



Trees and Shrubs for Difficult Sites

Trees—Dry Locations¹

Name	Plant Range ² and Height	Wildlife Value	Alkaline Tolerance	Remarks
Goldenrain tree (<i>Koelreuteria paniculata</i>)	E,C,W 30-50'	Fair	Fair	Interesting, ornamental; grows in a wide range of soil conditions; intermediate shade tolerance.
Hackberry (<i>Celtis occidentalis</i>)	E,C,W 50-100'	Good	Good	Widely adapted to a variety of soils and growing conditions; used by many birds and mammals; intermediate shade tolerance.
Hawthorn, Cockspur (<i>Crataegus crusgalli</i>)	E,C,W 20-35'	Good	Good	Attractive to birds; cedar-apple rust may be problematic; shade intolerant.
Hickory, Shagbark (<i>Carya ovata</i>)	E 75-100'	Excellent	Good	Slow grower; tolerates shade well; native bottomland tree, often found on upland sites
Honeylocust (<i>Gleditsia triacanthos</i>)	E,C,W 50-75'	Fair	Good	Does well in filtered shade; available in thornless varieties; susceptible to several insect and disease problems.
Juniper, Rocky Mountain (<i>Juniperus scopulorum</i>)	W 40-60'	Good	Good	Evergreen; plant only in western most counties of Kansas; shade tolerance intermediate in youth, intolerant at maturity.
Oak, Black Jack (<i>Quercus marilandica</i>)	E, C 35-50'	Excellent	Fair	Provides cover and food for many mammals and birds; slow grower; shade intolerant.
Oak, Bur (<i>Quercus macrocarpa</i>)	E,C,W 50-75'	Excellent	Good	Hardy throughout Kansas; large tree, slow-moderate grower; shade intolerant.
Oak, Chinkapin (<i>Quercus muehlenbergii</i>)	E,C 35-50'	Excellent	Good	Medium-large tree; moderate grower; native to limestone bluffs and hillsides; shade intolerant.
Osage Orange (<i>Maclura pomifera</i>)	E,C,W 35-50'	Good	Good	Large fruits on female tree, male varieties available; heaviest and hardest wood in North America; very drought tolerant; can spread aggressively in eastern Kansas; shade intolerant.
Ponderosa Pine (<i>Pinus ponderosa</i>)	E,C,W 35-50'	Fair	Good	Tip moth may be a problem; shade intolerant.
Redcedar, Eastern (<i>Juniperus virginiana</i>)	E,C,W 40-75'	Excellent	Fair	Evergreen; affected by cedar-apple rust and bagworms; shade tolerance intermediate in youth, intolerant at maturity.

¹Generally tolerant or adapted to dry, upland shallow soil or rocky sites.

²See map, page 4

Trees—Wet Locations¹

Name	Plant Range ² and Height	Tolerates Short Periods of Flooding	Wildlife Value	Remarks
Ash, Green (<i>Fraxinus pennsylvanica</i>)	E,C,W 50-75'	Yes	Fair	Excellent bottomland tree; fast grower in wet locations; shade tolerant as seedling.
Baldcypress (<i>Taxodium distichum</i>)	E,C 50-75'	Yes	Poor	Adaptable to a large range of sites; appears as an evergreen in the summer, but is deciduous; intermediate shade tolerance.
Birch, River (<i>Betula nigra</i>)	E 35-50'	Yes	Poor	Requires very moist sites with a pH ≤ 6.5; low shade tolerance.
Buckeye, Ohio (<i>Aesculus glabra</i>)	E,C 35-50'	Yes	Poor	Used in shaded areas; sensitive to leaf scorch.
Cottonwood (<i>Populus deltoides</i>)	E,C,W 75-100'	Yes	Fair	Good for bank stabilization and shore protection; fast grower; shade intolerant.
Hackberry (<i>Celtis occidentalis</i>)	E,C,W 50-100'	Yes	Good	Widely adapted tree used by many birds and mammals; intermediate shade tolerance.
Hickory, Shellbark (<i>Carya laciniosa</i>)	E 75-100'	Yes	Excellent	Native bottomland tree; more tolerant of shade and standing water than shagbark hickory.
Linden, American (Bass-wood) (<i>Tilia americana</i>)	E,C,W 75-100'	Yes	Fair	Flowers attract bees; fast grower; shade tolerant.
Maple, Silver (<i>Acer saccharinum</i>)	E,C 50-75'	Yes	Poor	Good bottomland tree; will develop iron chlorosis in high pH soils; wood is brittle; intermediate shade tolerance.
Mulberry, Red (<i>Morus rubra</i>)	E,C,W 35-50'	Yes	Excellent	Grows well throughout Kansas; berries excellent wildlife food; intermediate shade tolerance.
Oak, Pin (<i>Quercus palustris</i>)	E 75-100'	Yes	Excellent	Good fall color; will develop iron chlorosis in high pH soils; shade intolerant.
Oak, Red (<i>Quercus rubra</i>)	E,C 75-100'	Yes	Excellent	A relatively fast grower among the oaks; shade intolerant.
Oak, Swamp White (<i>Quercus bicolor</i>)	E,C 40-60'	Yes	Excellent	Does well on wet, poorly-aerated soils; intermediate shade tolerance.
Pecan (<i>Carya illinoensis</i>)	E 75-100'	Yes	Excellent	Native bottomland tree in southeast Kansas; requires well-drained soils; least shade tolerant of hickories.
Sycamore (<i>Platanus occidentalis</i>)	E,C 75-100'	Yes	Fair	Fast growing when young; tolerates wide range of soil condition as long as adequate moisture; intermediate shade tolerance.
Willow, Black (<i>Salix nigra</i>)	E,C,W 35-50'	Yes	Fair	Excellent for bank stabilization and shore protection; rapid grower; shade intolerant.
Willow, Peach-leaved (<i>Salix amygdaloides</i>)	E,C,W 35-50'	Yes	Fair	Excellent for bank stabilization and shore protection; rapid grower; shade intolerant.

