NERR

The National Environment and Recreation Research Symposium

Celebrating 31 Years of NERR

Annapolis, MD
April 7 – 9, 2019

Schedule of Presentations and Events

(Draft 1 – Feb. 4, 2019)
### DAY 1 - SUNDAY, APRIL 7, 2019

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:00 a.m. – 5:30 p.m.</td>
<td>Registration Atrium</td>
</tr>
<tr>
<td>1:00 – 1:20 p.m.</td>
<td>Welcome and Opening Remarks</td>
</tr>
<tr>
<td></td>
<td>NERR 2019 Chair, Carla Barbieri, North Carolina State University</td>
</tr>
<tr>
<td>1:30 – 3:00 p.m.</td>
<td>SESSION I (Sunday, 1:30 – 3:00 p.m.)</td>
</tr>
<tr>
<td></td>
<td><strong>Session I-A: Niche Tourism</strong></td>
</tr>
<tr>
<td></td>
<td>Ballroom A</td>
</tr>
<tr>
<td></td>
<td>Surf tourism destination governance in Bocas del Toro, Panama: Understanding how actors in the surf tourism system shape destination development. Leon Mach (School for Field Studies - Panama).</td>
</tr>
<tr>
<td></td>
<td>Substitution interests among active-sport tourists: The case of a cross-country ski event. Madeleine Orr &amp; Ingrid Schneider (University of Minnesota).</td>
</tr>
<tr>
<td>1:30 – 3:00 p.m.</td>
<td><strong>Session I-B: Outdoor Recreation</strong></td>
</tr>
<tr>
<td></td>
<td>Ballroom B</td>
</tr>
<tr>
<td>Facilitator:</td>
<td>The impacts of Marcellus Shale natural gas energy development on outdoor recreation: A statewide assessment of Pennsylvanians. Michael Ferguson1, Samantha Powers2, Myles Lynch1, Darrick Evensen3, Alan Graefé2 &amp; Andrew Mowen2 (1University of New Hampshire, 2The Pennsylvania State University, 3The University of Edinburgh).</td>
</tr>
<tr>
<td></td>
<td>Recreation impacts: A case study of the Sawtooth Wilderness. Chelsea Phillippe &amp; Elizabeth Covelli Metcalf (University of Montana).</td>
</tr>
<tr>
<td></td>
<td>Psychological stress responses in natural environment. Sharon Tessneer (Indiana University).</td>
</tr>
<tr>
<td></td>
<td>Igniting the science of outdoor recreation: Presenting a research strategy and agenda. Anna B. Miller, Lee Cerveny &amp; Monika Derrien (USFS Research &amp; Development).</td>
</tr>
</tbody>
</table>
1:30 – 3:00 p.m.  
**Session I-C: Management & Governance  Ballroom C**

Facilitator:

- Understanding differences of motivation and creativity among first year and returning staff members in a residential camp setting.  
  Myles Lynch¹ & Nate Trauntvein² (¹University of New Hampshire, ²Utah State University).

- Encouraging voluntary use of nonlead ammunition on national wildlife refuges: Field staff perceptions.  
  John H. Schulz¹, Sonja A. Wilhelm Stanis¹ & Elisabeth B. Webb² (¹University of Missouri, ²U.S. Geological Survey).

- Exploring how lake associations contribute to governance of lakes and their catchments.  
  Leah Fitchett, Michael G. Sorice & Kevin J. Boyle (Virginia Polytechnic Institute and State Univ.).

- Sustainable rural livelihood under different governance models of tourism development: A case study of Villages in Yunnan, China.  
  Qianlang Shang & Philip Wang (Kent State University).

3:00 – 3:30 p.m.  
**Afternoon Break  Atrium**

**SESSION II (Sunday, 3:30 – 5:00 p.m.)**

3:30 – 5:00 p.m.  
**Session II-A: Heritage Conservation  Ballroom A**

Facilitator:

- Historical and cultural resource visitation in Alpena, MI.  
  Danielle Schwarzmann¹, Vernon (Bob) Leeworthy² & Mary Tagliareni² (¹National Marine Sanctuary Foundation, ²NOAA’s Office of National Marine Sanctuary).

- Assessing the human dimensions of dinosaurs and other paleontological resources at Denali National Park and preserve, Alaska.  
  Vincent L. Santucci¹, Peter Newman², B. Derrick Taff², Zachary D. Miller², Denny Capps³ & Rose Keller¹ (¹National Park Service, ²The Pennsylvania State University).

