THE TREE LIST Evergreen Trees For The Kansas City Region

(As Rated By Metropolitan Area Experts)

A study by Robert Whitman RLA, AICP, LEED AP

The Tree List: Evergreen Trees For The Kansas City Region (As Rated By Metropolitan Area Experts) was a 2012-2013 study conducted by Robert Whitman, RLA, AICP, LEED AP, in which Kansas City region tree experts were asked to provide numerical opinions (0-5 ratings) in each category for evergreen trees they have tested/observed from a master list of 154 evergreen trees. These ratings were averaged to determine the tree ratings for each category.

Study Participants:

Alan Branhagen, Director of Horticulture, Powell Gardens; Cameron Rees, Skinner Garden Store, (785) 233-9657; Cheryl Boyer, Assistant Professor, K-State Extension; Chip Winslow, FASLA, KSU Department of Landscape Architecture; Chuck Conner, Forester, Missouri Department of Conservation; Dennis Patton, Johnson County Extension Agent; Don Mann, Loma Vista Nursery, (913) 897-7010; Duane Hoover, Horticulturist, Kauffman Memorial Garden; Ivan Katzer, Consulting Arborist, (816) 765-4241; Jason Griffin PhD, KSU John C. Pair Horticultural Center; Kim Bomberger, Community Forester, Kansas Forest Service; Marvin Snyder, Past President, American Conifer Society; Mic Mills, Rosehill Gardens, (816) 941-4777; Michael Dougherty, Tree Management Company, (913) 894-8733; Rick Spurgeon, Olathe City Arborist; Robert Whitman, Landscape Architect, Multistudio, (816) 701-5460; Scott Reiter, Linda Hall Library; Susan Mertz, Loma Vista Nursery, (913) 897-7010; and Tim McDonnell, Forester, Kansas Forest Service

PINE TREES

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= Well Tested/Observed in Kansas City region

= Somewhat Tested/Observed in Kansas City region = Not Well Tested/Observed in Kansas City region (Buyer Beware) = **Super** tree for this condition = Fair tree for this condition

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9

= Very Poor tree for this condition

- = **Poor** tree for this condition

*	= Unknown	

Score	Size	Tree Name			Ra	ting			Comments
Expert-tested for Kansas City region	Height x width (ft.)		As specimen	As buffer or massing	Culturally adaptable	Heavy soils	Drought tolerant	Lifespan	
**	15x9	Pinus aristata Bristlecone Pine	8		8		•	8	Needs excellent drainage, dislikes Kansas City humidity
*	35x20	<i>Pinus ayacahuite</i> Mexicon White Pine	•	Ð	Ð	Ð	€	×	Limited experience, but shows promise
**	35x22	Pinus banksiana Jack Pine	•		•	•	•	8	Pine wilt when under stress
**	25x18	Pinus bungeana Lacebark Pine	9	8	8	8	8	•	Excellent performer with interesting bark
*	22x11	Pinus cembra Swiss Stone Pine	•	8			8	×	Limited local success, slow grower
**	30x20	Pinus densiflora Japanese Red Pine	•	8	•	•	•	8	Some local success, very open habit
**	14x12	Pinus densiflora 'Umbraculifera' Tabletop Pine	θ	3	8	8	8	8	Some local success, interesting flattop specimen
***	30x17	Pinus flexilis 'Vanderwolf's Limber Pine	•	8	8	8	8	•	Green-blue color, can get needle blight
*	35x20	Pinus koraiensis Korean Pine	•	•	•	8	•	×	Loose form, some local success
*	28x15	Pinus leucodermis Bosnian Pine	8	8	8	8	Ð	×	Some local success, black pine replacement
***	12x14	Pinus mugo Mugo Pine	8	3	8	8	8	•	Variation in size, pine wilt and scale problems
*	12x7	Pinus mugo 'Tannenbaum' Tannenbaum Pine	•	8	8	•	8	×	Attractive form, small pine alternative
***	55x30	Pinus nigra Austrian Pine			•	9	9		Severe diplodia tip blight, short lived
**	35x19	Pinus parviflora Japanese White Pine	8	8	•	•	•	9	Attractive pine, some local success
***	50x30	Pinus ponderosa Ponderosa Pine	8	8	8	3	9	θ	Pine tip moth, fungal problems
**	40x18	Pinus resinosa Red Pine		8	9	9	8	8	Too hot in KC for this pine
**	40x25	Pinus strobiformis Southwestern White Pine	8	9	9	3	Ð	8	Performs well here and Southwest of KC
***	60x30	Pinus strobus Eastern White Pine	8	•	•	•	8	8	Drought susceptible, chlorosis, good pine
***	45x16	Pinus strob. 'Fastigiata' Columnar White Pine	•	•	•	•	8	8	Same as species but better for narrow sites
***	45x25	Pinus sylvestris Scotch Pine			8	9	9		Pine wilt & root nematode, European sawfly
*	50x25	Pinus taeda Loblolly Pine		8	8	8	9	×	Cold, ice and high pH can cause problems
**	25x15	Pinus thunbergiana Japanese Black Pine	8	3	80	8	8	8	Salt tolerant, ice damage, pine wilt
*	30x15	Pinus wallichiana Himoloyon Pine	8	8	8	8	8	×	Needs more testing

