

HORTICULTURE REPORT – JANUARY 21, 2020 – The American Elm



My presentation today has been distilled from an article by Patrick Parent, Paul Parent's son.

Today's report is about the American Elm which grew from Newfoundland Canada to Florida and west to the Rockies. The American elm was the most planted street tree in America and every city had their Main Street and parks lined with this tree. Millions of trees grew from the mid 1600's to the mid 1900's.

In 1930 there were 77 million elms in North America and by 1989 over 75% had died. Almost all were destroyed by a single type of insect 1/8 of an inch long called the elm bark beetle. In the 1930 a boat load of diseased elm logs arrived from Europe. These elm logs were to be used for furniture but they were unknowingly contaminated with a fungus called "Ceratocystis Ulmi" more commonly known as "Dutch Elm Disease".

While these infected logs sat outside the lumber yard, our native elm bark beetles fed on them. The beetles emerged from the infected logs to feed on our native trees which were growing in the area and quickly infected the healthy ones with this disease. The fungus spread quickly. Dying trees were quickly cut down and shipped to lumber yards to be cut into lumber and the problem spread even faster.

The American Elm was important to the formation of our country. In 1646 one block east of the Boston Common, at Washington and Essex Street, an American Elm (later known as the "Liberty

Tree”) was planted. It stood there for 129 years until 1775 when the British army cut it down as they evacuated Boston. The British soldiers hated this tree since it was a symbol of the freedom from Britain the colonists were trying to achieve. Nearly all great political meetings of the Sons of Liberty were held near and under the tree and this historic elm tree bore the words “Liberty” on its trunk.

The American Elm was majestic, growing 60 to 90 feet tall and 40 to 50 feet wide. It grew from a single trunk and its branches grew in the shape of the letter "Y" like a fluted vase. The ends of the branches seemed to weep a little bit, making the top of the tree resemble a vase filled with fresh greens.

The oval dark green foliage grew 3 to 6 inches long, 2 inches wide, with a point on the tip of the leaf. They looked rough with thick green raised veins on the leaf like a feather pattern. Small saw-like teeth covered the leaf’s edges. A very short stem (under 1/2 inch) attached to the branches of the tree. In the fall, the leaves turned a bright yellow and when the leaf was rubbed it had an incredible fragrance.

The tree’s bark was dark gray, very rough and scaly. Patches of gray and white lichen, as well as mosses gave it character. The strong roots of the tree grew wide and tolerated salt in later years. It continued to grow even when asphalt was applied under its branches to build roads.

Unfortunately, we still do not have a way to stop this fungus; however, the nursery industry has been working very hard to develop new disease resistant species of elms that are resistant to Dutch Elm Disease. These new tree varieties are called Liberty Trees. One species called 'Valley Forge,' has been known to grow from 6 ft to over 30 ft tall in only 10 years.

If you would like more information about the Liberty Tree go to Elm Research Institute in Keene, NH. Call them at 800-367-3567 or email them at info@elmresearch.org. They have programs to plant a tree in every town in America with civic groups like the Scouts and also sell small trees. Local nurseries may sell these new disease resistant varieties as well.



American Elm Leaf