

RESEARCH AT THE RESERVE

131 WAQUOIT HIGHWAY, WAQUOIT (E. FALMOUTH)

TUESDAY EVENINGS

7:00PM - 8:30PM



IS NITROGEN REMOVAL A SHELL (OR SHELLFISH) GAME?

INSIGHTS INTO NITROGEN LOADING IN COASTAL WATERS & POTENTIAL REMEDIATION STRATEGIES

Tuesday, April 26

Nitrogen pollution of our coastal waters is a threat to the health of our ecosystems, public health and economy. For the residents of Cape Cod, nitrogen remediation is a multibillion dollar issue. This economic driver has spurred increased interest in alternative strategies to restore the health of our coastal waters. Oyster aquaculture is one such strategy that has benefitted from the increased interest but does it really remove nitrogen or just move it to another place within our estuaries?

Dr. Daniel Rogers is an Assistant Professor of Analytical Chemistry at Stonehill College in Easton, MA. Dr. Rogers earned a Ph.D. through the Massachusetts Institute of Technology/Woods Hole Oceanographic Institution Joint Program in Oceanography. His research interests include the coupling of chemical and biological techniques to better understand how natural environments function.



AFTER TWENTY YEARS, WHAT CAN THE WATERS IN WAQUOIT BAY TELL US?

Tuesday, May 3

The Waquoit BayWatchers volunteer citizen science program has over twenty years of temperature, salinity, depth, dissolved oxygen, and chlorophyll data for Waquoit Bay. The Reserve's Research Associate Jordan Mora has recently examined the data and detected dramatic changes in temperature and dissolved oxygen that provide compelling evidence that Waquoit Bay may be experiencing impacts from climate change as well as eutrophication from the addition of too much nitrogen to the waters stemming from wastewater, fertilizers, and the burning of fossil fuels. Join us to see what the data is revealing.

Jordan Mora is the Research Associate at the Waquoit Bay Reserve. Ms. Mora earned a Master of Science degree in salt marsh ecology from the University of New Hampshire. Ms. Mora is responsible for the System-Wide Monitoring Program at Waquoit Bay Reserve which monitors the long-term effects of natural and human-induced environmental changes.



TRACKING THE MOVEMENTS OF COMMON TERNS, ROSEATE TERNS, AND PIPING PLOVERS IN SOUTHERN NEW ENGLAND

Tuesday, May 10

Ever wondered about the antenna rising up from the sands at South Cape Beach in Mashpee? Researchers from UMASS Amherst are tracking the movements of Common Terns, Roseate Terns, and Piping Plovers in Southern New England by using light-weight transmitters which track the birds around the clock. Knowledge of offshore flight paths of birds is essential to inform effective conservation decisions in marine planning such as how to minimize impacts of offshore wind energy facilities on key bird populations. Hear about the work at South Cape Beach in Mashpee and how it connects to work in southern New England which is coordinated with automated radio telemetry stations throughout the Western Hemisphere.

Pamela Loring is a PhD candidate in the Department of Environmental Conservation at the University of Massachusetts, Amherst. Her doctoral research focuses on tracking the movement patterns of shorebirds & seabirds in southern New England to inform siting & monitoring of offshore wind energy facilities in the region.

WAQUOIT BAY RESERVE VISITOR CENTER

COFFEE HOUSE SERIES

Join us for an informal evening learning about the cutting edge 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.

Coffee & dessert provided.

There is no charge for the series, table seating is limited and available on a first-come, first-serve basis. For additional information please contact Joan Muller at joan.muller@state.ma.us or visit our website at www.waquoitbayreserve.org.

Co-Sponsored by the Waquoit Bay Reserve, Waquoit Bay Reserve Foundation & MA Department of Conservation & Recreation