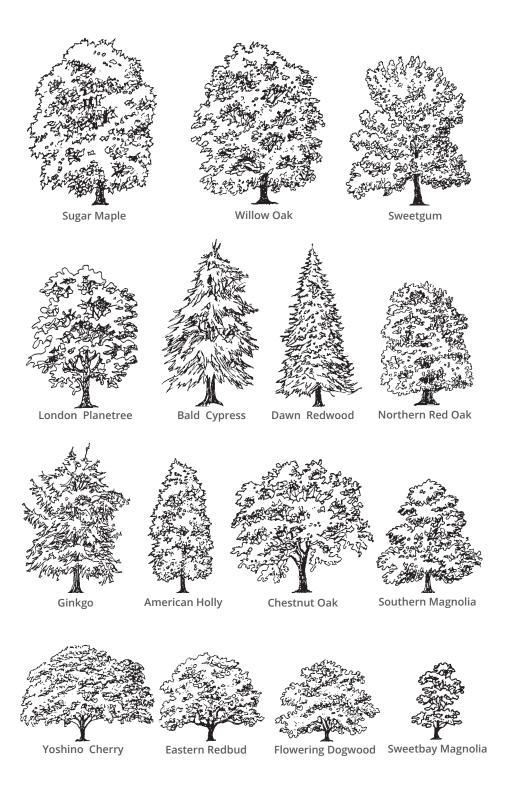


For Neighborhood, School, and Other Nashville Groups



### About this Manual

How to Organize a Successful Tree Planting is a handbook of best practices created to help group leaders plan, prepare, and implement a successful event for their school, organization, or neighborhood group. These principles apply whether you're planting one tree or one hundred.

This guide provides information about:

- Where, when, and what kinds of trees to plant.
- Planning and preparing your site.
- Complete timeline from six months out to Planting Day and beyond.
- Full instructions on planting container, bare root, and seedling trees.
- Aftercare: watering, pruning, replacement, and long-term maintenance.
- A list of resources including website links and supporting organizations.
- How to celebrate your success with an Arbor Day event.

The manual's online companion offers expanded information, downloadable samples, and more resources. Watch throughout the manual for links to the website, Trees.Nashville.gov.



Planting more trees is a cost-effective way to improve your neighborhood and your community. Sure, you get the standard benefits of beautifying your surroundings, but trees also are the only infrastructure projects that add value as they age. Their natural mechanisms keep us healthier, clean our air, slow flooding and stormwater runoff, increase business profits, and save energy.

Remember, even if your neighborhood has mature trees, new trees need to be planted NOW to replace their future loss.

In the coming decades Nashville will be blessed and challenged by a huge influx of new neighbors requiring increased infrastructure. Adding thousand of homes and roadways will affect our tree canopy, the amount of Davidson County shaded by trees. It is essential that we maintain our canopy coverage and make plans to plant even more shade for future generations. You can find a master plan for Nashville's tree-canopy goals at Trees.Nashville.gov.

The bottom line is that tree plantings are FUN. Bringing together a group of people to work in the sunshine and fresh air to make everybody's lives better results in great personal satisfaction and long-lasting benefits.

# Plant Trees to Benefit Your Community

Trees create green spaces in communities. The right trees in the right places benefit you, your home, and your community now and in the future.

Trees growing in parks and public areas, along streets and in the yards and gardens of neighborhoods provide a mosaic of green landscapes within a community. Trees provide a wealth of benefits to improve quality of life:

- Trees cool the air through evapotranspiration and provide shade that reduces radiation and reflection from hard city surfaces.
- Trees lower urban temperatures and so reduce the use of fossil fuels.
   Trees that shade your home can reduce electric bills by 15%. Shading an air conditioning unit can increase its efficiency by 10%.
- Tree foliage filters pollutants from the air and converts carbon dioxide to oxygen through photosynthesis.
- Trees reduce stormwater runoff and prevent soil erosion during heavy rainfall.
- Trees absorb noise and provide an effective screen for unsightly areas.
- Trees increase economic stability and property values. On average, trees add between 5% and 15% to the value of a house lot.
- Trees provide a shaded place for children to play and adults to socialize.
- Studies have proven that trees help us relax and recover from illness. They give us a feeling of security and make us feel at home.
- Trees beautify and add natural character to our city.
- Trees connect us symbolically to past events and eras and serve as a living legacy for the next generation.

#### Trees benefit students

- Better retention: Students retain more information if they spend some time in green spaces.
- Less sun exposure: Shade for playgrounds reduces UV-B exposure by half, thus reducing risks of skin cancer.
- Better concentration: Trees can have a relaxing effect on students studying for exams and can influence their academic performance.

