of Pennsylvania	Thursday, October 7	3:00pm	3:45pm	Research Roundtable	Live
Everyday Aesthetics: towards an Education to Perceive and Co-Inhabit	Everyday aesthetics focus on sensory perception in daily experiences such as cooking or cleaning. Everyday aesthetics have been underinvestigated in education research, although its huge impacts on our world-making. This research explores this challenge by asking what comprehensions and practices of perceiving and co-inhabiting people develop in urban socio-ecological systems?	Manuela Mendez Herranz, Pontificia Universidad Católica de Chile	Thursday, October 7	3:00pm	3:45pm	Research Roundtable	Live
Theoretical Foundations For Science Teachers' Commitment To Outdoor Education	Adapting Shuman and Ham's (1997) Model of Environmental Education Commitment, a theoretical model of science teachers' commitment to outdoor education will be shared that recognizes the relationships among teachers' pedagogical content knowledge, self-efficacy, life experiences, and social norms, and the influence of these on teachers' pedagogical decisions regarding outdoor learning.	Sagan Goodpaster, University of Kentucky	Thursday, October 7	3:00pm	3:45pm	Research Roundtable	Live
4-H Clubs Can Conduct Community Action Projects!	Helping youth understand and work toward the resolution of community environmental issues can build problem solving skills and efficacy, but implementing these ambitious projects is challenging! This discussion will share results from a needs assessment for a new 4-H program and explore opportunities to engage 4-H youth in community projects.	Martha C. Monroe, University of Florida; Gabby Salazar, University of Florida; Jessica Ireland, University of Florida	Thursday, October 7	4:00pm	4:45pm	Research Roundtable	Live
Conceptualizing Environmental Education As Institutional Change.	"We create institutions which in turn create us" (Churchill). Where does change happen? In the macro or micro level? What is the role of associating people/concepts in weaving new institutions? Conceptualizing institutional change has the potential for redirecting our research and practice.	Naama Sadan, University of California Berkeley	Thursday, October 7	4:00pm	4:45pm	Research Roundtable	Live
Dismantling White Supremacy by Teaching Outside the Classroom	Environmental and place-based education (EPBE) is often used to get students outside of classrooms and into nature and communities. However, EPBE was not designed to uproot white supremacy. By centering antiracism, could EPBE be used to get outside of the harm caused by schools and dismantle racist policies and practices?	Scott Morrison, Elon University; Dani Toma-Harold	Thursday, October 7	4:00pm	4:45pm	Research Roundtable	Live
Funny Business: Environmental Educators' Uses of Humour	Why, when, where, and how do environmental educators choose to use humour pedagogically or personally? We will facilitate a conversation about the uses of humour in EE and how scholars might investigate the phenomenon.	Constance Russell, Lakehead University; Justin Dillon, University of Exeter; Juan Miguel Arias (he/hé), Colorado College; Ashley Bangsund, Vancouver School Board; Jennifer Good, Brock University; Richard Kool, Royal Roads University; Greg Lowan-Trudeau, University of Calgary; Beth Osnes, University of Colorado	Thursday, October 7	4:00pm	4:45pm	Research Roundtable	Live
Teaching Future Teachers – Empowering Preservice Teachers to Combat Climate Crisis	In Canada, there is limited research on relevant, accessible and meaningful pedagogy and programming for embedding Environmental and Sustainability Education (ESE) within preservice teacher education. This roundtable presentation by Doctoral Candidate and teacher Alysse Kennedy aims for change by sharing findings of preservice experiences from a unique, multi-faceted ESE program.	Alysse Kennedy, OISE (U of T)/TDSB/EECOM 2020	Thursday, October 7	4:00pm	4:45pm	Research Roundtable	Live
Uncovering the Impacts of EID on People's Awareness on Local Marine Issues	Museums and aquariums provide a good environment to study how EID constructed by previous knowledge, worldviews, and culture affects learning experience concerning complex environmental issues and the interpretation or awareness of these issues. This project targets adolescents who visit museums and aquariums internationally seeing how EID affects their learning of local marine issues.	Shu-Min Yang, Oregon State University	Thursday, October 7	4:00pm	4:45pm	Research Roundtable	Live
Using Social Media Networks to Explore Community-Centered Sustainable Practices	We explore ways social media can foster community connections and a sharing economy. We use the concept of a solidarity economy, and employ feminist and critical race analysis in our study of two local Facebook groups. We will also share thoughts and ideas about conducting research on/with/about social media.	Sarah Stapleton, University of Oregon	Thursday, October 7	4:00pm	4:45pm	Research Roundtable	Live