- The conservation funding crisis: What solutions do college students support?  
  Lincoln Larson¹, Victoria Vayer¹, Kangiae Jerry Lee¹, Nils Peterson¹, Adam Ahlers², Ryan Sharp², Kris Irwin³, Kyle Woosnam³, Sam Keith³, James Farmer⁴, Elizabeth Metcalf⁵, Tim Van Deelen⁶, Christine Anhalt-Depies⁶, Jeremy Bruskotter⁷, Richard Stedman⁸, William Siemer⁹, Shari Rodriguez⁹, Matt Springer¹⁰, Alan Graefé¹¹, Tom Mueller¹¹, Matt Kelly¹², Richelle Winkler¹², Chelsie Romulo¹³ & Michael Quartuch¹⁴ (¹NC State University, ²Kansans State University, ³University of Georgia, ⁴Indiana University, ⁵University of Montana, ⁶University of Wisconsin, ⁷Ohio State University, ⁸Cornell University, ⁹Clemson University, ¹⁰University of Kentucky, ¹¹Pennsylvania State University, ¹²Michigan State University, ¹³University of Northern Colorado, ¹⁴Colorado Parks & Wildlife).

- Guiding hunter recruitment, retention, and reactivation: A market-driven approach.  
  Dan Stephens, Kristen Black & Craig A. Miller (Illinois Natural History Survey).
3:30 – 5:00 p.m.  Session II-B: Destination Image & Loyalty  Ballroom B

Facilitator:

1 Impacts of motivation, past experience, and satisfaction on destination loyalty: A case study of Lushan National Park, China.
Jinyang Deng¹ & Jianqiong Yuan² (¹West Virginia University, ²Central South University of Forestry & Technology, China).

2 Exploring destination image from Social Network and Text Analysis.
So Young Park & Bing Pan (Pennsylvania State University).

3 The effect of a virtual reality experience on destination image: A case study of education abroad programs.
Sarah Collins & Nicky Wu (Middle Tennessee State University).

4 Poetry and dramatic landscape: An interpretation.
Philip Wang, Barbara Atanga & Qianlang Shang (Kent State University).

3:30 – 5:00 p.m.  Session II-C: Education & Capacity Building  Ballroom C

Facilitator:

Does experiential wilderness-based training influence secondary educator’s importance and confidence utilizing experiential teaching methods?
W. Hunter Holland¹, Robert Powell² & Kathleen K. Holland¹ (¹University of North Carolina at Wilmington, ²Clemson University).

Addressing budgetary shortfalls through grant-writing success: Capacity-building lessons from local parks and recreation agencies in North Carolina.
Kyle Smith & Lincoln Larson (North Carolina State University).

Hunters’ knowledge of and support for chronic wasting disease management in Illinois.
Craig A. Miller¹ & Jerry J. Vaskê² (¹Illinois Natural History Survey, ²Colorado State University).

Reducing physical and social fears of the outdoor environment through education and practice.
Sharon L. Todd, Eric Kovatchitch, & Anderson Young (SUNY Cortland).

3:30 – 5:00 p.m.  Session II-D: Roundtable I  Windjammer

Adapting to increasing visitation: Application of human dimensions research in an urban-proximate open space district
Deonne VanderWoude, Anna Kellogg & Heidi Seidel (City of Boulder, Colorado)
5:15 – 6:15 p.m. (Sunday)  
POSTER SESSION AND RECEPTION  
Atrium

- **Attitudes toward wilderness mobile phone usage in outdoor college orientation programs.**  
  Alice Morgan & Dave Smaldone (West Virginia University).

- **Exploring career women’s leisure participation and satisfaction in urban China.**  
  Linan Zhang, Jie Gao & Yawei Wang (Montclair State University).

- **Dimensions in tourists’ stress and coping strategies during vacation.**  
  Linan Zhang, Jie Gao & Yawei Wang (Montclair State University).

  Samuel V. Lankford¹ & Jordan V. Lankford² (¹Fresno State, ²Oregon Recreation Research & Service).

- **A comparison of internet and intercept survey methods and findings in visitor studies.**  
  Samuel V. Lankford¹, Jordan V. Lankford² & Wade Kooiman³ (¹Fresno State, ²Oregon Recreation Research & Service, ³University of Mary).

- **Examining the advantages of geographically weighted regression techniques for understanding impacts to recreation resources.**  
  Min Kim & David Graefe (Marshall University).

