Planting Trees Around Your Home

Why should you plant trees around your home? Simple. It will save you money! As few as three trees around your home can cut your air conditioning bills in half. Trees will also increase the value of your home.

Where to Plant Trees to Save Energy

- The east, west and south walls of your house receive the most sun. Plant at least three deciduous (leaf-losing) trees around your house to shade these three sunniest sides.

- Trees can also save energy in cold weather. A row of evergreen trees on the north side of your house (or the side with prevailing winter winds) can serve as a windbreak and lower heating costs.

- Plant a tree to shade the area around and over your air conditioner, but be sure to keep the air intake area clear of branches. You’ll save money if your air conditioner draws air from a cool, shaded area.

- More home energy is lost from windows than walls, so locate your trees to specifically shade windows. Plant a tree east or southeast of east-facing windows; south, southeast or southwest of south-facing windows; or west or southwest of west-facing windows.

- You want trees near enough to shade, but not too close to overhang the roof. Use the following table as a guide:

<table>
<thead>
<tr>
<th>Spacing Guide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tree Size</td>
</tr>
</tbody>
</table>

http://www.lpb.org/
The Forest Where We Live

<table>
<thead>
<tr>
<th>Small trees (to 25')</th>
<th>from wall</th>
<th>from house corner</th>
</tr>
</thead>
<tbody>
<tr>
<td>6' to 10'</td>
<td>5' to 8'</td>
<td></td>
</tr>
<tr>
<td>Medium trees (25'-50')</td>
<td>10' to 15'</td>
<td>8' to 12'</td>
</tr>
<tr>
<td>Large trees (50'+)</td>
<td>15' to 20'</td>
<td>10' to 15'</td>
</tr>
</tbody>
</table>

- Make sure the planting site has enough room for roots and branches to reach full size. Be sure to avoid both overhead and underground utility and sewer lines!

### Planting Trees Near Utility Lines

<table>
<thead>
<tr>
<th>Maximum Tree Height</th>
<th>Minimum Distance from Lines</th>
</tr>
</thead>
<tbody>
<tr>
<td>0'-30'</td>
<td>0'</td>
</tr>
<tr>
<td>30'-50'</td>
<td>35'</td>
</tr>
<tr>
<td>50'+</td>
<td>50'</td>
</tr>
</tbody>
</table>

### What to Avoid:

- Don't plant tall trees within 35' of overhead utility lines, as they will need recurring and often disfiguring pruning in later years.
- Don't plant large trees in restricted growing spaces.
- Don't obstruct airflow to chimneys.
- Don't block windows or scenic views.
- Don't plant trees or shrubs that would block a driver's view of signs, signals or intersecting streets when planting near street corners.

### Choosing a Tree

Choose at least a 5-6' tree grown to the standards of the American Association of Nurserymen. Make sure the tree is suitable for your climate and the specific conditions of your yard, such as moisture and acidity. Ask the nursery staff for assistance.

### Planting the Tree

The ideal time to plant trees and shrubs is during the dormant season (fall) after leafdrop or early spring before budbreak. This period of cool weather allows plants to establish roots in their new location before spring rains and summer heat stimulate new growth.

- Mark out a planting area that is 2 to 5 times wider (the wider, the better) than the diameter of the root ball. Loosen this area with shovels or a tiller to about 12" deep. Rake out all vegetation and large rocks. Contrary to popular belief, no organic matter (such as peat moss) should be added. Eventually, the roots must grow in existing soil and it is best to have them adapt to this soil as soon as possible.

- In the center of the area, dig a hole about twice as wide as the root ball and deep enough so that the top of the root ball is level with (or no more than 2 inches above) the existing
soil level. The bottom of the ball needs to rest on solid, undisturbed soil. It is best not to use fertilizer until the plant is well-established. Good, rich soil placed in the hole is usually adequate.

- Place the tree in the hole so the trunk is straight, and then cut and remove all wire, rope or twine around the root ball and tree trunk. When planting container-grown trees, wait to remove the pot at this step so the roots area not exposed to air that may dry and kill them. With container-grown trees and shrubs, roughen the outside of the root ball with your fingers or cut vertical slits to break up the root mass that has started encircling the plant. These circling roots may eventually girdle and kill the tree. If the root ball is burlapped, cut several vertical slits in the burlap around the ball, removing all burlap from the top of the ball.

