City Trees

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Early in March I received a circular letter from Mr. Horner, in which he asked if there were any troublesome problem in our city for which the city engineer was responsible and, if so, would I bring the matter up at the Road School for discussion. There was—city trees.

At that particular time there was a coal shortage, so we started what might be termed Operation Fire Wood. We started cutting down and making into fire-wood old and dangerous shade trees, using a chain saw for felling and a 30-inch buzz saw working up the logs.

Mr. Horner suggested that I discuss preservation, proper type, best locations, heights, trimming, owners share in responsibility, etc.

To get a good idea of the wrong species, improper location, bad maintenance and improper trimming, I will describe our trees in Martinsville. If you approach Martinsville via S. R. 252, from the high hills, a few miles east of town, you will look down on an area of flat farming land, in the center of which appears to be a dense forest with faint light lines running through it and occasionally a smoke stack extending up through the trees. This is Martinsville.

WHITE OR SOFT MAPLE

As to species prevailing, I would say that 70 percent of the trees are White or Soft Maple (Acer saccharinum). They are natives, growing along the banks of the White River. They are fast growing trees and will attain heights of 100 feet or more. In the city they were planted too close together and too near sidewalks and curbs. The branches overspread the roofs of houses and form arches over the streets. The roots lifted the sidewalks and found their way into sewers.

This tree is hard to control because of its rapid growth and weak fiber in its branches. The winged seed from this specie is also a nuisance, filling roof gutters, in which they germinate in a short time and form a thick sod. When falling into flower beds or any loose soil, they immediately start growing.

Some of the trees recently cut down were from 24 to 36-inches
in diameter. Where pruning had been attempted, there were dead snags and most of the older limbs had holes with a lot of dead wood near the heart. This is not a desirable tree for cities or towns.

**AMERICAN ELM**

Next in number in our city is the American Elm (*ulmus americana*). This was a grand old tree until the Dutch Elm Plague came. Now they are on their way out. We cut down one of these old patriarchs near the public square that was nearly 4 feet in diameter and growth rings showed it to be about 100 years old. This tree was sound in trunk and branches until the Dutch Elm disease made its attack.

The elm is a tough fibered tree, fast growing and forms itself properly without much pruning, but the American Elm is out for keeps unless a new generation develops an immunity that can resist the Dutch Elm disease.

**SYCAMORES**

Sycamores are next in number in our city. They are also a native and a very sturdy, fast grower and take a good form without much pruning. In thickly built up sections they are undesirable. They are fast growing trees and take a good form naturally, but they become giants and there is no way of holding them back if planted in good, deep soil. They also shed their large leaves through most of the summer, due to parasites, and also shed their outer bark during the growing season. Sycamores are fine as park trees or on large estates.

**BLACK WALNUTS**

We have a lot of black walnut trees, in yards mostly. They are a strong tree and make fast growth when in proper sites. In Martinsville the soil type is perfect: deep, sandy soil with plenty of moisture. The only objection to the black walnut is the leaf and stem litter. The nuts are also a problem. Green nuts falling throughout the summer and mature nuts, not valued very highly, are hard on lawn mowers. If you wish to get some walnut trees in your yard plant the seed, as the little trees are hard to transplant.

Catalpa, red mulberry, willow and cottonwood are all weed trees and are a nuisance in cities. The poorest of all is the box-elder.
THE BETTER SPECIES FOR CITY PLANTING

1. *Norway Maple.* This tree is a rapid growing, tough type. They make a dense shade and do not grow into giants. They respond to pruning without causing dead snags or knot holes. This is a nursery tree. Planting space should be about 25 feet.

