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Neighborhood Trees 101.

Considerations you need to make
when deciding to plant a tree...

Or a Street tree.

The process for finding, locating, &
planting a great tree.

How you can make sure your tree
stays healthy and happy.



Cool things trees can do...

Oh, what time can do...



Why should you consider planting a tree(s)?

Trees impact you and your community in various ways – most good and some bad...



You don't have to be a "Tree-Hugger" to understand the value of trees.

Trees do the following but not just the following:

- Add financial value to your home or business = more \$\$\$
- Add aesthetics = Curb appeal = Increased business
- Cool parking lots = reduces Heat Island Effect
- Add interest to a property – Spring flowers, fruit, fall color
- Provide shade to cool = lower Air Conditioning use = Less \$\$\$
- Provide wind breaks = lower Heating use = Less \$\$\$
- Protect waterways and land from erosion damage
- Provide clean air – CO₂ in O₂ out = Awesome!!!



Why should you consider planting a tree(s)?

\$\$\$ Benefits To Tree Planting:

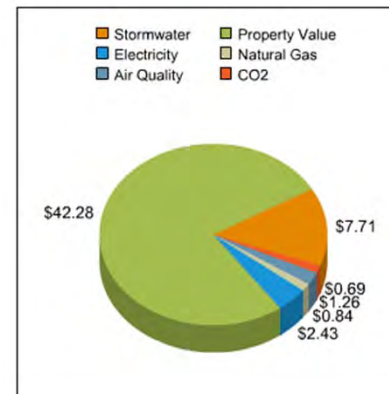
Additional Information Provided with respect to:

TREE BENEFIT CALCULATOR

The screenshot shows the website interface for the National Tree Benefit Calculator. At the top, the Arbor Day Foundation logo is on the left, and navigation links for Home, Trees, Membership, Programs, Media, Arbor Day Farm, Lied Lodge, Shop, Take Action, and Contact Us are in the center. A search bar and links for cart, wish list, and sign in are on the right. Below the navigation is a banner image of a forest. The main content area is titled "National Tree Benefit Calculator" and includes an "Instructions" section, a "You Have Chosen" section with user input (Zip Code: 40507, City: LEXINGTON, KY, Climate Zone: Lower Midwest), and a "Calculate" button.

Breakdown of your tree's benefits

Click on one of the tabs above for more detail



Ash
Fraxinus species

This 8 inch Ash provides overall benefits of: \$55 every year.

While some functional benefits of trees are well documented, others are difficult to quantify (e.g., human social and communal health). Trees' specific geography, climate, and interactions with humans and infrastructure is highly variable and makes precise calculations that much more difficult. Given these complexities, the results presented here should be considered initial approximations—a general accounting of the benefits produced by urban street-side plantings.

Benefits of trees do not account for the costs associated with trees' long-term care and maintenance. **If this tree is cared for and grows to 13 inches, it will provide \$75 in annual benefits.**



Why should you consider planting a tree(s)?

\$\$\$ Benefits To Tree Planting:

Additional Tree Benefit Calculators:

- i-Tree (<http://www.itreetools.org/index.php>)
- National Tree Benefit Calculator (<http://www.treebenefits.com/calculator/mapselect.cfm>)



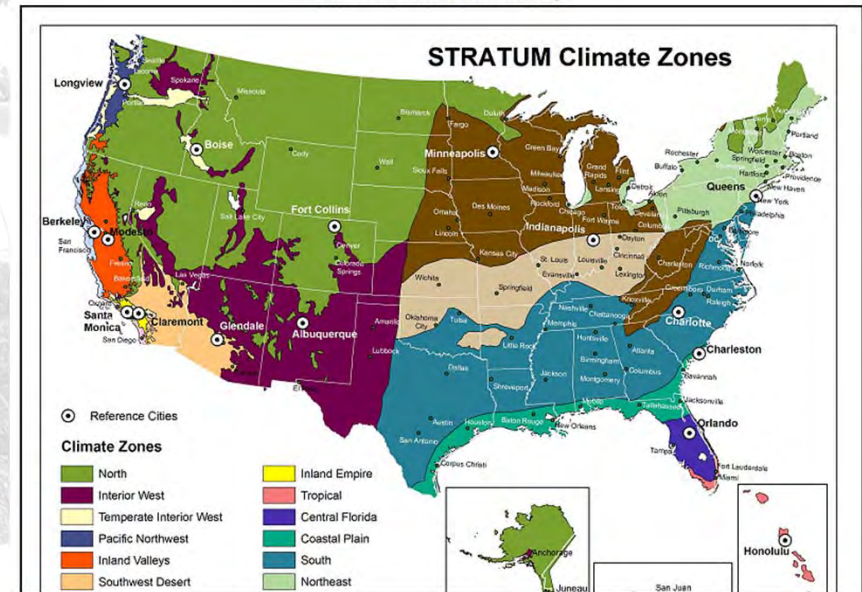
The screenshot shows the i-Tree website interface. At the top left is the i-Tree logo with the tagline "Tools for Assessing and Managing Community Forests". To the right is a search bar and a login/register section. Below the header is a large image of a city street with trees and a stop sign. A navigation menu includes Home, About, Applications, Utilities, Resources, Support, and News. The main content area features a "What is i-Tree?" section with a description of the software suite, a "What's New?" section with recent updates, and a "Featured i-Tree Project" for the Fox Valley, WI Metro Area.