# YOUR PLANTING STEP BY STEP

Your successful tree planting depends on months of planning and proper execution. It's a lot more than digging a few holes—at right is a comprehensive list of tasks required from planting organizers. The following pages provide more information about the process, from choosing a site and buying trees to managing planting day and beyond.

# When you plant a tree you plant a legacy.

**Pepper Provenzano** 

#### Reality Checklist

#### 6+ months out

- ➤ Pick a date Page 6
- Find organizers
- ➤ Choose a site
- ➤ Choose tree size
- ➤ Determine tree count
- ➤ Set budget
- ➤ Begin fundraising 11

#### 3 months out

- ➤ Select species
- ➤ Order trees
- ➤ Apply for permits 13

#### 6 weeks out

➤ Recruit volunteers 12

#### 1 month out

- ➤ Inform neighbors 13
- ➤ Gather tools
- ➤ Invite dignitaries

#### 2 weeks out

➤ Notify media

#### Week of planting

- ➤ Flag site 14
- ➤ Count volunteers
- ➤ Call before you dig

#### Day before planting

- ➤ Walk the site
- ➤ Adjust flags
- ➤ Tree delivery
- ➤ Buy supplies

#### Planting Day

- ➤ Get there early 15
- ➤ Set up registration
- Unload supplies
- Put up signage
- ➤ Offer refreshments
- ➤ Register volunteers
- Collect waivers
- Welcome remarks
- DemonstrationDig, plant, mulch
- ➤ Water trees
  ➤ Closing remarks
- ➤ Clean up

#### Ongoing

➤ Water trees 1

16

- ➤ Prune trees
- ➤ Replace dead trees

# When to Hold Your Event

Planting season in Davidson County runs roughly October through March. It's best to plant trees close to their dormant period (when leaves have dropped) so they experience less shock from transplanting to a new location. In addition, planting in late fall and winter avoids heat stress and requires less watering.

# Select Your Site

Your first decision in choosing a site is public or private land. Public planting space is limited. Metro Nashville allows tree planting in right-of-ways and in the green strip between the sidewalk and the street. These plantings require participation in the Right-of-Way Planting Program administered by Public Works.

#### ■ More info online

Many schools permit groups to plant on their property. Planting in public parks is not always possible because many have specific planting plans.

#### Private spaces

Unlimited opportunities for planting on private property can fulfill any group's goals. Many churches, businesses, and residences welcome having trees planted for them and often enjoy helping.

#### Planting for shade

Heat is a growing issue impacting health and energy use that trees can help alleviate. Consider planting big trees to shade areas that people use: next to sidewalks, in the right-of-way, over roofs, within parking lots, and shading playgrounds. You can even plant to provide shade for air conditioning units to cut electricity use.

#### Riparian planting

Planting along the banks of creeks and streams cleans the water, prevents erosion, and slows stormwater runoff.

### Choose Your Trees

Planting the right tree in the right place is crucial for safe and healthy trees. Take into consideration the mature height, canopy spread, growth rate, and soil/sun/moisture requirements. If the tree bears fruit, remember that people don't like these trees near walking areas.

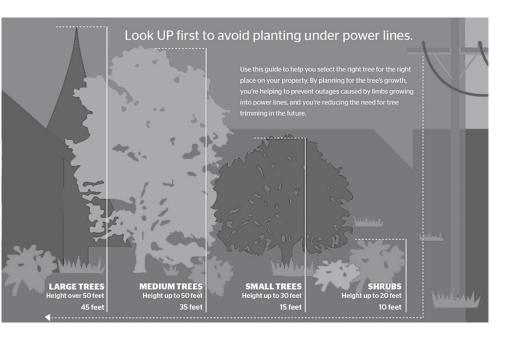
Consider the tree's dimensions at maturity and leave plenty of room for growth. Do not plant your trees where they will interfere with buildings, overhead utility lines, pavement, or sight lines of street intersections.

Choose trees wisely. The following pages list understory and powerlineapproved trees you can plant without fear of utility trimming. The larger canopy trees listed require the most room but return the most benefits.

#### Plant the right tree in the right place

Use the Nashville Electric chart below to determine what size and where you can plant your trees.

■ See larger version online



# Recommended Species

Metro Tree Advisory Committee compiled this list of NES powerline-approved trees—species that at maturity have an average height of 20 feet. (Individual trees may exceed this height under optimal conditions.) These trees usually will not require pruning to reduce height and are suitable for planting under powerlines at the form



suitable for planting under powerlines at the front and sides of houses.

