

Appendix B. Recommended Tree Species List for Red Lodge

The following list was compiled by Cathy Ritter of the Rocky Mountain Flower Farm with help from Jim Fisher and Phil Robertson.

Trees require care throughout their lifetime, but especially in the first several years after planting. Plan carefully and select a tree that fits the intended site. Plant, water, fertilize, prune and protect from wildlife damage as instructed by a local nursery.

The ability of a tree to withstand insects, diseases, winter wind, and cold, can depend on its overall health and vigor. The greatest single factor affecting tree vigor in our area is proper watering (which may include fall and winter watering). Another very important factor affecting the health of newly planted trees involves their root system. Many trees are sold in containers. While in containers, root system growth is inhibited. Plant containerized trees with careful attention to cut encircling roots and to untangle and flare roots out and down in the planting hole. With careful attention, these trees can provide our community with increased beauty and vitality in the years to come.

TREES UNDER 20 FEET TALL (REQUIRING 20 FOOT LATERAL SPACING)					
SPECIES	GROWTH RATE	LIGHT REQUIREMENT	ADVANTAGES	LIMITATIONS	REMARKS
Arborvitae (<i>Thuja occidentalis</i>)	fast	sun to part shade	grows well in shade, adapts to alkaline soil, there are many cultivars in a variety of shapes, tall varieties make a nice screen, evergreen	best in semi-protected location from direct exposure to winter wind and sun, not deer resistant in areas with frequent damage	popular cultivars are 'Techny' 10-12' or 'Techny Globe' 4-6'
Chokecherry, Amur (<i>Prunus maackii</i>)	medium	sun	attractive early white flowers, small black fruit that birds enjoy, yellow fall color, exfoliating reddish bark (similar to birch)	none serious	may reach 25' tall
Chokecherry, 'Canada Red' (<i>Prunus virginiana</i> 'Canada Red')	fast	sun	very hardy, green leaves turn purple in summer, oval crown, fruit is an edible chokecherry loved by birds	requires frequent sucker removal at base, susceptible to X-disease and Black Knot	cultivar of native species

TREES UNDER 20 FEET TALL (REQUIRING 20 FOOT LATERAL SPACING)					
SPECIES	GROWTH RATE	LIGHT REQUIREMENT	ADVANTAGES	LIMITATIONS	REMARKS
Crabapple, 'Coralburst' (Prunus 'Coralcole')	medium	sun	compact rounded shape to 10' high, double pink-rose flowers, no fruit, highly rated for disease resistance	none serious	flowers do not bloom early which can be beneficial with late frost
Crabapple, 'Prairiefire' (Malus 'Prairiefire')	medium	sun	purple foliage in spring turns dark green on red stems, reddish flowers, small persistent fruit, highly resistant to diseases, spreading shape to 20' high	none serious	flowers do not bloom early which can be beneficial with late frost
Crabapple, 'Radiant' (Malus 'Radiant')	medium	sun	bronze foliage matures to green, early single deep-pink flowers, small persistent fruit, rounded shape to 20' high	susceptible to apple scab in a wet season	
Crabapple, 'Royalty' (Malus 'Royalty')	medium	sun	extremely hardy, purple foliage, early red flowers with persistent sparse fruit, rounded habit to 15' high	may be susceptible to apple-cedar rust and powdery mildew	
Crabapple, 'Spring Snow' (Malus 'Spring Snow')	medium	sun	abundant early white flowers, fruitless, attractive uniform oval-shaped crown with dense foliage to 20' high	may be susceptible to fireblight and apple scab	
Flowering Plum, 'Newport' (Prunus cersifera 'Newport')	medium	sun	very attractive purple-red foliage turns reddish in fall, pale pink flowers, spreading shape	some potential insect and disease problems	
Flowering Plum, 'Princess Kay' (Prunus nigra 'Princess Kay')	medium	sun	double-flowered selection of a Canadian wild plum, early white profuse flowers, orange-maroon fall color, round to oval shape, very hardy (seldom produces fruit)	requires good drainage, some potential insect and disease problems, doesn't perform well when stressed	

TREES UNDER 20 FEET TALL (REQUIRING 20 FOOT LATERAL SPACING)

