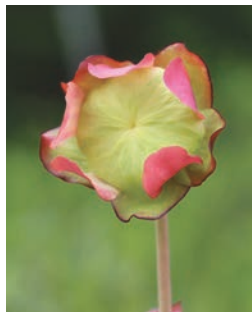
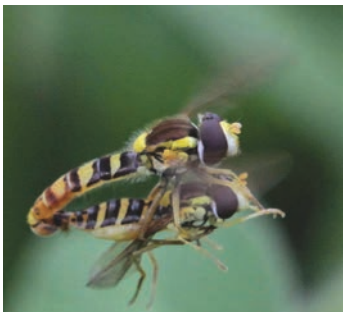




THE  
**NORTHEAST**  
  
**NATURAL HISTORY**  
 CONFERENCE



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# NENHC 2019

Promoting the study and stewardship of the natural environment in the northeastern US and eastern Canada

# Program and Participants List

**April 12–14, 2019**

**Springfield, MA**



**Eagle Hill Institute**  
[www.eaglehill.us](http://www.eaglehill.us)



# Welcome to the 2019 Northeast Natural History Conference!

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North Branch Nature Center

Northeast Natural History & Supply

Northern Forest Atlas Project

Rhode Island Natural History Survey

Species Forest Inc.

Torrey Botanical Society

Yale University Press

Note: The conference venue is a smoke-free facility and so smoking is prohibited anywhere on the premises.

Friday	<b>NENHC 2019 Friday Field Trips</b>
9:00 AM–4:00 PM	<p><b>Geology and Paleontology of the Triassic/Jurassic Rift Valley Sequence of the Connecticut River Valley</b>, led by Frederick Rogers, Mark Leckie, and Alfred Venne</p> <p><b>Meet at Springfield Sheraton lobby and carpool to the site.</b></p>
12:30–5:30 PM	<p><b>Community and Ecosystem Ecology of Robinson State Park</b>, led by Christian Liriano, Independent field ecologist/student</p> <p><b>Meet at Springfield Sheraton lobby and carpool to the site.</b></p>
1:00–4:00 PM	<p><b>Early Season Grasses, Sedges, and Herbs</b>, led by Brett Engstrom, Northern Forest Atlas Foundation</p> <p><b>Meet at Trailhead for Frost Trail at Mt. Toby on the north side of Bull Hill Road, a quarter mile west of Route 63 in Sunderland, MA.</b></p>
1:00–4:00 PM	<p><b>Mosses</b>, led by Sue Williams, Northern Forest Atlas Foundation</p> <p><b>Meet at Trailhead for Frost Trail at Mt. Toby on the north side of Bull Hill Road, a quarter mile west of Route 63 in Sunderland, MA.</b></p>
1:00–5:30 PM	<p><b>An Introduction to Wetland Evaluation and Restoration</b>, led by Scott Smyers, Association of Massachusetts Wetland Scientists</p> <p><b>Meet at Lobby of the Springfield Sheraton and carpool to the sites.</b></p>
Friday	<b>NENHC 2019 Friday Workshops</b>
Two Identical sessions: 9:00 AM–1:00 PM and 2:00–6:00 PM	<p><b>Program R for Absolute Beginners</b>, led by Kristine Hoffmann, Visiting Assistant Professor of Biology, St. Lawrence University</p> <p><b>Room C</b></p>
1:00–4:00 PM	<p><b>Photographing Mosses and Other Small Plants</b>, led by Jerry Jenkins, Northern Forest Atlas Foundation</p> <p><b>Meet at Trailhead for Frost Trail at Mt. Toby on the north side of Bull Hill Road, a quarter mile west of Route 63 in Sunderland, MA.</b></p>

SATURDAY	<b>SATURDAY APRIL 13, 2019</b>
7:00 AM	<b>Conference Registration Open</b>
7:00-8:00	<b>Set up for exhibitors</b>
8:00	<b>Exhibitions Open</b>
7:00-8:00	<b>Set up for Day 1 scientific posters</b>
7:00-7:30	<b>PowerPoint upload, preview/technology check for Day 1 Morning oral presentations - in the room your talk will be given</b>
7:30-8:00	<b>PowerPoint upload, preview/technology check for Day 1 Afternoon oral presentations - in the room your talk will be given</b>
8:10-9:40	<b>CONCURRENT SESSIONS: Morning I - schedule on page 8</b>
9:40-10:30	<b>MORNING POSTER SESSION w/ light snacks and beverages - list of Saturday posters on pages 18-19</b>
10:30-12:00	<b>CONCURRENT SESSIONS: Morning II - schedule on page 9</b>
12:00-1:30	<b>LUNCH (included for those who pre-registered for the conference)</b>
1:30-2:40	<b>CONCURRENT SESSIONS: Afternoon I - schedule on page 10</b>
2:40-3:20	<b>AFTERNOON POSTER SESSION w/ light snacks and beverages - list of Saturday posters on pages 18-19</b>
3:20-5:30	<b>CONCURRENT SESSIONS: Afternoon II - schedule on page 11-12</b>
5:30-6:00	<b>OPEN NETWORKING SESSION w/ cash bar and finger foods</b>
5:30-6:00	<b>Take down for Day 1 scientific posters</b>
6:00-7:30	<b>PLATED DINNER - ticketed event</b>
7:30-10:00	<b>ASAA SYMPOSIUM on Mega-fauna of Late Pleistocene Eastern North America and SATURDAY EVENING WORKSHOPS - schedule on page 12</b>

SUNDAY	<b>SUNDAY APRIL 14, 2019</b>
7:00 AM	<b>Conference Registration Open</b>
7:00-8:00	<b>Set up for exhibitors</b>
8:00	<b>Exhibitions Open</b>
7:00-8:00	<b>Set up for Day 2 scientific posters</b>
7:00-7:40	<b>PowerPoint upload, preview/technology check for Day 2 Morning oral presentations - in the room your talk will be given</b>
7:40-8:00	<b>PowerPoint upload, preview/technology check for Day 2 Afternoon oral presentations - in the room your talk will be given</b>
8:10-9:40	<b>CONCURRENT SESSIONS: Morning I - schedule on page 12</b>
9:40-10:30	<b>MORNING POSTER SESSION w/ light snacks and beverages - list of Sunday posters on pages 22-23</b>
10:30-12:00	<b>CONCURRENT SESSIONS: Morning II - schedule on page 13</b>
12:00-1:30	<b>LUNCH (included for those who pre-registered for the conference)</b>
1:30-3:00	<b>PLENARY SESSION - description on page 15</b>
3:10-3:50	<b>AFTERNOON POSTER SESSION w/ light snacks and beverages - list of Sunday posters on pages 22-23</b>
3:50-6:00	<b>CONCURRENT SESSIONS - Afternoon II - schedule on pages 15-16</b>
5:20-6:00	<b>Take down for Day 2 scientific posters</b>
	<b>Thank you for participating in NENHC 2019. We hope you enjoyed the conference and wish you a safe journey home.</b>

