

Tree Species Preservation Guide

Common Name	Ave. Life Span (Years)	Worthy of Preservation
Arborvitae (White Cedar)	200 - 300	Possibly *
Ash, Green (& cultivars)	100 - 150	No
Ash, White (& cultivars)	150 - 200	No
Beech	200 - 300	Yes
Birch, River	50 - 75	Possibly *
Birch, White	60 - 75	Possibly *
Boxelder	50 - 75	No
Cherry, Black	150 - 200	Possibly *
Elm, American	150 - 200	No
Elm, Siberian	150 - 200	No
Fir, Balsam	125 - 175	Possibly *
Hackberry	100 - 200	Possibly *
Hemlock	300 - 400	Yes
Hickory	150 - 200	Yes
Honeylocust	100 - 150	Possibly *
Juniper (Redcedar)	200 - 300	Possibly *
Locust, Black	50 - 75	No
Linden (Basswood)	150 - 200	Possibly *
Maple, Norway (& cultivars)	100 - 150	No *
Maple, Red (& cultivars)	100 - 150	Possibly *
Maple, Silver	50 - 75	No
Maple, Sugar	75 - 150	Yes
Oak, Black	150 - 200	Yes
Oak, Bur	200 - 300	Yes
Oak, Pin	150 - 250	Possibly *
Oak, Red	200 - 300	Yes
Oak, Swamp White	125 - 175	Possibly *
Oak, White	350 - 400	Yes
Pine, Jack	40 - 60	No

Pine, Red	250 - 350	Yes
Pine, White	300 - 400	Yes
Poplar/Aspen	60 - 75	No
Spruce, Black	125 - 200	No
Spruce, Colorado	225 - 350	No *
Spruce, Norway	75 - 125	No
Spruce, White	250 - 300	Yes
Tamarack (Larch)	150 - 250	Possibly *
Walnut, Black	150 - 250	Yes
Willow	50 - 75	No

* Contact the appropriate LAC for guidance about specific situations.

Tree Transplanting Guide

These Common Trees are Usually Considered Suitable for Transplanting*

BOTANICAL COMMON NAMES	TREE TRUNK **DIAMETER	HEIGHT IN FEET	MINIMUM BALL DIAMETER	OPTIMAL TIME TO TRANSPLANT	COMMENTS SEE LEGEND NEXT PAGE
LARGE DECIDUOUS TREES					
<u>Acer rubrum</u> (Red Maple)	4-6"	14-24'	66"	same	Red Maple #1
<u>Acer saccharum</u> (Sugar Maple)				same	
<u>Celtis occidentalis</u> (Hackberry)	2-4"	10-16'	44"	Oct. 15 - May 15	#4
	4-6"	12-22'	66"	same	#4
	6-8"		84"	same	#4
<u>Gleditsia triacanthos inermis</u> (Thornless Honeylocust)	2-4"	10-16'	44"	Oct. 15 - May 15	#2,3
	4-6"	14-24'	66"	same	#2,3
	6-8"		84"	same	#2,3

BOTANICAL COMMON NAMES	TREE TRUNK **DIAMETER	HEIGHT IN FEET	MINIMUM BALL DIAMETER	OPTIMAL TIME TO TRANSPLANT	COMMENTS SEE LEGEND NEXT PAGE
MED. TO SMALL DECIDUOUS TREES					
<u>Betula nigra</u> (River Birch)	2-4"	10-15'	44"	Feb. 15 - May 15	#1
<u>Betula papyrifera</u> (Paper Birch)	2-4"	10-15'	44"	same	#1
<u>Crataegus crusgalli</u> (Cockspur Hawthorn)	2-4"	8-12'	44"	Oct. 15 - May 15	#4
<u>Crataegus intricata</u> (Thicket Hawthorn)	2-4"	8-12'	44"	same	#4
<u>Malus spp.</u> (Crabapple species and cvs)	2-4"	8-12'	44"	Oct. 15 - May 15	#3,4,5

