

# Pine Hawk Site

## Native American Settlement Along the Sudbury, Assabet, Concord Rivers



### WHY DID NATIVE AMERICANS LIVE THERE?

Located on a high terrace of sandy soil overlooking the Assabet River, the Pine Hawk Site was a good location for temporary camps. Native Americans chose this place because of its level ground surface, well drained sandy soils and easy access to the river. It may have also been on a trail or path crossing the Assabet River near the present route of High Street. In addition, Native Americans may have lived here while fishing with traps or weirs in the shallow, rocky bottom of the Assabet River near the site.



### STONE TOOL MAKING

Stone tools were studied to see which types of stone from both local and non-local sources were important raw materials for tool making. Stone tool making left behind concentrations of flakes and tools that broke during the manufacturing process. These broken tool fragments and the small flakes of stone created by this process were also examined to understand what methods Native Americans used to make their tools.

The tool making workshops on the Pine Hawk site contained stone from sources beyond the Sudbury/Assabet/Concord River area. Fine grained volcanic rock known as rhyolite and a metamorphic rock called hornfels from the Blue Hills (Canton/Milton, MA) and central New Hampshire were brought to this site by Native Americans.

The black rhyolite in this workshop was brought from the Middlesex Fells area near Wakefield, MA. Roughly flaked quarry blanks were made into smaller, thin perforators that could be chipped down further to make projectile points, scrapers and other tools.

### SHARDS & FLAKES



### RHYOLITE SPEAR POINTS

The Pine Hawk Site was probably only occupied a few times in this period. These Orient stemmed spear points made of rhyolite found at the site by PAL archaeologists are typical Terminal Archaic artifacts about 2500 years old.

### HOW WAS THE PINE HAWK SITE EXCAVATED?

Archaeologists used 2 x 2 meter square excavation units to uncover evidence of Native American activity on the site. These excavation units were dug by shovel in 5 cm horizontal levels to sterile subsoils, usually about 60cm (20 inches) below the ground surface. Over 40 excavation units were completed during the final archaeological investigation in 1999. All the soil removed from the units was sifted through 1/4 inch hardware mesh to recover Native American cultural material such as stone tools, small flakes of stone from tool making and fragments of burnt animal bone.

Other remains of Native American activity such as fire pits, stone tool making workshops and burnt rock concentrations found in excavation units were recorded with scaled drawings, photographs and videotape.

Samples of charcoal for radiocarbon dating and soil for flotation analysis were taken from all features.



The Sudbury/Assabet/Concord River drainage basin was occupied by Native Americans for as long as 11,000 years from the PaleoIndian period to first contact with Europeans in the early 17th century. Wetlands along the Assabet River and nearby forested uplands provided many natural resources for Native Americans. Camp sites near rivers, streams and wetlands were used by Native Americans for various purposes including hunting, fishing, trapping, stone tool making, collecting plant foods and ceremonial activities.

The Pine Hawk Site was a well-preserved example of a large archaeological site along the lower Assabet River. It contained a complex record of thousands of years of Native American activity. The Pine Hawk Site was eligible for inclusion in the State and National Registers of Historic Places, a listing of the most important historic and archaeological sites in our nation.

The location of the Pine Hawk Site was needed for construction of a new sewage treatment plant for the Town of Acton. From 1998 to 1999, archaeologists completed several studies to evaluate the Pine Hawk Site and excavate the important information in it before construction started. Artifacts such as stone tools and charcoal - filled fire pits were found within the proposed treatment plant site. They indicated that Native Americans used the Pine Hawk Site from about 7500 to 1000 years ago during the Middle to Late Archaic and Middle Woodland periods.

Since the Pine Hawk Site could not be protected or saved, a plan for archaeological data recovery was developed to collect information from it before the start of construction. Data recovery is the systematic removal of the scientific, prehistoric, historic, and/or archaeological information that provide a significant site like Pine Hawk with its research value. The Pine Hawk Site was carefully excavated and the artifacts and other kinds of information in it were collected and studied.



This skull is from a small dog found buried on the Pine Hawk Site. It was probably a family pet from a nearby farm buried on the site when it was open field or pasture.