- ➤ Red Buckeye (Aesculus pavia)
- CRABAPPLES (Genus: Malus) Adirondack Crabapple (Malus 'Adirondack') Narragansett Crabapple (Malus 'Narragansett')
- ➤ CRAPE MYRTLES (Genus: Lagerstroemia) Lipan Crape Myrtle (L. indica x L. fauriei 'Lipan') Sioux Crape Myrtle (L. indica x L. fauriei 'Sioux') Yuma Crape Myrtle (L. indica x L. fauriei 'Yuma')
- ➤ DOGWOODS (Genus: Cornus)
  Flowering Dogwood Hybrids (Cornus florida x Cornus kousa)
  Stellar Pink Flowering Dogwood (C. florida x C. kousa 'Stellar Pink')
  Aurora Dogwood (C. florida x C. kousa 'Aurora')
  Celestial Dogwood (C. florida x C. kousa 'Celestial')
  Constellation (C. florida x C. kousa 'Constellation')
  Ruth Ellen Dogwood (C. florida x C. kousa 'Ruth Ellen')
- ➤ Chinese Fringetree (Chionanthus retusus)
- ➤ Japanese Apricot, Flowering Apricot (*Prunus mume*) Cultivars: 'Alba,' 'Albo Plena' (white), 'Alphandii' (pink), 'Benishidare' (crimson)

Chinese Dogwood, Kousa Dogwood (Cornus kousa)

- ➤ FLOWERING CHERRIES (Genus: Prunus)
  Yoshino Flowering Cherry (Prunus yedoensis)
  Kwanzan Flowering Cherry (Prunus serrulata 'Kwanzan')
- ➤ HOLLIES (Genus: *llex*)
  Greenleaf American Holly (*llex opaca* 'Greenleaf')
  Warren Red Holly (*llex decidua* 'Warren Red')
- ➤ Jane Magnolia (Magnolia liliifloria 'Jane')
- ➤ MAPLES (Genus: Acer)
  Flame Amur Maple (Acer ginnala 'Flame')
  Japanese Maple (Acer palmatum)
- REDBUDS (Genus: Cercis)
  Forest Pansy Redbud (Cercis canadensis 'Forest Pansy')
  Oklahoma Redbud (Cercis canadensis texensis 'Oklahoma')
- ➤ Blackhaw, Plum Leaf Viburnum (Viburnum prunifolium)

Visit nashvilletreefoundation.org to download a powerline-approved trees brochure.

#### **Understory Trees**

Metro Tree Advisory Committee developed this list of understory trees, which normally achieve an overall height at maturity of 15 to 30 feet.

**DECIDUOUS** 

Trident Maple

(Acer buergeranum)

Hedge Maple

(Acer campestre)

Paperbark Maple (Acer griseum)

Serviceberry

(Amelanchier arborea)

American Hornbeam

(Carpinus caroliniana)

White Fringetree

(Chioanthus virginicus)

Washington Hawthorn

(Crataegus phaenopyrum)

Green Hawthorn

(Crataegus viridus)

Franklin Tree

(Franklinia alatamaha)

Possumhaw

(Ilex decidua)

Saucer Magnolia

(Magnolia x soulangiana)

Star Magnolia

(Magnolia stellata)

Sweetbay Magnolia

(Magnolia virginiana)

Apples (Heirloom)

(Malus domestica spp.) American Hophornbeam

(Ostrya virginiana)

(Oxydendrum arboreum)

Chinese Pistache

(Pistacia chinensis)

American Plum

(Prunus americana)

Chickasaw Plum

(Prunus augustifolia)

**Fruiting Pear** 

(Pyrus spp.)

**Japanese Snowbell** 

(Styrax japonicus) Japanese Tree Lilac

(Syringa reticulata)

Littleleaf Linden 'Green Globe'

(Tilia cordata 'Green Globe')

**FVFRGRFFN** 

Burford Holly tree form

(*Ilex cornuta* 'Burfordi')

Foster's Hybrid Hollies

(*Ilex x attenuate 'Fosteri'*)

Nellie R. Stevens Holly

(Ilex x 'Nellie R. Stevens')

Cherry Laurel tree form

(Prunus caroliniana) Little Gem Magnolia

(Magnolia grandiflora 'Little Gem')

#### Canopy Trees

These trees normally achieve an overall height at maturity of 30 feet or more—not for use under powerlines.

