



# Disturbed Environments Ecological Impact & Management

Mid-Atlantic Chapter, Ecological Society of America

Annual Meeting, April 14 & 15, 2012

Blacksburg, Virginia

## Saturday Program

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8:00-8:45	<b>Registration &amp; Continental Breakfast</b> <i>Holiday Inn</i>		
8:45-11:00	<b>Plenary Session</b> <i>Holiday Inn-Olin/Preston</i>		
8:45-9:00	Welcome & Opening of Meeting <i>Dr. Susan Day, Chair MA-ESA</i> <i>Virginia Tech, Blacksburg, VA</i>		
9:00-10:00	Keynote Address <b>Ecological Processes &amp; Conservation of Biological Diversity in Urban Forest Patches</b> <b>Dr. Greg Shriver</b> <i>Assistant Professor, Department of Entomology &amp; Wildlife Ecology,</i> <i>University of Delaware, Newark, DE</i> <i>Shriver will review our current understanding of ecological processes in urban landscapes and present results from a large-scale urban forest fragmentation study.</i>		
10:00-10:45	Special Topic <b>An Overview of Mountain Top Removal Mining - The Issues &amp; the Science</b> <b>Dr. Stephen Schoenholtz</b> <i>Director of the Virginia Water Resources Research Center</i> <i>Professor of Forest Hydrology &amp; Soils, Department of Forest Resources &amp; Environmental Conservation, Virginia Tech, Blacksburg, VA</i> <i>Schoenholtz will provide an overview of mountaintop removal mining in the Central Appalachians, its impacts on terrestrial and aquatic ecosystems, and efforts to minimize and mitigate these impacts.</i>		
10:45-11:00	Coffee Break — <i>Holiday Inn</i>		
11:00-12:00	<b>Workshop, Business Meeting &amp; Poster Setup</b>		
11:00-11:45	Poster Setup & Preview <i>Holiday Inn-Olin/Preston/Smithfield /Hallways</i> <i>Note: Montgomery is also scheduled for oral sessions in the afternoon. Posters on display boards in Montgomery may not be moved into viewing position until 4:30 pm.</i>	MA-ESA Business Meeting <i>Holiday Inn-Board Room</i>	Getting Funded: Proposal Writing Workshop <i>James Vonesh</i> <i>Virginia Commonwealth University</i> Presented by the MA-ESA Student Section <i>Holiday Inn-Cascades</i>
11:45-12:00	Poster Setup (All posters must be set up by the end of lunch)		

<b>12:00-1:00</b>	<b>Lunch Activities</b>				
12:00-1:00	Lunch Buffet <i>Holiday Inn-Latitudes (seating is available outside, in Attitudes, Latitudes, Olin/Preston, and Cascades)</i>		Poster Preview <i>Holiday Inn-All rooms</i>		
12:30-1:00	MA-ESA Student Section Business Meeting <i>Holiday Inn-Stockholders</i>				
<b>1:10-4:30</b>	<b>Concurrent Oral Sessions – Holiday Inn &amp; The Inn at Virginia Tech</b>				
	<b>Concurrent Sessions I– Holiday Inn &amp; The Inn at Virginia Tech</b>				
1:10-3:10	Track I-A: Urban Ecology & Disturbed Ecosystems  <i>Moderator:</i> <i>Amy Villamagna</i> <i>Holiday Inn—Montgomery</i>	Track I-B: Disturbance Ecology & Ecological Restoration  <i>Moderator:</i> <i>Lauren Howard</i> <i>Holiday Inn—Cascades</i>	Track I-C: Biogeochemistry & Soil Microbial Ecology  <i>Moderator:</i> <i>Madhavi Kakumanu</i> <i>The Inn at VT—Duck Pond</i>	Track I-D: Plant Ecology & Plant-Animal Interactions  <i>Moderator:</i> <i>Dirk Vanderklein</i> <i>The Inn at VT—Cascades A</i>	Track I-E: Invasive Species  <i>Moderator:</i> <i>Christopher Binckley</i> <i>The Inn at VT—Cascades B</i>
3:10-3:30	Coffee Break <i>Holiday Inn &amp; The Inn at Virginia Tech</i>				
	<b>Concurrent Sessions II – Holiday Inn &amp; The Inn at Virginia Tech</b>				
3:30-4:30	Track II-A: Urban Forest Ecology  <i>Moderator:</i> <i>J. Roger Harris</i> <i>Holiday Inn—Montgomery</i>	Track II-B: Aquatic Ecology  <i>Moderator:</i> <i>Julie Charbonnier</i> <i>Holiday Inn—Cascades</i>	Track II-C: Biogeochemistry & Soil Microbial Ecology  <i>Moderator:</i> <i>Madhavi Kakumanu</i> <i>The Inn at VT—Duck Pond</i>	Track II-D: Animal Ecology  <i>Moderator:</i> <i>Dane Ward</i> <i>The Inn at VT—Cascades A</i>	Track II-E: Ecology Education  <i>Moderator:</i> <i>Bruce Grant</i> <i>The Inn at VT—Cascades B</i>
<b>4:30-5:30</b>	<b>Poster Session &amp; Cash Bar – Holiday Inn (Presenters should be by their posters)</b>				
<b>5:30-6:30</b>	<b>Free time – Poster take-down (Please remove posters promptly to facilitate preparation for dinner)</b>				
<b>6:30-7:45</b>	<b>Awards Dinner &amp; Guest Speaker</b> <i>Holiday Inn-Olin/Preston/Smithfield/Montgomery</i>  <b>Ecological Research and Climate Change Policy: How Ecology Intersects with Current U.S. Efforts to Address Climate Change at Home and Abroad</b>  <b>Dr. Michael Wolosin</b> <i>Director of Research &amp; Policy, Climate Advisers, Inc.</i> <i>Visiting Scholar, Resources for the Future, Washington DC</i>  <i>Wolosin will share a broad overview of current U.S. climate policies, dive into a few specific examples of intersections with ecological research, and gaze into the crystal ball to see where we might be headed in the next decade.</i>				

