



2024 Annual Conference
Mid-Atlantic Chapter
Ecological Society of America

April 5th – 7th

Agriculture in Ecological Context

Hosted by

The Department of Biology, the Environmental Science
Program

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College of Liberal Arts and Sciences

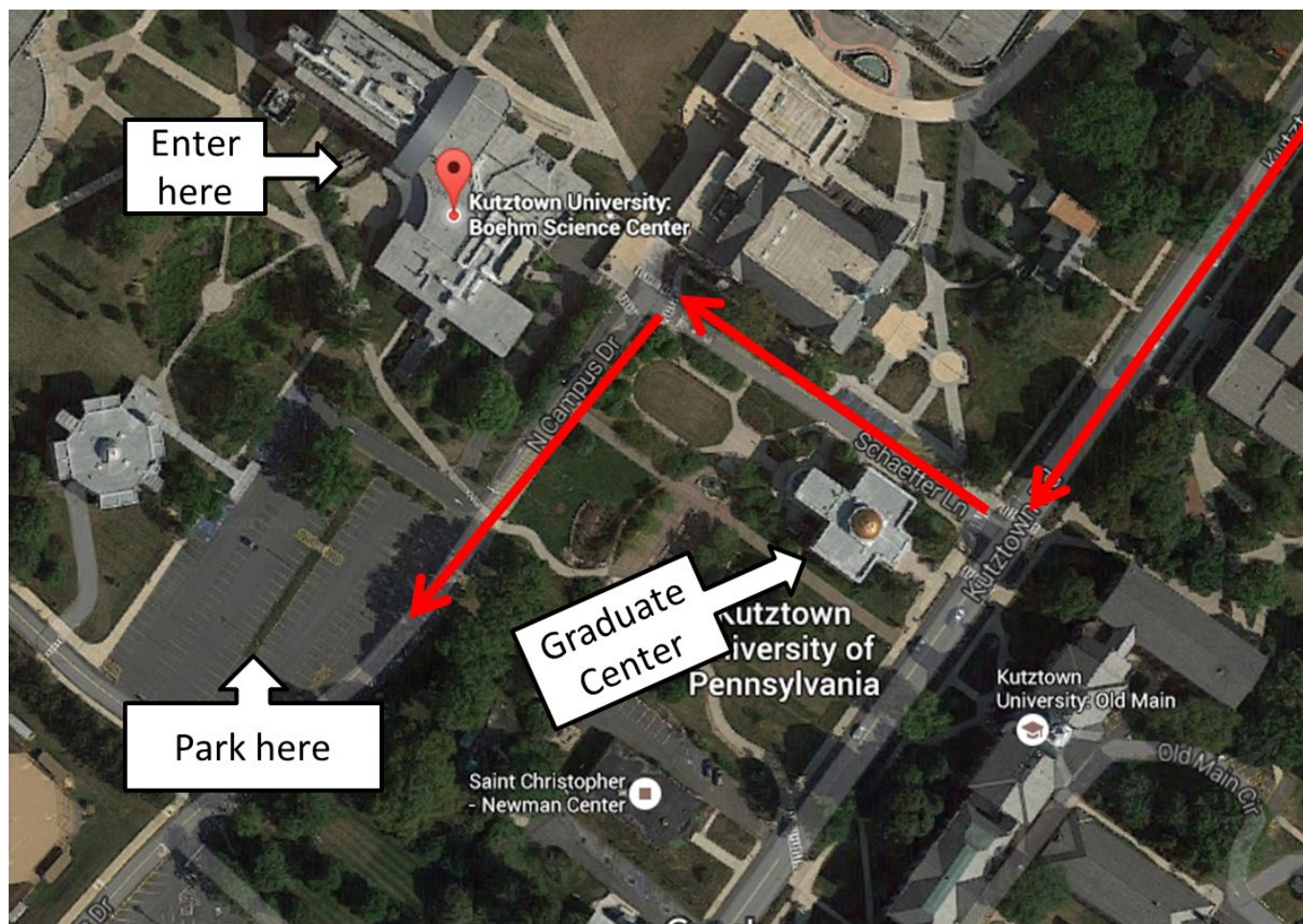


Conference Location and Directions

The 2024 Annual Conference of the Mid-Atlantic Chapter of the Ecological Society of America will be held in the Boehm Science Building, Kutztown University.