BOTANICAL	TREE	HEIGHT	<i>MINIMUM</i>	OPTIMAL	COMMENTS
COMMON NAMES	TRUNK	IN	BALL	TIME TO	SEE
CONIFEROUS (EVERGREEN) TREES	**DIAMETER	FEET	DIAMETER	<i>TRANSPLANT</i>	LEGEND
					NEXT PAGE
<u>Abies concolor</u> (White Fir)	2-4"	6-12'	44"	Feb. 15 - June 1 & Aug. 15 - Oct. 1	#1
<u>Juniperus virginiana</u> (Eastern Redcedar) and cultivars	2-4"	6-10'	44"	Feb. 15 - June 1 & Aug. 15 - Oct. 1	#2,3,4
<u>Picea abies</u> (Norway Spruce)	2-4"	6-12'	44"	Feb. 15 - May 15 &	#3
<u>Picea glauca</u> (White Spruce)	4-6"	10-18'	66"	Aug. 15 - Oct. 1	#3
<u>Picea pungens</u> (Colorado Spruce)				same	#3
<u>Pinus nigra</u> (Austrian Pine)	2-4"	6-12'	44"	Feb. 15 - May 15 &	Aus., Red, Scot #2,3
<u>Pinus rubra</u> (Red Pine)				Aug. 15 - Oct. 1	White Pine #1
<u>Pinus strobus</u> (Eastern White Pine)				same	
<u>Pinus sylvestris</u> (Scot Pine) 2-4" ONLY				same	
<u>Pseudotsuga menziesii</u> (Douglas fir)	2-4"	6-12'	44"	Feb. 15 - June 1 & Aug. 15 - Oct. 1	#1

Contact the BHM LACs (see [FDM 27-1-1](#) for your region contact) for information regarding species not featured on this list.

**Caliper

LEGEND

1. Prefers site with moist well-drained soil.
2. Will tolerate dry soil such as on a south or west-facing slope.
3. Transplanting after the optimal time period is generally successful. However, preparation before and extra care before and during transplanting are critical. Evergreens should NOT be disturbed while new growth is tender and light green in color.
4. In general, do NOT plant near a commercial or home orchard.
5. Protect against rodent damage.

OTHER NOTES

The following trees are considered difficult to transplant; survival rates are typically low

1. Carya ovata (Shagbark Hickory)
2. Aesculus spp. (Horsechestnut)

3. Quercus spp. (Oaks)
4. Juglans nigra (Black Walnut)

If the above four tree species are considered for transplanting, use tree sizes smaller and ball sizes larger than corresponding figures in the preceding charts. For instance, a 2-3" caliper tree should have a 44" ball and a 3-6" caliper tree a 66" ball. Handle the trees with the same care as other deciduous trees but keep in mind that the more precautions taken, the more likely the tree is to survive.

The following trees are generally not considered worthy of preservation:

1. Acer negundo (Box Elder)
2. Ulmus spp. (Elm species)
3. Populus spp. (Poplars)
4. Salix spp. (Willows)

Plants Used for Roadside Planting in WI

LARGE DECIDUOUS TREES (>40 feet)

Symbol	Common Name	Scientific Name	ANS Type	Note
OB	Buckeye, Ohio	Aesculus glabra	1T	C
BC	Cherry, Black	Prunus serotina	2T	A
KC	Coffeetree, Kentucky	Gymnocladus dioicus	2T	C
CE	Elm, Cathedral	Ulmus x cathedral	2T	C
G	Ginkgo	Ginkgo biloba	1T	C
PSG	Ginkgo, Princeton Sentry	Ginkgo biloba 'Princeton Sentry'	1T	C
H	Hackberry, Common	Celtis occidentalis	2T	A
SH	Shagbark Hickory	Carya ovata	1T	A
TH	Honeylocust, Common Thornless	Gleditsia triacanthos inermis	1T	B
ITH	Honeylocust, Thornless Imperial	Gleditsia triacanthos inermis 'Imperial'	1T	B
STH	Honeylocust, Thornless Skyline	Gleditsia triacanthos inermis 'Skyline'	1T	B
AL	Linden, American	Tilia americana	1T	A
LL	Linden, Littleleaf	Tilia cordata	2T	C
GLL	Linden, Littleleaf 'Greenspire'	Tilia cordata 'Greenspire'	2T	C
RM	Maple, Red	Acer rubrum	1T	A
RSM	Maple, Red Red Sunset	Acer rubrum 'Red Sunset'	1T	A
SM	Maple, Sugar	Acer saccharum	1T	A
GSM	Maple, Sugar Green Mountain	Acer saccharum 'Green Mountain'	1T	A
BO	Oak, Bur	Quercus macrocarpa	1T	A
PO	Oak, Pin	Quercus palustris	1T	C
RO	Oak, Northern Red	Quercus borealis	1T	A
WO	Oak, White	Quercus alba	2T	A
SWO	Oak, Swamp White	Quercus bicolor	1T	A
CP	Poplar, Carolina	Populus canadensis var. eugenei	1T	C
NW	Willow, Niobe Weeping	Salix x blanda	1T	C

Notes:

A - Native to Wisconsin

B - Native to some parts of Wisconsin

C - Not native to Wisconsin

* Tends to be invasive. Use with care in urban areas only.

