

**Annual Meeting of the Mid-Atlantic Chapter of the
Ecological Society of America
(MA-ESA)**

Bowie State University, Bowie, MD

5-7 April 2019

Meeting Theme – Ecology of Unintended Consequences

Friday 5 April 2019

1800-2100 hrs Opening Social Event BJs Restaurant and Brewhouse
(Bowie, MD)

Saturday 6 April 2019

0700-0900 hrs Registration Student Center Ballroom A-D

0800-0900 hrs Breakfast “

0900-0910 hrs Welcome (Dr. Steve Sheffield) “

0910-0920 hrs Welcome (Dr. Patricia Westerman) “

**0920-1200 hrs PLENARY SESSION – “
 Ecology of Unintended Consequences**

0920-0930 hrs Intro to Plenary Session (Dr. Steve Sheffield) “

0930-1000 hrs Plenary Talk I (Dr. David Bowne) “

Title: Accidentally important: how unintended
consequences change the world

1000-1040 hrs Plenary Talk II (Dr. Louis Verchot) “

Title: Climate change: the ultimate unintended
consequence! Contributions of
ecosystems science

1030-1050 hrs Coffee Break “

1050-1130 hrs Plenary Talk III (Mr. Joseph Galella) “

Title: Novel “chemical cocktails” in inland waters
are a consequence of the freshwater
salinization syndrome

1130-1200 hrs	Plenary Discussion Panel	”
1200-1330 hrs	LUNCH	“
1200-1300 hrs	MA-ESA Business Meeting	CNSMN 1225
1200-1330 hrs	Workshop I (Career ecology: What’s your story?)	CNSMN 1220
	Workshop II (Science Policy 101: ways an ecologist can engage in the policy process)	CNSMN 1222
1330-1630 hrs	Oral Sessions	CNSMN 120-130
1515-1530 hrs	Coffee Break	CNSMN 1230 Lobby
1630-1830 hrs	Poster Session	CNSMN 1 st Floor Hallways
1900-2130 hrs	Closing Social Event	Student Center Ballrooms A-D

* Dinner

* Closing Social Event Speaker – Dr. Robert Musil, President, Rachel Carson Council

Title: Unintended consequences and environmental justice: from Rachel Carson to today

* Student Presentation Awards (undergrad, grad, oral, poster)

* Book signing – Dr. Musil (2 books)

Sunday 7 April 2019

0900-1200 hrs	Field Trip	Patuxent Wildlife Research Center (next door to Bowie State University)
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ORAL SESSIONS (* = presenter)

Session 1 - Conservation/Biodiversity/Pop Dynamics

CNSMN Room 1230 (Moderator: Dr. Carlos Iudica)

- 1:30 PM Kartik Murtry*, Dilip Naidu, and Sumanta Bagchi
Centre for Ecological Sciences, Indian Institute of Science
Correspondence between abrupt vegetation shifts and their early warning signals
- 1:45 PM Kristen Greaney*, and Jay Kelly
Dept of Science and Engineering, Raritan Valley Comm College
Effects of temperature, extreme weather events, habitat patch size, and matrix on amphibian diversity and abundance in New Jersey
- 2:00 PM Douglas Boucher*¹, and Ethan Davis²
White Acre Farms¹; Dept of Geography, Penn State Univ²
Malthus backwards: the growth of human populations and food supply since 1961
- 2:15 PM Rebecca Dunkleberger*, and Linda Johnson
Dept of Biology, Chatham Univ
Lead and copper accumulation in lichen at Powdermill Nature Reserve
- 2:30 PM Olivia Turner*, Megan Conway, and Heather Sahli
Dept of Biology, Shippensburg Univ
Pollination biology and natural selection in the Pennsylvania endangered dwarf iris, *Iris verna*
- 2:45 PM* Jessica Ray*¹, Jay Kelly¹, Ryan Rebozo², and J. Rhoads² (***)**CANCELLED**(***)
Dept of Science and Engineering, Raritan Valley Comm College¹; Pinelands Preservation Alliance²
Restoring coastal habitats through compromise beach management in New Jersey
- 3:00 PM Nicole Fusco*¹, Jason Munshi-South¹, and Ellen Pehek²
Dept of Biology, Fordham Univ¹; NYC Parks and Rec Dept²
Genetic connectivity of stream salamander populations within stream systems in the NY City metropolitan area
- 3:15-3:30 PM COFFEE BREAK
- 3:30 PM Stacy Smith*¹, Amy Faivre²
Dept of Agronomy, Univ of Florida¹; Dept of Biological Sciences, Cedar Crest College²
Reproductive biology of a rare endemic Florida plant *Euphorbia rosescens* with a complex sexual system
- 3:45 PM Megan Carr*, Lea R. Johnson
Dept of Plant Biology and Landscape Architecture, Univ of Maryland – College Park
Shifting patterns of forest cover along an urban-rural gradient
- 4:00 PM Jaimie Kittle*¹, Colleen Winters¹, Brian Masters¹, and Phil Allman²
Dept of Biology, Towson Univ.¹; Dept of Biological Sciences, Florida Gulf Coast Univ²
Use of conservation genetics for a population of Home's hingeback tortoise (*Kinixys homeana*) in central Ghana