8:10–9:40	<b>Saturday Concurrent Sessions - Morning I</b>				
	Room A	Room B	Room C	Room D	Room E
	<b>EREN: A Collaborative Networked Approach to Research and Teaching with Undergraduates I</b>	<b>Full Life-cycle Ecology</b>	<b>Botany</b>	<b>Marine Impact on Coastal Ecosystems</b>	<b>On-farm Habitats: Agronomic Beneficials and Biodiversity Conservation I</b>
Moderator	<b>Sara Scanga</b>	<b>Jason Hill</b>	<b>Laney Widener</b>	<b>Gaytha Langlois</b>	<b>Conrad Vispo</b>
8:10–8:15	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview
8:15–8:35	<b>Danielle Garneau</b> Ecological Research as Education Works: EREN	<b>Michael Hallworth</b> Tracking Dragons: Stable Isotopes Reveal the Annual Cycle of a Long-distance Migratory Insect	<b>Jinyan Guo</b> Stigma, Pollen Tube Transmitting Track, and Epidermal Micromorphology of the Style of <i>Sarracenia purpurea</i>	<b>Gaytha Langlois</b> Microbial Responses to Pollutants in Coastal Sediments	<b>Conrad Vispo</b> Applied Farmscape Ecology: Managing On-farm Habitats for Beneficials and Nature Conservation
8:35–8:55	<b>Mary Beth Kolozsary</b> Using a Multi-site Collaborative Network to Study Large-scale Spatial Patterns in Freshwater Turtles	<b>Jason Hill</b> Migratory Patterns and Connectivity of Grasshopper Sparrows	<b>Jinyan Guo</b> Developmental Sequence of the Flattened and Broadened Style of <i>Sarracenia purpurea</i>	<b>Gaytha Langlois</b> Presence of Metals in the Marine Macroalgae <i>Codium fragile</i> and <i>Chondrus crispus</i> : Establishing Baseline Data for the Bryant University Macroalgae Remediation Project	<b>Claudia Knab-Vispo</b> Creating Habitat: Establishment and Monitoring of On-farm Native Wildflower Meadows
8:55–9:15	<b>Mark Lesser</b> Tracking Forest Change Using the Permanent Forest Plot Project	<b>Rodger Gwiazdowski</b> Repopulating the Endangered Puritan Tiger Beetle in the Connecticut River	<b>Lindsey Pett</b> Aquatic Ecosystem Stoichiometry in Response to Nutrient Deposition, Using the Model System <i>Sarracenia purpurea</i>	<b>Michael Rizzo</b> Ocean Sunfish Strandings on the Shores of New England	<b>Dylan Cipkowski</b> Beneficial Insect-Wildflower Associations in Upstate New York: Farm Management Implications
9:15–9:35	<b>Aimee Phillippi</b> Is Common Milkweed ( <i>Asclepias syriaca</i> ) Locally Adapted?	<b>Susi von Oettingen</b> Contrasting Life History Strategies of Two Freshwater Mussel Species of <i>Alasmidonta</i>	<b>Matt Peters</b> Toward a Flora of Uapishka – Les Monts Groulx, Quebeca	<b>Katelynn Howard &amp; John Stachelhaus</b> Land Cover Change and Forest Loss in the Woonasquatucket Watershed in Northern Rhode Island	<b>Erin Allen</b> Butterflies as Charismatic Indicators of On-farm Habitat Quality
9:35–9:40	Q & A	Q & A	Q & A	Q & A	Q & A



10:30-12:00 <b>Saturday Concurrent Sessions - Morning II</b>					
	Room A	Room B	Room C	Room D	Room E
	<b>EREN II</b>	<b>Population Ecology</b>	<b>Phenology and Climate Change I: Long-term Trends</b>	<b>Turtle Ecology and Conservation I</b>	<b>On-farm Habitats II</b>
Moderator	<b>Mary Beth Koloszvary</b>	<b>Caitlin Fisher-Reid</b>	<b>Richard Primack</b>	<b>Brian Bastarache</b>	<b>Conrad Vispo</b>
10:30-10:35	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview
10:35-10:55	<b>Timothy McCay</b> Geographic Pattern in Earthworm Assemblages of the Northeast and Midwest	<b>George Kraemer</b> Understanding Boom-Bust Cycles of Invaders Can Require Long-term Data Sets and Population Structure Monitoring	<b>Sarah Bois</b> Phenological Response to Earlier Spring: Opportunities and Challenges in a Changing Climate	<b>Russell Burke</b> Visual and Olfactory Cues Raccoons Use to Find Diamondback Terrapin Nests: Do Raccoons Learn?	<b>Kendrick Fowler</b> Ant Assemblages in Vegetable Crops and Crop-Adjacent Habitats in the Hudson Valley, New York
10:55-11:15	<b>Anna Aguilera</b> Identifying Patterns for Garlic Mustard Invasion Success	<b>Nicholas Dorian</b> Estimating Dispersal of the Endangered Karner Blue Butterfly ( <i>Lycaeides melissa samuelis</i> )	<b>Megan Napoli</b> Phenological Shifts in Southeastern NY: Understanding the Local Effects of Climate Change through Analysis of a Unique Long-term Dataset	<b>Danielle Marston</b> Monitoring the Impact of Coastal Erosion on the Nesting Habitats of <i>Malaclemys terrapin</i> (Northern Diamondback Terrapin) in Marion, Mattapoisett, and Wareham, MA	<b>Carmen Greenwood</b> Invertebrate Roles in Ecosystem Function: Life Underground
11:15-11:35	<b>Sara Scanga</b> Macroscale Ecology in the Classroom: An EREN Partnership Using NEON Data	<b>Jill Fleming</b> Sparcnet: Collaborative Range-wide Monitoring of the Red-Backed Salamander ( <i>Plethodon cinereus</i> )	<b>Sarah Rumsey</b> Phenological Changes in Avian Migration Revealed by Local Long-Term Data From Northeast Connecticut	<b>Barbara Brennessel</b> Diamondback Terrapin Utilization of Wellfleet's Herring River Estuary	<b>Anne Bloomfield</b> Are Birds Beneficial to Farming? Changing Attitudes, Conservation, and Research Needs in the Northeast
11:35-11:55	<b>Kathleen LoGiudice</b> How Can We Expand EREN's Reach?	<b>Maria Aliberti Lubertazzi</b> A Tale of Two Urban Ponds—Seen Through the Lens of Emerging Dragonfly Populations	<b>Lucille Zipf</b> Impacts of Global Change on Reproductive Phenology and Success of Tree Swallows	<b>George Bancroft</b> A Population Assessment of <i>Malaclemys terrapin</i> (Northern Diamondback Terrapin) in the Lower Taunton River Watershed	<b>Noah Perlut</b> Community Farming for Grassland Birds: A Local Conservation Strategy
11:55-12:00	Q & A	Q & A	Q & A	Q & A	Q & A

