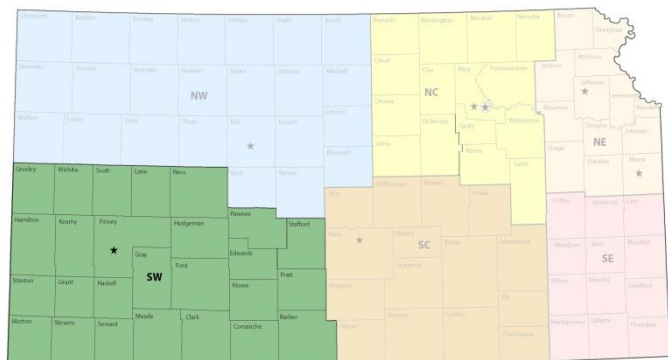


Preferred Trees for Southwest Kansas



Growing trees successfully depends on the selection of the right trees for the intended site. It is important to match the growing conditions and space available on the site with the cultural requirements and projected size of each tree to be planted. The following four charts show the tolerances of individual trees to various environmental conditions as well as the major landscape attributes of each tree. Not all recommended trees for planting in Southwest Kansas are included. The preferred trees listed were recommended by industry professionals such as city foresters, local tree boards, county and horticulture extension agents, commercial arborists and

retail/production nursery interests.

KEY TO USING THIS INFORMATION:

TREE SPECIES AND CULTIVARS: The names of the trees are listed in the center of four different charts. Three of the charts list deciduous trees according to average mature height [a plus (+) indicates they may grow slightly larger.] The fourth chart lists evergreen trees. If improved cultivars of the trees are available and recommended, they are listed. Cultivars often possess improved plant characteristics like better fall color; a unique form; more attractive flowers, fruit or bark; greater heat tolerance; or increased pest resistance. Many trees are available in single and multi-stemmed form. Multi-stemmed forms are more likely to be damaged from snow, ice, or wind.

ENVIRONMENTAL TOLERANCES: The left side of each chart indicates whether the tree is tolerant to various environmental conditions including full sun, light shade, alkaline soil, drought or wet soil. Each chart also shows how resistant each tree is to insect and disease pests. A "G" (for good) under the appropriate column indicates the tree is strongly tolerant of the characteristic indicated. A "F" (for fair) signifies that the tree shows some tolerance. A blank space in a column indicates the tree is not tolerant and should not be subjected to that environmental condition. Specific information on the "alkaline soil" and "pests" categories follows:

ALKALINE SOIL: (G) = tree may tolerate soils with a pH up to 8.0 or more; (F) = tree generally will tolerate an alkaline soil up to a pH of 7.5; (blank) = tree may not tolerate alkaline soils; do not plant in alkaline soils to avoid the problem of iron or manganese chlorosis.

PESTS: (G) = tree is usually free of insect and disease problems; (F) = tree encounters insect or disease pests on an infrequent basis and often is not permanently damaged; (blank) = tree may suffer from pests which may permanently damage or kill the tree and/or the tree may exhibit minor insect and disease problems on a frequent basis which may affect the aesthetics of the tree or insects may commonly be a nuisance.

LANDSCAPE ATTRIBUTES: The right side of each chart includes average mature height and spread of each tree. The size is sometimes highly variable due to the size and shape of different cultivars planted and variability among growing sites. The landscape attributes of flowers, fruit, autumn color and ornamental bark are also listed.

DESIRABLE FLOWERS: (G) = the flowers are showy, adding unique ornamental interest to the landscape; (F) = the flowers are not particularly showy, but may possess other desirable characteristics such as fragrance; (blank) = the flowers are generally considered insignificant.

SHOWY OR USEFUL FRUIT: (G) = fruits are generally aesthetically pleasing; (F) = fruits or nuts are not considered unusually showy, but may provide other interest or benefits such as attracting wildlife; (blank) = no showy or useful fruit.

AUTUMN FOLIAGE COLOR: (G) = the autumn leaf color is typically quite good (may vary with individual trees, cultivars and environmental conditions, however); (F) = the fall color may provide interest in some years; (blank) = autumn foliage color is generally not considered an asset of this particular tree.

ORNAMENTAL BARK: (G) = the bark or twigs are considered to be exceptionally ornamental; (F) = the bark or twigs (on at least some cultivars) lend interest to the landscape (good color, texture, etc.); (blank) = the bark or twigs are not generally considered to be ornamental.

