

**VIRGINIA NATURAL HISTORY SOCIETY**  
**4<sup>th</sup> General Meeting**  
**19 October 2024**  
**Radford University, Radford, Virginia**

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**REFRESHMENTS AND REGISTRATION, SET UP POSTERS**  
**9:15 am – 10:00 am**

**ORAL PRESENTATION SESSION I (\*Student author)**  
**10:00 am – 11:45 am, M73 Center for the Sciences**

- 10:00     **Welcome and Opening Remarks/Review of Fall Bioblitz**  
Karen E. Powers  
President, VNHS and conference host, Radford University
- 10:15     **Interning at a State Natural History Museum**  
Benjamin Dye\*, Arianna Kuhn, Jackson Means  
Virginia Museum of Natural History
- 10:30     **Songbirds and Microplastics: Examining Exposure to Microplastics in Cedar Waxwings**  
Sara O'Brien, Katie Wheeler\*, Brian Walker, Andrew White\*, Brianna DiMaggio\*, Karen E. Powers, Matthew T. Close, Jamie K. Lau  
Radford University (most), Fairfield College (BW, AW, BD)
- 10:45     **Buried Secrets: Uncovering the Impact of Formaldehyde on Cemetery Soil Microbes**  
Madison Rader\*, Sara Foltz, Steven McBride  
Radford University
- 11:00     **Resting Places: The Potential of Urban Cemeteries as Wildlife Habitat**  
Sarah L. Foltz, Jamie K. Lau  
Radford University
- 11:15     **A Bumble Where It Should Not "Bee": Updating the Range of *Bombus fraternus* in Virginia**  
Jennifer M. Weber\*, T. Adam Coates, Verl R. Emrick III, W. Mark Ford, Margaret J. Couvillon  
Virginia Tech (nearly all), US Geological Survey (WMF)
- 11:30     **Progress Report of an Ongoing Survey of the Native Bee Fauna of Virginia**  
Ellison C. Orcutt, Steven M. Roble  
Virginia Dept. of Conservation & Recreation

**11:45-12:45 LUNCH, M Floor, Center for the Sciences**

**12:45 pm – 1:30 pm POSTER SESSION, M Floor, Center for the Sciences**

**ORAL PRESENTATION SESSION II**  
**1:30 pm – 3:50 pm, M73 Center for the Sciences**

- 1:30     **The Ecological Significance of High Bacterial Taxonomic Ranks Emerges at the Community Level**  
Ernest D. Osburn, Steven G. McBride  
University of Kentucky (EDO), Radford University (SGM)
- 1:45     **Then and Now: Herpetology at the Virginia Museum of Natural History**  
Arianna Kuhn  
Virginia Museum of Natural History
- 2:00     **Wildlife on Campus: A Collaborative Camera Trapping Study on Two College Campuses**  
Todd Fredericksen, Jason Worley  
Ferrum College (TF), Patrick and Henry Community College (JW)
- 2:15     **Dendroclimatology of a Spruce Bog at Mountain Lake, VA**  
Stockton Maxwell  
Radford University

**2:30 – 2:50 COFFEE BREAK**

- 2:50     **Symbiotic Interactions of Virginia Crayfish: Natural History and Implications of Crayfish Invasion**  
Bryan L. Brown, Robert P. Creed  
Virginia Tech (BLB), Appalachian State University (RPC)
- 3:05     **Excavating Sponges Change Their Bioerosion Behavior in Response to Predation**  
Melissa DeBiasse, Amber Stuber  
Radford University (MD), Occidental College (AS)
- 3:20     **Distribution of the Sickle-jaw Centipede (*Agathothus gracilis*) in Virginia (Geophilidae: Linotaeniinae)**  
Derek A. Hennen  
Virginia Museum of Natural History
- 3:35     **Roundworm on the Mountain: Using Dixie Caverns as a Test Case for Raccoon Roundworm Abatement in Virginia**  
Karen E. Powers, L. Kristen Page, and Rick J Reynolds  
Radford University (KEP), Wheaton College (LKP), Virginia Department of Wildlife Resources (RJR)