A Place-Binding Knot Map. Phronésis as Outdoor Learning	This philosophical reflection on outdoor learning invites consideration of wider horizons of possibility around the constructs of when and where we learn in relation to phronésis, practical wisdom, and notions of kairos and tópos. The work re-infuses the three back into broader educational aims through practices of local learning outdoors.	Hart Banak, UNBC	Thursday, October 7	5:00pm	6:15pm	Research Poster	Live
Advancing Community Connectivity: Developing a Nature Park Master Plan	Leveraging novel nature-based environments and building human capacity requires intentional design, responsible use, and evidence-based management. Our collaborative team explored diverse social elements prudent in planning for a new 184-acre public nature-park in Valdez, AK. Modern engagement and analysis techniques proved efficient in capturing stakeholders' values, uses, and park preferences.	Hunter Holland, UNCW; Kathleen Holland, UNCW	Thursday, October 7	5:00pm	6:15pm	Research Poster	Live
An Action Research Approach for the Development of Children's Environmental Motivation	We describe the attempt of a teacher/researcher and her fellow co-workers to increase the motives of a group of students living in vulnerable social conditions, through gardening. An action research framework was adopted and basic principles of motivation's theories was followed	Konstantinos Korfiatis, University of Cyprus	Thursday, October 7	5:00pm	6:15pm	Research Poster	Live
Assessing Campus Sustainability Literacy and Culture: How Are Universities Doing It?	Higher education institutions struggle with conducting sustainability literacy and culture assessments to assess their populations' sustainability knowledge. I examined the impact of organizational learning capability to use the assessment data for bringing programmatic- and institutional-level changes. I present practices that educators can adopt to ensure meaningful outcomes of these assessments.	Nikita Lad, George Mason University	Thursday, October 7	5:00pm	6:15pm	Research Poster	Live
Assessing the Effects of Expeditionary Field Science Courses on Student's Environmental Literacy	The purpose of this project was to identify changes to the environmental literacy of students local to the Greater Yellowstone Ecosystem after participation in a 5-day expeditionary field science program. Traditional and non-traditional methods of assessment were used.	Adam G. Bavier, EUREKA! McConnell Science Museum	Thursday, October 7	5:00pm	6:15pm	Research Poster	Live

2021 Research Symposium—Preliminary Schedule

Title	Summary	Presenters	Date	Begin Time (Eastern Daylight Time)	End Time (Eastern Daylight Time)	Session Format	Presentation Mode
<p align="center"><i>This is a preliminary schedule; sessions, times, and presenters are subject to change. All times are Eastern Daylight Time. The final schedule will be available through the conference platform when it launches in mid-September. The platform includes the opportunity to add sessions to your personal calendar.</i></p>							
Assessing Undergraduate College Students' Values and Conceptions of Sustainability	Prior research has shown that the term 'sustainability' is perceived in several distinct ways. In this study, we examine how undergraduate students define sustainability and if their personal values can predict a more inclusive definition of the term that recognizes the role of sustainability in creating social equity.	Jennifer Gribben, University of Southern California	Thursday, October 7	5:00pm	6:15pm	Research Poster	Live
Building Sense Of Place And Community In A Virtual Space	This qualitative study examined how community and place served as central foci of professional work with teachers from two urban districts as part of a larger Design-Based Research program and shaped later face-to-face work in a summer institute. Implications for practice and theory are discussed.	Roberta Howard Hunter, Michigan State University	Thursday, October 7	5:00pm	6:15pm	Research Poster	Live
Captain Coleslaw Outdoors: A Youtube-Styled Outdoorsman Vlog As Means For High-School Environmental Education	When faced with a pandemic, environmental education required novel virtual pedagogy to stay relevant. This project used mixed-methods to explore student experiences with a teacher-created YouTube channel as supplementary literacy in their high-school science curriculum. The channel used consumptive hunting, fishing, and foraging strategies to teach environmental/biological concepts.	Gino Colella, Slippery Rock University; Rebecca Thomas, Slippery Rock University; Mohamad Khalifa; Joshua Magyar, Slippery Rock University	Thursday, October 7	5:00pm	6:15pm	Research Poster	Live
