



PLANTS OF THE VARGA ARBORETUM



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The Varga Arboretum showcases trees and shrubs that are well-suited to Utah's arid, mountain valleys. The arboretum is a growing, living legacy started by William A. Varga, the Utah State University Botanical Center's first director and long-time Utah State University horticulture educator.

The trees and shrubs found in the arboretum are grouped in three hydrozones, or according to the amount of water they require. The arboretum began in 1999 with 57 trees and shrubs that were moved, under Varga's direction, from the former USU Botanical Garden in Farmington. During 2008 and 2009, more than 100 newer varieties were added to the original collection. Each year, more trees and shrubs are planted by dedicated USU BC staff and volunteers. Currently, there are 300 different species highlighted.



WATER-USE ZONES

Trees must be watered thoroughly at planting and once or twice each week for the first couple of months. In the following years, water according to their needs (see recommendations below for each zone). Please note that the recommended irrigation amounts are for a tree with mulch over the rooting area. Additional water will be needed if large amounts of plants, like dense grass, are grown over the rooting area because they compete for available water. Also, these amounts assume you are live in a low elevation, dry area in Utah like the Salt Lake valley, and could be reduced if you live in the cooler, moister mountains.

VERY LOW WATER-USE ZONE

Once established, trees and shrubs in this zone require 1/2 to 1 inch of water every two weeks during the growing season.

LOW WATER-USE ZONE

Once established, trees and shrubs in this zone require 1 to 1 1/2 inches of water every two weeks during the growing season.

MODERATE WATER-USE ZONE

Once established, trees and shrubs in this zone require 1 1/2 to 2 inches of water every two weeks during the growing season.

TREES

Latin Name	Common Name	Height	Spread	Zone
<i>Acer grandidentatum</i>	Bigtooth maple	20-30'	20-25'	4-8
<i>Amelanchier utahensis</i>	Utah serviceberry	15-18'	10-15'	4-9
<i>Arctostaphylos patula</i>	Greenleaf manzanita	5-6'	8-10'	2-6
<i>Cercocarpus ledifolius</i>	Curleaf Mountain-mahogany	10-15'	10-15'	3-8
<i>Cercocarpus montanus</i>	Alderleaf Mountain-mahogany	6-10'	6-10'	3-6
<i>Fraxinus anomala</i>	Singleleaf ash	20-25'	20-25'	6-9
<i>Juniperus osteosperma</i>	Utah juniper	20-25'	10-15'	3-7
<i>Juniperus scopulorum</i>	Rocky Mountain Juniper	30-40'	3-15'	3-7
<i>Juniperus scopulorum</i> 'Grey Gleam'	'Grey Gleam' Rocky Mtn. juniper	15-20'	5-10'	3-7
<i>Pinus aristata</i>	Bristlecone pine	8-20'	variable	2-7
<i>Pinus edulis</i>	Pinyon pine	20-35'	15-25'	4-8
<i>Quercus gambelii</i>	Gambel oak	15-35'	15-25'	4-8
<i>Quercus macrocarpa</i>	Bur oak	70-80'	70-80'	3-8

SHRUBS

Latin Name	Common Name	Height	Spread	Zone
<i>Artemisia tridentata</i>	Big Sagebrush	2-12'	5-8'	3-6
<i>Atriplex confertifolia</i>	Shadscale	2-3'	2-3'	3-6
<i>Chrysothamnus nauseosus</i>	Rubber Rabbitbrush	4-6'	4-6'	3-6
<i>Ephedra viridis</i>	Mormon Tea	2-4'	2-4'	3-6
<i>Fallugia paradoxa</i>	Apache Plume	4-5'	4-5'	3-10
<i>Mahonia fremontii</i>	Fremont Barberry	4-6'	4-6'	3-6
<i>Purshia mexicana</i>	Cliffrose	4-5'	3-4'	4-7
<i>Rhus glabra</i> var. <i>cismontana</i>	Dwarf Smooth Sumac	3-5'	3-4'	3-6
<i>Rhus trilobata</i>	Skunkbush Sumac	3-4'	5-6'	4-7
<i>Shepherdia rotundifolia</i>	Roundleaf Buffaloberry	3-6'	3-12'	2-6

TREES

Latin Name	Common Name	Height	Spread	Zone
<i>Abies concolor</i>	White fir	30-50'	15-30'	3-6
<i>Acer campestre</i> 'JFS Schichtel2'	'Streetside' maple	35'	18'	5
<i>Acer Ginnala</i> 'Ruby Slippers'	Ruby Slippers Amur Maple	20'	20'	3
<i>Acer Grandidentatum</i> 'JFS-NuMex 3'	Mesa Glow Big Tooth Maple	28'	18'	4
<i>Acer grandidentatum</i> 'JFS-NuMex 3' P.A.F.	Mesa Glow Maple	28'	18'	4
<i>Acer Grandidentatum</i> 'Schmidt'	Rocky Mountain Glow Big Tooth Maple	25'	15'	4
<i>Acer miyabei</i> 'KW-3ami'	Rugged Ridge Miyabe Maple	55'	40'	4
<i>Acer miyabei</i> 'State Street'	'State Street' maple	40-50'	30-35'	4-8
<i>Acer negundo</i> 'Sensation'	'Sensation' boxelder	30-40'	25-35'	3-9
<i>Acer tataricum</i> 'Patdell'	Pattern Perfect Tatarian Maple	25'	20'	3
<i>Acer tataricum</i> 'Garann'	'Hot Wings' Tartarian maple	15-20'	15-20'	4-10
<i>Acer tataricum</i> 'JFS-KW2'	'Rugged Charm' Tatarian maple	15-20'	15-20'	3-8
<i>Amelanchier canadensis</i>	Shadblow serviceberry	8-10'	6-8'	3-7
<i>Amelanchier laevis</i>	Allegheny serviceberry	20-25'	10-15'	4-8
<i>Amelanchier laevis</i> 'JFS-Arb' pp15304	Spring Flurry' Allegheny serviceberry	25'	15'	4-8
<i>Amelanchier x grandiflora</i> 'Autumn Brilliance'	'Autumn Brilliance' Apple serviceberry	10-12'	8-10'	4-9
<i>Catalpa speciosa</i>	Northern catalpa	40-60'	20-40'	5-8
<i>Catalpa speciosa</i> 'Hiawatha 2'	'Heartland' catalpa	40-50'	20-25'	5
<i>Cedrus atlantica</i>	Blue Atlas cedar	40-60'	30-40'	6-9
<i>Cedrus atlantica</i> 'Glauca Pendula'	'Weeping Blue' Atlas cedar	10-15'	8-10'	6-9
<i>Celtis occidentalis</i>	Common hackberry	40-60'	40-60'	3-9
<i>Celtis occidentalis</i> 'Prairie Sentinel'	'Prairie Sentinel' hackberry	45'	12'	3-9
<i>Cercis canadensis</i>	Eastern redbud	20-30'	25-35'	4-9
<i>Chitalpa x tashkentensis</i>	Chitalpa	20-25'	20-25'	6-9
<i>Cornus mas</i>	Corneliancherry dogwood	20-25'	15-20'	4-7
<i>Cotinus obovatus</i>	American smoketree	25'	20'	4-8
<i>Crataegus crusgalli</i> 'Crusader'	'Crusader' Cocksbur hawthorne	15-20'	20-25'	4-7
<i>Crataegus douglasii</i>	Douglas (Black) hawthorne	15-20'	10-20'	3-6
<i>Crataegus laevigata</i> 'Paul's Scarlet'	'Paul's Scarlet' English hawthorne	15-20'	15-20'	4-7



