

# TREE PLANTING AND MAINTENANCE RESOURCES



BECAUSE EVERY TREE IS IMPORTANT





# TREE COMMISSION MISSION STATEMENT



The trees of Plain City are a valuable part of Plain City's heritage and history. The mission of the Plain City Tree Commission is to maintain, improve and increase the community forest of the village through the sharing of expertise, guidance, and recommendations to the administration, developers, and property owners for:

- The protection of healthy trees
- Proper tree selection, planting site selection, and promotion of native species
- Planned pruning
- Tree risk assessment
- Planting in public rights-of-way and open spaces

In addition, the commission works to educate the public about the benefits that trees provide. This commitment to planting, protecting and maintaining public trees represents a long-term investment in the beauty, biodiversity, and historic character of Plain City.

## DID YOU KNOW?

#### >>> TREES FILTER AIR, PROVIDE OXYGEN, AND CAPTURE CARBON

Trees remove air pollution by the interception of particulate matter on plant surfaces and the absorption of gaseous pollutants through the leaf stomata. According to the US Department of Agriculture - Forest Service, computer simulations with local environmental data reveal that trees and forests in the United States removed 17.4 million tons of air pollution in 2010.

#### **GET THE FACTS**

Visit ArborDay.org for a comprehensive list of facts and benefits of trees

https://www.arborday.org/trees



#### >>> TREES HELP MITIGATE CLIMATE CHANGE

A single tree can sequester 1,200 pounds of carbon dioxide in a 50year lifespan. Trees can reduce the urban heat island effect by as much as 10 degrees through transpiration of water into the atmosphere. Trees also help to improve water quality by slowing runoff and filtering pollutants and suspended solids from rain water.



#### >>> TREES SHADE YOUR HOME AND **HELP LOWER UTILITY COSTS IN** THE WARM MONTHS

Homeowners and small-business operators can make significant cash savings by properly using trees for shade. How much is saved depends on climate, existing tree cover, and type of building. However, savings of 58 percent of daytime air conditioning have been documented. \*1

#### >>> TREES INCREASE PROPERTY VALUE AND AESTHETIC PLEASURE TO **YOUR YARD**

The visual appeal of trees is unmistakable—beautiful landscaping attracts buyers. Research has shown that planting large trees can increase property values anywhere from 3% to 15%, according to the Arbor Day Foundation, \*2



#### >>> TREES PROVIDE SHELTER AND PROTECTION FOR WILDLIFE

Trees of all kinds shelter wildlife among and beneath their branches, within loose bark where insects overwinter, in cavities, and in burrows beneath their roots. Evergreen trees such as pine, spruce, fur, juniper, and arborvitae trees have year-round dense foliage, creating ideal cover from predators and shelter from the elements. Nearly all species of trees comfortably host some nesters. \*3



- 1. https://www.arborday.org/trees/bulletins/coordinators/resources/pdfs/021.pdf
- 2. https://www.realtor.com/advice/home-improvement/how-trees-can-affect-the-value-ofyour-home/
- 3. https://www.humanesociety.org/resources/plant-trees-helpanimals#:~:text=Trees%20of%20all%20kinds%20shelter,trees%20comfortably%20ho st%20some%20nesters.



## PLANNING YOUR TREE PLANTING

#### >>> TIME OF YEAR TO PLANT

Trees in Ohio are best planted in the spring or fall.

One of the best times to plant is in spring between early March and early May, when trees are still dormant, frost is no longer a threat, and before buds begin. Plant trees as early as possible when soil moisture is high and there are cooler temperatures.

The fall planting season in Ohio begins in early September and runs through November.

### >>> <sup>1</sup>

## CHOOSING A LOCATION

Proper tree placement can enhance your property and prevent costly maintenance and repairs down the road. Consider utility lines, the side walk and driveways when choosing a location.

A local arborist or tree care professional, utility company, local nursery, or county soil and water office can help with proper tree selection and placement.