Climate Youth Engagement: From Deliberation to Action	We hypothesized deliberation using NAAEE's Environmental Issue Forums (EIF) would promote knowledge, awareness, hope, and trust among participants regarding climate change. Program effectiveness was measured using pre-and post-test instruments. Our results suggest EIF deliberation is a useful education and communication process for effectively engaging high school students with climate change issues.	Christine Jie Li, University of Missouri	Thursday, October 7	5:00pm	6:15pm	Research Poster	Live
Connecting EE & Citizen Science to Move Youth from Awareness to Stewardship	Citizen Science and environmental education offer complementary approaches to move participants towards environmental literacy, yet little research exists on their intersection. This study integrated and connected EE and CS activities to move youth participants from awareness to environmental stewardship as they engaged in a water quality monitoring citizen science project.	Dave Smaldone, West Virginia University	Thursday, October 7	5:00pm	6:15pm	Research Poster	Live
Connection To Nature Boosts Adolescents' Mental Well-Being During COVID-19	This research explores the role that connection to nature plays in enhancing the mental well-being of adolescents before and during the COVID-19 pandemic. We found that connection to nature mediates the relationship between outdoor activity participation and mental well-being, and that the mediating relationship was stronger during the pandemic.	Steven B. Jackson, Florida Gulf Coast University; Kathryn Stevenson, NC State University	Thursday, October 7	5:00pm	6:15pm	Research Poster	Live
Do Online Classes Connect Children with Nature?	Online classes and nature-based programs don't normally go together. But in a situation like the pandemic, is it better to provide something rather than nothing?	Batool Ishaque, Early Years Learning And Research	Thursday, October 7	5:00pm	6:15pm	Research Poster	Live
Examining Extension Professionals' and the Publics' Conceptions of Water Systems	The connection between humans and their environment is often misunderstood, particularly when talking about water in human-engineered and natural systems. This presentation will examine Extension professionals' and the publics' conceptions of water systems and discuss how practitioners can build upon participants' water knowledge and further develop their system thinking skills.	Gabriela Sullivan	Thursday, October 7	5:00pm	6:15pm	Research Poster	Live
Exploring Elementary Science Teachers' Experiences Implementing Outdoor Instruction	This study explores elementary teachers' perceptions of and experiences with incorporating outdoor learning experiences in their science instruction. This includes the factors influencing their pedagogical decisions, barriers to their use of outdoor spaces, and the topics and teaching strategies they believe are best-suited for outdoor science instruction.	Sagan Goodpaster, University of Kentucky	Thursday, October 7	5:00pm	6:15pm	Research Poster	Live
Faith Integration in Environmental Sciences in Evangelical Christian Higher Education	Conducting interviews and through analysis and comparison of course syllabi for "Evangelical Christian" higher education institutions, this study seeks to share more of the narrative of how faith is integrated into the environmental sciences when compared against "Establishment Christian" and "secular" higher education institutions.	Nicholas Green, University of Wisconsin-Madison	Thursday, October 7	5:00pm	6:15pm	Research Poster	Live
How Field Experiences Influence Students' Connections to Community and Environment	Summer field experiences facilitate positive outcomes for students including increased content knowledge, confidence in scientific skills, and understanding of careers. Additionally, the unique tiered mentorship structure of the Mid-Hudson Young Environmental Scientist program facilitates deepened connections to community, to peers and mentors, as well as to their local environment.	Ashley Aired, Cary Institute of Ecosystem Studies	Thursday, October 7	5:00pm	6:15pm	Research Poster	Live
Inter-species Communications: Personal Stories and Insights for Environmental Education	The world is full of voices - human voices, animal voices, voices of the land. This project brings personal stories of communicative encounters with animals, nature, and places into the discourse around nature connection to support the exploration of the more-than-human voice in environmental education programming.	Deb Matlock, Wild Rhythms, LLC	Thursday, October 7	5:00pm	6:15pm	Research Poster	Live
Is There Really a Difference: Exploring Rural Attitudes and Behaviors Relating to Community Appearance	How do leaders identify conditions that may be causing environmental, economic, and aesthetic challenges and address them? Research conducted in a rural location examined the residents' and leaders' attitudes, behaviors, and influences in the built and natural environment to assess what may inspire civic action to enhance the community.	Cecile Carson, Carson Consulting	Thursday, October 7	5:00pm	6:15pm	Research Poster	Live
