



On Parker Pond, Mount Vernon Maine

A Natural History Week at Bearnstow

June 20–24, 2016

Program for Wednesday, June 22

MORNING SESSION: 10:30 A.M.

“Climate Change in New England: A Long-term Perspective from Lakes”

**Dan Miller, Ph.D. candidate and graduate fellow,
Northeast Climate Science Center, University of Massachusetts–Amherst**



Dan Miller and colleagues Helen Habicht and Ben Keisling collect water samples using sediment traps in Basin Pond in September 2015. These water samples are analyzed to look at the productivity and biodiversity at different depths in the lake.

Starting roughly 20,000 years ago, ice sheet retreat began to carve out the New England landscape as we know it today, including many lakes in the region. We will discuss how these lakes can be used in understanding environmental and climatic change since the last Ice Age, and will address the impact humans have had on the local landscape and lake ecosystems.

The talk will be focused on research from Basin Pond, Fayette, Maine, where studies are being performed that focus on the past environmental and climatic conditions around the pond.

AFTERNOON SESSION: 1:30 P.M.

“Recognizing Local Geologic Features in the Lake Environment” Woods and Shore Walk with Dan Miller

Past glacial activity can be clearly seen across New England’s landscape, especially around lakes. We will look at different features around the lakeshore that indicate glacial activity thousands of years ago. We will also view the relationship between lakes and the local environment by looking at the types of vegetation and wildlife around the lakeshore.



Dan Miller is a Ph.D. candidate and graduate fellow of the Department of the Interior’s Northeast Climate Science Center at the University of Massachusetts–Amherst. Dan received his Bachelor of Science in Atmospheric Sciences and Economics from Ohio State University in 2013, and his Master of Science in Geosciences from the University of Massachusetts–Amherst in 2015.

Dan’s research interests broadly include climate and environmental change throughout time, and how humans are contributing to current and future climate change. Currently, Dan’s Ph.D. research includes (1) using lake sediment cores to reconstruct past climatic extreme events (focusing on wildfire activity) in the Northeastern United States, and (2) predicting future risk and susceptibility to wildfires in the region with future climate change through the 21st century.

Admission is free, but contributions for the nature walks and presentations are greatly appreciated. Please reserve for any event by calling 207-293-2280 after June 15. Lunch is also available (\$10). Bearnstow is located at 84 Bearnstow Road in Mount Vernon. See www.bearnstow.org/contact.htm for directions.