# Sunday Field Trip

<b>8:15</b>	<b>Meet in Parking Lot of Holiday Inn</b>
<b>8:30</b>	<b>Depart promptly at 8:30 a.m. in vans</b>
<b>11:00</b>	<b>Arrive Kayford Mountain – tour</b>
<b>noon</b>	<b>Box lunch at Pavilion</b>
<b>12:45</b>	<b>Depart for Blacksburg (arrive Holiday Inn around 3 p.m.)</b>

## Details of Saturday Oral and Poster Sessions

### Track I-A: Urban Ecology & Disturbed Ecosystems (Holiday Inn-Montgomery)

**Moderator: Amy Villamagna**

<b>Time</b>	<b>Authors—Affiliation of Presenter</b>	<b>Title</b>
1:10	Amy Villamagna*, Beatriz Mogollon, Paul Angermeier, and Elena Bennett <i>Sustainable Development &amp; Conservation Biology Program, University of Maryland</i>	Integrating stakeholder engagement, scenario analysis, and ecosystem-service mapping for conservation planning
1:30	Bonnie Fairbanks*, Dana Hawely, and Kathleen Alexander <i>Department of Biological Sciences, Virginia Tech</i>	Human-augmented food resources in modified environments may lead to changes in behavior and disease in banded mongooses
1:50	Verl Emrick* <i>Conservation Management Institute, Virginia Tech</i>	Plant community structure and ecosystem processes in response to disturbance gradients at Fort Pickett, Virginia
2:10	Megan Wallrichs* and Kevina Vulinec <i>Department of Agriculture &amp; Related Sciences, Delaware State University</i>	Investigating golf course landscapes as viable bat habitat
2:30	Shea Dunifon, Michael Goatley*, Gregory Evanylo, Rory Maguire, Shan Dexin, and Xunzhong Zhang <i>Department of Crop &amp; Soil Environmental Sciences, Virginia Tech</i>	Compost application practices improve quality of turfgrass and a degraded urban soil
2:50	Ian Yesilonis* and Richard Pouyat <i>USDA Forest Service, Northern Research Station, Baltimore Ecosystem Study, UMBC</i>	Carbon stocks in urban forest remnants: Atlanta and Baltimore as case studies

**Track II-A: Urban Forest Ecology (Holiday Inn-Montgomery)****Moderator: J. Roger Harris**

<b>Time</b>	<b>Authors—Affiliation of Presenter</b>	<b>Title</b>
3:30	Blake Troxel*, Max Piana, Colleen Murphy-Dunning, and Mark Ashton <i>School of Forestry &amp; Environmental Studies, Yale University</i>	Relationships between crown and bole size for young urban street trees
3:50	Max Piana*, Blake Troxel, Colleen Murphy-Dunning, and Mark Ashton <i>School of Forestry &amp; Environmental Studies, Yale University</i>	The influence of biophysical factors on the growth and mortality of young urban trees
4:10	Sarah Mincey*, Mikaela Schmitt-Harsh, Matt Patterson, Burnell C. Fischer, and Tom Evans <i>Center for the Study of Institutions, Population, and Environmental Change, Indiana University</i>	Analysis of private urban forest management in Bloomington, Indiana: a social-ecological systems (SES) perspective

