



P.O. Box 549
2470 Volunteer Parkway
Bristol, TN 37621

Bristol Tennessee Essential Services

Electric • Internet • Telephone • Cable

Plant a tree today for a Greener tomorrow





Choosing a Tree

Type

Choose the type of tree—**deciduous** or **coniferous**—that will best suit your needs and soil type. Deciduous trees, which lose their leaves in fall, will offer you shade in the summer while letting in sunlight during the winter. Coniferous trees, which include most evergreens, will provide a strong windbreak against cold winter winds.

Height

Depending on the size of your property and the amount of space between your home and paved surfaces, choose a tree that will complement its surroundings. Choosing a tree that will grow too large can overwhelm a small area.

Growth Rate

Some trees grow much faster than others. If you are looking for fast results, choose a tree that matures more quickly than others. Take into account that generally fast growing trees have a weaker wood structure than slow growing trees, and are often shorter-lived.

Trees act as a natural air filter, removing dust and greenhouse gases such as carbon dioxide.

Regional Differences

All trees do not grow well or even survive in all parts of the country. Featured are trees that are recommended for our area.

Form

Different types of trees, when mature, have very different shapes. Depending on your personal preference, site location and purpose for planting trees, keep in mind which form—spreading, pyramidal, erect or rounded—will be suitable for your needs.

Soil

Select a tree that will grow well based on your soil type—acidic, alkaline, clay, loamy or sandy—and soil drainage—moist to wet, moderate or dry.

Aesthetics

Besides the many benefits trees provide, they should be pleasing to the owner. When choosing a tree, consider some of these characteristics: fall colors, flowering, bark texture and color or whether it has a single or multiple trunk.

Disease and insects

Certain trees are more susceptible to problems, generally and regionally. The trees featured have been selected because of their resistance to disease and insects in our area.



Selecting a Site

Well placed trees around a home can trim energy bills up to twenty percent.

Choose tree planting sites to maximize energy conservation. Deciduous shade trees on the south and west sides of your home make hot summers cooler and let in warming sunlight when the leaves are gone in winter. Coniferous evergreen trees in groups on the northern and western sides provide a winter wind break.

Choose the site based on how the tree will look when it is fully grown. Make sure to give the tree plenty of room to grow, above and below ground.

Plant tall trees well away from power lines, never directly under and a sufficient distance away, so branches do not tangle in the wires. Follow the chart for spacing.

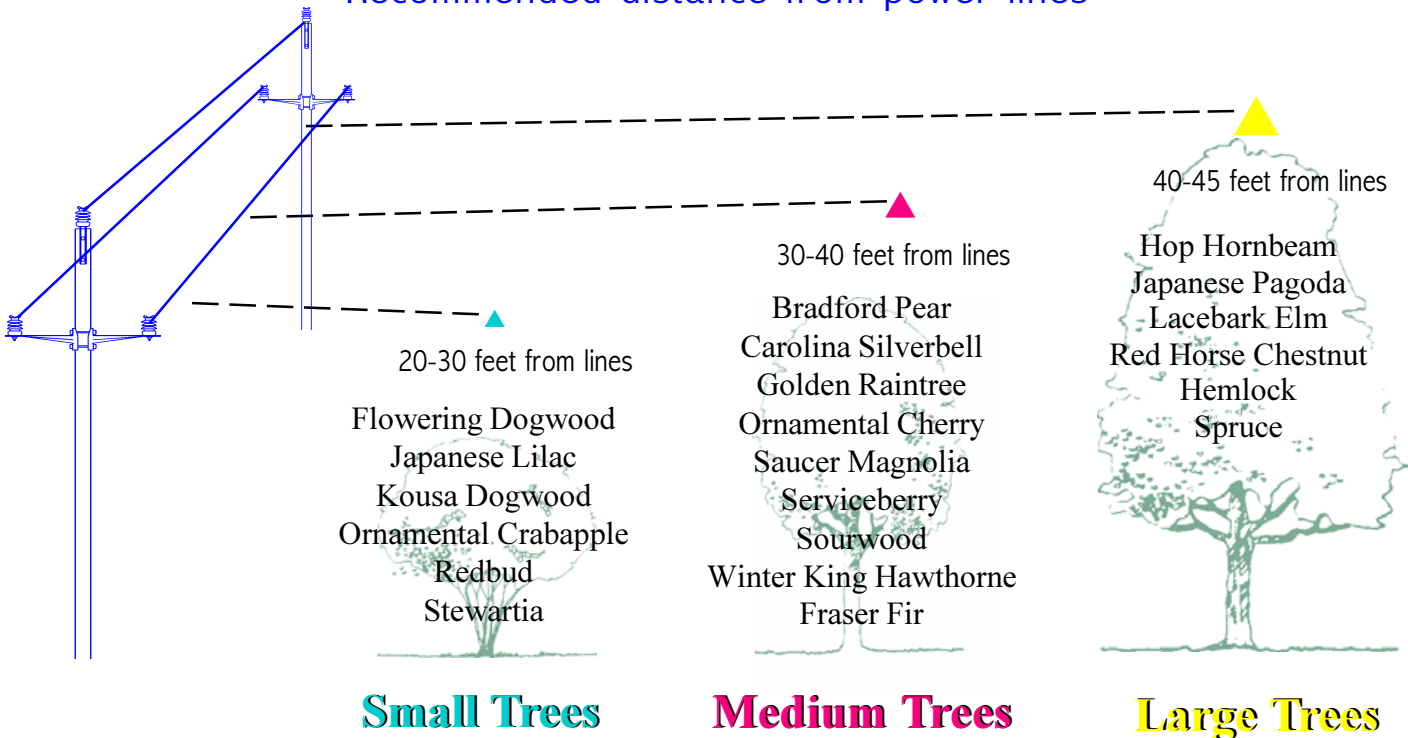
Avoid planting trees too near driveways, walkways, sewer and water lines or septic systems to prevent damage caused by roots.