SPRUCE TREES

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Score	Size	Tree Name			Ra	ting			Comments
Expert-tested for Kansas City region	Height x width (ft.)		As specimen	As buffer or massing	Culturally adaptable	Heavy soils	Drought tolerant	Lifespan	
***	60x30	Picea abies Norway Spruce	9	9	9	9	9	Ð	Tough and proven spruce for KC
***	27x10	Picea abies 'Cupressina' Upright Norway Spruce	θ	8	θ	⊕	8	θ	Narrow and fast growing spruce
***	22x15	Picea abies. v. pendula Weeping Norway Spruce	θ	8	θ	θ	•	θ	Many specimen application options
**	30x14	Picea breweriana Brewer's Spruce	8	8		3	3	8	Tested with many failures
*	30x16	Picea engelmannii Engelmann Spruce	•		8	•	•	×	Not tolerant of KC heat or humidity
**	40x20	Picea glauca White Spruce	8	8	3	8		8	Poor heat tolerance
***	30x18	Picea glauca 'Densata' Block Hills Spruce	•	•	•	•	•	8	Slow growing but performs well, dense form
**	18x4	Picea glauca 'Pendula' Weeping White Spruce	9		9	•	8	8	Great specimen, good upright leader
**	20x9	Picea mariana 'Columnar' Columnar Black Spruce	•	8	8			80	Blue-green foliage, slow growing
**	20x7	Picea mariana 'Wellspire' Columnar Black Spruce	₿	8	8			80	Upright form, soft needles, green color
**	40x16	Picea omorika Serbian Spruce	•	•	8	8	8	8	Blue-green color, performs well in irrigation
**	25x10	Picea omorika 'Bruns' Bruns Serbian Spruce	•	•	9	8	8	3	More narrow than species
**	22x8	Picea omorika 'Pendula' Weeping Serbian Spruce	θ	8	8	3	•	8	Very attractive weeping specimen
***	25x12	<i>Picea omorika 'Riverside'</i> Upright Serbian Spruce	₿	8	8	8	8	8	Nice form with green color
*	25x15	Picea orientalis Oriental Spruce	8	•	8	•	•	×	Tiny needles
**	18x8	Picea orientalis 'Deer Run' Deer Run Spruce	8	8	8	•	•	8	Blue color, slow growing
*	18x9	P. orientalis 'Skylands' Yellow Oriental Spruce	•	8	8	8	8	*	Yellow needles fade to green, will scorch
***	45x20	Picea pungens Colorado Spruce	•	•	8		8	8	Not heat or drought tolerant, green needles
***	45x20	Picea pungens v. glauca Colorado Blue Spruce	•	•	80	8	8	8	Same as species, but blue color
***	40x18	Picea pungens 'Kosteri' Koster Blue Spruce	9	8	9	8	8	8	Blue color, not uniform or dense
*	15x8	Picea pungens 'Baby Blue Eyes' Baby Blue Eyes Spruce	θ	•	8		8	×	Tidy, small mature size
**	25x14	Picea pungens 'Bakeri' Bakeri Spruce	9	•	8		8	8	Good blue color
***	20x9	Picea pungens 'Blue Totum' Col. Blue Spruce	9	8	8		8	9	Good blue color, snow/ice load is problem
**	20x10	Picea pungens 'Fastigiata' Col. Blue Spruce	8		8	8	8	•	Good blue color, snow/ice load is problem
***	20x15	Picea pungens 'Fat Albert' Fot Albert Blue Spruce	θ	8	8			Ð	Excellent blue color and form
***	30x16	Picea pungens 'Hoopsii' Hoopsii Blue Spruce	8	•	8	8	8	8	Bluest spruce, more open form