From Interstate 78: Take Exit 40 and drive south on Krumsville Rd. (Route 737 South) for 6 miles. Turn right and follow West Main Street up the hill for ~0.5 miles. At the top of the hill, West Main Street turns into Kutztown Road. At the KU Graduate Building (granite building with copper top), turn right onto **Schaeffer Lane** and park in the closest available parking lot.

To enter the Boehm Science Building, climb up the stairs just north of the attached greenhouse (east of the moat-shaped retention pond).



MA-ESA 2024 Meeting Schedule

Friday, April 5, 2024

6:00 – 8:30 pm Evening social
Saucony Creek Brewery and Gastropub

Saturday, April 6, 2024

7:30 – 9:00 am Registration and Continental Breakfast
Lobby, Boehm Science Building, Kutztown University

9:00 – 9:15 am Opening Remarks. Chris Habeck (MA-ESA Chair) and Laurie McMillian (Dean, College of Liberal Arts & Sciences)
Room 145, Boehm Science Building

9:15 – 10:15 am Keynote Address - Dr. Matthew Ryan (Cornell University): Agriculture in Ecological Context
Room 145, Boehm Science Building

10:15 – 10:30 am Morning Break

10:30 – 11:30 am Panel Discussion with Matt Ryan (Cornell), Jake Sewall (Kutztown), Arash Ghale (Rodale Institute), Steve Schoeniger (Rainbow Farms), and Brent Habig (Two Creek Farms): Benefits and Challenges of Sustainable Agricultural Practices
Room 145, Boehm Science Building

11:30 am – 1:30 pm Box Lunch
Lobby, Boehm Science Center

12:30 – 1:30 pm MA-ESA Business Meeting – *Rm 220*
Workshop I: Microbiomes for All! Data Analysis Workshop – *Rm 260*
Workshop II: The basics of “R” programming for ecological research – *Rm 261*
Workshop III: Digitized Natural History Collections and BCEENET CUREs: Bringing digital data into your classroom – *Rm 104*
Workshop IV: Career Development – *Rm 262*
Boehm Science Center

1:30 – 2:45 pm Oral Session 1
Rooms 105, 107, 145, 260, 261, 262, Boehm Science Building

2:45 – 3:15 pm Afternoon Break

3:15 – 4:30 pm Oral Session 2
Rooms 105, 107, 145, 260, 261, 262, Boehm Science Building

4:30 – 6:00 pm Poster Session
First Floor, Boehm Science Building

6:30 – 9:00 pm Banquet and Student Presentation Awards.
Saucony Creek Brewery and Gastropub

Sunday, April 7, 2024

9:30 am – 1:30 pm Field Trip to the Rodale Institute to learn about their regenerative organic
agricultural practices.
Meet at Boehm Science Building parking lot

Invited Speakers

Keynote Speaker

Dr. Matthew Ryan
Cornell University

Title of Matthew's Talk

Boehm Science Building, Room 145
Saturday, April 6th at 9:15 AM

Panel Discussion

Dr. Arash Ghale
The Rodale Institute

Brent Habig
Two Creek Farms, Lakewood, PA

Dr. Matthew Ryan
Cornell University

Steve Schoeniger
Rainbow Farms, New Tripoli, PA

Dr. Jacob Sewall
Kutztown University

A Conversation about the Benefits and Challenges of Sustainable
Agriculture

Boehm Science Building, Room 145
Saturday, April 6th at 10:30 AM

Sunday, April 7th Field Trip: The Rodale Institute, Kutztown, PA

Our field trip will be hosted by the staff scientists at the Rodale Institute's international headquarters in Kutztown, Pennsylvania.

Rodale is a global leader in the development of regenerative organic agricultural practices. Their staff focus on agricultural research, farmer training programs, and consumer outreach. Rodale maintains a 386-acre working farm that includes some of the longest organic agriculture research experiments in the world.