**DECIDUOUS** 

Florida Maple/Southern Sugar Maple

(Acer barbatum)

Black Maple

(Acer nigrum)

Red Maple 'Armstrong,' 'Bowhall'

(Acer rubrum)

Sugar Maple and varieties

(Acer saccharum)

Ohio Buckeve

(Aesculus glabra)

Yellow Buckeye

(Aesculus flava)

Common Alder/Black Alder

(Alnus glutinosa) River Birch

(Betula nigra)

Katsura Tree

(Cercidiphyllum japonicum)

American Yellowwood (Cladrastis kentukea)

Common Persimmon

(Diospora virginiana)

Hardy Rubber Tree

(Eucommia ulmoides)

Honevlocust

(Gleditsia triacanthos var. inermis)

Gingko

(Gingko biloba 'Princeton Sentry')

Kentucky Coffeetree

(Gymnocladus dioicus)

Sweetgum 'Slender Silhouette'

(Liquidambar styraciflua)

Yellow Poplar/Tuliptree/Tulip Poplar

(Liriodendron tulipifera)

Dawn Redwood

(Metasequoia glyptostroboides)

Black Gum/Black Tupelo

(Nyssa sylvatica)

London Planetree (Platanus x acerifolia)

Sawtooth Oak

(Quercus acutissima)

White Oak

(Quercus alba)

Swamp White Oak

(Quercus bicolor) Scarlet Oak

(Quercus coccinea)

Tree photos

#### Canopy Trees continued

Southern Red Oak (Ouercus facata) Cherrybark oak

(Quercus facata var pagodafolia)

Overcup Oak (Quercus lyrata) Shingle Oak (Ouercus imbricaria)

Bur Oak

(Quercus macrocarpa) Chinkapin Oak (Quercus muehlenbergii) Nuttall Oak

(Quercus nuttallii [texana])

Pin Oak

(Quercus palustris) Willow Oak (Quercus phellos) Chestnut Oak (Quercus prinus)

**English Oak** (Quercus robur) Northern Red Oak (Quercus rubra) Shumard Oak

(Quercus shumardii) Amur Corktree

(Phellodendron amurense)

**Bald Cypress** (Taxodium distichum) American Basswood (Tilia americana)

White Basswood (Tilia americana var heterophylla)

Littleleaf Linden (Tilia cordata) Silver Linden (Tilia tomentosa) Winged Elm (Ulmus alata)

American Elm 'Valley Forge' (Ulmus americana)

Chinese Flm

(Ulmus parvifolia 'Bosque')

Slippery Elm (Ulmus rubra) September Elm (Ulmus serotina) Japanese Zelkova

(Zelkova serrata 'Green Vase')

**EVERGREEN** Cryptomeria (Cryptomeria japonica)

American Holly and cultivars

(Ilex opaca)

Eastern Red Cedar (Juniperus virginiana) Southern Magnolia (Magnolia grandiflora) Norway Spruce (Picea abies) Scots Pine (Pinus sylvestris) Japanese Black Pine (Pinus thunbergiana) **Shortleaf Pine** 

'Green Giant' arborvitae (Thuja standishii x plicata)

(Pinus echinata)

#### Don't Plant These Trees

These trees do not mature well and have such issues as shallow roots, splitting, and reseeding themselves or are susceptible to diseases and insects.

Red Maple (Acer rubrum) Silver Maple

(Acer saccharinum) Tree-of-Heaven (Ailanthus altissima)

Mimosa (Albizia julibrissin) Paper Mulberry

(Broussonetia papyrifera, syn. Morus papyrifera L)

Tree of Heaven (Ailanthus altissima) Sugarberry (Celtis laevigata) Hackberry (Celtis occidentalis)

Leyland Cypress (Cupressus x leylandii) Russian Olive

(Elaeagnus angustifolia) Ash spp. (green, white, blue)

(Fraxinus spp.)

Chinese Parasol Tree (Firmiana simplex) Goldenrain Tree

(Koelreuteria paniculata)

(Melia azedarach) Pin Oak (Quercus palustris)

China Berry

White Poplar (Populus alba) **Bradford Pear** 

(Pyrus calleryana [all varieties]) Royal Paulownia/Princess Tree

(Paulownia tomentosa) Chinese Tallow (Triadica sebifera)

Eastern (Canadian) Hemlock

(Tsuga canadensis) Siberian Elm (Ulmus pumila)

■ More tree lists

# Raising Funds

Once you've decided how many and what kind of trees to plant, set a budget and make a plan for fundraising. For a large-scale planting, you'll want to find sponsors to help underwrite the costs, while you can hold an event or sell products to raise money yourself for a smaller planting.

