Planting Trees

Your guide to planting the right tree in the right place

we energies

we energies

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From splendid beauty to energy conservation, trees are a landscape investment for a lifetime. Simply by planting trees, you can:

- **Create an enjoyable place for outdoor living.**
- **Reduce your heating and cooling costs.**
- **Enjoy clean, fresh air.**
- **Increase the value of your property.**

Selecting the right tree for the right location will help you achieve long-term benefits from your investment. Planning is the key to reaching your ultimate landscaping goals. Trees planted in the wrong place can cause property damage and become a nuisance or even a hazard.

One of the most important things to consider when planting trees is the location of above- and below-ground utility lines. Problems happen when trees grow too close to power lines. During storms, trees and branches can fall and knock down live power lines which can cause electrical outages, fires and shock hazards.

You can help prevent these dangerous situations, and prevent the heartache of losing all or part of a treasured tree by choosing tree-planting locations carefully.

This brochure will take you through the steps of planning for and planting your trees. The information provided will help you determine which trees to plant and where to plant them.

Why should I plant trees?

Trees have many benefits. Determining why you want to plant trees will help you decide which trees to plant and where to plant them. 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 will 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 inside of your house. Plant shade trees about 15 feet away from your house for maximum benefits.

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 of the row will also help to eliminate wind and control snow drifts.

Trees can increase your property value.

Urban trees are worth much more than just the value of their wood. Studies done by the USDA Forest Service have shown that trees can increase the value of residential property by as much as 25 percent. Also, lots with trees tend to sell faster than those with fewer or no trees planted on them. Trees can create a sense of relaxation and serenity which cannot be measured in dollar amounts.

Trees have a positive environmental impact.

Trees and other plants help to:

- slow surface water runoff.
- reduce soil erosion.
- filter sediments and chemicals out of groundwater.
- provide privacy.
- reduce noise pollution.
- improve air quality.
- encourage wildlife diversity.

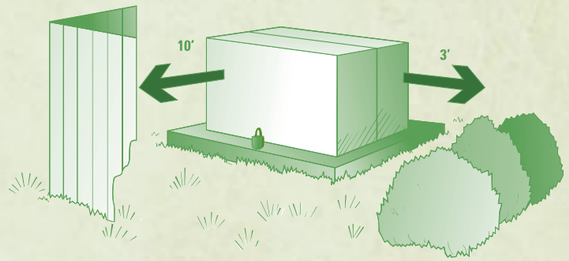
Where should I plant my trees?

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 away from power lines. And trees growing to be over 40 feet tall should be located a minimum of 50 feet from the 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 a wide spread or low-hanging branches can scratch cars or obstruct drivers view of nearby street signs.



Be aware of your property boundaries and surroundings.

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

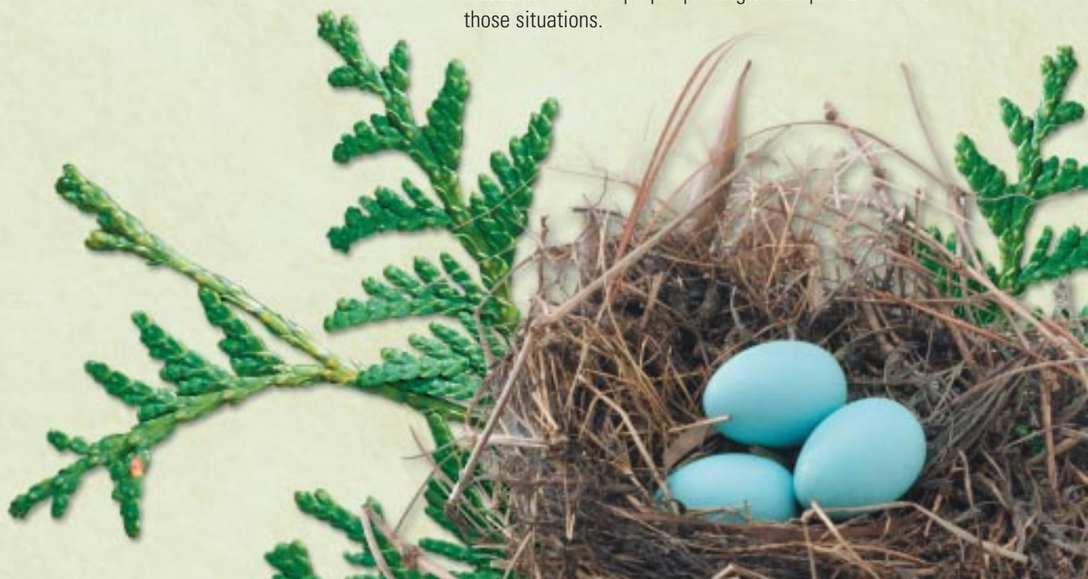
Always check with your local utilities on the location of underground services before you start planting, as utility facilities are buried underground. Call to have your property marked for underground utilities at least three working days before you plan to dig.