Schedule:

- 9:30 AM Meet in the B1 parking lot next the Boehm Science Building, Kutztown University
- 9:45 AM Depart for the Rodale Institute's Kutztown campus
- 10:00 AM Tour of the Rodale Institute's working farm trials
- 1:15 PM Depart Lehigh Gap Nature Center
- 1:30 PM Arrive Boehm Science Building, Kutztown University



Oral Presentation Concurrent Session 1

Time	Session 1A Boehm 145	Session 1B Boehm 105	Session 1C Boehm 107
1:30 PM	<p><i>Canopy Productivity and Density within an urban brownfield.</i></p> <p>Yan, Gallagher - Rutgers, The State University of New Jersey</p>	<p><i>Opportunistic Tickborne Disease Testing of Eastern Pennsylvania Small Mammals</i></p> <p>Signore, Chinnici, Davies, Rollinson, Rowley, Whiter, Williams, LaDuke - East Stroudsburg University</p>	<p>3,000 Years of Pollen at the Glen Forney Vernal Natural Heritage Area, Michaux State Forest, Pennsylvania, USA</p> <p>Hegodus, Marr - Shippensburg University</p>
1:45 PM	<p><i>Liriodendron tulipifera growth increases with reduced drought severity in urban forests</i></p> <p>McCoach, Chavanne, Trammell, D'Amico - University of Delaware</p>	<p><i>Avian Botulism: Microbial community shifts unveiled in seabird ectoparasites</i></p> <p>Barber, Sheehan - Frostburg State University</p>	<p><i>A dichotomous key for identification of trees in the Northeast using bark characteristics.</i></p> <p>Saul – Rutgers University</p>
2:00 PM	<p><i>Aligning urban forest management actions with urban sustainability goals: A multi-city expert elicitation</i></p> <p>Mlotha - Antioch University Patsun – North Central Conservation District, CT</p>	<p><i>Are Antibiotic Resistant Genes Expressed within the Blue Marsh Watershed? Let's Find Out!</i></p> <p>Duarte, Felker, Mysliwiec - Penn State Berks</p>	<p><i>Reforestation the Mid-Atlantic: Tree Planting or Natural Regeneration?</i></p> <p>Boucher - White Acres Farm</p>
2:15 PM	<p><i>Hidden urban biodiversity: student-led project demonstrates significant herbaceous plant biodiversity in both cultivated and uncultivated lawns</i></p> <p>Clark - Prince George's Community College</p>	<p><i>What's the scoop on the Mycoloop? Chytrid fungi associated with increased zooplankton density in the Chesapeake Bay</i></p> <p>Kirkendall, Skelton - College of William and Mary</p>	<p><i>Long-term conservation of white ash on the Allegheny National Forest</i></p> <p>Kilgore - Washington & Jefferson College Knight, Flower, Royo - Northern Research Station, USDA Forest Service</p>
2:30 PM	<p><i>Measuring Productivity Within A Naturally Assembled Urban Forest Stand</i></p> <p>Mitroff, Gallagher - Rutgers The State University of New Jersey</p>	<p><i>The Queen's Gambit: Developmental Diapause of Future Queens in Temperate Paper Wasps</i></p> <p>Miller, O'Donnell, Lenhart - Drexel University</p>	<p><i>Forest age and tree size shape development of tree-base microhabitats in second-growth forests</i></p> <p>Holmes, Holcomb, Jankosky, Hingston, Miller, Stienberg – Chatham University</p>