<i>Crataegus monogyna 'Flexuosa'</i>	Contorted Singleseed hawthorne	15-25'	10-15'	4-7
<i>Crataegus phaenopyrum</i>	Washington hawthorne	25-30'	20-25'	4-8
<i>Crataegus x lavallei</i>	Lavelle hawthorne	15-30'	10-15'	3-6
<i>Crataegus x mordenensis 'Toba'</i>	'Toba' hawthorne	20'	20'	4-7
<i>Cupressus arizonica 'Blue Pyramid'</i>	'Blue Pyramid' Arizona cypress	30-40'	15-25'	6-9
<i>Fraxinus anomala</i>	SingleLeaf ash	20-25'	20-25'	6-9
<i>Ginkgo biloba</i>	Ginkgo or Maidenhair tree	50-80'	30-40'	4-8
<i>Ginkgo Biloba 'the president'</i>	Presidential Gold Ginkgo	50'	40'	4
<i>Ginkgo biloba 'Jade Butterfly'</i>	'Jade Butterfly' Ginkgo	12-15'	10'	4-9
<i>Gleditsia triacanthos var. inermis 'Skyline'</i>	'Skyline' honeylocust	40-50'	40-50'	4-10
<i>Gleditsia triacanthos var. intermis 'Impcole'</i>	'Imperial' honeylocust	40-50'	40-50'	4-10
<i>Gymnocladus dioicus 'Espresso'</i>	'Espresso' Kentucky coffeetree	35-50'	30-40'	3-8
<i>Koelreuteria paniculata</i>	Goldenraintree	25-30'	25-30'	5-8
<i>Koelreuteria paniculata 'Fastigiata'</i>	Columnar Goldenrain Tree	20-30'	4-7"	5b-9
<i>Maclura pomifera 'White Shield'</i>	'White Shield' Osage orange	35'	35'	4-9
<i>Malus 'Dolgo'</i>	Dolgo Crabapple	30'	25'	3-7
<i>Malus 'JFS KW213MX'</i>	'Raspberry Spear' Crabapple	20'	8'	4
<i>Malus 'JFS KW214MX'</i>	'Ivory Spear' Crabapple	18'	7'	4
<i>Malus 'JFS-KW207'</i>	Sparkling Sprite Crabapple	12'	12'	4
<i>Malus 'Parrisi'</i>	Pink Princess Crabapple Right Root	8'	12'	5
<i>Malus 'Purple Prince'</i>	Purple Prince Crabapple	20'	20'	4
<i>Malus 'Rejzam'</i>	Rejoice Crabapple	20'	10'	4
<i>Malus 'Royalty'</i>	Royalty Crabapple	15'	15'	4-8
<i>Malus 'Adams'</i>	Adams crabapple	20'	20'	4-8
<i>Malus 'Cascole'</i>	White Cascade crabapple	12'	15'	4-8
<i>Malus 'Centurion'</i>	Centurion crabapple	25'	15-20'	4-8
<i>Malus 'Coral Burst'</i>	'Coral Burst' crabapple	8-10'	8-10'	4-8