This publication is made available in cooperation with the USDA Forest Service. Kansas State University and the Kansas Forest Service is committed to making their services, activities and programs accessible to all participants. Support and input for this publication is provided by:



| ENVIRONMENT (tolerant of) | | | | | | LANDSCAPE ATTRIBUTES | | | | | | | |
|---------------------------|-------------|-------------------------|---------------------|----------------|-----------------|---|---------------|---------------|-------------------|-----------------------|----------------|-----------------|--------------|
| FULL SUN | LIGHT SHADE | ALKALINE SOIL (HIGH pH) | DROUGHTY CONDITIONS | SATURATED SOIL | PEST RESISTANCE | | MATURE HEIGHT | MATURE SPREAD | DESIRABLE FLOWERS | SHOWY OR USEFUL FRUIT | AUTUMN FOLIAGE | ORNAMENTAL BARK | UTILITY TREE |
| | | | | | | SMALL DECIDUOUS TREES (usually under 25 feet at maturity) | | | | | | | |
| G | F | F | G | F | F | Maple, Amur (<i>Acer ginnala</i>). Many cultivars available: Compactum (reduced size) | 15-20 | 15-25 | F | F | G | | F |
| F | G | G | F | | | Redbud, Eastern (<i>Cercis canadensis</i>) Cultivar also available: Var. alba (white flowers) | 15-20 | 20-25 | G | | F | F | |
| G | F | G | F | | F | Redbud, Oklahoma (<i>Cercis reniformis</i> 'Oklahoma'). Glossy green leaves, more intense flower color, insect resistant. | 15-20 | 15-20 | G | | F | F | F |
| G | | F | F | | | Crabapple, Adams (<i>Malus</i> 'Adams') Foliage green with red tinge. Pink blooms. Disease resistant. | 15-20 | 15-20 | G | G | F | | F |
| G | | F | F | | F | Crabapple, David (<i>Malus</i> 'David') Compact rounded habit. Light green foliage. Pink blooms change to white. Red fruit. Disease resistant. | 10-15 | 10-15 | G | G | | | G |
| G | | F | F | | | Crabapple, Spring snow (<i>Malus</i> , 'Spring Snow') Upright and dense. Green foliage. White blooms. Fruitless | 20-25 | 15-20 | G | | | | |
| G | | F | F | | F | Crabapple, Prairiefire (<i>Malus</i> , 'Prairiefire') Outstanding magenta flowers. Leaves emerge purple turn dark green. Disease resistant. | 15-20 | 15-20 | G | F | F | G | F |
| G | | G | G | | | Cockspur Hawthorn (<i>Crataegus, crusgalli</i>) Glossy green foliage on tight oval crown. Has long thorns . Cultivar available: var. inermis (thornless). | 10-15 | 10-15 | G | F | G | | F |
| G | | G | G | | F | Sumac, Staghorn (<i>Rhus typhina</i>) Large, open, loose shrub. Compound leave give fern-like appearance. Orange to red in fall. Cultivar available: 'Laciniata', Cutleaf. | 15-20 | 15-20 | | F | G | | |

| ENVIRONMENT (tolerant of) | | | | | | LANDSCAPE ATTRIBUTES | | | | | | | |
|---------------------------|-------------|-------------------------|---------------------|----------------|-----------------|--|---------------|---------------|-------------------|-----------------------|----------------|-----------------|--------------|
| FULL SUN | LIGHT SHADE | ALKALINE SOIL (HIGH pH) | DROUGHTY CONDITIONS | SATURATED SOIL | PEST RESISTANCE | | MATURE HEIGHT | MATURE SPREAD | DESIRABLE FLOWERS | SHOWY OR USEFUL FRUIT | AUTUMN FOLIAGE | ORNAMENTAL BARK | UTILITY TREE |
| | | | | | | MEDIUM DECIDUOUS TREES (usually 25 to 40 feet at maturity) | | | | | | | |
| G | F | | F | | F | Maple, Trident (<i>Acer buergerianum</i>) Low rounded crown. May develop iron chlorosis. Foliage is medium green. Orange-red in fall. | 20-25 | 15-25 | | | G | G | |
| G | G | F | F | | G | Maple, Hedge (<i>Acer campestre</i>) Attractive small tree. Adaptable to many soils. May be used as large hedge. Leaves are dark green and orange to red in fall. | 25-35 | 20-30 | | | F | | |
| G | | G | G | F | G | Osage Orange (<i>Maclura pomifera</i>) Cultivars: 'Park', 'Wichita'. Use thornless and fruitless cultivars only . Very durable wood. | 30-40 | 20-40 | | | F | F | |
| G | | G | G | | | Goldenraintree (<i>Koelreutaria paniculata</i>) Host to boxelder bugs. Flowers are brilliant yellow clusters. Foliage is medium green turning yellow in fall. | 30-40 | 30-40 | G | G | F | | |
| G | | G | G | | G | Pistache, Chinese (<i>Pistacia chinensis</i>) Very durable wood. Brilliant fall color of red to orange. | 30-35 | 30-40 | | F | G | F | |
| G | | F | G | | F | Pear, Callery (<i>Pyrus Calleryana</i>) Cultivars: 'Aristocrat', 'Capitol', 'Chanticleer'. Do not plant cultivar 'Bradford' due to breakage problems | 30-40 | 15-40 | G | | G | | |
| G | | G | G | | G | Soapberry, Western (<i>Sapindus drommondii</i>) Foliage is yellow green turning brilliant yellow in the fall. Very durable on any site. | 30-40 | 25-35 | | G | G | F | |
| G | | G | G | | G | Oak, Chinkapin (<i>Quercus muehlenbergii</i>). Develops a low spreading crown. Great wildlife tree. Fall color of red to orange to brown. | 35-40 | 40-45 | | G | F | | |