JUNIPER TREES

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40x25

30x15

15x5

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20x12

23x10

20x8

18x5

*** * *** = Well Tested/Observed in Kansas City region

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Juniperus virginiana Eastern Red Cedar

Juniperus virginiana 'Burkii' Blue Burkii Juniper

Juniperus virginiana 'Canaertii' Concert Juniper

Juniperus virginiana 'Glauca

Silver Eastern Red Cedar

Blue Arrow Juniper

Hillspire Juniper

Juniperus virginiana 'Blue Arrow'

Juniperus virginiana 'Cupressifolia

Emerald Sentinel Juniper Juniperus virginiana 'Prairie Sentinel'

Prairie Sentinel Juniper

Juniperus virginiana 'Taylor

Taylor Upright Juniper

Juniperus virginiana 'Emerald Sentinel'

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Expert-tested for Kansas City region	Height x width (ft.)		As specimen	As buffer or massing	Culturally adaptable	Heavy soils	Drought tolerant	Lifespan	
*	20x12	Juniperus chinensis 'Wintergreen' Wintergreen Juniper	8	•	•	•	•	×	Dense rich green
**	16x9	Juniperus chinensis 'Blue Point' Blue Point Juniper	•	•	•	•	•	•	Teardrop shape, blue-green color
**	25x14	Juniperus chinensis 'Columnaris Glauca' Upright Blue Juniper	8	•	•	•	•	8	Narrow, loose habit, silver-grey color
***	16x9	Juniperus chinensis 'Hetzii Columnaris' Hetz Juniper	8	•	₿	•	•	•	Green, heavy attractive cone production
**	13x5	Juniperus chinensis 'lowa' lowa Juniper	8	8	8	8	0	8	Green with blue tint, loose form
***	20x13	Juniperus chinensis 'Keteleerii' Keteleerii Juniper	8	•	•	•	•	•	Green with loose form, interesting unsheared
***	20x12	Juniperus chinensis 'Perfecta' Perfecta Juniper	8	8	8	8	8	8	Natural freshly sheared look
**	18x9	<i>Juniperus chinensis 'Robusta</i> Green' Upright Juniper	8	•	•	•	•	•	Green, tufted form, slightly irregular
***	20x9	Juniperus chinensis 'Spartan' Sporton Juniper	•	8	Θ	Θ	8	•	Green, dense and narrow
*	20x18	Juniperus rigida Temple Juniper	•	•	8	Θ	Θ	×	Green, slightly weeping branchlets
**	25x13	J. scopulorum 'Blue Haven' Blue Haven Juniper	8	8	8		8		Blue, striking color, heavy cone production
***	20x7	Juniperus scopulorum 'Skyrocket' Skyrocket Juniper				8	•		Blue, very narrow, poor performer
***	18x8	Juniperus scopulorum 'Welchii' Welch Juniper					•		Silvery blue-green, compact and dense
***	20x10	Juniperus scopulorum 'Wichita Blue' Wichita Blue Juniper		8		8	•		Brilliant bright blue, poor performer

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Our only native and most durable evergreen