<i>Malus 'Hargozam'</i>	'Harvest Gold' crabapple	20-25'	15-20'	4-8
<i>Malus 'Indian Magic'</i>	'Indian Magi' crabapple	12-15'	12-15'	4-8
<i>Malus 'Jarmin'</i>	'Marilee' crabapple	25'	10'	4-8
<i>Malus 'JFS KWS'</i>	'Royal Raindrops' crabapple	15-20'	15-20'	4-8
<i>Malus 'King Arthur'</i>	"King Arthur" crabapple	6-8'	10-12'	4-8
<i>Malus 'Lady Guineverer'</i>	'Lady Guinevere' crabapple	6-8'	12-15'	4-8
<i>Malus 'Prairifire'</i>	'Prairifire' crabapple	20-25'	20-25'	4-8
<i>Malus 'Radiant'</i>	'Radiant' crabapple	20-25'	20-25'	4-8
<i>Malus 'Red Baron'</i>	'Red Baron' Columnar crabapple	15-20'	10-12'	4-8
<i>Malus 'Red Jade'</i>	'Red Jade' Weeping crabapple	10-15'	10-15'	4-8
<i>Malus 'Sargent Tina'</i>	'Sargent Tina' crabapple	10-15'	10-15'	4-8
<i>Malus 'Sutyzam'</i>	'Sugar Tyme' crabapple	25'	25'	4-8
<i>Malus floribunda</i>	Japanese Flowering crabapple	25'	25'	4-8
<i>Malus ioensis 'Klehm's Improved Bechtel'</i>	Klehm's Improved Bechtel Crabapple	20'	18'	4
<i>Malus ioensis 'Prairie Rose'</i>	Prairie Rose Crabapple	20'	18'	4
<i>Malus x moerlandii 'Profusion'</i>	Profusion crabapple	20'	20'	4-8
<i>Malus x Zumi var. 'Calocarpa'</i>	'Zumi Calocarpa' crabapple	20'	24'	4-8
<i>Parrotia persica</i>	Persian parrotia	20-35'	20-30'	5-8
<i>Picea glauca 'Morton Tower'</i>	Weeping White Spruce	10-15'	5-8'	2-6
<i>Pinus contorta 'Taylor's Sunburst'</i>	'Taylors Sunburst' Lodgepole pine	6-12'	6-8'	4-8
<i>Pinus flexilis 'Vanderwolf's Pyramid'</i>	'Vanderwolf's Pyramid' Limber pine	30-50'	15-35'	4-7
<i>Pinus monophylla</i>	Singleleaf Pinyon pine	20-35'	15-25'	4-8
<i>Pinus nigra</i>	Austrian pine	50-60'	20-40'	3-7
<i>Pinus ponderosa</i>	Ponderosa pine	60-80'	25-30'	3-7
<i>Pinus sylvestris</i>	Scotch pine	30-60'	30-40'	3-7
<i>Pinus sylvestris 'Fastigiata'</i>	Columnar Scotch pine	20-30'	5-10'	3-7
<i>Pinus sylvestris 'Glauca Nana'</i>	Dwarf Scotch pine	20-30'	10-15'	3-7
<i>Pistacia chinensis</i>	Chinese pistache	30'	30'	6-9
<i>Platanus x acerifolia 'Bloodgood'</i>	'Bloodgood' London Plane tree	70-100'	65-80'	4-8
<i>Prunus maackii</i>	Manchurian cherry	35-45'	12-20'	3-6
<i>Prunus padus 'Merlot'</i>	'Merlot' European birdcherry	25-30'	20-25'	3-6
<i>Prunus virginiana 'Canada Red'</i>	'Canada Red' chokecherry	20-30'	18-25'	2-6
<i>Pseudotsuga menziesii</i>	Douglas-fir	50-80'	15-25'	2-6
<i>Pseudotsuga menziesii var. glauca</i>	Blue Douglas fir	30-40'	20-30'	3
<i>Quercus alba</i>	White oak	45'	45'	4-9
<i>Quercus bicolor</i>	Swamp White oak	50-60'	50-60'	3-9
<i>Quercus bicolor 'Bonnie and Mike'</i>	'Beacon' oak	30-40'	10-15'	4-8
<i>Quercus buckleyi</i>	Texas Red oak	30-50'	20-40'	7-8
<i>Quercus imbricaria</i>	Shingle oak	50'	40'	5-8
<i>Quercus macrocarpa</i>	Bur oak	70-80'	70-80'	3-8
<i>Quercus macrocarpa 'JFS-KW14'</i>	Cobblestone Oak	55'	45'	3
<i>Quercus muhlenbergii</i>	Chinkapin oak	40-50'	40-50'	4-8
<i>Quercus robur x bicolor 'Long'</i>	'Regal Prince' oak	45'	18'	4-9
<i>Syringa pekinensis 'WFH2'</i>	'Great Wall' Tree Lilac	20'	12'	3
<i>Syringa pekinensis 'Zhang Zhiming'</i>	Beijing Gold Lilac	20'	20'	5
<i>Syringa reticulata 'Ivory Silk'</i>	'Ivory Silk' Japanese lilac	20-30'	15-25'	3-7

<i>Ulmus 'Morton Glossy'</i>	Triumph Elm	50-60'	35-40'	4-7
<i>Ulmus 'Frontier' (carpinifolia x parvifolia)</i>	'Frontier' Elm	40-50'	30-40'	4-9
<i>Ulmus americana</i>	American elm	45-55'	50-60'	4
<i>Ulmus americana 'Lewis & Clark'</i>	'Praire Expedition' elm	45-55'	50-60'	5
<i>Ulmus americana 'Princeton'</i>	Princeton Elm	65'	50'	4
<i>Ulmus Davidiana 'JFS KW2UD'</i>	Greenstone Elm	60'	40'	4
<i>Ulmus glabra 'Camperdownii'</i>	Camperdown elm	10-15'	25-30'	4-6
<i>Ulmus parvifolia 'Emer II' (Allee)</i>	'Allee' Lacebark elm	40-50'	40-50'	4-9
<i>Ulmus propinqua 'JFS-Bieberich'</i>	'Emerald Sunshine' elm	30-35'	25-30'	5-8
<i>Viburnum lentago</i>	Nannyberry viburnum	15-18'	15-20'	3-7
<i>Zelkova serrata 'Green Vase'</i>	'Green Vase' Zelkova	60-70'	40-50'	4-8
<i>Zelkova serrata 'Schmidtlow'</i>	'Wireless' Zelkova	25-30'	30-35'	4-8



<i>Prunus besseyi 'Pawnee Buttes'</i>	Pawnee Buttes Western Sand Cherry	2'	6-8'	3-6
<i>Rhus aromatica 'Grow-Low'</i>	'Grow-Low' Sumac	2-4'	6-8'	3-9
<i>Rhus typhina 'Baltiger'</i>	Tiger Eyes sumac	6'	6'	4-8
<i>Ribes alpinum</i>	Alpine currant	3-6'	3-6'	2-7
<i>Ribes aureum</i>	Golden Currant	4-6'	3-5'	4-7
<i>Sambucus nigra 'Black Lace'</i>	'Black Lace' Elderberry	6-10'	6-10'	4-6
<i>Sambucus nigra 'Gerda'</i>	Black Beauty elderberry	8-12'	8-12'	4-6
<i>Shepherdia argentea</i>	Silver Buffaloberry	6-12'	6-10'	2-6
<i>Syringa x 'Bailbelle'</i>	Tinkerbelle lilac	5-6'	4-5'	2-7
<i>Syringa patula 'Miss Kim'</i>	Miss Kim lilac	6-8'	6-8'	4-7
<i>Syringa x 'Purple Penda'</i>	Bloomerange lilac	5'	5'	3-7
<i>Syringa vulgaris 'Ludwis Spaeth'</i>	'Ludwig Spaeth' lilac	6-10'	6-10'	3-7
<i>Viburnum dentatum 'Christom'</i>	Blue Muffin Arrowwood viburnum	6-8'	6-8'	3-8
<i>Viburnum dentatum 'JN Select'</i>	Red Feather Arrowwood viburnum	8-10'	10-12'	3-8