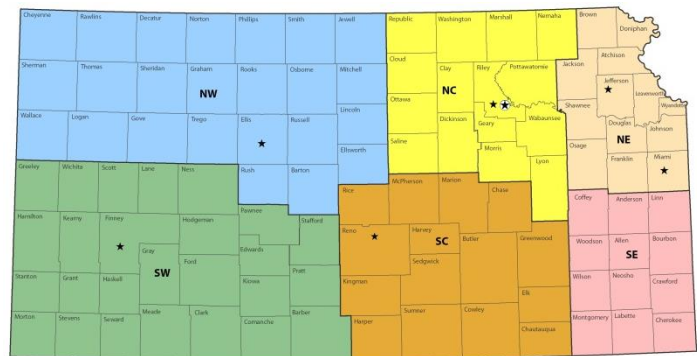
| ENVIRONMENT (tolerant of) | | | | | | LANDSCAPE ATTRIBUTES | | | | | | | |
|---------------------------|-------|-------------------------|---------------------|----------------|-----------------|---|---------------|---------------|-------------------|-----------------------|----------------|-----------------|--------------|
| FULL SUN | SHADE | ALKALINE SOIL (HIGH pH) | DROUGHTY CONDITIONS | SATURATED SOIL | PEST RESISTANCE | | MATURE HEIGHT | MATURE SPREAD | DESIRABLE FLOWERS | SHOWY OR USEFUL FRUIT | AUTUMN FOLIAGE | ORNAMENTAL BARK | UTILITY TREE |
| | | | | | | LARGE AND VERY LARGE DECIDUOUS TREES (usually 40 to 70+ feet at maturity) | | | | | | | |
| G | F | | | G | | Maple, Red (<i>Acer rubrum</i>) Cultivars: 'Autumn Flame', 'October Glory', 'Red Sunset'. | 40-60 | 35-50 | F | | G | F | |
| G | F | F | F | F | F | Hackberry, Sugar (<i>Celtis laevigata</i>) The cultivar 'All Seasons' is reported to be resistant to galls. | 40-60 | 40-50 | | F | F | G | |
| G | F | G | G | G | | Hackberry, Common (<i>Celtis occidentalis</i>) Subject to hackberry nipple gall and witches broom. Is not resistant to heart rot. | 40-60 | 40-50 | | F | F | G | |
| G | | | G | F | G | Ginkgo (<i>Ginkgo biloba</i>) Cultivars: 'Autumn Gold', 'Princeton Sentry'. Narrow, pyramidal crown. Can be chlorotic. Slow growing. | 50-60 | 25-40 | | F | G | G | |
| G | F | G | G | F | G | Coffeetree, Kentucky (<i>Gymnocladus dioica</i>) Use male cultivars to avoid large pod-like fruit. | 50-60 | 30-45 | | F | F | F | |
| G | F | | | F | | Plantree, London (<i>Plantanus x acerifolia</i>) The cultivar 'Bloodgood' has the best anthracnose disease resistance. | 60-80 | 50-60 | | F | | G | |
| G | | F | G | F | G | Oak, Sawtooth (<i>Quercus acutissima</i>) Strong wooded. Widely adaptable. Pyramidal when young. Great wildlife tree. | 40-50 | 30-45 | | F | | | |
| G | | F | F | G | F | Oak, Swamp White (<i>Quercus bicolor</i>) Drought resistant. | 50-60 | 40-60 | | F | F | F | |
| G | | G | G | F | | Oak, Bur (<i>Quercus macrocarpa</i>). Sturdy, long-lived tree. | 60-80 | 50-70 | | F | | | |
| G | | G | G | | F | Oak, English (<i>Quercus robur</i>). Very adaptable tree. Also available in cultivar 'Fastigata', an upright form only 12 to 15 feet wide. | 40-60 | 40-60 | | F | | | |
| G | | | | | F | Oak, Red (<i>Quercus rubra</i>) Moderate to fast growing. | 60-75 | 40-60 | | F | G | | |
| G | | F | G | F | F | Oak, Shumard (<i>Quercus shumardii</i>) Related to red oak. Much more site tolerant. | 60-80 | 40-60 | | F | G | | |
| G | | | F | G | G | Baldcypress (<i>Taxodium distichum</i>) Tree surprisingly drought tolerant. A deciduous evergreen. | 50-70 | 10-50 | | F | G | F | |
| G | F | F | | F | F | Linden, American (<i>Tilia Americana</i>) Available in the cultivar 'Redmond'. | 50-60 | 35-40 | F | | F | | |
| G | F | G | | | F | Linden, Littleleaf (<i>Tilia cordata</i>) The form is more rounded. Cultivar: 'Greenspire' | | | | | | | |
| G | | F | F | | | Elm, Lacebark (<i>Ulmus parvifolia</i>) Cultivar for this area is 'Allee'. Has beautiful mottled bark. | 40-60 | 35-50 | | | F | G | |
| G | | F | G | | F | Pagodatree, Japanese (<i>Sophora japonica</i>). Fast growing cultivar is 'Regent'. Fruit is a yellow-green pod. | 40-80 | 20-40 | F | G | F | | |
| G | | | F | | | Walnut, Black (<i>Juglans nigra</i>). Slow growing, large tree. Releases a chemical harmful to some plants. | 80-100 | 40-50 | | G | | | |