4:15 PM Dietrich Epp Schmidt, and Stephanie A. Yarwood
Dept of Environmental Science and Technology, Univ of Maryland – College Park
Urban microbes: heavy metals, nitrogen cycling and methanogenesis, oh my!

**Session 2 – Climate/Disturbance/Ecol of Unintended Consequences/Urban Sustainability
CNSMN Room 1222 (Moderator: Dr. Kari Debbink)**

1:30 PM Taniya Roy Chowdhury*, Stephanie A. Yarwood
Dept of Environmental Science and Technology, Univ of Maryland – College Park
Microbial insights into freshwater tidal wetland redox biogeochemistry

1:45 PM Xia Chen*
South China Botanical Garden, Chinese Academy of Sciences
Synergistic responses of carbon metabolism and hydraulic conductivity for woody plants during drought

2:00 PM Aysenne Bartlebaugh*, Leandra Bello, Samantha Boich, Michael Grove, Courtney Richmond,
and Nathan Ruhl
Dept of Biological Sciences, Rowan Univ
Differences in PC:CHL ratio across a reservoir series in southern New Jersey during the summer

2:15 PM Ernest Osburn*¹, Jennifer Knoepp², and John E. Barrett¹
Dept of Biological Sciences, Virginia Tech¹; USDA Forest Service, Coweeta Hydrological Lab²
Historical forest disturbance alters microbial diversity and ecosystem function in Appalachian soils

2:30 PM Emma Witt*
Dept of Environ Sciences, Stockton Univ
Response of vernal pools to precipitation events

2:45 PM Timothy Swartz*, Matthew Helmus, and Jocelyn Behm
Center for Biodiversity, Dept of Biology, Temple Univ
Development creates novel habitats and leads to diversification of the Hemipteran communities on a Caribbean island

3:00 PM Brian Czech*
Center for the Advancement of the Steady State Economy
The trophic conundrum: unintended consequences of ecosystem services markets

3:15-3:30 PM COFFEE BREAK

3:30 PM Mollie McGee*, and Lisa Horth
Dept of Biology, Old Dominion Univ
Habitat preference of *Osmia lignaria* in Hampton Roads, Virginia

3:45 PM Elizabeth Perkin*
Dept of Biology, McDaniel College
Stream insect acclimation to artificial light at night

- 4:00 PM Joshua Price*¹, Jill Felker¹, Melissa Buchter¹, Zachary Weagly¹, Katherine Baker², and Tami Mysliwicz¹
Dept of Biology, Penn State Univ – Berks¹; Dept of Biology, Penn State Univ – Harrisburg²
Isolation of pathogenic microbial communities and bacteriophage in the Blue Marsh Watershed
- 4:15 PM Payton Phillips*, Jocelyn Behm, Matthew Helmus
Dept of Biology, Temple Univ
Human activities alter movement of three lizard species on Curacao
- 4:30 PM Caty Saffarinia*, Tornia Anderson-Morgan, Caitlin Arlotta, and Matthew Richardson
Division of Sciences and Mathematics, Univ of the District of Columbia
Varieties of sweet potatoes for urban agriculture

Session 3 – Invasion/Restoration/Biogeochemistry CNSMN 1220 (Moderator: Dr. Tyesha Burks)