More narrow than 'Glauca', not as durable

Steel-blue color, lacks interesting cones

Attractive lumpy form, proven durability

Italian cypress look, durable, species color

Green, keeps winter color, durable

Grey-green color, slower grower

Dark green color

Silver hue and very durable

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× = Unknown

ARBORVITAE TREES

Score	Size	Tree Name	Rating						Comments
Expert-tested for Kansas City region	Height x width (ft.)		As specimen	As buffer or massing	Culturally adaptable	Heavy soils	Drought tolerant	Lifespan	
***	25x15	Thuja occidentalis Eastern Arborvitae		•	8	•		8	Needs irrigation, snow loads are a problem
**	18x4	T. occ. 'Degroot's Spire' Degroot's Spire Arborvitae	•	•		•	6 3	8	Best cultivar, otherwise same as species, slow
***	16x6	T. occidentalis 'Smaragd' Emerald Green Arborvitae		8		•			Overplanted and unloved by experts
**	20x7	Thuja occidentalis 'Techny' Techny Arborvitae		8		•			Poor performer, slow growing
***	35x15	Thuja x 'Green Giant' Green Giant Arborvitae	8	8	•	•		8	Fast grower, drought problems, deer resistant
**	25x12	<i>Thuja x 'Spring Grove'</i> Spring Grove Arborvitae	8	•	•	•		8	Less vigorous than Green Giant, but similar
***	25x15	Thuja orientalis Oriental Arborvitae		•	8	8	9	8	Toughest arborvitae for challenging KC

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FIR / YEW TREES

Score	Size	Tree Name			Ra	ting			Comments
*	40x18	Abies balsamea Balsam Fir				8	8	×	Poor performance in KC
**	45x25	Abies concolor White Fir	•					8	Beautiful, needs excellent drainage, variable
**	25x14	Abies concolor 'Candicans' Condicons Fir	•				8	8	White-blue color very impressive
*	30x16	Abies fraseri Fraser Fir		8				×	Very few good trees in KC, many failures
*	30x20	Abies homolepis Nikko Fir	8	8		8	8	×	Very few good trees in KC, many failures
*	15x6	Abies koreana Koreon Fir	•			•	8	×	Heat and drought sensitive
*	35x16	Abies nordmanniana Nordmon Fir	•	8	8	•	•	×	Very few good trees, but shows promise
**	40x20	Pseudotsuga menziesii Douglas Fir	8	8	8		8	•	Very few nice older specimens in KC
***	20x14	Taxus cuspidata 'Capitata' Pyramidal Japanese Yew	9	8	•		8	8	Great evergreen for shade, needs drainage
***	15x9	Taxus x media 'Hicksii Hicks Upright Yew	8	8	•	8	•	•	More upright/round form than Cap Yew

HOLLY / MAGNOLIA TREES (BROADLEAF EVERGREENS ONLY)

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= **Super** tree for this condition = **Fair** tree for this condition ***** =

Solution = **Very Poor** tree for this condition

- Fair tree for this condition
 Poor tree for this condition
 - is condition **X** = **Unknown**