SPECIES	GROWTH RATE	LIGHT REQUIREMENT	ADVANTAGES	LIMITATIONS	REMARKS
Hawthorn, Thornless Cocksaur (<i>Crataegus crus-galii</i> var. <i>inermis</i>)	medium	sun	attractive shiny green foliage and white flower clusters, persistent fruit (doesn't drop), nice shape, purple fall color, good disease resistance	prefers moist soil, slow to establish, potential insect and disease problems if stressed, prefers semi-protected location	
Japanese Lilac Tree, 'Ivory Silk' (<i>Syringa reticulata</i> 'Ivory Silk')	medium	sun	compact oval shape, attractive foliage, profuse large white flower clusters in July, easily grown, relatively free from pests	requires good drainage, slow to establish	
Juniper (<i>Juniperus scopulorum</i>)	fast	sun	deer resistant, drought resistant, cultivars available in a variety of sizes and shapes, evergreen	requires good soil drainage and air circulation around foliage, do not overwater, may be subject to magnesium deficiency (treat first with Epsom salts and later with magnesium-rich fertilizer)	'Cologreen' (15-20'), 'Welchi' (10-12'), 'Wichita Blue' (10-15'), 'Medora' (10-12'), Rocky Mountain (30-40' - Montana native species)
Maple, Amur (<i>Acer ginnala</i>)	medium slow	sun to part shade	rounded shape, fragrant yellowish-white flowers in spring, brilliant red fall color, easy to transplant, tolerates wind, hardy	abundant seed drop, best with regular watering, yellowing leaves in summer may indicate lack of water or need for chelated iron in soil, may experience temporary tip dieback after a severe winter, may need pruning at first	

TREES UNDER 20 FEET TALL (REQUIRING 20 FOOT LATERAL SPACING)					
SPECIES	GROWTH RATE	LIGHT REQUIREMENT	ADVANTAGES	LIMITATIONS	REMARKS
Maple, Tatarian (Acer tataricum)	medium slow	sun to part shade	adaptable to a wide range of sites, yellow-orange fall color, taller and with better tolerance to alkaline soil than Amur Maple	seldom has serious insect and disease problems	
Pine, Bristlecone (Pinus aristata)	very slow	sun	very long-lived, irregular shape makes an attractive addition to rock garden or as an accent plant, evergreen	susceptible to mountain pine beetle, white pine blister rust, scale insects	
Serviceberry, 'Autumn Brilliance' (Amelanchier x grandiflora 'Autumn Brilliance')	medium	sun	symmetrical, upright spreading crown, white flowers in spring, brilliant red fall color, dark purple fruit loved by birds	berries may attract unwanted wildlife, prefers moist well-drained soil, shape can be irregular when young	

TREES 20-40 FEET TALL (REQUIRING 30 FOOT LATERAL SPACING)					
SPECIES	GROWTH RATE	LIGHT REQUIREMENT	ADVANTAGES	LIMITATIONS	REMARKS
Aspen, Quaking (Populus tremuloides)	fast	sun	slender tree with delicate leaves that "tremble" in the breeze, hardy, adaptable, attractive white bark, yellow fall color	needs ample moisture, not drought resistant, spreads by suckers	Montana native species
Aspen, Swedish Columnar (Populus tremula 'Erecta')	slow	sun	narrow, columnar shape, leaves similar to Quaking Aspen, substitute for Lombardy Poplar for screening, seedless, red fall color	needs ample moisture, insects and diseases can be a problem if drought-stressed	
Birch, Paper (Betula papyrifera)	fast	sun	very hardy long-lived birch, adaptable, white papery bark, turns yellow in fall	susceptible to birch borer, leaf miner, various fungi, prefers moist well-drained soils	Montana native species

TREES 20-40 FEET TALL (REQUIRING 30 FOOT LATERAL SPACING)