1:30–2:40 <b>Saturday Concurrent Sessions - Afternoon I</b>					
	Room A	Room B	Room C	Room D	Room E
	<b>Pollination Ecology</b>	<b>The Spotted Lanternfly: An Emerging Pest</b>	<b>Phenology and Climate Change II: New Approaches and Insights</b>	<b>Turtle Ecology and Conservation II</b>	<b>On-farm Habitats III</b>
Moderator	<b>Patricia Jones</b>	<b>Javier Marin</b>	<b>Morgan Tingley</b>	<b>Brian Bastarache</b>	<b>Conrad Vispo</b>
1:30–1:35	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview
1:35–1:55	<b>Sarah Lawson</b> Effects of Pollen Nutrition on Development in the Small Carpenter Bee	<b>Javier Marin</b> Spotted Lanternfly: The Latest Threat to the Commonwealth	<b>Kerissa Battle &amp; Anna Duhon</b> Two Centuries of Phenological Change in NY State: A Historic–Modern Citizen Science Network Story	<b>Sidney Anderson</b> Population Study of Eastern Painted Turtles ( <i>Chrysemys picta</i> ) on Two Ponds In Acadia National Park	<b>Erik Kiviat</b> Turtles and Agriculture: A Review
1:55–2:15	<b>Patricia Jones</b> Impacts of Alcohol in Floral Nectar on Foraging Behavior in Bumblebees	<b>Richard Gardner</b> The Spotted Lanternfly: Observations and Thoughts from the Frontline in Berks County, PA	<b>Tara Miller</b> Fruiting Phenology Investigated with Thoreau’s Observations and Herbarium Specimens	<b>Brian Bastarache</b> 10 years and 1000 Turtles: Lessons about Head-starting as a Conservation Tool	<b>Jerry Jenkins</b> Farm Abandonment: A Bryophyte View
2:15–2:35	<b>Rachel Noone</b> Effect of Diurnal and Nocturnal Pollination on Fruit Abundance and Quality of Lowbush Blueberry ( <i>Vaccinium angustifolium</i> ) Patches on Kent Island	<b>John Rogan</b> Predicting the Spread of Spotted Lanternfly ( <i>Lycorma delicatula</i> ) in Central Massachusetts	<b>Richard Primack</b> Was Thoreau a Good Naturalist?	<b>Miranda Figueras</b> Consumption and Assimilation Patterns of the Eastern Box Turtle: A Diet Generalist?	<b>Jean-Paul Courtens</b> On-farm Habitats: An Organic Farmer’s Perspective
2:35–2:40	Q & A	Q & A	Q & A	Q & A	Q & A

**Interested in looking at the abstracts for some of the presentations?**

**Printed reference copies of the abstracts for both all of the oral and all of the poster presentations are available for perusal at the registration table during the conference. They are also available on the conference website: you can access them from the left-hand menu of the home page under the “Program” menu heading.**

3:20–5:30					
Saturday Concurrent Sessions - Afternoon II					
	Room A	Room B	Room C	Room D	Room E
	<b>Roadside and Interior Forest Ecology</b>	<b>Human Impacts on Wildlife</b>	<b>Natural History of Sedges</b>	<b>Public Participation in Rare Species Conservation</b>	<b>Arthropod Ecology</b>
Moderator	<b>Jack Tessier &amp; Christopher Martin</b>	<b>Alllyson Jackson</b>	<b>Jerry Jenkins</b>	<b>Bryan Windmiller</b>	<b>Daniel Shustack</b>
3:20–3:25	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview
3:25–3:45	<b>Richard Stafursky</b> Species' Forest Model for the Return of the Natural Landscape	<b>Aaron Grade</b> Patterns of Mammal Diversity and Abundance Across a Suburban Gradient	<b>Lisa Standley</b> The Diversity, Evolution, and Ecology of Carex: a Personal Perspective	<b>Jonathan Atwood</b> Using Citizen Science Data to Assess Eastern Meadowlark Status in Massachusetts	<b>Paul Siskind</b> Controlling Lily Leaf Beetle: An Integrated Pest Management Approach
3:45–4:05	<b>Jack Tessier</b> Minimal Impact of a Long-Distance Hiking Trail on the Plant Community in the Adirondacks	<b>Will Maynard</b> Distribution of Black Bears in the Exurbs and Suburbs of southern New York and Connecticut	<b>Robert Popp</b> Habitat for the Federally Endangered Northeast Bulrush: Searching in All the Wrong Places	<b>Cara McElroy</b> HATCH: Partnering with Local Institutions to Bolster the Threatened Blanding's Turtle	<b>McKenzie Wybron</b> Habitat Selection and Dispersal of the Northern Barrens Tiger Beetle ( <i>Cicindela patruela</i> ) in the Hudson Valley, New York
4:05–4:25	<b>Thomas Worthley</b> Assessing Roadside Oak Mortality in Eastern Connecticut Due to Gypsy Moth Defoliation and Other Factors	<b>Stephen Kovari</b> Where Coyotes and Red Fox Live: Determining Occupancy and Activity Patterns on a Suburban College Campus Using Motion Activated Camera Traps	<b>Robert Wernerehl</b> Tracking Rare Sedges in Massachusetts	<b>Laura Heady</b> Engaging Volunteers to Raise Awareness and Reduce Mortality of Pool-Breeding Amphibians	<b>Jennifer Apple</b> Natural History of a Non-Native Ant-Mimicking Spider in Western New York
4:25–4:45	<b>Christopher Martin</b> Identifying Trees within State Parks and Forests that Pose High Risk to the Public and Infrastructure Utilizing ESRI's 123 Survey Tool	<b>Lauren Nolfo-Clements</b> Recovery Disparities in Island White-Footed Mouse Populations Following a Historically Snowy Winter	<b>Brett Engstrom</b> Celebrating Our Sedges Out-of-Season: Vegetative Characters and Evergreenness	<b>Laney Widener</b> The New England Plant Conservation Volunteer Program	<b>Peter Burn</b> Abundance of Six Moth Species in Carlisle, MA, from 2012-2018