**3:50 CLOSING REMARKS**

**PLANETARIUM SHOWING (optional): 4:00 – 4:30**

**POSTER SESSION (\*Student author)**  
**12:45 pm – 1:30pm, M Floor, Center for the Sciences**

**Heavy Metal Influences on Soil Microbial Function**

Jack R. Arthur\*, Michael Brown\*, Steven G. McBride  
Radford University

**Size of Aquatic Macroinvertebrates as an Indicator of Stress in Response to Environments with Heavy Mining Activity**

Hiya Barai\*, Kelley Sinning\*, Saumil Trivedi, Erin Hotchkiss, Daniel McLaughlin, Caleigh Meehan\*, Greg Pond, Stephen Schoenholtz, Lisa Tabor, Sally Entrekin  
Virginia Tech

**Climate-growth Response of *Lirodendron tulipifera* at Selu Conservancy**

Kiara Bartoli\*, Ian Koeppen, Stockton Maxwell  
Radford University

**Understanding Prediction Strategies for Global Volcanic Activities: Advancements over the Past Decade**

Jannah DiMaggio\*, Ava Gorski\*, Parvinder Sethi  
Radford University

**Petrographic Investigation of *Tyrannosaurus rex* from the Hell Creek Formation, Montana: Implications for Paleoenvironmental Analysis**

Katelyn Harris\*, Kristen Zimmerman\*, Bode Lindauer\*, Parvinder Sethi  
Radford University

**Tracking Biomass of Insects in Wildwood Park, Radford, Virginia**

William Justice\*, Jessica Handy\*, Thomas Ausburne\*, Chet Bhatta  
Radford University

**Historic and Modern Habitat Alteration Techniques for Bog Turtle Habitat Management**

Tanis McDonnell\*, Joel Snodgrass, Carola Haas  
Virginia Tech

**Investigating the Demography and Parasites of Spring-Migrating Cedar Waxwings (*Bombycilla cedrorum*) in Virginia after a Single-day Mortality Event**

Karen E. Powers, Will Sadler\*, Acalia J. Carter-Martin\*, G. Caleb Smith\*, Gabe W. Tieskotter\*, Katie E. Wheeler\*, Matthew T. Close, Sara O'Brien, Stephen A. Smith, Jamie K. Lau

Radford University (All but one), Virginia-Maryland College of Veterinary Medicine (SAS)

**Effect of Plastic and Manganese on Soil pH**

Zachary N. Runyan\*, Arianna E. McBride\*, Steven G. McBride  
Radford University (ZNR, SGM), Andrew Lewis Elementary School (AEM)

**An Assessment of Propolis from Southwest Virginia**

Tiannah Shifflett\*, Thomas Ausburne\*, Binuk Samarasinghe, Chet Bhatta  
Radford University

**Time Time Time See What's Become of Me: Seasonal Changes of the Mill Creek Aquatic Insects, Roanoke Co.**

G. Caleb Smith\*, Alexander M. McVicker\*, Jamie K. Lau, Tara A. Pelletier, Kristina R. Stefaniak  
Radford University

**Contributions to eBird and iNaturalist County Records in Western Virginia: The Hidden Value of Game Camera Incidentals**

W. Jayme Viers\*, Kendra J. Earls, Karen E. Powers, and Rick J. Reynolds  
Radford University (WJV, KJE, KEP), Virginia Department of Wildlife Resources (RJR)

**A Comparative Analysis of UAV-coupled LiDAR and Broadband Multi-spectral Measurements to Ground-scale Data for the Devonian Millboro Shale, Virginia, USA 2.0**

Kristen Zimmerman\*, Parvinder Sethi, Andrew Foy  
Radford University