Oral Presentation Concurrent Session 1

Time	Session 1D Boehm 260	Session 1E Boehm 261	Session 1F Boehm 262
1:30 PM	<p><i>Snail physiological stress responses to predation affect biological soil crust stoichiometry</i></p> <p>Rinehart – Drexler University Shamir Weller, Ben Lulu, Hawlena - The Hebrew University of Jerusalem</p>	<p><i>Effects of warming and elevated CO2 on stomatal conductance and chlorophyll fluorescence of C3 and C4 coastal wetland species</i></p> <p>Sendall, Muñoz, Ritter – Rider University Noyce, Megonigal - Smithsonian Environmental Research Center</p>	<p><i>Population genetics of wild lupine (Lupinus perennis), an early successional plant species of conservation concern</i></p> <p>Pettita, Sabo, López-Urbe - Pennsylvania State University</p>
1:45 PM	<p><i>Microbial Antics: Unveiling the Unseen World of ant Aphaenogaster rudis</i></p> <p>Kelleher, Ramalho – West Chester University</p>	<p><i>Long Term Phenological Shifts in Moth Communities in Central New York</i></p> <p>Foster, Grames - Binghamton University</p>	<p><i>Does genetic relatedness or management context drive tree-associated insect communities in Baltimore city?</i></p> <p>Perry, Burghardt - University of Maryland Shobe, Avolio – Johns Hopkins University Sonti, Locke – U.S. Forest Service</p>
2:00 PM	<p><i>Seeds, flies, wasps: A new trophic chain to study top-down and bottom-up controls in the Arctic</i></p> <p>McDonald, Carita Vaz, Fetcher – Wilkes University Unger – Florida International University</p>	<p><i>The influence of climate warming on flowering phenology in relation to historical annual and seasonal temperatures and plant functional traits</i></p> <p>Machiorlete, Dalgleish, Puzey, LaMar - College of William and Mary</p>	<p><i>Examining the effects of multiple stressors on Rubus allegheniensis using structural equation modeling</i></p> <p>O'Sullivan, Morrison - The College of New Jersey</p>
2:15 PM	<p><i>pH Influences the Thermal Performance Curves of Protist Populations</i></p> <p>Najarro, Gilbert, Yammine – Duke University</p>	<p><i>Climate Induced Phenology Changes of Western Pennsylvania Tree and Herb Species Over the Past 125 Years</i></p> <p>Holcomb, Bierker, Utz - Chatham University Mason Herberling - Carnegie Museum of Natural History</p>	<p><i>Clonal reproduction contributes to common milkweed (Asclepias syriaca) population dynamics in Northern Virginia, USA</i></p> <p>Machiorlete, Dalgleish, Puzey, LaMar - College of William and Mary</p>
2:30 PM	<p><i>Microplastic Microbial Hitchhikers in Blue Marsh Lake</i></p> <p>Lu, Felker, Mysliwiec – Penn State Berks</p>	<p><i>Multi-scale distribution modeling for the Spotted Lanternfly (Lycorma delicatula) reveals range expansion and increased risk to important viticultural regions under climate change.</i></p> <p>Owens, Helmus – Temple University</p>	<p><i>Factors limiting reproduction in the Pennsylvania endangered dwarf iris, Iris verna</i></p> <p>Taylor, Sahli – Shippensburg University</p>

Oral Presentation Concurrent Session 2

Time	Session 2A Boehm 145	Session 2B Boehm 105	Session 2C Boehm 107
3:15 PM	<p><i>Characterization of Cyanobacteria in Blue Marsh Lake</i></p> <p>Popescu, Felker, Mysliwiec – Penn State Berks</p>	<p><i>Forest understory condition is affected by interactions between invasive species and the environment</i></p> <p>Sabo, Nilson, Burkhart - Penn State University Stark - American Chestnut Foundation</p>	<p><i>Leaf Litter Quantity Influences on Microclimate and Wildflower Phenology</i></p> <p>Yancy - University of Pittsburgh Miller - Chatham University Heberling - Carnegie Museum of Nat. Hist. Kuebbing - Yale University</p>
3:30 PM	<p><i>Understanding a pH Anomaly in a Coastal Plain Lake</i></p> <p>Witt, Ficken, Griffin, Quick – Stockton University</p>	<p><i>Assessing Impacts of Buckthorn (Rhamnus spp.) as invasives on Vegetation Distribution and species Diversity within Hudson River valley, New York, USA</i></p> <p>Mlotha - Antioch University Patsun - North Central Conservation District, CT</p>	<p><i>Effects of soil fertility and moisture on soil respiration by fine roots, fungi, and prokaryotes in a tropical forest drying experiment</i></p> <p>Dietterich, Cordeiro, Cusack - Colorado State Univ. McFarlane - Lawrence Livermore Natl. Lab</p>
3:45 PM	<p><i>Impact of wave exposure on coral dispersion patterns at Rapa Nui</i></p> <p>Herlan, Staniczenko, McDonald - City College of New York Santos, James – Florida Intl. University Gaymer - ESMOI</p>	<p><i>Patterns of Invasive Plant Species in Urban Forests Vary Across Spatial Scales</i></p> <p>Levy-Diedrich – University of Delaware D'Amico - US Forest Service</p>	<p><i>Gone with the wind: pre- and post-tornado comparisons of small mammal communities</i></p> <p>Sheffield - Bowie State University</p>
4:00 PM	<p><i>Plastic pollution disrupts primary production and trophic interactions in aquatic food chains</i></p> <p>Sheehan, McHale - Frostburg State University</p>	<p><i>Invasion Density and Soil Moisture Influence Soil Nitrogen Cycling in Forests Invaded by the Shrub Rosa multiflora</i></p> <p>Moore, Pouyat*, Trammell - University of Delaware; U.S. Forest Service</p>	<p><i>Pre-copulatory behavior in color polymorphic tortoise beetle, Chelymorpha alternans</i></p> <p>Parker - Chatham University Strickland – Boston University</p>
4:15 PM	<p><i>Oyster Aquaculture Supports a Diverse Community of Fishes and Macroinvertebrates</i></p> <p>Motz, Campbell, Hudock, Hale, Carlisle - University of Delaware</p>	<p><i>A Potential New Nemesis for Garlic Mustard? Exploring the Range and Impacts of a Newly Arrived Specialist Aphid</i></p> <p>Troutman, Stuble, Watson, Jenkins, Engerman - Holden Forests and Gardens</p>	<p><i>Using passive acoustics to assess bat activity on barrier island habitats in New York</i></p> <p>Costante, Warren - Stony Brook University</p>

