

# STREET TREES

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Perrysburg Department of Public Service  
Perrysburg Street Tree Commission  
11980 Roachton Road  
Perrysburg, Ohio 43551  
419.872.8020

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## TREE CITY USA

Since the spring of 1985, Perrysburg, Ohio has officially been designated a Tree City USA, confirming what residents have long known - that our tree-lined streets are a valuable aspect of Perrysburg's well-known quality of life. The Tree City USA program, administered by the National Arbor Day Foundation with support from the USDA Forest Service and state forestry programs, recognizes communities that implement four basic standards necessary to a comprehensive community tree care program. Perrysburg has met these standards each year since 1985.

## TREE CITY USA STANDARDS

- Observe Arbor Day locally with a program in the spring of each year and declaring an official proclamation
- Adoption of a Street Tree Ordinance in 1973, legally protecting trees in the public right-of-ways
- Spend \$2 annually for every citizen of Perrysburg on our Community Forestry Program
- Establishment of the Perrysburg Street Tree Commission in 1973 to develop and administer the forestry program



# CITY OF PERRYSBURG STREET TREES

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## STREET TREE COMMISSION

The Street Tree Commission was established in conjunction with Ordinance 1024 of the City of Perrysburg Codified Ordinances, for the purpose of advising the City Council and the Mayor on any program or legislation regarding plants in public ways. The eight members of the Commission include the Director of Public Service, the Operations Manager of Public Service, the Planning and Zoning Administrator and/or Deputy Administrator, and five citizen members, one of which is a certified/ licensed arborist appointed by the Mayor. The Commission is charged with the education of the public regarding the selection, planting and care of trees.

This commission meets monthly to approve all tree plans of new subdivisions and new construction to consider the overall composition and the diversity of the urban forest.



## STREET TREE ORDINANCE

Perrysburg's Street Tree Ordinance established the authority of the Operations Manager of the Department of Public Service, who is under the supervision of the Director of Public Service, to plant, trim, spray, and remove trees in public places. The Operations Manager's authority also extends to the pruning of any limbs overhanging public property. The ordinance requires a written permit to plant a tree in the public right-of-way.

The ordinance further protects trees in public places by prohibiting the pouring of deleterious substances upon the soil surrounding trees, prohibiting the stacking of materials around the base of trees, and protecting trees during any construction occurring nearby. Approval for City street tree removal must be obtained from the Street Tree Commission.



The final provision of the Street Tree Ordinance requires that all construction include the planting of street trees. Prior to a zoning permit being granted, all tree permit funds are collected and then the Street Tree Commission develops the street tree plans.

## PERMITS FOR PLANTING TREES IN THE PUBLIC RIGHT-OF-WAY

A permit is required for planting trees in the public right-of-way. Planting permits are available on the City's [website](#) and at the Planning and Zoning Office at 419.872.8060.

