

Tree Tips Column for April 4, 2003

By Steve Rasmussen, District Extension Forester

Drought hardy trees

In the last Tree Tips column, I discussed the importance of watering trees during dry periods. In this column, we will be looking at the best trees to plant in dry locations where watering is not as easy or if you want a tree that will grow best with minimal watering. For northeast Nebraska, some of the trees that will grow best in drought conditions or dry soils after they are established include the following:

Deciduous Trees:

Amur maple - Good red fall color, could be trimmed for a tall hedge. 30' tall, 20' spread.
Tartarian maple - Similar to Amur maple, more drought tolerant. 20' tall, 15' spread.
Black maple - Similar to sugar maple but more heat and drought tolerant. 40' tall, 35' spread.
Northern catalpa - Large white flowers in late spring, large seed pods. 50' tall, 35' spread.
Black locust - Fragrant flowers, small thorns and small seedpods. 45' tall, 35' spread.
Honeylocust - Numerous cultivars available, thornless and seedless. 50' tall, 40' spread.
Kentucky coffeetree - Native tree with coarse winter habit, fat seed pods. 60' tall, 40' spread.
Hackberry - Common native NE tree that is sensitive to herbicides. 60' tall, 45' spread.
Turkish tree hazel - Slow growing with edible nuts on female trees. 40' tall, 30' spread.
Bur oak - Most common NE native oak. Large leaves with strong branches. 55' tall, 50' spread.
Northern red oak - Eastern NE native oak with good fall color. 65' tall, 50' spread.
Chinkapin oak - Native southeast NE tree. Small acorns. 45' tall, 40' spread.
Hophornbeam - Native understory tree. Very hard wood. 25' tall, 20' spread.

Evergreen Trees:

Junipers / Cedars - Numerous cultivars, various blue to green needle colors. Variable sizes
Ponderosa pine - Native pine in the Pine Ridge and Niobrara Valley. 60' tall, 45' spread.
Limber pine - Native pine in Kimball County, flexible needles. 40' tall, 25' spread.
Jack pine - Unrefined, retains closed cones, good on tough, sandy sites. 45' tall, 25' spread.
Bristlecone pine - Very slow growing, picturesque in dry locations. 20' tall, 15' spread.
Black Hills spruce - Compact growth, short needles. 40' tall, 30' spread.

These trees listed will give you the best growth and least problems on dry sites with minimal watering needs after the tree is established (eight to 10 years). The most likely candidates are those trees native to the Great Plains region or that come from a similar environment that has the hot, mid-continent weather summers.

During initial establishment time, any plant needs extra care and attention to help it develop as healthy and extensive root system as possible. The better the root system, the more drought hardy the tree can become. This includes not planting the tree too deep initially, timely watering to help the root system expand outward and mulching with organic material like wood chips. Even with the adaptability for dry sites that these trees possess, mulching with wood

chips around the base of young trees and under the crown spread of larger trees will greatly improve the root system's growth and vigor. This relates back to helping the tree withstand stressful conditions like drought.