TREES

Latin Name	Common Name	Height	Spread	Zone
<i>Abies koreana 'Horstmann's Silberlock'</i>	'Horstmann's Silberlock' Korean fir	12-15'	8-10'	5-7
<i>Abies pinsapo</i>	Spanish fir	20-30'	15-20'	6-7
<i>Acer buergerianum</i>	Trident maple	25-30'	15-25'	5-8
<i>Acer campestre 'Queen Elizabeth'</i>	'Queen Elizabeth' Hedge maple	30-35'	30-35'	4-8
<i>Acer ginnala 'Flame'</i>	'Flame' Amur maple	15-18'	15-18'	3-8
<i>Acer glabrum</i>	Rocky Mountain maple	10-20'	8-10'	4-7
<i>Acer griseum</i>	Paperbark maple	20-30'	20-30'	5-8
<i>Acer henryi</i>	Henry's maple	25'	25'	5-6
<i>Acer nigrum 'Greencolumn'</i>	Greencolumn Black Maple	70'	30'	4
<i>Acer palmatum 'Burgundy Lace'</i>	'Burgundy Lace' Japanese maple	10-15'	10-15'	5-8
<i>Acer pensylvanicum</i>	Striped maple	15-30'	15-30'	4-8
<i>Acer platanoides 'columnarbroad'</i>	Parkway Norway Maple	40'	25'	3
<i>Acer platanoides 'Crimson King'</i>	Crimson King Norway Maple	35-45'	25-30'	3
<i>Acer Platanoides 'Globosum'</i>	Globe Norway Maple	15'	18'	4
<i>Acer platanoides 'Princeton Gold'</i>	Princeton Gold Norway Maple	35'	30'	4
<i>Acer platanoides 'Royal Red'</i>	Royal Red Norway Maple	35-40'	20-25'	4-7
<i>Acer platanoides 'Crimson Sentry'</i>	'Crimson Sentry' maple	20-25'	10-15'	4-7
<i>Acer platanoides 'Deborah'</i>	'Deborah' Norway maple	60-70'	50-60'	4-7
<i>Acer pseudoplatanus 'Atropurpureum'</i>	Spaethii maple	40'	30'	4-7
<i>Acer pseudosieboldianum</i>	Korean maple	22'	18'	4-7
<i>Acer pseudosieboldianum x palm 'Hasselkus'</i>	Northern Glow Korean Maple M-S	20'	24'	4
<i>Acer rubrum 'Frank Jr.'</i>	Redpointe Red Maple	45'	30'	5
<i>Acer rubrum 'JFS-KW78'</i>	Armstrong Gold Red Maple	40'	12'	4
<i>Acer saccharum 'JFS-Caddo2'</i>	Flashfire Sugar Maple	45'	40'	4
<i>Acer saccharum 'John Pair'</i>	John Pair Sugar Maple	30'	30'	5
<i>Acer truncatum x A. platanoides 'JFS-KW187'</i>	'Urban Sunset' maple	30-35'	15-20'	4

SHRUBS

Latin Name	Common Name	Height	Spread	Zone
<i>Buddleia alternifolia</i>	Alternate-leaf butterflybush	10-20'	10-20'	5-7
<i>Cotinus coggygia 'Ancot'</i>	Golden Spirit smoke tree	6-8'	6-8'	4-8
<i>Cotinus coggygia 'Royal Purple'</i>	Royal Purple smoke tree	12-15'	12-15'	4-8
<i>Kolkwitzia amabilis</i>	Beautybush	6-10'	6-10'	4-8
<i>Lonicera tatarica 'Honeyrose'</i>	Honeyrose Tatarian honeysuckle	8-10'	8-10'	3-8
<i>Philadelphus x virginialis</i>	Mock orange	6-8'	6-8'	5-8
<i>Physocarpus opulifolius 'Dart's Gold'</i>	Dart's Golden ninebark	5'	5'	2-7
<i>Physocarpus opulifolius 'Mindia'</i>	Coppertina ninebark	8-10'	8-10'	2-7
<i>Physocarpus opulifolius 'Nugget'</i>	Golden ninebark	5'	6'	2-7
<i>Physocarpus opulifolius 'Seward'</i>	Summer Wine ninebark	6-8'	6-8'	3-7



<i>Acer truncatum x platanoides</i> 'JFS-KW-187'	Urban Sunset Truncatum Maple	35'	20'	4b
<i>Acer truncatum x platanoides</i> 'JFS-KW202'	Crimson Sunset Truncatum Maple Undercut	35'	25'	4
<i>Acer truncatum x platanoides</i> 'JFS-KW249'	Ruby Sunset Truncatum Maple	25'	20'	4b
<i>Acer truncatum x platanoides</i> 'keithsform'	Norwegian Sunset Truncatum Maple	35'	25'	4b
<i>Acer truncatum x platanoides</i> 'Warrenred'	'Pacific Sunset' maple	30-35'	20-25'	4-8
<i>Acer x freemanii</i> 'Jeffersred'	'Autumn Blaze' maple	40-50'	30-40'	3-8
<i>Aesculus x carnea</i> 'Briotii'	'Briotii' Red horsechestnut	25-30'	30-35'	4-7
<i>Alnus glutinosa</i>	Black Alder	40-60'	20-40'	4-7
<i>Alnus tenuifolia</i>	Thinleaf Alder	15-25'	15-25'	3-7
<i>Betula nigra</i> 'Shiloh Splash'	Shiloh Splash Birch	8'	4'	4
<i>Betula nigra</i> 'Cully'	Heritage River Birch	40-50'	40-50'	3-9
<i>Betula nigra</i> 'Summer Cascade'	Summer Cascade' Birch	15'	20'	4-8
<i>Betula occidentalis</i>	Western Water Birch	20-30'	15-20'	2-7
<i>Betula platyphylla</i> 'Fargo'	Dakota Pinnate Birch	35'	10'	3
<i>Betula platyphylla</i> var. <i>japonica</i> 'Whitespire'	Whitespire Japanese White Birch	40-50'	20-30'	4-7
<i>Carpinus betulus</i> 'Frans Fontaine'	Frans Fontaine Hornbeam	35'	15'	5
<i>Carpinus betulus</i> 'Pyramidalis'	Pyrimidal European hornbeam	40-60'	30-40'	3-9
<i>Carpinus caroliniana</i> 'JFS-KW6'	Native Flame American Hornbeam	30'	20'	5
<i>Carpinus caroliniana</i> 'Uxbridge'	Rising Fire American Hornbeam	30'	15'	4
<i>Carpinus caroliniana</i> 'CCSQU'	Palisade' American Hornbeam	30'	15'	5-8
<i>Cedrus deodara</i> 'Gold Cone'	Gold Cone Weeping Deodara cedar	40-60'	30-40'	7-8