- 1:30 PM Richard Gardner*, and Heather Cuthbert
T&A Ecological Research
The spotted lanternfly – observations and thoughts from the front line in Berks Co, Pennsylvania
- 1:45 PM Margaret Park*, and Laura Gough
Dept of Biology, Towson Univ
Invasion ecology of *Miscanthus sinensis*
- 2:00 PM Samuel Dainton* and Abigail A.R. Kula
Dept of Science, Mount St. Mary's Univ
Nasty neighbors: evaluating the effects of garlic mustard (*Alliaria pettiolata*) on nearby plants
- 2:15 PM Janet Morrison*
Dept of Biology, The College of New Jersey
Metabolomic responses of a native and non-native shrub-layer species to deer exclosure and herbivory in suburban forests
- 2:30 PM Rebecca Fletcher*, Jacob Barney, and Kayla Varnon
Dept of Biology, Virginia Tech
Climate driven differences in seed germination traits in an invasive grass
- 2:45 PM Holly Martinson*¹, and Michael Raupp²
Dept of Biology, McDaniel College¹; Univ of Maryland – College Park²
Does leaf size constrain oviposition in the brown marmorated stink bug, *Halyomorpha halys*?
- 3:00 PM Richard Gardner, and Heather Cuthbert
T&A Ecological Research
Lessons from four years of chasing the wild American chestnut, *Castanea dentata*
- 3:15-3:30 PM COFFEE BREAK
- 3:30 PM David Grow, Vanessa Beauchamp, and Laura Gough
Dept of Biological Sciences, Towson Univ
Short-term plant community impacts of an invasive tree removal

- 3:45 PM Morgan Thompson*, and William Lamp
Dept of Entomology, Univ of Maryland – College Park
Aboveground insect herbivory alters a belowground plant-microbe mutualism
- 4:00 PM Steven McBride*¹, Noah Fierer², and Michael Strickland³
Dept of Biological Sciences, Virginia Tech¹; Dept of Ecology and Evolutionary Biology, Univ of Colorado²; Soil & Water Systems, Moscow, ID³
Volatile organic compounds from decomposing leaf litter fuel microbial metabolism and alter community composition
- 4:15 PM Oluwatosin Ogunmayowa*, and Meredith Steele
Dept of Biological Sciences, Virginia Tech
The macroscale variation in nutrient loads via scaling functions
- 4:30 PM Eni Baballari*, and Stephanie Yarwood
Dept of Environmental Science and Technology, Univ of Maryland – College Park
What happens to soil, plants, and microbes when Bloom biosolids are added?

POSTER SESSION (* = presenter)

Agroecology

(1) Kirk Cherneskie*¹, Denise Finney¹, and Gladis Zinadi²
Dept of Biology, Ursinus College¹; Rodale Institute²
Soil health in organic and conventional vegetable systems in different tillage regimes

(2) Madison Moses*, and Denise Finney
Dept of Biology, Ursinus College
Assessing the nitrogen conundrum at the Ursinus College Organic Farm

Behavior

(3) Malik Black*, and Matthew Persons
Dept of Biological Sciences, Susquehanna Univ
The effect of intraguild predators on chemically-mediated feeding interference in the wolf spider *Pardosa milvina*

(4) Dante' Dobbins*, and Matthew Persons
Dept of Biological Sciences, Susquehanna Univ
Do spiders use plant essential oils as repellents or attractants for preferred vegetation?

(5) Stefani Rath*
Dept of Biology, Bryn Athyn College
Suburban white-tailed deer predictivity of feeding schedules

(6) Eugene Potapov*, Fredrik Bryntesson, Edward Higgins, and Grace McMackin
Dept of Biology, Bryn Athyn College
Application on knot theory to the analysis of animal movement: an example of white-tailed deer

Biogeochemistry

(7) Alexandra Matthews*¹, Shea Wales², and Christopher Gough²
Dept of Biological Sciences, Rutgers Univ – New Brunswick¹; Dept of Biology, Virginia Commonwealth Univ²
Leaf nitrogen and chlorophyll variation as biochemical indicators of production stability in Michigan forests

