



## CONTRIBUTED SESSIONS

### MORNING CONCURRENT SESSIONS

#### COASTAL RESTORATION – AUDITORIUM

**11:00 am – 11:20 am**

**Lauren Alleman**, Urban Ecologist, NYC Program, The Nature Conservancy

**Valuing Natural and Built Infrastructure for Resilience: A Case Study in Howard Beach, Queens**

We demonstrate an ecosystem service framework for valuing the multiple benefits of natural infrastructure for Howard Beach, a coastal community hit impacted by Hurricane Sandy.

**11:20 am – 11:40 am**

**Clara Holmes**, Seed Collection Coordinator, Mid-Atlantic Regional Seed Bank

**The Mid-Atlantic Seed Bank Goes Regional**

The Mid-Atlantic Seed Bank is an initiative to collect and bank seed for conservation and restoration purposes. In the coming years, MARSB will focus on coastal collections for restorations resulting from climate change.

**11:40 am – 12:00am**

**Dennis Whigham PhD**, Smithsonian Environmental Research Center

**Phragmites Invasion in Chesapeake Bay Tidal Wetlands: Causes, Consequences and Management**

Examples demonstrate the level of expansion of Phragmites that has occurred in Maryland tidal wetlands since the early 1970s. The consequences and causes of this expansion are detailed.

#### RESTORATION AND GREEN INFRASTRUCTURE – ROOM 125

**11:00 am – 11:20 am**

**Steven Allison, LEED, ISA Certified Arborist**, Landscape Designer, Floura Teeter Landscape Architects

**Urban Bioretention Management: The Challenges of Maintaining Living Systems**

Urban bioretention has fast become an answer for problematic urban stormwater runoff locally and nationally. We will explore the science of these living systems and discuss how incorporating timely maintenance can benefit the budget as well as the environment.

**11:20 am – 11:40 am**

**Marit Larson**, Director, Wetlands Restoration, NYC Dept. Parks & Recreation, Natural Resources Group

**Habitat Restoration and Green Infrastructure Opportunity Analysis for the Alley Creek/Little Neck Bay Watershed and Habitat Restoration Plan**

The Alley Creek Watershed Plan demonstrates a model for setting goals for restoration, a framework of strategies for reaching those goals, specific recommendations and priorities for implementation.

**11:40 am – 12:00am**

**Trinh Doan**, Environmental Protection Specialist, DC Watershed Protection Division

**Reimagining the Schoolyard as a Stormwater Practice and Incentive Programs that Will Help**

This session will cover several ways of reimagining the schoolyard space as a place where stormwater can be reduced, stored, harvested, and treated. A brief discussion of the various incentive programs that DDOE offer to help school and residential communities.

### MORNING CONCURRENT SESSIONS (continued)

#### HABITAT RESTORATION – ROOM 120

11:00 am – 11:20 am

**Jennifer Greenfeld**, NYC Department Parks & Recreation, Natural Resources Group

**“Guidelines for Urban Forest Restoration” – The Anti-Cookbook or 30 Years of Experience**

**Restoring Forests in New York City**

This talk will introduce a new publication compiling the theories and practices developed, implemented and tested during this time period. The talk will review the contents of the book sharing specific examples.

11:20 am – 11:40 am

**Adam Mitchell**, Research Assistant, Dept. of Entomology and Wildlife Ecology, University of Delaware

**Modifying Soil Properties to Restore Plant Communities for Arthropods following Plant Invasion and Drought**

Modifying the chemical and physical properties of the soil to reduce the dominance of an invasive, warm-season grass and restore native plant and arthropod communities in Gulf Coastal prairies.

11:40 am – 12:00am

**Larry Murrell**

**Soil Restoration: Reversing Soil Compaction in Damaged Clay Soils**

Soil decline of residential properties in NJ can be reversed through high levels of air-infusion into eroded clay, which causes the clay to become highly porous, improving underground water flow and site conditions.

