



**9<sup>th</sup> Biennial Research Conference**  
**9:00 am to 4:30pm, November 5th, 2021**

**Conference Day Program**

**9:00 – 9:30am:** Coffee and Refreshments

**9:30 - 9:40am:** *Opening Remarks:* Jen Karberg: Chair, NBI

***Session 1: 9:40-11:00am***

**9:40 – 10:00am (*in person*):** **ASSESSING AND RESTORING EELGRASS TO NANTUCKET, MASSACHUSETTS**

**Alyssa B. Novak<sup>1</sup>**

<sup>1</sup>Boston University, Boston, MA

**10:00 - 10:20am (*remote*):** **BUILDING STRONGER SALT MARSHES: USING NATURE-BASED TECHNIQUES TO ENABLE MARSHES TO KEEP PACE WITH SEA-LEVEL RISE**

**Russ Hopping<sup>1</sup>**

<sup>1</sup>The Trustees of Reservations

**10:20 - 10:40am (*in person*):** **TRAJECTORIES OF PLANT COMMUNITIES IN SOUTHEASTERN MASSACHUSETTS CRANBERRY FARMS DISCONTINUED FROM AGRICULTURE**

**Anastasia Pulak<sup>1</sup>, Christopher Neill<sup>1</sup>, Haley Miller<sup>1,2</sup>, Benjamin Hoekstra<sup>3</sup>, and Sarah Klionsky<sup>4</sup>**

<sup>1</sup>Woodwell Climate Research Center, Falmouth, MA; <sup>2</sup>Clemson University, Clemson, SC;

<sup>3</sup>University of Massachusetts Cranberry Experiment Station, East Wareham, MA; <sup>4</sup>University of Connecticut, Storrs, CT

**10:40 - 11:00am (*in person*):** **NATURALIZED SCOTCH BROOM (*CYTISUS SCOPARIUS*) ON NANTUCKET ISLAND, MASSACHUSETTS**

**Sarah Bois<sup>1</sup>**

<sup>1</sup>Linda Loring Nature Foundation, Nantucket MA

**11:00-11:30am:** *Morning Break & Poster Session* with Coffee and Refreshments

***Session 2: 11:30am – 12:30pm***

**11:30 - 11:50am (*remote*):** **THE MACROINVERTEBRATE FAUNA OF NANTUCKET'S PERENNIAL AND EPHEMERAL STREAMS**

**Greg Whitmore<sup>1</sup>**

<sup>1</sup>Citizen, Deerfield, NH

**11:50 - 12:10pm (*in person*):** **PREVALENCE OF TICKS AND TICK-BORNE DISEASE AGENTS AT SENTINEL SITES ON NANTUCKET AND TUCKERNUCK, MASSACHUSETTS**

**Allison A. Snow<sup>1,3</sup>, Patrick Pearson<sup>2</sup>, and Stephen Rich<sup>2</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

**12:10 - 12:30pm (*remote*):** **GENETIC BARCODING REVEALS THE PRESENCE OF *POLYDORA NEOCAECA* PARASITIZING WILD BAY SCALLOPS ON NANTUCKET, MA**

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

**12:30 - 1:30pm: *Lunch Break & Poster Session***

***Session 3: 1:30-2:30pm***

**1:30 - 1:50pm (remote): MONITORING NANTUCKET'S TIDAL MARSH BIRDS USING POINT COUNT RESURVEYS AND TWO NOVEL MONITORING METHODS**

**Kate Ruskin<sup>1</sup>**

<sup>1</sup>University of Maine

**1:50 - 2:10pm (in person): NORTHERN LONG-EARED BATS AND WHITE-NOSE SYNDROME: THE IMPORTANCE OF COASTAL ISLANDS IN SUPPORTING POPULATION PERSISTENCE**

**Samantha Hoff<sup>1</sup> and Danielle O'Dell<sup>2</sup>**

<sup>1</sup>University at Albany; <sup>2</sup>Nantucket Conservation Foundation

**2:10 - 2:30pm (in person): MICROBIAL DIVERSITY IN GRAY SEALS (*HALICHOERUS GRYPUS*) ON NANTUCKET, MA**

**Stephanie A. Wood<sup>1</sup> and Amanda G. Tokash-Peters<sup>1,2</sup>**

<sup>1</sup>University of Massachusetts Boston, Boston, MA; <sup>2</sup>Centenary University, Hackettstown, NJ

**2:30-3:00pm: *Afternoon Break & Poster Session***

***Session 4: 3:00 – 4:00pm***

**3:00 - 3:20pm (in person): PROJECTIONS FOR CLIMATE CHANGE IMPACTS TO BEACHES AND SALT MARSHES ON NANTUCKET, MARTHA'S VINEYARD AND THE ELIZABETH ISLANDS**

**Cynthia Dittbrenner<sup>1</sup> and Brittany Hoffnagle<sup>2</sup>**

<sup>1</sup>The Trustees of Reservations; <sup>2</sup>Woods Hole Group

**3:20 - 3:40pm (in person): STREAMLINED WORKFLOWS FOR WATER QUALITY ANALYSIS AND HABITAT ASSESSMENT USING SEAGLASS**

**W. Benjamin Bray<sup>1</sup>**

<sup>1</sup>MIT Sea Grant, Cambridge, MA

**3:40 - 4:00pm (in person): CONSTRUCTING RESILIENT BEACHES: EXTENDING THE LIFE OF BARRIER BEACHES USING NATURE-BASED SOLUTIONS**