This redware rimsherd is from a large crock used to store food. From the 17th to mid 19th century redwares like this were often made by local potters.

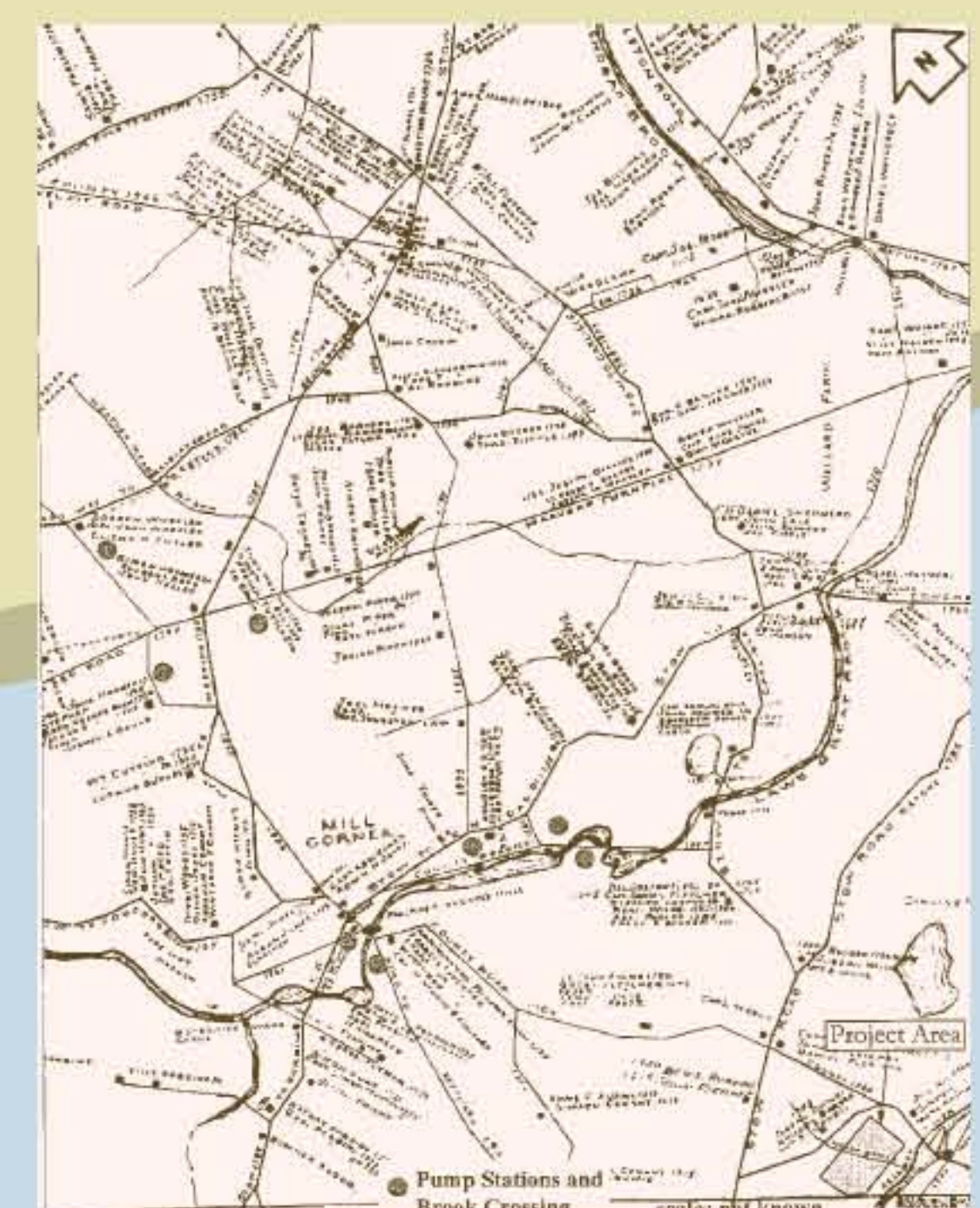


This handle fragment is from a creamware pitcher manufactured in England between about 1760 and 1800 and imported to America.