#### Partnering with sponsors

Keep your options open when looking for sponsors.

- Companies in your vicinity. They benefit directly from having trees planted in the neighborhood.
- Companies in green industries. Landscapers, retailers who sell lawn and garden materials, arborists, and nurseries are potential supporters.
- Companies loyal to you. Use the network of your membership to reach large corporations and business owners who will help the project.

Sponsors may also be a source of publicity and planting volunteers.

#### Other ideas

- Have a tree sale to fund your tree planting.
- Hold an event like a home or garden tour, bake sale, or a walk or bicycle
  for trees—or host a celebration of trees with those components, along
  with activities and demonstrations promoting trees.

#### ■ More fundraising ideas

#### Calling on sponsors

Do your homework before you set an appointment with potential sponsors. You are more likely to succeed if you bring a proposal that strengthens the connection between them and trees.

- Explain how planting more trees will positively affect the sponsor's business or mission, as well as the health and well-being of employees and the community.
- Share your goals for number of trees to plant and number of participants involved.
- Give sponsors a sense of ownership in the project. Listen and follow their lead on how they would like to be involved.
- Ask specific questions. Find out before you leave when a decision will be made and when money or goods will be available.

# Recruiting Volunteers

Before you start recruiting volunteers, it's important to know how many you'll need. This is a factor of the number of trees you have to plant.

As a rule of thumb, you want to keep your volunteers busy for about three to four hours, including pre-planting and clean up. Ideally, you'll want to supply juice, coffee, and healthy snacks before the planting and perhaps lunch afterward —with plenty of water throughout.

#### Consider these sources:

- Youth organizations such as Boy Scouts and Girl Scouts.
- Students from high schools and colleges, especially ones with ecology clubs, environmental studies programs, or community service requirements.
- Hands On Nashville.
- Service organizations such as Rotary, Civitan, Sertoma.
- Business groups like Chamber of Commerce.
- Large corporations and major employers looking for service projects.

#### How many volunteers?

Your planting volunteers should be organized in teams of three. Each team will be able to plant about three trees in three hours, depending on the difficulty of digging holes. This means you need about one volunteer per tree to be planted per hour of event. (If you want to plant 30 trees, you'll need 30 volunteers for a three-hour planting.)

#### Working with tree experts

Make sure you include tree experts on your team of organizers and volunteers. Include them from the early planning stage through planting day and beyond. Their advice will be invaluable in helping you avoid unpleasant surprises and ensuring the success of the trees.

- Match tree species to specific conditions of planting site.
- Recommend trustworthy suppliers of trees.
- Make introductions to potential sponsors.
- Conduct demonstration plantings for the volunteers.
- Circulate throughout the site(s) on planting day to oversee the process and answer technical questions.

#### ■ ISA-certified arborists

# Site Planning and Preparation

The first step in getting your site ready for the planting is to find or create an up-to-date map of the location. You will use it for multiple functions.

- Identify where you want trees planted, in relation to streets, buildings, power lines, and other trees.
- Decide where to set up the volunteer center for registration, refreshments, and first aid.
- Indicate parking and restrooms.
- Put out construction flags showing where to plant. Look up and look around: Avoid planting under powerlines or over utilities.
- Notify nursery where to deliver trees.
- Determine where tools will be delivered and stored.
- Identify locations to store and distribute mulch.
- Pick sites for demonstration plantings.

#### Call before you dig

Always call Tennesseee 811 a week before the planting so that utility companies can mark the location of underground lines before you start digging. The 811 operator will ask for details about your event, location, planting date, and number holes you plan to dig. This is a free service.

#### Get permission

If you're planting on private property:

- Get permission from owners.
- Ask their cooperation in watering trees after the planting.

If you're planting in right-of-ways or along public streets:

Get permission from Metro Department of Public Works.

If you're planting on school grounds:

 Contact officials for permission and to avoid conflicts with school events.

#### Collect Supplies

- Gloves
- Event T-shirts (optional)
- Safety vests
- Plastic rain ponchos
- Clipboards, paperweights, pens
- Trash bags
- Mulch
- Tools

Dollies to move trees

Wire cutters

Sharp knives or scissors Shovels

Mattocks or pickaxes

Metro Public Works has a Community Tool Share Program with all the tools you need for community-driven beautification projects.

Application process

# Tree Planting Timeline

To stage a successful tree planting, it's best to start working at least six months to a year in advance. This schedule will help you stay on track.

A • symbol indicates more information at Trees.Nashville.gov.