Plants Used for Roadside Planting in WI

MEDIUM DECIDUOUS TREES (20-40 feet)

Symbol	Common Name	Scientific Name	ANS Type	Note
BA	Aspen, Bigtooth	Populus grandidentata	1T	A
QA	Aspen, Quaking	Populus tremuloides	1T	A
PB	Birch, Paper	Betula papyrifera	1T	B
RB	Birch, River	Betula nigra	1T	A
WB	Birch, Whitespire	Betula platyphylla 'Whitespire'	1T	C
AH	Hornbeam, American	Carpinus caroliniana	3T	A
JTL	Tree Lilac, Japanese	Syringa reticulata	3T	C

SMALL DECIDUOUS TREES (<20 feet)

Symbol	Common Name	Scientific Name	ANS Type	Note
CC	Chokecherry, Common	Prunus virginiana	3T	A
CRC	Chokecherry, Canada Red	Prunus virginiana 'Canada Red'	3T	A
PC	Crabapple, Prairie	Malus ioensis	3T	A
PD	Dogwood, Pagoda	Cornus alternifolia	4T	A
CHW	Hawthorn, Cockspur	Crataegus crusgalli	3T	C
THW	Hawthorn, Thicket	Crataegus intricata coccinea	3T	A
AH	Hophornbeam, American	Ostrya virginiana	2T	A
AMA	Mountainash, American	Sorbus americana	2T	B
SMA	Mountainash, Showy	Sorbus decora	2T	B
APL	Plum, American	Prunus americana	4T	B
ASB	Serviceberry, Allegheny	Amelanchier laevis	3T	A
SBS	Serviceberry, Shadblow	Amelanchier canadensis	3T	A
LW	Willow, Laurel	Salix pentandra	4T	C
CW	Witchhazel, Common	Hamamelis virginiana	4T	A

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Plants Used for Roadside Planting in WI

LARGE EVERGREEN TREES (>30 feet)

Symbol	Common Name	Scientific Name	ANS Type	Note
CD	Douglasfir, Common	<i>Pseudotsuga menziesii</i>	4E	C
WF	Fir, White	<i>Abies concolor</i>	4E	C
CH	Hemlock, Canadian	<i>Tsuga canadensis</i>	4E	B
EL	Larch, Eastern (Tamarack)	<i>Larix laricina</i>	4E	A
AP	Pine, Austrian	<i>Pinus nigra</i>	4E	C
WP	Pine, Eastern White	<i>Pinus strobus</i>	4E	A
RP	Pine, Red	<i>Pinus resinosa</i>	4E	A
CS	Spruce, Colorado	<i>Picea pungens</i>	4E	C
NS	Spruce, Norway	<i>Picea abies</i>	4E	C
WS	Spruce, White	<i>Picea glauca</i>	4E	B
BHS	Spruce, Black Hills	<i>Picea glauca</i> 'Densata'	4E	B

SMALL EVERGREEN TREES (10-30 feet)

Symbol	Common Name	Scientific Name	ANS Type	Note
AA	Arborvitae, American	<i>Thuja occidentalis</i>	4E	B
PA	Arborvitae, Pyramidal	<i>Thuja occidentalis</i> 'Pyramidalis'	4E	B
TA	Arborvitae, Techny	<i>Thuja occidentalis</i> 'Techny'	4E	B
IJ	Juniper, Iowa	<i>Juniperus chinensis</i> 'Iowa'	4E	C
MJ	Juniper, Mountbatten	<i>Juniperus chinensis</i> 'Mountbatten'	4E	C
ER	Redcedar, Eastern	<i>Juniperus virginiana</i>	4E	A
CER	Redcedar, Eastern Canaert	<i>Juniperus virginiana</i> 'Canaertii'	4E	A

EVERGREEN SHRUBS (<10 feet)