National Tree Benefit Calculator

Beta

Select a zone from the map



Deciding to plant a tree...

A list of things to consider:

- Do you own the property you are planting on?
- Do you have permission?
- Who will own and/or maintain the tree once planted?
- Do you have the space and clearance to plant in?
- Consider the species carefully – if you don't know enough, do some research or speak to someone who knows.
 - Many communities have tree ordinances and preferences
 - Consult a Certified Arborist or the Urban Forester
- Plant the “right tree in the right place”...
 - The wrong tree in the wrong place can have long-term negative impacts; most important of these - Life or property

- **REMEMBER:** If you don't know if you can install a tree in your property or need assistance locating and installing a tree hire an ISA Certified Arborist.



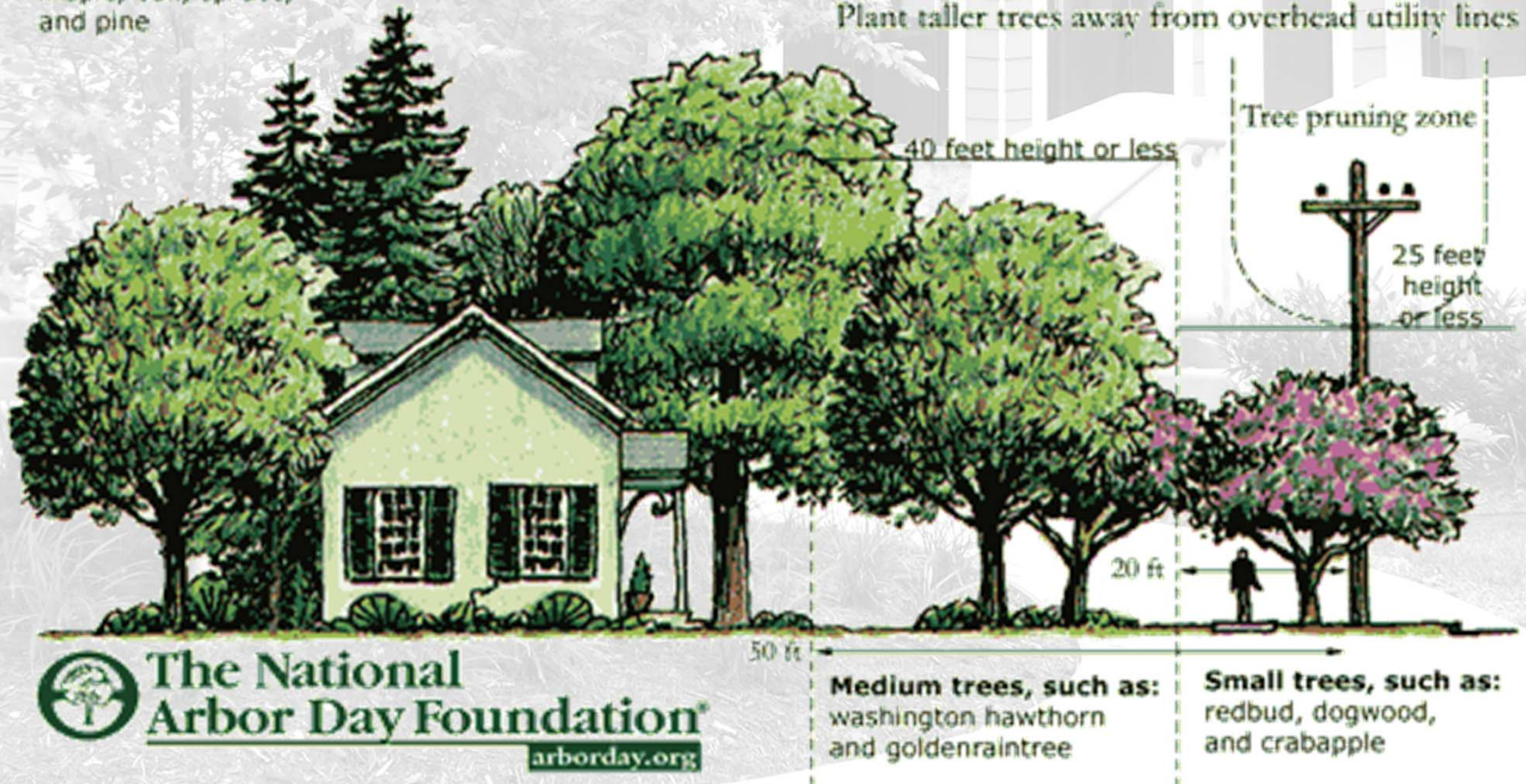
Right Tree...Right Place

Utility Corridor Guidelines

Tall trees, such as:
maple, oak, spruce,
and pine

Plant the right tree in the right place

Plant taller trees away from overhead utility lines



Planting the tree...

Check with Local Authorities Before you Start:

Street Trees

“Street trees benefit our community in many ways. They define the character of our neighborhoods and add to the value of our properties. Street trees, generally located between the sidewalk and curb, provide aesthetic, environmental and socioeconomic benefits that help improve our quality of life.

Lexington has more than 53,000 street trees varying in age, size and species.

Common tree species include varieties of maple, oak, ash, pear and sycamore.

In Lexington, street trees are the responsibility of the abutting property owner to maintain.”

