

CCMNH Volunteers Help Out With Taylor Bray Farm Archaeological Investigations

By Daniel Zoto, Archaeologist, CCMNH Archaeology Advisory Committee Chair

This October, Plymouth Archaeology Rediscovery Project (PARP) and Taylor Bray Farm Preservation Association (TBFPA) completed its fourth season of archaeological investigation at Taylor Bray Farm in Yarmouthport. Directed by Craig Chartier, the field crew consisted of Cape Cod Museum of Natural History (CCMNH) archaeologists Dan Zoto, Bill Colson, Bruce Brockway, and Craig Kirker, as well as a large number of CCMNH and community volunteers. The Taylor Bray property contains a 17th-century homestead site, possibly the oldest English settlement in the Hockanom area, as well as evidence of Native American occupation spanning the past 8,000 years.

This year, PARP conducted a site examination survey designed to better understand Native American presence at the site, specifically to determine the site's age and purpose. The testing was focused around the positive 50-centimeter² test pits that had been excavated on a ten meter grid across the property during the 2011 season. The challenge was set forth: Could we find artifacts and features in the soil that would give an indication of what types of activities were taking place here and when? The answer is yes, we could, and we did!

The diagnostic artifacts, those whose physical attributes give an indication of age, recovered during this year's dig were consistently from the same time period. We had multiple examples of what are called Atlantic projectile points, which are essentially broad spears that would have been used as an actual spearhead or employed as a knife. Atlantic points in New England date from about 4,100 to 3,600 years before present. The majority of these points were made of rhyolite, a volcanic rock with the correct fracture properties to be chipped into a stone tool. A small number were made of quartzite, a metamorphosed sandstone. Both stone types can be found in on eroding hillsides or along the beaches of Cape Cod.

The other main type of projectile point recovered was of the Wading River type, part of the Small-Stemmed Tradition. This point-making tradition was a technological manifestation that lasted for a much longer duration than Atlantic points, used as far back as 6,000 years possibly up until 1,000 years ago. These points were consistently made of quartz, a silicate that can also be found on the beach or picked from areas of exposed glacial till.

The only projectile points that did not fit into the previous categories were one example of what is called a Cape Stemmed point, and two that were possibly of the Stark type. Cape Stemmed points are a tradition that is confined to southeastern Massachusetts (south of the Boston Basin, the Cape and Islands, and west to Narragansett Bay). Cape Stemmed points date to between 2,500 and 1,500 years ago and were used as a knife or a graver, an engraving tool often used on wood or bone. The two possible Stark points could push dating human occupation in this locus back some 6,000-7,000 years. The condition of the points made it difficult to determine their diagnostic type in the field; hopefully further laboratory analysis will be conclusive.

At several locations across the site, both Atlantic and Wading River point types were found in association with clusters of fire-cracked rock, which are the remnants of Native American cooking activities. The rocks may be cracked from once lining a hearth or cooking fire, or from a cooking process known as stone-boiling in which stones are heated and dropped into

water—as the stones cool they are replaced by freshly heated stones, and the heat transfer brings the water to boil. The thermal pressure created by the rapid heating and cooling of the stones causes them to break in a distinct manner easily recognizable to archaeologists. Some of the fire-cracked rock clusters found at Taylor Bray Farm were in loosely circular groupings, with some stones that were obviously displaced by a plow during the historic period.

In one instance, a string of units encompassing two square meters contained both Atlantic and Wading River points and a fire-cracked rock feature. This association places both point types in contemporaneous use at this site, and constricts the possible time of settlement to between 3,600 and 4,100 years ago. Small amounts of charcoal collected from some of the fire-cracked rock features will be sent out for radiocarbon dating, which will hopefully give us a more precise date. The radiocarbon dates may also help to determine whether the features represent one large occupation or multiple smaller ones.

The group also recovered hundreds of pieces of chipping debris, or “debitage,” which are by-products of stone tool production and maintenance, such as re-sharpening edges or flaking new tips or bases onto broken points. At Taylor Bray Farm, thedebitage was comprised of various types of rhyolite, quartz, and quartzite; the same lithic materials as the projectile points. The only exceptions were two flakes of exotic materials, one of translucent tan chalcedony from an unknown location and one of grey chert which was likely derived from upstate New York. These exotic materials may indicate that people were either moving great distances across the landscape or were engaged in trade with peoples from other regions.

The many CCMNH volunteers that freely dedicated their time and assistance made this year’s excavation at Taylor Bray Farm a great success. A wonderful time was had by all, and hopefully everyone learned a little something along the way! I hope to see a large museum presence again at next year’s dig with Craig Chartier, which will focus on the 17th-century homestead site.