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OUR AMERICAN HERITAGE — TREES¹

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Abstract

The first tree introduced into America was the peach, by the Spaniards in the early 16th century. Pears, apples, cherries, quince, and plums followed in 1638 and again in 1663. Survival of man was foremost. The first tree shipped from America was the arbor-vitae, to France, before 1550.

Indians used tamarack for thread, shagbark hickory for fresh cream. Peaches were planted by them in quantity.

The first native trees planted by the Colonists were sugar maple, red oak, catalpa, and American elm. Those used for building and furniture were white oak and black walnut.

American elms were of early historical significance; one was the "Liberty Tree," under one there was a signing of a peace treaty with the Indians by William Penn, and under one George Washington took command of the Continental Army.

The first botanic garden was started by John Bartram near Philadelphia in 1728. The first commercial nursery, the Robert Prince Nursery in Flushing, New York, began in 1737 and existed until 1869 through four generations, included an extensive variety of fruits and ornamentals. The first organized street tree planting program occurred in Philadelphia in 1750. Fairmount Park, Philadelphia, is the oldest park in America.

Men of importance regarding trees: Mark Catesby who introduced *Nyssa sylvatica*, *Asimina*, etc.; John and William Bartram who found *Franklinia alatamaha*; Johnny Appleseed who started extensive apple plantations; Andre Michaux who discovered *Cladrastis lutea*; Joseph Howland who found *Tsuga canadensis pendula*; William Hamilton who planted the first fruit tree varieties; Dr. George Hall who first introduced trees directly from the Orient; and Dr. Ernest H. Wilson who explored and introduced plants extensively.

There are many cultivars of recent essence including the Merrill magnolia, seedless and fruitless honeylocusts, Bradford pear, etc.

No one could have a finer heritage than the members of the International Society of Arboriculture, who care for and love trees.

Let's go back not just 200 years, but 300, 400, and in some cases 450, to the time when the first tree was introduced into America. It was the peach, by the Spaniards, in the early part of the 16th century.

Since the early settlers were primarily interested in survival, fruit trees were first considered. Two voyages to New England, one in 1638 and the other in 1663, brought pears, apples, cherries, quince, and plums. There were a few herbs also included in these shipments.

The American arbor-vitae was the first American tree shipped to Europe. Jacques Cartier was responsible for this. He found it along the St. Lawrence River, and it was planted in Paris before 1550.

A Spaniard by the name of Cabeza de Vaca first observed and recorded the American sweetgum on an expedition into Florida in 1528.

Mark Catesby came to Virginia from England in 1712, and subsequently made an additional trip, but between these trips he stayed many years. He wrote two volumes on the natural history of Carolina, Florida, and the Bahamas, one in 1731 and the other in 1783, both printed in England. Mark Catesby was more than a plantsman, he was also an artist, which is evident in his natural history, where beautiful large color plates are to be found. He is known in the tree world for being the first to record and describe such trees as black gum, sour gum or black tupelo, *Nyssa sylvatica*, as well as white fringetree, pawpaw, umbrella magnolia, and the rosebay rhododendron.

The Indians used our trees in a different way than did the early settlers. William Bartram, son of John Bartram whom we will discuss later, relates how they would utilize shagbark hickory nuts. They would take them, smash them into tiny bits, and throw them in boiling water. The liquid was then run through a very fine sieve, which resulted in hickory milk. It was as sweet and fresh as fresh cream, so William Bartram said.

¹. Presented at the annual convention of the International Society of Arboriculture in St. Louis, Mo. in August 1976.



Sweetgum, *Liquidambar styraciflua*, leaf character



Sweetgum, twig character

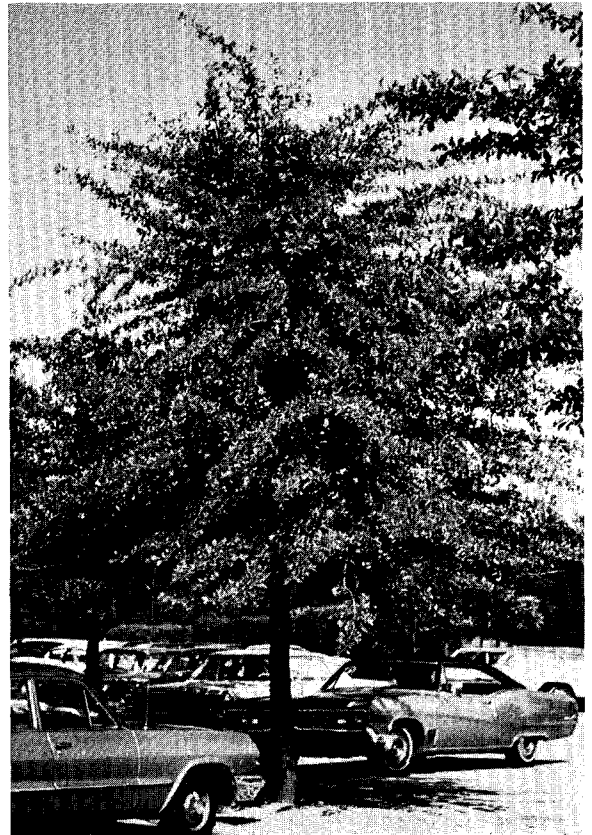
The Indians also took the fine roots from tamarack, or American larch, and used them for thread in sewing their birch-bark (canoe or paper birch) canoes. They also had many acres of peaches, which probably was the result of Spanish influence. William Penn attested that the flavor was good.