**Track I-B: Disturbance Ecology & Ecological Restoration (Holiday Inn-Cascades)****Moderator: Lauren Howard**

<b>Time</b>	<b>Authors—Affiliation of Presenter</b>	<b>Title</b>
1:10	Joe Berg* <i>Biohabitats, Inc.</i>	Regenerative stream conveyance (RSC) as an approach to restoration of ecosystem services
1:25	Carl Zipper*, James Burger, and Daniel Evans <i>Department of Crop &amp; Soil Environmental Sciences, Virginia Tech</i>	Young forest composition and growth on an Appalachian coal surface mine
1:40	Stephen Kunz* <i>Schmid &amp; Company, Inc.</i>	Increase in aquatic resource impacts from longwall coal mining following revision of Pennsylvania underground mining law
1:55	Lauren Howard* <i>Department of Biology, Arcadia University</i>	The roles of fire and environmental factors in plant community dynamics of high-elevation yellow pine woodlands in northeastern West Virginia
2:10	Nina Craig*, Brian Strahm, James Burger, Whitney Nash, and Lee Daniels <i>Department of Forest Resources &amp; Environmental Conservation, Virginia Tech</i>	Long-term carbon and nutrient accrual in coal mine topsoil substitutes in southwest Virginia
2:25	Philip Shirk*, David Patrick, Elizabeth Harper, Kim Howell, and James Vonesh <i>Department of Biology, Virginia Commonwealth University</i>	Community and population-level responses of an Afromontane chameleon assemblage to forest fragmentation

2:40	Anthony Timpano*, David Soucek, Carl Zipper, and Stephen Schoenholtz <i>Virginia Water Resources Research Center, Virginia Tech</i>	Salinity as a benthic macroinvertebrate community organizer in headwater streams of Virginia's central Appalachian coalfield region
2:55	James Deemy* and Edward Crawford <i>Center for Environmental Studies, Virginia Commonwealth University</i>	Vegetative recruitment patterns and seed bank composition in a recently restored mixed tidal regime wetland

### Track II-B: Aquatic Ecology (Holiday Inn-Cascades)

**Moderator: Julie Charbonnier**

Time	Authors—Affiliation of Presenter	Title
3:30	Gregory Anderson*, Emily Cornwell, James Casey, Mark Bain, and Paul Bowser <i>Department of Fish &amp; Wildlife Conservation, Virginia Tech</i>	Host selection and spatiotemporal heterogeneity of viral hemorrhagic septicemia virus: inferences from hierarchical multi-scale occupancy models
3:50	Beatriz Mogollon*, Amy Villamagna, and Paul Angermeier <i>Department of Fish &amp; Wildlife Conservation, Virginia Tech</i>	Mapping cultural ecosystem services: the case of freshwater recreational fishing in the Albemarle-Pamlico basin
4:10	Julie Charbonnier* and James Vonesh <i>Department of Biology, Virginia Commonwealth University</i>	Synthesizing studies of plastic responses to pond drying in amphibians: a meta-analysis

### Track I-C: Biogeochemistry & Soil Microbial Ecology (The Inn at VT-Duck Pond)

**Moderator: Madhavi Kakumanu**

Time	Authors—Affiliation of Presenter	Title
1:10	William Eaton* and Olivier Chassot <i>School of Environmental Life Sciences, Kean University</i>	Soil moisture, nutrients, and microbial communities in the Monteverde Reserve forests: potential for monitoring of climate change
1:30	Kevin Geyer* and John Barrett <i>Department of Biological Sciences, Virginia Tech</i>	Influence of resource gradients on soil microbial communities in a polar desert
1: 50	Jeffery Norman* and John Barrett <i>Department of Biological Sciences, Virginia Tech</i>	Environmental controls on the abundance and activity of ammonia oxidizing bacteria and archaea in temperate forest soils
2:10	Adam Altrichter*, John Barrett, Kevin Geyer, Cristina Takacs-Vesbach, and Michael Gooseff <i>Department of Biological Sciences, Virginia Tech</i>	Landscape history and contemporary environmental drivers of microbial community structure and function

