



**10<sup>th</sup> Biennial Research Conference  
8:30am to 4:30pm, November 3rd, 2023**

**Conference Day Program**

**8:30 - 9:15am:** *Coffee & Refreshments*

**9:15 - 9:30am:** *Opening Remarks:* Seth Engelbourg: Chair, NBI

*Session 1: Marine Biodiversity, 9:30 - 10:30am*

**9:30 - 9:50am:** **DNA BARCODING OF MARINE INVERTEBRATES COLLECTED FROM MARINAS AND DOCKS ON NANTUCKET ISLAND**

**Andrew A. Davinack<sup>1</sup>**

<sup>1</sup>Wheaton College, Norton, MA

**9:50 - 10:10am:** **ANCIENT PEAT DEPOSITS ON THE CONTINENTAL SHELF MAY FUEL FISHERIES PRODUCTION AND ENHANCE BIODIVERSITY**

**Ryan Munnely<sup>1</sup>**, Roland Smolowitz<sup>1</sup>, James Nelson<sup>2</sup>, Brian Roberts<sup>3</sup>, and Jeffrey Donnelly<sup>4</sup>

<sup>1</sup>Coonamessett Farm Foundation, Inc.; <sup>2</sup>University of Louisiana Lafayette; <sup>3</sup>Louisiana Universities Marine Consortium; <sup>4</sup>Woods Hole Oceanographic Institution

**10:10 - 10:30am:** **DNA SEQUENCING FOR MARSH CONSERVATION**

**Cooper Kimball-Rhines<sup>1</sup>**, Alice Palmer<sup>1</sup>, Brook Moyers<sup>1</sup>.

<sup>1</sup> Department of Biology, University of Massachusetts Boston

**10:30 - 11:00am:** *Morning Break:* Poster Session, Coffee, & Refreshments

*Session 2: Habitat Management and Restoration, 11:00am – 12:20pm*

**11:00 - 11:20am:** **CHALLENGES, SUCCESSES, AND RECOMMENDATIONS FOR MANAGEMENT OF COASTAL SANDPLAIN GRASSLANDS AS REGIONAL BIODIVERSITY HOTSPOTS IN THE NORTHEASTERN UNITED STATES**

**Sarah Bois<sup>1</sup>**, Christopher Neill<sup>2</sup>, Michael Whittemore<sup>3</sup>, Lena Champlin<sup>4</sup>, Karen Beattie<sup>5</sup>, Russell Hopping<sup>6</sup>, Jennifer Karberg<sup>5</sup>, Karen Lombard<sup>3</sup>, Kelly Omand<sup>6</sup>, Polly Weigand<sup>7</sup>, Robert Wernerehl<sup>8</sup>

<sup>1</sup>Linda Loring Nature Foundation; <sup>2</sup>Woodwell Climate Research Center; <sup>3</sup>The Nature Conservancy; <sup>4</sup>Department of Biodiversity, Earth and Environmental Sciences, Drexel University; <sup>5</sup>Nantucket Conservation Foundation; <sup>6</sup>The Trustees; <sup>7</sup>Central Pine Barrens Joint Policy and Planning Commission; <sup>8</sup>Massachusetts Natural Heritage and Endangered Species Program

**11:20 - 11:40am:** **INCORPORATING ECOLOGICAL DATA INTO THE DESIGN OF A WETLAND RESTORATION PROJECT TO ENHANCE RARE SPECIES HABITAT AND BIODIVERSITY AT WINDSWEPT CRANBERRY BOG, NANTUCKET ISLAND, MA.**

**Karen C. Beattie<sup>1</sup>**, Danielle I. O'Dell<sup>1</sup> and Kelly A. Omand<sup>1</sup>

<sup>1</sup>Department of Ecological Research, Stewardship and Restoration; Nantucket Conservation Foundation, Nantucket, MA

**11:40am - 12:00pm: WETLAND RESTORATION AND HABITAT MANAGEMENT PRACTICES TO ESTABLISH VIABLE POPULATIONS OF THE EASTERN SPADEFOOT TOAD ON CAPE COD: A 12-YEAR CASE STUDY**

**Ian Ives<sup>1</sup>** and Jay Cordeiro<sup>1</sup>  
<sup>1</sup>Mass Audubon Cape Cod

**12:00 - 12:20pm: SOUTHERN PINE BEETLE OUTBREAK ON NANTUCKET: SUPPRESSION TECHNIQUES AND LESSONS FOR PROACTIVE FOREST MANAGEMENT**

**Danielle O'Dell<sup>1</sup>**  
<sup>1</sup>Nantucket Conservation Foundation

**12:20 - 1:20pm: *Lunch Break & Poster Session***

***Session 3: Plant Biodiversity, 1:20-2:20pm***

**1:20 - 1:40pm: TWO DECADES OF CHANGE IN MARTHA'S VINEYARD PLANT COMMUNITIES**

**Patrick Farrar<sup>1</sup>**, Christopher Neill<sup>1</sup>, Julia Charest<sup>1,2</sup>, Glenn Motzkin<sup>3</sup>  
<sup>1</sup>Woodwell Climate Research Center, Falmouth MA; <sup>2</sup>University of Maryland Center for Environmental Science; <sup>3</sup>Shelbourne, MA