Linking Education for Outdoor Recreation Specialization to Pro-Environmental Behaviors	The presented study explores how environmental educational programming designed to encourage prescriptive outcomes can also promote generalized behaviors of interest. By understanding how environmental identity mediates the relationship between outdoor recreation specialization and pro-environmental behavior, direction is provided on how to facilitate learning experiences that have expanded outcomes.	Tim Mateer, Shaver's Creek Environmental Center and the Pennsylvania State University; Danielle Frank Lawson, The Pennsylvania State University	Thursday, October 7	5:00pm	6:15pm	Research Poster	Live
Mentions of Environmental Education in Cryptocurrency Regulation	This study aims to evaluate mentions of environmental education in policies surrounding the regulation of cryptocurrency. As cryptocurrencies become increasingly used worldwide, it is crucial to consider the environmental impacts of computing and environmental education concerning the public's understanding of these issues.	Stephanie Quon, The Sprouts Initiative	Thursday, October 7	5:00pm	6:15pm	Research Poster	Live
Nature Exposure and Well-Being During the COVID-19 Pandemic	This study examines the role of nature engagement and its association with human well-being during the COVID-19 pandemic. We ask whether connection to nature and different forms of nature engagement are associated with self-reported measures of well-being including loneliness, rumination, emotional impact, and mental health.	Jordan Tralins; Abigail Brown, Cornell University; Tina Phillips, Cornell Lab of Ornithology	Thursday, October 7	5:00pm	6:15pm	Research Poster	Live

2021 Research Symposium—Preliminary Schedule

Title	Summary	Presenters	Date	Begin Time (Eastern Daylight Time)	End Time (Eastern Daylight Time)	Session Format	Presentation Mode
<p><i>This is a preliminary schedule; sessions, times, and presenters are subject to change. All times are Eastern Daylight Time. The final schedule will be available through the conference platform when it launches in mid-September. The platform includes the opportunity to add sessions to your personal calendar.</i></p>							
Nature-Based Professional Development for Educators of Young Children in Poverty	The results are here! Following the delivery of a comprehensive, web-based, professional development training package, a recent dissertation study examined the knowledge, perception, and application of nature-based teaching practices among early childhood teachers in a minority-serving, high-poverty community. Findings will be presented along with implications for future research.	Sylvia Collazo, Florida Atlantic University	Thursday, October 7	5:00pm	6:15pm	Research Poster	Live
Online Environmental Education: Effective Strategies and Shifting Perspectives	Is online learning a barrier in environmental education, or is it a realm of new opportunities? Educators were surveyed and interviewed to better understand their perceptions of online education, as well as the most effective strategies they have used to engage their students in meaningful environmental activities amidst the pandemic.	Katrina Vickery, University of New Haven	Thursday, October 7	5:00pm	6:15pm	Research Poster	Live
Reaching Participants in a COVID-19 World: Innovations in Data Collection and Outreach	As "social distance" and "remote learning" become societal norms, researchers struggle to find methods for collecting rich quantitative and qualitative data with children remotely. In this poster, I highlight innovative methods used in my dissertation research that engaged preadolescent participants in both my qualitative and quantitative phases.	Ann Rossmiller, The University of Cincinnati	Thursday, October 7	5:00pm	6:15pm	Research Poster	Live
Synchronous Sustainability Education for Remote Learning	Educators have had to get creative during the pandemic era of teaching. This poster describes how sustainability education pedagogies were applied to remote, community-based learning senior undergraduate capstone courses at Portland State University. Synchronous meetings allowed for student and instructor connection, despite being remote.	Megan Schneider, Portland State University	Thursday, October 7	5:00pm	6:15pm	Research Poster	Live
Teachers' Perceptions Of Using Outdoor Spaces For Learning During A Global Pandemic	The aim of this study is first to explore teachers' perceptions of outdoor learning as a response to COVID-19 and second, to identify teachers who are taking students outdoors for any reason and learn more about their current and prospective future practices relative to outdoor learning.	Annette Schmidt, Arizona State University; Andrea E Weinberg, Arizona State University	Thursday, October 7	5:00pm	6:15pm	Research Poster	Live