Symbol	Common Name	Scientific Name	ANS Type	Note
AJ	Juniper, Andorra	<i>Juniperus horizontalis</i> 'Plumosa'	1C	C
DJJ	Juniper, Dwarf Japanese	<i>Juniperus procumbens</i> nana	1C	C
HJ	Juniper, Hughes	<i>Juniperus chinensis</i> 'Hughes'	2C	C
MJ	Juniper Maney	<i>Juniperus chinensis</i> 'Maney'	3C	C
MJJ	Juniper, Mint Julep	<i>Juniperus chinensis</i> 'Mint Julep'	2C	C
OCJ	Juniper, Oldfield Common	<i>Juniperus communis</i> var. <i>depressa</i>	3C	A

PJ	Juniper, Pfitzer	Juniperus chinensis 'Pfitzeriana'	2C	C
SGJ	Juniper, Sea Green	Juniperus chinensis 'Sea Green'	3C	C
BRJ	Juniper, Wilton Blue Rug	Juniperus horizontalis 'Wiltonii'	1C	C
MP	Pine, Mugo Swiss Mountain	Pinus mugo var. mugo	3C	C
CY	Yew, Canada	Taxus canadensis	2C	B

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Plants Used for Roadside Planting in WI

LARGE DECIDUOUS SHRUBS (>10 feet)

Symbol	Common Name	Scientific Name	ANS Type	Note
SB	Buffaloberry, Silver	Shepherdia argentea	3S	C
MC	Cotoneaster, Many-flowered	Cotoneaster multiflorus	3S	C
AS	Serviceberry, Apple	Amelanchier x grandiflora	3S	A
SS	Sumac, Smooth	Rhus glabra	3S	A
SH	Sumac, Staghorn	Rhus typhina	3S	A
BV	Viburnum, Blackhaw	Viburnum prunifolium	4S	C
NV	Viburnum, Nannyberry	Viburnum lentago	3S	A
WV	Viburnum, Wayfaringtree	Viburnum lantana	3S	C
ACV	Viburnum, American Cranberrybush	Viburnum trilobum	3S	A
EW	Wahoo, Eastern	Euonymus atropurpureus	4S	A

MEDIUM DECIDUOUS SHRUBS (4-10 feet)

Symbol	Common Name	Scientific Name	ANS Type	Note
GD	Dogwood, Grey	Cornus racemosa	2S	A
RD	Dogwood, Redosier	Cornus sericea	2S	A
ID	Dogwood, Isanti	Cornus sericea 'Isanti'	2S	A
AE	Elder, American	Sambucus canadensis	3S	A
AF	Filbert, American	Corylus americana	3S	A
CN	Ninebark, Common	Physocarpus opulifolius	3S	A
DCN	Ninebark, Dwarf Common	Physocarpus opulifolius 'Nanus'	2S	A
PR	Rose, Prairie	Rosa setigera	3S	B
RR	Rose, Rugosa	Rosa rugosa	3S	C
VS	Spiraea, Vanhoutte	Spiraea x vanhouttei	1S	C
FS	Sumac, Fragrant	Rhus aromatica	3S	A
AV	Viburnum, Arrowwood	Viburnum dentatum	3S	C

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Plants Generally Used for Roadside Planting in WI

SMALL DECIDUOUS SHRUBS (<4 feet)

Symbol	Common Name	Scientific Name	ANS Type	Note
DB	Bushhoneysuckle, Dwarf	Diervilla lonicera	2S	A
BLC	Chokeberry, Black	Aronia melanocarpa	3S	A
BC	Cinquefoil, Bush	Potentilla fruticosa	1S	A
ABC	Cinquefoil, Bush Abbotswood	Potentilla fruticosa 'Abbotswood'	1S	A
JBC	Cinquefoil, Bush Jackman	Potentilla fruticosa 'Jackmanii'	1S	A
IC	Coralberry, Indiancurrant	Symphoricarpos orbiculatus	3S	B
AC	Currant, Alpine	Ribes alpinum	1S	C
CR	Rose, Carolina	Rosa carolina	3S	A
NWR	Rose, Nearly Wild	Rosa spp. 'Nearly Wild'	3S	A
VR	Rose, Virginia	Rosa virginiana	3S	A
S	Snowberry	Symphoricarpos albus	3S	B
AWS	Spiraea, Anthony Waterer	Spiraea x bumalda 'Anthony Waterer'	1S	C
DWS	Spiraea, Dwarf White	Spiraea albiflora	1S	C
DRS	Spiraea, Dwarf Red	Spiraea x bumalda 'Coccinea'	1S	C
FSP	Spiraea, Froebel	Spiraea x bumalda 'Froebelii'	1S	C
SMS	Spiraea, Snowmound	Spiraea nipponica 'Snowmound'	1S	C
GFS	Sumac, Fragrant Gro-low	Rhus aromatica 'Gro-low'	3S	A

VINES

AB	Bittersweet, American	Celastrus scandens	4V	A
BI	Ivy, Boston	Parthenocissus tricuspidata	4V	C
VC	Creeper, Virginia	Parthenocissus quinquefolia	4V	A
EI	Ivy, Engelmann	Parthenocissus quinquefolia 'Engelmanni'	4V	A

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Symbols are derived from the first letter of each word in the common name of the plant.