#### 6+ months out

- Begin planning by picking a date to plant.
- Recruit organizers to oversee key tasks. Be sure to include one or more tree experts on your team.
- Choose a site and determine how many trees to plant.
- Set budget according to size and number of trees.
- Raise funds by recruiting sponsors, putting on events, or selling products.

#### 3 months out

- Select the species of trees to plant.
- Order trees from nursery.
- Apply for any necessary permits.
  - Permit information

#### 6 weeks out

- Determine how many volunteers you need.
- Begin recruiting volunteers.

#### 1 month out

- Communicate with neighbors affected by the planting.
  - Download a sample announcement postcard.
- Gather tools for planting.
  - Nashville Community Tool Share Program
- Invite local residents and dignitaries: mayor, council members, Metro Beautification commissioner, church leaders, neighborhood organizers.
- Get a proclamation honoring the event from the mayor or council.
  - Download sample proclamation

#### 2 weeks out

- Notify media.
  - Download sample news release
- Remind volunteers and ask them to watch a planting video.
  - **■** How to plant a tree videos

#### Week of planting

- Put out flags marking planting locations.
- Get a firm count of volunteers. Arrange for more if needed. Provide volunteers with time and directions. Discuss weather contingencies. Tell them to wear appropriate clothing and heavy shoes, and bring tools if they have them.
- Call 811 service five business days before your event so utility providers can mark their underground locations for free before you dig.

#### Day before planting

- Walk the site to spot any unexpected situations.
- Restore any location flags that may have moved. Make sure you're clear of any marked utilities.
- Have trees delivered. Ask the vendor to drop trees at flagged locations.
- Buy refreshments, trash bags, and other supplies.

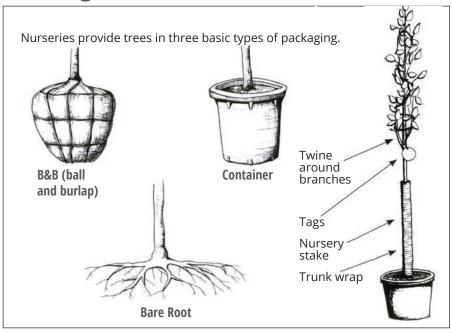
#### Planting Day

- Arrive before the stated time. A few volunteers are sure to show up early.
- Set up tent and tables at volunteer site.
- Unload supplies.
- Put up signage.
- Set out refreshments.
- Gather waivers including contact information from volunteers.
  - See sample waiver Suggested safety instructions
- Opening ceremony
  - See sample agenda
- Group photo
- Demonstration planting: Separate site or time for each 25-30 volunteers
- Hand out cards with planting instructions distributed to volunteers.
  - Download sample card
- Dig, plant, water, mulch
- Closing remarks and thank yous
- Gather and inventory borrowed tools.
- Site clean up

#### Demonstration plantings

Demonstrating proper planting techniques contributes directly to the long-term health of your trees. Recruit several tree experts or have each expert do multiple demonstrations. More than 20 or 30 observers cannot hear the instructions. Demonstrators should show how deep and wide to dig, how to position the tree, and how to use tools safely.

# **Planting Your Trees**



#### Remove trunk and branch packaging.

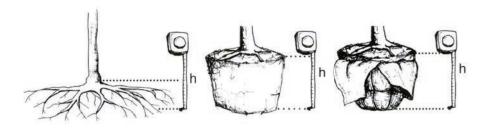
Remove trunk wrap, twine around the branches, labels, and nursery stake. Leave any root packaging in place for now.

Remove soil from the top of the root ball until the top of the main root system is exposed. There should be several roots at least as big around as a pencil extending in opposite directions from the trunk. You may have to remove two to four inches of soil before finding the main roots.

**Ball-and-burlap trees**: Remove the top of the root ball packaging. Cut any twine from around the trunk taking care not to nick the bark. Then bend the wire basket back off the top of the ball. Leave the wire basket in place until the tree is put in the ground.

**Containerized trees**: Remove the entire container. Loosen roots and point them outward, to prevent them from growing in a circle.

Bare-root trees: There is not soil or root packaging to remove. Although they're the easiest to transport and handle, bare-root trees require keeping the roots moist and cool until planting. If they dry out, they can be soaked in a bucket of water overnight.

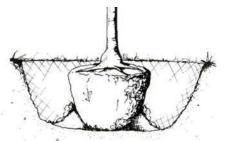


#### Observation Determine how deep and wide to dig.

- A. Measure the height of the remaining root ball. This is exactly how deep you should dig the hole. (Use your shovel handle to measure.)
- B. Measure the approximate width of the root ball or root system. Multiply this by two, or if your soil is hard (clay or compacted), by at least three. This is how wide you should dig the hole.