<i>Cedrus deodara</i>	Deodar cedar	40-60'	30-40'	7-8
<i>Cedrus deodara</i> 'Prostrate Beauty'	'Prostrate Beauty' Deodar cedar	5'	10'	7
<i>Cedrus libani</i> 'Glauca Pendula'	Weeping Blue cedar of Lebanon	40-50'	20-30'	6-9
<i>Cedrus libani</i> var. 'Stenocoma'	'Stenocoma' cedar of Lebanon	40-50'	30-40'	5-7
<i>Cercidiphyllum japonicum</i>	Katsura Tree	40-60'	25-60'	4-8
<i>Cercidiphyllum japonicum</i> 'Rotfuchs'	Red Fox Katsura Tree	40-60'	25-50'	4-8
<i>Cercis canadensis</i>	Eastern redbud	20-30'	25-35'	4-8
<i>Cercis canadensis</i> 'Covey'	Lavender Twist Redbud	4-10'	4-10'	5-9
<i>Cercis canadensis</i> 'Pink Pom Poms'	'Pink Pom' Poms Redbud	20'	15'	6b
<i>Cercis canadensis</i> 'Ruby Falls'	Ruby Falls Redbud	5-6'	3-4'	5-9
<i>Chamaecyparis nootkatensis</i> 'Pendula'	Weeping Alaska cedar	30-45'	15-20'	4-7
<i>Chionanthus retusus</i>	Chinese fringetree	15-25'	15-25'	4-9
<i>Chionanthus retusus</i> 'Tokyo Tower'	Tokyo Tower Fringetree	12-15'	4-6'	6-9
<i>Cladrastis kentukea</i>	Yellowwood	30-50'	40-55'	4-8
<i>Cornus florida</i> 'Comco No.1'	Cherokee Brave Dogwood	25'	22'	5
<i>Cornus kousa</i> 'Summer Fun'	Summer Fun Dogwood	18'	15'	5
<i>Corylus americana x avellana</i>	European Filbert	15-20'	15-20'	4-9
<i>Corylus avellana</i> 'Contorta'	Contorted European filbert	8-10'	8-10'	4-8
<i>Eucommia ulmoides</i>	Hardy Rubber tree	40-45'	40-45'	5-8
<i>Fagus sylvatica</i>	European Beech	50-60'	35-45'	4-7
<i>Fagus sylvatica</i> 'Purple Fountain'	Purple Fountain' beech	20-25'	8-10'	4-7
<i>Fagus sylvatica</i> 'Asplenifolia'	Fern-leaved beech	40-50'	30-40'	4-7
<i>Fagus sylvatica</i> 'Pendula'	Weeping beech	40-50'	30-40'	4-7
<i>Fagus sylvatica</i> 'Purple Fountain'	'Purple Fountain' beech	20-25'	8-10'	4-7
<i>Fagus sylvatica</i> 'Roseomarginata'	Tricolor beech	35-50'	25-40'	4-7
<i>Fagus sylvatica</i> 'Spaethiana'	'Spaethiana' beech	40-50'	30-40'	4-7
<i>Ficus carica</i>	Desert King Fig	10-15'		5-9
<i>Gleditsia triacanthos</i> 'Draves'	Street Keeper Honeylocust	45'	20'	4
<i>Hamamelis x intermedia</i> 'Arnold Promise'	Arnold Promise Witch Hazel M-S	12-15'	12-15'	5-8
<i>Hamamelis x intermedia</i> 'Diane'	Diane Witch Hazel M-S	8-12'	10-15'	5-9
<i>Hamamelis x intermedia</i> 'Jelena'	Jelena Witch Hazel M-S	8-12'	8-12'	5-8
<i>Heptacodium miconioides</i>	Seven-sons flower	15'	15'	5-8
<i>Lagerstroemia indica</i> "Catawaba"	"Catawaba" Crape myrtle	15'	15'	7-9
<i>Larix kaempferi</i> 'Diana'	'Diana' Japanese larch	20-30'	15-20'	4-7
<i>Liquidambar styraciflua</i> 'Slender Silhouette'	'Slender Silhouette' sweetgum	50'	8'	5-9
<i>Liquidambar styraciflua</i> 'Worplesdon'	'Worplesdon' sweetgum	60-75'	40-50'	5-9
<i>Liriodendron tulipifera</i> 'Fastigiatum'	Columnar Tulip Tree Undercut	50-60'	20'	5
<i>Liriodendron tulipifera</i> 'JFS-Oz'	Emerald City Tulip Tree	55'	25'	4b
<i>Liriodendron tulipifera</i> 'Aureo-marginatum'	Variiegated Tulip tree	70-90'	35-50'	4-9
<i>Maackia amurensis</i> 'JFS-Schichtel1'	'MaacNificent' Amur maackia	25-30'	20-25'	3
<i>Maackia amurensis</i>	Amur maackia	20-30'	20-30'	4-7
<i>Magnolia</i> 'NCMX1'	Mercury Magnolia	25'	15'	5

