



## LISS Habitat Restoration & Stewardship Work Group

Mystic Aquarium  
55 Coogan Blvd.  
Mystic, CT 06355-1997

September 12, 2018

### Meeting Summary

#### Attendance-21

David Kozak, CTDEEP  
Victoria O'Neill, NEIWPCC/LISS  
Mark Paine, City of West Haven  
Genevieve Nuttall, Audubon CT  
Suzanne Paton, USFWS  
Angela Schimizzi, NYSDEC  
Anna Weshner-Dunning, LISS/NYSG  
David Gumbart, TNC  
Emily Hall, CTDEEP  
MaryEllen Mateleska, Mystic Aquarium  
Peter Auster, Sea Research Foundation

Tim Visel, Sound School  
Suzanne Paton, USFWS  
Harry Yamalis, CTDEEP/LISS  
Jamie Vaudrey, UConn  
Mark Parker, CTDEEP  
Roger Wolfe, CTDEEP  
Todd Bobowick, NRCS  
Alison Verkade, NOAA  
Katie Cubina, Mystic Aquarium  
Beth Sullivan, Avalonia Land Trust

#### Notes

Welcome, Introductions / Announcements  
*V. O'Neill / H. Yamalis / D. Kozak*

Suzanna Paton, USFWS

- There is a saltmarsh business plan underway for east coast that will identify major threats to marshes. Mitch Hartley will present at next LISS HRSWG meeting. Please let us know if you want to review the draft.
- USFWS is working on tool to identify habitat restoration areas for the saltmarsh sparrow. There will be state by state prioritization. Top 5 areas for restoration will be identified for NY and CT.
- Saltmarsh sparrow listing under ESA
- Species status assessment document is out for peer review right now and a response is due in October 2018. Recommendation meeting in Hadley, MA in December 2018 where USWFS will review document and recommend that it goes to Washington DC. FFY19 decision no later than September 2019. Regardless of the listing decision, this document will be a living document which will inform conservation actions with partners.
- Black rail listing is due soon as well; decision will be no later than Sept 2019.

Welcome to Mystic Aquarium  
*Katie Cubina*

#### Presentations

##### **Macroalgae in Long Island Sound Embayments**

*Dr. Jamie Vaudrey, UConn*

- Monoculture algal blooms can be found throughout LIS shallow embayments.
- The outer portion of Little Narragansett Bay (RI & CT) has a well flushed area of seagrass. The inner portion of LNB has reduced H<sub>2</sub>O quality with reduced water clarity. Cladophora is abundant.

-Massive blooms that coat the bottom of the embayment can create massive impacts on bottom habitat. Recreationally it is bad because there is a rotten smell and the algae create shading, depleting the area of oxygen, increasing turbidity. This change to the habitat has a negative impact on crabs and fish. Some algae release toxic compounds and inhibit larval recruitment.

-Seaweed blooms have positive impacts too. They increase productivity, provide complex habitats like food and shelter. The problem is LIS is nutrient abundant and the growth is out of control.

#### ***Mumford Cove, CT***

WWTP at Fort Hill Brook. Outfall relocated in fall 1987. Basically turned off the source of the nutrients and stopped the macroalgae bloom. It took 15 years for eelgrass to naturally come back to the area.

#### ***Little Narragansett Bay***

-Huge amount of Cladophora on bottom. Acts like Velcro and collects seagrass leaves. Thick and tumbles vertically, moves traps seagrass, some places 3ft deep. Summer rates of cladophora floating and washing up on marsh surface and beach. Now coating seagrass beds outside LNB and moving westward.

#### ***Holly Pond, Stanford, CT***

-Gracilaria sp. Invasive forms

#### ***Cold Spring Harbor***

-Not a seaweed problem in most of CSH. Ulva inner portion 1930s there was eelgrass in CSH.

#### **Unified Waters Study**

-Sampling seaweed as part of the study. Using a rake.

-N is 66% of septic and sewer in LIS embayments. What do you do with seaweed? rake it and reuse it? Not if it is toxic.

-Control nutrients at the source.

-Animal feed, fish feed. But needs to test for heavy metals.

-Problem Species: Ulva, Gracilaria, Cladophora, five browns

-Eelgrass catches balls of Ulva and smothers the eelgrass

-Warmer spikes in water temperature in summer but colder spikes in winter so southern species cannot survive.

-Specifications to specific issues in CTDEEP. Sewer areas where septic is not working, centralize waste. Take care of point source pollution. WWTP increase N removal. Move outfall to areas that flush better. All takes money and political will.

#### **Subtidal Habitat Mapping: Insights into ecological processes and management issues**

##### ***Dr. Peter Auster, Senior Research Scientist, Sea Research Foundation***

-LIS Cable Fund project. Mapping seafloor in LIS. The pilot project area included Stratford Shoals. The current project area is in Eastern LIS. The last area to map will be in the Western LIS. Many partners over many years of work.

-In eastern LIS Crepidula dominated most areas. Blue mussels only dominated one area. In the 1970-1990s, blue mussels dominated most areas.

#### **Creating a Wish List of Habitat Restoration Projects**

##### ***V. O'Neill/H. Yamalis***

The HRSWG will create a list of potential habitat restoration projects which we will present to the LISS-MC at the October 18 2018 MC meeting. The purpose of this effort will be to request funding for one or more projects directly through the MC / Base+ budget, given the tripling of the overall LISS operating budget by Congress from the steady ~\$4million budget from 2016 and earlier. The types of projects we are looking for are projects that need a little bit of funding to get the project over the edge, projects with no match, projects that do not fit within the scope of the LISFF. Projects discussed during the meeting included:

-Flax Pond, Old Field, NY

-Cranberry Pond tidal marsh, Waterford, CT

-Great Gull Island

-Merwin Meadows Dam Removal, Wilton, CT

**Coastal Resiliency on a Small Scale: The Dodge Paddock Project**

*Roger Wolfe, CTDEEP*

**Field Trip to Dodge Paddock**

*Roger Wolfe (CTDEEP), Beth Sullivan (Avalonia Land Trust), MaryEllen Mateleska (Mystic Aquarium)*

-Photos below

*For those of you who missed the meeting, or for those that would like to revisit the presentations, you can find the presentations here:*

[https://drive.google.com/drive/folders/1iKCT2HgiAZM-5BDGC0fIXqJ841p\\_dNTx?usp=sharing](https://drive.google.com/drive/folders/1iKCT2HgiAZM-5BDGC0fIXqJ841p_dNTx?usp=sharing)

**2018 Meeting Dates:**

Wednesday, November 28 (NY)



Beth Sullivan from the Avalonia Land Trust speaks to the group prior to the tour of Dodge Paddock in Stonington, CT (*photo NYSDEC*).



The group tours the Dodge Paddock site (*photo NYSDEC*).



View of the restoration site at Dodge Paddock (*photo NYSDEC*).