Fall is for Planning and Planting an Energy-Saving Landscape

Hosted by:







LANDSCAPE PLANTS CAN HELP REDUCE HEATING AND COOLING COSTS

According to the U.S. Dept. of Energy:

"A well-placed tree, shrub or vine can deliver effective shade, act as a windbreak and reduce your energy bills. Carefully positioned trees can save up to 25% of the energy a typical house uses."

"Planting trees in the right places can reduce your annual energy costs as much as 30%."

- Trees' Impact on Energy Savings

THOSE LIVING IN AREAS PRONE TO WILDFIRES NEED TO ENLIST FIRE-SAFE LANDSCAPING STRATEGIES

- <u>Defensible Space</u>, <u>Fire Resistant Landscaping</u>
 and Fire Hazard Reduction
- Firewise Landscaping A Guide to Protecting Your Home from Wildfire

AVOID UNDERGROUND UTILITIES

Always call 811 at least 3 business days before starting to dig. Wisconsin residents can also file online at DiggersHotline.com while gardeners in any other states can also visit call811.com/811-In-Your-State. This free service contacts all underground utility companies who will mark the location of their services in your work area. Avoiding underground utilities while working in the yard can help reduce the risk of injury, inconvenience and money spent repairing the damage.

AVOID OVERHEAD UTILITIES

- Site and Tree Selection
- All distances measured from outermost primary conductor
 - Low growing trees at least 12' (3.7m) from power line
 - Trees 25 to 40' (7.6 to 12.2m) plant at least
 30' (9.1m) from power line
 - Any trees taller than 40' (12.2m) plant at least
 50' (15.24m) from power line
- Check with your local utility company when planting near overhead utilities

EVALUATE

Start tracking the sunlight and wind on your property throughout the day and year. This information will help you place plants in the landscape for the maximum energy savings benefit.

PLANTING TREES

About 30% of a home's heating energy is lost through windows. In cooling seasons, about 76% of sunlight that falls on standard double-pane windows enters to become heat.

- In the North and Midwest
 - Plant deciduous trees on East, Southeast, West and Southwest side of house
 - Shades windows and the roof in summer
 - Allow warming sunlight to reach the house in winter
 - Fine branches block less winter sunlight than those with coarser branches

Utility-friendly Tree Planting Tips from We Energies

Trees growing too close to power lines can cause sparks, fires, power outages and shock hazards. To avoid these problems, plant trees that won't interfere with power lines when fully grown. Small ornamental trees or shrubs that will not exceed 15 feet in height such as serviceberry, dogwood and low-growing evergreens are best to plant around power lines. Trees such as maple, basswood, burr oak, white pine or spruce grow more than 40 feet high and should be planted more than 50 feet from any overhead power lines.

And don't forget to call 811 at least three days before planting to check the location of underground services.

Learn more utility-friendly planting tips at <u>we-energies.com</u>.



- Grow evergreens on the North and Northwest side
 - Blocks winder winds
 - Does not block warming winter sunshine from the South

"Glass windows and doors can account for between 30 and 60% of a building's total heat gain in the summer."

- In Florida, plant trees on the Western, Eastern and Southern exposures, in that order
- In Texas, Southern and Western wall and windows

EVERGREEN WINDBREAKS FOR LARGE PROPERTIES

- Windbreaks can reduce winter fuel use by 10 to 25%
- Plant in L or U shape to block prevailing winds and 50' (15.24m) beyond each corner of the area to be protected
 - Place no more than 1-2 tree heights from house for best protection
 - Most snow accumulates on down-wind side of the trees. So plant windbreak 1-3 times the tree-height distance from your rooftop and driveway, if possible.

WINDBREAKS FOR SMALL LOTS

Use evergreens near the house to block winds and create dead air space for added insulation

PROPER TREE PLANTING

- Transporting trees from the nursery
 - Wrap canopy to protect from wind burn on the ride

- Wrap the trunk where it will rest on trunk, tailer or truck tailgate
- Secure to minimize shifting
- Flag if extending 3' (.9m) or more beyond vehicle
- Mark the planting hole
- Place post in spot where tree is to be planted
- Use rope and landscape paint to mark planting hole
 - Hole should be 2 to 5 times wider than root ball
- Find the root flare, also called trunk flare
 This is where main roots curve away from the trunk
- Measure the depth at the center of the planting hole - this should be equal to the distance from the root flare to the bottom of the root ball
 - Avoid digging deeper, that can result in settling
 - The hole can be saucer-shaped getting shallower near the edges
- Roughen the sides of the planting hole
 - Glazed surfaces from digging can prevent roots from exploring the surrounding soil
- Move the tree by the root ball, not the trunk, to avoid damaging the roots
 - Ask for help good for you and the tree
- Position tree so best side faces the way you desire
- Cut away wire basket, burlap and twine
 - I have found these materials intact years later
 - Be aware some nurseries will not honor their guarantee if this is done
- Backfill with existing soil
 - Amending the soil encourages roots to stay within the planting hole

Landscaping Around We Energies Utilities

Plants and other landscaping features can interfere with utility equipment and cause safety risks. Remember to:

Maintain equipment visibility: Use techniques that camouflage rather than hide utility equipment. Hearty grasses and/or flowers are preferred. They provide aesthetic improvements and grow back quickly should equipment access be necessary.

Ensure easy access: When fencing is used, choose a split-rail type, which can be easily dismantled when equipment access is needed. Be sure fences are located more than 3 feet from transformer sides and no permanent fence post is located in front of transformer door.