If you receive your electricity from underground lines and are not sure of their location, call BTES at 968-1526 to avoid costly—and potentially dangerous—accidents. Or call the Underground Cable Locating Service at 1-800-351-1111 in Tennessee to locate all underground utilities.

Use the following as a guide for tree planting

Tree size (fully mature)	Minimum spacing from wall/power line
Up to 20 feet	▲ 20 to 30 feet
20 to 40 feet	▲ 30 to 40 feet
40 feet and up	▲ 40 to 45 feet

Recommended distance from power lines

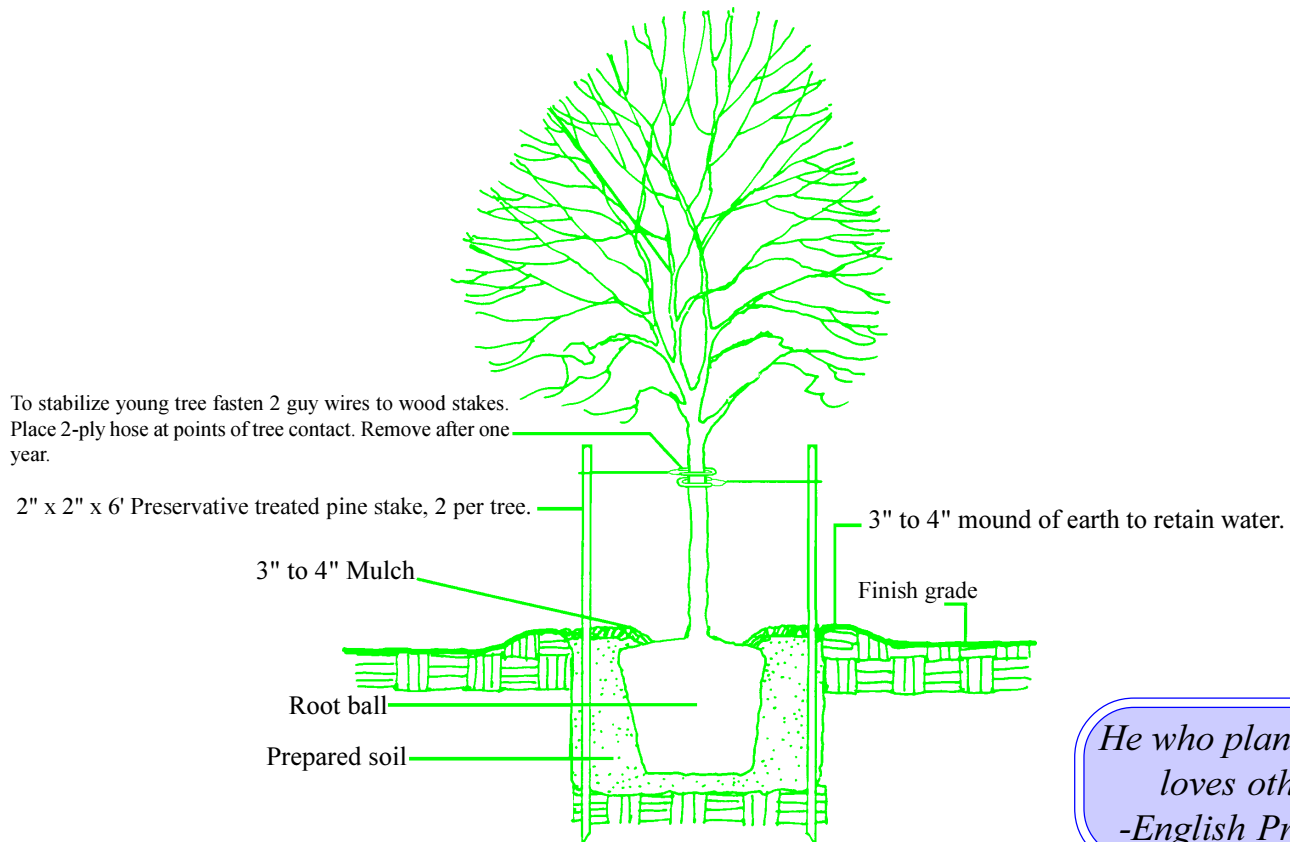




Plant a Tree

Try to plant the tree soon after purchasing to avoid unnecessary transplant shock.

- ▶ After selecting the best site, dig a hole only as deep, but at least twice as wide, as the size of the root ball. Break the soil up as you dig, removing any large stones.
- ▶ Set your new tree in the hole so that the root ball is at or a little above the surrounding soil level. If your tree is growing in a pot be sure to remove the pot and pull loose any roots growing in circles on the outside of the root ball.
- ▶ If your plant has a burlap-covered root ball, cut loose all string or twine around the trunk and roll the burlap off the top of the root ball. Be careful of nails or staples that may hold the burlap together.
- ▶ Fill the hole with the soil you have removed. Gently firm it with your foot as you fill the hole. Add soil just up to the top of the root ball.