## CALL BEFORE YOU DIG

A federally-mandated national "Call Before You Dig" number — 811 — was created to help protect you from unintentionally hitting underground utility lines while working on digging projects. If you are going to be planting a tree soon remember to plan ahead to be safe when you dig.



#### >>> SOIL PREPARATION

Before putting trees in the ground, you have to ensure that the native soils are suitable for the trees to thrive. Subsoiling, digging to loosen soil, will ensure the trees' roots have exposure to air pockets while simultaneously removing excess water that could hinder their growth.

The best soil to plant trees in contains additions of compost or organic materials, known as soil amendments. Organic matter consisting of soil conditioners and rotten manure promotes health and speedy growth. Some people use sawdust or woodchips, but these can deprive the tree of the soil's nutrients. Amendments like tree bark that break down slowly will improve tree growth.

## CHOOSING THE BEST TREE

#### >>> PLANTING TIPS

- Consider size and sun: Before you head to the local nursery, take a look at your landscape space and bring photos for reference.
- Choose the right tree for the right location: Stick to the trees that best suit your landscape.
- Plant the tree as soon as possible: If not the same day, then place the
  tree in a shaded area and give it plenty of water. Planting in Fall or
  Spring is recommended.

#### >>> WHAT TO CONSIDER

It can be tempting to pick the prettiest tree in the nursery, but looks aren't everything. You'll need to determine what kind of tree will do well in your climate, soil, and growing conditions.

Trees that require full sun need a minimum of six hours of sun a day to thrive. Look around your yard and take note of how much shade it gets from structures and other trees.

Also consider your region's hardiness zone, which is the standard that determines which plants are likely to thrive at a given location.

Another key factor to consider before planting is drainage. If your yard is sloped, trees and plants at the bottom of your yard will retain more water and may even be prone to drainage issues. Keep this in mind when deciding on the water needs of your future tree.

Required growing space is one of the most commonly overlooked factors when it comes to tree planting. Poor placement can result in roots or branches too close to structures, driveways or sidewalks. You could also run into problems with underground plumbing, or overhead or underground power lines.

#### >>> TREES FOR ALL SEASONS

https://www.arborday.org/trees/health/pests/article-multi-season-color.cfm

## Samples of Recommended Trees



Autumn Brilliance Serviceberry



Eastern Redbud



Eastern Redcedar



Follow QR Code for full list of preferred trees



Shingle Oak



Ohio Buckeye



# WHAT TO KNOW ABOUT WATERING

#### >>> HOW MUCH TO WATER

Water is critical to the success of any tree or shrub planting. One good rule of thumb is to immediately irrigate a newly-planted tree with 2 to 3 gallons of water per inch of its trunk diameter. Watering is recommended two or three times a week in the first year through autumn until the tree drops all its leaves.

How much to water newly planted trees based on size of trunk

Caliper of tree trunk	Root establishment time	Gallons of water at each irrigation
1 inch	1.5 years	1-1.5 gallons
2 inches	3 years	2-3 gallons
3 inches	4.5 years	3-4.5 gallons
4 inches	6 years	4-6 gallons
5 inches	7.5 years	5-7.5 gallons
6 inches	9 years	6-9 gallons

#### >>> TOOLS

Watering bags can be useful in areas where it would be difficult to haul a sprinkler or hose to and from a tree. The watering bag can provide a slow release of water over a few days and reduce trips to each tree. Especially helpful if you've planted several trees.

For newly planted trees or shrubs, water well after planting, then place the bag around the trunk and secure with the zipper. Shorter profile bags set on the ground, encircling the tree or shrub. Lift the bag with the handles to spread out the bottom, then fill the bag to the top.

## EXPERT TIP

Remember to skip rainy days on your watering schedule. If the soil around your tree is kept too wet, it could develop root rot.

#### >>> OVERWATERING

Bear in mind that it is possible to overwater new trees. This is problematic, as new trees need to establish a healthy root system. If the soil is too saturated it can become anaerobic, or lacking oxygen. Roots need oxygen in order to respirate, which is an important metabolic process.