Rimsherd from porcelain item, possibly a shallow bowl or cup. Chinese export item common in late eighteenth to early nineteenth century

### The Pine Hawk Site Becomes Farmland, 1700 to 1900 A.D.

These artifacts show that the Pine Hawk Site was used as farmland in the historic period after about 1700 A.D. The site was plowed and used by an Acton farmer to plant crops or as pasture. While it was used as farmland, household trash such as these ceramic sherds, the brick and hand-forged nail was dumped on the Pine Hawk Site and plowed under.



200 YEARS AGO

### Middle Archaic Period, 7,500-5,000 years ago

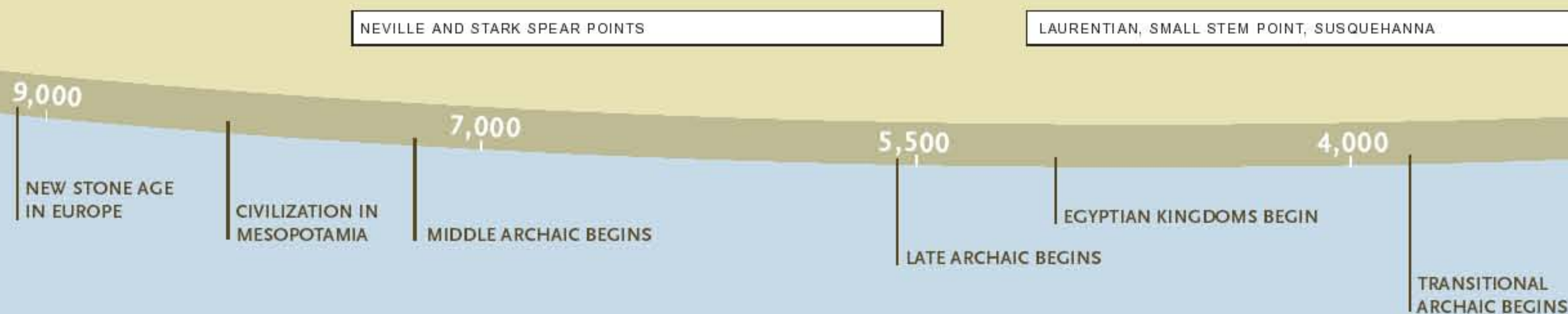
Evidence of Native American settlement at many places along the Sudbury, Concord and Assabet rivers. By about 7500 years ago, the Assabet River drainage was near a boundary between northern hardwood and oak dominant forest types in central Massachusetts. Native American groups developed ways of hunting, fishing and collecting plant foods during different seasons of the year within their own territories. Stone tools include Neville and Stark type spear points, drills/perforators and ground stone tools used for woodworking (gouges, adzes) fishing or catching waterfowl (net weights). Local types of stone (quartzite, mylonite, amphibolite) quarried from bedrock outcrops in Westborough, Sudbury, Maynard, and Burlington were used to make chipped stone tools.

### Late Archaic Period, 5,000-3,000 years ago

Many different site locations near marshes and swamps along the Sudbury, Assabet and Concord Rivers and in hilly upland settings near small streams and swamps were used by hunter/gatherers of three cultural traditions (Laurentian, Small Stem Point, Susquehanna). Some large sites along these rivers were base camps where stone tools representing many different activities (hunting, fishing, plant food processing, hide/leather working, woodworking etc) and numerous firepit, burnt rock spreads, refuse pit, and stone tool making workshop features were left behind. Native American groups may have settled and used natural resources within defined group territories. The area was covered by a mixed deciduous forest type with oak, hickory, beech and hemlock trees.

### Terminal Archaic Period, 3,000-2,500 years ago

Native American settlement seems to have declined along the Sudbury, Assabet and Concord rivers during this period of time. Some archaeological sites on these rivers were probably fishing stations used in the spring time. We know that Native American people spent much of their time in coastal zone areas such as Boston Harbor where they began to use shellfish (clams, oysters) resources.



NEVILLE AND STARK SPEAR POINTS

LAURENTIAN, SMALL STEM POINT, SUSQUEHANNA

BIFACES, DRILL