| ENVIRONMENT (tolerant of) | | | | | | LANDSCAPE ATTRIBUTES | | | | | | | | |
|---------------------------|-------------|-------------------------|---------------------|----------------|-----------------|----------------------|---|---------------|-------------------|-----------------------|----------------|-----------------|--------------|---|
| FULL SUN | LIGHT SHADE | ALKALINE SOIL (HIGH pH) | DROUGHTY CONDITIONS | SATURATED SOIL | PEST RESISTANCE | EVERGREEN TREES | MATURE HEIGHT | MATURE SPREAD | DESIRABLE FLOWERS | SHOWY OR USEFUL FRUIT | AUTUMN FOLIAGE | ORNAMENTAL BARK | UTILITY TREE | |
| G | F | F | G | | | | Juniper, Chinese (<i>Juniperus chinensis</i>) Very rust resistant. Cultivars: 'Keteleeri', 'Robusta', 'Spartan'. | varies | varies | G | | | | F |
| G | | | | | | | Spruce, Black Hills (<i>Picea glauca</i> var. <i>densata</i>) | 30-40 | 15-20 | F | | | | |
| G | | G | G | | | | Pine, Pinyon (<i>pinus cembroides</i>) var. 'Edulus' Host to pine tip moth. | 15-25 | 15-20 | F | | | | |
| G | F | F | F | | | | Pine, Southwestern White (<i>Pinus strobiformis</i>) Limited use. Problems with scale insects. | 40-60 | 25-40 | F | | | | |
| G | F | F | G | | F | | Pine, Ponderosa (<i>pinus ponderosa</i>) shaggy. Needles borne in 2 and 3 per bundle Very drought tolerant. | 45-60 | 35-40 | | | | G | |

This publication is coordinated and updated by the Kansas Forest Service. For further information and assistance, or to provide feedback and recommendations to the preferred tree listing please contact:

John Klempa, District Forester
 Kansas Forest Service
 2106 E Spruce St
 Garden City, KS 67846-6362
 620-275-0211
jdklempa@ksu.edu

*Preferred tree lists are available for other areas of the state.
 Visit us on the web for more information.*



www.kansasforests.org

revised September 2013