

1 These American Elm (Ulmus americana) trees are remarkable for their classic vase shape, tall size, and age. The American Elm was once a flourishing species but has declined dramatically due to Dutch Elm disease.

Dutch Elm disease is a fungal disease carried by a bark beetle and has destroyed the species across the US. The trees on the Lyons-Cutler Reservation may have escaped exposure or are resistant to the disease. American Elms were used by Native Americans for canoes, and they were used by settlers for lumber and furniture. The trees were frequently used to line city streets throughout the country before they succumbed to disease.

2 Vernal pools are found within this wetland complex. A vernal pool is an important type of wetland found throughout New England and are temporary ponds that sometimes hold water for only a few months out of the year.

Typically the ponds are full in the spring and early summer. The rest of the year the pool could be completely dry. Vernal pools fill with water from rain and snow melt. Vernal pools provide habitat to animals such as migrating waterfowl, and they provide a water and food source for deer, rabbits, and other animals.

Vernal pools are an especially important habitat because they provide a breeding ground for a number of rare species here in Massachusetts. In fact, all four species of listed amphibians in Massachusetts depend on vernal pools—Jefferson salamander, blue-spotted salamander, marbled salamander, and eastern spadefoot toad. These animals breed and lay their eggs when the vernal pools are full of water. The larvae hatch and mature before the pools dry up in the summer. If these vernal pools stopped existing, the species living exclusively in them would become extinct.

3 The ditches you see in front of you served as boundaries to mark property lines. Many years ago, boundaries were frequently marked by low stone walls, ditches, hedges, and trees. Since the Lyons-Cutler site was mainly farmland, these ditches were likely



used by the landowners to mark the edges of their farms.

4 Wide awareness of the importance of local land conservation began in the middle of the 20th century. Preserving the beauty of the landscape and protecting the plants and animals that live on these lands has had a positive impact on the quality of our lives. This old car was likely discarded when the property was much more open. The forest has grown around it since.

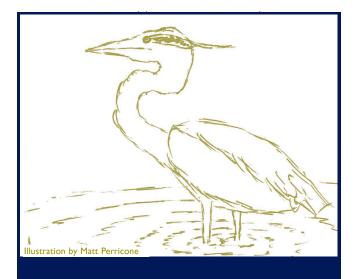
5 Looking north across Allowance Brook, you can see the rookery of a great blue heron. Heron rookeries are places where great blue herons nest communally. Rookeries take their name from the breeding nests of another bird, the rook. You will see the large nests on the top of the trees in the middle of the wetlands. The nests are made of sticks and are lined with moss, pine needles, and leaves.

A heron will typically use the same rookery every year. Great blue heron rookeries are most active from March to September in the New England area. The herons feed on fish, insects, frogs, snakes, and other small animals. These rookeries are increasing in numbers for many reasons, including a decrease in hunting and pollution and an increase in the number of dead trees in newly formed marshes created by beaver activity.

6 Notice the unusual growth on this tree. This is called a burl. Burls are deformities on trees caused by a virus or bacteria. The invader inserts a plasmid into the tree, which tells the tree to grow in this way. The most common bacteria that does this is the Crown Gall bacteria, but there are many other species that cause burls as well. The burl does not damage the inner parts of the tree, such as the xylem and phloem, so the tree can still live. Burls are also commonly used for furniture, as the grain on the finished product has a unique look do to the way the tree grows.

This brochure was made by Matt Perricone of Troop 61 Sudbury as part of his Eagle Project in 2016. The help of Scouts and other volunteers to assist in this project is appreciated.





Landham Brook Marsh Conservation Land and Lyons-Cutler Reservation

Interpretive Trail Guide

By Matt Perricone for His Eagle Scout Project



Sudbury Valley Trustees 18 Wolbach Road Sudbury, MA 01776 www.svtweb.org



Sudbury Conservation Commission 275 Old Lancaster Road Sudbury, MA 01776