- **Blending Creative Place-making and the Community Capitals Framework in the context of craft-beverage tourism.**  
  Claudia Gil Arroyo, Whitney Knollenberg & Carla Barbieri (North Carolina State University).

- **Factors influencing climate change belief among university students.**  
  David Graefe (Marshall University).

- **A city park: An ideal place for family recreation.**  
  Bob Lee (Bowling Green State University).

- **Hiking the woodland edge: A Gibsonian approach to the perception and experience of liminality.**  
  Chad D. Pierskalla (West Virginia University).

- **Intergenerational learning beyond the immediate family: Are students environmental change-agents in their communities?**  
  Jenna Hartley¹, Kathryn Stevenson¹, Nils Peterson¹, Elizabeth DeMattia², Renee Strnad¹, Sarah Carrier¹ & K.C. Busch¹ (¹North Carolina State University, ²Duke University).

- **Studying the relationship between social media data and park attendance in the Northern Forest Region.**  
  Diane Kuehn¹, James Gibbs¹, Alden Sampson², Marshall Moutenot² & Lilly Stradtman¹ (¹SUNY, ²Upstream PBC).

- **Debris Free D&E: An examination of intervention strategies for reducing littering behavior on campus.**  
  Lucas Powell & Rick Gage (Davis & Elkins College).
Tourism training at the secondary level: An assessment of attitudinal impacts.
Roy Ramthun & Susan Williams (Concord University).

Idealized locations for floating offshore wind turbines (FOWT) in the Gulf of Mexico and projections utilizing MATLAB Machine Learning.
Gary Thomas Talor & Doeun Choe (Prairie View A&M University).

Parks and vacant lots: Residents' perceptions of the contributions of urban green spaces to socio-ecological outcomes.
Emily Piontek¹, Sonja Wilhelm Stanis¹, Damon Hall¹, Lauren Mullenbach², Andrew Mowen² & Birgitta Baker² (¹University of Missouri, ²Pennsylvania State University).

Capturing long-term impacts of the Muddy Sneakers environmental education program through qualitative interviews and a longitudinal snapshot survey.
S. Brent Jackson, Kathryn Stevenson, Nils Peterson, Lincoln Larson, Sarah Carrier & Renee Strnad (North Carolina State University).

Impacts of geoscience-focused STEM education combined with recreation activities on middle school to high school-aged youths.
Lauren Janowicz, Jonas Leveque & Robert Burns (West Virginia University).

Improving landowner connections to conservation: Linking organizational and landowner values in wildlife incentive programs.
Madeline Grupper¹, Paxton Ramsdell² & Michael G. Sorice¹ (¹Virginia Tech, ²Environmental Defense Fund).

Does the location matter?
Kyungho Yu & Joohyun Lee (Eastern Mennonite University).

Political mobilization via Twitter and Instagram: A case study on #AltNPS.
Olivia Vila, Joshua Randall, Maude Dinan & Bethany Cutts (North Carolina State University).

Understanding the perceptions and experiences of African-American outdoor recreationalists.
Diquan Edmonds, Michael B. Edwards, Myron F. Floyd & KangJae “Jerry” Lee (North Carolina State University).

Measuring the socioeconomic impacts of water restoration projects: Contributions to community vibrancy.
Erin Keller, Lissy Goralnik, Michelle Rutty & Jessica Brunacini (Michigan State University).

The role of social norms and identity in landowners’ use of prescribed fire.
Andrew Johnson, Kiandra Rajala & Michael G. Sorice (Virginia Tech).

Re-conceptualizing socially sustainable tourism in urban micro Destinations.
Ladan Ghahramani & Aaron Hipp (North Carolina State University).

Costa Rica agritourism: Lessons in tourism education, sustainability and development.
Mark Gleason¹ & Deborah Steketee² (¹Grand Valley State University, ²Aquinas College).

Bodies or boats: Differentiating beach-based density and displacement.
Ami Choi, Ben Pflughoeft, Christopher Nachtseim & Anna Eorre (University of Minnesota).
Tourists’ preferences for weather and environmental conditions: A pilot study of Virginia Beach. Lindsay Usher & Michael Allen (Old Dominion University).

Obesity and recreation opportunities from a regional planning perspective. Kyung Hee Lee (Central Michigan University).