Oral Presentation Concurrent Session 2

Time	Session 2A Boehm 260	Session 2B Boehm 261	Session 2C Boehm 262
3:15 PM	<p><i>ARBOREAL: A new network to support undergraduate researchers investigating temperate forest canopy biodiversity</i></p> <p>Kilgore, Hoffman - Washington & Jefferson College *see abstract for additional authors</p>	<p><i>Data and artwork from the forest floor: connecting ways of knowing</i></p> <p>Morrison - The College of New Jersey</p>	<p><i>Testing for an effect of predator body size on the relative importance of consumptive versus non-consumptive effects in streams</i></p> <p>Toscano, Segal, Exnerova, Ver Pault – Trinity College</p>
3:30 PM	<p><i>Taking course-based undergraduate research experiences (CUREs) one step further: interdisciplinary team teaching</i></p> <p>Sewall, Palkendo, Habeck – Kutztown University</p>	<p><i>Merging Traditional Ecological Knowledge with Modern Organic Practices: A Case Study in Participatory Research</i></p> <p>Silva - University of Wisconsin-Madison</p>	<p><i>Exploring tree preference of <i>Odocoileus virginianus</i> for antler rubbing in an urban park</i></p> <p>Zaleski, Aiello, Lecrone, Pellow, González Santoro, Olmsted - University of Pittsburgh</p>
3:45 PM	<p><i>You're in my personal space! How using spatial autoregression can change a model outcome.</i></p> <p>Kafas - The College of New Jersey</p>	<p><i>Integrated Urban Farming: Synergizing Solar Energy, Rainwater Harvesting, and Sustainable Agriculture for Enhanced Resource Efficiency</i></p> <p>Nowshin, Shujath, Al Rousan, Azam – Univ. of the D.C. Roman - State University of New York</p>	<p><i>Modeling Presence and Occupancy of Wildlife on the Trinity Washington University Campus</i></p> <p>Nielson - Trinity Washington University</p>
4:00 PM	<p><i>Structural equation modeling examines factors influencing suburban forest indigenous plant diversity</i></p> <p>Ciuba, Morrison - The College of New Jersey</p>	<p><i>Environmental and landscape indicators: A pathway for improved biosphere integrity assessment</i></p> <p>Shaker - SUNY College of Environmental Science and Forestry Mackay - Toronto Metropolitan University</p>	<p><i>Age structure and window-collision mortality of avian migrants in an urban greenspace</i></p> <p>Xu, Holzapfel – Rutgers University</p>
4:15 PM	<p><i>A Stochastic Individual Based Model of <i>Eriophorum vaginatum</i> growth</i></p> <p>Mahler, Vas - Wilkes University</p>	<p><i>Flocking by migrant and resident birds during migratory stopover</i></p> <p>Hidayati, Buler - University of Delaware Zenzal, Jr. - US Geological Survey, Wetland and Aquatic Research Center</p>	<p><i>Does belonging to the species matter to the bacterial leaf-cutting ant community?</i></p> <p>Gianaris, Ramalho – West Chester Univ. Bueno - Unesp Rio Claro Martins - UFPI</p>