4:45-5:05	<b>Jeffrey Ward</b> Stormwise - Integrating Forest and Roadside Management Objectives to Create Storm Resilient Forests	<b>Brandi Van Roo</b> Potential Impacts of Solar Arrays on Wildlife Communities	<b>Matt Peters</b> Alpine Sedges in the Northeastern Flora: Their Identity, Status, and Natural History	<b>Jay Cordeiro</b> Post-release Monitoring of a Captive Bred Spadefoot Toad, <i>Scaphiopus holbrookii</i> , Population in Restored Wetlands on Cape Cod, MA	<b>Daniel Shustack</b> Secondary "Market" for Bird Feathers: What Happens to Feathers After Birds Shed Them?
5:05-5:25	Q & A	<b>Katherine Straley</b> Parental Behaviors Mediate the Effects of Bird Blow Fly Parasitism on Nestlings in Suburban Forests	<b>Jerry Jenkins</b> A Pattern Language for Sedge Ecology	Q & A	<b>Adam Green</b> The Asian Longhorned Beetle Cooperative Eradication Program 10 Years Later
5:25-5:30		Q & A	Q & A		Q & A

7:30-10:00 PM	<b>ROOM A – American Society for Amateur Archaeology (ASAA) Symposium on MEGA-FAUNA OF LATE PLEISTOCENE EASTERN NORTH AMERICA: HUMAN INTERACTIONS</b>
	<i>A Site Where a Butchered Mastodon was Consumed and Its Skeleton Transformed into Artifacts</i> by Richard M. Gramly
	<i>Lighting, Heating, and Cooking during the Late Pleistocene: Upper Palaeolithic Lamps in the Old and New Worlds</i> by Richard M. Gramly and Dennis J. Vesper
	<i>Discovery of Portable Art from the Clovis Zone, Hiscock Site, NY</i> by James B. Harrod
	<i>Cultural Insights Derived from Iroquois and Northeastern Oral Traditions of Ancient "Monsters"</i> by Russell Judkins
	<i>The Coats-Hines Site, Tennessee, and Mastodon B</i> by Richard M. Gramly, John Broster, and Chris Widga

**\*\*\*The ASAA symposium is open to all who have registered for the Northeast Natural History Conference\*\*\***

Saturday	<b>NENHC 2018 Saturday Evening Workshop - preregistration required</b>
7:30-9:30 PM	<b>Enhancing the Edibility of Northeast Landscapes with Native Species</b> , led by Russ Cohen and Georgia Hann  <b>Room B.</b>

8:10–9:40	<b>Sunday Concurrent Sessions - Morning I</b>				
	Room A	Room B	Room C	Room D	Room E
	<b>Amphibian Ecology and Conservation I</b>	<b>Seabirds and the Marine Environment</b>	<b>Science and Education</b>	<b>Northeastern Coyote: Genetics, Ecology, and Perceptions</b>	<b>Earthworm Assemblages Past, Present, and Future</b>
Moderator	<b>Brian Bastarache</b>	<b>John Anderson</b>	<b>Kathleen Nolan</b>	<b>Carol Henger</b>	<b>Timothy McCay</b>
8:10–8:15	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview
8:15–8:35	<b>Brett Thelen</b> Amphibian Road Closures: Lessons Learned From a Pilot Season of “Big Night Detours” in Keene, NH	<b>John Anderson</b> Changes in Breeding and Loafing Seabird Populations in Eastern Maine: The View From Great Duck	<b>Kathleen Nolan</b> Networking with YES! Youth Educational Seining Groups	<b>Elizabeth Heppenheimer</b> High Genomic Diversity and Candidate Genes Under Selection Associated with Range Expansion in Eastern Coyote ( <i>Canis latrans</i> ) Populations	<b>Damnait McHugh</b> Phylogeographic Analyses of Three Asian Earthworm Species Co-invading North America
8:35–8:55	<b>Zac Cota</b> Using Citizen Science to Assess Amphibian Road Crossing Sites in Vermont	<b>Jenna Schlener</b> Individual Variation in Foraging Behavior by Gulls in Eastern Maine	<b>Michelle Kraczkowski</b> Experiential Learning through Immersive Observations of a Campus Landscape	<b>Alexandra DeCandia</b> Genetics of Urban Coyote Colonization: Neutral and Adaptive Variation in New York City’s Newest Residents	<b>Josef Gorres</b> Invasive Jumping Worms: Cocoons, Climate Change and Expansion at the Northern Limit of their Range
8:55–9:15	<b>Jasper Leavitt</b> Impacts of Cannibalism on an All-Female Lineage of Salamanders	<b>Noah Perlut</b> Dispersal Distance by Sub-adult Herring Gulls Increases with Latitude Across the Gulf of Maine	<b>Jameson Chace</b> A Civically Engaged Conservation Biology Course Increased Student Investment in Learning	<b>Tatyana Graham</b> Are Coyotes “Natural”? Perceptions of Coyotes in New York City	<b>Rebecca Pinder</b> Native and European Earthworm Assemblages along Riparian Zones in Eastern New York: 10 Years Later
9:15–9:35	<b>Michael Graziano</b> Amphibians and Vernal Pools: Seeing the Forest for the Trees	<b>Jeff Kolodzinski</b> Jailbirds: The History and Future of Herring Gulls on Rikers Island in New York City	<b>Justine Weber</b> Rediscovering Our Species Sense: Developing Natural History Appreciation and Skillsets in Undergraduate Students	<b>Mark Weckel</b> <i>n</i> of 1: Spatial Ecology of an Eastern Coyote Along the East Bronx Waterfront	<b>Timothy McCay</b> Native Earthworms and the Possible Pre-Columbian Earthworm Landscape of the Northeast
9:35–9:40	Q & A	Q & A	Q & A	Q & A	Q & A



