

# Intelligent Tree Planting Will Determine America's Future Beauty, Minn. Treemen Hear

## 200 Delegates to 3rd Annual U. of Minn. Course Learn Step-by-Step Program for Tree Selection When Landscaping

"The future beauty of America will in great part depend on the way we plant the landscape and integrate country with city through plantings," Donald B. White told an audience of nearly 200 attending the third annual Shade Tree Maintenance Short Course on the University of Minnesota's St. Paul Campus Sept. 14 and 15.

White is Associate Professor of the University of Minnesota's Department of Horticultural Science, specializing in ornamental horticulture and turf management. He spoke to an audience composed of nurserymen, arborists, and others professionally engaged in tree maintenance in homes, parks, and public grounds.

All the elements of the town-and-country scape can be harmonized through the use of trees, which tie the whole landscape together, White said.

The horticulturist challenged his audience to become acquainted with a wide diversity of shade trees—to be familiar with all those that are adapted to the area—in order to select them intelligently. He outlined three important steps preparatory to selecting trees for any site:

1. Determine the need for a shade tree by recognition of the required function.

For example, is the tree to be used to provide shade, frame the house or a building, control wind, provide a background or beauty interest? Since trees are a functional element in the landscape, choose them to fulfill the necessary function.

2. Make a complete evaluation of the ecology of the site: the space available, the soil type, moisture, drainage, climate of

the total environment, exposure. Is the location in town or country? In what part of town? What are the esthetics of the site?

3. Make a physical evaluation of the area to be planted.

Determine the size and shape of the tree needed, the desirable growth rate, the texture, color, seasonal interest desired, as well as other esthetic factors.

After you have fulfilled these steps, you can begin the process of selecting your trees, White said. Determine whether they should be deciduous or evergreen and whether they are adapted to the particular environment.

Always ask yourself if the trees you select will create unity in the planting and overall area involved. But, White reiterated, it is impossible to select trees for public or private grounds intelligently without a knowledge of a great diversity of shade trees.

### The Ash as a Street Tree

In an appraisal of the ash as a street tree and a substitute for the boulevard elm, Lawrence Bachman of Bachman's, Inc., Minneapolis, listed these assets of the ash: rapid growth rate; upright symmetrical growth habit; lacy leaf pattern, permitting filtered sunlight; strong croches and branch structure; fibrous root system, yet not competing with adjacent vegetation or causing heaving of walks.

The ash "will not produce the high arching branches which have literally bridged over many of our streets and boulevards as the elm has done, but I feel it will provide a uniform wall of green on each side of our roads," Bachman said. Because the trees grow symmetrically of their own accord, less pruning would be

needed over their life span. The relatively few disease problems which affect the ash would mean less spraying and preventive maintenance.

Among newer ash varieties are the Summit ash and the Marshalls ash. Yellow-leaved varieties are now being offered, and a red-leaved variety, particularly striking in the fall, will soon be available. Bachman recommended growing only seedless varieties of the ash and offering the budded male selections for sale to customers.

### Unreasonable Demands On Street Trees

"When I stop to think what we ask of a tree when we use it as a street or boulevard tree, I shudder to recommend any at all," Bachman declared. "We really throw every obstacle in the world at these poor trees. Smoke, other air pollutants, mechanical injuries, a disrupted water table, highly compacted soil, lack of organic matter in the soil, limited root space, reflected heat from buildings, roads and walks, lack of water, use of salt on roads and walks, plus the usual infestations of insects and infection of roots by soil inhabitants and on and on. It is a wonder they grow at all. I almost



A discussion of the best of the maples was a highlight of this year's Minnesota course. Albert Johnson (left) used slides to point out maple characteristics to A. B. Stitt, forester for Northern States Power Co.

think I'm doing the ash a disservice by recommending it to be put through such rigors, but I honestly believe the ash will respond to such miserable torture as well as any other variety we can grow," the nurseryman concluded.