2:30	David Berrier*, Rima Franklin, and Scott Neubauer <i>Department of Biology, Virginia Commonwealth University</i>	The effect of saltwater intrusion on microbial community structure and function in a tidal freshwater marsh
2:50	Lindsey Koren*, Leigh McCallister, Scott Neubauer, Rudolf Jaffè, and Youhei Yamashita <i>Department of Biology, Virginia Commonwealth University</i>	Microbial carbon processing in tidal freshwater wetland soils and the impending impacts from saltwater intrusion
<b>Track II-C: Biogeochemistry &amp; Soil Microbial Ecology (The Inn at VT-Duck Pond)</b>		
<b>Moderator: Madhavi Kakumanu</b>		
<b>Time</b>	<b>Authors—Affiliation of Presenter</b>	<b>Title</b>
3:30	Stephanie Yarwood*, Elizabeth Brewer, Rockie Yarwood, Kate Lajtha, and David Myrold <i>Environmental Science &amp; Technology Department, University of Maryland</i>	The persistence of soil microbes: active community composition and capability to respond to litter addition after ten years of no-inputs
3:50	Jaimie Gillespie*, Rima Franklin, and Scott Neubauer <i>Department of Biology, Virginia Commonwealth University</i>	Changes in methane fluxes of tidal wetlands along a naturally occurring salinity gradient in the James River
4:10	Ember Morrissey*, Joseph Morina, Jaimie Gillespie, and Rima Franklin <i>Department of Biology, Virginia Commonwealth University</i>	Piecing together how soil organic matter dynamics influence the community structure of denitrification and DNRA organisms in tidal wetlands
<b>Track I-D: Plant Ecology &amp; Plant-Animal Interactions (The Inn at VT-Cascades A)</b>		
<b>Moderator: Dirk Vanderklein</b>		
<b>Time</b>	<b>Authors—Affiliation of Presenter</b>	<b>Title</b>
1:10	Sheri Shiflett, Julie Zinnert, and Don Young <i>Department of Biology, Virginia Commonwealth University</i>	Physiological strategies of three co-occurring temperate shrub species: responses that enhance invasibility
1:30	Carrie Seltzer, Colin Kremer, Henry Ndangalasi, and Norbert Cordeiro <i>Department of Biological Sciences, University of Illinois at Chicago</i>	Seedling establishment from experimentally planted seeds of an economically important African tree
1:50	Dabiela Shebitz* and William Eaton <i>School of Environmental &amp; Life Science, Kean University</i>	Forest structure, nutrient dynamics, and <i>Pentaclethra macroleoba</i> growth following deforestation in Costa Rica

2:10	Alyssa Stewart* and Michele Dudash <i>Department of Biology, University of Maryland</i>	Old world nectar and fruit bats: A comparison of obligate and facultative pollinators to examine fitness implications for both plants and pollinators
2: 30	Stephen Via*, Julie Zinnert, Don Young <i>Department of Biological Sciences, Virginia Commonwealth University</i>	Variations in the sensitivity of growth responses to explosives contamination
2:50	Brittney Hopkins*, William Hopkins, Devin Jones, and J. D. Willson <i>Department of Fish and Wildlife Conservation Virginia Tech</i>	Maternal mercury exposure has negative consequences for turtle reproduction

#### **Track II-D: Animal Ecology (The Inn at VT-Cascades A)**

**Moderator: Dane Ward**

<b>Time</b>	<b>Authors—Affiliation of Presenter</b>	<b>Title</b>
3:30	Justin Bredlau* and Karen Kester <i>Department of Biology, Virginia Commonwealth University</i>	Pre- and post-zygotic reproductive barriers between two host-plant complex races of a parasitic wasp
3:50	Chris Latimer* and Dean Stauffer <i>Department of Fish &amp; Wildlife Conservation, Virginia Tech</i>	Avian reproduction in response to vegetation restoration on reclaimed surface-mines in southwest Virginia
4:10	Richard Pendleton, Jeremy Pritt, Brandon Peoples*, and Emmanuel Frimpong <i>Department of Fish &amp; Wildlife Conservation, Virginia Tech</i>	Nest association strength influences patterns of rarity and commonness in New River, Virginia cyprinids

#### **Track I-E: Invasive Species (The Inn at VT - Cascades B)**

**Moderator: Christopher Binckley**

<b>Time</b>	<b>Authors—Affiliation of Presenter</b>	<b>Title</b>
1:10	Dan Tekiela* and Jacob Barney <i>Department of Plant Pathology &amp; Weed Science, Virginia Tech</i>	Non-riparian water dispersal as a mechanism for local dispersal and population expansion of the invasive grass <i>Microstegium vimineum</i>
1:30	Gordon Selckmann*, Charles Dean, and Eric Annis <i>Department of Biology, Hood College</i>	Implications of early life histories on competition between virile and rusty crayfish in the Monocacy River, Maryland
1:50	Christopher Binckley* and Sneha Thomas <i>Department of Biology, Arcadia University</i>	Effects of biopesticides on oviposition in both introduced and native mosquito species