Poster Session

	Title	Author(s)	Primary Affiliation
1	<i>Beneath the Aftermath: Exploring Soil Respiration in Temple's Tornado-Disturbed Forest</i>	Flores, Caplan, Bonfim, Stevenson, LeClair, Eisenman, Cortese, Freestone	Temple University
2	<i>Assessing the Thermal Tolerance of Infected and Uninfected Bombus impatiens to a Variable Thermal Environment</i>	Lohr	Mount Holyoke College
3	<i>American ginseng's mating game: Insights into pollination and reproductive success of an Appalachian icon</i>	Chandler, Polich	West Chester University
4	<i>Gas exchange of temperate and boreal tree seedlings under warming and drought</i>	Ritter, Sendall, Stefanski, Villanueva	Rider University
5	<i>Soil clay minerals trump fire and plant productivity to explain carbon distribution in a tropical savanna</i>	Watson, Hedin, Coetsee, Wigley, February	Princeton University
6	<i>Non-timber forest products: a framework for sustainable management in small forest areas</i>	Goncalves Lazzaro, Wilkinson Kaye, Muth, Pugh, Coville	Pennsylvania State University
7	<i>Using deer enclosures to aid in forest understory restoration at Rider University</i>	Murphy, Sendall	Rider University
8	<i>Toxic interactions of glufosinate ammonium, co-formulants, and tank additives on the agrobiont wolf spider Pardosa milvina</i>	Aben, Roan, Rossi, Seibert, Persons	Susquehanna University
9	<i>Analyzing Earlywood and Latewood Tree Ring Width Differences in Response to Precipitation and Temperature in Nepal</i>	Banyacski, Druckenbrod	Rider University
10	<i>Chemically-mediated antipredator responses among neustonic prey of males and females of the semi-aquatic fishing spider Dolomedes triton</i>	Shilcusky, Ahmed, Persons	Susquehanna University
11	<i>Analysis of Rhodococcus rhodochrous by Activity-Based Labeling in the Presence of Soil</i>	Adler, Hyman	NC State University
12	<i>The wolf spider Tigrosa helluo uses visual associative and beacon landmarks during water maze navigation tasks</i>	Weidman, Persons	Susquehanna University
13	<i>Effects of Color, Pattern, and Distance from a Pond on Predator Attack Rates on Clay Model Frogs in Central Ohio</i>	Copeland, Smith	Denison University
14	<i>Examining early plant community response to a novel tornado disturbance</i>	LeClair, Sewall, Freestone, Bonfim, Gutierrez Velez, Caplan, Razzaghi Asl	Temple University
15	<i>Algal community composition and response to disturbance in mid-order rivers</i>	Desjardins, Peipoch, Schedlbauer	West Chester University
16	<i>Monitoring Harmful Algal Blooms: Preliminary Findings in Assessing the Accuracy of Low-Cost Algal Toxin Detection Methods at Spruce Run Reservoir, New Jersey</i>	Barrett, Stander, Scarpantonio	Raritan Valley Community College

