UNIVERSITY of NEW HAMPSHIRE
COOPERATIVE EXTENSION

"Memories of Elms"

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As a young child, I remember the majestic elms with arching branches that lined the avenue into town, with their cascading branches of lopsided oval leaves, brushing roofs of cars passing beneath.

I remember marveling at the huge solitary elm perched on the lakeshore bluff at the farm, protecting the earth from the angry waves below that relentlessly eroded and undermined its precarious hold to land.

I remember the perfect silhouette of the umbrella-shaped elm in the school field luring children to play in its shade rather than return to the stuffy classroom. And I vaguely remember the elms on the college quad that I took for granted – little time or interest in trees during those days!

Nostalgic memories of magnificent elms from times past are treasured as the American elm continues to die from Dutch Elm disease. This deadly disease originating in the orient was first described in the Netherlands in 1921, and found in Ohio by 1930. The native American elm fell quickly to this new tree fungus spread by two species of bark beetles or by root grafting. The rapid loss of these stately native American shade trees changed the appearance of public spaces in Eastern United States forever.

American elms were great landscaping trees. Their high canopy created shade without blocking views of buildings, instead they framed scenery. L.H. Bailey in his *Standard Cyclopedia Of Horticulture 1935*, notes they weren't difficult to transplant even when larger. They thrived in urban sites, withstanding compacted soils of streets – first dirt and then pavement. These desirable features resulted in their extensive use, lining streets and sidewalks for miles to provide shade to travelers, and shading walkways in parks to provide cooling rest areas.

Native to Eastern America, elms naturally grow in flood plains and wet areas, an adaptation that gives them their tolerance for compacted soils.

Although they are remembered as a perfect tree, their visual value surpasses their lumber value. Elm wood isn't wonderful, creating a disposal problem when so many died in the 1960's. Elm wood isn't great firewood – it doesn't burn hot and is difficult to split. It is stringy, making it difficult to work and to saw.

Boards cut from elm wood are both tough and rough and used for coarse jobs, floors of trucks, barn stalls and in times gone by for wagon wheels. When submerged in water, elm wood doesn't rot and was used for pilings, but when exposed to air, it does rot and wasn't good for fence posts.

Elms have always been vulnerable to the elm leaf-beetle, and more recently to the introduced Japanese beetles. Both beetles can destroy the foliage giving a ratty appearance. In the fall elm leaves turn dull yellow not adding much to the New England fall color show.

Mature elm trees produce an enormous amount of seeds in late spring – wafers that sprout within days in moist mulch. I have discovered this to be an annoyance in local public gardens that have elms near by. All this seed means plenty of young trees, especially in wet hedgerows or around ponds.

The disease that now has been around for 66 years seems to attack elm trees when they are about 20 years old and four to six inches in diameter leaving dismal dead trees along roadsides. The branches of the dead trees cup together forming bundles of dead branches that look like closed umbrellas. With a continuous supply of young elm trees the disease persists, reducing these uniquely American trees to insignificant scrub trees.

Intensive research to develop resistant trees has been disappointing. Since elms typically don't show symptoms until about 20 years, it takes that long to learn whether a new cultivar is resistant. It is a sad discovery to find out that a new hope is hopeless.

Princeton University put a lot of hope into an effort in developing its own resistant trees to replace the dying ones on campus. They also purchased resistant trees from other sources to maintain the traditional campus landscape. This sad report appeared in the Alumni News in the October 8, 2003 issue: "So far this year the University has lost 12 American elm trees (Ulmus Americana) to Dutch elm disease, and another six were treated and remain standing….. Of the 12 American elms lost, four were Princeton elms….The others were America Liberty elms developed by the Elm Research Institute in New Hampshire as disease resistant." The grounds manager reports that they continue to lose a few old elms each year, and continue to search for resistant cultivars.

But a few of the grand old elms live on. The New Hampshire Champion elm tree is colossal, a behemoth from centuries past. It grows in front of a Milford farmhouse right by the road. Its massive trunk measures 219 inches around and its typical flattop is 126 feet high. The day it was remeasured in June, a family of baby raccoons nesting high in the treetop woke the homeowners with their chipper chatter. Another year wood ducks hatched high in the tree, fell to the ground unharmed and scampered to the nearby stream. If only trees could talk, what stories this one could tell!

Since the fungus disease jumps from tree to tree through root grafts, lone trees like this unique survivor seem to do better. Hopefully this giant is too tall for the fungus to find it.

As the huge old elms continue to die the NH Big Tree Committee welcomes reports of undocumented elm Big Tree candidates. If you notice a really big elm in your summer travels and excursions, contact the NH Big Tree State Coordinator, Carolyn Page, carolyn_page@hotmail.com, or call 664-2934, who will pass the information on to the appropriate county coordinator.

Also visit the NH Big Tree web site at: www.nhbigtrees.org for the complete list champion Big Trees. The UNH Cooperative Extension and the NH Division of Forests and Lands sponsor the NH Big Tree program in cooperation with the National Register of Big Trees through American Forests.

Got questions? UNH Cooperative Extension's Family, Home & Garden Education Center Info Line offers practical help finding answers for your lawn and garden questions. Call toll free at 1-877-398-4769, M-F, 9:00 a.m.-2:00 p.m., or e-mail us at answers@unh.edu