Planting Trees
A We Energies guide to planting the right tree in the right place
Why plant trees?

Trees have many benefits. Consider the following when making your planting decisions:

**Trees can decrease your energy cost.**

By planting the right tree in the right place, you can reduce your energy bill by as much as 30 percent.

**Trees provide summer relief.**

Trees such as Maple, Linden or Honey Locust placed along the south, southwest or west sides of a building provide excellent shade from the summer sun. The temperature under a shade tree can be up to 10 degrees cooler than out in the open. This cooling can be passed along to the interior of your house. Plant shade trees about 15 feet away from your house for maximum benefit.

**Trees provide winter help.**

Windbreaks of evergreen trees such as Spruce or Pine can cut down on the chilling winter wind that can cool your house. To reduce winter heating costs, consider planting a row of evergreens along the windward side of your house to deflect prevailing winds. Planting shrubs on the windward side also will help eliminate wind and control snow drifts.

**Trees can increase your property value.**

Trees are worth much more than just the value of their wood. Studies done by the U.S. Forest Service have shown that trees can increase the value of residential property by as much as 25 percent. Also, properties with trees tend to sell faster than those with fewer or no trees. Trees can create a sense of relaxation and serenity that can’t be measured in dollars.

**Trees have a positive environmental impact.**

Trees and other plants help to:
- filter sediments and chemicals out of groundwater
- provide privacy
- reduce noise pollution
- improve air quality
- encourage wildlife diversity

Where should I plant my trees?

Once you determine why you want to plant trees, you can choose the location. While well-placed trees can help conserve energy and add to the appearance of your home, a tree in the wrong place can be harmful. Remember, the small tree you plant today will increase in size over many years.

**Make sure you give the tree adequate room to grow.**

Never plant trees with a mature growth height of greater than 25 feet directly below overhead power lines. Trees reaching 25 to 40 feet in height should be planted at least 30 feet from power lines. And, trees growing to over 40 feet tall should be located a minimum of 50 feet from power lines.

Avoid planting trees too close to a driveway or sidewalk. Large tree roots can lift and break pavement, creating hazards and additional repair costs. Trees with widespread or low-hanging branches can scratch cars or obstruct a driver’s view.

**Be aware of your property boundaries and surroundings.**

Utility workers need space to access meters and pad-mounted electrical transformers on your property. When planting, plan for adequate room around these locations to ensure the delivery of efficient service. We recommend at least a 10-foot clearance in front of transformers and a 3-foot clearance around the sides and rear.

Always check with your local utilities on the location of underground services before you start planting, as many utility facilities are buried underground. Call to have your property marked for underground utilities at least three working days before you plan to dig. This free service can help you stay safe and avoid costly damage to buried utilities.

Diggers Hotline (Wisconsin) 800-242-8511 or 811
Miss Dig (Michigan) 800-482-7171 or 811

**ASPLUNDH** We Energies and Asplundh Tree Expert Co. work together to provide safe, reliable electric service. Asplundh performs required tree-trimming services for We Energies. Asplundh crews are professionally trained to recognize hazardous situations and use proper pruning techniques to correct those situations.
What trees should I plant?

There are many species of trees available to plant in your yard. We have put together a chart that describes a number of different trees suitable for your area. Although this list is not all-inclusive, it will serve as a good reference and starting point for choosing your tree.