(8) Taylor Brown*¹, Julia Simpson¹, Jessica Peterman¹, John E. Barrett¹, Michael Strickland², and Steven McBride¹
Dept of Biological Sciences, Virginia Tech¹; Soil and Water Systems, Univ of Idaho²
Low molecular weight carbon: impacts on C and N dynamics under different moisture regimes

Biodiversity

(9) Carly Strickland*¹, Pranav Podel¹, Alexis Peipszowski¹, Kathryn Mickle², and Nathan Ruhl¹
Dept of Biological Sciences, Rowan Univ¹; College of Science, Health, and the Liberal Arts, Thomas Jefferson Univ²
Zooplankton biodiversity patterns in a novel flooded cranberry bog complex

(10) Steven Schulze*¹, and Emma Perry²
Dept of Biology, Rutgers Univ¹; Dept of Biology, Unity College²
The first records of marine tardigrades from New Jersey, USA

(11) Taylor Dobson*, Brian Alfaro, John Alviar, Ashley Zelinski, Michael Grove, Courtney Richmond, and Nathan Ruhl
Dept of Biological Sciences, Rowan Univ
Differences in zooplankton biodiversity between reservoirs in southern New Jersey

(12) Robert Spicer*¹, Nathan Ruhl¹, and Ariel Lugo²
Dept of Biological Sciences, Rowan Univ¹; Research and Development, US Forest Service²
Successional trajectory of tree community differs by landform position in a secondary urban subtropical forest following a major hurricane

(13) Eric Yee*
Dept of Earth and Planetary Sciences, Johns Hopkins Univ
Soil microarthropod diversity does not reflect Pb-contamination levels in the rhizosphere of metal hyperaccumulating *Plantago* spp.

(14) Allison Blanchette*, and Meghan Avolio
Dept of Earth and Planetary Sciences, Johns Hopkins Univ
The divergent effect of income on residential lawn and floral plant biodiversity

(15) Dayanara Galan*, Kristelle Pierre, Melissa Miksits, George Dwamena, and Maurice Laguerre
Dept of Biological Sciences, SUNY – Old Westbury
Comparative analysis of biodiversity and carbon sequestration in SUNY – Old Westbury deciduous forest edge and interior plots

Climate Change

(16) Garrett Evans*, and Laura Leites
Dept of Ecosystem Science and Management, Penn State Univ
Evaluating adaptation to climate in *Acer rubrum* populations to understand responses to climate change

(17) Megan Rhone*, and Amy Savage
Dept of Biological Sciences, Rutgers Univ – New Brunswick
Assessing the effects of influxes of fine woody debris from winter storms on arthropod communities in the New Jersey Pine Barrens

(18) Abigail Jamison*, and Laura Leites
Dept of Ecosystem Science and Management, Penn State Univ – University Park
Evaluating interactions between adaptation to climate and competition in *Juglans nigra* populations

(19) Ourania Nikolaidis*
Dept of Biology, Rutgers Univ – Camden
Effects of urban stress on squash bee pollination networks

(20) Benjamin Davidson*¹, and Emily Mooney²
Dept of Biology, Vassar College¹; Dept of Biology, Univ of Colorado – Colorado Springs²
Effects of plant bug herbivory and warming on the fitness of *Ligusticum porteri*

(21) Emma Sullivan*, and Kristin Strock
Dept of Biology, Dickinson College
Extreme rain events alter water temperature and dissolved oxygen concentration in Pennsylvania reservoirs

Competition

(22) Iman Elkhatab*, Doris Politz, Ana Konyak, and Janice L. Krumm
Dept of Biology, Widener Univ
Spicebush endophytes inhibit growth of the plant pathogen *Fusarium oxysporum*

Conservation

(23) Julia Baer* and Abigail A.R. Kula
Mount St. Mary's Univ
The effects of mycorrhizal fungi as a fertilizer for *C. pepo*

(24) Shannon Lynch*, and Amy Savage
Dept of Biological Sciences, Rutgers Univ – New Brunswick
Mutualisms in the age of rapid global change

(25) Taylor Donovan*, and Pedram Daneshgar
Dept of Biology, Monmouth Univ
Characterizing northern diamond terrapin nest site selection with respect to vegetation in southern New Jersey