- ▶ Water your tree by letting a hose run slowly at the base of the tree for about five to ten minutes for small trees, longer for larger trees.
- ▶ You may add mulch three to four inches deep at the base of the tree, at least six to eight inches from the trunk.
- ▶ Water thoroughly, but do not flood the hole.



*He who plants a tree
loves others.
-English Proverb-*

*Trees improve the value of your property
from five to thirty percent.*



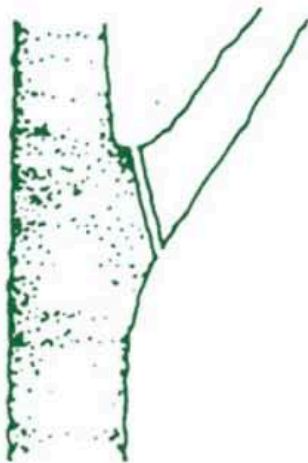
Maintaining a Tree

Tree Maintenance

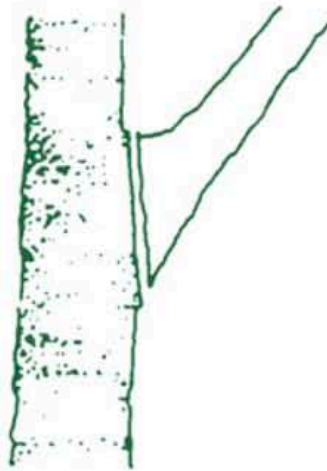
- ◆ Water the tree regularly during dry weather. Usually, a new tree needs water about once a week if there is no rain. After a year or two, it can go longer without extra water.
- ◆ Water slowly and deeply, letting the water soak in and saturate the soil.
- ◆ Pruning is an important part of caring for your tree. It adds to the strength and beauty of the tree. Pruning includes removing dead or dying branches or removing branches that interfere with the function or beauty of a tree. The best time to prune is in the dormant season.
- ◆ Prune any dead or broken limbs from the newly planted tree. Also, prune “suckers” or unwanted sprouts from the base of the trunk or major branches. To prevent disease, sterilize cutting tools with alcohol before using.
- ◆ Cut near the main trunk or limb near the outside of the branch collar. Avoid flush cutting or creating long stubs.