17	<i>Instrument bias in measuring leaf gas exchange: a comparison among species and habitats</i>	Apuzzo, Sendall	Rider University
18	<i>Pollinia Germination and Hybridization in Milkweed</i>	Cunningham, Barlow, Dalglish, Puzey	William and Mary Biology Department
19	CANCELLED <i>Using NOAA's Marine Recreational Information Program (MRIP) recreational catch data to assess changes in species' latitudinal range and distribution associated with climate change</i>	Roday, Hudock, Millea, Hale, Carlisle	University of Delaware
20	<i>Methodology for the investigation of metabolic costs in M. genalis facultative sociality using stop-flow respirometry.</i>	Barnes, Wcislo, Somjee	Trinity college
21	<i>A Preliminary Comparison of Two Automated Software Measurement Programs in the Assessment of Morphological Differences in Gambusia affinis</i>	Rodriguez, Lutnesky	Texas A&M University - San Antonio
22	<i>Effect of burning on the microbial composition of grassland soils in NE Pennsylvania</i>	Brown, Fortunato	Widener University
23	<i>Cannibalism risk outweighs the effect of physical interference on water bug feeding rates</i>	Ver Pault, Acee	Trinity College
24	<i>Burrowing Crab Effects on Plant Communities along a Chronosequence of Tidal Marsh Restoration.</i>	Quitel, Cherry, Dybiec, Rinehart	Drexel University
25	<i>Investigating the invasiveness of Pennsylvania non-native plant species versus native species after disturbance</i>	Tomb, Mastria, Castelluccio, Sahli	Shippensburg University
26	<i>Phenotypic divergence is associated with urbanization in the common butterfly Pieris rapae</i>	McManus, Spigler	Temple University
27	<i>Fish Community Surveys at the Union City Dam of French Creek</i>	Beall, Squires, Frantz, Dakin, Honick, Porter	Duquesne University
28	<i>Effect of elevated growth temperature on photosynthetic rate in Phaseolus vulgaris</i>	Jansons, Schedlbauer	West Chester University
29	<i>Targeting Single-Use Plastics: Determining Impacts of Location on Trash Amounts and Effectiveness of Bans</i>	Brown, Moreira, Fork	West Chester University Biology Department
30	<i>Exploring Biodiversity Over a Vertical Gradient in Two Red Oak trees</i>	Hyatt, Norris	Stevenson University
31	<i>The Impact of Milkweed Nectar Microbes on the Reproduction of Common Milkweed (Asclepias syriaca)</i>	Barlow, Machiorlete, Williamson, Puzey, Dalglish	College of William & Mary
32	<i>Effects of Reservoir Morphometry on Phytoplankton Community Dynamics During the Fall Transition</i>	Rose, Holt	Susquehanna University
33	<i>Effects of Water Availability and Simulated Herbivory on Extrafloral Nectaries in Vicia faba</i>	Thomas, Packer	Susquehanna University
34	<i>Does color morphology influence water retention in Plethodon cinereus?</i>	Sherinsky, Hauk, Hawley-Matlaga	Susquehanna University
35	<i>Burning questions in food web ecology</i>	DeCresenza, O'Boyle, Erickson, Savitski, Fetcher, Howey, Stratford	Wilkes University
36	<i>Assessing changing carbon pool dynamics and species composition in a Pennsylvania broadleaf forest fragment</i>	Levinsky, Schedlbauer	West Chester University of Pennsylvania
37	<i>Are single-use plastic bans effective? A preliminary look at urban streams in southeastern Pennsylvania</i>	Moreira, Brown, Fork	West Chester University

38	<i>Tracking the Eastern Expansion of the Coyote (Canis latrans var.) on Long Island</i>	Traficante, Nieto-Fernandez, Klein	SUNY Old Westbury
39	<i>Diatom assemblages of the Ridley Creek watershed over 114 years of observations</i>	Barker, McGrath, Potapova	Drexel University
40	<i>Treatments for managing the invasive grass Microstegium vimineum differ in effectiveness, effort required, and regeneration of native plants over time.</i>	Johnson, Petri, Oordt, Thomas, Horne	Longwood Gardens
41	<i>Soil moisture and temperature in forest gaps across multiple eastern U.S. cities</i>	Kang, Trammell, Yesilonis, Piana, Hallett	University of Delaware
42	<i>Do winners lose, too? Investigating the success of Prunus serotina in a long-term deer exclosure study</i>	Basch, Morrison	The College of New Jersey
43	<i>Evolving Partnerships: A Multi-Stage Analysis of Host-Microbe Dynamics in the Life Cycle of the Spotted Lanternfly (Lycorma delicatula)</i>	Munshower, Ramalho, Chandler, Donze-Reiner	West Chester University
44	<i>The long and salty road: understanding the consequences of road salt deposition on native plant community restoration practices</i>	Conway, Brudvig	Michigan State University
45	<i>Dispersal-mediated resilience to altered pH in aquatic arthropods</i>	Licopoli, Brandt, Doubleday, DeCristofaro	Muhlenberg College
46	<i>Patterns of leaf traits, herbivory, and photosynthesis in the canopies of mature red oak canopies</i>	Stevens, Norris	The Bryn Mawr School
47	<i>Gene Expression in Eastern Oak Species is Impacted by Underlying Site Geology</i>	Alving, Kaye, Hamilton, Zhebentyayeva	Pennsylvania State University
48	<i>The Role of Transportation and Environment in Shaping the Spread of Spotted Lanternfly Invasion Dynamics</i>	Stonefield, Bonfim, Leclair, Swartz, Banks, Freestone, Sewall	Temple University
49	<i>The Effects of Multiple Stressors on Green Ash</i>	Mirza, Morrison	The College of New Jersey
50	<i>Avian Foraging Habits in Aquaculture: Insights from Parasite Community Analysis</i>	Olsen, Sheehan	Frostburg State University
51	<i>Correlating social factors and species biodiversity within a historically redlined part of Philadelphia</i>	Iralien, Lhanyitsang, Baumgarten	Bryn Mawr College
52	<i>Baseline mammal surveys before strip mine reclamation using camera traps and environmental DNA.</i>	Powell, DeRienzo, Neugebauer, Robinson, Bierer, Porter, Janecka	Duquesne University
53	<i>Spatial Distribution of Arbuscular Mycorrhizal Fungi Diversity and Heavy Metal Soil Concentrations as a Function of Urban Structure in Philadelphia, PA</i>	Berrios, Kremer, Goldsmith, Egan	Villanova University
54	<i>Burrowing Crabs do not Affect Decomposition Rates Along a Tidal Marsh Chronosequence</i>	Rodriguez, Cherry, Dybiec, Rinehart	Drexel University
55	<i>Surveying salamanders' presence and absence to determine the health of local forests.</i>	Norris, Vickery	Irvine Nature Center & Stevenson University
56	<i>Defense Mechanisms of Bumblebees (B. griseocollis and B. impatiens) Against Conopid Fly Parasitism</i>	Ashby, Roulston	University of Virginia
57	<i>Exploring Wolbachia Diversity in the Global Ant Genus Pheidole: Implications for Biogeography and Ecological Success</i>	Pisiechko, Manuela, Lovell	West Chester University