(26) Shazneka Blue*, Eve Bell, and Maria Shumskaya
School of Natural Sciences, Kean Univ
Next generation sequencing analysis of dead wood as a method to study diversity of saproxylic fungi for biodiversity assessment

Disturbance

(27) Kathleen McGuinness*, Lara Beck, Emma Witt, and Jeanette Myers
Dept of Environmental Sciences, Stockton Univ
Impact of forest management on throughfall volumes in a coastal plain pine-oak forest

(28) Eric Bartkowski*, Lauren Lynch, Michael Stellitano, Zachary Wisher, and Eric Wiener
School of Theoretical and Applied Science, Ramapo College of New Jersey
Spatial and temporal patterns of tree mortality in two mixed hardwood forests in the New Hersey Highlands

Ecology of Unintended Consequences

(29) Melanie Fetsko*, and Ryan Utz
Falk School of Sustainability, Chatham Univ

Assessing the effects of an invasive plant, Japanese barberry, on forest amphibians in western Pennsylvania suburban forests

(30) Devyani Mishra*, and Janet Morrison
Dept of Biology, The College of New Jersey
Edge effect in bird communities of fragmented suburban forests

(31) Jill Felker*¹, Lauren Mehalik¹, and Katherine Baker²
Dept of Biology, Penn State Univ – Berks¹; Dept of Biology, Penn State Univ – Harrisburg²
Impacts of microbial communities in green roofs: use of triclosan-containing graywater irrigation

(32) Daniela Nattes, Elizabeth Nemeč*, Elena Nattes, Claire Paul, Lucas Pick, and Janet Morrison
Dept of Biology, The College of New Jersey
The effect of long-term deer enclosure on native tree cover in northeastern American suburban forests

(33) Jennifer Gilmore*¹, Andrew Wilson¹, Douglas Nowacek², and Wendy Piniak²
Dept of Environmental Studies, Gettysburg College¹; Marine Lab, Nicholas School of the Environment, Duke Univ²
Impact of recreational boat noise on eastern oyster (*Crassostrea virginica*) larval settlement

(34) Lisa Wheeler*, and Vanessa Beauchamp
Dept of Biological Sciences, Towson Univ
A look at a seed bank within a riparian wetland

(35) Michaela Sten*, and Meghan Avolio
Dept of Earth and Planetary Sciences, Johns Hopkins Univ
Plant communities and soil characteristics of Baltimore's informal green areas

Education

(36) Abigail Schmid*, and Emilie Stander
Dept of Science and Engineering, Raritan Valley Comm College
Green roofs and food production

(37) Sara Do*, Emma Podietz, and Lea R. Johnson
Dept of Plant Science and Landscape Architecture, Univ of Maryland – College Park
Planting for urban wildlife and its connection to people: Baltimore Biodiversity Toolkit

(38) Kenneth Klemow*¹, Diane Ebert-May¹, Carmen Cid², Alan Berkowitz³, George Middendorf⁴, Teresa Mourad⁵, and Bob R. Pohlad⁶
Dept of Biology, Wilkes Univ¹; Dept of Biology, East Connecticut State Univ²; Cary Institute of Ecosystem Studies³; Dept of Biology, Howard Univ⁴; Ecological Society of America⁵; School of Natural Sciences and Mathematics, Ferrum College⁶
Implementing an integrative framework for undergraduates: the Ecological Society of America's Four Dimensional Ecology Education (4DEE) Initiative

(39) Reekarl Plerre*, Lydia Geevarghese, Taesha Lillard, and Lenisha Witt
Dept of Biological Sciences, SUNY – Old Westbury
A comparative analysis of the difference in species composition and diversity between interior and exterior plot on the basis of soil porosity and texture

(40) Delivrance Jenkins*, Fabiola Pacheco-Valencia, Jaclyn Fontana, and Syprina Ellis
Dept of Biological Sciences, SUNY – Old Westbury

Biomass accumulation of a permanent forest interior plot from 2015-2018

(41) Sydney Coscia*, Jourvonn Skeen, Sarah Sadik, Gisela Gonzalez, Valeria Hidalgo
Dept of Biological Sciences, SUNY – Old Westbury
The effect of longitude on tree biodiversity and carbon storage potential in deciduous forests