The first trees actually planted by the Colonists were sugar maple, red oak, American elm, and catalpa.

The American elm is very much a part of our early history. It was under this species that George Washington took command of the Continental Army. Earlier, in 1682, on the east bank of the Delaware River, William Penn signed a treaty with the Indians. It was a guarantee of friendship between the Indians and the white settlers.

The American elm also became famous for its role as the Liberty Tree, with such trees being recognized in Providence, Newport, New York, and best known in Boston. On August 14, 1765, in Boston, there was affixed to this tree a copper plate which read "The Tree of Liberty". The Sons of Liberty had their meetings under this tree.

The white pine was found on several revolutionary flags. More than this, it played an important part in instigating the Revolution. The King of England reserved the right to keep these tall, straight trees, some 150 feet, for the masts of his royal navy. He forbade any Colonist from cutting any that were more than 12 inches in diameter. If discovered, the proceeds from such went to his Majesty's treasury. The Colonists in New England became so angry that they refused to ship white pine masts to England, which, in turn, curtailed the backbone of the King's navy.



Sour gum, *Nyssa sylvatica*

There was recorded one white pine 240 feet high on the site of what is now Dartmouth College at Hanover, New Hampshire.

The white oak was used extensively in building during these early years, but the British felt it was inferior to their own English oak. Another tree used in large quantities was the black walnut, which became very much a part of the Colonist's



American elm, *Ulmus americana*, in foliage

furniture. They also used it for fence posts and rails like those cut by "The Rail Splitter," Abraham Lincoln.

The records of George Washington indicate that he did a good deal of tree planting at Mount Vernon, which he acquired in 1760. Included in his planting were mulberry, pawpaw, southern or evergreen magnolia, sassafras, and his favorites, flowering dogwood, American holly, and American redbud. He planted a flowering dogwood on his birthday in 1785.



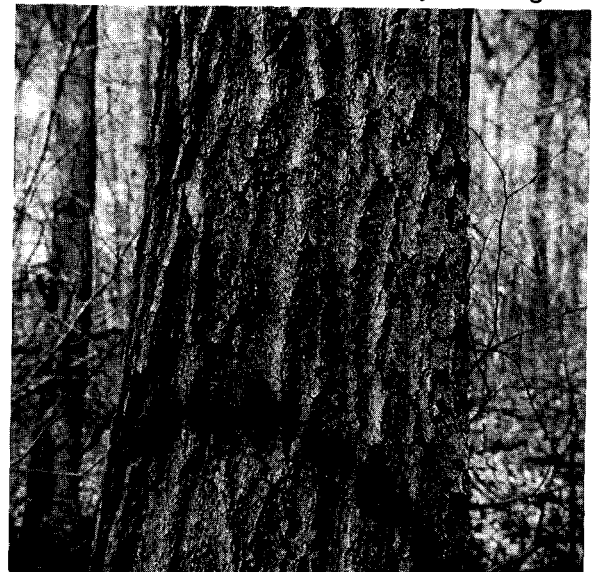
American elm, dormant

Thomas Jefferson, at Monticello, kept excellent records, which contained such information as to when the growth buds first burst from winter dormancy, and when the flowers appeared. He knew the name of every tree, and his favorite was the pink- or red-flowering dogwood.

The first botanic garden of any significance was established in 1728, by John Bartram, on the banks of the Schuylkill River, near Philadelphia. He was responsible for introducing more native trees for use in this country and England



White pine, *Pinus strobus*



Red oak, *Quercus rubra*, trunk character

than any other person of that era. He explored the eastern part of America from Lake Ontario to northern Florida. These many miles were traversed through wilderness and it was done mostly on horseback. He and his son William, when John Bartram was 67 years old, traveled to Georgia, where, along the Altamaha River they found an unknown shrub-like tree. He named this the Franklin tree in honor of his good friend Benjamin Franklin. Since his, and his son William's, exploring, it has only been found twice, a few years later, but never again. All the plants we have today, and there are many thousands of them, are the results of the plants brought back north by the Bartrams, and those sent by these same men to England.

The first organized street planting was in Philadelphia in 1750, where many streets were and are named after trees. The oldest park in America is also in Philadelphia, Fairmount Park, which today covers hundreds of acres.

