# RESEARCH AT THE RESERVE

# **TUESDAY EVENINGS IN MARCH**

## VIRTUAL & IN-PERSON

Join us for an informal evening learning about innovative research happening around Waquoit Bay. Each week you will learn from a different scientist about how they do their research, what they are discovering, and how it applies to today's issues.

#### To register for one or all of our programs please visit www.waquoitbayreserve.org



### VIRTUAL PRESENTATIONS ASSESSMENT & MONITORING OF TIDAL MARSH BIRD POPULATIONS IN THE FACE OF GLOBAL CHANGE Tuesday, March 5 - Virtual Presentation

6:30PM - 7:30PM



Learn about the efforts of SHARP (Saltmarsh Habitat and Avian Research Program). What is SHARP and what does it have to do with the marshes of Waquoit Bay? Come hear about this program which is working from Maine to Virginia to answer the questions needed to prevent tidal marsh birds and their wetland habitats from disappearing. Find out the results of their surveys at Waquoit Bay NERR and how community members can contribute to these studies.

A Zoom link will be sent to you prior to the webinar.

SHARP is being used to assess tidal marsh bird populations in the face of sea-level rise. Since 2010, SHARP has united partners in surveying tidal marsh birds, particularly the Saltmarsh Sparrow. Their work has yielded insight about tidal marsh bird populations that is now being used to direct marsh restoration.

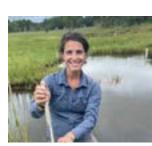
Kate Ruskin, University of Maine, and Sophie Barno, Adjunct Professor, Baruch College of Natural Sciences and Queens College Dept. of Biology.



#### SALT MARSH MIGRATION INTO MARITIME FORESTS IN THE NORTHEAST Tuesday, March 12 - Virtual Presentation 6:30PM - 7:30PM

Learn about the impacts of sea level rise on salt marshes in the northeast and what is currently known about the process of marsh migration into forests. Research in Waquoit Bay and sites in New York and New Jersey has shown that plant communities in areas where forest is transitioning to marsh differ in species composition between sites, and that plant ability to survive tidal flooding also differs between sites. Find out what factors stress and shape plant communities in forest-marsh transition areas. *Andrew Payne, Ph.D. Candidate, Drexel University.* 

#### **IN-PERSON & VIRTUAL PRESENTATIONS**



# What is a Runnel and Can it Help Restore Our Salt Marshes?

#### Tuesday, March 19 (In-person & Virtual) 6:30PM - 7:30PM

Salt marshes are experiencing accelerated changes via sea level rise and other disturbances, which is causing extensive habitat loss. Areas of standing water on the marsh platform cause vegetation death, elevation loss, and expansion of standing water. This has potential implications for important ecosystem services such as carbon and nitrogen cycling. In December 2023, we installed runnels, a restoration tool to help drain standing water and encourage revegetation and elevation gain in the marshes in the South Cape Beach area. In the coming years, we will monitor the effectiveness of the runnels. *Hillary Sullivan, (Woodwell Climate Research Center), Ph.D. Candidate, Northeastern University, and NOAA Margaret Davidson Fellow at Waquoit Bay NERR.* 

### WAQUOIT BAY Reserve Visitor Center

131 Waquoit Highway, Waquoit

Please register at www.waquoitbayreserve.org

Doors open at 6:00PM.

Light refreshments

Questions? Contact Joan Muller at joan.muller@mass.gov



#### INTO THE SWMP AND BAYWATCHERS META-VERSE Tuesday, March 26 (In-person & Virtual) 6:30PM - 7:30PM

Waquoit Bay NERR hosts two long-term water quality monitoring programs encompassing the whole bay and its tributaries: the national scale System-Wide Monitoring Program (SWMP) and the local volunteer-based Waquoit BayWatchers. They are very different programs both in their structures and in aspects of their missions. Waquoit Bay Research Associate Theo Collins dives into the details of both programs: the strengths and limitations of each dataset, where to find and access the data, and how data from each of these programs have been applied in various projects from local to national scales. *Theophilos (Theo) Collins, Research Associate, Waquoit Bay NERR.* 

**Co-Sponsors** 

Waquoit Bay National Estuarine Research Reserve, Friends of the Waquoit Bay Reserve MA Department of Conservation & Recreation, National Oceanic and Atmospheric Administration