Symbols for plants not shown on this list should conform to this convention.

The first letter of three-letter symbols usually, but not always, represents a cultivar name.

For example, ABC stands for Abbotswood (A), a cultivar of bush cinquefoil.

Cultivars with variegated or unusually colored foliage should not be planted.

BALLING & BURLAPPING SPECIFICATIONS

The following tables represent the recommended minimum sizes for trees which are grown in a nursery under favorable conditions

**SHADE & FLOWERING TREES
TYPES 1 AND 2***

SIZE (Cal.) WHEN PLANTED	MINIMUM SIZE				MULCH RING DIAMETER
	BALL		PLANT HOLE		
	DIAMETER	DEPTH	DIAMETER	DEPTH	
1/2"	12"	8"	36"	8"	48"
3/4"	14"	9"	38"	9"	50"
1"	16"	10"	40"	10"	52"
1 1/4"	18"	12"	42"	12"	54"
1 1/2"	20"	12"	44"	12"	56"
1 3/4"	22"	13"	46"	13"	58"
2" cal.	24"	14"	48"	14"	60"
2 1/2"	28"	17"	52"	17"	64"
3"	32"	19"	56"	19"	68"
3 1/2"	38"	23"	62"	23"	74"
4"	42"	25"	66"	25"	78"
4 1/2"	48"	29"	72"	29"	84"

* See the American Nursery & Landscape Association standards for definitions of plant types.

**SHADE & FLOWERING TREES
TYPES 3 AND 4***

SIZE (HT) WHEN PLANTED	MINIMUM SIZE				MULCH RING DIAMETER
	BALL		PLANT HOLE		
	DIAMETER	DEPTH	DIAMETER	DEPTH	
2' ht.	10"	6.5"	34"	6.5"	46"
3' ht.	12"	8"	36"	8"	48"
4' ht.	14"	9"	38"	9"	50"
5' ht.	16"	10"	40"	10"	52"

SIZE (Cal.) WHEN PLANTED	MINIMUM SIZE				MULCH RING DIAMETER
	BALL		PLANT HOLE		
	DIAMETER	DEPTH	DIAMETER	DEPTH	
1 1/2"	20"	12"	44"	12"	56"
1 3/4"	22"	13"	46"	13"	58"
2" cal.	24"	14"	48"	14"	60"
2 1/2"	28"	17"	52"	17"	64"
3" cal.	32"	19"	56"	19"	68"
3 1/2"	38"	23"	62"	23"	74"
4"	42"	25"	66"	25"	78"
4 1/2"	48"	29"	72"	29"	84"

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BALLING & BURLAPPING SPECIFICATIONS

The following tables represent the recommended minimum sizes for trees which

are grown in a nursery under favorable conditions

**CONIFEROUS EVERGREENS
TYPES 1, 2, 3***

SPREAD WHEN PLANTED	MINIMUM SIZE				MULCH RING DIAMETER
	BALL		PLANT HOLE		
	DIAMETER	DEPTH	DIAMETER	DEPTH	
9"	8"	5"	32"	5"	44"
12"	8"	5"	32"	5"	44"
15"	10"	6.5"	34"	6.5"	46"
18"	10"	6.5"	34"	6.5"	46"
24"	12"	8"	36"	8"	48"
30"	14"	9"	38"	9"	50"
36"	16"	10"	40"	10"	52"
42"	18"	12"	42"	12"	54"
48"	21"	12.5"	45"	12.5"	57"
60"	24"	14"	48"	14"	60"
72"	28"	17"	52"	17"	64"
84"	32"	19"	56"	19"	68"
96"	36"	21.5"	60"	21.5"	72"

* See the American Nursery & Landscape Association standards for definitions of plant types.