<i>Magnolia grandiflora</i> 'Edith Bogue'	'Edith Bogue' Southern magnolia	25-35'	15-25'	6-9
<i>Magnolia stellata</i>	Star magnolia	15-20'	10-15'	4-8
<i>Magnolia x loebberii</i> 'Ballerina'	'Ballerina' magnolia	20'	20'	4-8
<i>Magnolia x soulangiana</i> 'Rustica Rubra'	'Rustica Rubra' Saucer magnolia	20-30'	20-30'	4-9
<i>Metasequoia glyptostroboides</i> 'JFS-PN3Legacy'	Jade Prince Dawn Redwood Graft	70'	25'	5
<i>Metasequoia glyptostroboides</i>	Dawn redwood	70-100'	25-30'	4-8
<i>Nyssa sylvatica</i> 'Haymanred'	'Red Rage' Black tupelo	35'	20'	5-8
<i>Ostrya virginiana</i>	American hophornbeam	20-35'	20-35'	4-7
<i>Ostrya virginiana</i> 'Autumn Treasure'	'Autumn Treasure' American hophornbeam	35'	25'	4-7
<i>Oxydendrum arboreum</i>	Sourwood	30-40'	25'	5-9
<i>Parrotia persica</i>	Persian parrotia	20-35'	20-30'	5-8
<i>Parrotia persica</i> 'JL Columnar'	Persian Spire Persian Parrotia	25'	10'	5
<i>Parrotia persica</i> 'Vanessa'	Vanessa Persian Parrotia	28'	14'	5
<i>Phellodendron lavallei</i> 'Longnecker'	'Eye Stopper' Cork Tree	40'	35'	4-7
<i>Picea abies</i> 'Rubra Spicata'	'Rubra Spicata' Red-tipped Norway spruce	8-12'	8-12'	4
<i>Picea abies</i> 'Cupressina'	'Cupressina' Norway spruce	25-30'	4-6'	4-7
<i>Picea abies</i> 'Pendula Major'	Weeping Norway spruce	30-40'	20-30'	4-7
<i>Picea abies</i> 'Pendula'	Weeping Norway spruce	20-40'	variable	3-7
<i>Picea bicolor</i> 'Howell's Dwarf Tigertail'	'Howell's Dwarf Tigertail' spruce	10-15'	10-15'	4-7
<i>Picea bicolor</i> 'Morton Tower'	Weeping White spruce	10-15'	5-8'	2-6
<i>Picea glauca</i> 'Yukon Blue'	'Yukon Blue' White spruce	10-12'	6-8'	3
<i>Picea glauca</i> 'Yukon Blue'	Yukon Blue spruce	8-10'	4-5'	2-6
<i>Picea mariana</i> 'Fastigiata Wells'	'Wells' Black spruce	25-30'	8-10'	2-5
<i>Picea omorika</i> 'Bruns'	Bruns Serbian spruce	30-35'	8-10'	4-8
<i>Picea omorika</i> 'Riverside'	'Riverside' Serbian spruce	40-50'	15-20'	4-7
<i>Picea orientalis</i> 'Aurea'	Golden Oriental spruce	40-50'	20-25'	4
<i>Picea orientalis</i> 'Deer Run'	'Deer Run' Oriental spruce	20-25'	8-10'	3
<i>Picea orientalis</i> 'Goudy'	'Goudy' Oriental spruce	10-15'	4-5'	4-7
<i>Picea orientalis</i> 'Skylands'	'Skylands' Oriental spruce	30-35'	10-15'	5-8
<i>Picea pungens</i> 'Hoopsi'	'Hoopsi' Blue spruce	30-50'	15-20'	2
<i>Picea pungens</i> 'Mesa Verde'	'Mesa Verde' Blue spruce	3-4'	8-10'	2
<i>Picea pungens</i> 'Procumbens'	'Procumbens' Blue spruce	2'	10'	2
<i>Picea pungens</i> 'Bakeri'	'Bakeri' Blue spruce	25-35'	15-20'	3-7
<i>Picea pungens</i> 'Fat Albert'	'Fat Albert' Blue spruce	15-25'	20-30'	3-7
<i>Picea pungens</i> 'Iseli Fastigiata'	Columnar Blue spruce	25-25'	15-20'	3-7
<i>Picea pungens</i> 'Montgomery'	'Montgomery' Blue spruce	10-15'	15-20'	3-7
<i>Picea pungens</i> 'Sester's Dwarf'	'Sester's Dwarf' spruce	6-8'	4-6'	3-7
<i>Picea pungens</i> 'The Blues'	'The Blues' Weeping Blue spruce	5-8'	3-6'	2-8
<i>Pinus aristata</i> 'Sherwood's Compact'	Sherwood's Compact Bristlecone	6-8'	4-6'	4-7
<i>Pinus banksiana</i>	Jack pine	25-40'	20-30'	2
<i>Pinus banksiana</i> 'Uncle Fogy'	'Uncle Fogy' Weeping jack pine	8-10'	varies	4-8
<i>Pinus bungeana</i>	Lacebark pine	30-50'	20-35'	4-7
<i>Pinus bungeana</i> 'Rowe Arboretum'	'Rowe Arboretum' Lacebark pine	30-40'	20-30'	4

<i>Pinus cembra</i>	Swiss Stone pine	25-30'	15-20'	3-7
<i>Pinus cembra</i>	Swiss Stone pine	30-40'	15-25'	3
<i>Pinus heldreichii</i> var. <i>leucodermis</i>	Bosnian pine	30-40'	10-15'	5-7
<i>Pinus leucodermis</i> 'Satelit'	Satellite Bosnian pine	12-15'	4-6'	5-7
<i>Pinus nigra</i> 'Arnold Sentinel'	'Arnold Sentinel' pine	20-30'	5-10'	3-7
<i>Pinus strobus</i> 'Aero Variegata'	Gold Variegated Eastern White pine	25-35'	15-20'	3-7
<i>Pinus wallichiana</i> 'Zebrina'	Varigated Himalayan pine	30-50'	15-35'	5-7
<i>Platanus x acerifolia</i> 'Morton Circle'	Exclamation! Planetree	55'	35	5
<i>Populus tremula</i> 'Erecta'	Swedish Columnar aspen	40	10	2
<i>Populus tremuloides</i>	Quaking Aspen	30-35'	15-35'	5-7
<i>Populus tremuloides</i> 'NE Arb'	'Prairiegold' Quaking Aspen	30-35'	15-20'	4-7
<i>Prunus</i> 'JFS-KW14'	First Blush Cherry	25'	12'	5
<i>Prunus</i> 'NCPH1'	'Pink Cascade' cherry	10-12'	10-12'	5
<i>Pyrus calleryana</i> 'Chanticleer'	'Chanticleer' Flowering Pear	35-40'	15-20'	5-8
<i>Quercus acutissima</i>	Sawtooth oak	40'	40'	5-8
<i>Quercus coccinea</i>	Scarlet oak	50'	40'	4-9
<i>Quercus macrocarpa</i> 'JFS-KW3'	Urban Pinnacle Oak Bare Root	55'	25'	3
<i>Quercus nuttallii</i>	Nuttall Oak	60-80'	35-50'	6b-8
<i>Quercus palustris</i> 'Pringreen'	'Green Pillar' oak	50'	15'	4-8
<i>Quercus robur</i> x <i>alba</i> 'JFS-KW1QX'	Streetspire Oak	45'	14'	4
<i>Quercus rubra</i> (<i>borealis</i>)	Northern Red oak	60-75'	60-75'	4-7
<i>Quercus shumardii</i>	Shumard oak	50'	40'	5-9
<i>Quercus velutina</i>	Northern Black oak	50'	45'	3-9
<i>Quercus x macdaniellii</i> 'Clemons'	Heritage oak	50'	40'	4-9
<i>Sciadopitys verticillata</i>	Japanese Umbrella pine	20-30'	15-20'	5-7
<i>Sequoiadendron giganteum</i> 'pendulum'	Giant Weeping sequoia	15-30'	10-15'	6-8
<i>Sorbus alnifolia</i>	Korean Mountain ash	30-40'	20-30'	4-7
<i>Sorbus aucuparia</i>	European Mountain ash	35'	24'	3-6
<i>Sorbus aucuparia</i> 'Rossica'	Rossica Mountain Ash	30'	20'	3