58	<i>The influence of feather mite load on body condition of four songbirds</i>	Frischia, Underwood	Kutztown University
59	<i>Evidence for Aegopodium podagraria's complex effects on soil quality and biodiversity in Southwestern Pennsylvania</i>	Evanov, Olmsted, Stanley	University of Pittsburgh
60	<i>Engaging Students in Introductory Ecology through iNaturalist</i>	Barry	West Virginia University
61	<i>Does Varying Predator Biomass</i>	Kitaygorodskiy, Gosnell, Corpuz, Uddin, Betke, Lande, Agustin	Bernard M. Baruch College
62	<i>Assessing Impact of Current Management Practices on Female Spotted Lanternfly Populations.</i>	Hodges, Sewall, Bonfim, Leclair	Temple University, Ambler Field Station
63	<i>Climate-Driven Disturbances Alter Carbon Dynamics in Mature Temperate Forests</i>	Kern, Bonfim, Cortese, Freestone	Temple University, Ambler Field Station
64	<i>Are native bee foraging behaviors changing in the urban ecosystem?</i>	Benitez, Sturtevant, Bankson	Massasoit Community College
65	<i>Fecal Matter Preservation: Examining the Effects on Microbial Composition 5-years Later</i>	Cudmore, Wohl	Elizabethtown College
66	<i>Human presence does not elicit spatiotemporal responses in mammals at Hawk Mountain Sanctuary, Pennsylvania</i>	Keller, Mashintonio	Kutztown University
67	<i>Seasonal variation in movements and home range sizes of White-Tailed Deer (Odocoileus virginianus) in a suburban habitat</i>	Potapov, McMackin, Bryntesson, Higgins	Bryn Athyn College
68	<i>A metabarcoding approach to analyze the diet of the Yucatán black howler monkey from Toledo District, Belize</i>	Roberts, Laychock, Habeck, Stone, El Mounadi	Kutztown University
69	<i>Isolation and identification of soil fungi with ovicidal activity against pig parasites</i>	Henrikson, Ruiz, Hernandez, Major, El Mounadi	Kutztown University
70	<i>Comparing carbon footprints of organic and conventional farming systems in Pennsylvania</i>	Graham, Ghalehgozlabbehbahani, Smith, Carr	Rodale Institute
71	<i>Lehmann lovegrass (Eragrostis lehmanniana) removal and black gramma (Bouteloua eriopoda) restoration in the Chihuahuan Desert.</i>	Buerdsell, Lehnhoff	Wilson College
72	<i>"Won't You Be My Neighbor?": An Ecological and Community Rehabilitation Project</i>	Landis	Kutztown University
73	<i>Determining the Biodiversity of Heterotrophic Bacterial Species and Overall Water Quality of Remote and Populated Lake Locations in Eastern Pennsylvania</i>	Hewko, Aruscavage	Kutztown University