¹Generally suited for areas prone to occasional flooding and/or ponding of water such as streambanks, low areas, etc.

²See map, page 4

Shrubs—Dry Locations¹

Name	Plant Range ² and Height	Wildlife Value	Alkaline Tolerance	Remarks
Caragana (<i>Caragana arborescens</i>)	E, C, W 6-12'	Good	Good	Good for field windbreaks; recovers well from defoliation; attracts grasshoppers for game birds; drought tolerant; shade intolerant.
Cherry, Choke (<i>Prunus virginiana</i>)	E, C, W 6-12'	Good	Good	Forms thickets; edible fruit; intermediate shade tolerance.
Coralberry (Buckbrush) (<i>Symphoricarpos orbiculatus</i>)	E,C,W 1-2'	Fair to Good	Good	Good winter food and cover for wildlife; shade tolerant.
Cotoneaster, Peking (<i>Cotoneaster acutifolia</i>)	E, C, W 4-6'	Good	Fair	Non-thicket forming; thick, dense foliage; shade intolerant.
Currant, Golden (<i>Ribes odoratum</i>)	E, C, W 3-5'	Good	Good	Forms loose, open thickets; edible fruit; loses foliage in hot temps; tolerant of 50% shade.
Dogwood, Rough-leaved (<i>Cornus drummondii</i>)	E,C,W 4-8'	Good	Good	One of the hardiest woody shrubs; excellent soil stabilizer; shade intolerant.
Lilac (<i>Syringa vulgaris</i>)	E, C, W 6-12'	Fair	Good	Low, dense growth provides cover for wildlife and low level wind protection; shade intolerant.
Plum, American (<i>Prunus americana</i>)	E,C,W 6-12'	Excellent	Good	Grows in dense thickets; sprouts readily from roots; edible fruit; shade intolerant.
Plum, Sandhill (<i>Prunus angustifolia</i>)	E,C,W 6-12'	Excellent	Good	Excellent for soil stabilization; edible fruit; shade intolerant.
Sumac, Fragrant (<i>Rhus aromatica</i>)	E,C,W 4-6'	Fair to Good	Good	Fall color excellent; very drought hardy; non-thicket forming shrub; shade intolerant.