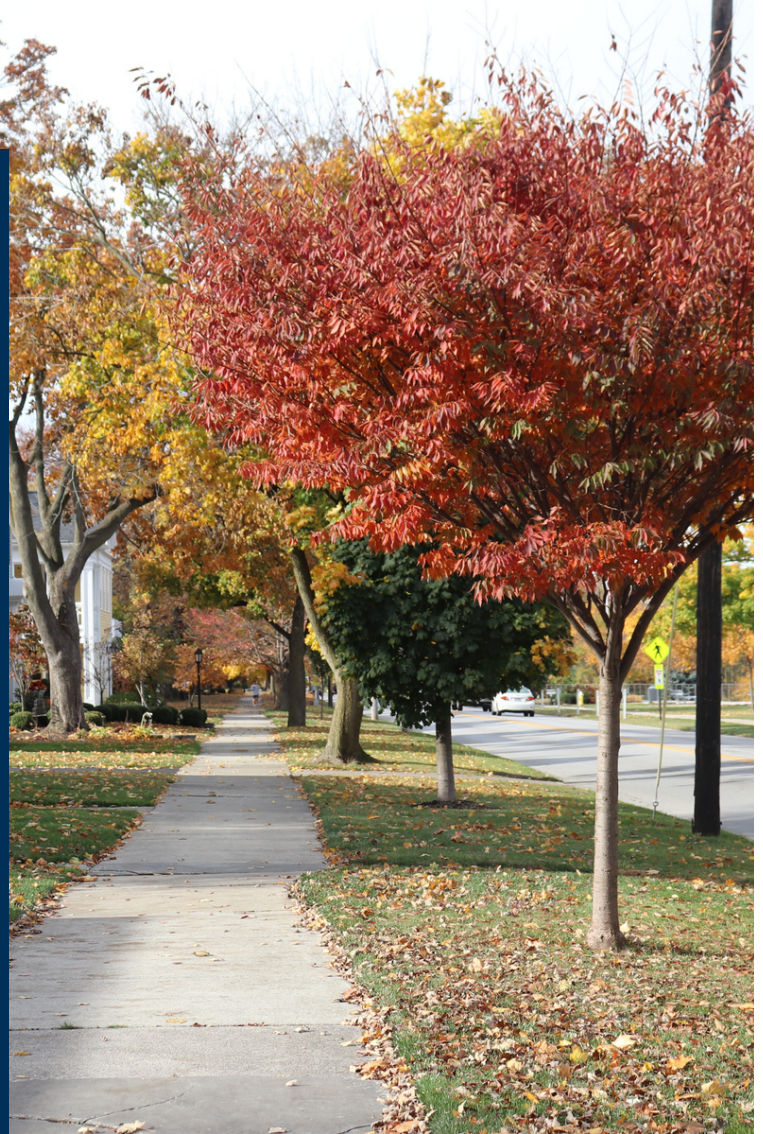
# STREET TREES

The City is responsible for all trees in right-of-way, parks and on city properties. The Department of Public Service oversees the planting of all trees in new subdivisions and commercial properties. All new subdivisions and commercial properties are required to submit a street tree plan to the Street Tree Commission.

Residents who wish to plant trees in the right-of-way are required to submit a street tree work permit to the Street Tree Commission.

Location and species of tree is considered when approving tree plantings to assure that tree growth and mature size is appropriate for the planting site.

The comprehensive inventory of Perrysburg's existing street trees is updated annually. It includes species, size, and maintenance requirements. The Operations Manager of Public Service uses this inventory to care for existing trees.



## GENERAL NOTES ABOUT STREET TREES:

1. Street trees shall be planted in the center of the tree lawn, were applicable.
2. The minimum trunk caliper measured at 6" above the ground for all street trees shall be no less than 2-1/2".
3. Trees shall conform to American Standard for Nursery Stock Z60.1, latest edition.
4. Trees shall have straight trunk with a single central leader.
5. Ball sizes shall conform to 1.3.1 and 1.3.4 of the standards.
6. No stem girdling roots will be allowed.
7. No open wounds will be allowed.
8. Trees shall be branched no closer than 48" to the ground.
9. A small tree shall be used when planting under overhead primary electric wires.
10. Tree locations shall be a least sixty-six (66) feet from street intersections and ten (10) feet from fire hydrants, street lights or utility poles.
11. Tree spacing shall be calculated using the mature size of each tree.
12. The minimum spacing between trees shall be as follows:
  - a. Small trees up to 30 feet tall - fifteen (15) feet spacing between trees
  - b. Medium trees 30 to 45 feet tall - twenty five (25) feet spacing between trees
  - c. Large trees 45 feet and taller - forty (40) feet spacing between trees

# APPROVED STREET TREES:

All street trees should be straight with a single trunk, 2-1/2" minimum caliper and insect/disease resistant.

## SMALL TREES

- Mature height under 30'
- Minimum tree lawn 4' wide
- Suitable with overhead wires

- **Crabapple** *Malus*
  - 'Adirondack' (upright form)
  - 'Sugar Tyme' (white flowers)
  - 'Prairie Fire' (pink flowers)
- **Dogwood** *Cornus*
  - Corneliancherry – *Cornus mas*
  - Kousa – *Cornus k.ch.* 'Samtomi'
  - Pagoda – *Cornus alternifolia*
  - Silky – *Cornus amomum*
  - White Flowering – *Cornus florida*
- **Elm**
  - Anarondike
  - Chinese – *Ulmus japonica*
- **Filbert**
  - American – *Corylus Americana*
  - European – *Corylus aveellana*
  - Purple Giant – *Corylus maxima*
- **Hawthorn**
  - Cockspur (thornless) – *Crataegus crus-galli*
  - Downy – *Crataegus mollis*
  - English – *Crataegus laevigata*
  - Lavalley – *Crataegus x. lavalley*
  - Ohio Pioneer – *Crataegus punctata* (thorns)
  - Washington – *Crataegus phaenopyrum*
  - Winter King (has thorns) – *Crataegus virdis*
  - Weswood Lestre
- **Maple**
  - Amur – *Acer ginnala*
  - Hedge – *Acer campestre*
  - Shantung – *Acer truncatum*
- **Oriental Hornbeam** – *Carpinus orientalis*
- **Serviceberry** – *Amelanchier canadensis*
  - Allegheny – *Amelanchier laevis*
  - Autumn Brilliance – *Amelanchier A.x grandiflora*
  - Cumulus – *Amelanchier laevis*
  - Cole's Select – *Amelanchier A. x gradiflora*
  - Downy – *Amelanchier arborea*
  - Shadblow – *Amelanchier arborea*
- **Tree Lilac**
  - Ivory Silk – *Syringa reticulata*
  - Summer Snow – *Syringa reticulata*