6:30 – 8:30 p.m. (Sunday) Buffet Dinner Ballroom

7:15 p.m. (Sunday) Founder’s Forum Speaker Ballroom

Charles (Chuck) Nelson, Ph.D.
Department of Community Sustainability
Michigan State University

Day 2 - Monday, April 8, 2019

7:00 a.m. – 5:30 p.m. Registration Atrium

Session III (Monday, 8:00 – 9:30 a.m.)

8:00 – 9:30 a.m. Session III-A: Communication Methods & Messages Ballroom A

Facilitator:

Social media and national parks: An exploratory study. Camille Marcotte & Patricia A. Stokowski (University of Vermont).

Connectivity across the citizen science landscape: Using Social Network Analysis to inform project management. Sara E. Futch, Lincoln R. Larson & Caren B. Cooper (North Carolina State University).

Disaster communication on social media during hurricane Florence: A cross-platform comparison of message framing by tourism organizations. Danielle Barbe¹, Ashley Schroeder² & Lori Pennington-Gray¹ (¹University of Florida, ²The Pennsylvania State University).

Zen and the art of leisure. Philip Wang (Kent State University).
8:00 – 9:30 a.m.  Session III-B: Homeownership: Values & Pitfalls  Ballroom B

Facilitator:

- Investigating factors influencing homeowners’ adoption of Firewise activities in southern California wildland-urban interface areas.
  Benjamin Ghasemi¹, Gerard T. Kyle¹ & James D. Absher² (¹Texas A&M University, ²Natural Resources Sociologist).

- Rail trails and home values: A longitudinal study.
  Robert S. Bristow¹ & Jo Beth Mullens² (¹Westfield State University, ²Keene State College).

- Recreational displacement following introductions of the nonnative Tui Chub at Diamond Lake, Oregon.
  Mary E. Allen & Robert C. Burns (West Virginia University).

- Exploring the fluid identity of the short-term vacation rental host in Savannah, GA.
  Emily Yeager¹, Bynum Boley², Meredith-Welch Devine² & Cari Goetcheus² (¹East Carolina University, ²University of Georgia).

8:00 – 9:30 a.m.  Session III-C: Human Dimensions of Wildlife  Ballroom C

Facilitator:

- Springtime exploitation of brook trout by anglers in remote headwater streams of central Appalachia.
  Kyle J. Hartman¹, Ross G. Andrew¹, Christopher W. Schwinghamer¹, David W. Thorne² & Jeremy S. Webster¹ (¹West Virginia University, ²West Virginia Division of Natural Resources).

- Anglers’ perceptions of varying resource quality.
  Lija Krievs & David B. Klenosky (Purdue University).

- Recruiting, retaining, and re-engaging new hunters in Illinois by creating an adult learn to hunt program.
  Kristen Black¹, Daniel Stephens¹, & Craig A. Miller² (¹University of Illinois at Urbana-Champaign, ²Illinois Natural History Survey).

- Examining hunters’ normative beliefs about equipment, fair chase, and crossbow use in Illinois.
  Adam C. Landon¹ & Craig A. Miller² (¹Minnesota Department of Natural Resources, ²Illinois Natural History Survey).
8:00 – 9:30 a.m.  
**Session III-D: Roundtable II**  
**Windjammer**

*Navigating the transition from graduate student to professional in today’s recreation and tourism field*

Rick Gage¹, Alison Murray², Michael D. Ferguson³, Kyle Olcott⁴ & Nick Pitas⁵  
¹Davis & Elkins College, ²Eastern Washington University, ³University of New Hampshire, ⁴Federal Energy Regulatory Commission, ⁵State University of New York.

9:30 – 10:00 a.m.  
**Mid-morning Break**  
**Atrium**

---

**SESSION IV (Monday, 10:00 – 11:30 a.m.)**

10:00 – 11:30 a.m.  
**Session IV-A: Weather & Climate Change**  
**Ballroom A**

Facilitator:

- *The influence of temporal and weather dimensions on outdoor recreation in the wildland-urban interface.*  
  Eleanor Crofford¹, Forrest South¹, Jessica Klamut¹, Chris Zajchowski¹ & Jeff Rose²  
  (¹Old Dominion University, ²University of Utah).

- *Climate change and recreation: Harnessing travel experiences for climate benefit.*  
  Paige P. Viren¹, Christina Beckmann² & Pavlína Látková³  
  (¹San Francisco State University, ²Adventure Travel Trade Association).