10:30-12:00	<b>Sunday Concurrent Sessions - Morning II</b>				
	Room A	Room B	Room C	Room D	Room E
	<b>Amphibian Ecology and Conservation II</b>	<b>Avian Biology and Conservation</b>	<b>Macroinvertebrates</b>	<b>Rare Plant Monitoring: What are We Measuring and to What End?</b>	<b>Effects of Exotic Earthworms</b>
Moderator	<b>Brian Bastarache</b>	<b>Chad Seewagen</b>	<b>Jay Cordeiro</b>	<b>Robert Popp</b>	<b>Annise Dobson</b>
10:30-10:35	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview
10:35-10:55	<b>Greg Gerritt</b> Fowler's Toads and the Rainwater pool: A Video Study	<b>Justin Clarke</b> The Northern Waterthrush: Analyzing Distribution and Abundance of a Secretive Songbird in PA	<b>Erik L'Heureux</b> Generalist or Specialist: What Habitats are Occupied by the Invasive Slug <i>Arion fuscus</i> ?	<b>Steve Young</b> The Monitoring of Seabeach Amaranth ( <i>Amaranthus pumilus</i> ) on Long Island	<b>James Fischer</b> Exploring the Relationships between <i>Ixodes scapularis</i> and Introduced Earthworms in Northern Forests
10:55-11:15	<b>Andis Arietta</b> Feeling the Squeeze: Late-season Advancement and Early-season Delays in the Phenology of a Common Amphibian	<b>Chad Seewagen</b> Effects of Japanese Barberry on the Prey Base and Physiological Condition of Breeding Male Ovenbirds	<b>Hinatea Arie</b> Diet of an Exotic Invasive Slug Species Through Genetic Analysis	<b>Robert Wernerehl</b> Sandplain Gerardia: Federally Listed Plant Monitoring in Massachusetts	<b>Robert Buchkowski</b> Earthworms Work Alone: The Combined Impact of Non-native Earthworms and Native Herbivores on Plants and Nutrient Cycling in Connecticut Old-fields
11:15-11:35	<b>William Cranier</b> Analysis of Cutaneous and Environmental Microbial Communities of Pre- and Post-Metamorphic North American Frogs	<b>Mariamar Gutierrez</b> Influence of En Route Weather Over the Gulf of Mexico on the Lean Mass and Continued Migration of Birds of the Northeast	<b>Weston Strubert</b> Effects of Riparian Plant Invasions on Stream Macroinvertebrate Communities	<b>Robert Popp</b> Twenty-five Plus Years of Monitoring and Management of the Federally Endangered Jesup's Milk-vetch	<b>Annise Dobson</b> Impacts of Invasive Earthworms on Forest Plants
11:35-11:55	<b>Scott Smyers</b> Larval Development Variation Exhibited by Wood Frogs from Across New England Including Mount Washington, NH	<b>Debra Kriensky</b> Tracking Semipalmated Sandpiper Migration from Jamaica Bay, NY	<b>Alyssa Gleichsner</b> Risky Business: Do Infected Daphnia Have a Higher Predation Risk?	<b>Arthur Gilman</b> Monitoring Vermont's Largest Population of Autumn Coralroot	Q & A
11:55-12:00	Q & A	Q & A	Q & A	Q & A	

Sunday Afternoon I					
1:45–3:10	<b>Plenary Session - In the Lunch Banquet Hall</b> <b>Youth at the Helm of Building Community Climate Empowerment</b>  <b>Jen Kretser</b> , Director of Climate Initiatives, The Wild Center <b>Witter Swanson</b> , Student and Youth Climate Advisory Board, The Wild Center <b>Brittany Gutermuth</b> , Climate Educator, Massachusetts Audubon Society				
	<p>The term climate change often prompts feelings of diminished hope and futility regarding rising temperatures and sea levels, drought, wildfires, invasive species, diminishing snow pack, erratic storms and changing precipitation patterns, and a deep political divide. These feelings are legitimate—climate change is considered to be the greatest threat to humanity. However, optimism, determination, and resilience do exist among young people, and they are igniting a climate movement. For today’s youth, the status quo is unacceptable, and many feel we need to transition rapidly to a low-carbon economy. For the last 10 years, thousands of students have learned about climate change through a unique, youth-driven climate-education program in the Adirondack Park of upstate New York: the Adirondack Youth Climate Program. In turn, they are sharing that program model around the world. The program’s student leaders are part of a worldwide movement whose purpose is to engage and empower youth on climate change. Join the speakers as they share a unique approach to partnering with young people to act on climate change in their communities.</p>				
3:50–6:00					
<b>Sunday Concurrent Sessions - Afternoon II</b>					
	Room A	Room B	Room C	Room D	Room E
	<b>Snake Ecology and Conservation</b>	<b>Human Impacts on Birds</b>	<b>Innovative Tools for Conservation: More Bang for the Buck</b>	<b>Orchids of the Northeast: Taxonomy, Distribution, and Population Status</b>	<b>The Ecology of Mycorrhizal Plants and Fungi</b>
Moderator	<b>Brian Bastarache</b>	<b>Jessie Knowlton</b>	<b>Robert Wernerehl</b>	<b>Tierney Rosenstock</b>	<b>Thomas Horton</b>
3:50–3:55	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview
3:55–4:15	<b>Jonathan Adamski</b> Quantifying the Effects of Habitat Disturbance on <i>Crotalus horridus</i> (Timber Rattlesnake) in Pennsylvania	<b>Anneliese Malachi</b> American Kestrel ( <i>Falco sparverius</i> ) Nest Box Occupancy and Success in Cranberry Bogs in Southeastern Massachusetts	<b>Tulpen Hansen-Schwoebel</b> Using ArcGIS to Map the Fruiting Phenology of Native and Invasive Species	<b>Tierney Rosenstock</b> Adirondack Orchid Survey: Species, Distribution, and Abundance	<b>Thomas Horton</b> <i>Legacy of Robinia pseudoacacia</i> (Black Locust) Invasion and use of Ectomycorrhizal Fungi to Restore <i>Pinus rigida</i> (Pitch Pine) in the Albany Pine Bush Preserve
4:15–4:35	<b>Kathy Michell</b> Techniques and Materials Used to Create an Effective Temporary Venomous Snake Exclusion Barrier	<b>Teresa Trias</b> Breeding Grassland Bird Presence in Southeastern Massachusetts	<b>Steven Lamonde</b> A Golden Opportunity: Novel GIS Applications for Rare Species Conservation	<b>William Brumback</b> Response of an <i>Isotria medeoloides</i> Population to Canopy Thinning	<b>Claudia Victoroff</b> Fruiting Response of Ectomycorrhizal Fungi to Nutrient Additions in Bartlett Experimental Forest, New Hampshire