<table>
<thead>
<tr>
<th>Common name (Scientific name)</th>
<th>At maturity height</th>
<th>Growth rate</th>
<th>Flower/fruit/seed</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gray Dogwood (Cornus sericea)</td>
<td>8-10'</td>
<td>Moderate</td>
<td>White flowers blooming in late spring. White fruit on red pedicels develop later in summer.</td>
<td>Burgundy red fall color. Very tolerant to a variety of conditions and grows well in full sun or shade.</td>
</tr>
<tr>
<td>Smooth Sumac (Rhus glabra)</td>
<td>8-12'</td>
<td>Fast</td>
<td>Red fruit in summer stays throughout winter.</td>
<td>Red fall color. Tolerates dry soil. Grows best in full sun.</td>
</tr>
<tr>
<td>Burning Bush (Euonymus alata)</td>
<td>8-12'</td>
<td>Moderate</td>
<td>Twigs have winged tip.</td>
<td>Bright pink or red fall color. Intolerant to poorly drained sites. Grows in full sun to shade.</td>
</tr>
<tr>
<td>American Cranberrybush Viburnum (Viburnum trilobum)</td>
<td>10-12'</td>
<td>Moderate</td>
<td>White flower clusters. Translucent red fruit often used in jelly or jam.</td>
<td>Bright red to maroon fall color. Tolerates wet sites and full to partial shade.</td>
</tr>
<tr>
<td>Common Lilac (Syringa vulgaris)</td>
<td>10-12'</td>
<td>Moderate</td>
<td>Highly fragrant flowers vary in color from white to pink to purple.</td>
<td>Blooms in May. Color only in spring. Adaptable to a wide variety of soil types. Requires full sun.</td>
</tr>
<tr>
<td>Nannyberry Viburnum (Viburnum lentago)</td>
<td>10-15'</td>
<td>Moderate</td>
<td>White flowers bloom in spring. Fruit turns from blue to black in fall.</td>
<td>Fall color varies from orange to red. Tolerant to a wide variety of soil conditions. Grows in sun or shade.</td>
</tr>
<tr>
<td>Crabapple (Malus spp.)</td>
<td>10-20'</td>
<td>Slow to moderate</td>
<td>Flower color varies from white to red and blooms in the spring. Fruit ranging in color from green and yellow to red and is attractive to birds.</td>
<td>Yellow and red fall color. Prefers full sun and is tolerant to a wide variety of soils. Look for disease resistant varieties.</td>
</tr>
<tr>
<td>Apple Serviceberry (Amelanchier grandiflora)</td>
<td>10-25'</td>
<td>Moderate</td>
<td>White flowers emerge in spring. Red or purple fruit.</td>
<td>Blooms in early spring. Multiple narrow round trunks. Yellow to red fall color. Tolerant to a wide variety of soils and full sun to shade. Attracts a variety of wildlife species.</td>
</tr>
<tr>
<td>Amur Maple (Acer ginnala)</td>
<td>15-20'</td>
<td>Slow to moderate</td>
<td>Winged seeds often referred to as helicopters due to the way they rotate to the ground.</td>
<td>Often multi-stemmed with compact lower branches. Red to orange fall color. Shade tolerant and very hardy in cold temperatures. Intolerant to poorly drained soils.</td>
</tr>
<tr>
<td>Hawthorn (Crataegus spp.)</td>
<td>15-25'</td>
<td>Moderate</td>
<td>Five petal white flowers bloom in late spring to early summer. Bright red fruit stay on branches into fall.</td>
<td>More than 100 species of Hawthorne. Typically seen with single trunk and long, slightly drooping branches. Prefers dry soils and plenty of sun.</td>
</tr>
<tr>
<td>Japanese Tree Lilac (Syringa reticulata)</td>
<td>15-25'</td>
<td>Moderate</td>
<td>White plume shaped flowers bloom in early summer.</td>
<td>Works well in group plantings. Prefers full sun and well drained soil.</td>
</tr>
<tr>
<td>Techyn Arborvitae (Thuja occidentalis)</td>
<td>15-20'</td>
<td>Moderate</td>
<td>Dark green, rounded needles.</td>
<td>Very adaptable to a wide variety of soils. Makes a good screen tree.</td>
</tr>
<tr>
<td>Black Spruce (Picea mariana)</td>
<td>25-30'</td>
<td>Slow</td>
<td>Egg-shaped lavender to purple cone turns brown when mature.</td>
<td>Slender tree with drooping branches. Long lived. Grows well in wet or poorly drained soils.</td>
</tr>
<tr>
<td>Eastern Red Cedar (Juniper virginiana)</td>
<td>25-30'</td>
<td>Slow to moderate</td>
<td>Small dark blue cone (appearing berry-like) with white powdery film.</td>
<td>Pyramid shape, single trunk is often crooked. Reddish-brown winter color. Requires moderate sun and prefers dry soils.</td>
</tr>
<tr>
<td>Hackberry (Celtis occidentalis)</td>
<td>40-60'</td>
<td>Moderate to fast</td>
<td>Small green flowers. Green berry-like fruit turns deep purple in fall.</td>
<td>Single trunk with slightly drooping branches. Yellow fall color. Sturdy and tolerant - grows well in a wide range of soils. Best in full sunlight.</td>
</tr>
<tr>
<td>Baldcypress (Taxodium distichum)</td>
<td>50-70'</td>
<td>Moderate</td>
<td>Small 12-inch cones attractive to wildlife.</td>
<td>Pyramidal upright shape. Tolerant of urban soils and moist conditions. Deciduous conifer with bronze fall color. Prefers full sun.</td>
</tr>
<tr>
<td>Thornless Honey Locust (Gleditsia triacanthos)</td>
<td>40-60'</td>
<td>Moderate</td>
<td>Large pea-like purplish-brown pod.</td>
<td>Single trunk often divides low with broad crown. Yellow fall color. Grows best in most rich soil with sun.</td>
</tr>
<tr>
<td>White Spruce (Picea glauca)</td>
<td>30-50'</td>
<td>Moderate</td>
<td>Stiff, short, pointy needle. Short, light brown colored cone.</td>
<td>Pyramid shape, lower branches are widest. Will grow in a wide variety of soils.</td>
</tr>
<tr>
<td>Redmond Linden (Tilia x Redmondii)</td>
<td>50-60'</td>
<td>Moderate</td>
<td>Small, fragrant flower blooms in June.</td>
<td>Pyramid shape crown. Light green to yellow fall color. Versatile shade tree.</td>
</tr>
<tr>
<td>Freeman Maple (Acer x Freemanii)</td>
<td>50-60'</td>
<td>Fast</td>
<td>Seedless variety available.</td>
<td>Bright red fall color. Tolerant to soils with higher pH. Requires full sun to partial shade. Naturally occurring hybrid.</td>
</tr>
<tr>
<td>Bar Oak (Quercus macrocarpa)</td>
<td>70-80'</td>
<td>Slow to moderate</td>
<td>Large copped acorns attractive to wildlife.</td>
<td>Very long lived and hardy tree once established. Very tolerant of urban soils and shows resistance to Oak Wilt. Prefers full sun.</td>
</tr>
</tbody>
</table>

For more details on various tree species, consult your local nursery, arborist or municipal forester. You can find a list of Wisconsin’s certified arborists at the Wisconsin Arborist Association’s website: www.waa-isa.org, then click on “Certified Arborists.”
How do I plant and maintain my trees?