Evolution

(42) Jason Burkholder*, and Tammy Domanski
Dept of Biological Sciences, Towson Univ, and Anne Arundel Community College
Molecular characterization of enterococci sources in the Anne Arundel County region

Genetic Diversity

(43) Sai Batchu*, and Janet Morrison
Dept of Biology, The College of New Jersey
Comparison of genetic variation between smutted and healthy populations of *Andropogon virginicus*

Invasion

(44) Benjamin Wolf¹, David Ward², and Ryan Utz¹
Falk School of Sustainability, Chatham Univ¹; Dept of Biological Sciences, Kent State Univ²
Effects of grazing on growth and water use by invasive *Bromus inermis* and natives *Andropogon gerardii* and *Schizachyrium scoparium*

(45) Henry Wald*, Martina Mateu, Andrew H. Baldwin, and Stephanie A. Yarwood
Dept of Environmental Science and Technology, Univ of Maryland – College Park
Dark septate endophyte of invasive *Phragmites australis* promotes aboveground growth of this lineage under mesohaline conditions

(46) Matthew Morris*, Alison Molnar, and Ryan Utz
Falk School of Sustainability, Chatham Univ
Impact of an exotic invasive shrub, *Berberis thunbergii*, on ground-dwelling arthropod abundance in eastern North American deciduous forest soil macrofauna communities

(47) Quentin Rice*, Phoebe Cooper, and Ryan Utz
Falk School of Sustainability, Chatham Univ
The effects of invasive Japanese barberry (*Berberis thunbergii*) on eastern deciduous forest soil macrofauna communities

(48) Hannah Rosche*, Alysha Slater, and Ryan Utz
Falk School of Sustainability, Chatham Univ
Assessing the influence of *Berberis thunbergii* invasion on small mammal density and antipredator behavior in Pennsylvania forests

(49) Daniela Nattes*, and Janet Morrison
Dept of Biology, The College of New Jersey
Invasive species *Microstegium vimineum* finds success in northeastern American suburban forests by taking advantage of open space

Microbial Community Ecology

(50) Rachel Daku*, and Jack R. Holt
Dept of Biological Sciences, Susquehanna Univ
Discharge and diatom biofilm communities in the Susquehanna River during the summers of 2016-2018

Physiology

(51) Josette McLean*¹, Patricia Rosa¹, and Humberto Diaz²

Dept of Environmental Services, St. George's Univ¹; Marine Science and Conservation Division, Nicholas School of the Environment, Duke Univ²

Investigating the impact of pH and temperature on blue crab juveniles

(52) Covell McDermot*¹, Tara Trammell¹, and Vince D'Amico²

Dept of Plant and Soil Sciences, Univ of Delaware¹; NRS-8, USDA Forest Service, Univ of Delaware²

The relative importance of above- and below-ground conditions on red maple physiology in urban forests: a manipulative field experiment

(53) Jacob Schmid*, Shauna Watkins, Marissa Jarrell, William J. Biggers

Dept of Biology, Wilkes Univ

Induction of settlement and metamorphosis of the marind polychaete annelid *Capitella teleta* by bacterial biofilms

Plant, Soil, and Microbial Interaction

(54) Jessica Eister*, and Alissa Packer

Dept of Biological Sciences, Susquehanna Univ

Effects of rhizobia, mycorrhizae, and fertilizer on *Phaseolus lunatus* (lima bean)

(55) Emily Wixted*, and Holly Martinson

Dept of Biology, McDaniel College

Effects of experimental deer exclusion on pollinator-plant interactions

(56) Christopher Blackley*, Jacob King, Derek Kopf, Emily Perez, Harrison Weiss, and Eric Wiener

School of Theoretical and Applied Sciences, Ramapo College of New Jersey

Daily and annual variation in concentrations of migrant raptors across multiple observation sites within the Atlantic Flyway of North America

(57) Iris Martinez*, and Harald Beck

Dept of Biological Sciences, Towson Univ

Effects of experimental defaunation on seedling dynamics of a neotropical rainforest

(58) Robin Minch*¹, and Holly Gaff²

Dept of Biology, McDaniel College¹; Dept of Biological Sciences, Old Dominion Univ²

Mark-recapture study of multiple Ixodidae species: a population comparison between six field sites in southeastern Virginia