Courtesy of LFUCG Division of Environmental Policy



Planting the tree...

Check with Local Authorities Before you Start:

- Consult the Urban Forestry Program at LFUCG, Division of Environmental Policy:
<http://www.lexingtonky.gov/index.aspx?page=2863>
 - Tim Queary, 859-258-3404
 - John Saylor, 859-258-3405
- LEXCALL SERVICE DESK
Dial 3-1-1 or (859) 425-2255
[MAKE A SERVICE REQUEST](#)

CLICK & CHECK OUT

**Ask the
Urban
Forester**



Planting the tree...

Check with Local Authorities Before you Start:

PERMIT TO REMOVE OR REPLACE A STREET TREE

LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT
Street Tree Removal / Replanting Permit Application
This application is for street trees only (trees in the right-of-way, between the curb and sidewalk).
If you have any questions, please call (859) 425-2558.
Please print legibly.

Property Owner Information

Name: _____ *If the tree's location is other than primary address, please complete this section:*
Address: _____ Address: _____
(City) (State) (Zip) Lexington, Kentucky _____
Phone: Primary () _____ (Zip)
Alternate () _____ *Only the property owner may apply to remove street trees*
Email address: _____

Trees to be Removed (attach additional sheets as needed)

Number _____ Species/Type _____ DBH (inches) _____
Number _____ Species/Type _____ DBH (inches) _____
(DBH = diameter at 4 1/2 feet above ground)

Reason(s) for removal

Dead Infrastructure damage *Comments: _____*
 Severe decay/rot Structural damage to tree _____
 Pathogen (bacterial/virus) Utility conflict _____
 Insect infestation Other (specify) _____
 Disease (fungal) _____

Street tree ordinance 17B-3 (removal) **Property owner's agreement**

(a) No person may remove a tree larger than three (3) inches in diameter, measured at a point four and one-half (4½) feet above the ground within the urban county government right-of-way without obtaining a permit from the urban forester or his designated arborist.
(b) The permit shall be granted provided the tree to be removed is dead or dying.
(c) The urban forester or his designee may issue permits for the removal of live trees only in special circumstances. Instances where a permit for the removal of a live tree may be issued include, but are not limited to, the following:
(1) The tree is a threat to the public safety.
(2) The tree is a threat to the health of other trees in the community, or
(3) The tree is to be replaced by a more desirable tree.
(d) If the urban forester or his designated arborist determines that a street tree is a hazardous tree, he can order the property owner to remove the hazardous tree in a timely manner, as determined by the urban forester or his designated arborist at the property owner's expense.
(e) The urban forester or his designated arborist can order the property owner to remove any street tree planted without a permit, or in violation of permit conditions.
(f) Nothing contained in this chapter is intended to infringe on the authority of the urban county engineer, pursuant to KRS 179.090, to remove trees from the right-of-way of any publicly dedicated road when the trees become a hazard to traffic.
(g) Except as provided in subsection (e) above, any person who removes a tree within the urban county government right-of-way shall replace the removed tree in accordance with the requirements set forth in section 17B-2(b). This requirement may be waived by the urban forester or his designated arborist where replacement would be inappropriate under the standards set forth in section 17B-2(b).

I agree to comply with the city's Street Tree Ordinance (Chapter 17B-3) regarding tree removal.

Property Owner's Signature _____
Date _____

Return to:
Division of Environmental Policy
Attention: JOHN SAYLOR
200 E Main Street
Lexington, KY 40507
(859) 425-2558 Fax: (859) 425-2859



Planting the tree...

Check with Local Authorities Before you Start:

- Check with the Urban Forestry Program at LFUCG, Division of Environmental Policy:

[STREET TREE GUIDELINES/APPROVED TREES](#)



Planting the tree...

Check with Local Authorities Before you Start:

- Check with the Urban Forestry Program at LFUCG, Division of Environmental Policy:
[STREET TREE GUIDELINES/APPROVED TREES](#)

Street Trees - A Benefit for the Community & the Environment

Street trees benefit you and the community in many ways. They add character to our neighborhoods, cool our homes and cities, clean our air, reduce stormwater runoff, increase property values, attract wildlife, and give us aesthetic beauty.

Property values are generally five to 20 percent higher if there are trees on the property. It makes good sense to properly care for and manage your street trees.

Chapter 17B of the Code of Ordinances, which regulates street trees in Fayette County, is administered by the Urban Forestry Program. This brochure explains the law and how street trees are to be maintained.

Who is responsible for street trees?

The answer is ... You are!
Street trees are regulated because they affect road usage, however, the care and maintenance of street trees are the *property owner's responsibility*.

The city does not maintain, plant, or replace street trees.

If a street tree is removed, property owners are required to replace the tree with a suitable species within one year. Violation of the ordinance could result in a citation.