The best time of year to plant trees is either in the spring or early autumn. It is best to avoid hot, dry days when planting. By following the steps below provided by the Wisconsin Department of Natural Resources and by referring to the planting diagram, you can increase your chances of growing a strong, healthy tree.

1. After having your property marked for underground utility lines, dig a shallow, wide planting hole. The hole should be about three times as wide as the diameter of the root system. Leave an undisturbed mound of soil in the bottom of the hole for the tree to rest on. Taper the sides of the hole and gently loosen the soil around the hole to promote root growth. The hole should be slightly shallower than the depth of the root system.

2. If the tree is container grown, remove the container from around the root system and check for the root collar or trunk flare (this is where the roots start to spread at the base of the tree). If the root system is wrapped in burlap, use a stiff wire to gently probe through the burlap next to the trunk to find the root collar.

3. Carefully place the tree in the hole so that the root collar is about three times as wide as the diameter of the root system. Leave an undisturbed mound of soil in the bottom of the hole for the tree to rest on. Taper the sides of the hole and gently loosen the soil around the hole to promote root growth. The hole should be slightly shallower than the depth of the root system.

4. Begin backfilling using the soil removed from that location. Slowly settle into place. When the hole is about half full, remove any air pockets that form and will help the tree settle into place. When the hole is about half full, remove the twine and peel back the burlap from around the root system. Cut off or bury the excess burlap. Continue filling and watering until the tree is firmly in place. It is a good idea to periodically check to make sure the tree is still straight throughout this process.

5. Use mulch or wood chips around the planting area to keep the soil cool and moist. A 2- to 4-inch layer is recommended. Avoid placing mulch directly in contact with the tree trunk as this can cause decay of the living bark at the base of the tree.

6. It is best to avoid staking trees. If you are planting in a very windy place, it may be necessary. If you must stake, use wide bands of nylon strap to support the tree upright. Make sure the tree has room to move a little. Do not pound the stakes through the root ball and remember to remove all staking hardware within one year after planting.

Generally, it is not recommended to fertilize or prune trees at the time of planting. Monitor your tree for problems such as disease, insects and broken or dead limbs. Proper watering is important. Too much or too little water may cause leaves to turn yellow and fall off. Check your trees at least once a week and more often in hot, dry weather. With proper care, the investment in your trees will pay off in the many years to come.

Ten safety tips to remember

1. Never play in trees growing near power lines.
2. Don’t build a tree house or anything else in a tree that is near a power line.
3. Never prune trees near power lines yourself. Pruning near power lines only should be done by a We Energies line clearance arborist. Report trees with branches growing near power lines by calling 800-242-9137. We will evaluate and determine the best course of action.
4. Extensive tree trimming and tree removal are best left to professionals. Visit www.waa-isa.org to find a certified arborist in your area.
5. Consider replacing tall-growing trees that are planted under power lines before they can cause problems. Low-growing trees and bushes are safe and just as attractive.
6. Call to have your underground utilities marked at least three days before you plan to dig or plant trees.
7. A tree is not a safe shelter in a lightning storm. A tall, wet tree can attract electricity by acting as a lightning rod.
8. Never climb utility poles or touch electric power lines.
9. Never touch a fallen power line, even if it’s not sparking. If you see one, call We Energies immediately.
10. Remember: Always plant the right tree in the right place.

Where can I get more information?

We Energies
Customer service
800-242-8137
www.we-energies.com
Forestry department
www.we-energies.com/forestry

Natural gas leak and/or natural gas safety hazard
800-261-5325

Power outage and/or electric safety hazard (non-medical)
800-862-4797

Diggers Hotline (Wisconsin)
800-242-8511 or 811
Miss Dig (Michigan)
800-482-7171 or 811

American Transmission Company
www.atcllc.com

Other resources
Wisconsin Arborist Association
www.waa-isa.org
Wisconsin Department of Natural Resources
www.dnr.state.wi.us

UW-Extension
www.uwex.edu/ces/wihort/index.html

National Arbor Day Foundation
www.arborday.org

We Energies has been a certified Tree Line USA utility since 1999. The Tree Line USA program is sponsored by the National Arbor Day Foundation in cooperation with the National Association of State Foresters and recognizes public and private utilities across the nation that demonstrate practices that protect and enhance America’s urban forests.