- ◆ Maintaining a mulched ring around the base of the tree will help retain moisture, retard weeds and keep lawn mowers a safe distance from your tree. Do not allow mulch to build up deeper than about three inches and avoid piling mulch against the trunk.
- ◆ Fertilizing every few years may help your tree to thrive. Fertilize based on results of a soil test and local recommendations.
- ◆ Watch for signs of insects and disease. Your local nursery or garden center can help you identify potential problems and answer any questions on the planting and care of your tree.

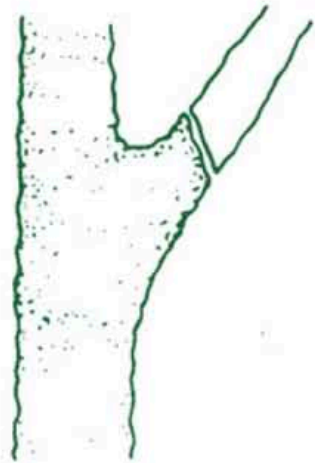
Trees provide wildlife habitats and shelter, reduce soil erosion from wind and rain, promote a healthy environment and enhance the local quality of life.



Correct



Incorrect



Incorrect

Tree Trimming



Our statistics show that the largest individual cause of interrupted electrical service is tree-related. We have an ongoing program designed to prudently clear trees, limbs and brush away from power lines. Our goal is to reduce the number of outages and reduce the costs associated with restoring service while maintaining our area's natural beauty and providing for the safety of our customers and our employees.



Trees for Our Area

▲ Flowering Dogwood

Latin Name: Cornus Florida

Common Name: Dogwood

Type: Ornamental tree, deciduous

Preferred Varieties: Cherokee Princess, Cherokee Chief

Height: Rarely exceeds 30 feet

Growth Rate: Moderate

Showy spring blooms, attractive summer foliage, crimson fall colors, glossy red berries and interesting branch angles in winter. Grow best as under-canopy trees in semi-shaded areas. Prefer moderately moist soil, slightly acid. Form varies from pyramidal to umbrella shaped, depending on cultivar. In cold areas, do not prune away lower branches; these help shade bark from sun after freezing nights.

▲ Japanese Lilac

Latin Name: Syringa reticulata

Common Name: Japanese Tree Lilac

Type: Ornamental tree, deciduous

Preferred Varieties: Japanese Tree Lilac

Height: 15 to 20 feet

Growth Rate: Moderate

An unusual, medium-sized tree with large clusters of privet scented creamy-white flowers. Large dark green leaves accent the early summer blooms. Prefers rich loam and a sunny location. Multi-stemmed or single-trunked with a rounded crown.

▲ Kousa Dogwood

Latin Name: Cornus Kousa

Common Name: Korean Dogwood

Type: Ornamental tree, deciduous

Preferred varieties: Kousa Dogwood

Height: 15 to 20 feet

Growth Rate: Slow to moderate

White, star-shaped blooms. Prefers slightly acid soil and grows well in full sun. Unpruned, it tends to be multi-trunked, but single stem plants are common.

▲ Ornamental Crabapples

Latin Name: Malus species

Common Name: Garland Tree

Type: Ornamental tree, deciduous

Preferred Varieties: Prairifire, Sugartype, Indian Magic, Donald Wyman, Jacki, Floribunda, Zumi Calocarpa.

Height: 15 to 30 feet

Growth Rate: Slow to moderate

A medium-sized tree with attractive flowers in early spring. Foliage is not especially attractive and may drop early. It prefers a well drained loamy soil and sunny location. Quite fragrant.

▲ Redbud

Latin Name: Cucis canadensis

Common Name: Judas Tree

Type: Ornamental tree, deciduous

Preferred Varieties: Forest Pansey

Height: 15 to 25 feet

Growth Rate: Moderate

Rosey pink flowers that bloom on bare branches in early spring. Leaves are heart shaped turning yellow in autumn. Prefers the moist soils of valleys and slopes in hardwood forests, but will grow well in almost any condition. It grows as wide as it is tall.