2:10	Ryan Dougherty*, Quinn, Endres, Voigt, and Barney <i>Department of Plant Pathology &amp; Weed Science, Virginia Tech</i>	Characterization of naturalized populations of <i>Miscanthus sinensis</i> in highly disturbed environments
2: 30	Larissa Smith* and Jacob Barney <i>Department of Plant Pathology &amp; Weed Science, Virginia Tech</i>	Establishment year evaluation of the agronomic and invasive potential of fertile <i>Miscanthus × giganteus</i>
2:50	Theresa Quelch* and William Cromartie <i>NAMS, Stockton College</i>	Exotic invasive species on the Richard Stockton College campus, 1970-2012

**Track II-E: Ecology Education (The Inn at VT-Cascades B)**

**Moderator: Bruce Grant**

<b>Time</b>	<b>Authors—Affiliation of Presenter</b>	<b>Title</b>
3:30	Sarah Bray* and Gary Bailey <i>Department of Biology, Transylvania University</i>	Altering college students' misconceptions of evolution requires addressing views that evolution and religion are in conflict
3:45	Rachel Faison*, Eric Hall*, Anne Wright, Holly Houtz, April Corey, and Leigh McCallister <i>Department of Biology, Virginia Commonwealth University</i>	Carbon awareness partnership (CAP)
4:00	William Hicks* <i>Department of Biology, Bethany College</i>	Helping students understand global warming and carbon cycles using research projects on woody debris, aboveground biomass, and litter decomposition
4:15	Bruce Grant* <i>Departments of Biology &amp; Environmental Science, Widener University</i>	Pedagogy for the rest: improving ecological literacy through a student-centered problem-based non-majors environmental science course



**4:30-5:30—Poster Presentations at the Holiday Inn (Olin/Preston/Smithfield/Montgomery/Hallways)**

#	Title	Presenter
1	The use of probiotics to prevent a lethal disease in the iconic Panamanian golden frog	Becker
2	Female age and caterpillar frass abundance correlate with annual fecundity in the Prothonotary Warbler ( <i>Protonotaria citrea</i> )	Besterman
3	Geographic variation in testosterone levels in the Rufous Collared Sparrow	Escallon
4	A habitat model for the detection of red-backed salamanders at C. F. Phelps Wildlife Management Area, Fauquier and Culpeper Counties, Virginia	McGhee
5	Genetic analysis of populations of the cownose ray, <i>Rhinoptera bonasus</i> , in the Chesapeake Bay and Gulf of Mexico	McVeigh
6	Microhabitat of flatwoods salamander egg deposition sites	Powell
7	Species diversity and the succession of dung beetles to horse dung on Assateague Island	Rentz
8	UV <sup>+</sup> /UV <sup>-</sup> experiment on growing snapping turtles ( <i>Chelydra serpentina</i> ): implication for disturbed environments	Rohtla
9	The nesting and neonate ecology of <i>Pituophis melanoleucus</i>	Smith
10	Quantifying <i>Metagonimoides oregonensis</i> infection in stream salamanders	Wyderko
11	Ontogeny of risk across the aquatic-terrestrial interface: how changing behavior and morphology affect predation through anuran metamorphosis	Abinette
12	The genotoxicity of atrazine in the cnidarian <i>Hydra magnipapillata</i>	Bowers
13	A human well-being framework to aid in mapping tradeoffs among ecosystem services and stakeholders	Chan
14	Maternal transfer of mercury in the northern watersnake ( <i>Nerodia sipedon</i> ): effects on offspring performance, and learning.	Chin
15	Metabolic response of the freshwater mussel <i>Pyganodon grandis</i> to alterations in temperature and photoperiod	Clements
16	Factors influencing inter- and intra-specific variation in mercury bioaccumulation by snakes inhabiting a contaminated river floodplain	Drewett
17	Assessing the genotoxicity of Triclosan to American Bullfrog tadpoles	Emery
18	Organic matter dynamics of reconstructed streams draining mines in the central Appalachians of Virginia	Krenz
19	Preliminary evaluation of gastric lavage as a technique for sampling diets of bonefish ( <i>Albula vulpes</i> ) in Eleuthera, The Bahamas	Whitebread & Wisniewski
20	Innovative mesocosm design to investigate the impacts of ocean acidification on carbon cycling in coastal waters	Cooper