## MEDIUM TREES

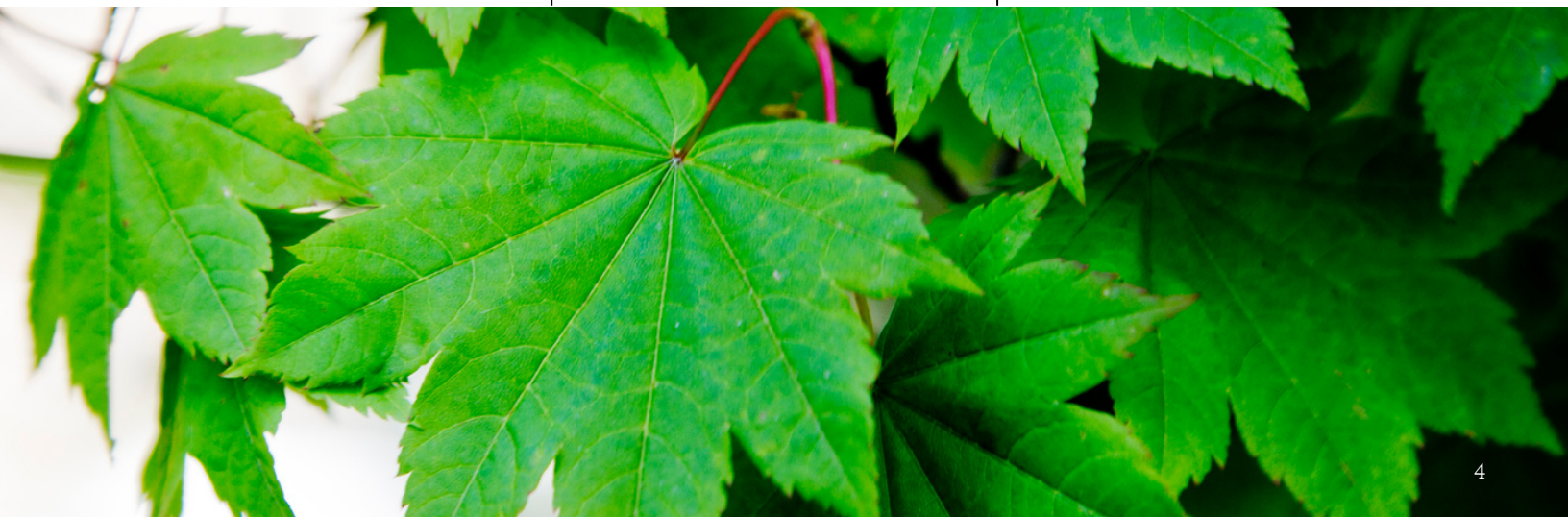
- Mature height of 30'-50'
- Minimum tree lawn 6' wide
- No overhead utility lines

- **Amur Maackia** – *Maackia amurensis*
- **Birch**
  - River Birch – *Betula nigra*
- **Filbert**
  - Turkish Filbert – *Corylus colurna*
- **Goldenraintree** – *Koelreuteria paniculata*
- **Green Hawthorn** – *Crataegus viridis*
- **Hophornbeam** – *Ostrya virginiana*
- **Hornbeam**
  - American – *Carpinus caroliniana*
  - European – *Carpinus belulus*
  - Heartleaf – *Carpinus cordata*
  - Japanese – *Carpinus japonica*
- **Ironwood** – *Ostrya virginiana*
- **Katsuratree** – *Cercidiphyllum japonica*
- **Linden**
  - Basswood – *Tilia americana*
  - Glenleven – *Tilia cordata*
  - Greenspire – *Tilia cordata*
  - Littleleaf – *Tilia cordata*
  - Redmond – *Tilia americana*
- **Maple**
  - Hedge – *Acer campestre*
  - Miyabei – *Acer miyabi*
  - Paperbark – *Acer griseum*
  - Red – *Acer rubrum*
  - Striped – *Acer pensylvanicum*
  - Sugar – *Acer saccharum*
  - Sycamore – *Acer pseudoplatanus*
- **Yellowwood** – *Cladrastis kentuk*

