

Eastern White Oak
Quercus alba

Location West side, Poorhouse Lane trail, 200' south of cemetery

Physical Characteristics

Height (ft.)	69
Circumference (in.)	105
Spread (ft.)	34
Points	182.5

Estimated Age 167 yrs. (1853)

Commentary

Nominator: This Eastern White Oak is a significant tree in West Newbury for several reasons. By size alone, being about 70 ft. tall, it stands out as a remarkable landscape feature as one walks along the Poorhouse Lane trail. This white oak also has a special place in West Newbury history as being the largest of the white oaks that line the Poorhouse Lane trail. The tree itself dates back to around 1850 and is part of the property that the Town purchased in the 1830's to become the Town Farm and on which the historic Alms House was eventually built. I have no doubt that people who lived in the Alms House and others who worked the Farm watched this tree grow up during the mid-1800's. As Peattie wrote in A Natural History of Trees, "If Oak is the king of trees, then the White Oak, throughout its range, is the king of kings...The mighty branches, themselves, often fifty feet long or more, leave the trunk at right angles and extend their arms benignly about the generations of men who pass beneath them." The habitat value of the white oak is significant as well, in part because its acorns are sweeter than others. The acorns are a key staple to the winter diet of squirrel and birds, and therefore of hawks and owls.

Committee: This Eastern White Oak likely has a special place in West Newbury history and qualifies for the Roster not only based on its size and age but also its location and historical context. The tree dates back to the 1850's, based on circumference size, and is located immediately next to the old Poorhouse Lane road, which is now a forest-canopied walking trail. This White Oak is the largest in the double row of white oaks that line this portion of the Poorhouse Lane trail, and it stands out as a significant and remarkable specimen to hikers using the trail. Fortunately, this tree remains on town property and will presumably remain an integral part of the surrounding landscape and ambience of the Poorhouse Lane trail.

Other Committee Comments: In terms of size, age, and historical context, the Poorhouse Lane Eastern White Oak is impressive as a survivor of almost two centuries and qualifies for the Roster of Significant and Remarkable Trees in West Newbury. As for size, this tree is in the top 33% of the largest white oaks in Massachusetts, based on the comparative size of the state champion Eastern White Oak. The age of the Poorhouse Lane White Oak was estimated using the standard growth factor table and the value for white oaks of 5.0.

As noted in the nomination, the Eastern White Oak can be viewed as the “kings of kings.” Another well known natural historian, Charles Fergus, writes in *Trees of New England*: “In a closed forest stand, the trunk of a white oak typically becomes tall and straight with little taper.... White oaks that grow in open terrain look like another species altogether. Ten to 20 feet above the ground, the trunk divides into many stout branches, which twist and crook as they extend outward 50 feet or more, and upward to form a deep, broad crown, often with an irregular shape but sometimes quite symmetrical and covering an impressive area. Look for such behemoths in farm fields, where they were left to provide a patch of cooling shade for the plowmen and the horse and ox teams of yesteryear.”

While the Eastern White Oak is robust enough to thrive in lowlands, it is more of an upland tree and does not tolerate wet bottomlands. It is more shade tolerant than the red and black oaks, which means that as our forest and leaf canopies thicken, the Eastern White Oak will find a larger niche. Among other things, this will enhance its presence in our hardwood forests as time goes by.

As habitat, the Poorhouse Lane White Oak is in its most prolific years for acorn production (ages 50-200). A single white oak can be expected to yield more than 10,000 and perhaps up to 60,000 acorns per year and, according to Fergus, a stand of white oaks can produce more than 200,000 acorns per acre. The white oak acorns contain less tannin than red oak acorns, which means they are less bitter-tasting and a favorite among the 180 species of northern woodland birds and mammals known to feed on the white oak acorns. These acorns contain about 6% protein and 65% carbohydrates, which makes them ideal as an energy-rich food source. However, the white oak acorns germinate and sprout in the same season as they drop from the tree, thereby losing much of the nutritional value locked up inside the nut. Haste is definitely not waste when it comes to gathering up the white oak acorns before winter arrives.

Like our native white pine, the Eastern White Oak played an important role in the Colonial Era. The English navy had long used the English or Norman Oak (*Quercus robur*) for its ship building needs. However, by Colonial times, the English forests had been depleted, and the English looked at the American white oak as a substitute. Their haste in cutting and seasoning the white oak led to poor quality, cracked wood that proved unseaworthy. As Peattie observes: “...the British loftily shook their heads at American White Oak as far inferior to their own. Well, if the mother country would not take our White Oak, we would build our ships of it. The immortal frigate *Constitution* has a gun deck of solid White Oak of Massachusetts, her keel was the same wood from New Jersey, while the knees of the Maryland White Oak formed her keelsons. All-Oak ships became the pride of our shipbuilders....” (Peattie, *A Natural History of Trees of Eastern and Central North America*).

Photo(s)

West Newbury Roster of Significant and Remarkable Trees



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