21	Microbial diversity: a spatial study of microbial community assemblages in the Floridian Aquifer	Hill
22	Response of microbial communities to matric and osmotic stress in soil systems	Kakumanu
23	Inhibitory effects of <i>Bromelia pinguin</i> ( <i>Bromeliaceae</i> ) on soil ecosystems in primary forests of Costa Rica	Looby
24	Environmental factors influencing the distribution of <i>Leptospira interrogans</i> in soil and surface waters using quantitative PCR	Opgrand
25	Environmental effects on pea aphids and their defensive bacterial symbionts	Smith
26	The metabolic fate of soil-derived dissolved organic carbon in the high-latitude Kongsfjord system	Tucker
27	The role of microbial communities on bullfrog skin in host disease resistance	Walke
28	Findings applicable to wetland restoration from a three-year study of natural patterns of plant colonization along excavated basin shorelines in relation to reproductive and life history traits	Gadwa
29	Pre-restoration stream data for amphibian populations at Big Spring Run, Lancaster County, PA	Payne & Hartzell
30	Seed production, germination, and morphological traits for <i>Vallisneria americana</i> crosses occurring within and among two geographic regions: implication for managed relocation	Peterson
31	Five years of stream restoration monitoring data demonstrate successful conversion of rip rap lined trapezoidal channel to diverse stream and wetland habitat	Straughan
32	Effects of parental origin on seed production and germination in controlled crosses of <i>Vallisneria americana</i> : implications for stock selection in restoration of submersed aquatic vegetation	West
33	Timing of disturbance alters gall-making arthropod abundance as well as goldenrod biomass and height in old field habitat	Bussell
34	Defining critical forest habitat for area-sensitive songbirds in Pennsylvania	Greenwald
35	Human disturbance, incubation rates, and nest survival of colonial waterbirds at Cape Lookout National Seashore, NC.	Heller
36	Dendrochronology and fire history of <i>Pinus rigida</i> on North Fork Mountain, WV	Kroll
37	The use of sustainable development practices to reconstruct tropical forests environments at El Bosque Nuevo in northern Costa Rica	Madigosky
38	Microclimate of a light gap at the Amazon Conservatory of Tropical Studies (ACTS), Loretto, Peru: a five year comparative analysis	Madigosky
39	Woodland salamander responses to silvicultural practices within the Monongahela National Forest of West Virginia	Mahoney
40	The extirpation of the Ridgway's Hawk ( <i>Buteo ridgwayi</i> ) from three Haitian satellite islands	White
41	Small mammal abundance and distribution on military training lands on Fort Pickett Maneuver Training Center, Blackstone, Virginia	Wolf
42	Landscape heterogeneity of airborne Hg (mixed dissolved, particulate and vaporous) and corresponding Hg concentration in <i>Prunus</i> sp. leaves within Rockingham Co., VA	Procopio

- 43 Landscape heterogeneity of airborne Hg (mixed dissolved, particulate and vaporous) and a sampling of total Hg concentration in micro-invertebrates within Rockingham Co., VA. Schwenk
- 44 Can plant trait responses and their effects on ecosystems be generalized across land-use intensity gradients and biomes? Lienin
- 45 Dendrochronology-based fire history of mixed pine-oak forest on Warm Springs Mountain, Virginia Sams
- 46 Modeling genetic differences in tree growth responses to changed climate with provenance tests data and mixed-effects modeling techniques Leites
- 47 Vegetation-desert dynamics in the southern boundary region of Tengger Desert, northwestern China Wang
- 48 The interaction between invasive tree *Ailanthus altissima* and native *Robinia pseudoacacia* in eastern deciduous forest Bao
- 49 Patterns of habitat utilization and evidence of competitive displacement in crayfish species in the Monocacy River Annis
- 50 Timing of gamete release in the ctenophore *Mnemiopsis leidyi* Bowman & Wilczynski
- 51 Herbivory by white-tailed deer on invasive plants in suburban/exurban forests Fertitta & Zymaris
- 52 Response of the invasive Asiatic sand sedge to beach nourishment James
- 53 Host plants and agro-ecology of the invasive brown marmorated stink bug in Virginia. Kuhar
- 54 Competition between IUCN, near-threatened, red-bellied turtles (*Pseudemys rubriventris*) and invasive red-eared slider turtle (*Trachemys scripta elegans*) Pearson
- 55 Changing flora of the Richard Stockton College campus, 1970-2012 Quelch
- 56 The role of whitebark pine facilitation and blister rust mortality in treeline community development, Northern Rocky Mountains Resler
- 57 Topographic influences on the distribution of white pine blister rust in *Pinus albicaulis* treeline communities, Montana, U.S.A. Smith-McKenna
- 58 Riparian vegetation abundance changes after dam removal with a focus on invasive species Walker
- 59 Preliminary examination of the indirect and direct effects of white-tailed deer (*Odocoileus virginiana*) on native and invasive plant species Woodworth
- 60 Measurement of invasive plant cover changes to prioritize and assess exotic plant control efforts in a rare Virginia wetland Yoder
- 61 Does stem length affect physiology and hydraulic conductance in pole bean? Davies
- 62 Comparative reproductive traits of two competing invasive species of crayfish (*Orconectes rusticus* and *Orconectes virilis*) in the Monocacy River Dean
- 63 Predation on nuts of the American beech (*Fagus grandifolia*) Gettinger
- 64 Elemental Defense in *Alyssum murale*: impacts on specialist and generalist insect herbivores Igwe
- 65 Alkaloid levels in leaves of *Lobelia cardinalis* from two Pennsylvania sites Johnson