SPECIES	GROWTH RATE	LIGHT REQUIREMENT	ADVANTAGES	LIMITATIONS	REMARKS
Birch, Water (Betula occidentalis)	fast	sun	hardy multi-stemmed tree, cherry-brown bark, yellow-orange-red fall color	needs moist, well-drained soil	Montana native species
Crabapple, Selkirk (Malus 'Selkirk')	medium	sun	very hardy, foliage red at first then turning bronze-green, pink flowers, small red fruits, fireblight and apple-scab resistant, grows to 25' high	none serious	
Fir, Alpine (Abies lasiocarpa)	slow	part sun to shade	Montana native in subalpine landscape, attractive narrow conical shape with short, flat green needles, evergreen	Prefers acidic soil, does not tolerate heat well, do not prune	try to purchase a tree that originated from a Montana nursery
Fir, Concolor (Abies concolor)	slow	part sun to shade	pyramidal form, soft-silvery-blue needles, evergreen	requires a sheltered environment (from wind and extreme cold) and well-drained soil	also called white fir
Linden, 'Greenspire' Littleleaf (Tilia cordata 'Greenspire')	fast	sun	symmetrical pyramidal form, very uniform, neat and tidy, fragrant flowers in June and July, yellow in fall	prefers moist well-drained soil, if weakened may be susceptible to some insects and diseases	
Linden, 'Lincoln' (Tilia americana 'Lincoln')	medium	sun	narrow pyramidal shape, tolerates alkaline soil, heat, drought, yellow fall color	relatively pest-free	
Linden, 'Harvest Gold' (Tilia mongolica 'Harvest Gold')	medium	sun	very hardy and adaptable, upright branching, spectacular gold fall color, exfoliating bark, no messy fruit	relatively pest-free, does best with moist, well-drained soil	
May Day Tree (Prunus padus)	medium	sun	early foliage and fragrant white spring blossoms, small black fruits in mid-summer are a favorite of birds, gold to bronze-red in fall	does not tolerate heavy clay soils well, susceptible to Black Knot disease, fruit may attract unwanted deer and moose	

TREES 20-40 FEET TALL (REQUIRING 30 FOOT LATERAL SPACING)					
SPECIES	GROWTH RATE	LIGHT REQUIREMENT	ADVANTAGES	LIMITATIONS	REMARKS
Mountain Ash, European (<i>Sorbus aucuparia</i>)	medium	sun to light shade	hardy, dense oval shape, clusters of white flowers in spring, orange-red berries in fall are loved by birds	requires good drainage, watch for fireblight, sapsuckers, aphids, mites, moose and deer	recommend 'Mitchred' cultivar - has narrow-oval shape
Mountain Ash, Showy (<i>Sorbus decora</i>)	medium	sun to light shade	smaller and hardier than European Mountain Ash, attractive white flower clusters, red fruit (loved by birds) and beautiful fall color	requires good drainage, watch for fireblight, sapsucker, aphids, mites, moose and deer	Montana native species
Ohio Buckeye (<i>Aesculus glabra</i>)	slow	sun	attractive rounded shape, yellow trumpet-shaped blooms in spring, fall color is yellow to orange-red, good choice for smaller yards	needs protected location and moist loamy soil, some flower litter, susceptible to leaf scorch, seeds are toxic	'Autumn Splendor' cultivar has no leaf scorch
Pine, Limber (<i>Pinus flexilis</i>)	moderately slow	sun	rounded open shape, tolerates wind and grows well in rocky soil, seeds are important food source for wildlife, evergreen		Montana native species
Pine, Austrian (<i>Pinus nigra</i>)	fast	sun	withstands dry windy conditions and adapts to most soil types, drought resistant once established, evergreen	some insect and disease problems, avoid fall planting	windbreak, screen or specimen tree


