TREES FOR MINNESOTA GOLF COURSES

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Late winter is the time many golf course superintendents order the trees to be planted in the spring. Typically the selection is based upon price, availability or what the superintendent observes growing at other courses. But these trees will represent perhaps a 40 to 60 year investment, hence much care should be used in their selection. Primary consideration should be the tree's ability to thrive in the soil and the climate of the course. If the tree is not adapted to the site, it may become severely stressed. This will manifest itself as a slower growth rate, occasional dieback or frequent occurrence of pest problems. Maintenance costs will be higher and some situations the tree will need to be replaced.

Minnesota has a well earned reputation for cold winters. This can be quickly demonstrated by reviewing a list of trees that have a difficult time surviving our winter. Minnesota resides within two hardiness zones. Zone 3 (minimum winter temperature of -40 degrees F) covers roughly the northern third of the state while Zone 4 (minimum winter temperature of -30 degrees F) covers the southern areas. There is a limited amount of material that performs well in the southern areas, even less in the northern zone. Trees that are planted north of their hardiness zone may suffer reduced growth, occasional dieback or even death.

Even if the climate is favorable, there is still the question of adapting to the soil, both the soil moisture (dry or wet) and pH (acid or alkaline). People often view the soil as something to hold the plant up rather than influencing growth. But if a river birch is planted in an alkaline soil, it may become chlorotic (yellow leaves). This is due to an iron deficiency. The soil may contain adequate reserves of iron but due to the alkaline soil, the iron is in a form unavailable to plants. Hence attention to soil pH is important to some trees. Growth may also be influenced by soil moisture, either too much or too little. Some trees such as Kentucky coffeetree are native to wet areas and have adapted to the low oxygen condition. These trees are excellent choices for wet soils.

Pest problems are another important consideration. Only a few trees, such as Ginkgo, can be accurately called pest free, most have some degree of pest problems. However, trees should be selected that have a minimum of pests. Keep in mind that this condition can change over time. Back in the 1950's honeylocust was considered a pest-free tree, now it suffers from a multitude of problems including canker and pod midge. The best advice is to select relatively pest-free trees but still limit the planting of any one species.

To help you decide what to plant next spring, the following is a list of trees for various site conditions. Notice that the same tree may appear on several of the lists. Also, while all these trees are available from Minnesota nurseries, some are easier to find than others. Please contact Dr. John Ball, University of Minnesota Technical College, Waseca. Phone 507/835-1000, ext. 285 for sources.

THE MOST COLD HARDY TREES (will do well in Zone 3)
Amur cherry - Prunus maackii
Amur maple - Acer ginnala
Basswood - Tilia americana
Black Hills spruce - Picea glauca var. densata
European larch - Larix decidua
Paper birch - Betula papyrifera

TREES FOR DRY SOILS

Grey birch - Betula populifolia
Green ash - Fraxinus pennsylvanica
Red oak - Quercus rubra
Russian olive - Elaeagnus angustifolia

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TREES FOR WET SOILS

European alder - Alnus glutinosa
Green ash - Fraxinus pennsylvania
Hackberry - Celtis occidentalis
Kentucky coffee tree - Gymnocladus dioicus
Swamp white oak - Quercus bicolor

TREES FOR ALKALINE SOILS

Amur corktree - Phellodendron amurense
Amur maple - Acer ginnala
Blue ash - Fraxinus quadrangulata
Japanese tree lilac - Syringa reticulata
Ponderosa pine - Pinus ponderosa
White poplar - Populus alba

TREES WITH FEW PEST PROBLEMS

Amur corktree - Phellodendron amurense
Blue beech - Carpinus caroliniana
Ginkgo - Ginkgo biloba
Ironwood - Ostrya virginiana
Kentucky coffee tree - Gymnocladus dioicus

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Before any new president of MGCSA makes his committee assignments for the coming year there is a great deal of anxiety and apprehension felt by each board member. Such was the case at Bunker Hills on December 15, 1985 as we directors all learned of our new tasks to serve the MGCSA. President Kerry Glader made the following committee appointments for 1986.

ARRANGEMENTS: Fred Anderson
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