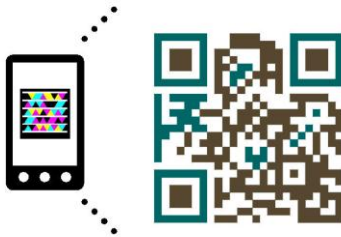
66	Effects of nutrient deficiency on the mechanism of the Rack-1 gene in <i>Arabidopsis thaliana</i>	Johnson
67	Differential impacts of tree seedling diversity on resistance to big versus small enemies	LaForgia
68	Temporal changes in stream detritivore communities are influenced by interaction between a dominant consumer and disturbance	Martin
69	Seasonal colonization of Hydra in a South-Eastern Pennsylvania pond	Mlynek
70	Dung beetles ( <i>Coleoptera: Scarabaeidae</i> and <i>Geotrupidae</i> ) communities of Eastern Maryland	Price
71	The effects of land management, pollination, and density dependence on the survivorship and fecundity of <i>Gentiana autumnalis</i>	Rebozo
72	Interactions between fungi and the Ni-hyperaccumulator, <i>Alyssum murale</i>	Stallworth
73	Using fire scars to construct a historic timeline of disturbance in northeastern West Virginia pine forests	Truong
74	Disturbance-dependent species area relationships in riverine rock pool communities	Vonesh
75	Population estimate of the northern pinesnake, <i>Pituophis melanoleucus</i> , in New Jersey	Ward
76	The distribution and prevalence of <i>Metagonimoides oregonensis</i> (Trematoda: Heterophyidae) in southwestern Virginia and northwestern North Carolina	Zemmer
77	Comparison of soil carbon dynamics in residential lawns and unmanaged forest	Campbell
78	Effects of vermicompost in potting soils and extract foliar sprays on vegetable health and productivity	Farb
79	Real-time ecologic interactions and their effect on the bioaccumulation of DDE by the worm species <i>Eisenia fetida</i> and <i>Lumbricus terrestris</i>	Kleiner
80	Bioindicators of soil quality in intercropped loblolly-switchgrass systems managed for biofuels	Baasandavaa
81	Land management effects on soil nutrients, biomass, and fauna and fungal communities in Costa Rica	McGee
82	Bacterial community dynamics along a developing coastal sand chronosequence	Shanmugam
83	Evidence for associative nitrogen fixation in feedstock grasses	Wewalwela
84	Relation of microbial biomass carbon and tree root distribution to soil carbon dynamics four years after urban soil rehabilitation	Chen
85	A comparison of soil respiration in turf grass and agricultural environments	Johnson
86	Saving Stadium Woods	Apdinares
87	Plant communities along shorelines in the Chesapeake Bay are altered by both Native American and modern land use history	Weller
88	Urban habitat moderates seasonality in the stress physiology, movement ecology, and foraging behavior of free-ranging banded mongooses	Laver
89	Habitat use by suburban white-tailed deer along disturbance gradients	Potapov
90	Pollinator accessibility and connectivity of the flowering dogwood ( <i>Cornus florida</i> ) across an urban landscape gradient	Redwine