- *Optimizing historic preservation under climate change: Decision support for cultural resource adaptation planning in national parks.*  
  Xiao Xiao¹, Erin Seekamp², Max Post van der Burg³ & Mitchell Eaton⁴  

- *Park-based climate change resilience: Place attachment, pro-environmental behavior and support for management actions.*  
  Lisa Groshong, Sonja A. Wilhelm Stanis, Mark Morgan & Christine Li (University of Missouri).

10:00 – 11:30 a.m.  
**Session IV-B: Tourism Management & Development**  
**Ballroom B**

Facilitator:

- *Guest workers in the US tourism, hospitality, and recreation industries.*  
  Wesley S. Roehl (Temple University).

- *Working in paradise: Resources and strategies supporting the tourism workforce in Ocracoke, NC.*  
  Sara Brune¹, Whitney Knollenberg¹, Jane Harrison² & Ann Savage³  
  (¹North Carolina State University, ²North Carolina Sea Grant, ³Alexandria/Pineville Area CVB).
Mapping and prioritizing rural communities for tourism development in Tennessee by using GIS based site suitability analysis and multi-criteria decision-making methods. I-Chun (Nicky) Wu & Kahler Stone (Middle Tennessee State University).

Social interactions and attitudes towards tourism development in a rural area. Alison Murray (Eastern Washington University).

10:00 – 11:30 a.m.  Session IV-C: Community & Citizen Engagement  Ballroom C

Facilitator:

Community engagement: Case study of applying appreciative inquiry in nearby communities at Theodore Roosevelt National Park.
N. Qwynne Lackey, Leah Joyner & Kelly S. Bricker (University of Utah).

Do project owner attitudes constrain citizen science? Enabling the shift from silo to holistic volunteer management.
Maria Sharova, Lincoln Larson & Caren Cooper (North Carolina State University).

Impacts of a wildlife-monitoring experience on citizen science volunteers.
Charmaine Pedrozo1, Lincoln L. Larson1, Caren Cooper2, Kathryn Stevenson1, Roland Kays2 & Stephanie Schuttler2 (1North Carolina State University, 2NC Museum of Natural Sciences).

Where did they come from and where do they go: Does volunteer starting point predict sustained engagement in citizen science?
Bradley Allf (North Carolina State University).

10:00 – 11:30 a.m.  Session IV-D: Roundtable III  Windjammer

Omnivores, sustainability, and action: A critical examination of food and animals in recreation and tourism
Kelly S. Bricker1, Carol Kline2, Kristin Lamoureux3, Leah Joyner1 & Carla Barbieri4 (1University of Utah, 2Appalachian State University, 3Virginia Tech University, 4North Carolina State University).

12:00 – 1:15 p.m. (Monday)  Lunch and Keynote Address  Atrium

Anupama Joshi, M.S.
Executive Director
Blue Sky Funders Forum

1:15 – 1:45 p.m. (Monday)  Silent Auction  Atrium
### 2:00 – 3:30 p.m. Session V-A: Youth as Agents of Change

#### Facilitator:

<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outside your door: Young producers bridge the divide between urban youth and public lands.</td>
<td>Nina S. Roberts (San Francisco State University).</td>
</tr>
<tr>
<td>Roleplaying to understand youth values towards forests: Quantitative results for forest plan revision.</td>
<td>Christopher J. Wynveen &amp; Kelli K. McMahan (Baylor University).</td>
</tr>
<tr>
<td>A changing face for hunting? Insights from college campuses across the United States.</td>
<td>Victoria Vayer¹, Lincoln Larson¹, Kangiae Jerry Lee¹, Nils Peterson¹, Adam Ahlers², Ryan Sharp², Kris Irwin³, Kyle Woosnam³, Sam Keith³, James Farmer⁴, Elizabeth Metcalf⁵, Tim Van Deelen⁶, Christine Anhalt-Depies⁶, Jeremy Bruskotter⁷, Richard Stedman⁸, William Siemer⁹, Shari Rodriguez⁹, Matt Springer¹⁰, Alan Graefe¹¹, Tom Mueller¹¹, Matt Kelly¹², Richelle Winkler¹², Chelsie Romulo¹³ &amp; Michael Quartuch¹⁴ (¹North Carolina State University, ²Kansas State University, ³University of Georgia, ⁴Indiana University, ⁵University of Montana, ⁶University of Wisconsin, ⁷Ohio State University, ⁸Cornell University, ⁹Clemson University, ¹⁰University of Kentucky, ¹¹Pennsylvania State University, ¹²Michigan State University, ¹³University of Northern Colorado, ¹⁴Colorado Parks &amp; Wildlife).</td>
</tr>
<tr>
<td>Intergenerational communication: Children as catalysts to climate change action.</td>
<td>Danielle Lawson, Kathryn Stevenson, Nils Peterson, Sarah Carrier &amp; Renee Strnad (North Carolina State University).</td>
</tr>
</tbody>
</table>