The Impact of COVID-19 Lockdowns on Young People's Relationships with Nature: A Socio-Spatial Perspective	We explored whether COVID-19 lockdowns impacted the locations of young people's relationships with nature. Two groups of young people—one before, one during lockdown—created qualitative, spatially referenced "story maps" about their relationships with nature. As young people's circumstances, environments, and needs changed, so did their dynamic relationships with nature.	Corey Martz, University of Denver	Thursday, October 7	5:00pm	6:15pm	Research Poster	Live
The Impacts of Environmental Identity on People's Awareness on Local Marine Issues	Museums and aquariums provide a good environment to study how EID constructed by previous knowledge, worldviews, and culture affects learning experience concerning complex environmental issues and the interpretation or awareness of these issues. This project targets adolescents who visit museums and aquariums internationally seeing how EID affects their learning of local marine issues.	Shu-Min Yang, Oregon State University	Thursday, October 7	5:00pm	6:15pm	Research Poster	Live
The Power of a Profound Experience with Nature	My research explored the long-term influences of a profound experience with nature—an experience that shifts an individual's view of or relationship with the natural world. Little is known about the long-term effects of a single, memorable experience with nature or how individuals use the associated memories in their lives.	Becky Mathers, n/a	Thursday, October 7	5:00pm	6:15pm	Research Poster	Live
The Role of Place-Based Education in Strengthening Community Resilience against Climate Change	Qualitative research was conducted on informal learning and activities of a neighborhood association in Joso City, Japan, one of the affected areas of the 2015 Kanto-Tohoku Torrential Rain Disaster. In this session, we discuss what is the role of Place-Based Education in strengthening community resilience against climate change impacts.	Noriko Hata, Tsuru University; David Allen, Texas Christian University; Junko Kondo, Kyoto University;	Thursday, October 7	5:00pm	6:15pm	Research Poster	Live
Using Digital Storytelling to Explore Climate Futures with Youth	Learn how digital storytelling was used in a climate education research project with secondary school students in the UK and Ireland to explore positive and negative visions of the future. As a participatory research methodology, digital storytelling results in rich qualitative data while engaging young people with constructive hope.	Bill Finnegan, University of Oxford	Thursday, October 7	5:00pm	6:15pm	Research Poster	Live
What We Bring to the Table: Influences on Youth Agricultural Literacy in North Carolina	Understanding youth agricultural literacy prior to a learning intervention allows for more responsive educational approaches. Results of this quantitative study highlight the importance of knowing a farmer and regular engagement between parents and youth in predicting youth agricultural literacy. Limited demographic variation indicates interest in food systems across broad audiences.	Caitlin Reilly, North Carolina State University	Thursday, October 7	5:00pm	6:15pm	Research Poster	Live
A Meeting of the Minds—Experienced Researchers' Advice for Early Career Folks	This session focuses on mentoring for early career researchers. We have found some of the standouts in our field to offer advice on topics on your mind as an early career researcher. Breakout rooms will include publishing, setting a research agenda, grant funding, writing, and working beyond the academy.	Roberta Howard Hunter, Michigan State University; Alberto Arenas, University of Arizona; John Baek, NOAA Office of Education; Steven Braun, eeRISE LLC; Charlotte Clark, Duke Nicholas School of the Environment; Martha C. Monroe, University of Florida; Scott Morrison, Elon University; Alan Reid, Monash University; Sarah Stapleton, University of Oregon	Thursday, October 7	6:30pm	7:30pm	Research Workshop	Live
Friday, October 8, 2021							
Alone Together: Building Grad Student Connections in a Virtual World	Over the last year and a half, there have been limited opportunities for graduate students in the EE field to meet and learn from each other. This session will be a space for making new connections, reinvigorating old ones, and discussing grad student challenges in supportive small groups.	Lauren Gibson, North Carolina State University; Chris Jadalala, University of California, Davis - School of Education; Naama Sadan, University of California Berkeley	Friday, October 8	10:00am	11:00am	Research Workshop	Live
