

# RESEARCH AT THE RESERVE

131 WAQUOIT HIGHWAY, WAQUOIT (E. FALMOUTH)  
THURSDAY EVENINGS IN APRIL  
7:00PM - 8:30PM



## THURSDAY, APRIL 2

### THE SUBTERRANEAN ESTUARY: AN UNSEEN AND OVERLOOKED BOUNDARY BETWEEN THE LAND AND THE SEA

This presentation will explore the Waquoit Bay subterranean estuary. This unique mixing zone between fresh and salty groundwater has been used over the past 25 years as a natural laboratory for understanding groundwater's effects on marine chemistry and biology.

*Matt Charette is a Senior Scientist in the Department of Marine Chemistry & Geochemistry and Director of the Coastal Ocean Institute at the Woods Hole Oceanographic Institution.*



## THURSDAY, APRIL 9

### WHAT'S NEXT FOR BLUE CRABS?

For centuries, Cape Cod has been the northern range boundary for blue crabs, an ecologically and economically important predator in Atlantic coastal estuaries. In recent years however, people have begun to see blue crabs in waters north of Cape Cod. As conditions continue to warm, will we see blue crabs expand their populations into the Gulf of Maine? What will this mean for the salt marshes and invasive green crabs if a new predator comes to town?

*Tanya Rogers is a PhD student at the Northeastern University Marine Science Center. She is studying crab populations in Waquoit Bay and in many other estuaries north and south of Cape Cod.*



## THURSDAY, APRIL 16

### WINTER FLOUNDER & WAQUOIT BAY

The Massachusetts Division of Marine Fisheries (Marine Fisheries) has conducted research on winter flounder for over 50 years in Massachusetts waters. In recent years, historically low populations of winter flounder were recorded in the region. We will look at the data collected and discuss what we have done and learned about this important species.

*Vincent Manfredi has worked at sea collecting fisheries data since 2001 on research surveys for the States of Maine & Massachusetts. He is currently a Survey Biologist for Massachusetts' Marine Fisheries Agency in New Bedford, MA.*



## THURSDAY, APRIL 23

### WHAT'S HAPPENING WITH CONTAMINANTS OF EMERGING CONCERN IN OUR COASTAL WATERS?

The Center for Coastal Studies, in collaboration with several other organizations, including Waquoit Bay Reserve, has documented the presence of contaminants of emerging concern (from sources including pharmaceuticals and personal care products) in our coastal waters. In 2014, the Center expanded this work to include research on accumulation of these contaminants in living organisms. What is their impact on the environment and humans?

*Dr. Amy Costa is a Research Scientist at the Center for Coastal Studies. Her work focuses on the quality and overall health of marine and coastal ecosystems through the integration of chemical, physical and biological studies.*



## THURSDAY, APRIL 30

### ANTIBIOTIC RESISTANT BACTERIA AT THE BEACH

Antibiotics have revolutionized the way we treat bacterial infections. However, bacteria have increased their resistance to antibiotics partially due to the prevalent use of these chemicals by humans. Why are the Centers for Disease Control and Prevention, the White House, and World Health Organization, concerned about antibiotic resistance? What does it have to do with our local beaches?

*Megan May is a second year graduate student pursuing her Ph.D. in Biological Oceanography in the MIT-WHOI Joint Program in Oceanography, she is a National Science Foundation Fellow and works in Rebecca Gast's laboratory in Woods Hole.*

## COFFEE HOUSE SERIES

### WAQUOIT BAY RESERVE VISITOR CENTER

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.

We'll serve hot coffee and sweet desserts to complete the coffee house atmosphere.

*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](mailto:joan.muller@state.ma.us) or visit our website at [www.waquoitbayreserve.org](http://www.waquoitbayreserve.org).*

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