

Ancient Hearths in Manor Field contain Carbonized Plants

The Bard Manor Field ancient Lenape archaeological site was discovered in 1999. The College's engineers had planned parking lots for its vicinity to serve patrons of the Fisher Center for the Performing Arts, designed by Frank Gehry. The proposed ground disturbances of landscaping and paving required archaeological investigation because the Annandale campus is located at the center of the National Landmark Historic District that spans 16 miles of the Hudson riverside. Shovel tests by five Bard students and their professor first found flint chips and then a triangular arrowhead. Next, a square-meter excavation nearby revealed a fire pit. This hearth had been truncated by tillage in historical times, likely when the Livingstons cultivated their estate, then called the Meadows, now Manor. Next to the hearth were remnants of its burned rock lining, along with more flint tools. Two dozen years later students found ancient pottery and charred plants.



The site was initially declared eligible for the National Register of Historic Places because it was still somewhat intact, and inhabited during a century the history of which is sketchily known, just before Henry Hudson's 1609 voyage. The College agreed to avoid the scatter of chipped flint and fire-cracked rock in its planning, as it could contain significant evidence of Indigenous lifeways.

In 2022, archaeology students returned, preliminary to another proposed ground modification: for the new Performing Arts Laboratory, designed by Maya Lin. The circular building with its courtyard opening to the east, was coincidentally to be shaped like certain ceremonial earthworks of Indigenous people in southern Ohio two millennia ago. They were consummate artists in stone, shell, and copper; architects in earth; and astronomers of the moon and sun.

Before excavations resumed, we brought in Timothy Horsley, PhD, a geophysical testing specialist from Illinois, who had done archaeological remote sensing for the NY State Museum. He employed a ground penetrating radar device and magnetometer to survey the site and the area around it. Below a thick plow zone of disturbed soil, from the ground surface down to 30 cm (12 in), the instruments detected a large burned patch of subsoil that might have been the hearth found in 1999. Dr. Horsley identified recent modifications that strongly suggested that landscaping had altered the ground outside the site's boundaries, subsequent to the site's delimitation as within a square, 12 m (40 ft) on each side.

The College signed an agreement with the NY Department of Environmental Conservation and NY's State Historic Preservation Office, reviewed in advance by the Stockbridge-Munsee Community and the Delaware tribal nations, on a research design to recover important information from the site before its

destruction. The large burned patch of soil became the center of a 4 m by 4 m (13.3 by 13.3 ft) rectangular excavation block. There, two dozen students sifted the plow zone, followed by troweling and sifting the last few centimeters (one inch) above the undisturbed light-colored subsoil, likely enabling us to see in it the truncated hearth from 1999 and two smaller clusters of rock with charcoal. We excavated all of these fire pits carefully in search of more Indigenous belongings and collected the soil to dissolve in water for recovery of archaeobotanical vestiges, carbonized plants. Two pieces of Indigenous pottery came to light just outside the large burned patch that contained charcoal and fire-cracked rock.

We finished the dig by mechanical stripping all but the last few centimeters (one inch) of the plow zone, from the central block outward for another 15 m (50 ft) in all directions. More exposure of the subsoil, by shoveling and troweling, revealed another four probable fire pits that we then excavated. One of these contained a flint tool that may have been chipped into shape during several centuries around 4,000 years ago. Another large, bright orange, burned patch (see below, scale is 30 cm / 12 in) contained clumps of black fibrous material, roughly 2.5 cm (1 in) in diameter by 1 cm (0.4 in) in thickness, and smaller chunks of charcoal.



In consultation with the Tribal Historic Preservation Officer and a prospective paleoethnobotanist who would analyze the specimens, we removed them in small blocks for closer study in the laboratory (click below for video, including flint find).



Currently, a key part of the data recovery plan is about to begin for the Bard 12 Manor Field site (its official name, with the number indicating the order in which it was reported, out of 28 other archaeological places at the College that have been reported to NY State). A specialist in paleoethnobotany, by immersing the fire pits' soil in water, will extract the microremains. These items are almost all charred plants (mostly fragmentary nut shells, wood charcoal, and carbonized seeds) that burning has preserved from decay caused by the soil's acidity and bacterial action. The Stockbridge-Munsee Community has expressed great interest in recovery of these botanical vestiges, indicated during two site visits and subsequent emails from its Tribal Historic Preservation Officer, as well as a visit from a Tribal Council member who is also a recognized herbalist, and her daughter who is now starting college as a Bard student.

This web presentation provides the initial public education component of the Bard Manor archaeological project that aims to recover important information about plant use by Indigenous people in the central Hudson Valley just before contact with European explorers. The final two parts of this project are a scientific report for Bard, the Indigenous nations, and the NY State Historic Preservation Office, and installation of a permanent exhibit at the Performing Arts Laboratory. This outdoor display will present four places at Bard that contain significant deposits of Indigenous belongings, ranging back some 90 centuries. One site may have been a pilgrimage destination for travelers from southern Ohio during the 800 years of ceremonial artistry around two millennia ago. This distant connection, together with its precursors and successors, establish the Bard lands, with their great abundance and relative intactness of archaeological places, including several sites from the historical period, as one of the foremost concentrations of buried cultural resources in the Hudson Valley.