Community-Engaged Learning: Advancing EE by Connecting Scholarship, Community, and Practice	This panel presentation will feature perspectives and next steps in a collaborative endeavor to facilitate community-engaged learning and peer-to-peer mentoring in Environmental Education. Perspectives from faculty, students, and community partners will highlight how community-engaged learning enhances teaching, learning, and practice by leveraging shared assets in virtual, hybrid, and in-person contexts.	Samantha Laurence, The Macoskey Center for Sustainability Education & Research; Emily Shosh, Slippery Rock University; Morgan Siebke, Jason Swartz, Slippery Rock University; Shaina Babcock; Alexandra Webb; (Moderator) Rebecca Thomas, Slippery Rock University	Friday, October 8	11:00am	11:45am	Panel Presentation	Live
Key Ideas Formal Education Should Embrace from the Youth Climate Justice Movement	In this panel presentation, researchers and youth climate justice activists will discuss key thematic ideas inherent within the youth climate justice movement and the implications for transforming current formal education through thoughtful pedagogical and programmatic integration.	Ellen Field, Faculty of Education, Lakehead University; Rupinder Grewal; (Moderator) Michele Martin, n/a	Friday, October 8	11:00am	11:45am	Panel Presentation	Live

2021 Research Symposium—Preliminary Schedule

Title	Summary	Presenters	Date	Begin Time (Eastern Daylight Time)	End Time (Eastern Daylight Time)	Session Format	Presentation Mode
<p align="center"><i>This is a preliminary schedule; sessions, times, and presenters are subject to change. All times are Eastern Daylight Time. The final schedule will be available through the conference platform when it launches in mid-September. The platform includes the opportunity to add sessions to your personal calendar.</i></p>							
What Do We Mean by "Education" in Environmental Education?	In what ways is environmental education research accounting for diverse and often diverging theories of education? In this session, panelists will explore the nuances of teaching and learning in their specific contexts, including the latest theories that inform their work and the implications for research and	Megan Zeni, School District #38, Richmond; Tatiana Height, University of Nebraska; Katherine Baker, Elon University; (Moderator) Scott Morrison, Elon University	Friday, October 8	11:00am	11:45am	Panel Presentation	Live
Pathways to Environmental and Sustainability Education Policies	This comparative case study of environmental and sustainability policies at the New York City Department of Education, Denver Public Schools and Prince William County Public Schools explores how these policies unfold in different contexts. What are the global, state and local factors and actors that shape and drive these policies?	Carrie Verschuere, Teachers College, Columbia University	Friday, October 8	11:00am	11:45am	Research Roundtable	Live
Understanding Awe: A Powerful Tool In Environmental Learning And Behavior	Awe is a powerful, but often underutilized, tool for promoting learning, prosocial behavior, and emotional wellness. Drawing from the literature and original research, this presentation will explore what we know about awe, what it looks like in the context of a nature experience, and how we may harness its potential.	Anna Lee, Stanford University	Friday, October 8	11:00am	11:45am	Research Roundtable	Live
Connecting Youth to Their (Just) City Through Innovation in Education	Many cities have issued Resiliency and Climate Action Plans into their official guidelines as a response to the impacts of climate change and environmental injustice. These programs for our future will not be just if they don't integrate with youth curriculum and leadership programs in a reciprocal way. Let's discuss!!	Maureen Ferry, HouseStories Inc	Friday, October 8	1:15pm	2:00pm	Research Roundtable	Live
EE for All: Using UDL principals in EE curriculum design	Our research explores the application of Universal Design for Learning (UDL) principles to EE curriculum design in order to create a powerful, scalable approach to EE learning open to all students by providing flexibility in information presentation and student responses, reducing barriers in instruction, and providing appropriate supports and challenges.	Nanette Ivory Marcum-Dietrich, Millersville University of Pennsylvania; Steve C. Kerlin, Stroud Water Research Center	Friday, October 8	1:15pm	2:00pm	Research Roundtable	Live
Environmental Education and Understanding the Deep Roots of Trauma	Childhood trauma impacts the health and wellbeing of our communities long-term. This presentation will explore the intersection of trauma and environmental education. Participants will engage in reflection and discussion to explore how environmental education can more effectively support individuals and communities impacted by trauma.	Emily Hayne, The Pennsylvania State University; Danielle Frank Lawson, The Pennsylvania State University	Friday, October 8	1:15pm	2:00pm	Research Roundtable	Live