**Shea Fee<sup>1</sup>**

<sup>1</sup>The Trustees of Reservations

**Closing Remarks:** Karen Beattie, Co-Chair, NBI Conference Organizing Committee

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

**Posters Presentations**

**ENGAGING THE PUBLIC WITH POND MONITORING: ADOPT A POND PROGRAM**

**Yvonne Vaillancourt<sup>1,11</sup>, Thaïs Fournier<sup>2</sup>, Guthrie Diamond<sup>3</sup>, Seth Engelbourg<sup>4</sup>, Kara Falck<sup>5</sup>, RJ Turcotte<sup>6</sup>, Sam Kefferstan<sup>7</sup>, Peter Brace<sup>8</sup>, Jack Dubinsky<sup>9</sup> and Diane Lang<sup>10,11</sup>**

<sup>1</sup>University of Massachusetts Boston; Nantucket Field Station; <sup>2</sup>Town of Nantucket Department of Natural Resources; <sup>3</sup>Nantucket Islands Land Bank Commission; <sup>4</sup>Linda Loring Nature Foundation; <sup>5</sup>University of New England; <sup>6</sup>Nantucket Land Council; <sup>7</sup>Massachusetts Audubon; <sup>8</sup>Nantucket Walkabout; <sup>9</sup>Maria Mitchell Association; <sup>10</sup>The Trustees of Reservations; <sup>11</sup>Nantucket Aquatic Threats Committee

**INVESTIGATING SANDBAR SHARK (*CARCHARHINUS PLUMBEUS*) DEMOGRAPHICS, HABITAT USE, AND MOVEMENT PATTERNS AROUND NANTUCKET, MA**

**Caroline Collatos<sup>1,2</sup>, Dr. Jeff Kneebone<sup>1</sup> and Dr. Nick Whitney<sup>1</sup>**

<sup>1</sup>Anderson Cabot Center for Ocean Life, New England Aquarium, Boston, MA; <sup>2</sup>School for the Environment, University of Massachusetts, Boston, MA

## **ISLAND-WIDE COLLABORATION FOR INVASIVE PLANT MANAGEMENT TO SUPPORT LOCAL ECOSYSTEMS**

**Elizabeth C. Buck<sup>1</sup>, Guthrie Diamond<sup>2,3</sup> and Sarah T. Bois<sup>2,4</sup>**

<sup>1</sup>Department of Science and Stewardship, Nantucket Conservation Foundation; <sup>2</sup>Nantucket IPSC Co-Chair; <sup>3</sup>Nantucket Land Bank; <sup>4</sup>Linda Loring Nature Foundation

## **MARINE INVASIVE SPECIES MONITORING ON NANTUCKET**

**Yvonne Vaillancourt<sup>1</sup>, Jack Dubinsky<sup>2</sup> and Brooke Steadman<sup>1</sup>**

<sup>1</sup>School for the Environment, University of Massachusetts Boston, Nantucket Field Station; <sup>2</sup>Maria Mitchell Association

## **NANTUCKET BIODIVERSITY DIGITAL REPOSITORY**

**Andrew Mckenna-Foster<sup>1</sup>, Meghan Mitchell<sup>1</sup> and Christopher Tillman-Neal<sup>1</sup>**

<sup>1</sup>University of Washington Information School, Seattle, WA

## **A POTENTIAL NON-HERBICIDE INVASIVE MANAGEMENT SOLUTION FOR SMALLER AREAS OF HYBRID JAPANESE KNOTWEED (*FALLOPIA X BOHEMICA*)**

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

<sup>1</sup>Department of Science and Stewardship, Nantucket Conservation Foundation

## **RESEARCH AND MONITORING TO PREPARE FOR WETLAND RESTORATION AT WINDSWEPT CRANBERRY BOG, NANTUCKET ISLAND, MA**

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

<sup>1</sup>Department of Science and Stewardship, Nantucket Conservation Foundation

## **THE SANDPLAIN GRASSLAND NETWORK: A REGIONAL PARTNERSHIP AMONG RESEARCHERS AND MANAGERS TO ADVANCE THE UNDERSTANDING AND EFFECTIVENESS OF SANDPLAIN GRASSLAND MANAGEMENT**

**Karen C. Beattie<sup>1</sup>, Sarah Bois<sup>2</sup>, Shea Fee<sup>3</sup>, Karen Lombard<sup>4</sup>, Chris Neill<sup>5</sup>, Kelly Omand<sup>1</sup>, Polly Weigand<sup>6</sup>, Robert Wernerehl<sup>7</sup> and Michael Whittemore<sup>8</sup>.**

<sup>1</sup>Nantucket Conservation Foundation; <sup>2</sup>Linda Loring Nature Foundation; <sup>3</sup>The Trustees of Reservations; <sup>4</sup>The Nature Conservancy, Northampton, MA; <sup>5</sup>Woodwell Climate Research Center; <sup>6</sup>Central Pine Barrens Joint Planning and Policy Commission; <sup>7</sup>Massachusetts Natural Heritage & Endangered Species Program; <sup>8</sup>The Nature Conservancy, Martha's Vineyard, MA

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