TREES 40+ FEET TALL (REQUIRING 40 FOOT LATERAL SPACING)					
SPECIES	GROWTH RATE	LIGHT REQUIREMENT	ADVANTAGES	LIMITATIONS	REMARKS
Ash, 'Fallgold' Black (<i>Fraxinus nigra</i> 'Fallgold')	slow	sun	native of Manitoba, very hardy, narrow upright shape, seedless, attractive yellow fall color	susceptible to male flower gall, borers	
Ash, 'Marshall' Green (<i>Fraxinus pennsylvanica</i> 'Marshall')	fast	sun	adaptable, broad oval shape, bright yellow in fall, fewer insect and disease problems than species	not always completely seedless, susceptible to borers	
Ash, 'Patmore' Green (<i>Fraxinus pennsylvanica</i> 'Patmore')	fast	sun	seedless, very cold hardy, tolerates alkaline soils, fairly drought tolerant, pyramidal shape in youth becomes rounded with age, radiant yellow in fall	susceptible to borers, scale insects, sawflies, leafspots and cankers	
Ash, 'Prairie Spire' Green (<i>Fraxinus pennsylvanica</i> 'Rugby')	fast	sun	selection from North Dakota State University for superior hardiness, upright narrow shape, golden in fall	susceptible to borers, scale insects, sawflies, leafspots and cankers	
Ash, 'Mancana' (<i>Fraxinus mandshurica</i> 'Mancan')	fast	sun	nice upright oval shape, adaptable to most soil types, provides dense shade, striking yellow fall color, seedless	smaller size than other ash, not as drought tolerant as green ash, may be subject to frost cracking and fungus	
Cottonwood (<i>Populus</i> spp.)	fast	sun	fast-growing, very tall, attractive shape, instant shade, many cottonless cultivars available, rust resistant	keep away from buildings and septic system as they have extensive roots, requires moist soil, weaker wood may break in high winds	recommend 'Siouxland' (70-80'), 'Robusta' (45-60') or Narrowleaf (50-60', has willow-like leaves)
Douglas-fir (<i>Pseudotsuga menziesii</i>)	medium	sun to part shade	native to Montana, open pyramidal shape with decorative downward-hanging cones, evergreen	requires moist, well-drained soil, plant in protected location, soak deeply on a regular basis	try to obtain a tree that originated from a Montana nursery

TREES 40+ FEET TALL (REQUIRING 40 FOOT LATERAL SPACING)					
SPECIES	GROWTH RATE	LIGHT REQUIREMENT	ADVANTAGES	LIMITATIONS	REMARKS
Hackberry (<i>Celtis occidentalis</i>)	medium	sun	umbrella shape, tolerates cold, wind and alkaline soil, yellow fall color and red berries in winter, interesting bark	susceptible to nipple gall, powdery mildew, leaf spots and scale insects, slow to establish in clay soil, may be susceptible to late spring frost, not drought tolerant	
Honeylocust, 'Imperial' (<i>Gleditsia triacanthos</i> var. <i>inermis</i> 'Impcole')	fast	sun	thornless, seedless, adaptable, dense symmetrical branching, fern-like foliage turns bright yellow in fall, drought tolerant	needs semi-protected location, may have some tip dieback in severe winter	
Honeylocust, 'Shademaster' (<i>Gleditsia triacanthos</i> PNI 2835)	fast	sun	rectangular to vase-shaped crown, thornless, seedless, yellow in fall, adaptable, drought resistant	needs semi-protected location, may have some tip dieback in severe winter, susceptible to webworm, borers, mites, powdery mildew	
Honeylocust, 'Skyline' (<i>Gleditsia triacanthos</i> 'Skycole')	fast	sun	a broad taller shape, thornless and usually fruitless, golden fall color, tolerant of most soil, hardy to cold, heat, wind	needs semi-protected location, good insect resistance, may have some tip dieback in severe winter	
Larch (<i>Larix</i> spp.)	medium	sun	bright green tufts of new needles in spring, brilliant yellow-orange needles in fall before they drop for the winter, not particular about soil, attracts birds	may be difficult to establish, check with your local nursery	<i>Larix occidentalis</i> is Montana native species

TREES 40+ FEET TALL (REQUIRING 40 FOOT LATERAL SPACING)					
SPECIES	GROWTH RATE	LIGHT REQUIREMENT	ADVANTAGES	LIMITATIONS	REMARKS
Linden, 'Redmond' (Tilia americana 'Redmond')	medium	sun	very hardy, glossy leaves and large pyramidal form, clusters of fragrant yellow blooms, bright yellow in fall, tolerates alkaline soil	may be slow to establish the first few years, prefers moist, heavier soil, may sucker around base	
Maple, 'Autumn Blaze' Freeman (Acer x freemanii 'Jeffersred')	fast	sun to part shade	broad oval crown with upright branches, long fall season of dependable color, drought tolerant, resembles silver maple	shallow root system with some surface roots, may experience some tip die-back from severe winter, susceptible to late spring frost, plant in semi-protected location	
Maple, 'Emerald Lustre' Norway (Acer platanoides 'Pond')	medium	sun to part shade	strong branches form rounded canopy, new foliage is reddish and matures to glossy green, improved vigor and scorch resistance, hardiest of Norway maples	shallow root system with some surface roots, susceptible to frost cracking on trunk	do not prune
Maple, 'Emerald Queen' Norway (Acer platanoides 'Emerald Queen')	medium	sun to part shade	dense oval shape, attractive deep green foliage in spring with red tint, yellow fall color, resistant to leaf scorch	shallow root system with some surface roots, susceptible to frost cracking on trunk	do not prune
Maple, 'Fall Fiesta' Sugar (Acer saccharum 'Fall Fiesta')	medium slow	sun to part shade	rounded crown with leathery leaves, exceptional yellow-orange-red fall color	prefers cool, moist soil conditions, questionable in alkaline soil	
Maple, 'Green Mountain' Sugar (Acer saccharum 'Green Mountain')	medium slow	sun to part shade	hardy, broad stately, oval crown, resistant to heat, wind and leaf scorch, turns orange-scarlet in fall	prefers cool, moist soil conditions but more drought tolerant than other sugar maples, questionable in alkaline soil	