Diggers Hotline (in Wis.)
(800) 242-8511

Miss Dig (in Mich.)
(800) 482-7171

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 this 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.

	Common Name (Scientific Name)	At Maturity Height	At Maturity Spread	Growth Rate	Flower/Fruit/Seed	Comments
Tall Shrubs	Gray Dogwood (Cornus racemosa)	8-10′	8-10′	Moderate	White flowers bloom in late spring. White fruit on red pedicles develop later in summer.	Burgundy red fall color. Very tolerant to a variety of conditions and grows well in full sun or shade.
	Smooth Sumac (Rhus glabra)	8-12′	8-10′	Fast	Red fruit in summer stays throughout winter.	Red fall color. Tolerates dry soil. Grows best in full sun.
	Burning Bush (Euonymus alata)	8-12′	10-12′	Moderate	Twigs have winged tip.	Bright pink or red fall color. Intolerant to poorly drained sites. Grows in full sun to shade.
	American Cranberrybush Viburnum (Viburnum trilobum)	10-12′	8-10′	Moderate	White flower clusters. Translucent red fruit often used in jelly or jam.	Bright red to maroon fall color. Tolerates wet sites and full to partial shade.
	Common Lilac (Syringa vulgaris)	10-12′	10-12′	Moderate	Highly fragrant flowers vary in color from white to pink to purple.	Blooms in May. Color only in spring. Adaptable to a wide variety of soil types. Requires full sun.
	Nannyberry Viburnum (Viburnum lentago)	10-15′	8-10′	Moderate	White flowers bloom in spring. Fruit turns from blue to black in fall.	Fall color varies from orange to red. Tolerant to a wide variety of soil conditions. Grows in sun or shade.
Short Trees	Crabapple (Malus spp.)	10-20′	10-20′	Slow - Moderate	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.	Yellow and red fall color. Prefers full sun and is tolerant to a wide variety of soils. Look for disease resistant varieties.
	Apple Serviceberry (Amelanchier grandiflora)	10-25′	10-15′	Moderate	White flowers emerge in spring. Red or purple fruit.	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.
	Amur Maple (Acer ginnala)	15-20′	15-20′	Slow to Moderate	Winged seeds often referred to as helicopters due to the way they rotate to the ground.	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.
	American Hornbeam, Musclewood, Blue Beech (Carpinus caroliniana)	15-25′	15-25′	Slow to Moderate	Clusters of small ribbed nutlets turn brown at maturity.	Single to multiple trunks, wide and flat crown. Orange to deep red fall color. Hard wood. Grows best in full sun but tolerates light shade.
	Eastern Redbud (Cercis canadensis)	15-25′	15-25′	Moderate	Pink-purple flower opens in early spring. Long, pointed reddish-brown pod shaped fruit.	Thin trunk with low branching – umbrella-like spreading crown. Full sun to shade tolerant. Prefers moist soil. Purchase from a local source.
	Hawthorn (Crataegus spp.)	15-25′	15-25′	Moderate	Five petal white flower blooms in late spring to early summer. Bright red fruit stay on branches into fall.	More than 100 species of Hawthorne. Typically seen with single trunk and long, slightly drooping branches. Prefers dry soils and plenty of sun.
	Japanese Tree Lilac (Syringa reticulata)	15-25′	15-25′	Moderate	White plume shaped flowers bloom in early summer.	Works well in group plantings. Prefers full sun and well drained soil.
Medium Trees	Techny Arborvitae (Thuja occidentalis)	15-20′	12-15′	Moderate	Dark green, rounded needles.	Very adaptable to a wide variety of soils. Makes a good screen tree.
	Amur Chokecherry (Prunus maackii)	20-35′	20-30′	Moderate	White flowers bloom in spring.	Unusual shiny, reddish-brown bark. Very hardy in cold weather. Requires well-drained soil.
	Black Spruce (Picea mariana)	25-30′	10-15′	Slow	Egg-shaped lavender to purple cone turns brown when mature.	Slender tree with drooping branches. Long lived. Grows well in wet or poorly drained soils.
	Eastern Red Cedar (Juniper virginiana)	25-30′	10-15′	Slow to Moderate	Small dark blue cone (appearing berry-like) with white powdery film.	Pyramid shape, single trunk is often crooked. Reddish-brown winter color. Requires moderate sun and prefers dryer soils.
Tall Trees	Hackberry (Celtis occidentalis)	40-60′	35-45′	Moderate to Fast	Small green flower. Green berry-like fruit turns deep purple in fall.	Single trunk with slightly drooping branches. Yellow fall color. Sturdy and tolerant - grows well in a wide range of soils. Best in full sunlight.
	Red Oak (Quercus rubra)	50-70′	40-50′	Moderate	Green acorn turns brown as it matures.	Deep red to reddish brown fall color. Plant in sunny, dry, sandy area. Susceptible to Oak Wilt in some areas.
	Thornless Honey Locust (Gleditsia triacanthos)	40-60′	30-40′	Moderate	Large pea-like purplish-brown pod with 12 – 14 seeds per pod.	Single trunk often divides low with broad crown. Yellow fall color. Grows best in moist rich soil with sun.
	White Spruce (Picea glauca)	30-50′	15-25′	Moderate	Stiff, short, pointy needle. Short, light brown colored cone.	Pyramid shape, lower branches are widest. Will grow in a wide variety of soils.
	Redmond Linden (Tilia x 'Redmond')	50-60′	20-30′	Moderate	Small, fragrant flower blooms in June.	Pyramid shape crown. Light green to yellow fall color. Versatile shade tree.
	Freeman Maple (Acer x Freemanii)	50-60′	35-45′	Fast	Seedless variety available.	Bright red fall color. Tolerant to soils with higher pH. Requires full sun to partial shade. Naturally occurring hybrid.
	Eastern White Pine (Pinus strobus)	50-80′	40-50′	Moderate to Fast	Curved green cone turns brown when mature.	Single tall trunk with evenly spaced branches. Keeps green color year round. Requires a rich soil neutral to acid.