Approved Street Trees: Refer to Planting Manual for full list of approved species

LARGE TREES (over 50 feet tall)

- American basswood (*Tilia americana*)
- American beech (*Fagus grandifolia*)
- American elm (*Ulmus americana*) only Dutch elm disease resistant varieties
- baldcypress (*Taxodium distichum*)
- chinkapin oak (*Quercus muehlenbergii*)
- European larch (*Larix decidua*)
- ginkgo (*Ginkgo biloba*) fruitless cultivars only
- Japanese zelkova (*Zelkova serrata*)
- lacebark elm (*Ulmus parvifolia*)
- London planetree (*Platanus x acerifolia*)
- Kentucky coffeetree (*Gymnocladus dioica*) fruitless cultivars only
- northern red oak (*Quercus rubra*)
- scarlet oak (*Quercus coccinea*)
- shingle oak (*Quercus imbricaria*)
- Shumard oak (*Quercus shumardii*)
- swamp white oak (*Quercus bicolor*)
- sweetgum (*Liquidambar styraciflua*)
- sugar maple (*Acer saccharum*)
- sugarberry (*Celtis laevigata*)
- tulip poplar (*Liriodendron tulipifera*)
- water oak (*Quercus nigra*)
- willow oak (*Quercus phellos*)
- white oak (*Quercus alba*)

NOTE: Native species are displayed in bold.

Planting of species not on the approved list may be allowed with approval of the Urban Forester.

For a complete list of acceptable species, please refer to the Planting Manual available online at: LexingtonKY.gov/planning.

MEDIUM TREES (25-50 feet tall)

- Allegheny serviceberry (*Amelanchier laevis*)
- amur maackia (*Maackia amurensis*)
- black gum (*Nyssa sylvatica*)
- Carolina silverbell (*Halesia tetraptera*)
- hardy rubber tree (*Eucommia ulmoides*)
- hedge maple (*Acer campestre*)
- hophornbeam (*Ostrya virginiana*)
- Japanese pagoda (*Styphnolobium japonicum*)
- Japanese snowbell (*Styrax japonicus*)
- Japanese tree lilac (*Syringa reticulata*)
- katsuratree (*Cercidiphyllum japonicum*)
- littleleaf linden (*Tilia cordata*)
- Persian parrotia (*Parrotia persica*)
- thornless honeylocust (*Gleditsia triacanthos* var. *inermis*)
- trident maple (*Acer buergerianum*)
- Turkish filbert (*Corylus colurna*)
- yellowwood (*Cladrastis kentukea*)

Street Tree Permits

Property owners are required to obtain a permit before removing and/or planting street trees. Your property will be evaluated before a permit will be issued. Applications are available online at www.LexingtonKY.gov/forestry or by calling the Urban Forestry Program at 425-2859.

Low-income property owners may be eligible to receive financial assistance for street tree removal, stump grinding, and tree planting. Please call 425-2859 for more information.

Before planting, call 8-1-1 or 1-800-752-6007 to check for underground utilities.

SMALL TREES (10-15 feet tall)

- American hornbeam (*Carpinus caroliniana*)
- amur maple (*Acer ginnala*)
- crabapple varieties (*Malus* spp.)
- eastern redbud (*Cercis canadensis*)
- white fruited tree (*Chionanthus virginicus*)
- flowering dogwood (*Cornus florida*)
- hawthorn varieties (*Crataegus* spp.)
- Japanese cherry (*Prunus* spp.)
- kousa dogwood (*Cornus kousa*)
- red horsechestnut (*Aesculus x carnea*)
- tatarian maple (*Acer tataricum*)

Prohibited Street Trees:

Trees that produce large and/or messy fruit or are structurally weak are not allowed as street trees.

- all flowering pears (*Pyrus calleryana*)
- birch varieties (*Betula* spp.)
- box elder (*Acer negundo*)
- catalpa varieties (*Catalpa* spp.)
- common apple (*Malus pumila*)
- evergreens
- ginkgo; female (*Ginkgo biloba*)
- goldenrain tree (*Koeleruteria paniculata*)
- mulberry varieties (*Morus* spp.)
- pin oak (*Quercus palustris*)
- Norway maple (*Acer platanoides*)
- Siberian elm (*Ulmus pumila*)
- silver maple (*Acer saccharinum*)
- tree of heaven (*Ailanthus altissima*)



Planting the tree...

Check with Local Authorities:

- Consider whether or not you are going to be able to maintain:
[STREET TREE CLEARANCE](#)



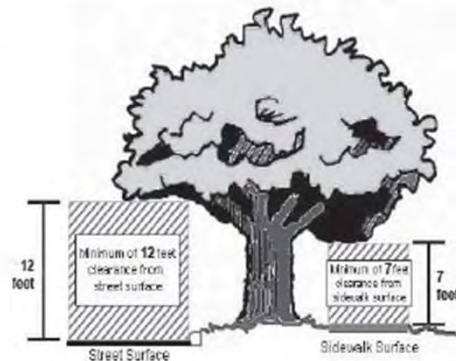
Street Tree Clearances

Street trees are an important part of Lexington's neighborhoods. In addition to adding beauty, they also increase property values and reduce energy costs.

Property owners are required to prune their street trees to maintain a 7-foot clearance above a sidewalk and a 12-foot clearance above a street.

Maintaining safe tree clearance is important since pedestrians use the sidewalks and trucks and emergency vehicles need to be able to travel your street to provide you with vital services such as trash and recycling pickups, mail delivery, and street sweeping.

Non-compliance with Lexington's street tree ordinance may result in a possible fine or fines.



Planting the tree...

Check with Local Authorities:

Additional Information Provided with respect to:
[DID YOU GET A GREEN DOOR HANGER NOTICE?](#)

Did you get one of these?

A friendly reminder ...



Street trees are an important part of Lexington's neighborhoods. In addition to adding beauty, they also increase property values and reduce energy costs.

