The Shohola Flats Archaeological Site

SHOHOLA TOWNSHIP, PIKE COUNTY, PENNSYLVANIA

IN SEPTEMBER 1995, PennDOT District 4-0 authorized Ecoscience, Inc.—a cultural resource management firm headquartered in Moscow, Pennsylvania-to conduct a Phase I archaeological investigation around the approaches to the bridge carrying Pennsylvania State Route 434 and New York State Route 55 across the Delaware River between the villages of Shohola, Pennsylvania and Barryville, New York. It was time to replace the 53-year-old Shohola-Barryville Bridge, but before that could happen, federal and state law mandated that all areas likely to be disturbed by construction of the new bridge be evaluated for archaeological

On the Shohola side of the river, the investigation focused on a 6-acre terrace—known to area residents as "the Flats"—lying just upstream from the mouth of Shohola Creek and Mitchie Falls. An aerial photograph of this terrace taken in April, 1939 (right, center) revealed that before the Shohola-Barryville Bridge's construction the terrace had been occupied by a baseball field with a well-worn diamond. Here Ecoscience archaeologists systematically excavated scores of shovel tests, larger test units, and even larger test trenches. The excavations uncovered a multi-layered archaeological site containing thousands of artifacts and more than a dozen features dating from the "prehistoric" or "precontact" period (before the arrival of Europeans in America) through the twentieth century. Ecoscience personnel gave this archaeological locus the name "Shohola Flats Site." The Pennsylvania Historical and Museum Commission then recommended that a program of Phase II testing be performed in order to determine the dimensions of the Site, the ages of its principal components, and ultimately its eligibility for listing in the National Register of Historic Places.

In 1998, after changes in the bridge design reduced the potentially affected area by half, PennDOT District 4-0 directed Ecoscience to proceed with a second phase of testing. This work yielded hundreds of additional artifacts and another dozen features concentrated in the center of the terrace. Among the more than 2,500 precontact artifacts unearthed during both phases of the investigation were stone bifaces or points (sometimes called "arrowheads"), hammerstones, grinding stones, netsinkers, pottery sherds (pieces of clay pots), and a drill. The precontact features comprised post holes, hearths, and boiling pits. Their presence in undisturbed soils signaled to the archaeologists that Native Americans had fished, manufactured and refined stone tools, and processed food on this bend in the Delaware River for at least 6,000 years, beginning in the Late Archaic Period (ca. 5000-3000 BP).

Artifacts recovered from the upper layers of soil deposited after the arrival of Europeans-included bullets, pistol balls, lead shot, bullet casings, kaolin pipe fragments, etched table glass, cut nails, a cast brass button, an English gun flint, a brass musket plate, yellowware, whiteware, and pearlware ceramics. Mostly dating to the late eighteenth and nineteenth centuries, these 1,500 "pieces of the recent past" were intriguing, but they did not reveal enough about how "the Flats" were used by latterday residents of the Delaware Valley to make the Site eligible for listing in the National Register on the basis of its post-contact components.

Its prehistoric components, on the other hand, provided valuable information that has enhanced our understanding of the precontact period in the region. Analysis of the artifacts, features, soil layers, Only half-a-dozen intact stone bifaces were unearthed at the Shohola Flats Site, as compared to two-dozen biface fragments (including the three below, left). Among the intact bifaces (left, from left) were a Normanskill Point (6000-4000 BP); a Levanna Point (1300-600 BP), and an Orient Fishtail Point (3200-2500 BP).

and animal remains discovered within the Shohola Flats Site suggested that Native Americans affiliated with groups from the New York area had either rested here on their seasonal migrations, or they carried out intermittent food-related and tool-processing activities here while occupying nearby camps or villages. The bend in the river was an ideal location for a fishing weir, typically fashioned by arranging stones in the shape of a V and placing a basket trap at an opening in the V's narrow end.

Trap fishing was particularly effective in the springtime, when shad migrated upstream. Mussels and oysters could have been gathered here during most months of the year. Traces of processed goosefoot, vervain seeds, maize, and acorns buried deep in the Shohola Flats Site indicated that food was both procured and processed here. Acorns, for instance, were likely parched, pounded, leached of tannic acid, and dried by the thousands. And, finally, the abundance of stone flakes unearthed at the Site (mostly chert from

Americans spent at least part of their time here making and rejuvenating stone weapons and tools.

An Ecoscience archaeologist records data

at Phase II Test Area 2 on August 13, 1998

view of the Shohola-Barryville

Because it vielded valuable information about life in the upper Delaware valley dating back 6,000 years, the Shohola Flats Site was determined eligible for listing in the National Register of Historic Places in 1999.

by archaeologists as pieces of decorated bowls. quarries now located in New York State) revealed that Native

Aerial view of "the Flats,

April 22, 1939

and the United States Army Corps of Engineers, in consultation with the Penn sylvania Historical and Museum Commission.



geomorphological Test Trench 9

in November, 1997







