



On Parker Pond, Mount Vernon Maine

A Natural History Week at Bearnstow

June 16–21, 2019

Monday, June 17, 7:30 P.M.

Mount Vernon Community Center

Evening Lecture

MIKE RETELLE, PH.D.

Professor of Geology, Bates College

“Long term Climate History Archived in the Sediment Record of Basin Pond, Fayette, Maine”



Dr. Retelle's colleagues Dan Miller (in the water), 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.



Professor Mike Retelle teaches courses that focus on Earth surface environments and records of environmental change, including introductory Earth Surface Processes, Sedimentology, and Quaternary Paleoclimatology. He also teaches a fieldbased short term course in Limnology and Paleolimnology of Lakes of Northern New England.

Currently Mike is involved in several research projects in the high latitude North Atlantic region. He began his arctic research as a graduate student working in the Canadian arctic, focusing on glacial and sea level history and high resolution records of climate change preserved in annually layered lake sediments.

Mike has been working in Svalbard, Norwegian high arctic since 2005. He co-led a summer research program for undergraduates, the Svalbard REU Project, sponsored by the U.S. National Science Foundation, Arctic Natural Sciences program. This project involved the study of modern processes in a high arctic glacial-fluviallacustrine system and the investigation of longer term and high resolution climate change reconstructed from lake sediments. This program is now a summer research course in the Arctic Geology Department at UNIS, the Norwegian University Centre in Svalbard, in which Mike is the lead instructor.

Admission is free, but contributions are gratefully accepted.