



## Tree Care without Chemicals

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## Our Premise!

- Proper selection, planting, and care when trees are young reduces long-term need for maintenance and chemicals. They prolong the tree's life, and reduce hazards.
- Trees are less adaptable as they get older.
- Learn to recognize a hazardous tree to be able to respond quickly to issues.

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## Tree Selection

Select trees according to your ability to water and care for them



Katsura

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## Tree Selection

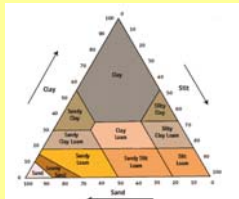
Select trees suitable to the site for both roots and canopy



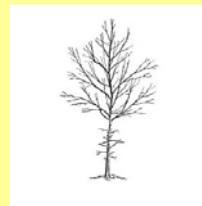
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## Trees and Soils

- Know the soil and manage according to soil structure.
- Compacted clay, hardpan, and a high water table can restrict roots to shallow depths and result in unstable trees.



## Tree Selection

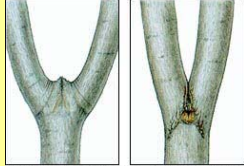


Choose a strong central leader

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## Tree Selection

U-shaped, not V-shaped, branch attachments



A. U-shaped strong union B. V-shaped weak union  
Figure 2. Types of branch unions

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## Tree Selection

Stay away from co-dominant stems



Redbud!

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## Tree Selection

Stay away from girdling roots



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## Tree Selection

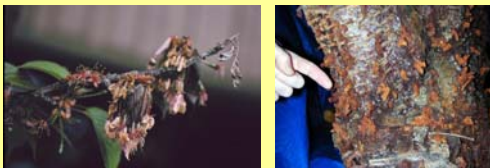
Roots should grow radially away from the trunk



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## Tree Selection

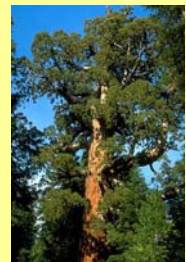
- Study the species before selecting it
- Cherries get 16 diseases and 13 pests in Western Washington



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## Follow Mother Nature's Lead

- General Sherman is 2700 years old
- Strong central leader with smaller diameter side branches
- U-Shaped branch attachments
- Roots growing radially from trunk
- Adapted to soils and rainfall



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## Tree Planting

- Eliminate circling roots at planting
- Shave root ball's outer edge
- Remove kinking and downward-growing roots



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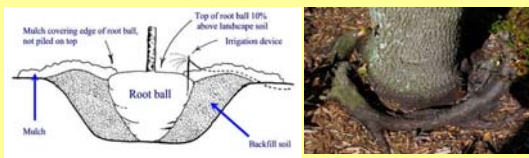
## Tree Planting

- Plant shallowly so that the top root is at or slightly above the soil surface.
- This tree was planted too deeply and is unstable. Notice how roots grow upward to surface.



## Tree Planting

- Keep mulch off the root ball to prevent upward root growth



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## Tree Care: Mulching

For established trees, mulch lightly, and keep away from the trunk.



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## Tree Care: Watering

- Water a newly-planted tree at the trunk for several years. After that, move outward from trunk.
- Try a bag or ring but check the trunk



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## Tree Care in Lawns

- Keep turf away from tree root zones
- Avoid Weed n Feed near trees



## Managing Trees Long-Term

- Old trees are less tolerant of change
- In old trees, leaves have a low ratio of leaves to biomass.
- Photosynthesis is a maintenance activity, not a growth activity
- Limit pruning



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## Managing Older Trees

- Old trees need water too
- Old trees benefit from mulch
- Old trees offer homes to other species and serve as ecosystems



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## Managing Trees Long-Term

- This 9550-year old spruce in Sweden only looks young. Its roots make it the oldest tree on earth.



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## For More Information

- WSU Hortsense  
<http://pep.wsu.edu/hortsense/>
- Ed Gilman's Website  
<http://hort.ufl.edu/woody/>

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## Thanks To

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