

Tree species	Planting size (height(ft.)/ cali)	Spread at planting (ft.)	10 year spread (ft.)	10 year coverage (sq. ft.)	20 year spread (ft.)	20 year coverage (sq. ft.)
DECIDUOUS TREES:						
Acer barbatum	6-7	5-6	9-12	61-106	13-17	132-228
A. buergeranum	6-7	3-4	8-10	50-79	12-15	113-177
A. campestre	6-7	3-4	8-10	50-79	12-15	113-177
A. ginnala	6-7	3-4	8-10	50-79	12-15	113-177
A. palmatum	6-7	3-4	8-10	50-79	12-15	113-177
A. platanoides	2-2 1/2	5-7	12-15	113-177	15-20	177-314
A. pseudoplatanus	2-2 1/2	5-7	12-15	113-177	15-20	177-314
A. rubrum	2-2 1/2	5-7	12-15	113-177	15-20	177-314
A. saccharinum	2-2 1/2	5-7	15-17	177-227	22-25	280-491
A. saccharum	2-2 1/2	5-7	12-15	113-177	15-20	177-314
A. truncatum 'Pacific Sunset'		6-6	14-16	159-198	19-21	291-344
A. x freemanii 'Autumn Blaze'	2-2 1/2	5-7	13-15	133-177	18-21	254-346
Aesculus flava	6-7	5-5	8-10	51-85	13-17	128-240
A. glabra	6-7	5-5	8-10	47-78	12-16	110-208
A. hippocastanum	2-2 1/2	5-7	12-15	113-177	18-22	254-380
A. pavia	6-7	4-4	8-11	55-88	11-15	88-177
Albizia julibrissin	6-7	3-4	10-12	79-113	12-15	113-177
Alnus glutinosa	2-2 1/2	5-7	10-12	79-113	15-18	177-254
Amelanchier arborea	6-7	4-6	10-12	79-113	14-16	154-201
A. laevis						
Amelanchier canadensis	2-5	2-3	6-7	28-38	10-13	79-133
Amelanchier x grandiflora	2-5	2-3	7-8	38-50	11-13	95-133
Betula maximowicziana	2-2 1/2	3-5	10-12	79-113	15-18	177-254
B. nigra	2-2 1/2	5-7	13-16	133-201	18-20	254-314
B. papyrifera	2-2 1/2	4-6	10-12	79-113	15-18	177-254
B. pendula	2-2 1/2	3-5	10-12	79-113	18-20	254-314
B. platyphylla	2-2 1/2	3-5	10-12	79-113	15-18	177-254
B. populifolia	6-7	4-4	7-11	39-88	9-16	70-192
Carpinus betulus 'Fastigiata'	2-2 1/2	2-3	6-8	28-50	10-12	79-113
C. caroliniana	2-2 1/2	3-5	10-12	79-113	12-15	113-177
Carya alba	2-2 1/2	5-7	9-11	69-102	12-14	118-210
C. illinoensis	2-2 1/2	5-7	15-17	177-227	20-25	314-491
C. ovata	2-2 1/2	5-7	10-13	79-133	12-15	113-177
Castanea mollissima	2-2 1/2	5-7	10-12	113-177	12-15	113-177
Celtis laevigata	2-2 1/2	5-7	12-14	113-154	15-18	177-254
C. occidentalis	2-2 1/2	5-7	13-16	133-201	18-22	254-380
Cercidiphyllum japonicum	6-7	2-3	8-10	50-79	12-15	113-177
Cercis canadensis	6-7	2-3	10-12	79-113	13-16	133-201
C. chinensis	6-7	2-3	8-10	50-79	10-13	70-133
Chioanthus virginicus	6-7	2-3	8-10	50-79	10-12	79-113
Chionanthus retusus	2-5	2-3	9-12	64-113	14-19	154-284

Tree species	Planting size (height(ft.)/ cali)	Spread at planting (ft.)	10 year spread (ft.)	10 year coverage (sq. ft.)	20 year spread (ft.)	20 year coverage (sq. ft.)