Property owners are required to prune their street trees to maintain a 7-foot clearance above a sidewalk and a 12-foot clearance above a street.



We want to let you know that your street trees do not currently meet those standards.

Maintaining safe tree clearance is important since pedestrians use the sidewalks and trucks and emergency vehicles need to be able to travel your street to provide you with vital services

(CONTINUED ON THE BACK)

If you recently received a lime green door hanger (as shown) on your front door, that means a staff member of the Lexington-Fayette Urban County Government has visited your property and determined that your street tree needs to be pruned.

Street trees should be pruned so that they are at least 7 feet above the sidewalk and 12 feet above the roadway.

You will notice that there is an inspection date printed on the door hanger detailing the date of the original inspection. Property owners have 30 calendar days to prune their street tree(s) before a re-inspection will be done by the city.

Property owners who do not comply can be issued a Notice of Violation followed by a possible civil citation and fine. If a street tree is judged to be an imminent danger to public safety, the city may use a private contractor to correct this situation. The city will seek reimbursement of these costs from the property owner and also has authority to place a lien on the property for non-payment.

Typically, every house in a neighborhood with street trees that require pruning will receive a door hanger.

The responsibility for a street tree that is located on a property line is shared by the two neighbors in question. These neighbors may elect to split the cost for tree care in some manner or they may decide that just one of them will take responsibility for the tree. This is entirely their choice; the city will not intervene in this decision. However, if such a street tree is not pruned by the re-inspection date, both property owners will receive a Notice of Violation.

If you would like to learn more about the city's Urban Forestry Program please call LexCall at 3-1-1 or (859) 425-2255.

livegreenlexington



Deciding to plant a tree...

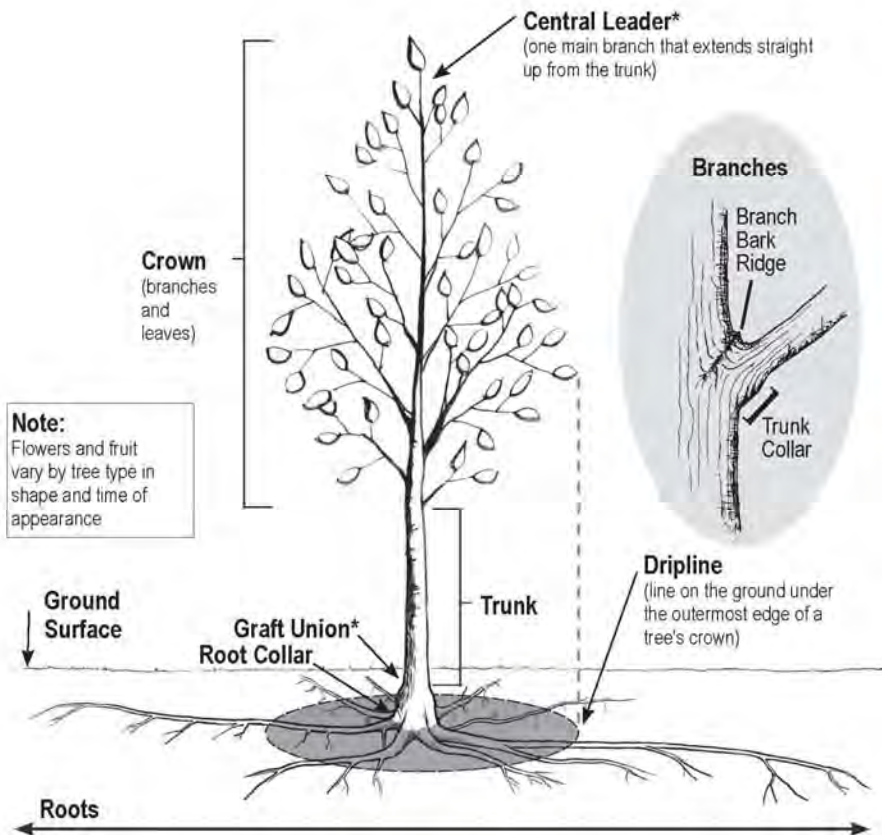
Have a Plan.



Selecting a Good tree...

A List of Things to Consider:

Deciduous Model (loses leaves in the autumn)



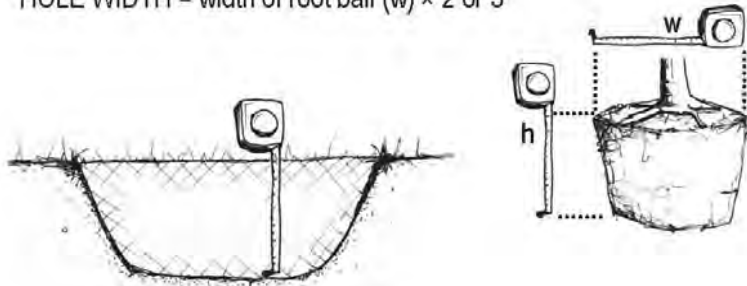
- Is the nursery/garden center well-kept? It could be an indication of the plant material conditions (stress, root rot, diseases, long-term issues).
- Does the tree selected look healthy?
- Where was the tree grown?
- Is it in a pot/container or burlap?
- Is the display lot/bed sopping wet or bone dry?
- Is the soil covering the trunk?
- Do the leaves look uniformly green (or proper color)?
- Is the tree symmetrical? Straight?
- Is there 1 central leader/stem?
- Do the trunk and branches have noticeable damage? Scrapes/Cuts?