Restoration

(59) Patrick Baltzer*, and Vanessa Beauchamp

Dept of Biological Sciences, Towson Univ

Floodplain reconnection and legacy sediment removal's effect on plant community dynamics in recently restored piedmont streams

(60) Lyla Kaul*, and Kate Douthat

Dept of Ecology, Evolution, and Natural Resources, Rutgers Univ – New Brunswick

Soil particle size distribution in mowed and un-mowed detention basins

(61) Michaela Fehn*, Justine Yeager, Cassidy Heid, Kellie Kalada, Kabita Kandel, and Kenneth Klemow

Dept of Biology, Wilkes Univ

Assessing success of a forest reclamation approach in a northeastern Pennsylvania anthracite mine site – a

baseline assessment

(62) Lindsay Wood*¹, Stephanie A. Yarwood¹, Meghan Fellows², and Chris Ruck²
Dept of Environmental Science and Technology, Univ of Maryland – College Park¹; Recreational Facilities and
Services, Fairfax County Government
Developing biological metrics: monitoring riparian restoration sites in Fairfax County, Virginia

(63) Jonathan Moy*¹, Lindsay Wood¹, Stephanie A. Yarwood¹, Meghan Fellows²
Dept of Environmental Science and Technology, Univ of Maryland – College Park¹; Recreational Facilities and
Services, Fairfax County Government
Quantification of the bacterial and nitrogen-cycling gene abundances in riparian restoration sites in Fairfax
County, Virginia

Species Interactions

(64) Maggie Garrity*, Sean Fisher, and Alissa Packer
Dept of Biological Sciences, Susquehanna Univ
Effect of species-specific microbial communities on lima bean defense following simulated herbivory

(65) Ariel Heminger*, and David Haak
School of Plant and Environmental Sciences, Virginia Tech
Microbiome mediated plant-pollinator interactions in non-agricultural systems

(66) Matthew Suchocki*, Julian Sheppy, Megan Muller-Girard, and Laura Gough
Dept of Biological Sciences, Towson Univ
The effects of fertilizer on a tundra plant community and plant-vole interactions

(67) Alexa Astacio*¹, Evan Perkowski², Doris C. Politz¹, and Janice L. Krumm¹
Dept of Biology, Widener Univ; Dept of Biological Sciences, Texas Tech Univ
Synergistic interactions within a fungal endophyte complex positively impact pepper seedling growth

(68) Kaitlyn Vitrano*, and Alissa Packer
Dept of Biological Sciences, Susquehanna Univ
Impact of rhizobia inoculation timing on the expression of plant defense in lima bean

(69) Joshua Johnson*, and Christopher Sacchi
Dept of Biology, Kutztown Univ
The relationship between acorn mass of red oak, *Quercus rubra*, acorn weevil *Conotrachelus posticus*
predation, seed germination, and seedling growth

Trophic Dynamics and Food Webs

(70) Josie Verter*¹, Kristin Strock¹, Bridget Deemer², and Nicole Hayes³
Dept of Biology, Dickinson Univ
The role of methanotrophs in fueling aquatic food webs and resulting effects on methane cycling in Icelandic
lakes

(71) Katerine Cuzco*, and Holly Martinson
Dept of Biology, McDaniel College
The influences of deer on the soil seedbank: a comparison of methods

(72) Meghan Sadler*¹, Holly Martinson¹, Dana Ferraris²
Dept of Biology, McDaniel College¹; Dept of Chemistry, McDaniel College²
Eau de corpse: volatile organic compounds and their attractiveness to flesh- and fly-eating beetles

Urban Agriculture

(73) Caitlin Arlotta*¹, Ramesh Marupaka², Raghavendhar R. Katha², Devanand Luthria², James Harnly², and Matthew L. Richardson¹

Division of Sciences and Mathematics, Univ of the District of Columbia¹; USDA – Agricultural Research Service²

Edible hibiscus for urban agriculture and advantages of mass selection breeding

LATE ADDITION

Behavior

(74) Helen Wolfe and John D. Styrsky

Dept of Biology, Univ of Lynchburg

Microhabitat preferences of an orb-weaver spider on ant-defended acacias reflect an ontogenetic shift in spider coloration