Johnny Appleseed was a real person, born in 1774 as Jonathan Chapman, in Leominster, Massachusetts. He was one of the most loved pioneers in American history. He journeyed to Western Pennsylvania, where he gathered seed from the cider mills, and then by canoe and foot he traveled westward for 46 years, across Ohio, Indiana, and into Illinois. He gave his seeds to any settler who would promise to plant the seed, and later take care of the trees. He left in his travels orchards covering 100,000 square miles, but there are no records today of any of these seedlings.

Fruit trees were important to the early Colonists for survival. When General William Howe marched into Long Island in 1776, he ordered his men not to destroy any part of an 80-acre orchard that Robert Prince had planted. General Howe and his British and Hessian soldiers got to know Robert Prince, and after the war he sent many trees to England and Germany as a result of this.

Robert Prince founded the first commercial nursery at Flushing, Long Island, in 1737, where it was managed through four generations until 1869. His first trees were primarily fruit, but later in their catalog of 1790 there were listed the smoketree, goldenraintree, and Lombardy poplar. His home plantings included the oldest and

largest cedars of Lebanon, Atlas cedars, purple-leaf beech, and Asiatic magnolias. In the Prince catalog of 1841 there were offered 272 kinds of apples, 420 pears, 109 cherries, 156 plums, 196 kinds of deciduous ornamental trees, 111 evergreens, and many more.

Another good nursery was established in Flushing in 1840 by the Parsons family, which embraced a good selection of trees, many from Asia, until it was discontinued in 1907. Today it is known as Kissena Park, where you can still find nursery rows of trees, particularly Japanese maples.

There were many men of note in the history of American trees. Andre Michaux, who arrived from France in 1785, brought many of our little or unknown trees into cultivation. He found yellowwood on the limestone cliffs of the Carolinas, Kentucky, and Tennessee, but he called it *virgilia*, which is occasionally used today. He also made known the shingle and bur oaks, and the bigleaf magnolia.

William Hamilton, a cousin of John Bartram, from Philadelphia, was one of the first to introduce varieties of fruits. Before this, seedlings were planted. He was growing, by 1800, a great collection of fruits and ornamental trees which had come from Europe. He introduced the ginkgo, and Lombardy poplar in 1784, and later the Norway maple. The ginkgo was first observed in the temple gardens of Japan and China, and here it was for many years thought to be its origin. In 1914 it was found growing over some 10 square miles in Chekiang Province, in southeastern China. Hamilton's gardens included the Tree of Heaven, which found its way here by way of the Orient to Kew Gardens, and finally to Philadelphia.

A very interesting personality, Dr. George Hall, in 1861, went to China and Japan where he spent 15 years, mostly in China. His mission there was to establish a hospital, but he became greatly interested in collecting plants, many of which he shipped to Parsons Nursery. This was the beginning of the era when plants were shipped directly to America from the Orient. At about this same time Thomas Hogg, American consul to Japan, sent to Parsons Nursery the Katsura tree, *Cercidiphyllum japonicum*, which has become popular in today's nurseries.



Yellowwood, *Cladrastis lutea*, trunk character

Immediately following the War Between the States, retired General Joseph Howland, living in what is now known as Beacon, New York, went to the upper slope of Mt. Beacon, and with the help of several men, brought down four specimens of weeping hemlock. He named it after his friend, who lived across the valley, Henry Winthrop Sargent. General Howland called it Sargent weeping hemlock. Two of these original specimens are alive today, one at the former Howland home, and the other in Massachusetts. It is one of the most beautiful of all our conifers, a flowing fountain of green foliage.

One of the most fantastic of recent figures in plant exploration was Dr. Ernest H. "Chinese" Wilson, who came to this country from Veitch Nursery in England. He was at the Arnold Arboretum from 1909 until 1929 when he was unfortunately killed in an automobile accident. He spent many years in China, and brought back great collections of seed and young plants. His book, *Aristocrats of the Trees*, is one of the most interesting. Read it.



Yellowwood, floral character

In more recent times has come the term cultivar, which indicates that this plant was found in cultivation, and from this and the succeeding trees or shrubs all most be propagated vegetively. There are many cultivars, and most notably are the many thornless and fruitless honeylocusts, the Bradford pear, Merrill magnolia, Chanticleer pear, October Glory red maple, Red Sunset red maple, Crimson King Norway maple, and many more are in our nursery catalogs, along our streets, and shading our homes today.

Bibliography

- Browne, D.J. 1846. *Trees of America*. Harper & Brothers.
 Hedrick, U.P. 1950. *A history of horticulture in America to 1860*. Oxford University Press.
 Peattie, Donald C. 1958. *A natural history of trees in eastern and central North America*. Bonanza Books.
 Wilson, Ernest H. 1930. *Aristocrats of the trees*. The Stratford Company.
 Wyman, Donald. 1965. *Trees for American gardens*. The Macmillan Company.

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