**CONIFEROUS EVERGREENS
TYPES 4, 5***

SIZE (HT) WHEN PLANTED	MINIMUM SIZE				MULCH RING DIAMETER
	BALL		PLANT HOLE		
	DIAMETER	DEPTH	DIAMETER	DEPTH	
12"	10"	6.5"	34"	6.5"	46"
18"	10"	6.5"	34"	6.5"	46"
24"	12"	8"	36"	8"	48"
36"	14"	9"	38"	9"	50"
48"	16"	10"	40"	10"	52"
60"	20"	12"	44"	12"	56"
72"	22"	13"	46"	13"	58"
84"	24"	14"	48"	14"	60"
96"	27"	16"	51"	16"	63"
108"	30"	18"	54"	18"	66"
120"	34"	20.5"	58"	20.5"	70"
144"	34"	20.5"	58"	20.5"	70"
168"	42"	25"	66"	25"	78"
192"	46"	27.5"	70"	27.5"	82"

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BALLING & BURLAPPING SPECIFICATIONS

The following tables represent the recommended minimum sizes for trees which are grown in a nursery under favorable conditions

**CONIFEROUS EVERGREENS
COLUMNAR CONIFERS (TYPE 6) ***

SIZE (HT) WHEN PLANTED	MINIMUM SIZE				MULCH RING DIAMETER
	BALL		PLANT HOLE		
	DIAMETER	DEPTH	DIAMETER	DEPTH	
12"	10"	6.5"	34"	6.5"	46"
18"	10"	6.5"	34"	6.5"	46"
24"	12"	8"	36"	8"	48"
36"	14"	9"	38"	9"	50"
48"	16"	10"	40"	10"	52"
60"	20"	12"	44"	12"	56"
72"	22"	13"	46"	13"	58"
84"	24"	14"	48"	14"	60"
96"	27"	16"	51"	16"	63"
108"	30"	18"	54"	18"	66"
120"	34"	20.5"	58"	20.5"	70"
144"	34"	20.5"	58"	20.5"	70"
168"	42"	25"	66"	25"	78"
192"	46"	27.5"	70"	27.5"	82"

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**DECIDUOUS SHRUBS
TYPES 1, 2, 3, 4, 5 ***

SIZE (HT) WHEN PLANTED	MINIMUM SIZE				MULCH RING DIAMETER
	BALL		PLANT HOLE		
	DIAMETER	DEPTH	DIAMETER	DEPTH	
12"	8"	5'	32"	5"	44"
18"	9"	6'	33"	6"	45"
24"	10"	6.5'	34"	6.5"	46"
36"	12"	8'	36"	8"	48"
48"	14"	9'	38"	9"	50"
60"	16"	10'	40"	10"	52"
72"	18"	12'	42"	12"	54"
84"	20"	12'	44"	12"	56"
96"	22"	13'	46"	13"	58"
108"	24"	14'	48"	14"	60"
120"	26"	15.5'	50"	15.5"	62"

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BARE ROOT SPECIFICATIONS

The following table represents the approved minimum root spread for nursery-grown shade trees

**SHADE AND FLOWERING TREES
TYPES 1, 2, 3, 4 ***

SIZE (CAL.) WHEN PLANTED	MINIMUM SIZE				MULCH RING DIAMETER
	ROOT		PLANT HOLE		
	SPREAD	DEPTH	DIAMETER	DEPTH	
1/2"	12"	8"	36"	8"	48"
3/4"	16"	9"	40"	9"	52"
1"	18"	10"	42"	10"	54"
1 1/4"	20"	12"	44"	12"	56"
1 1/2"	22"	12"	46"	12"	58"
1 3/4"	24"	13"	48"	13"	60"
2"	28"	14"	52"	14"	64"
2 1/2"	32"	17"	56"	17"	68"
3"	38"	19"	62"	19"	74"

* See the American Nursery & Landscape Association standards for definitions of plant types.

BARE ROOT SPECIFICATIONS

The following table represents the approved minimum root spread for nursery-grown deciduous shrubs.

**DECIDUOUS SHRUBS
TYPES 1, 2, 3, 4, 5 ***

SIZE (HT) WHEN PLANTED	MINIMUM SIZE				MULCH RING DIAMETER
	ROOT		PLANT HOLE		
	SPREAD	DEPTH	DIAMETER	DEPTH	
18"	10"	6.5"	34"	6.5"	46"
24"	11"	8"	35"	8"	47"
36"	14"	10"	38"	10"	50"
48"	16"	12.5"	40"	12.5"	52"
60"	18"	14"	42"	14"	54"
72"	20"	17"	44"	17"	56"

* See the American Nursery & Landscape Association standards for definitions of plant types.