4:35–4:55	<b>Tom Tying</b> The Snake that Loves People	<b>Melissa Jernakoff</b> Effects of Habitat and Diet on Mercury Exposure in Breeding Songbirds in Southeastern Massachusetts	<b>Robert Wernerehl</b> New Conservation Tools and Guidelines for Restoring Sandplain Grasslands in New England	<b>Andrea Nurse</b> <i>Cypripedium arietinum</i> : Rare Plant Conservation in a Changing Climate	<b>Aimee Hudon</b> Ectomycorrhizal Ecology of <i>Quercus ilicifolia</i> (Scrub Oak) in Fire-adapted Pine Barrens
4:55–5:15	<b>Alan Richmond</b> <i>Carphophis amoenus</i> (Eastern Wormsnake) in Massachusetts	<b>Veronica Winter</b> Mercury Contamination in Protected Areas: Comparing Riparian Songbird Concentrations Across Five US National Parks	<b>Christa Reeves &amp; Kristen Roth</b> From Golf Course to Wildlife Refuge: Quantifying Restoration Efforts with Low-cost Sensor Technology Using Stream Discharge and Turbidity	<b>Matthew Pace</b> How Do You Solve a Problem Like <i>Spiranthes cernua</i> ?	<b>Ryan Stephens</b> Signaling from Below: Rodents Select for Deeper Fruiting Truffles with Stronger Volatile Emissions
5:15–5:35	<b>Tigran Tadevosyan</b> Movements, Home Ranges, and Seasonality in Habitat Use by Northern Copperhead in Massachusetts	<b>Natasha Karniski</b> Changing Precipitation Patterns and the Common Loon in the Adirondack Park, NY	<b>Brittney Rogers</b> Engaging Broader Audiences through the iMapInvasives Certified Trainers Network	<b>Laney Widener</b> Common Orchid Conservation Efforts in New England	<b>Julian Koob</b> A Truffle-finding Orchid: <i>Epipactis helleborine</i> 's Mycorrhizal Fungi and Their Role in the Orchid's Carbon Budget
5:35–5:55	Q & A	<b>Allyson Jackson</b> Spanning the (Ecosystem) Gap: Aquatic Invertebrates Subsidize Nutrients and Mercury to Riparian Songbirds	<b>Brian Boom</b> <i>Fraxinus</i> Diversity and Emerald Ash Borer: Delineating Species, Engaging Citizen Scientists	Q & A	Q & A
5:55–6:00		Q & A	Q & A		

## Mark Your Calendars and Plan Ahead!

**The 2020 Northeast Natural History Conference will be in Stamford CT, Friday April 17–Sunday April 19.**

**Let us know if you are interested in joining our Program Committee to help plan next year's event.**

**We also welcome proposals for field trips, workshops, and oral presentation sessions for 2020—contact us with your ideas!**

# SATURDAY POSTER PRESENTATIONS DIRECTORY

No.	Presenter	Title
1 *	McKenzie Wybron	Marking Technique for Northern Barrens Tiger Beetle ( <i>Cicindela patruela</i> ) Adults
2 *	Elizabeth Deecher	Effect of Aphid Density on Monarch Abundances in Milkweed Populations
3	Lauren DiCarlo	Native Bee Response to Grassland Restoration and Wildfire
4 *	Jonathan Adamski	Comparative Study of Hymenopteran Pollinator Diversity
5 *	Zachary Jacobson	Rare Saproxylic Hover Flies (Diptera: Syrphidae) Inhabiting Old-growth Forests of New York State: One Component of the Empire State Native Pollinator Survey
6 *	Max McCarthy	Phenological Shifts in Bees with Varying Life-History Traits in the Genus <i>Colletes</i>
7 *	Alanna Richman	Relationship Between the Incidence of an Ant-mimicking Spider ( <i>Myrmarachne formicaria</i> ) and Ant Abundance and Diversity
8 *	Jacqueline Zhou	Display Behaviors in Encounters Between Males of the Ant-Mimicking Spider <i>Myrmarachne formicaria</i>
9 *	Samantha Muscat	Herbivory and Arthropod Abundance on Native and Invasive Understory Shrubs
10 *	Asa Peters	Exploring the Relationship between Recreational Trails and Plant Invasion in Southeastern Connecticut
11 *	Rheanna Meier	Comparing Resource Allocation of Fruiting Native and Invasive Species
12 *	Evan Burr	Competition for Seed Dispersers Between Native and Invasive Plant Species
13 *	Christina Singh	The Effects of Cinnamon and Vitamin E on Plant Cell Wall Integrity
14 *	Julia Whalen	Preliminary Results of a Common Garden Experiment with <i>Asclepias syriaca</i> (Common Milkweed)
15 *	Justine Weber	Evaluating Reproductive Niche Characteristics of Federally Listed Houghton's Goldenrod to Approximate Range-wide Stability
16 *	Vivian Chappell	A Preliminary Floristic Survey of the High Tor Wildlife Management Area (Naples, NY)
17 *	Steven Grunwald	Influence of Environmental Variation on Epiphytic Bryophyte Assemblages on <i>Acer saccharum</i> (Sugar Maple) in Northern and Central New York
18	Judith Roe	Population Genetics of Reindeer Lichens on Rock Glaciers in Deboullie Public Lands in Northern Maine
19 *	Elsa Bechu	Using Temperature Distributions within the Canopy to Model Free Convection in Bryophytes
20 *	Kaila McKiernan Catherine Kilada	Land Use and Tree Diversity
21 *	Kyle Masters Julia Bowen Lilia DeAngelis	Effects of Tip-up Mounds and Mammal Burrows on Species Richness and Total Abundance as Measured Using Camera Traps in a Vermont Suburban Natural Area
22 *	Morgan Perlman	Does Soil Moisture and Soil Texture Predict the Distribution of American Beech and Sugar Maple?
23	Chad Jones	Patterns of Plant Invasion at Multiple Scales in Three Forested Natural Areas
24	Langston Gash	Invertebrate and Vertebrate Biodiversity in a Chronosequence of Forest Restoration
25 *	Makayla Tompkins	Wetlands as Permanent Carbon Sinks in Fire-dependent Ecosystems
26 *	Grace Roeder	The Impacts of Fire Suppression on Pitch Pine Populations of a Maritime Forest in NJ
27 *	Christine Schultz	Exploration of Fox Den Family Dynamics using Camera Trap Data
28 *	Brendan Wirth	Deer Abundance Impacts on Biogeochemical Cycling along an Urban-to-Rural Gradient in the Hudson Valley
29 *	Brenna Cianci Heath Chapin	The Effect of Attempted Pilferage by Humans on Caching Behavior of Eastern Gray Squirrels