### 2:00 – 3:30 p.m., Monday Session V-B: Urban Spaces

#### Facilitator:

<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spatial analysis of constraints to urban park visitation among diverse residents in the Portland metropolitan area.</td>
<td>Jaclyn R. Rushing¹, Ashley D'Antonio² &amp; Mark D. Needham² (¹North Carolina State University, ²Oregon State University).</td>
</tr>
<tr>
<td>The mediating role of use and perceptions of urban greenspace on the association between socioeconomic status and wellbeing.</td>
<td>Rebecca Koroll &amp; Bryan Smale (University of Waterloo).</td>
</tr>
<tr>
<td>Visitor preferences in differently developed urban green areas: A case study from Tallinn, Estonia.</td>
<td>Mart Reimann¹, Piret Kuldna², Helen Sooväli-Sepping¹ &amp; Helen Poltimäe² (¹Tallinn University, ²Stockholm Environment Institute).</td>
</tr>
<tr>
<td>Exploring the relationship between urban park development and gentrification worldview.</td>
<td>Lauren E. Mullenbach, Andrew J. Mowen &amp; Birgitta L. Baker (The Pennsylvania State University).</td>
</tr>
</tbody>
</table>
2:00 – 3:30 p.m.  Session V-C: Management of Public Parks  Ballroom C

Facilitator:

- *A national look at unconfined recreation in wilderness managed by the Bureau of Land management.*
  C. Griff Griffin & Jager Kukowski (Grand Valley State University).

- *Porous boundaries in the National Capital Region: Opportunities and challenges with visitor counts.*
  Laurlyn K. Harmon¹, Margaret Daniels² & John Read² (¹University of Wisconsin – La Crosse, ²George Mason University).

- *Assessing trends in Michigan State Park use and users.*
  Charles M. Nelson, KaliMaisano, Shaun Hixson & Dennis Maxwell (Michigan State University).

- *Managers’ perceptions of crowding in New York State Parks.*
  Aaron Krinsky & Diane Kuehn (State University of New York).

2:00 – 3:30 p.m.  Session V-D: Roundtable IV  Windjammer

*Using research to build coalitions for the greater good of parks, recreation, and tourism.*

Whitney Knollenberg¹ & Ashley Schroeder² (¹North Carolina State University, ²The Pennsylvania State University).

3:30 – 4:00 p.m.  Afternoon Break  Atrium

SESSION VI (Monday, 4:00 – 5:30 p.m.)

4:00 – 5:30 p.m.  Session VI-A: Partnerships & Collaborations  Ballroom A

Facilitator:

- *Collaboration in the National Park Service: The role of advisory committees.*
  Megan L. Foster (University of California, Davis).

- *The relationships between parks and protected areas and communities: Two scoping reviews on the current state research globally and in the United States and Canada.*
  N. Qwynne Lackey & Kelly S. Bricker (University of Utah).

- *Elevating outdoor recreation together: State offices and potential partnerships in outdoor recreation, conservation, and economic development.*
  Brooke Sausser¹, Jordan W. Smith¹, Krista Sherwood², Adam Milnor² & Bob Ratcliffe² (¹Utah State University, ²National Park Service).

- *Outdoor education partnership in urban communities: A case study in South Dakota.*
  Paige O’Farrell & Hung-Ling (Stella) Liu (South Dakota State University).
Facilitator:

- **Identifying hikers’ special place meanings and geopiety: The Baekdu-Daegan trail, South Korea.**
  Jihee Park & Gerard Kyle (Texas A&M University).

- **Place identity and support for tourism development in coastal communities across Michigan (USA).**
  Michelle Rutty, Lissy Goralnik, Jessica Brunacini & Erin Keller (Michigan State University).

- **Contributions of sense of place to perceptions of ecosystem transformation.**
  Kiandra Rajala & Michael G. Sorice (Virginia Tech).

- **Considering the role psychological needs satisfaction plays in explaining place attachment among Southern Appalachian Region (U.S.) wilderness visitors.**
  Samuel J. Keith¹, Kyle M. Woosnam¹, Adam C. Landon² & Gerard T. Kyle³ (¹University of Georgia, ²Minnesota Department of Natural Resources, ³Texas A&M University).