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²See map, page 4

Shrubs—Wet Locations¹

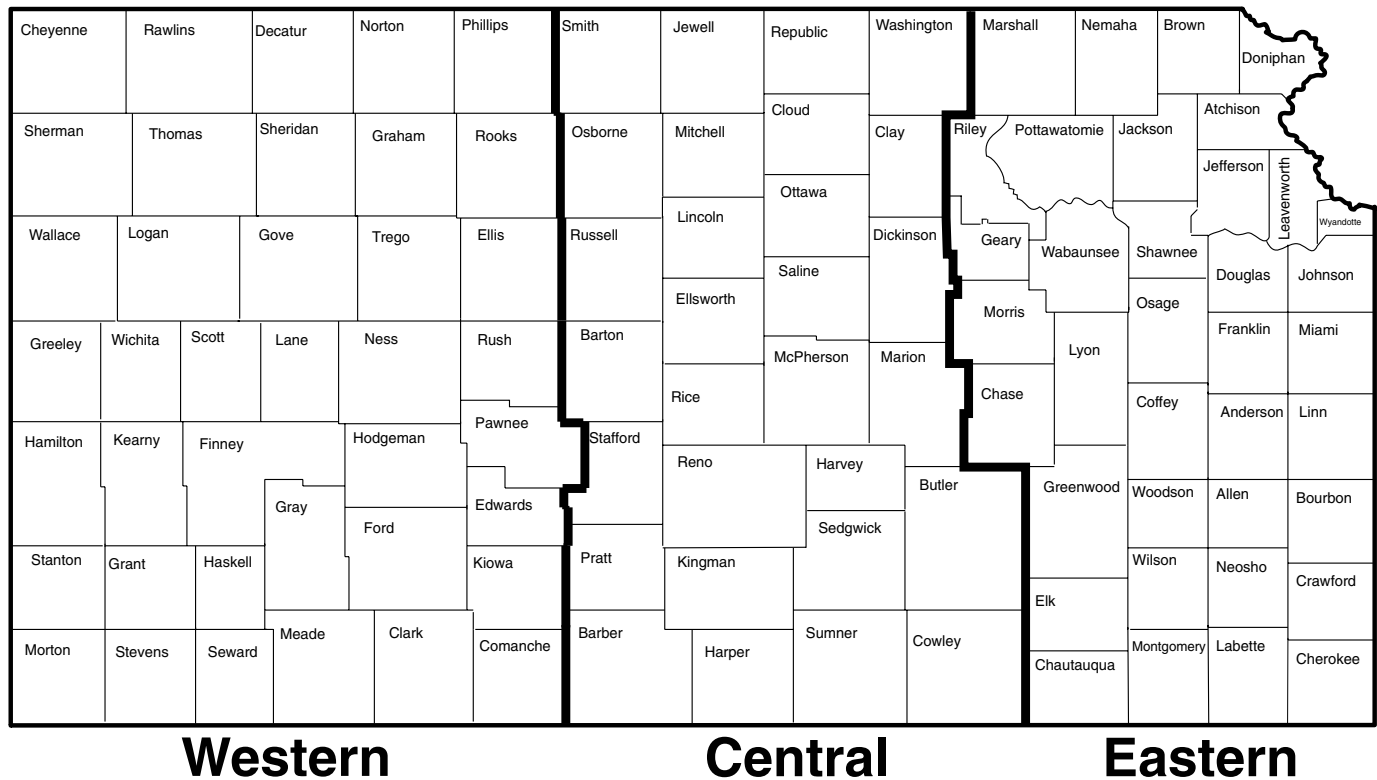
Name	Plant Range ² and Height	Wildlife Value	Bank Stabilization and Shore Protection	Remarks
Buttonbush (<i>Cephalanthus occidentalis</i>)	E,C 4-8'	Good	Excellent	Excellent for protecting shores against wave action; shade intolerant.
Dogwood, Redosier (<i>Cornus stolonifera</i>)	E,C 4-8'	Good	Fair	Twigs have red winter color; forms thickets; shade intolerant.
Dogwood, Rough-leaved (<i>Cornus drummondii</i>)	E,C,W 4-8'	Good	Excellent	Dense thickets provide cover and protection for birds and small mammals; shade intolerant.
Elderberry (<i>Sambucus canadensis</i>)	E,C,W 6-12'	Excellent	Good	Excellent for stream banks; prolific berry producer; shade tolerant.
Holly, Deciduous (<i>Ilex decidua</i>)	SE 10-20'	Fair	Fair	Good bird nesting site; use only in extreme southeast Kansas; intermediate shade tolerance.
Willow, Sandbar (<i>Salix interior</i>)	E,C,W 6-12'	Fair	Good	Excellent for stabilization of sandy soils; fast grower; shade intolerant.
Witchhazel, Vernal (<i>Hamamelis vernalis</i>)	E 6-12'	Fair	Good	Tolerates periods of standing water well; intermediate shade tolerance.

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²See map, page 4

The species included in this publication are not the only species that could be planted on difficult sites. Publication space precluded the inclusion of all possible species.

Plant Range Map



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