Planting the tree...

Creating a Proper Tree Planting Pit:

HOLE DEPTH = height of root ball (h)
HOLE WIDTH = width of root ball (w) x 2 or 3



[!] A root ball should remain a root ball. If it starts to fall apart as you take off the wire and burlap, backfill the hole with enough soil to stabilize it. Then carefully remove the wire and burlap, and backfill as you go to keep the root ball intact.

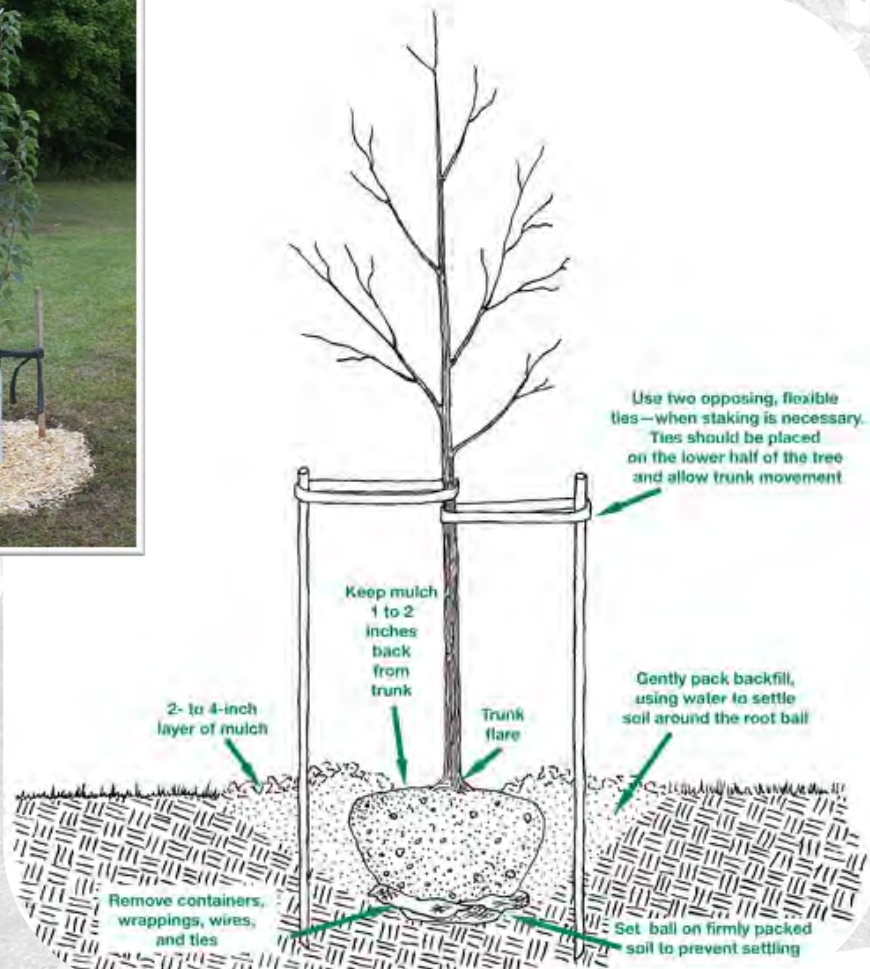
- Dig a hole, preferably by hand, to a depth = to the ball height and 2-3 times the width of the ball.
- Taper the walls of the hole – no straight sides.
- Scarify or roughen the walls of the hole – no smooth spots.
- Remove root ball from container/burlap & wire cage.
- Keep the hole free of rock and free water – no mud.
- Backfill the hole with existing soil – add organic material if soil is poor.



Planting the tree...

Tree Placement & Staking:

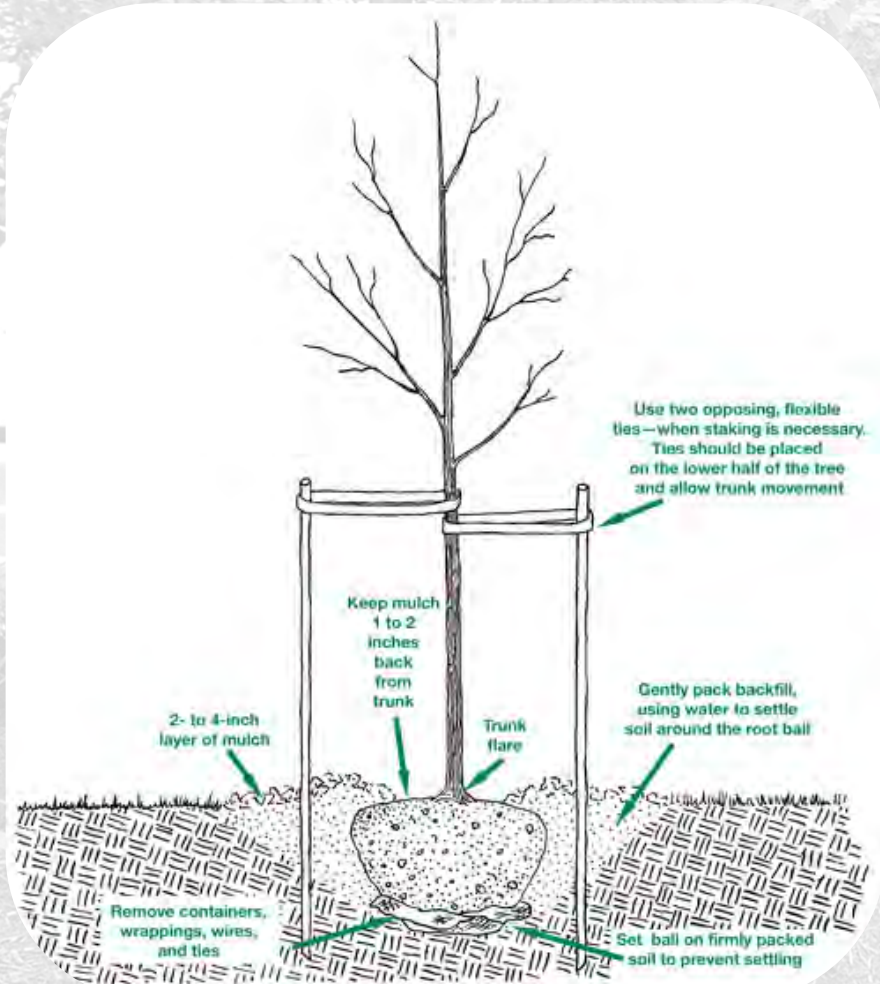
- Set the tree straight in the ground. Check plumb from all sides.
- Consider if Staking is necessary for your tree: Is it in a location vulnerable to high winds? If so, stake... If not, don't!



Planting the tree...

Proper Mulching Technique:

- Backfill the hole around the ball compacting by hand as you go – be careful not to put soil against the trunk and trunk flare!
- Provide 2"-4" of organic mulch. Keep off of the trunk! DO NOT VOLCANO MULCH!!!



Planting the tree...

Proper Mulching Technique:

- Backfill the hole around the ball compacting by hand as you go – be careful not to put soil against the trunk and trunk flare!
- Provide 2”-4” of organic mulch. Keep off of the trunk! DO NOT VOLCANO MULCH!!!



Planting the tree...

Proper Mulching Technique:

Additional Information Provided with respect to:

[HOW TO MULCH AROUND A TREE](#)

Protect your investment!

How to properly mulch your street tree

The right way:

The recommended mulching depth is 1 to 3 inches.

Mulch out to the tree's drip line or beyond.

Place mulch several inches away from the trunk so that the flare of the trunk is exposed. Avoid placing mulch against the trunk of the tree.

If mulch is already present, check the depth. Do not add mulch if there is a sufficient layer in place. Rake the old mulch and remove or aerate it to give the mulch a fresh appearance.

Organic mulches such as hardwood bark and compost are usually preferred to inorganic materials such as decorative stone because of their soil-enhancing properties.



The payback:

- Conserves moisture.
- Adds nutrients.
- Reduces competition from weeds and grasses.
- Reduces soil erosion.
- Improves soil structure.
- Serves as an insulation blanket during temperature extremes.
- Reduces damage caused by string trimmers.

The wrong way:

As beneficial as mulch is, too much mulch can be harmful.

Unfortunately, the practice of over mulching is getting more and more common. You can help stop over mulching by learning about how to properly mulch a tree.

Never practice "volcano mulching." That happens when mulch is piled up against the tree. Adding new mulch each year, often for the sake of refreshing the color, creates a build-up to depths that can be unhealthy for the tree. Cypress mulch for example, takes several years to decompose and does not need to be replenished annually.

Mulch piled up against the tree often leads to surface root development and can create an environment for decay organisms and rodents.



Planting the tree...

Tree Protection & Wrapping

- Consider wrapping or protecting the trunks of newly planted Deciduous trees and thin-barked trees if:
 - Trees will be exposed to extreme temperature variations – sun scald threat.
 - Trees will be affected by wildlife
 - Trees will be at risk from string-trimmers and lawn mowers.
 - Consider investing in screen wrapping, plastic tube/pipe wraps.
- Avoid using wraps that come into direct contact with the trunk (paper wraps, etc.).



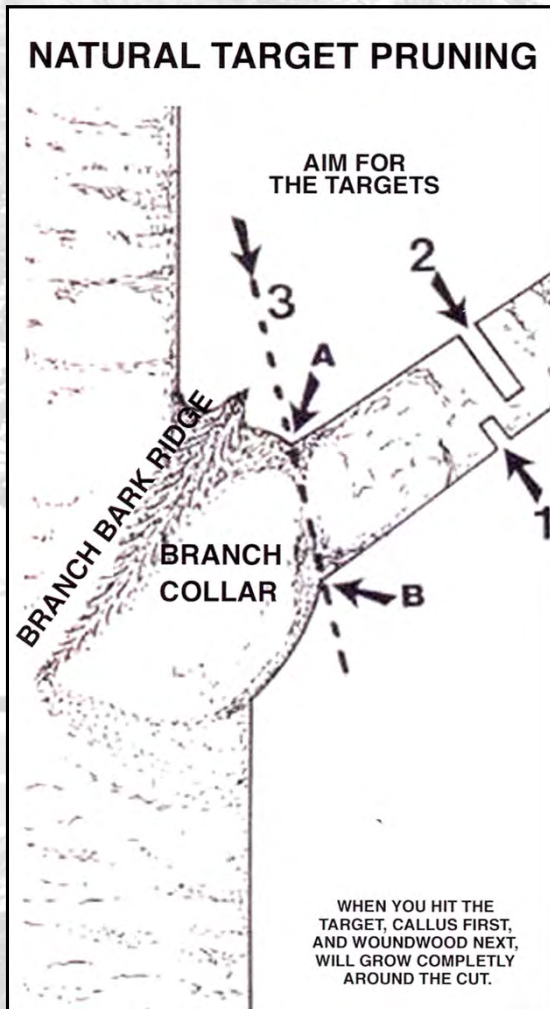
Planting the tree...

