

## **NORTHEASTERN FRIENDS OF THE PLEISTOCENE 2019 -- FIRST ANNOUNCEMENT**

The Northeastern Friends of the Pleistocene are returning to Cape Cod, Massachusetts, May 31 to June 2, 2019, sponsored by the U.S. Geological Survey, Massachusetts Geological Survey, and the Massachusetts Geological Society. Our headquarters hotel is the **FOUR POINTS BY SHERATON EASTHAM** with adjacent **OCEAN PARK INN** (please reserve rooms now – you may cancel easily if necessary). The annual banquet will be Saturday night, June 1 at the **FOUR POINTS**.

This trip comes 51 years after the original Cape Cod trip in 1968, led by Bob Oldale, Carl Koteff, and Joe Hartshorn, who invited the Friends to examine the geology shown on new, detailed geologic maps of the Cape Cod National Seashore. The present trip will visit classic stratigraphic localities that reveal evidence of meltwater processes active in construction of the large glaciodeltaic landforms of the outer Cape. We also will visit fresh pit exposures (your chance of a lifetime) in the two large recessional moraines and outwash deposits of the western Cape. Interpretation of offshore correlative geology from seismic profiles and origins also will be discussed. Holocene coastal and marine deposits of the Provincetown Hook, Wellfleet Harbor, and Seashore beaches will be visited. Our goal is to provide you with the latest stratigraphic framework of the Cape Cod area, a discussion of this part of the new Quaternary Geologic Map of Massachusetts, and opportunities for imaging and sampling typical sediments so that you are best prepared to teach these details to the next generation. The trip also features discussions about the bedrock surface beneath the Cape, distribution of Coastal Plain sediments on top of rock, history of subsurface studies, drill holes, ongoing contamination studies in aquifer zones, offshore geology, the last marine transgression, and developments in Quaternary geochronology of the area.

This trip covers parts of three days. Friends arriving early may enjoy sights and hikes early in the week at low off-season hotel rates. Trip activities will begin on **FRIDAY** at 10:00 AM when we will assemble at **FOUR POINTS** and drive to the first **STOP** on the outer Cape. We will visit **STOPS** in glacial and coastal deposits with scheduled assemblies at Seashore parking lots. A list of final **STOPS** and scheduled assembly times will be forwarded when we complete trip plans; you may join Friday's trip at a scheduled assembly point when you arrive during the day.

On **SATURDAY**, we board buses at the hotel and begin field stops in the Provincetown Spit, with discussion of offshore geology. We will then visit classic localities in the Wellfleet, Truro, and Eastham glaciodeltaic plains of glacial Lake Cape Cod, in order to consider a new twist on the setting of the earlier controversial Highland clay, to view details of various sedimentary facies, and to discuss relationships of these deposits to glaciotectonic Billingsgate deposits and the evolution of the glacial interlobate zone.

On **SUNDAY**, we rise early, settle with the hotel, and drive 45 minutes to park at the Cape Cod Canal visitor's center. There, we board buses for the trip to large pit exposures in the Buzzard's Bay and Sandwich moraines, and other exposures of outwash facies and postglacial deposits. The busses return to the parking lot at 2:00-3:00 so that you may begin your return trip from this vantage point.

Guests are responsible to make their own reservations (mention USGS Friends of the Pleistocene 2019 to receive the group rate). Reservations by attendees must be received on or before **05/01/2019 by 5pm**. Cancellation policies: Four Points- 48 Hours Prior to Arrival; Ocean Park Inn- One week Prior to Arrival

**FOUR POINTS BY SHERATON EASTHAM CAPE COD** 508-255-5000 reservations

Room Rates: May 31-June 3, 2019 Friday and Saturday, Per Night

Poolside Rooms with two queen beds: \$169.00 Per Room; Larger rooms with two queen beds: \$189.00 Per Room

**OCEAN PARK INN CAPE COD** (pet friendly) 508-255-1132 reservations

Room Rates: May 31-June 3, 2019 Friday and Saturday, Per Night

Rooms with two double beds: \$109.00 Per Room; Rooms with two queen beds: \$119.00 Per Room

Room rates Thursday night: \$79.00 for rooms with 2 double beds and \$89.00 for rooms with 2 queen beds