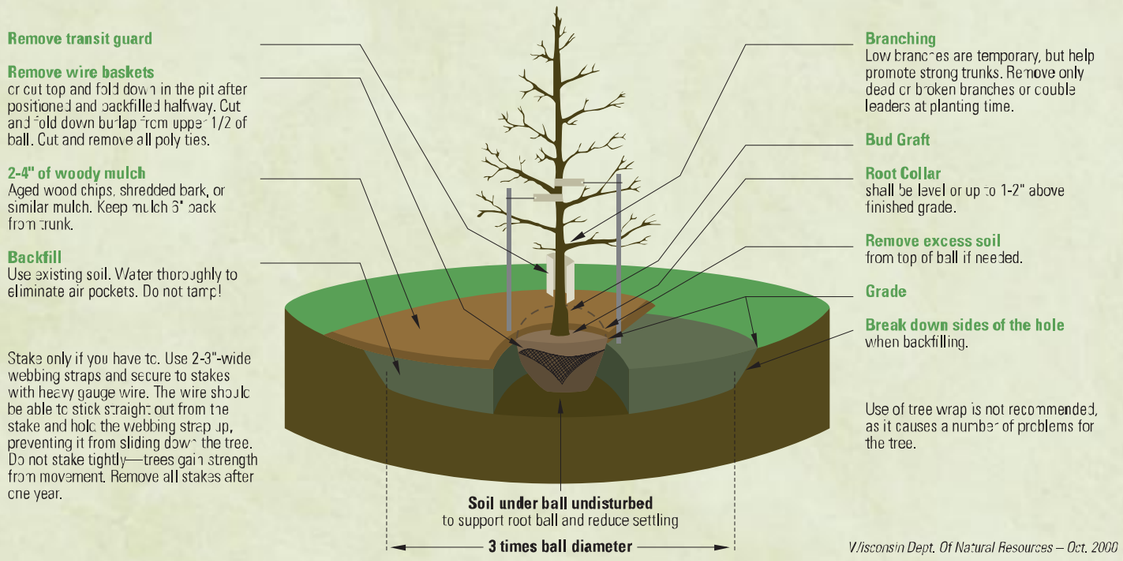
For more details on various tree species, consult your local nursery, arborist or municipal forester. You can find a list of Wisconsin's certified arborists at the Wisconsin Arborist Association's website: www.waa-isa.org, then click on "Certified Arborists".

How do I plant and maintain my trees?

The best time of year to plant trees is either in the spring or early fall. 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 checking 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 even with, or slightly above, the soil surface.
4. Begin backfilling using the soil removed from that location. Do not pack the soil down. Watering while planting will eliminate 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. But, 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.

It is generally 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, your investment in these trees will pay off in the many years to come.



Wisconsin Dept. Of Natural Resources – Oct. 2000

Trees and Safety

Ten things to remember about trees

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 should only be done by a We Energies line clearance arborist. Report trees with branches growing near power lines to us at (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. If you see one, call We Energies immediately.
10. Remember: Always plant the right tree in the right place.

References

Where can I get more information?

We Energies

Customer Service
(800) 242-9137
www.we-energies.com

Forestry Department
www.we-energies.com/forestry

Natural Gas Leak and/or Natural Gas Safety Hazard
(800) 261-LEAK (5325)

Power Outage and/or Electric Safety Hazard (non-medical)
(800) 662-4PWR (4797)

Digging

Diggers Hotline (Wisconsin)
(800) 242-8511

Miss Dig (Michigan)
(800) 482-7171

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

American Transmission Company
www.atcllc.com

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.

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