▲ Stewartia

Latin Name: Stewartia ovata

Common Name: Mountain Stewartia, Mountain-Camellia, Angle-fruit Stewartia

Type: Ornamental tree, deciduous

Preferred Varieties: Stewartia

Height: 20 feet

Growth Rate: Moderate

Shrub or small tree with camellia-like flowers. Leaves are dark green, turning orange and red in autumn. Prefers moist soil - stream borders are excellent - and a semi-shaded situation. Mostly confined to the southern Appalachians.

Tree size (fully mature)	Minimum Spacing from power line
▲ Up to 20 feet	20 to 30 feet
▲ 20 to 40 feet	30 to 40 feet
▲ 40 feet and up	40 to 45 feet

▲ Bradford Pear

Latin Name: Pyrus calleryard "Bradford"

Common Name: Bradford Pear

Type: Ornamental tree, deciduous

Preferred Varieties: Bradford

Height: 20-40 feet

Growth Rate: Moderate to fast

Ornamental tree with white flowers in early spring. Glossy green leaves turn coppery red in late fall. Highly tolerant of urban conditions and small places. Must be planted at least five feet from parking areas, driveways and walls to provide shade. This tree is virtually pest free.

▲ Carolina Silverbell

Latin Name: Halesia Carolina T

Common Name: Snowdrop-tree, Opossum-wood

Type: Ornamental tree, deciduous

Preferred Varieties: Carolina Silverbell

Height: 30 feet

Growth Rate: Moderate

Blooms in early to mid-spring. Flowers are well-shaped, with two to five blossoms clustered on long stalks. Leaves turn yellow in autumn. Thrives in most sandy valleys and uplands in under-story of forests. Irregular, spreading, open crown. Common in the southern Appalachians where it is known as "Mountain Silverbell."



Trees for Our Area

▲ Golden Raintree

Latin Name: *Kodreuteria paniculata*
Common Name: Varnish Tree
Type: Ornamental tree, deciduous
Preferred Varieties: Golden Raintree
Height: 25 to 35 feet
Growth Rate: Moderate

A good lawn tree, Golden Raintree's deep root system and open branching habit permit healthy lawn growth. Named for the delicate drizzle of golden flower petals following late spring bloom. Tolerates alkaline soil, drought, and winter cold - but branches tend to be brittle. Rounded outline and widespreading branches eventually give the tree a flat top.

▲ Ornamental Cherries

Latin Name: *Prunus*
Common Name: Flowering Cherry, Japanese Flowering Cherry
Type: Ornamental tree, deciduous
Preferred Varieties: Okami, Mt. Fuji, Yoshino
Height: 30 feet
Growth Rate: Moderate

Profuse flower in early spring, slightly fragrant. These trees prefer a rich, loamy soil, with lots of sun. Upright form, are commonly planted with azaleas.

▲ Saucer Magnolia

Latin Name: *Magnolia soulangiana*
Height: 40 feet
Growth Rate: Moderate to fast

Showy white flower clusters in spring. Shiny dark green leaves often turn scarlet in autumn. Especially suited to wet or moist soils of valleys and low upland slopes. It is thicket forming with a straight, often fluted trunk and a rounded dense crown of spreading branches.

▲ Serviceberry

Latin Name: *Amelanchier* leaves
Common Name: Serviceberry or Shadblow
Type: Ornamental tree, deciduous
Preferred Varieties: Serviceberry
Height: 20 to 40 feet
Growth rate: Moderate

One of the earliest trees to flower in the East. Snow-white blossoms. Beautiful autumn color. Adapted to most soils and often multi-stemmed with an upright, twiggy form. Edible fruit. Also called "Sarries."

▲ Sourwood

Latin Name: *Oxydendrum arboreum*
Common Name: Sorrel Tree, Lily of the valley-tree
Type: Ornamental shade tree, deciduous
Preferred Varieties: Sourwood
Height: 30 to 40 feet
Growth rate: Slow

One of the most beautiful American flowering trees. Leaves are translucent amber red as they unfold in spring, scarlet in autumn. Pendulous sprays of white flowers are borne for a long period in July. Has a light feathery habit; looks more like an Oriental specimen than a shade tree. Requires acid soil, resents competition from lawns or other plants.