Tree Protection & Wrapping



Caring for the Tree...

Pruning & Maintenance



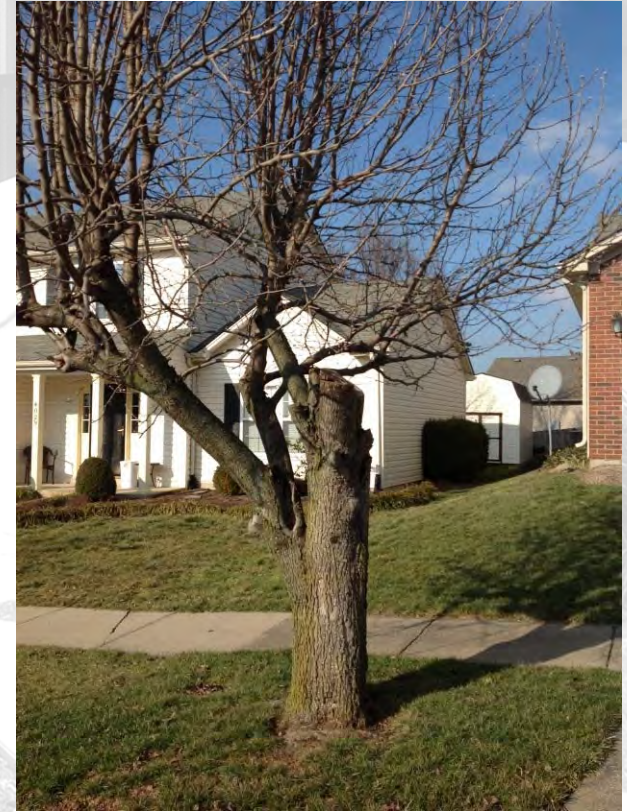
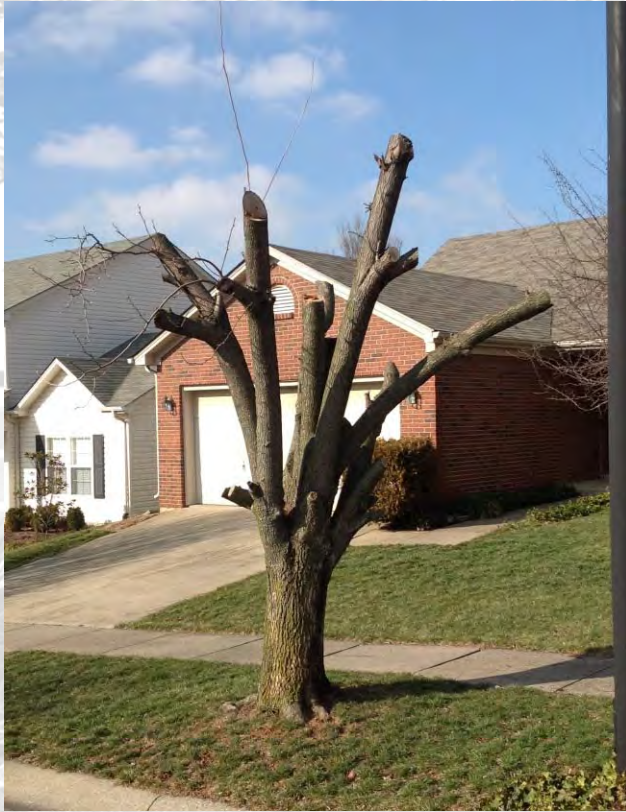
- An important part of tree planting and ownership is maintenance.
- Pruning and annual care are essential to maintaining healthy, rewarding, and safe trees.
- Pruning should be done to prevent future problems and when desired to suit the Owner's aesthetic desires – *to a point.*
- NEVER “Top” a tree!
- Avoid creating Lollipop trees. It's not natural!
- **REMEMBER:** If you can't reach it you need to hire a Certified Arborist.
- If you don't know how and what to cut hire a Certified Arborist.



Caring for the Tree...

Pruning & Maintenance

Topping is Bad for Trees!!!



Good Resources for Property Owners...

And Do-It-Yourselfers:



-  www.treesaregood.org
-  www.treeownersmanual.info
-  www.isa-arbor.com
-  www.kyisatree.org
-  www.lexingtonky.gov/index.aspx?page=295
-  www.lexingtonky.gov/index.aspx?page=286
-  www.lexingtonky.gov/index.aspx?page=286
-  www.lexingtonky.gov/index.aspx?page=286
-  <http://forestry.ky.gov>
-  www.kyasla.org

OR email me at:

jonathan@pla-design.com



QUESTIONS???

Feel Free to Download This Presentation in PDF
format from my Website at:

<http://www.pla-design.com/downloads.html>