Cladrastis lutea	2-2 1/2	3-5	12-15	113-177	15-18	177-254
Cornus florida	6-7	2-3	8-10	50-79	12-15	113-177
C. kousa	6-7	2-3	10-12	79-113	12-15	113-177
C. mas	6-7	2-3	6-8	28-50	8-12	50-113
Corylus colurna	6-7	4-4	8-10	45-62	11-15	101-167
Cotinus coggygria	6-7	3-4	8-10	50-79	12-15	113-177
Crataegus crusgalli	6-7	3-4	10-12	79-113	12-15	113-177
C. phaenopyrum	6-7	3-4	8-10	50-79	10-12	79-113
C. viridis	6-7	3-4	8-10	50-79	12-15	113-177
Diospyros virginiana	2-2 1/2	4-6	10-12	79-113	12-15	113-177
Elaeagnus angustifolia	6-7	3-4	10-12	79-113	15-18	177-254
Eucommia ulmoides	2-2 1/2	4-6	10-12	79-113	12-15	113-177
Fagus grandifolia	2-2 1/2	4-5	10-12	79-113	12-15	113-177
F. sylvatica	2-2 1/2	4-5	10-12	79-113	12-15	113-177
Franklinia alatamaha	6-7	2-3	8-10	50-79	10-13	79-133
Fraxinus americana	2-2 1/2	4-5	12-15	113-177	15-18	177-254
F. angustifolia	6-7	5-5'	11-12	92-119	17-20	217-299
F. pennsylvanica	2-2 1/2	4-5	10-12	79-113	12-15	113-177
'Marshall's Seedless'						
'Patmore' & 'Summit'						
Ginkgo biloba	2-2 1/2	3-5	8-10	50-79	10-13	79-133
'Sentry'	2-2 1/2	2-3	6-8	28-50	8-10	50-79
Ginkgo biloba 'Autumn Gold'	2-2 1/2	3-5	10-11	79-95	12-14	113-154
Gleditsia triacanthos var. inermis	2-2 1/2	3-5	13-16	133-201	16-20	201-314
'Imperial' & 'Skyline'						
Shademaster'						
Gymnocladus dioicus	2-2 1/2	5-7	10-12	79-113	12-15	113-177
Halesia tetraptera	2-5	2-3	8-10	50-79	14-17	154-227
Hammamelis virginiana	2-5	3-4	9-12	64-113	14-18	154-254
Juglans nigra	2-2 1/2	5-7	12-15	113-177	18-20	254-314
J. regia	6-7	6-6	14-16	163-207	21-25	337-500
Koelreuteria paniculata	6-7	2-3	8-10	50-79	12-15	113-177
Lagerstroemia indica	6-7	3-4	6-8	28-50	12-15	113-177

Tree species	Planting size (height(ft.)/ cali)	Spread at planting (ft.)	10 year spread (ft.)	10 year coverage (sq. ft.)	20 year spread (ft.)	20 year coverage (sq. ft.)
Larix decidua	2-2 1/2	5-7	12-14	113-154	15-18	177-254
L kaempferi	6-7	3-3	8-9	53-65	14-16	160-201
Liquidamber styraciflua	2-2 1/2	5-7	12-15	113-177	15-18	177-254
Liquidambar styraciflua 'Rotundiloba'	2-2 1/2	5-7	10-11	79-95	15-16	177-201
Liriodendron tulipifera	2-2 1/2	5-7	12-15	177-227	15-18	177-254
Maackia amurensis	2-5	4-5	10-12	78-113	17-21	227-346
Maclura pomifera	2-2 1/2	5-7	13-15	133-177	18-20	254-314
Magnolia acuminata	2-2 1/2	5-7	8-10	50-79	12-15	113-177
M. macrophylla	6-7	3-4	7-9	38-64	10-12	79-113
M. x soulangiana	6-7	3-4	8-10	50-79	10-15	79-177
M. stellata	6-7	3-4	5-7	20-38	8-10	50-79