Fostering Ecological Care At Summer Camp: Insights From Yin-Yang Theory	This study aimed to understand how youth in a STEM residential summer camp came to care for/about the natural world. We found disrupting our Western theorizing was necessary to explain how our program inadvertently perpetuated nature as 'separate from me'. We drew on Yin-Yang theory and concepts of affectionate knowing.	Dearing Blankmann, UNCG; Heidi Carlone, The University of North Carolina at Greensboro	Friday, October 8	1:15pm	2:00pm	Research Roundtable	Live
Network Climate Action Through Massive Open Online Courses	We examined MOOC participants' climate actions and how they influenced their networks to take the same actions in countries across the globe. The survey results showed that participants commonly chose reducing food waste and plant-rich diets, and applied social influence research to persuade their family and friends.	Yue Li, Cornell University; Marianne Krasny, Cornell University	Friday, October 8	1:15pm	2:00pm	Research Roundtable	Live
The Power Of Place: Connecting Students Through Literature & Place-Based Pedagogy	As the climate crisis becomes more severe, it is essential we begin to look to education for sustainability (ES) as part of the solution. Education for Sustainability must be woven through all content, and through bio-regional literature and place-based education, students can learn the knowledge, skill, and dispositions of sustainability.	Tiphani Davis, University of Wisconsin Stevens Point	Friday, October 8	1:15pm	2:00pm	Research Roundtable	Live
Edges in Garden-Based-Learning: Embracing Reciprocal Relationships with Humus, Hills, and Weeds	Restoring and restoring connections is key in anti-racist and decolonizing education. Poetic connections with living soil, reclamation of messy complexity, reconciliation garden arts, and empowering mound-making invert colonial, grid-conscious frames into biocultural-diversity-loving, multi-textured, arts-based, and polyvocal meta-frames. Leave this lively session inspired to facilitate decolonizing design of vibrant learning gardens.	Dilafuz R. Williams, Portland State University; Susan Gail Gerofsky, University of British Columbia; Julie Vaudrin-Charette, Cégep de l'Outaouais; (Moderator) Mama Hauk, Institute for Earth Regenerative Studies & Prescott College	Friday, October 8	2:15pm	3:00pm	Panel Presentation	Live
Environmental and Sustainability Education Leadership in Pre-service Teacher Education	Newly qualified teachers should be seen as an important force in reimagining schools for a sustainable future. What does environmental leadership look like for teacher educators striving to prioritize environmental education and sustainability in their programs? Join us as we explore our voyage of self-discovery through collaborative action research.	Paul Elliott, Trent University; Hilary J Inwood, OISE, University of Toronto; Yovita Gwekwerere, Laurentian University	Friday, October 8	2:15pm	3:00pm	Panel Presentation	Live
Renewable Energy Education Reconsidered: Emerging Insights	This presentation will share insights from an ongoing study into the experiences of sociocritical renewable energy educators in a range of contexts across Canada. This work is informed by critical, interpretive, and Indigenous research paradigms; decolonizing approaches to STEM; multi-, inter-, and transdisciplinary theories; and critical place-based pedagogy and inquiry.	Greg Lowan-Trudeau, University of Calgary; Teresa Fowler, Concordia University of Edmonton	Friday, October 8	2:15pm	3:00pm	Panel Presentation	Live
Climate Strikes: The Collective Power of Youth, Social Justice, and Ecopedagogy	The climate strikes of 2019 showed the undeniable and collective concern of youth. In this study the climate strike leaders suggested social justice and indigenous knowledge as more engaging and a greater motivational hook for addressing climate change than ecological collapse, which points to an ecopedagogical approach to climate change education.	Ria Bright, University of Waikato	Friday, October 8	2:15pm	3:00pm	Research Roundtable	Live
Enacting A 'Virtual Field School' on Bio-cultural Diversity and Education	A partnership of Sam Ratulangi University (Indonesia) and Simon Fraser University (Canada), the program involved scholars living near the epicenters of biodiversity on the planet. The course included place-based interpretation and design activities augmented by a slate of case studies on Bio-cultural Diversity offered in an online symposium format.	David Zandvliet, Simon Fraser University	Friday, October 8	2:15pm	3:00pm	Research Roundtable	Live
