

LANDSCAPING WITH TREES IN MIND



Cheyenne is a hard place to grow Trees!



- Do trees grow naturally in Cheyenne?
- What are our challenges?
- Precipitation, hardiness zone, ph, clay soils, salt content, compaction, storms, I&D, people

Buy Quality Trees

- Hardy species
- Insect or disease problems?
- Healthy, vigorous
- Good Form
- Adequate root ball: 1.5" = 20"
- Root condition?



Don't Plant Ash!



It's only a matter of time!



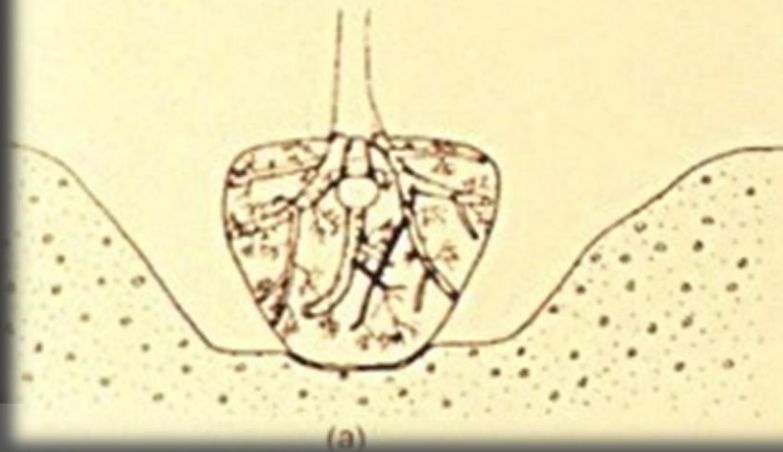
Emerald Ash Borer

Plant the Tree Properly

- Find the root flare
- Cut circling roots
- Plant at the proper depth: 1-2 inches above ground level



Good-quality root ball



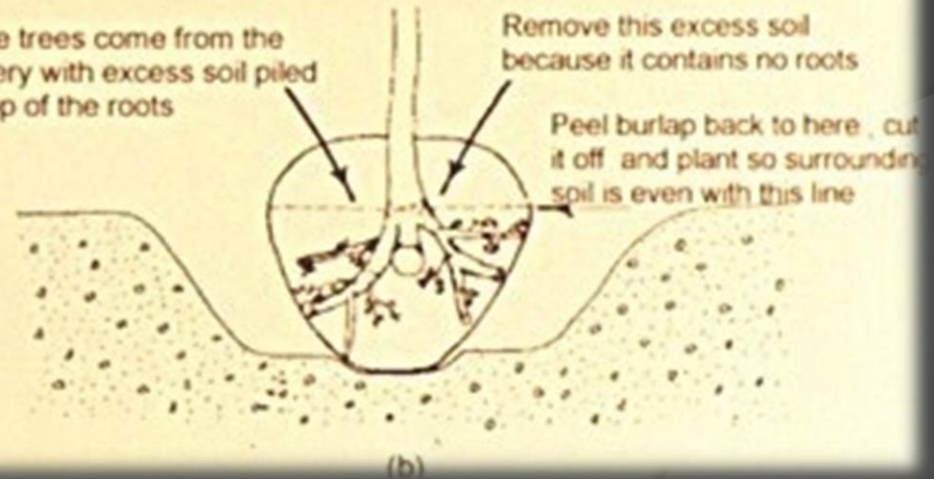
(a)

Poor-quality root ball

Some trees come from the nursery with excess soil piled on top of the roots

Remove this excess soil because it contains no roots

Peel burlap back to here, cut it off and plant so surrounding soil is even with this line



(b)



Proper Planting Hole

Wider Is Better!