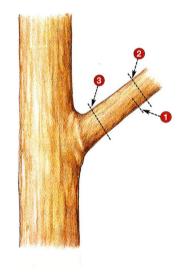


## TREE MAINTENACE

#### >>> PRUNING

Prune trees and shrubs at planting time only to remove branches damaged during handling and transplanting. Lower branches manufacture critically needed food and should not be removed. Inspect plants after a year and remove dead and crossing branches. Trees do not need to be pruned to balance the root with the top.

Trees and shrubs should be pruned in the dormant season to easily visualize the structure of the tree, to maximize wound closure in the growing season after pruning, to reduce the chance of transmitting disease, and to discourage excessive sap flow from wounds.



#### three-cut branch removal

To prune a tree limb cleanly and safely, use a prunning saw and make these three sequential cuts:

- On the bottom of the limb between 6 and 12 inches from the trunk; cut about one-quarter of the way through.
- Through the limb from the top, starting about 1 inch beyond the first cut. (The weight of the branch may cause it to snap off before the cut is complete.)
- Completely through the short remaining stub from top to bottom just beyond the swollen branch collar. (Support the stub while sawing, to make a clean cut.)



#### >>> MULCHING

Mulching is the most important post-planting practice you can do to improve the health and vitality of your landscape tree.

Wood-chip mulch can nearly double growth in the first few years by protecting tree roots from extreme weather, preserving soil moisture, eliminating grass and weed competition and preventing damage from mowers and weed trimmers. Apply a layer of wood-chip mulch 2-4 inches thick to a diameter of 3-4 feet.

DO NOT mound mulch directly around the base of the tree.

### **PROTECT YOUR TREES**

#### **>>>**

#### PROTECTING FROM TREE PESTS

**Inspect your trees** - Make sure your trees are clear of tree-damaging pests that lurk around the leaves, branches and trunk. Check your leaves for discoloration or holes. Examine the growth of your tree trunks and look for any holes or frass. You can prevent an infestation by dealing with the issue right away.

**Trim your trees** - Pruning your branches helps trees absorb more light. You can also improve the airflow in your tree by trimming the branches. This helps to prevent pest infestations.

https://www.arborday.org/trees/health/pests/

## HELP PROTECT OHIO'S TREES

SPOTTED LANTERN FLY FEED ON A WIDE VARIETY OF WOODY AND HERBACEOUS PLANTS, CAUSING WILTING AND DIEBACK AND STRESS THAT CAN MAKE HOST PLANTS MORE SUSCEPTIBLE TO DAMAGE BY OTHER BIOTIC OR ABIOTIC FACTORS.

IF YOU SEE THESE INVASIVE PESTS, CALL OR EMAIL PLANT PEST CONTROL SECTION OF THE OHIO DEPARTMENT OF AGRICULTURE: (614) 728-6400 OR PLANTPEST@AGRI.OHIO.GOV





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#### TREE TRUNK PROTECTION

If you have deer in your area, we recommend protecting your trees with plastic tubing or chicken wire. Wrap one of these around your tree's trunk, leaving at least an inch of space between the tube and the trunk so that it doesn't cut into the tree or trap water inside. Both of these materials are widely available at hardware stores for little expense, and one roll of tubing or chicken wire can be shared by many trees and many neighbors!

Providing a barrier also protects against lawn mowers and weed whackers, one of the other biggest causes of mortality for young urban trees. The base area of young trees (the bottom of the trunk, and the "root flare" where the trunk begins to fan out and become the roots of the tree) is a sensitive and critically-important part of the tree, and protecting this zone can ensure your young tree thrives and grows into full, healthy maturity.

## **RESOURCES**

#### **ODNR Common Trees of Ohio**

https://ohiodnr.gov/wps/portal/gov/odnr/discover-and-learn/plants-trees/common-trees-ohio

#### **Plain City Tree Commission Website**

https://www.plain-city.com/tree\_commission

#### **Tree Planting Guide**

https://www.arborday.org/trees/planting/

#### **Tree Care Tips & Techniques**

https://www.arborday.org/trees/tips/

#### **Plain City Preferred Tree List**



