



Bearnstow

On Parker Pond, Mount Vernon, Maine

The Fifth Annual Natural History Week June 20–24, 2016

Lecture Presentations and Nature Walks by Visiting Naturalists

Morning Lectures (10:30 a.m.) / Afternoon Nature Walks (1:30 p.m.)

Admission free. Call 207-293-2280 for reservations after June 15.



Monday, June 20:

Peter Warny, Wildlife Ecologist and Herpetologist, New York
“Amphibians and Reptiles of Cape Cod National Seashore”



Tuesday, June 21:

Justin Waskiewicz, Lecturer, Rubenstein School of Environment and Natural Resources,
University of Vermont
“Forests as Dynamic Ecological Systems”



Wednesday, June 22:

Dan Miller, Northeast Climate Science Center, University of Massachusetts, Amherst
“Climate Change in New England: A Long-term Perspective from Lakes”



Thursday, June 23:

Eric Jones, Assistant Professor of Plant Biology, University of Maine, Machias
“Pollination, Food Production, and Honeybee Health”



Friday, June 24:

Kevin Doran, Natural Science Educator, Maine Forest Service
“Maine Woods: Finding the Right Balance”

See also www.bearnstow.org/nathist2016.htm.

Bearnstow’s lands are protected in perpetuity by a conservation easement held by the [Kennebec Land Trust](#).



Bearnstow

On Parker Pond, Mount Vernon, Maine

A Natural History Week at Bearnstow

June 20–24, 2016

Program for Monday, June 20



MORNING SESSION: 10:30 A.M.

“Reptile Ecology Along the East Coast, USA”

Peter Warny, Wildlife Ecologist and Herpetologist, New York

This illustrated talk will discuss over 40 years of eco-road trips from Maine to Florida. Attention will focus on changes in biodiversity as documented in wetland and roadkill surveys, coverboard snake surveys, and in snorkeling surveys to recapture turtles for a long term monitoring projects. A discussion of various environmental issues will follow.

Left: Pete shows various snake skins to a group of students on a field trip from the University of Florida.

AFTERNOON SESSION: 1:30 P.M.

Woods Walk with Pete Warny

On this walk we will look for wildlife and wildlife signs along the Clyde Walton Trail, Uncle Daniel’s Brook, and Parker Pond, examining plants, animals, and the geology of rocks and minerals. Special emphasis will be given to amphibians and reptiles encountered.



Peter Warny, a former ecologist with the Nature Conservancy and National Audubon Society, travels extensively across America, focusing on wetland habitats and documenting changes in the food webs composed of aquatic insects, fish, amphibians, and reptiles.

Pete currently conducts conservation biology projects and surveys on private preserve lands in Florida and Louisiana.



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.



Bearnstow

On Parker Pond, Mount Vernon Maine

presents

A Natural History Week at Bearnstow

June 20–24, 2016

Program for Tuesday, June 21

MORNING SESSION: 10:30 A.M.

“Forests as Dynamic Ecological Systems”

Justin Waskiewicz, Lecturer
Rubenstein School of Environment and
Natural Resources, University of Vermont

Forests are complex both in the diversity of components within them and in the ways those parts interact over time. This presentation will introduce the basic concepts of forest ecosystem function—the processing of energy and materials by interacting organisms, and how those processes and their results change as a forest grows and ages.

AFTERNOON SESSION: 1:30 P.M.

“Tree Behavior and Strategy, Forest Structure and Interactions”

The complex and dynamic environment of a forest ecosystem presents challenges for long-lived organisms like trees. Different species have developed different strategies for ensuring their success in this environment, both as individuals and as reproducing populations. The interaction of these tree behaviors shape the appearance of a forest at any given time and provide clues for estimating the past and predicting the future of forest development.



Justin Waskiewicz is a forestry lecturer in the Rubenstein School of Environment and Natural Resources at the University of Vermont, where he teaches a variety of courses in forest ecology, forest measurements, and forest management. He grew up in rural northern Pennsylvania, surrounded by actively managed northern hardwood forests. With those surroundings, and a forester and amateur naturalist as parents, Justin developed a strong interest in forest ecology early on, which he pursued through hobbies and education.

Justin has a BS in Forestry from Northern Arizona University, an MS from the same institution, where he studied standing dead trees (snags) in ponderosa pine forests subject to prescribed fire restoration treatments, and a PhD in Forest Resources from the University of Maine, where he studied competition between species in red oak–white pine dominated mixtures.

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.



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.



Bearnstow

On Parker Pond, Mount Vernon, Maine

**A Natural History Week at Bearnstow
June 20–24, 2016**

Program for Thursday, June 23

MORNING SESSION: 10:30 A.M.

“Pollination, Food Production, and Honeybee Health”

Eric Jones, Assistant Professor of Botany, University of Maine at Machias



This talk will provide a basic introduction to pollination and how pollination services are critical in the production of foods. We will talk about general trends in pollinator abundance and what that means for global food production prospects. Honeybees will serve as a model during this discussion, and the particular issues facing honeybees globally will be detailed along with recommendations of how individuals can play a part of the solution to this impending global crisis.

AFTERNOON SESSION: 1:30 P.M.

Woods Walk with Eric Jones

The walk in the woods of the Bearnstow camp will focus on methods used by plants for reproduction. We will examine some examples of flowers that relate to our morning discussion about pollination biology. We will examine how other plants reproduce in the absence of flowers as well.



Eric Jones graduated from Florida State University in 2012 with a Ph.D. in biological sciences, studying plant mating system evolution in the genus *Houstonia* (Rubiaceae, the coffee family). Eric’s interests are in biodiversity and botany in the broad sense. His background in botany ranges from molecular biology to phylogenetics and development. He is currently Assistant Professor of Botany at the University of Maine at Machias where he teaches courses in general botany, plant systematics, plant ecology, general ecology, algal biology, and phylogenetic methods. Eric is also the curator of the UMM Herbarium, which houses collections of vascular and non-vascular plants and marine macroalgae.

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.



Bearnstow

On Parker Pond, Mount Vernon Maine

**A Natural History Week at Bearnstow
June 20–24, 2016**

Program for Friday, June 24



Kevin Doran takes core sample from tree trunk to estimate age.

MORNING SESSION: 10:30 A.M.

**“Maine Woods: Finding the Right Balance”
and
“Tree identification, Reading the Landscape, Forests, and Forestry”**

Kevin Doran, Natural Science Educator, Maine Forest Service

An overview of Maine’s woods—forest cover types, land ownerships, and acreage. The balance between land-owner objectives—economic, ecological, wildlife habitat, recreation, and aesthetics will be discussed. We will explore current efforts to manage and conserve Maine forest land, along with opportunities and threats.



Kevin Doran has been a Natural Science Educator for the Maine Department of Conservation, Maine Forestry Service, since 1999. He is also adjunct faculty of the University of Southern Maine, and the University of Maine. He holds an M.S. in Adult and Higher Education from the University of Southern Maine, and an Ed.D. from Nova Southeastern University, Fischler School of Education and Human Services.

In his role as Natural Science educator his job entails developing and delivering forest-based programs, workshops, and materials for students, teachers, and natural resource professionals, forest owners, and the general public throughout the state. Of his position, he says, “I feel I have the best job in state government.”

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