<i>Sorbus x hybrida</i>	Oakleaf Mountain ash	30'	20'	3-5
<i>Stewartia pseudocamellia</i>	Japanese stewartia	30'	20'	5-7
<i>Taxodium distichum 'JFS-SGPN'</i>	Green Whisper Bald Cypress	55'	30'	5
<i>Taxodium distichum 'Skyward'</i>	'Lindsey's Skyward' Bald cypress	20-25'	15-10'	5
<i>Taxodium distichum 'Cascade Falls'</i>	'Cascade Falls' Bald cypress	10-15'	5-10'	4-11
<i>Tetradium daniellii</i>	Korean evodia	30'	25'	4-8
<i>Thuja occidentalis 'Filiformis'</i>	Weeping Threadleaf arborvitae	30-40'	10-15'	3-7
<i>Thuja plicata 'Green Sport'</i>	'Green Sport' Western Red Cedar	50-70'	15-20'	5-9
<i>Thuja plicata 'Green Sport'</i>	'Green Sport' Western Red cedar	50-70'	15-20'	5-9
<i>Tilia americana x euchlora 'Redmond'</i>	Redmond American Linden	35'	25'	3
<i>Tilia cordata 'Greenspire'</i>	Greenspire Littleleaf Linden	40-60'	35-50'	3a-7a
<i>Tilia cordata 'Halka'</i>	Summer Sprite Littleleaf Linden	20'	15'	4
<i>Tilia tomentosa</i>	Silver linden	50-70'	30-25'	4-7
<i>Tilia tomentosa 'PNI 6051'</i>	Green Mountain Linden	45'	35'	5
<i>x Cupressocyparis leylandii</i>	Leyland cypress	60-70'	10-12'	6-9
<i>x Cupressocyparis leylandii</i>	Leyland cypress	60-70'	10-12'	6-9
<i>Zelkova serrata 'JFS-KW1'</i>	City Sprite Zelkova	24'	18'	5
<i>Zelkova serrata 'Musashino'</i>	'Musashino' Columnar Zelkova	45-50'	25-30'	4-8

SHRUBS

Latin Name	Common Name	Height	Spread	Zone
<i>Abies koreana 'Starker's Dwarf'</i>	Starkers Dwarf Korean fir	3-5'	3-5'	4-6
<i>Berberis x gladwynensis 'William Penn'</i>	'William Penn' barberry	4-5'	4-6'	6-9
<i>Berberis thunbergii 'Golden Rocket'</i>	'Golden Rocket' Japanese barberry	3-5'	2-3'	4-8
<i>Berberis thunbergii 'Goruzam'</i>	'Golden Ruby' Japanese barberry	2-3'	2-3'	4-8
<i>Berberis thunbergii 'Monomb'</i>	'Cherry Bomb' Japanese barberry	3-4'	3-4'	4-8
<i>Berberis thunbergii 'Orange Rocket'</i>	'Orange Rocket' Japanese barberry	3-5'	2-3'	4-8
<i>Berberis thunbergii 'Rosy Rocket'</i>	'Rosy Rocket' Japanese barberry	3-5'	2-3'	4-8
<i>Berberis thunbergii 'Royal Cloak'</i>	'Royal Cloak' Japanese barberry	3-5'	3-5'	4-8
<i>Calycanthus floridus</i>	Sweet shrub	6-8'	6-8'	4-9
<i>Cedrus libani 'Nana'</i>	Dwarf Cedar of Lebanon	4-6'	4-6'	5-7
<i>Chaenomeles x 'Texas Scarlet'</i>	Texas Scarlet Flowering quince	4-6'	4-6'	4-8
<i>Cornus alba 'Elegantissima'</i>	Variiegated Red twig dogwood	6-8'	6-8'	3-7
<i>Cornus sericea 'Hedgerows Gold'</i>	Hedgerows Gold Redosier dogwood	3-6'	3-6'	2-7
<i>Corylus avellana 'Contorta'</i>	Contorted European filbert	8-10'	8-10'	4-8
<i>Cotoneaster acutifolius</i>	Peking cotoneaster	10'	10'	4-7
<i>Cotoneaster divaricatus</i>	Spreading cotoneaster	6-8'	6-8'	4-9
<i>Daphne x burkwoodii 'C.M'</i>	Carol Mackie daphne	3-4'	3-4'	4-7
<i>Euonymus europaeus 'Red Cap'</i>	'Red Cap' euonymus	6-8'	6-8'	4-7