30	Glenn	Proudfoot	Frequency Sensitivity and 3-D Processing of Sound Source Cues in the Northern Saw-whet Owl ( <i>Aegolius acadicus</i> )
31	* Sarah	Deckel	Mechanisms that Drive Breeding Success of Swainson's Thrush on an Elevation Gradient
32	* Phoebe	Hartvigsen	Assessing the Role of Avian Seed Dispersal in the Spread of Invasive <i>Lonicera</i> Seeds
33	* Patrick	McKenna	Assessing Impact of Dam Removal on Densities of <i>Anguilla rostrata</i> (American eels) in the Mill River, Taunton, MA, and the Town River, West Bridgewater and Bridgewater, MA
34	* Samantha Rianna	King Tamulynas	Assessing Impact of Dam Removal on Length Frequency Distribution of <i>Anguilla rostrata</i> (American Eel) in the Mill and Town Rivers
35	* Hannah	Poplawski	Sediment Transport in the Hoosic River
36	Catherine	Landis	Rifts, Reefs, and Riparian Wetlands: Historical Ecology of Seneca, Oneida, and Oswego Rivers
37	Kourtnie	Bouley	Known Range Expansion for Two Clam Shrimp Species in Massachusetts
38	* Alexander	Kimball	Genetics of Maine's Freshwater Snails
39	Kirsten	Martin	The Role of Free-Floating Macrophytes in Sequestration of <i>E. coli</i> in the Scantic River (CT)
40	* Elena Alexander	Babicz O'Roak	SPARCnet Year 2: Mark-Recapture Reveals Variation in Abundance of <i>Plethodon cinereus</i> Within a Suburban Forest
41	* Carissa	Colby	Response to Land-clearing Disturbance by the Red-backed Salamander: A Preliminary Analysis
42	* Dayna	Levine	No Leaf Left Behind
43	* Hannah	Duffy	Ability of Detection Dogs to Discriminate Between Amphibian Species
44	Joshua	Schwartz	Taxis Bold as Love: The Influence of Aggressive Calls on Mate Choice by Female Gray Treefrogs
45	Sarah	Helmbrecht	Hatchling Size, Brumation Activity, and In-water Behavior in a Population of Northern Diamondback Terrapin
46	* Taylor	Donovan	Characterizing Northern Diamondback Terrapin Nest Site Selection with Respect to Vegetation in Southern New Jersey
47	* Jennifer	Coppa	Behaviors in Captive Red-eared Sliders ( <i>Trachemys scripta elegans</i> ) Compared to Wild Populations
48	* Rose	West	Habitat Selection by a Presumed Extirpated Population of Eastern Hognose Snakes
49	* Brian	Doherty	Quantification of Meso- and Macro-plastics From Beaches of Long Island and Connecticut
50	* Maya	Roe	Population Biology of Rockweed ( <i>Ascophyllum nodosum</i> ) in Frenchman Bay: Assessment of a Commercially Targeted and Ecologically Important Species
51	* Hallie	Arno	Factors Influencing the Fecundity of <i>Semibalanus balanoides</i> in the Gulf of Maine
52	* Nicole	Huff	Correlation of Average Winter Temperatures with Abundance of the Asian Shore Crab
53	* Alexis	Correia	An Analysis of Spatial Synchrony of Population Dynamics of the Asian Shore Crab
54	* Mathew	Driscoll	Shelter Selection of Reproductive Female <i>Hemigrapsus sanguineus</i> in Southern New England
55	* Sarah	Kuyateh	Effects of Prey Abundance on Egg Production of the Asian Shore Crab
56	* Lindsey	Meola	Effects of Asian Shore Crab Abundance on Biodiversity of Intertidal Invertebrates in New England
57	Guy	Robinson	Re-visiting the Paleoeological History of High Point State Park, New Jersey
58	* Aya	Kumagai	Learning Field Ecology and Natural History through Ecological Inventories: The View From Mrs. Mayo's Farm I
59	* Judith Lundy Addison Sage	Khadonova Tunstad Stowe Gruber Fuller	An Ecological Inventory of a Land Trust Property: The View From Mrs. Mayo's Farm II
60	Terryanne	Maenza-Gmelch	An Enhanced Biodiversity Blitz Model for Natural History Education at Black Rock Forest, NY