91	Landscape influences over nitrogen dynamics during storms	Stewart
92	Assessing the effect of select pre-planting, environmental and socioeconomic variables on the condition and mortality rates associated with newly planted trees in Washington, D.C.	Torres
93	Modeled impacts of land cover change on greenhouse gas emissions in the Roanoke Valley, Virginia	Novakovic
94	Stewardship success: how community group dynamics affect urban street tree survival	Jack-Scott
95	Assessing carbon processing differences in environmentally varied aquatic mesocosms: results from the carbon awareness partnership (CAP) program at the VCU Rice Center	Corey
96	Physiological differences between urban and rural song sparrow ( <i>Melospiza melodia</i> ) populations are apparent in some years, but not others	Foltz
97	Support for urban ecology initiatives in the city of Chester, PA using global positioning and geographic information system technology to spatially analyze shade trees	Freed
98	Carbon sequestration by trees on the campus of Elizabethtown College, Pennsylvania	Phillips
99	Use of automated radio telemetry to detect nesting activity in ornate box turtles	Radzio
100	Linking ecosystem services to private property owners in urban forestry	Verweij
101	Predicting urban tree success: modeling tree growth in neighborhood-initiated tree plantings	Vogt

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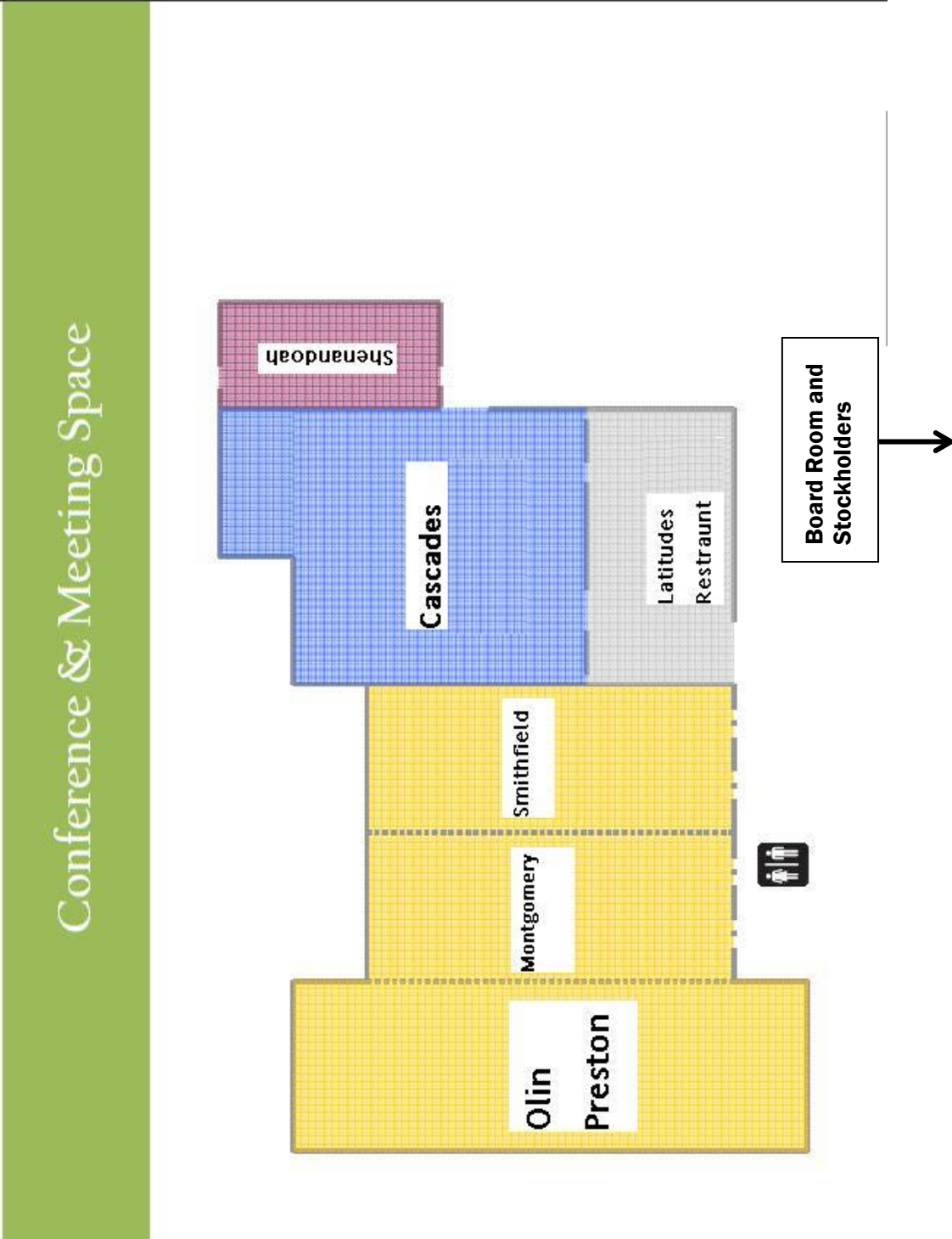
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Session Room Maps  
Conference Hotel: Holiday Inn





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