Publishing Academic Work About Environmental and Sustainability Education: Options, Priorities, and Reflections	Join us for a candid discussion on the processes and potential impacts of publishing environmental education research in books, peer-reviewed journals, and non-traditional venues. Scholars with experience writing and editing books, as well as serving as editors on leading EE journals, will host the session.	Alan Reid, Monash University; Alberto Arenas, University of Arizona; Justin Dillon, University of Exeter; Clare Hintz, Journal of Sustainability Education; Marc Stern, Virginia Tech	Friday, October 8	3:15pm	4:00pm	Panel Presentation	Live
Climate change education: Developing structures, agency and hope with youth	Facing the climate emergency, youth can feel hopeless and helpless. Constructs of hope and agency could overcome pessimism and helplessness, motivating action-taking. Using a critical realist lens and a design-based implementation research approach, a climate change education programme was co-designed and trialled to nurture hope, agency and action-taking with youth.	Sally Birdsall, The University of Auckland; Chris Eames, University of Waikato	Friday, October 8	3:15pm	4:00pm	Research Roundtable	Live

2021 Research Symposium—Preliminary Schedule

Title	Summary	Presenters	Date	Begin Time (Eastern Daylight Time)	End Time (Eastern Daylight Time)	Session Format	Presentation Mode
<p><i>This is a preliminary schedule; sessions, times, and presenters are subject to change. All times are Eastern Daylight Time. The final schedule will be available through the conference platform when it launches in mid-September. The platform includes the opportunity to add sessions to your personal calendar.</i></p>							
Connecting with the Earth Through Contemplative Artistic Practices	Bringing together contemplative and arts-based forms of inquiry, this session shares with practitioners how artistic contemplative practices of drawing and photography might enrich relationships within the self and also with local natural ecologies, and how the deepening of both these connections is interdependent.	Zuzana Vasko, SFU; Charles Scott, Simon Fraser University	Friday, October 8	3:15pm	4:00pm	Research Roundtable	Live
Ecotopia v Zombie Apocalypse: Collaborative Writing Games for Ecosocial Crisis	The collaborative writing game "Ecotopia versus Zombie Apocalypse" leverages group genius to help learners encounter rather than deny the monstrous in our midst, plumbing deep imagination powers, calling out to future beings. Shared guidelines and a mini-round inspire your game inventions.	Mama Hauk, Institute for Earth Regenerative Studies & Prescott College	Friday, October 8	3:15pm	4:00pm	Research Roundtable	Live
Freeing Fireflies from Glass Jars: Centering Black Futures in Nature-Based Learning	Nature-based learning is widely approached and studied as beneficial in children's development domains, including cognitive, social, emotional, and physical (Gerrish, 2014). However, according to the National Start Alliance, only 3% of children enrolled in nature programs are Black. This roundtable will discuss methods that can increase access and inclusion within nature education for Black children.	Deja Jones, HoneyPot Montessori	Friday, October 8	3:15pm	4:00pm	Research Roundtable	Live
We Need Better Theory: It's Time to Talk About Religion.	Scientific methods and mindsets are necessary for advancing EE, but not independently sufficient. Religious traditions offer alternative frameworks of theory and knowledge. Circling our discussion around three Jewish legal concepts (sacred time, land ethics and environmental damages), we seek to expand our horizons by reading old sources with new eyes.	Ariel Mayse, Stanford University; Naama Sadan, University of California Berkeley	Friday, October 8	3:15pm	4:00pm	Research Roundtable	Live
Centering Human and More-Than-Human Interactions across Wildly Different Educational Contexts	This workshop will help participants explore research methodologies and design approaches for centering human/more-than-human relationships in research and practice. Our work and associated methodologies aim to position all places as natural contexts in which we can support human/more-than-human relations and design for multispecies thriving.	Manjke Hecht, Penn State Greater Allegheny; Philip Bell, University of Washington; Chris Jadhav, University of California, Davis School of Education; Nikki McDaid, Northwestern University; Veronica McGowan, University of Washington Bothell; Jordan Sherry-Wagner, University of Washington; Georgia Silvera Seamans	Friday, October 8	4:15pm	5:15pm	Research Workshop	Live
Speed-Dating For Side Projects: Expanding Our EE Research Collaborative Network	By both necessity and habit, we researchers tend to operate within a limited set of interests, skills, theories, and collaborators. At this workshop, we will employ a speed-dating format to connect researchers based on shared interests and complimentary skills to encourage new projects and collaborations.	Susan Caplow, University of Montevallo; Kathayoon Khalil, Zoo Advisors; Kathryn Stevenson, NC State University	Friday, October 8	4:15pm	5:15pm	Research Workshop	Live