Trees For Laramie

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Laramie Residents go out of their way to protect their Trees... Some may take it too far!

Environmental Factors

HARDINESS ZONES

- Most of WY is in Zone 4
- Zones 3 and 5 are also represented
- Laramie is Zone 4b: -20 to -25
Environmental Factors

Moisture - dry vs. wet sites
Light - full sun vs. shaded
Insects and Disease - outbreaks, epidemics
Soil Conditions - pH, texture

The Tree's Purpose

SHADE
✓ Deciduous trees will shade homes in the summer and allow sun to pass through in the winter.
✓ ...lower home heating and cooling costs.
✓ ...lower watering needs for lawns

AESTHETICS
✓ Fall color
✓ Flowers
✓ Fruit
✓ Bark
✓ Crown shape
✓ Leaves
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Planting Location & Tree Size

- Available space
- Overhead lines
- Underground utilities
- Sidewalks/curbs
- Neighbor
- Nearby trees/shrubs
- Mature tree size
  - Height
  - Crown spread
  - Root growth

2007 Tree Inventory Summary

3,500 trees inventoried

Trees for Laramie

These trees should grow and flourish in Laramie. However, proper care and maintenance are needed for any tree to thrive.
Kentucky Coffeetree

Zone: 4
Height: 40-50 ft.
Spread: 30-40 ft.

Medium to large open spreading tree. Large compound leaves turning yellow in the fall. Seed pods 6" long. A picturesque tree in winter with deeply furrowed bark and stout branches. Adapted to urban conditions. "Espresso" variety is seedless and has better branching.

Bur Oak

Zone: 3
Height: 40-60 ft.
Spread: 30-50 ft.

Hackberry
Zone: 2
Height: 40-60 ft.
Spread: 40-50 ft.
Medium to large tree. Broad ascending branches with corky gray-brown bark. Purplish fruit is relished by birds and wildlife. Sometimes difficult to get established. Tolerant of a variety of soil types and conditions.

Plains Cottonwood
Zone: 4
Height: 60-100 ft.
Spread: 50-60 ft.
*Populus sargentii 'Variorum' (Sargent Straight Cottonwood)*. Best cottonwood for WY. More available in the nursery industry. Fast growing, very hardy and adaptable to poor soils and high elevations (7,000). Should be planted more often. Lanceolate and Narrowleaf are other good choices. Several less hardy varieties being sold.
Honeylocust  
Zone: 4  Height: 50-60 ft.  Spread: 30-40 ft. 
‘Shademaster’, ‘Imperial’ and ‘Skyline’ cultivars are among the most popular but seem to struggle at higher elevations (7,000 ft.) Fairly fast growing large tree. Fern-like foliage is light green turning yellow in the fall. Casts a light shade. Tolerates a wide range of soil conditions and adverse urban conditions, great for streetscape plantings. “Northern Acclaim” variety is more cold hardy and might do better in Laramie.

American Linden  
Zone: 3  
Height: 40-50 ft.  
Spread: 30 ft.  
Has excellent symmetrical branching habit. Broadly pyramidal when young, becoming rounded as it matures. Large, heart-shaped foliage turns yellow in the fall. “Frontyard” and “Redmond” are popular varieties.
Littleleaf Linden

Zone: 3
Height: 40-60 ft.
Spread: 30-40 ft.

A medium to large tree. Dense, symmetrical crown with glossy, dark green foliage. Very fragrant yellow flowers in early summer. Fall color is yellow. Fairly disease free. Branch structure can be problematic.

Emerald Queen, Emerald Lustre
Norway Maple

Zone: 4
Height: 45 ft.
Spread: 30 ft.

Considered hardiest and most well-adapted Norway maples to arid West. Has large, glossy leaves with a dense branching habit. Excellent shade tree but susceptible to leaf scorch and succulard. Better for parks and yards than streets and parking lots.

Cutleaf Weeping Birch

Zone: 2
Height: 40-50 ft.
Spread: 30-35 ft.

Graceful, white barked tree with drooping limbs and cutleaf foliage. Very cold hardy but struggles where temps fluctuate in winter. Golden yellow fall color. Susceptible to bronze birch borer. Paper birch and western water birch are options.
Ohio Buckeye
Zone: 4
Height: 20-40 ft.
Spread: 15-30 ft.
Oval shaped tree with large palmate leaves and white flowers in upright spikes up to 10". Growth seems to be stunted in WY. Very hardy and drought tolerant. Horsechestnut is very similar and may be even more hardy.

Sensation Boxelder
Zone: 3
Height: 40-60 ft.
Spread: 25-35 ft.

State Street Maple
A hardy, alkaline tolerant maple with moderate-fast growth rates. Upright-oval growth form while young, becoming rounded with age. Performing well in FL. Collins. No serious insect or disease problems.
Zone: 4
Height: 40 ft.
Spread: 25 ft.
Accolade Elm

Zone: 4
Height: 40-50 ft.
Spread: 30-40 ft.

American Elm-like form and foliage. Graceful V-shaped, formal crown with dark glossy foliage. Excellent street tree and hardy to many different soil conditions. Very good Dutch elm disease resistance and good elm leaf beetle resistance. "Triumph", "New Horizon" varieties are also good choices.

Princeton American Elm

Zone: 2b
Height: 40-50 ft.
Spread: 30-40 ft.