**1:40 - 2:00pm: CITY MARSH, COUNTRY MARSH: EXPLORING DIVERSITY IN PICKLEWEEDS AND THE PICKLEWEED MICROBIOME**

**Alice Palmer<sup>1</sup>**, Cooper Kimball-Rhines<sup>1</sup>, Lexi Papamechail<sup>1</sup>, Anisa Ahmed<sup>1</sup>, Scarlet Taveras Guzman<sup>1</sup>, Brook Moyers<sup>1</sup>.  
<sup>1</sup>Department of Biology, University of Massachusetts Boston

**2:00 - 2:20pm: THE ROLE OF PHENOLOGY IN PLANT INVASION ON NANTUCKET ISLAND**

**Yingying Xie<sup>1</sup>**, Allison Turner<sup>1</sup>, Bianca Turner<sup>1</sup>, Sarah Bois<sup>2</sup>  
<sup>1</sup>Northern Kentucky University; <sup>2</sup>Linda Loring Nature Foundation

**2:20 - 2:50pm: *Afternoon Break & Poster Session***

***Session 4: Animal Biodiversity, 2:50 – 4:10pm***

**2:50 - 3:10pm: VAGRANCY AND DISPERSAL BY LESSER BLACK-BACKED GULLS**

**<sup>1</sup>Richard R. Veit** and Lisa L. Manne  
<sup>1</sup>City University of New York, Staten Island

**3:10 - 3:30pm: SELECTED CASE STUDIES OF 3 STRANDED MARINE MAMMALS ON NANTUCKET**

**Stephen J. St. Pierre<sup>1</sup>**, DVM  
<sup>1</sup>Marine Mammal Alliance Nantucket

**3:30 - 3:50pm: SANDBAR SHARK (CARCHARHINUS PLUMBEUS) PRELIMINARY DEMOGRAPHICS, HABITAT USE, AND MOVEMENTS IN NANTUCKET SOUND, MA.**

**Caroline Collatos<sup>1,2</sup>**, Jeff Kneebone<sup>1</sup>, Greg Skomal<sup>3</sup>, Keith Dunton<sup>4</sup> & Nick Whitney<sup>1</sup>  
<sup>1</sup>Anderson Cabot Center for Ocean Life, New England Aquarium; <sup>2</sup>School for the Environment, University of Massachusetts, Boston; <sup>3</sup>Monmouth University; <sup>4</sup>MA Division of Marine Fisheries

**3:50 - 4:10pm: TICKS ON COASTAL ISLANDS: SURVEYS OF NANTUCKET, TUCKERNUCK, AND CHAPPAQUIDDICK, MASSACHUSETTS.**

**Allison A. Snow<sup>1,3,4</sup>**, Patrick Pearson<sup>2,4</sup>, and Stephen Rich<sup>2,4</sup>  
<sup>1</sup>Department of Biology, <sup>2</sup>Department of Microbiology, University of Massachusetts, Amherst;  
<sup>3</sup>Department of Evolution, Ecology, and Organismal Biology, Ohio State University, Columbus;  
<sup>4</sup>Laboratory of Medical Zoology, University of Massachusetts, Amherst

**4:10 - 4:30pm: *Closing Remarks, Door Prize, & Final Poster Session***

*Cocktail Reception and Mixer, 5:00 – 7:00pm at Lemon Press; 41 Main Street*

**Poster Presentations**

**SESACHACHA POND ECOLOGICAL ENHANCEMENT AND RESILIENCE STRATEGIES ON NANTUCKET, MA.**

Leah Hill<sup>1</sup>

<sup>1</sup>Town of Nantucket Natural Resources Department<sup>1</sup>

**DESCRIPTION OF THE BLACK-CAPPED CHICKADEE SONG TYPE ON TUCKERNUCK ISLAND, MASSACHUSETTS**

Skyler K. Kardell<sup>1</sup> and Lily C. Morello<sup>2</sup>

<sup>1</sup>Connecticut College, <sup>2</sup>Southern New Hampshire University

**BUMBLE BEES OF WINDSWEPT**

Shalit, Amanda G.<sup>1</sup>

<sup>1</sup>Nantucket Conservation Foundation; Department of Ecological Research, Stewardship, & Restoration

**HOW FRESHWATER WETLAND RESTORATION LAYS THE FOUNDATION FOR LONG-TERM COASTAL RESILIENCE**

Michael Soares<sup>1</sup>, Wetland Scientist

<sup>1</sup>Fuss & O'Neill, Inc.

**COSKATA: AT THE BROAD WOODS: A GLIMPSE INTO THE NATURAL AND HUMAN HISTORY OF THE MARITIME OAK FOREST COSKATA WOODS, AND ITS COMPOSITION AND ECOLOGICAL DIVERSITY.**

Morgan Sayle<sup>1</sup>,

<sup>1</sup>The Trustees, Coskata Coatee Wildlife Refuge

**RESTORATION AND RESILIENCY PLANNING WITH THE LINDA LORING NATURE FOUNDATION**

Sarah Bois<sup>1</sup>,

<sup>1</sup>Linda Loring Nature Foundation

**STEAM (Science Technology Engineering Art and Math) Youth Poster Presentations**

**ROOTING FOR NANTUCKET**

Molly Zegans<sup>1</sup> and the Youth Climate Committee

<sup>1</sup>Mass Audubon

**SPONGE BOB IRL PROGRAM**

Zacil Nash<sup>1</sup>, Franco Alonzo, Leighton Capizzo, Niko Coutinho, Emmett Graziadei,

Sidney Hanson, Nikol Kirilova, Julia Nogueira, Ava Perron, Sofia Sultanova

<sup>1</sup>Dreamland Theatre, Nantucket

## Thank you to our 2023 Conference Supporters!

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