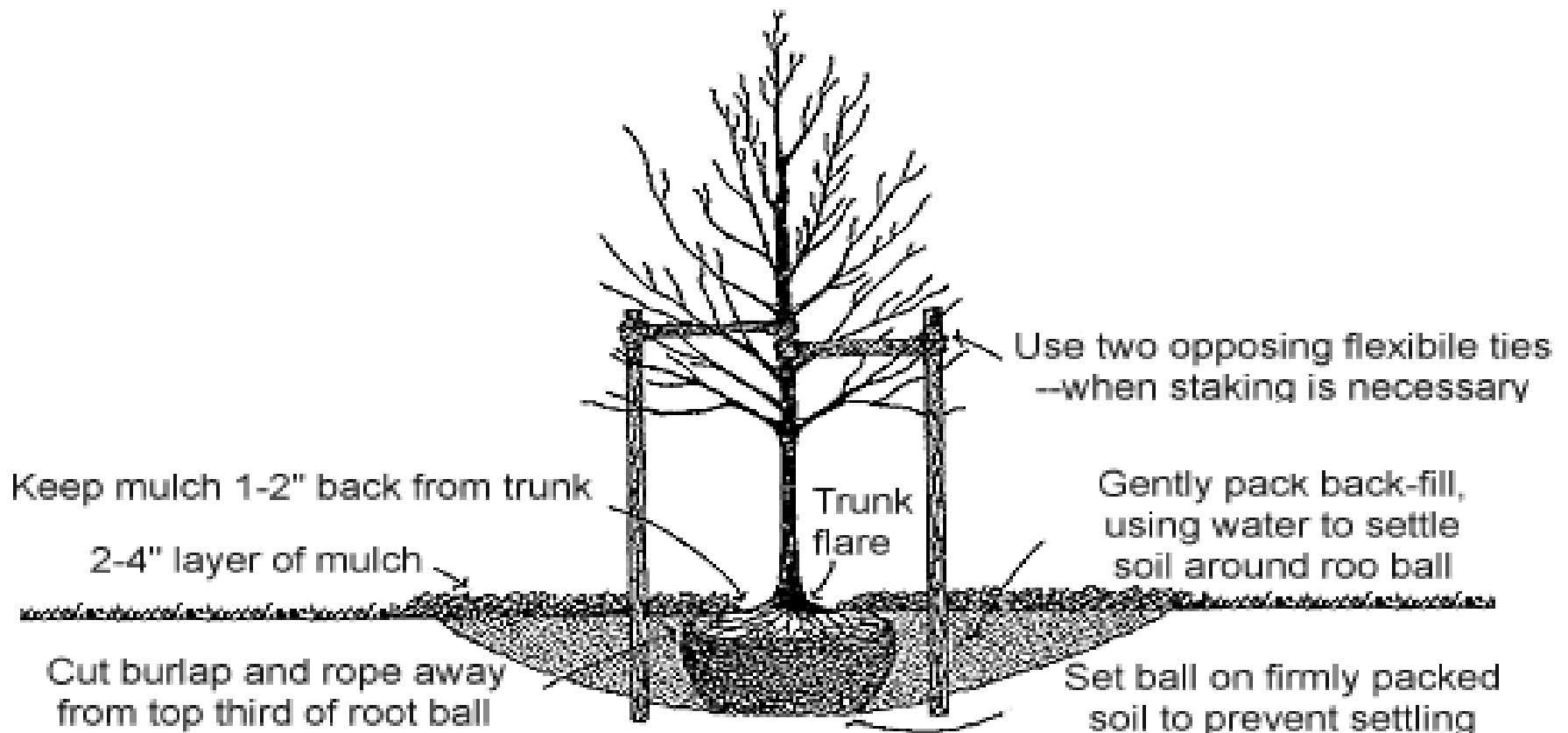
← **Good Hole**



Bad Hole →

Tree Planting

- Dig a wide hole
- Remove all packing material
- Find root flare/treat circling roots
- Don't amend the soil
- Water when backfilling
- Consider a basin
- Mulch, stake and protect as necessary



Mulching

- Mulch newly planted trees with wood chips, bark or rock
- Mulch as large an area as possible.

Benefits

- Prevents competition with grass and weeds
- Retains soil moisture- about 30% more
- Wood mulch improves soil nutrient levels
- Improves soil aeration
- Protects from lawnmower and string trimmer damage
- Reduces soil temperature extremes









Mowers/trimmers Kill Trees!



Grass/Sod is a fierce competitor!

HOW A TREE GROWS



- Most tree roots are in the first 12 inches of the soil profile
- Rarely are they deeper than 18 inches
- They occupy the same area as turf grass roots
- Turf grass forms a very dense layer of roots and emits allelopathic chemicals

Trees do better in mulch!





Mulch

Young Trees

- Helps them establish much quicker
- Will grow faster
- Be more resistant to I&D
- Less likely to experience dieback
- Less likely to die and need replacement
- Mulch is a good investment!

Mulching

Maintenance

- Weeds and grass will seed into mulch
- Use Roundup twice a season- be careful!
- Wood mulch becomes soil- replace as needed
- Where wind is a problem use coarse mulch/rock









Rock works well too!





Staking/Protecting

- It's windy in Cheyenne!
- 2-3 stakes is adequate
- Don't drive stakes into root ball
- Don't over tighten guy wires
- Use mesh straps or other non-abrasive material
- Remove after 1-2 years
- Bamboo not necessary
- Trunk protectors/trunk wrap?





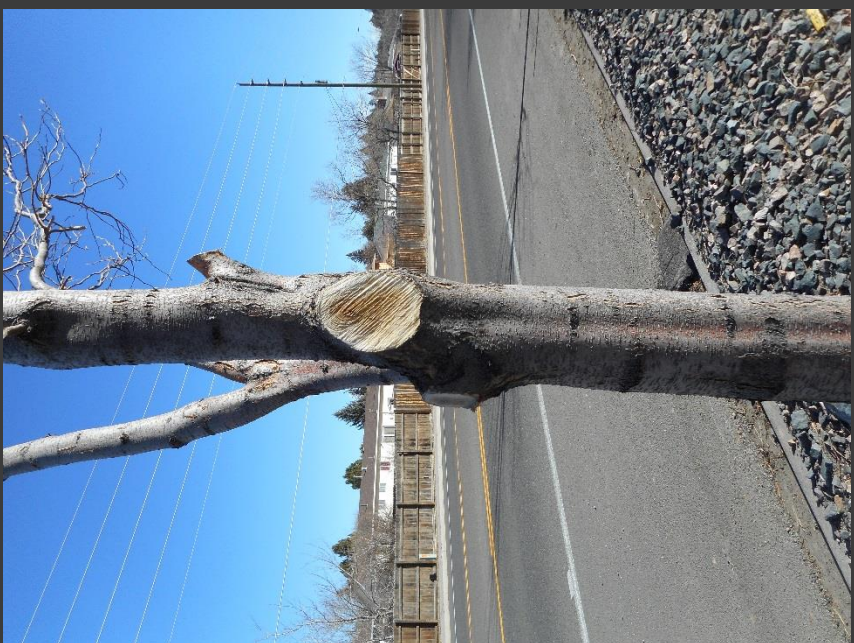
Watering

- Lack of adequate water is primary cause of tree mortality
- Turf irrigation systems can't sustain newly planted trees
- Supplemental watering is critical to survival
- Drip system, hand water, tree gators
- Should water once/week: 10 gals per 1in. of caliper









Caring for Newly-planted Trees

Summary:

- Quality nursery stock
- Proper planting
- Improve conditions for the roots
- Reducing competition with turf
- Protecting the tree
- Supplemental watering, adjust amount/frequency