▲ Fraser Fir

Latin Name: *Abies fraseri*
Common Name: Fraser
Type: Ornamental, coniferous
Preferred varieties: Fraser
Height: 30-50 feet
Growth Rate: Moderate

Common in Great Smokey Mountains, with its silvery green foliage, often grown for Christmas Trees. Cones are dark purple and upright on most twigs. Shiny dark green above with two broad silvery-white bands beneath.

Tree size (fully mature)	Minimum Spacing from power line
▲ Up to 20 feet	20 to 30 feet
▲ 20 to 40 feet	30 to 40 feet
▲ 40 feet and up	40 to 45 feet

▲ Winter King Hawthorne

Latin Name: *Crataegus viridis* "Winter King"
Common Name: Southern Hawthorne
Type: Ornamental tree, deciduous
Preferred Varieties: Winter King
Height: 40 to 60 feet
Growth Rate: Rapid

Medium-sized tree, oval to rounded with many desirable landscape features. Small leaves form an open canopy, turn pale yellow to purple in fall. Very tolerant of alkaline, poor and compacted soil, as well as heat and drought; grows rapidly under good conditions. Highly resistant to Dutch elm disease and the elm leaf beetle.

▲ Red Maple

Latin Name: *Acer Rubrum*
Common Name: Scarlet Maple, Swamp Maple
Type: Deciduous
Height: 60-90 feet
Growth Rate: Moderate

Large handsome shade tree with a narrow or rounded compact crown displaying red in different seasons. Leaves turn brilliant red, orange and yellow in fall. Grows well in different soil types.

▲ Shagbark Hickory

Latin Name: *Carya ovata*
Common Name: Scalybark Hickory, Shellbark Hickory
Type: Deciduous
Height: 80-100 feet
Growth Rate: Moderate

Large tree with tall trunk, narrow irregular crown and distinctive rough shaggy bark. Leaves turn golden brown in autumn. Hickory nut fruit. Prefers moist soil in valleys.



Trees for Our Area

▲ Spruce

Latin Name: Picea rubens

Common Name: Red spruce, Eastern spruce

Type: Ornamental tree, coniferous

Preferred Varieties: Red, eastern

Height: 50-80 feet

Growth Rate: Moderate

Shiny green with whitish lines. Reddish-brown cones hang down on short, straight stalks fall at maturity.

▲ Lacebark Elm

Latin Name: Ulmus parvifolia

Common Name: Chinese Elm

Type: Ornamental tree, deciduous

Preferred Varieties: Lacebark Elm

Height: 40-60 feet

Growth Rate: Rapid

Medium-sized tree, oval to rounded with many desirable landscape features. Small leaves form an open canopy, turn pale yellow to purple in fall. Very tolerant of alkaline, poor and compacted soil, as well as heat and drought; grows rapidly under good conditions. Highly resistant to Dutch elm disease and the elm leaf beetle.

▲ White Oak

Latin Name: Quercus alba

Common Name: White Oak, Stave Oak

Type: Deciduous

Height: 80-100 feet

Growth Rate: Moderate

Large tree with widespreading branches and a rounded crown, the trunk irregularly divides into spreading, often horizontal, stout branches. Leaves turn red or brown in fall and often remain attached in winter. Acorns 3/8-1-1/4 inch enclosed by shallow cup. Prefers well-drained uplands and lowlands.

▲ Hemlock

Latin Name: Tsuga canadensis

Common Name: Hemlock

Type: Ornamental, shade tree, coniferous

Preferred Varieties: Eastern, Canada

Height: 60-70 feet

Growth Rate: Moderate

Graceful shade tree and ornamental, can also be trimmed into hedges. Shiny, dark green above with two narrow whitish bands beneath. Brown, short-stalked cones hanging down at ends of twigs. Likes acid soil, rock outcrops and north-facing slopes.

Tree size (fully mature)	Minimum Spacing from power line
▲ Up to 20 feet	20 to 30 feet
▲ 20 to 40 feet	30 to 40 feet
▲ 40 feet and up	40 to 45 feet