

## **Pencil Factory Kiosk**

### **Beyond the Banks**

#### **Topography**

The natural landscape around you is the result of weathering of high mountains formed during the Paleozoic Era and glacial action that concluded 15,000 years ago. The Nashoba Brook valley is especially rich in glacial remains, predominantly glacial till – subsoil composed of rocks, sand, clay, and gravel that resulted from the glaciers' grinding action as they moved over this region's extensive sheets of bedrock. Prominent erratic boulders and several eskers, also remains left by the retreating ice sheet, contribute to this area's unusual topography.

#### **Our Neolithic Ancestors**

This terrain, with its network of streams, ponds, and marshes, provided raw materials from which indigenous humans constructed their villages and ceremonial centers. Forest lands, fostering plants and animals, as well as fish-filled streams, provided their livelihood. Remains of this Woodland culture are numerous. Using the plentiful stone, Neolithic people built the boundary and trail markers, creating Nashoba Valley's earliest stone walls. Evidence of economic, ceremonial, and astronomical pursuits is seen as well in natural grinding stones, stone rings set into the earth, constructed stone 'seats', standing stones, and stone chambers, all of which are plentiful throughout the Northeast. Fish weirs of stone were also constructed.

Nashoba Brook and adjoining Spring Hill Conservation areas are strewn with such structures. Most notable is a stone chamber with carefully laid-up drywall masonry, post and lintel doorway, and large capstone roof. The axis of the chamber has a north-south alignment, and a small, constructed aperture in the roof allows the rays of the summer solstice sunset to filter throughout. There is great debate within the archeological community as to whether all these artifacts are Colonial or some the work of the Amerindians.

#### **During Colonial Times**

The Nashoba Indians of this area gave their name, meaning 'the place between the waters,' to this valley. They practiced agriculture and fishing as well as hunting and gathering.

By the 1630s, John Eliot, a young minister from Roxbury, was attempting to Christianize the Indians west and north of Boston. He petitioned the General Court of Massachusetts to establish several villages where Indians willing to adopt European dress and religion could live without fear of reprisal. Of the first group of seven villages, referred to as 'praying villages,' Nashoba was the sixth, organized in 1654 in a four-mile square area centered in today's Littleton. The most interesting but controversial remains left by the native inhabitants are the elements of ritual architecture still evident on the landscape.

Later, European colonists would greatly reduce the native population by introducing both diseases and economic practices hostile to the Native American's way of life. Forests were cut

and turned into pastureland and agricultural fields. Much stonework seen here today was constructed by these later-day industrious and hardy folk. But some of what remains was adapted by the colonists from structures built millennia earlier by indigenous folk able to exploit Nature's provisioning for their culture and livelihood.

### **The Indomitable New England Forest**

Today, the upland deciduous forest surrounding the Nashoba Brook basin is in transition. In the early 1900s, what is now a mixed oak, maple, and pine woodland was completely cleared, and cattle and sheep grazed on these boulder-strewn slopes. But, as pastoral practices were abandoned, the forest returned.

During a forest's natural progression towards its climax phase, different deciduous trees thrive and give way to other species. Now, red oak and white pine dominate the upland, while black birch and red (swamp) maple thrive on the more moist lower slopes. The oldest red oaks, grown from stumps left after a post-World War I harvest, now mix with Canadian hemlock, black oak, and hickory. American chestnut saplings still grow from stumps of long-dead trees, but die off before reaching maturity from the same blight that destroyed these magnificent trees in the early 1900s.

The forest has a stratified character, with witch-hazel, high-bush, blueberry, beech, and alder thriving in the shaded understory. The cool forest floor is rich in cinnamon ferns, sarsaparilla, and mayflowers, as well as spring wildflowers. Several species of ground covers including pipsissewa, many mosses, and partridgeberry hug the ground. Sheep laurel and winterberry holly – two shrubby plants – are also plentiful.

Nesting in the leaf litter created by the oak canopy one might find an ovenbird, a member of the warbler family that winters in Central America and migrates north in April to raise its young in the Nashoba Brook basin. White-tailed deer, browsing on the hemlock, are plentiful throughout the valley. Stone walls provide denning niches for red squirrels and chipmunks. Red foxes often sit on these walls, patiently waiting for a chipmunk to emerge from the safety of the stones. Eastern coyotes are becoming common inhabitants of this diverse ecosystem as well.