M. virginiana	6-7	3-4	8-10	50-79	10-12	79-113
Malus spp.	6-7	3-4	8-12	50-113	10-15	79-177
Metasequoia glyptostroboides	2-2 1/2	3-4	8-10	50-79	12-15	113-177
Morus spp.	2-2 1/2	5-7	12-15	113-177	15-20	117-314
Nyssa sylvatica	2-2 1/2	3-5	8-10	50-79	12-15	113-177
Ostrya virginiana	6-7	5-5	8-9	46-66	12-16	117-202
Oxydendron arboreum	6-7	2-3	8-10	50-79	10-12	79-113
Parrotia persica	6-7	6-6	7-13	42-132	10-18	75-250
Phellodendron amurense	2-2 1/2	5-7	12-14	113-154	15-18	177-254
Pistacia chinensis	2-2 1/2	4-5	13-15	133-177	15-18	177-254
Platanus x acerifolia	2-2 1/2	5-7	14-16	154-201	18-22	254-380
P. occidentalis	2-2 1/2	5-7	16-18	201-254	20-25	314-491
Prunus cerasifera	6-7	3-4	8-10	50-79	12-15	113-177
P. persica	6-7	3-4	6-8	28-50	10-13	79-112
P. sargentii	6-7	3-4	8-10	50-79	12-15	113-177
P. serotina	6-7	5-7	10-12	79-113	13-16	133-201
P. serrulata						
P. serrulata 'Kwanzan'	6-7	3-4	8-10	50-79	12-15	113-177
P. subhirtella	6-7	3-4	8-10	50-79	10-13	79-133
P. x yedoensis	6-7	3-4	8-10	50-79	10-13	79-133
Pyrus calleryana	2-2 1/2					
'Aristocrat'	2-2 1/2	4-5	12-15	113-177	18-20	254-314
'Autumn Blaze'	2-2 1/2	3-5	10-12	79-113	12-15	113-177
'Bradford'	2-2 1/2	4-5	12-15	113-177	15-18	177-254
'Capital'	2-2 1/2	3-5	6-8	28-50	8-10	50-79
'Chanticleer'	2-2 1/2	3-5	6-8	28-50	8-10	50-79

Tree species	Planting size (height(ft.)/ cali)	Spread at planting (ft.)	10 year spread (ft.)	10 year coverage (sq. ft.)	20 year spread (ft.)	20 year coverage (sq. ft.)
'Redspire'	2-2 1/2	3-5	10-12	79-113	12-15	113-177
'Whitehouse'	2-2 1/2	3-5	8-10	50-79	10-12	79-113
Quercus acutissima	2-2 1/2	3-4	8-10	50-79	12-15	113-177
Q. alba	2-2 1/2	4-5	10-12	79-113	15-18	177-254
Q. bicolor	2-2 1/2	4-5	10-12	79-113	15-18	177-254
Q. coccinea	2-2 1/2	4-5	10-12	70-113	15-18	177-254
Q. falcata	2-2 1/2	5-7	16-18	193-259	21-26	334-514
Q. imbricaria	2-2 1/2	4-5	12-14	113-154	15-18	177-254
Q. laurifolia	2-2 1/2	3-5	10-12	79-113	12-15	113-177
'Darlington'	2-2 1/2	3-5	8-10	50-79	10-12	79-113
Q. lyrata	2-2 1/2	4-5	13-17	133-227	17-22	226-380
Q. macrocarpa	2-2 1/2	4-5	10-12	79-113	12-15	113-177
Q. michauxii	2-2 1/2	4-5	16-17	201-227	22-25	380-491
Q. muehlenbergii	2-2 1/2	5-7	17-19	233-291	22-26	372-524
Q. nigra	2-2 1/2	4-5	12-14	113-154	15-18	177-254
Q. nuttallii	2-2 1/2	4-5	11-12	95-113	13-16	133-201
Q. palustris	2-2 1/2	5-7	12-15	113-177	15-18	177-254
Q. phellos	2-2 1/2	3-5	10-12	79-113	12-15	113-177
Q. prinus	2-2 1/2	4-5	10-12	79-113	12-15	113-177