<i>Exochorda racemosa</i>	Common pearlbrush	10-15'	10-15'	4-8
<i>Forsythia x 'Northern Sun'</i>	Northern Sun forsythia	8-10'	8-10'	6-8
<i>Forsythia x intermedia 'Lynwood Gold'</i>	Lynwood Gold forsythia	6-8'	6-8'	6-8
<i>Fothergilla major 'Mt. Airy'</i>	Mt. Airy fothergilla	6'	6'	4-8
<i>Hibiscus syriacus</i>	Rose-of-sharon	8-10'	8-10'	5-8
<i>Kerria japonica 'Pleniflora'</i>	Double Flowered Japanese rose	8-10'	8-10'	5-9
<i>Photinia x fraseri</i>	Fraser photinia	8-12'	8-10'	7-9
<i>Physocarpus opulifolius 'Diablo'</i>	'Diablo' ninebark	8-10'	8-10'	2-7
<i>Physocarpus opulifolius 'Jefam'</i>	'Amber Jubilee' ninebark	5-6'	4-5'	2-7
<i>Picea abies 'Elegans'</i>	Dwarf Norway spruce	3-5'	8-10'	3-7
<i>Picea abies 'Nidiformis'</i>	Bird's Nest spruce	3-5'	8-10'	3-7
<i>Picea abies 'Repens'</i>	Prostrate Norway spruce	3-5'	8-10'	2-6
<i>Picea omorika 'Nana'</i>	Dwarf Serbian spruce	4-6'	4-6'	4-7
<i>Picea pungens 'Glauca Globosa'</i>	'Globosa' Blue spruce	3-6'	4-8'	3-7
<i>Pinus mugo 'Big Tuna'</i>	'Big Tuna' Mugo pine	8-10'	6-8'	3-7
<i>Prunus glandulosa</i>	Flowering almond	4-6'	3-5'	4-8
<i>Prunus laurocerasus 'Mount Vernon'</i>	Mount Vernon English laurel	2-4'	5-8'	4-6
<i>Rhamnus frangula 'Ron Williams'</i>	Fine Line buckthorn	6-8'	6-8'	2-7
<i>Viburnum carlesii</i>	Koreanspice viburnum	4-6'	4-6'	5-7
<i>Viburnum lantana L. 'Mohican'</i>	Mohican viburnum	6-8'	6-8'	4-7
<i>Viburnum nudum</i>	Possumhaw viburnum	6-10'	6-10'	5-9
<i>Viburnum opulus 'Nanum'</i>	Dwarf European Cranberry Bush viburnum	3-5'	3-5'	3-8
<i>Viburnum opulus 'Sterile'</i>	European Cranberrybush viburnum	10'	10'	3-8
<i>Viburnum plicatum tomentosum 'Summer Snowflake'</i>	Summer Snowflake viburnum	6-8'	8-10'	5-7
<i>Viburnum plicatum var. tomentosum 'Mariesii'</i>	Mariesii Doublefile Viburnum	8-10'	8-10'	5-8
<i>Viburnum plicatum var. tomentosum 'Popcorn'</i>	Popcorn Doublefile viburnum	6-8'	6-8'	4-7
<i>Viburnum rhytidophylloides 'Alleghany'</i>	Alleghany viburnum	10-15'	10-15'	5-7
<i>Viburnum trilobum 'Bailey's Compact'</i>	Bailey's Compact American Cranberry Bush viburnum	3-5'	3-5'	2-7
<i>Viburnum wrightii 'C.A. Hildebrandt's'</i>	C.A Hildebrandt's Wright viburnum	4-6'	6-8'	5-7
<i>Viburnum x bodantense 'Pink Dawn'</i>	'Pink Dawn' Viburnum	8-10'	8-10'	5-9
<i>Viburnum x burkwoodii</i>	Burkwood viburnum	6-12'	6-8'	5-8
<i>Viburnum x carlcephalum</i>	Fragrant Viburnum	6-10'	6-10'	6-7
<i>Viburnum x juddii</i>	Judd Viburnum	6-10'	6-10'	4-8
<i>Viburnum x pragnense</i>	Prague Viburnum	8-10'	8-10'	5-8



SIX TREE PLANTING STEPS

by Michael Kuhns, Extension Forestry Specialist, USU

The future health of a tree is dependent on proper care at planting time. The following are six important steps in tree planting. For more tips: forestry.usu.edu

1 Select a healthy tree that is right for the site.

Tissues should be moist with no obvious insect or disease damage. Important site-related tree characteristics are adaptation to drought, high soil pH, heat, cold, poor drainage, soil compaction, shade, and available space.

2 Root system health and form are especially important.

The upper roots should flare out from the trunk (this is the root collar) at or just below the soil surface. If the root collar is buried deep in the root ball or pot, remove the excess soil or potting media when planting or return the tree. Root balls should measure at least 10 to 12 inches across (diameter) for each inch of trunk diameter measured just above the root collar. Avoid heavily root-bound trees with many circling roots; pot-grown trees are more likely to be root-bound than other kinds.

3 Dig a wide-shallow hole, at least three times as wide as the root ball and no deeper than the root ball's height.

The root collar should end up at or slightly above the surrounding soil level. Soil in the hole bottom should be undisturbed so the heavy root ball doesn't sink in when watered.

4 Place the tree in the hole with the root collar at the correct level and remove as much packing material as possible, especially pots, burlap, cords, and tags.

Backfill with native soil; very poor soil can be amended with up to 25% well-composted organic matter mixed in thoroughly. Tamp the backfill firmly enough to remove air pockets, but gently enough to avoid over-compaction. Do not add any fertilizer or root-stimulants.

5 Mulch the soil surface around the tree with fairly coarse organic matter such as wood chips, bark, or coarse compost in a layer as wide as possible and four inches deep.

Keep mulch away from the trunk base. Do not use weed fabrics or plastic sheeting. Stake the tree only if high winds or vandalism are likely. If so, attach the stakes to the tree with soft, flexible material that allows moderate trunk movement. Remove stakes after one or two years. Trunk wrapping generally is unnecessary, but if you wrap use light-colored material that can breathe (paper or perforated plastic) and remove after one year.

6 Water the tree thoroughly at planting time and once or twice a week for the first couple months.

Then water according to need, always watering enough to wet the entire root ball (width and depth) and the area surrounding it. Nearly all trees planted in Utah's dry, low-elevation valleys need at least some irrigation during the hottest, driest parts of the summer.

DIAGRAM OF PROPER TREE PLANTING

Trees must be watered thoroughly at planting and once or twice each week for the first couple of months. In the following years water according to their needs (see recommendations inside for each zone).