### AFTERNOON CONCURRENT SESSIONS

#### LAND MANAGEMENT FOR RESTORATION – AUDITORIUM

1:30 pm – 1:50 pm

**Nathan Shampine**, Natural Lands Manager, Mt Cuba Center

**Data-Driven Land Management: Using Data Collection and GIS to Establish Goals and Prioritize Land Management and Restoration Decisions**

Utilizing available tools and technology, land managers can easily make data-driven, intentional and impactful management decisions. This talk will demonstrate examples of how Mt Cuba has chosen reforestation sites and show how they have developed a long term vegetation survey to track changes over time.

1:50 pm – 2:10 pm

**Tracy Beerley**, Morris Arboretum

**An Adaptive Management Plan of the Natural Lands Section of Morris Arboretum of the U of Penn**

An assessment of the current status of a section of the Natural Lands Section of the Morris Arboretum, it will serve as baseline data for future monitoring, evaluation and further investigation.

2:10 pm – 2:30pm

**Kristen King & John Krawchuk**, NYC Parks, Central Forestry, Horticulture & Natural Resources Division  
**Ecological Restoration and Historic Preservation: Two Case Studies from NYC**

An examination of unique projects at historic Fort Totten and North Brother Island where forest restoration goals interface with the preservation of historic and cultural resources.

### AFTERNOON CONCURRENT SESSIONS (continued)

#### RESTORATION – ROOM 125

**1:30 pm – 1:50 pm**

**Claudia West & Shane Morgan**, White Clay Creek Wild & Scenic Rivers Program/North Creek Nurseries  
**Cleaning Water with Native Plants**

Retrofitting existing basins with dense layers of native plants improves their functionality and aesthetic quality, but doing so with limited budgets is a challenge. Join us as we share lessons learned, common mistakes as well as success stories, to give you the knowledge and tools you need.

**1:50 pm – 2:10 pm**

**Terry Doss**, Biohabitats

**Restoration in the Post-Super Storm World**

How can we reduce flood risk in coastal areas that are being rebuilt, while integrating our built environment with the natural habitats that provide a myriad of ecosystem services? Nature has provided us with the tools.

**2:10 pm – 2:30pm**

**Geoffrey Goll, P.E.**, Princeton Hydro

**Restoration of Natural Stream Function and Fish Passage on Darby Creek, Delaware County, PA**

This talk focuses on the restoration of Darby Creek's functions and values to reduce the impact of floods and restore historic routes for migratory fish such as American eel and river herring.

#### HABITAT RESTORATION II – ROOM 120

**1:30 pm – 1:50 pm**

**Jonas Hamberg**, Environmental Science/Ecological Restoration, SUNY – ESF

**Modeling Restoration Potential of Aquatic Plants in the Hudson River after Loss Due to Storm Events**

I model the sustainability of assisted restoration of submerged aquatic vegetation in the Hudson River estuary after loss due to storm events. Results point to a need for citizen science involvement.

**1:50 pm – 2:10 pm**

**Sarah Lumban Tobing**, Project Manager, Wetlands and Riparian Restoration, Forestry, Horticulture, and Natural Resources, NYC Parks and Recreation

**Anadromous Fish Restoration on the Bronx River**

Fish passage design and construction on the Bronx River faces unique challenges due to its ultra-urban setting, as well as the fact dams are viewed as valuable historic architecture in NYC.

**2:10 pm – 2:30pm**

**Zachary Ladin**, University of Delaware

**Plugging the Urban Sink: Metapopulation Simulations suggest Coincident Regional and Local Conservation Efforts could Help Stem Declines of Forest-Breeding Songbirds**

We use an integrative approach linking 40 years of demographic data with contemporary metapopulation model simulations of a declining forest-breeding songbird to predict population responses under differing conservation scenarios. Results suggest that independently reducing the proportion of impervious surface around forest patches and cowbird parasitism pressure may slow current negative population trends.