#### 3 Dig the hole.

Do not put a \$100 tree in a \$10 hole. The dimensions of the hole are **very important** in determining the survival of your tree. Dig the hole ONLY as deep as the root system, no deeper!



DO NOT PLANT TOO DEEP!

#### 4 Put the tree in the hole.

If the tree has a heavy root ball, slide or roll it into the hole, and straighten the trunk. Trees should be planted an inch or two above the ground. They will settle over time.

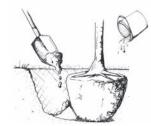
#### 6 For ball-and-burlap trees, remove root ball packaging.

Ball-and-burlap trees: Without loosening the root ball, cut, peel back, and remove as much of the wire basket and burlap as possible (at least the top third).

NOTE: A root ball should remain a root ball. If it starts to fall apart, backfill the hole with enough soil to stabilize it. Then carefully remove the wire and burlap, and backfill as you go to keep the root ball intact.

#### @ Backfill with the same soil.

Make sure the trunk is straight. Put the original soil back in the hole, breaking up large clods, and working it in with your hands or a shovel.

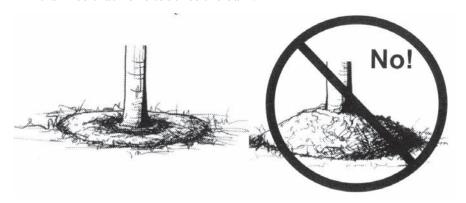


#### Water.

Water the root ball and entire backfilled area deeply. Skip this step if you're using a water tank to irrigate all the trees after planting.

#### Mulch.

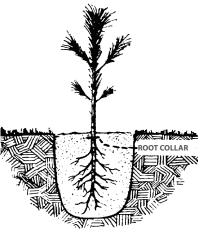
Arrange any leftover dirt in a moat around the tree. Put a two- to four-inch layer of mulch over the backfilled area. Pull mulch away from the trunk so that none touches the bark.



#### Planting seedlings

Planting seedlings uses the same planting techniques. Dig the hole twice the size of the spread roots and deep enough to hold them all. Do not let the roots curl back up to the top. Fill the hole with soil and water thoroughly.

Seedlings are extremely hard to spot in a landscape, so make sure to protect them from weed eaters, lawnmowers, weeds, and grass. While the seedling is small, tie a bright ribbon in its top to make it more noticeable and less likely to be damaged.



# Safety

Safety is everyone's concern. Always be aware where your fellow planting team members are when using tools so you don't hit someone. Also be aware of tools lying on the ground. Turn shovels that are lying on the ground face-down so they don't pop up when you step on them. To protect the tree's roots, trunk, and branches—and your back—slide or roll the tree in the hole rather than trying to pick the tree up.

### Maintenance

A consistent watering and maintenance plan is the best guarantee of healthy trees and good insurance against insect and disease problems.

#### Watering

Your newly planted trees will need water for the first two years their lives. One rule of thumb is that trees need the equivalent of an inch of rainfall per week during growing season from March through October. That's about five gallons per tree per week. Keep an eye on the weather reports for your neighborhood or install a rain gauge at the site.

If you haven't received sufficient rainfall then water by hand. You can arrange with nearby neighbors to water the trees or use a trailer-mounted water tank. Always water deeply to encourage deep root growth.

#### Pruning

Pruning should be done with a purpose and not as an automatic routine. Remove dead and injured branches and those that are crossing and in contact with other branches. If a tree has co-dominant trunks (see illustration), prune away one of them to prevent future problems.



#### **Fertilizing**

Do not fertilize your newly planted trees. Use fertilizer after having your soil tested, and never fertilize stressed trees. Fertilizer is not tree food and should be applied only if needed.

#### Replacement

Despite your best efforts, some trees will die from disease, injury (especially from people), or drought. Be sure your budget includes funds for replacement trees; figure about 10% could need replacement over two years. Check their status in late summer and plan a fall replacement planting.