2. *Yellow Poplar or Tulip Tree* (*Liriodendron tulipifera*). This is the grandest of our native trees. In its natural stands it would grow to a diameter of 3 to 4 feet and a height of 60 feet to the first limb and a total height of over 100 feet. These giants have all been slaughtered, as the wood was valuable, but a fine young stand of reproduction is showing up on state forests near here. The yellow poplar when planted in open spaces does not grow too high, but has a rather spreading form, and will take a perfect form naturally. The first few years after planting its growth is rapid, then it slows down somewhat. This tree seems to have no natural enemies, neither insects nor disease. They have beautiful lyre shaped leaves and a large tulip shaped bloom, hence its name.

3. *White Ash* (*Flaximus americana*). This is the most desirable of the ash family. This native is a clean tree in every way, makes a rapid initial growth, forms itself perfectly without much pruning and has a long life.

4. *Sugar Maple* (*Acer saccharum*). Commonly called sugar tree. From this tree the sap is used to make maple syrup and maple sugar. This sugar tree is a rather slow growing tree, but considering its fine characteristics is worth waiting for. It has a long life, easy to control and form and is of tough fiber.

5. *Chinese Elm.* This tree is taking its place along with Norway Maple as a favorite street line tree. It makes a rapid initial growth and never develops into an unruly giant, has a lot of small branches and can be headed back and formed easily. This is a nursery tree.

6. *Oak.* The oak has its place in large lawns or parks. Red oak (*Quercus borealis*) and white oak (*Quercus alba*) are the best of the oak family. They are slow growers but have a long life. A new wilt blight is reported in some of the northern scrub varieties of oak, but has not made its appearance in our locality.

7. *Evergreens.* In general the conifers are satisfactory in cemeteries, parks, and along country roads, but you won't get much grass to grow under pines or cedars on your city lawns. However, nurseries have developed dwarf varieties that are beautiful ornamentals. Spacing depends largely on species, and whether the planting is in
rows or random planting in large areas. The rapid growing species that attain large trunks and wide spreading tops must be planted farther apart. Soft maple or sycamore should be planted at least 35 feet apart when planted in rows along streets; in large lawns, allow 60 feet spread per tree. Do not plant near walks, under wires or near sewers.

We have a few native ornamentals, such as dogwood, redbud and service berry. Some of these will grow to a height of 30 to 40 feet with diameters of 5 to 10 inches. They can be trimmed up until the low branches are above head height. They make good fill-ins between large trees. In their native habitat, they grow under the forest canopy.

When a seedling is planted, start trimming off the bottom limbs, and do not top the center leader until it has reached the desired height, but continue cutting off the bottom branches until proper clearance is reached. Trim out limbs that rub each other, and cut out branches that throw the general form out of balance. When the proper height and clearance is obtained, trim the main leader and terminal ends of side branches each year until the rapid growth of the tree has passed.

Tree surgery may be all right when the tree is vigorous and making good growth, but I don't think much of the technique when we have to follow up in a few years and remove the old giant with the trunk and knot holes filled with cement, to say nothing of the rods, cables and lag screws encountered throughout the trunk and top system of the tree. We have ruined several chains on our power saw when these things were encountered.

RESPONSIBILITY FOR PLANTING AND MAINTENANCE

As to responsibility for the planting and care of city trees my belief is that the planting is an obligation of the property owner, even on the street lawns, but the planting should be under city supervision.

Care of the trees on city property is an obligation of the city, when the adjacent owners neglect trimming and shaping the growing trees. It is the cities duty to remove dangerous branches and remove all dangerous trees.

On the owner's property, trees near the sidewalk often become a hazard to the public and damage the sidewalks. Our practice is to remove such trees. We have removed several trees from back yards, charging the cost of labor involved. The price charged by professional tree men runs from $75 to $150 per tree.
The felling and removal of these large trees is dangerous work. Men often must climb up 30 to 50 feet to attach cables and saw off limbs and swing them clear of roofs and wires with a hoist.

Our planning board, now in the making, will set up definite rules in an ordinance covering planting and care of trees.

Trees, when properly planted and cared for, are the finest of nature's creation, but when poor species are planted, or when any trees are neglected, they become a nuisance and a hazard to life and property.