Q. robur	2-2 1/2	3-5	10-12	79-113	12-15	113-177
'Fastigiata'	2-2 1/2	2-3	6-8	28-50	8-10	50-79
Q. rubra	2-2 1/2	4-5	12-15	113-177	15-18	177-254
Q. shumardii	2-2 1/2	4-5	12-13	113-133	18-19	254-284
Q. velutina	2-2 1/2	5-7	13-14	139-170	18-21	281-370
Robinia pseudoacacia	2-2 1/2	3-4	8-10	50-79	10-13	79-133
Salix babylonica	2-2 1/2	4-5	15-17	177-227	20-25	314-491
S. matsudana "Tortuosa"	2-2 1/2	3-4	10-12	79-113	12-15	113-177
S. nigra	2-2 1/2	3-5	12-15	113-177	15-18	177-254
Sassafras albidum	6-7	5-5	8-11	51-94	12-18	107-241
Sophora japonica	2-2 1/2	3-4	10-12	79-113	15-18	177-254
Sorbus alnifolia	2-2 1/2	3-4	10-12	79-113	15-18	177-254
Stewartia koreana	6-7	2-3	6-8	28-50	10-12	79-113
S. ovata	6-7	2-3	6-8	28-50	10-12	79-113
S. pseudocamellia	6-7	2-3	6-8	28-50	10-12	79-113
Styrax japonicus	6-7	2-3	8-10	50-79	12-15	113-177
Syringa reticulata	6-7	2-3	6-8	28-50	10-12	79-113
Taxodium ascendens	2-2 1/2	2-2	3-3	8-10	5-6	21-26
T. disticum	2-2 1/2	3-4	8-10	50-79	12-15	113-177
Tilia americana	2-2 1/2	3-4	12-15	113-177	17-20	227-314
'Legend' & 'Redmond'						
T. cordata	2-2 1/2	3-4	10-12	79-113	12-15	113-177
'Glenleven' & 'Greenspire'						
T. tomentosa	2-2 1/2	3-4	13-14	133-154	17-20	227-314

Tree species	Planting size (height(ft.)/ cali)	Spread at planting (ft.)	10 year spread (ft.)	10 year coverage (sq. ft.)	20 year spread (ft.)	20 year coverage (sq. ft.)
Ulmus americana	2-2 1/2	3-5	15-17	177-227	20-25	314-491
U. americana 'Princeton'	2-2 1/2	3-5	13-15	133-177	19-21	284-346
U. hollandica 'Groenveldt'	2-2 1/2	3-5	12-15	113-177	18-22	254-380
U. japonica x wilsoniana 'Accolade'	2-2 1/2	5-7	11-12	101-120	14-17	161-218
U. parvifolia	2-2 1/2	3-5	10-12	79-113	12-15	113-177
Viburnum prunifolium	6-7	3-3	3-4	8-16	4-8	16-46
Zelkova serrata	2-2 1/2	3-5	10-12	79-113	12-15	113-177
EVERGREEN TREES:						
Abies concolor	6-7	2-4	6-8	28-50	8-10	50-79
A. fraseri	6-7	2-4	6-8	28-50	8-10	50-79
Calocedrus decurrens	6-7	2-3	3-5	7-20	4-6	13-28
Cedrus atlantica	6-7	3-4	6-8	28-50	10-12	79-113
C. deodara	6-7	3-4	8-10	50-79	12-15	113-177
Chamaecyparis lawsoniana	6-7	2-4	6-8	28-50	8-10	50-79
C. obtusa	6-7	2-3	3-5	7-20	5-7	20-38
C. pisifera 'Plumosa'	6-7	2-3	5-7	20-38	8-10	50-79
C. thyoides	6-7	2-3	5-7	20-38	8-10	50-79
Cryptomeria japonica	6-7	2-3	6-8	28-50	8-10	50-79
Cunninghamia lanceolata	6-7	3-4	6-8	28-50	12-15	113-177
x Cupressocyparis Leylandii	2-2 1/2	3-5	8-10	50-79	10-12	79-113
Ilex aquifolium	6-7	2-4	4-6	20-38	6-8	28-50