Keep proper clearance: When woody shrubs or bushes are used, place them more than 3 feet from transformer sides and more than 10 feet from its door. Keep future growth in mind for the size of shrubs or bushes.

Learn more utility-friendly planting tips at *we-energies.com*.

- Water thoroughly
 - Some gardeners water midway through planting to help settle the soil
- Mulch
 - Apply a 2 to 3" (5 to 7.6cm) layer of shredded bark or wood chips over the planting area and beyond, if possible
 - Grass is a big competitor for young trees, so the wider the mulch ring, the better for the tree
 - Pull the mulch away from the tree trunk to avoid girdling and adventitious roots and reduce the risk of vole damage and trunk rot
- Water regularly the first few years to help tree become established
 - Trees need 10 gallons (38 liters) of water for every inch diameter of trunk

TREE ALTERNATIVES FOR SMALL SPACES

- Deciduous vine covering South, East or West walls of your home
- Attached or adjacent deciduous vine covered arbor
 - Shade in summer and allow warming sunshine in over winter

GREEN ROOF

- Consult with a building construction engineer when planning to install a green roof on your home
- Live Roof Systems of plantable cells or grow bags for green roof
- Well-drained planting mix
- Drought tolerant plants
- Green roof shelter, shed, <u>doghouse</u> and <u>bird</u> feeder

FOUNDATION PLANTINGS

- Grow plants, especially evergreens, near the home to create dead space along walls
 - Space filled with still or slow-moving air reduces heat loss from the house
 - Provides added insulation.
 - Those in areas prone to wildfires need to consider plant placement for fire safety

PLANTING SHRUBS

- Proper spacing
 - Check tags for mature size and recommended spacing
 - Fill voids with annuals and perennials until shrubs fill the space
- Loosen roots from pot
- Slide the shrub out of the pot do not pull on stems
- · Cut pot away, if needed
 - Remove bottom
 - Slice side of pot
 - Set in hole and once in place, peel away the pot
- Loosen any girdling roots
- Dig a hole
 - Same depth as distance from the crown to the bottom of the root ball
 - At least 2 to 3 times the width of the root ball wide
- Roughen sides of the hole
- Backfill with the existing soil
 - Roots tend to remain in planting hole when soil is amended
- Water and mulch
 - Apply a 2 to 3" layer (5 to 7.6cm) layer of wood chips, shredded bark, leaves, evergreen needles
 - Pull mulch away from the crown of the plant
- Continue providing needed water takes several years for shrubs to develop a robust root system



About Melinda

Nationally known gardening expert, TV/ radio host, author & columnist Melinda Myers has over 30 years of horticulture experience and has written over 20 gardening books, including Can't Miss Small Space Gardening, the Midwest Gardener's Handbook 2nd Edition released 2022, and Jackson and Perkins' Beautiful Roses Made Easy. She hosts the nationally-syndicated "Melinda's Garden Moment" program airing on over 115 TV and radio stations throughout the U.S. Melinda also hosts the internationally distributed Great Courses "How to Grow Anything" DVD series and Instant Video, including the latest Food Gardening for Everyone and Help Your Trees and Shrubs Thrive. She is a columnist and contributing editor for Birds & Blooms magazine, writes the twice monthly "Gardeners' Questions" newspaper column and a nationally-distributed gardening column. She appears regularly as a guest expert on national and local television and radio shows.

Visit Melinda's website, melindamyers.com

COVER THE SOIL

Temperatures over groundcovers can be 15 to 20°F cooler than bare soil or paved surfaces

SHADE WALKS, PATIOS AND DRIVES

- Shading these surfaces results in a cooler landscape and reduction in cooling costs
- Temperatures 3 to 6°F cooler

SHADE AIR CONDITIONERS

- Plant trees, shrubs and vines on trellis
- Decorative screen
- Air conditioner runs more efficiently using as much as 10% less energy
- Provide space around unit for needed airflow

MAINTAIN VISIBILITY AND ACCESS TO UTILITY EQUIPMENT

- Grass and flowers camouflage equipment and recover quickly if access is needed
- Leave at least 3' (.9m) around sides and 10' (3m) in front of transformers when using fencing or shrubs to camouflage the equipment

EVALUATE YOUR CURRENT LANDSCAPE AND LOOK FOR OPPORTUNITIES TO IMPROVE ENERGY EFFICIENCIES WITH THE HELP OF PLANTS AND LANDSCAPE DESIGN

OTHER RESOURCES

- Use Vegetation to Increase Energy Efficiency
- Smart Landscaping and Energy Efficiency
- <u>Using Trees and Vegetation to Reduce Heat Islands</u>
- Trees and Lawns Beat the Heat
- Landscaping for Energy Conservation
- How to Plant Trees to Conserve Energy for Summer Shade
- How to Plant Trees to Conserve Energy for Winter Warmth
- Energy Efficient Landscaping
- Planting the Right Tree in the Right Place

Grow Budget-Wise, Beautiful
Gardens Anywhere





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Melinda's Garden Moment VIDEO TIPS

FREQUENTLY ASKED QUESTIONS

MONTHLY GARDENING CHECKLISTS & MORE

BE SURE TO SIGN UP FOR MY E-NEWSLETTER TO GET TIMELY GARDENING TIPS AND A CHANCE TO WIN





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Midwest Lawn Guides

Minnesota & Wisconsin Getting Started Garden Guide

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Michigan Getting Started Garden Guide

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