Facilitator:

- **Parks for who? Access to, use of, and perceived benefits from local park and recreation services between 1992 and 2015.**
  Nick Pitas¹, Andrew J. Mowen², Alan R. Graefe², & Geoffrey C. Godbey² (¹State University of New York, ²The Pennsylvania State University).

- **Parks for ALL: A validation study of diversity and Inclusion in Michigan’s National Parks.**
  Mark Gleason & Michael Scantlebury (Grand Valley State University).

- **Navigating trailheads: Capturing the stories of women adventurers.**
  Olivia McAnirlin (Miami University).

Visitor use monitoring & management in & around federal aquatic sanctuaries and parks: A sea of opportunity.

Robert Burns¹, Bob Leeworthy², Kyle Hartman¹, Danielle Schwarzmann², Bret Meldrum³, Mary Allen¹ & Ross Andrew¹ (¹West Virginia University, ²NOAA Office of National Marine Sanctuaries, ³National Park Service Social Science Program).
5:45 – 6:45 p.m.  NATIONAL ENVIRONMENT AND RECREATION RESEARCH ASSOCIATION (NERRA) General Business Meeting

DINNER ON YOUR OWN

DAY 3 - TUESDAY, APRIL 9, 2019

7:00 a.m. – 12:00 p.m.  Registration  Atrium

SESSION VII (Tuesday, 8:00 – 9:30 a.m.)

8:00 – 9:30 a.m.  Session VII-A: Residents’ Perspectives  Ballroom A

Facilitator:

Public values and attitudes toward public parks and recreation services.
Hung-Ling (Stella) Liu & Paige O’Farrell (South Dakota State University).

Wilderness preservation values and support among residents of varying political persuasions within the Southern Appalachian Region.
Samuel J. Keith & Kyle M. Woosnam (University of Georgia).

“Show me the benefits, I will show you the money”: The relationship between use and willingness to support community parks and recreation.
Samantha L. Powers¹, Robert J. Barcelona² & Nate E. Trauntvein³ (¹The Pennsylvania State University, ²University of New Hampshire, ³Utah State University).

Determinants of support for recovery of large carnivores in Illinois.
Benjamin Ghasemi¹, Adam C. Landon², Craig A. Miller³ & Brent D. Williams³ (¹Texas A&M University, ²Minnesota Department of Natural Resources, ³University of Illinois).

8:00 – 9:30 a.m.  Session VII-B: Sustainable Tourism  Ballroom B

Facilitator:

Facilitating sustainable outdoor recreation and ecotourism growth through Extension Service programming.
Shane Feyers & Taylor Stein (University of Florida).

Environmental quality and its impact on business performance of the Bed and Breakfats (B&B) industry in Taiwan.
Chia-Ning Chiu¹ & Hsuan Yu² (¹National Ilan University - Taiwan, ²University of Maryland).
**Destination stewardship: Understanding sustainable tourism through WTTC Tourism for Tomorrow Award finalists.**  
Ruan De Lange & Kelly S. Bricker (University of Utah).

**A critical examination of sustainable tourism development and practices.**  
Hans Vogelsong (East Carolina University).

### 8:00 – 9:30 a.m.  
**Session VII-C: Visitors & Tourists**  
**Ballroom C**

**Facilitator:**

- **Consumer benefits and sustainable funding for outdoor recreation.**  
  Kelly Horvath (Duke University).

- **Visitors’ spatial movement patterns and market segmentation in Washington D.C.**  
  Jinyang Deng¹ & Rogelio Andrada II² (¹West Virginia University, ²University of the Philippines Los Baños - Philippines).

- **Place and pooches: Differentiating dog-walkers.**  
  Ingrid E Schneider¹, Sonja Wilhelm-Stanis² & Arne Arnberger³ (¹University of Minnesota, ²University of Missouri, ³University of Natural Resources and Life Sciences – Austria).

- **The devil made me do it: Interpretation and values as predictors of zoo visitors’ pro-conservation behaviors for Tasmanian Devils.**  
  Jeffrey C. Skibins¹, Betty Weiler² & Kevin Markwell² (¹East Carolina University, ²Southern Cross University).