Score	Size	Tree Name	Rating						Comments
Expert-tested for Kansas City region	Height x width (ft.)		As specimen	As buffer or massing	Culturally adaptable	Heavy soils	Drought tolerant	Lifespan	
***	20x12	llex x attenuata 'Fosteri' Foster's #2 Holly	•	•	•	8	8	8	Needs winter wind protection
***	20x12	llex x attenuata 'Greenleaf' Greenleaf Holly	•	8	8	8	8	8	Chlorosis, needs winter wind protection
***	8x7	<i>Ilex x 'Blue Maid'</i> Blue Maid Holly		8	•	8		8	Needs winter wind protection
**	14x7	Ilex x Centennial Girl' Centennial Girl Holly	8	8	•	8		8	Needs winter wind protection
*	14x6	Ilex x 'Dragon Lady' Dragon Lady Holly	8	8	8	8	8	×	Rare to succeed in KC
**	6x5	Ilex x 'Honey Maid' Honey Maid Holly	8			8			Creamy white leaf margin, often fails
*	9x5	<i>llex x meserveae 'Hackenfee'</i> Costle Spire Holly	Θ	8	•	8		×	Good fruit production, needs male in area
*	9x5	Ilex x meserveae 'Hackenstar' Castle Wall Holly	•	•	8	8		×	Male pollinator for 'Castle Spire'
*	18x9	Ilex x 'Nellie R. Stevens' Nellie Stevens Holly	8	8		8		×	Needs shelter, but often killed to ground
***	35x18	Ilex opaca Americon Holly	•	•	•	8	8	•	Species is variable, but many old specimens
*	20x15	llex penunculosa Longstock Holly				•		×	Not heat or drought tolerant
*	10x5	Ilex x 'Rutzan' Red Beauty Holly	•	•	•	8	8	*	Tough holly with excellent fruit production
*	40x20	Magnolia grandiflora 'DD Blanchard' Magnolia	Θ	8	8	Θ	8	×	Large flowers, seems superior to 'Bracken's'
***	30x20	Magnolia grandiflora 'Bracken's Brown' Magnolia	Θ	8	8	•	8	Θ	No protection needed, heavy snow breakage
**	35x25	Magnolia grandiflora 'Edith Bogue' Magnolia	•	8	8	•	8	8	More hardy than 'Bracken's'
**	25x12	<i>M. virginiana 'Jim Wilson'</i> Moonglow Sweetbay Magnolia	•	8	8	Θ	•	8	Holds some foliage thru winter, fragrant
***	25x14	Magnolia virginiana v. australis Sweetbay Magnolia	•	•	•	•	•	•	Tolerates wet sites, needs winter moisture

MISC. NEEDLED EVERGREENS TREES

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**	Olivitowii	

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Expert-tested for Kansas City region	Height x width (ft.)		As specimen	As buffer or massing	Culturally adaptable	Heavy soils	Drought tolerant	Lifespan	
*	30x14	Calocedrus decurrens Incense-Cedor	•	8	8	•	•	×	Does well in SW KS, but not tested in KC
**	30x16	Cedrus atlantica 'Glauca' Blue Atlos Cedor	•		•	8	•	8	Nice specimen if winters stay mild
*	30x15	<i>C. deodara 'Karl Fuchs'</i> Blue Himoloyon Cedor	•		8	8	•	×	Blue fades to grey, cold tolerant
*	25x12	Cedrus deodara 'Electric Blue' Blue Him.Cedar	•			8	•	×	More dense, less cold tolerant than 'K.Fuchs'
*	30x25	Cedrus libani v. stenocoma Cedar of Lebanon	•		8		8	×	Not holding up in KC, no thriving old trees
*	18x9	Chamaecyparis lawsoniana Lawson Falsecypress	•		8	•	8	*	Interesting horizontal twig structure
**	24x10	Chamaecyparis nootkatensis Weeping Alaska Cedar	8		8	•		8	Interesting specimen, doing well in KC
**	12x8	Cham. pisifera 'Filifera' Japanese Falsecypress	8	8	•	•	8	•	Internal needles die but can be trimmed
**	15x9	Cham. pisifera 'Boulevard' Blvd. Folsecypress	•		•	•	8	•	Can look a bit rough with age, but does well
*	35x20	Cryptomeria japonica Japanese Cedar	8		8	8	•	×	Very few surviving trees in KC
*	30x14	Cupressus arizonica Arizona Cypress	8	8	8		•	×	Seed source/cultivar is important
*	20x7	Cupressus arizonica 'Cook's Peak' Cook's Peak Cypress	8	8	•		•	×	Appears to be cold hardy, blue foliage
*	25x10	Cupressus arizonica 'Blue Ice' Blue Ice Cypress	•	8	8		Ð	×	Blue foliage, cold hardiness in question
**	25x10	Sciadopitys verticillata Japanese Umbrella Pine	•		88	8	8		Very slow, needs winter shade, needs love
*	30x15	Sequoiadendron giganteum Giant Redwood						×	Not suited for KC's climate
*	30x15	Sequoiadendron giganteum 'Hazel Smith' Gignt Redwood	•					×	Blue color, hates KC humidity,but can survive
***	45x25	Tsuga canadensis Conodion Hemlock	8	8	8			8	Needs winter wind protection and good soil