#### Other Trees Recommended for Boulevards and Streets

L. C. Snyder, head of the Department of Horticultural Science, Albert Johnson, associate scientist, and Robert Mullin, instructor in horticultural science, University of Minnesota, recommended a variety of other trees as possibilities for street and boulevard plantings and as replacements for the elm. Here is the list of trees recommended by the short course speakers:

#### Large Shade Trees—35 or more feet tall

##### Ash

Green (*Fraxinus pennsylvanica*) & cultivars 'Summit' & 'Marshall Seedless'  
White (*Fraxinus americana*)  
Blue (*Fraxinus quadrangulata*)

##### Lindens or Basswood

American (*Tilia americana*)  
Littleleaf (*Tilia cordata*)  
Redmont (*Tilia x cuchlora* 'Redmont')

##### Maples

Sugar (*Acer saccharum*) & cultivars 'Newton Sentry,' 'Temple Upright'  
Red (*Acer rubrum*) & cultivars 'Schlesinger'  
Norway (*Acer platanoides*) & cultivars 'Schwedler,' 'Crimson King'  
Silver (*Acer saccharinum*) & cultivars 'Weirs Cutleaf'

##### Miscellaneous

Black Cherry (*Prunus serotina*)  
Honeylocust (*Gleditsia triacanthos*) & varieties 'Sunburst,' 'Skyline'  
Kentucky Coffeetree (*Gymnocladus dioica*)

##### Oaks

White (*Quercus alba*)  
Eastern Pin (*Quercus palustris*)  
Swamp White (*Quercus bicolor*)



**Preconference study session** gave delegates and speakers a chance to exchange questions. Here, left to right, Wayne Willmeng (Grand Forks, N.D., park board); Wisconsin Department of Agriculture Plant Pathologist Dr. George Hofstad; and Minnesota extension horticulturist C. G. Hard talked about Dutch elm disease. Dr. Hard was chairman of the annual tree course.

Hackberry (*Celtis occidentalis*)  
Shellbark Hickory (*Carya laciniosa*)

#### Medium and Small Trees—Under 35 Feet

##### Maples

Amur (*Acer ginnala*)  
Tatarian (*Acer tatarica*)

##### Mountain Ash

Densehead or Korean (*Sorbus alnifolia*)  
Showy (*Sorbus decora*)  
European (*Sorbus europaea*)

##### Birch

Paper (*Betula papyrifera*)  
River (*Betula nigra*)

Japanese Tree Lilac (*Syringa amurensis japonica*)

Ironwood (*Ostrya virginiana*)  
Amur Corktree (*Phellodendron amurensis*)

Blue Beech (*Carpinus caroliniana*)

##### Hawthorns

Toba (*Crataegus 'Toba'*)  
(*Crataegus crus-galli*)

##### Flowering Crabapples

Siberian (*Malus baccata*)  
Cultivars—Red Splendor,  
Radiant, Vanguard, Flame.

#### Insect Problems Foreseen

John Lofgren, University of Minnesota extension entomologist, warned that a number of

insect problems can be expected in 1965 as a result of environmental conditions.

The weakening of shade trees by the drought makes it easier for bark beetles and borers to get a foothold. Unless dead trees from severe windstorms are cleaned up, Lofgren warned, they will be a source of infestation.

#### Dutch Elm Disease

Minnesota did not see a large increase in Dutch elm disease in 1964, Donald M. Coe, director of the Division of Plant Industry, Minnesota Department of Agriculture, reported. Although 47 new cases were found in Monticello, only three additional trees over last year were found infested in St. Paul and four in Minneapolis.

"Although we're thankful we didn't have a real blowup, don't close your eyes and say it can't happen here," Coe cautioned. He reminded the audience that sanitation, removal of dead trees, and spraying for beetles are essentials in the control of Dutch elm disease.

The Shade Tree Maintenance Short Course was sponsored by the University of Minnesota's Department of Horticultural Science and the Agricultural Extension Service.