TREES 40+ FEET TALL (REQUIRING 40 FOOT LATERAL SPACING)					
SPECIES	GROWTH RATE	LIGHT REQUIREMENT	ADVANTAGES	LIMITATIONS	REMARKS
Maple, 'Northwood' Red (Acer rubrum 'Northwood')	medium	sun to part shade	hardest of red maple cultivars, rounded oval crown with good branching, orange-red in fall	prefers moist slightly acidic, well-drained soil, performance is questionable in droughty alkaline soil	
Maple, 'Royal Red' Norway (Acer platanoides 'Royal Red')	slower than green-leafed Norway Maples	sun to part shade	maroon foliage throughout season, hardest of red-leafed Norway maples	shallow root system with some surface roots, may not perform as well in alkaline soil	do not prune
Maple, 'Sienna Glen' Freeman (Acer x freemanii 'Sienna')	fast	sun to part shade	hardy, pyramidal shape, deep burgundy in fall, resembles red maple, resistant to frost cracking, sunscald and dieback, tolerant of wet soil	none serious	
Oak, Bur (Quercus macrocarpa)	slow	sun	large rounded shape with very strong branches, tolerates drought, alkaline soil and soil compaction, hardy	needs good drainage	Montana native species
Pine, Lodgepole (Pinus contorta)	fast	sun	tall thin pyramidal shape, evergreen	requires regular water, susceptible to mountain pine beetle	Montana native species
Pine, Ponderosa (Pinus ponderosa)	medium to fast	sun	very stately with age; straight, open, orange-colored trunk; long needles; drought-tolerant once established, evergreen	susceptible to mountain pine beetle	Montana native species
Spruce, Black Hills (Picea glauca var. densata)	slow to medium	sun	dense and symmetrical, cold hardy and resistant to winter injury, deer resistant, evergreen	more resistant to white pine weevil than most spruce	Dwarf Alberta is a popular miniature of this species

Said chairman shall, within five (5) days after the receipt of an application, grant said permit or deny the same, stating his reasons therefore. (1980 Code § 14.02.020)

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- D. Prohibited Trees: Cottonwood, Carolina poplar, Canadian poplar, Lombardi poplar, silver leaf poplar, or box elder trees shall not be planted in streets, avenues or alleys of the city, neither shall any other variety of trees deemed by the parks board unfit or undesirable be planted therein. The varieties named herein being deemed dangerous to the health of the city and an interference with the use of the streets thereof.
 - E. Location: It shall be unlawful for any person to plant any tree so that the roots thereof will reach beyond the property line of said person into the streets of the city in such a manner as to interfere with the use of such street or with the sewers of the city. (1980 Code § 14.02.030)
 - F. Size: No tree shall be planted measuring less than one inch (1") in diameter of trunk one foot (1') above the ground, and the lowest branch shall not be less than eight and one-half feet (8 1/2') above the ground where the same extends over sidewalks, streets, driveways or any place where traffic passes under such tree or branch. (1980 Code § 14.02.040)
 - G. Penalty: Any person who shall violate any of the provisions of this section shall be guilty of a misdemeanor and upon conviction thereof shall be punished as set forth in section 1-4-1 of this code. (1980 Code § 14.02.050)