### Resources

#### **BEFORE YOU DIG**

Underground utility notification, www.tenn811.com

#### **PUBLICATIONS**

Manual of Woody Landscape Plants Trees For American Gardens by Michael A. Dirr Tree Owner's Manual by USDA Forest Service, www.treeownersmanual.info

#### **METRO NASHVILLE GOVERNMENT AGENCIES**

#### Tree Advisory Committee

www.nashville.gov/Public-Works/Community-Beautification/Tree-Information/Tree-Advisory-Committee.aspx

#### Land Use and Zoning

www.nashville.gov/Codes-Administration/Land-Use-and-Zoning-Information/Urban-Forestry.aspx

#### **Beautification and Environment Commission**

www.nashville.gov/Public-Works/Community-Beautification.aspx

#### Public Works (right-of-way planting permission)

www.nashville.gov/Public-Works/Community-Beautification/Tree-Information/Planting-in-the-Right-of-Way.aspx

#### Agriculture Extension Service

http://www.nashville.gov/Agricultural-Extension-Service.aspx

#### STATE AGENCIES

#### Department of Agriculture, Division of Forestry, Urban Forests

www.tn.gov/agriculture/topic/ag-forests-urban

#### Wildlife Resources Agency

www.tn.gov/twra/article/wildscaping

#### **FEDERAL AGENCIES**

#### US Army Corps of Engineers, Nashville District

www.lrn.usace.army.mil

#### **US Forest Service**

www.fs.fed.us

#### **NON-PROFIT GROUPS**

#### American Forests

americanforests.org

#### **Cumberland River Compact**

plants trees with volunteers to help improve water quality.

cumberlandrivercompact.org

#### International Society of Arboriculture

isa-arbor.com

#### Nashville Civic Design Center

civicdesigncenter.org

#### National Arbor Day Foundation

arborday.org

#### Nashville Tree Foundation

hosts an annual tree planting on ReLeafing Day, the Saturday before Thanksgiving and invites your group to plant on this day to help create city-wide tree plantings. nashvilletreefoundation.org

SoundForest soundforest.org

### Tennessee Environmental Council tectn.org

The Nature Conservancy

#### nature.org/Tennessee

Parks and Greenways Foundation tenngreen.org

### Tennessee Urban Forestry Council tufc.com

Trees Nashville treesnashville.org

■ More resources online

# How to Celebrate Arbor Day

Planting trees builds communities. Celebrating Arbor Day is a great way to get the community involved in planting and caring for trees. Here are some ways you might get your group involved in an Arbor Day celebration, in addition to planting trees.

- Get students involved through writing essays or poetry, an art contest, or producing a play about trees.
- Take tree-lovers on a walk through the city or a hike through the woods to identify species and condition of trees.
- Recognize best practices and good stewardship of trees at an Arbor Day ceremony.
- Hold a workshop on identifying, selecting, planting, and caring for trees.
- Sponsor a neighborhood block party or community fair around the theme of trees.

You can find celebration materials, a sample program for an event, a proclamation template, and more at ArborDay.com.

Be creative in helping volunteers match their talents to your needs. These suggestions may spark other ideas to get more people involved.

- Photographers to document street trees
- Marketing coordinators for generating publicity and dealing with media
- Webmasters to create an educational website
- Accountants and lawyers to oversee business decisions
- Teachers who will use tree information in a lesson plan
- Fundraiser and development experts to help you raise money

#### When is Arbor Day?

For many years, Arbor Day was celebrated on April 22, the birthday of the man who founded it in 1872, J. Sterling Morton. National Arbor Day is now celebrated on the last Friday in April, while each state has set its own Arbor Day on a date appropriate for planting trees in that region.

In Tennessee, Arbor Day is celebrated the first Friday in March. Nash-ville has an annual Arbor Day celebration that includes presentation of Tree City USA, TreeLine USA, and Tree Campus USA flags; a mayoral proclamation; memorial and honor plantings; and readings by student essay-contest winners.

■ More ideas online



This manual was created on behalf of Metro Public Works, Metro Beautification and Environment Commission, Metro Tree Advisory Committee with the Metro Landscape Coordination Program. It was funded by a Tennessee Department of Agriculture Division of Forestry Grant. Supplemental funding provided by Trees Nashville. Additional material courtesy of USDA Forest Service *Tree Owner's Manual*.

# Trees Make a Difference!

# Reduce flooding

Every 5% of added tree canopy reduces stormwater runoff by 2%.

# Help us breathe

Just two 30-foot trees supply the oxygen needs of a person for a year.

# Help us work

Workers with a view of trees report more job satisfaction and less stress.

# Provide shade

Mature tree canopy reduces urban air temperatures up to 10 degrees.

# Save energy

A 25-foot tree reduces typical heating and cooling costs by up to 12%.

# **Improve** health

Hospital patients who can see trees recover faster with fewer complications.

# Keep us safer

A 10% increase in tree canopy can lower crime by about 12%.



To exist as a nation, to prosper as a state, and to live as a people, we must have trees.

**Theodore Roosevelt**