I. x attenuata 'Fosteri'	6-7	2-4	6-8	28-50	8-10	50-79
I. x 'Nellie R. Stevens'	6-7	3-5	7-9	38-64	10-12	79-113
I. opaca	6-7	2-4	5-7	20-38	7-10	38-79
I. vomitoria	6-7	2-4	5-7	20-38	7-10	38-79
Juniperus chinensis	6-7	3-5	6-8	28-50	8-12	50-113
'Denserecta'	6-7	3-5	2-4	3-13	3-5	7-20
'Hetzii Columnaris'	6-7	3-5	2-4	3-13	3-5	7-20
'Keteleeri'	6-7	3-5	4-6	13-28	6-8	28-50
'Robusta Green'	6-7	3-5	3-5	7-20	5-7	20-38
'Torulosa'	6-7	3-5	2-4	3-13	3-5	7-20
J. scopulorum	6-7					
'Blue Heaven'	6-7	2-3	3-5	7-20	5-7	20-38
'Cologreen'	6-7	2-3	2-4	3-13	3-5	7-20
'Columnaris'	6-7	2-3	2-4	3-13	3-5	7-20
'Erecta Glauca'	6-7	2-3	3-5	7-20	5-7	20-38
'Gray Gleam'	6-7	2-3	2-4	3-13	3-5	7-20
'Moonglow'	6-7	2-3	2-4	3-13	3-5	7-20
J. virginiana	6-7	2-3	3-5	7-20	5-7	20-38
'Canaertii'			3-5	7-20	5-7	20-38

Tree species	Planting size (height(ft.)/ cali)	Spread at planting (ft.)	10 year spread (ft.)	10 year coverage (sq. ft.)	20 year spread (ft.)	20 year coverage (sq. ft.)
'Manhattan Blue'			2-4	3-13	4-6	13-28
'Princeton Sentry'			2-4	3-13	4-6	13-28
Magnolia grandiflora	2-2 1/2	5-7	12-14	113-154	15-20	177-314
M. grandiflora 'Little Gem'	2-5	1-2	3-4	7-13	6-7	28-38
Picea abies	6-7	3-4	10-12	79-113	12-15	113-177
P. glauca	6-7	3-4	8-10	50-79	10-12	79-113
'Conica'	3-4	1-2	2-3	3-7	3-4	7-13
P. omorika	6-7	2-3	3-5	7-20	5-7	20-38
P. pungens	6-7	6-8	6-9	6-10	6-11	6-12
P. pungens 'Hoopsii, Thompsenii'	6-7	6-8	6-9	6-10	6-11	6-12
Pinus bungeana	2-2 1/2	3-5	6-8	28-50	8-10	50-79
P. echinata	2-2 1/2	3-5	10-12	79-113	12-15	113-177
P. ellioti	2-2 1/2	3-5	10-12	79-113	12-15	113-177
P. nigra	2-2 1/2	3-5	8-10	50-79	10-13	79-133
P. rigida	2-2 1/2	3-5	8-10	50-79	10-12	79-113
P. strobus	2-2 1/2	3-5	10-12	79-113	12-15	113-177
P. sylvestris	2-2 1/2	3-5	8-10	50-79	12-15	113-177
P. taeda	2-2 1/2	3-5	10-12	79-113	12-15	113-177
P. thunbergiana	2-2 1/2	3-5	8-10	50-79	10-13	70-133
P. virginiana	2-2 1/2	3-5	10-12	79-113	12-15	113-177
Pseudotsuga menziesii	6-7	3-4	8-10	50-79	10-12	79-113
Quercus virginiana	2-2 1/2	4-5	10-15	79-177	15-20	177-314
Taxus baccata	6-7	2-3	5-7	20-38	7-10	38-79
'Fastigiata'	2-3	3-7	3-4	7-13		
T. cuspidata	6-7	2-3	3-5	7-20	5-7	20-38
'Capitata'	3-5	2-3 (was 7-2)	6-8	28-50		
Thuja occidentalis	6-7	3-4	3-5	7-20	5-8	20-50
T. orientalis	6-7	3-4	3-5	7-20	5-8	20-50
T. plicata 'Green Giant'	2-5'	2-3	3	7-7	6-7	28-38
Tsuga canadensis	6-7	3-5	8-10	50-79	12-15	113-177
T. caroliniana	6-7	3-5	10-12	79-113	12-15	113-177