# SUNDAY POSTER PRESENTATIONS DIRECTORY

No.	Presenter	Title
1 *	Mariammar Gutierrez	Refueling Rates of Migratory Songbirds at Stopover Sites in the Connecticut River Valley
2 *	Benjamin Dookram	Documenting a Poorly Understood Alarm Call in the Northern House Wren
3 *	Anna Handte-Reinecker	Stable Isotope Analysis to Compare the Trophic Overlap of Wood Thrush Nestlings in Continuous vs. Fragmented Forests
4 *	Hannah Wait	Morphology of <i>Junco hyemalis</i> (Dark-eyed Junco) in Western Massachusetts
5 *	Jaret Gonzalez	Population Fluctuations in Dark-eyed Juncos in the Northeast
6 *	Tyler Hertzwig	Fruiting Phenology in Migratory Stopover Habitat in an Urban Riparian Zone
7 *	Abigail Burke	Flocking Patterns of Black-capped Chickadees ( <i>Poecile atricapillus</i> ) in Urban Versus Rural Areas
8 *	Micaela Griffin	Stopover Habitat Quality in a Conserved Urban Riparian Zone in Rhode Island
9	Glenn Proudfoot	Haemosporidian Prevalence in Northern Saw-whet Owls ( <i>Aegolius acadicus</i> ) is Predicted by Host Age and Average Annual Temperature at Breeding Grounds
10 *	Batya Nightingale	NGS Reveals Trophic Transfer of Hg in Songbirds in Acadia National Park
11 *	Alex Youre-Moses	You are What You Eat and Where You Live: How Territory Size and Diet Relate to Mercury Concentration in Riparian Songbirds
12 *	Maeve McGowan	Nest Initiation Dates in a Changing Climate: Savannah Sparrows and Bobolinks Respond to Climactic Variables from their Wintering Grounds
13 *	Kylee DiMaggio	Mixed Consequences of Divorce on Reproductive Success of Songbirds Nesting in Agricultural Hayfields
14 *	James Austin	An Analysis of the Warbler Community Assembly in the Northeastern United States
15	John Anderson	Research and Workshops at Aton Forest Field Station
16	Ashton Leschke	Effects of Reforestation Efforts on Forest Development and Abiotic Factors across a Restoration Chronosequence
17	Aswini Pai	Tannin Variation in Eastern Hemlock Bark
18 *	Patrick Bly	Decline in Growth and Productivity of Sugar Maples in the Northeastern Adirondacks
19 *	Linh Le	A Tale of Two Trees: How Climate Change is Affecting Growth Trends of <i>Pinus banksiana</i> and <i>Pinus rigida</i> at Opposing Range Margins
20 *	Helena Mueller	Effect of Snow Cover on Temperature and Seedling Survival
21 *	Troy Tetreault	Establishment and Growth of Trees Encroaching into a Boreal Peatland in the Central Adirondacks, New York State
22 *	Jesse Pruden	Estimating Deer Populations in Northern Adirondack Forests
23 *	Rosalee Walter	Estimating White-tailed Deer ( <i>Odocoileus virginianus</i> ) Abundance Using Trail Cameras on Conserved Forest Lands
24 *	Joshua Amir	Red Oak Seedling Growth and Survival as a Measurement of Whitetail Deer Browse in Northeast Deciduous Forests
25 *	Rory Schiafo	Dwarf Pitch Pine Survival, Regeneration, and Understory Community Response to Wildfire at Sam's Point Preserve, NY
26 *	Matthew Adams	Wildlife Response to Wildfire at the Altona Flat Rock Pine Barren in Northern NY
27 *	Christian Connors	Effect of Forest Fragmentation on Parasitoid Attack of Moth Caterpillars of Contrasting Diet Breadth
28 *	Nikki Pirtel Amanda Minicucci	The Effect of Density and Diet Quality on Lepidopteran Larvae Melanization

29 *	Matthew	Garafalo	Phenological Trends of Insect Diversity and Abundance in Acadia National Park: A Methods Study
30 *	Hunter	Phillips	Pollinator Visitation of Spring Ephemerals and Spatial/Temporal Variability
31	Aya	Rothwell	Bees of Coastal Napatree Point and Inland Southern Rhode Island
32 *	Alexus	Wang	Effects of Urban Land-Use Management on Hymenopteran Communities
33 *	Emily	Fusco	Translating Science into Practice and Practice into Science: Northeast RISCC Management Network
34 *	Casey Erik	Yamamoto Anderson	Recovery of Diverse Flora After Control of Japanese Knotweed Monoculture
35 *	Olivia	Asher	Phylogenetic Analyses of the Genus <i>Platismatia</i> (Parmeliaceae, Lichenized <i>Ascomycetes</i> ) Shed New Light on Species from Northeastern North America
36 *	Dimitri	Lockhart	Cortex Degeneration Contributes to Leaf Prostration of the Wintergreen Fern <i>Polystichum acrostichoides</i>
37 *	Maeve	Sherry	Using Dendrogeomorphology to Reconstruct Flooding History in the Champlain Valley
38 *	Emily	Beasley	Responses of Small Mammal Communities to Local and Landscape Factors in a Forest/Agriculture Mosaic
39	Daniel	Winters	Assessing the Persistence of Fisher ( <i>Pekania pennanti</i> ) in a Fragmented, Suburban Landscape in Albany, NY
40	Kendall	O'Connell	Detecting Turtle Presence in Ward Pound Ridge Reservation
41 *	Hannah	Harby	Comparing Contemporary to Historical Fluctuating Asymmetry in Plastron Scutes of Wood Turtles
42 *	Ryan	DeBernardis	Population Dynamics of Painted Turtles ( <i>Chrysemys picta</i> ) from a Connecticut Farm Pond
43 *	Kathryn	Lauer	Evaluating the Trapping Efficacy of Spotted Turtles ( <i>Clemmys guttata</i> )
44 *	Lauren	Ash	Investigating American Bullfrogs as Potential Disease Reservoirs in Vermont and Brazilian Amphibian Communities
45 *	Jacob	LaVarway	Parasitology of Adirondack Fish
46 *	Shekina	Moise	The Effects of Estradiol and Parasitism on <i>Daphnia dentifera</i>
47 *	Lucas	Letarte	A Survey of Microplastic Pollution from Wastewater Treatment Plant Effluent Within the Lake Champlain Basin
48 *	Penelope	Murphy	Understanding Carbon Sources and Energy Flow in Ponds of Different Trophic Status
49 *	Alexandra	Allen	Estimating the Hydraulic Residence Time of the Bagaduce River Estuary in Maine using a Box Model
50 *	Lakota	Wadena	Autumn Gut Contents of Allegheny Crayfish and Rusty Crayfish Introduced in Eastern Pennsylvania
51 *	Lily	Delmarsh	Size Class and Population Densities of Mysids ( <i>Mysis diluviana</i> ) in Lake Champlain
52 *	Sierra	James	Cardiac Response of <i>Carcinus maenas</i> and <i>Cancer irroratus</i> under Acute Hypoxia Exposure
53	Sarah	OMalley	Characterization of Muddy Intertidal Infaunal Communities in Depleted Soft Shell Clam ( <i>Mya arenaria</i> ) Flats
54 *	Sally	Jarmusz	An Investigation of the Sedimentary Environments of Smith Cove and Nautilus Cove, Maine
55 *	Cassandra	Wright	Climate Adaptation Planning for the Hoosic River Coldwater Fishery
56 *	Brendan	Kerivan	A Paleoecological Survey of Salt Marsh Sediments in the Bagaduce River, Maine

\* indicates presentation is by student(s) and so is eligible for poster competition.