### 8:00 – 9:30 a.m.  
**Session VII-D: Economic Considerations**  
**Windjammer**

**Facilitator:**

- **Building program desirability into payment for ecosystem services programs.**  
  Michael G. Sorice¹, C. Josh Donlan², Kevin J. Boyle¹, Weibin Xu¹ & Stefan Gelcich³ (¹Virginia Tech, ²Advanced Conservation Strategies – Spain, ³Pontificia Universidad Católica de Chile - Chile).

- **Economic impacts from diving and snorkeling on the southeast Florida reef tract.**  
  Kristy Wallmo¹, Peter Edwards², Scott Steinback¹ & Sabrina Lovell¹ (¹National Marine Fisheries Service, ²National Ocean Service).

- **Becoming a tourism economy: A cross-cultural examination of emerging tourism markets in rural China and Appalachia.**  
  Rick Gage (Davis & Elkins College).

- **Economic impact measures: EI benchmarking and market profiling of non-attendees at regional special events.**  
  Rodney B. Warnick¹ & David C. Bojanic² (¹University of Massachusetts at Amherst, ²University of Texas at San Antonio).

### 9:30 – 10:00 a.m.  
**Morning Break**  
**Atrium**
**SESSION VIII (Tuesday, 10:00 – 11:30 a.m.)**

**10:00 – 11:30 a.m.  Session VIII-A: Stakeholders' Perspectives  Ballroom A**

**Facilitator:**

- **Analyzing sustainable recreation intentions: A qualitative content analysis of Forest Service Region 3 Recreation Investment Fund proposals.**
  Jeremy Golston¹, Steven Selin², Chad Pierskalla² & Francisco Valenzuela¹ (¹Forest Service Southwest Regional Office, ²West Virginia University).

- **Sense of responsibility as a socio-psychological dimension of the owner-land relationship.**
  Evgenia Spears & Michael A. Schuett (Texas A&M University).

- **Perceived benefits, demographics and dog park use.**
  Edwin Gómez¹ & Ron Malega² (¹East Carolina University, ²Missouri State University).

- **Assessing stakeholders’ perceptions of the entry fee removal at Bastimentos National Marine Park in Bocas Del Toro, Panama.**
  Melanie Klemond¹, Camila Rojas² & Carly Winner³ (¹University of Minnesota, ²St. Edward’s University, ³University of Wisconsin-Madison).

**10:00 – 11:30 a.m.  Session VIII-B: Innovative Methods  Ballroom B**

**Facilitator:**

- **How do you say “crowding” in Spanish? Innovative data collecting methods on diverse times.**
  Adrian Benedetti, Alan Graefe, Derrick Taff & Max Olsen (The Pennsylvania State University).

- **Distance-related human-wildlife conflict: A virtual reality approach to understanding visitor perceptions.**
  Stephanie E. Freeman, Zachary D. Miller, Jacob A. Benfield, B. Derrick Taff & Peter Newman (The Pennsylvania State University).

- **GPS-based mobile exercise application: An alternative tool to assess spatio-temporal dynamics of residents’ physical activities in community recreation.**
  Eunjung Yang, Jinwon Kim & Brijesh Thapa (University of Florida).

- **The influence of priming on indicators and thresholds for outdoor recreation.**
  Chris Zajchowski¹, Jeff Rose², Kensey Baker² & Matthew Brownlee³ (¹Old Dominion University, ²University of Utah, ³Clemson University).
10:00 – 11:30 a.m.  Session VIII-C: Natural Disruptions & Resilience  Ballroom C

- **Exploring snowmaking and water usage: A Michigan case study.**
  Kali Maisano & Michelle Rutty (Michigan State University).

- **Land of encroachment: Identifying sociocultural impacts of ecosystem change on New Mexico grasslands.**
  Maude Dinan & Bethany Cutts (North Carolina State University).

- **Potential impacts of bark-beetles on visitor interference and displacement: Cross-national perspectives.**
  Ingrid E. Schneider¹, Arne Arnberger², Stuart Cottrell³, Paul Gobster⁴, Stephanie Snyder⁴ & Robert C. Venette⁴ (¹University of Minnesota, ²University of Natural Resources and Life Sciences - Austria, ³Colorado State University, ⁴USDA Forest Service).

- **Community resilience: A case study in planning in rural eastern North Carolina.**
  Daniel Pilgreen¹, Paige P. Viren² & Clifton E. Watts³ (¹Texas A&M University, ²San Francisco State University, ³East Carolina University).

**SYMPOSIUM CONCLUDES (Tuesday 11:30)**

*Thanks for your participation. See you next year!*