- **Backfill** with the original soil until the hole is half full. Do not add organic matter. Flood the hole with a slow hose, and tap GENTLY with your foot to firm the soil. Repeat until the hole is full. Do not press too firmly, only enough to hold the tree upright. This method of backfilling with soil and water will remove large air pockets.

- Construct a small dam three feet in diameter around the tree. This dam will help hold water until it percolates into the soil. Cover the entire loosened area of soil with two to four inches of **mulch**, but do not place mulch within 6" of the tree trunk. Mulch is simply organic matter applied to the area at the base of the tree. Some good choices are leaf litter, pine straw, shredded bark and twigs, peat moss and wood chips. Mulch will hold water for the tree, reduce the amount of grass and weeds around the tree, provide a slow source of nutrients and organic materials, and moderate root zone temperature. Maintain this area by adding mulch as needed for approximately two years. Do not allow other vegetation into this mulched area, as it will compete for water, nutrients and air that the tree roots need.

- If the tree will stand alone, staking is not recommended. If you must stake, be sure to pad any wire or twine that touches the tree (old garden hose is excellent) and allow the tree to move slightly with the wind. Periodically check wires for proper looseness, and remove all wire and stakes, if possible, after one year.

- Wrapping the trunk is not recommended. Wrapping material can lead to insect and disease problems.

**Caring for Your New Tree**

- Since many roots were removed when the tree was dug in the nursery, **regular watering** is important to aid the development of a strong new root system in the new site. Water trees at least once a week, barring rain, and more frequently during hot weather. When
the soil is dry four inches below the surface, it is time to water. A thorough soaking is better than several sprinklings, which just wet the surface.

- Wait six months before fertilizing, unless you use a slow-release fertilizer.
- Watch for signs of insects or disease, including wilting leaves, changes in leaf color, webs, and sticky material on the leaves. Contact your cooperative extension service or a qualified arborist if you notice these signs.

**Mature Tree Care**

When one considers the value of a healthy tree, providing regular care for your trees is like putting money in the bank. An effective tree maintenance program should include four major practices: inspection, mulching, fertilizing and pruning.

**Tree Inspection**

Tree inspection will call attention to any change in the health of the tree before the problem becomes too serious. During the inspection, be sure to examine four characteristics of tree vigor: new leaves or buds, leaf size, twig growth, and crown dieback.

Any abnormalities found during this inspection should be noted and watched closely. If you are uncertain as to what should be done, report your findings to your local arborist or tree care professional for advice or treatment.

**Mulching**

Mulching can cut down on stress by providing trees with a stable root environment that is cooler and contains more moisture than the surrounding soil. Mulch can also prevent mechanical damage by keeping machines such as lawnmowers away from the base of the tree. Further, mulch acts to reduce competition from surrounding weeds and turf. To be most effective in all of these functions, mulch should be placed four inches deep and extend as far as possible from the base of the tree.

**Fertilization**

Do not add fertilizer at planting time. Sprinkle a balanced fertilizer (one that contains nitrogen, phosphorous, potassium and micronutrients) over your planting area the next spring, and then again 2-3 times throughout the growing season.

Always follow the label on the fertilizer as to amount to apply; too much will injure the tree. Trees and grass do not require the same fertilizer, and definitely not at the same rate. Remember that the decomposing mulch layer will make nutrients available to the tree as well.

**Pruning**

At planting time check and remove only dead or broken limbs, or limbs that are rubbing together. Subsequent pruning should be done regularly to control the shape of the tree and to keep branches from harming surrounding structures or people. For most trees, the best time to prune is winter to early spring. Trees pruned at this time of year close their wounds more quickly.

When pruning, follow the three-cut method:

1. Undercut 12"-24" up from the branch collar. This keeps the bark from tearing.

2. Make the second cut from the top all the way through the branch, 2" to 3" above the first cut.
3. The final cut should be just beyond the branch collar. Support the stub so it does not tear the bark.