A true American elm developed prior to the DED epidemic. Good resistance to DED and elm leaf beetles. Very cold hardy, adaptable and grows fast. Has traditional V-shaped crown. Requires more attention to pruning. "Prairie Expedition", "New Harmony" varieties are promising.
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**Spring Snow Crabapple**

Zone: 3  
Height: 25-30 ft.  
Spread: 15-20 ft.  

A strikingly beautiful tree with masses of white flowers. The foliage is a rich, bright green. This crab is nearly sterile, bearing scarcely any fruit. Fire blight resistance is fair to good.

**Radiant Crabapple**

Zone: 3  
Height: 15-20 ft.  
Spread: 15-20 ft.  

An upright, compact grower with red-purple leaves changing to green. Flowers are deep pink followed by ½" red fruit. Highly resistant to fire blight.

**Thunderchild Crabapple**

Zone: 3  
Height: 15-20 ft.  
Spread: 15-20 ft.  

Leaves are deep purple and flowers are delicate, pink blooms, appearing before the foliage. Very resistant to fire blight and powdery mildew. Dark red, ½ inch fruit.
Crimson Cloud Hawthorn

Zone: 4
Height: 15-20 ft.
Spread: 12-18 ft.

Large, single, bright red flowers with a star-shaped white center. Foliage resistant to leaf blight. Glossy red fruit persists into winter. Thornless, upright grower. Coppery-red fall color.

Toba Hawthorn

Zone: 3
Height: 10-15 ft.
Spread: 12 ft.

Double, white flowers that age to pink mid to late May. Bright red fruit persisting into winter. Foliage is glossy, resistant to leaf spot. Very hardy, thornless tree. Coppery-red fall color.

Oakleaf Mt. Ash

Zone: 3
Height: 12-15 ft.
Spread: 12 ft.

Double, white flowers that age to pink mid to late May. Bright red fruit persisting into winter. Foliage is glossy, resistant to leaf spot. Very hardy, thornless tree. Coppery-red fall color.
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Hotwings Tatarian Maple

Zone: 3
Height: 20-25 ft.
Spread: 15-20 ft.
Developed in Ft. Collins. Excellent performer in rugged climates. Red samaras from mid-late summer. Orange-red fall color. Tree is in high demand.

Questionable Trees

- Autumn Blaze Maple
- Lombardi Poplar
- Boleana Poplar
- Silver Poplar
- Fallgold Black Ash
- Willows

Spruce Alternatives

- White fir
- Douglas fir
- Ponderosa pine
- Austrian pine
- Limber pine
- Black hills spruce
- Norway spruce
- European larch
Which Planting Medium?

**Balled and Burlapped**
- Largest trees
- Hardest to move
- Most difficult to plant
- Plant in spring or fall

**Grow Bag**
- Large tree compared to root ball
- Mass of small feeder roots
- Easy to plant
- Plant in spring or fall

**Potted**
- Smaller trees
- Easy to plant
- Girdling roots?
- Plant in spring or fall

**Bare Root**
- Smaller trees
- Easy to plant
- Cheaper
- Underutilized
- Plant in spring
- Roots must be kept moist

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Find the Root Flare

- Nurseries often add soil to the top of the root ball
- If planted with soil on top of the root ball:
  - roots don't get enough oxygen, water
  - tree struggles/takes longer to establish
  - roots often grow up into soil and circle the stem
- Find the root flare and plant at that depth

[Diagram of root balls and root flares]

Graphs by Ed Gilman
**Trees For Laramie**

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**Circling Roots Cause Big Problems**
- Occurs when tree is in the container too long or when root pruning is not done
- After planting, roots will continue to circle and girdle the tree
- Pull the roots out horizontally to avoid circling or cut the circling roots
- Investigate at nursery before purchase

![Image of circling roots](Picture by Ed Gilman)

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**Proper Planting Hole**

**Roots Are Not Battering Rams**
- Plant tree with top of root ball even with grade or just a bit above grade
- Never position below grade (beware of backhoes!)
- Backfill with native soil and water in tree
- Do not amend the native soil
- Tamp backfill gently to fill large air pockets

![Diagram of proper planting hole](Dug or rutted area  
Shovel depth  
3-6 times diameter of tree  
Pails added to prevent setting)

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**Proper Planting Hole**

**Wider is Better!**

![Good and Bad Holes](Good Hole  
Bad Hole)
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Watering

✓ Water when backfilling planting hole
✓ Consider a basin around the planting hole
✓ Water right on top of the root ball
✓ Consider drip irrigation
✓ Slowly water tree once a week during dry summer months for B&B trees
✓ Water 2-3 times per week for potted and grow bag trees
✓ Winter water when soil is not frozen - especially evergreens

Watering

✓ Water where the roots are, not where they will be.
✓ Never allow the roots to dry out, or become flooded.
✓ Frequency depends on the soil, the tree and the site.

Mulching

✓ Mulch newly planted trees with wood chips or bark
✓ Avoid using grass clippings or leaves
✓ Mulch as large an area as possible up to 4" in depth

Benefits
✓ Prevents competition with grass and weeds
✓ Retains soil moisture
✓ Improves soil nutrient levels
✓ Improves soil aeration
✓ Protects from lawnmower and string trimmer damage
✓ Reduces soil temperature extremes
Mulching

"Extremes" slow root development. Mulching moderates soil temperature and moisture fluctuations...

but, don't bury stems with mulch.

The End...

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