## LARGE TREES

- Mature height of 50 feet
- Minimum tree lawn 8 feet wide
- No overhead utility lines

- **Alder** – *Alnus glutinosa*
- **Blackgum/ Sourgum** – *Nyssa sylvatica*
- **Elm** – *Ulmus* spp. Dutch elm disease resistant
  - American Liberty – *Ulmus americana*
  - Lacebark – *Ulmus parvifolia*
  - Pioneer – *Ulmus carpinifolia*
  - Valley Forge – *Ulmus americana*
- **Ginkgo** – (males only) *Ginkgo biloba*
- **Hackberry** – *Celtis occidentalis*
- **Hardy Rubbertree** – *Eucommia ulmoides*
- **Honeylocust**
  - Moraine – *Gleditsia triacanthos*
  - Shademaster – *Gleditsia t.i.*
  - Skyline – *Gleditsia t.i.*
- **Kentucky Coffeetree** (seedless) – *Gymnocladus dioica* 'Espresso'
- **London Planetree** – *Platanus x acerifolia*
- **Oak**
  - Chestnut – *Quercus prinus*
  - Chinquapin – *Quercus muehlenbergii*
  - Pin – *Quercus palustris*
  - Red – *Quercus rubra*
  - Scarlet – *Quercus coccinea*
  - Shingle – *Quercus imbricaria*
  - Shumard – *Quercus shumardii*
  - Swamp White – *Quercus bicolor*
  - White – *Quercus alba*
- **Sweet Gum** – *Liquidambar styraciflua*
  - Moraine – "Moraine" (no seed pods)
- **Sycamore** – *Plantanus occidentalis*
- **Zelkova** – *Zelkova serrata*
  - Green Vase
  - Musachino
  - Village Green



## PROHIBITED STREET TREES:

The public tree lawn is a unique environment due to its exposure to urban stresses such as road salt, size constraints, and poor soil conditions making it an unsuitable planting site for many tree species. The following trees are prohibited for street tree planting in Perrysburg for a variety of reasons including weak wood, susceptibility to disease or insect pests, overly messy flowers or fruit, aggressive root systems, incompatibility with our soil, and/or early leaf drop.

- **Ash Fraxinus** – All species due to Emerald Ash Borer (EAB)
- **Baldcypress** – *Taxodium distichum*
- **Birch** (except River Birch *Betula nigra*)
- **Black Locust** – *Robinia pseudoacacia*
- **Black Walnut** – *Juglans nigra*
- **Box Elder** – *Acer negundo*
- **Buckeye** – *Aesculus glabra*
- **Buckthorn** – *Bumelia lycioides*
- **Butternut** – *Juglans cinerea*
- **Catalpa** – *Catalpa speciosa*
- **Cottonwood** – *Populus deltoids*
- **Elm**
  - American – *Ulmus americana*
  - Red – *ulmus rubra*
  - Siberian – *Ulmus pumila*
- **European Mountain Ash** – *Sorbus spp*
- **Evergreen trees** (fir, hemlock, larch, pine, spruce, etc.)
- **Fringetree** – *Chionanthus* (affected by EAB)
- **Fruitbearing trees** (apple, pear, etc.)
- **Ginkgo** – (female because it bears fruit)
- **Hickory** – (nut bearing)
- **Honeysuckle** – *Lonicera*
- **Horsechestnut** (fruit bearing) – *Aesculus hippocastanum*
- **Kentucky Coffeetree** (variety with seeds)
- **Magnolia**
  - *Magnolia soulangeana*
  - *Magnolia stellata*
- **Maple** – All soft maples
  - Norway – *Acer platanoides*
  - Silver – *Acer saccharinum*
- **Mulberry** – *Morus spp*
- **Pears** – All species
- **Poplar** – *Populus spp*
- **Russian Olive** – *Elaeagnus angustifolia*
- **Shrubs** – All species
- **Smoketree** – *Cotinus coggygria*
- **Tree of Heaven** – *Ailanthus altissima*
- **Willow** – *Salix spp*

## THE VALUE OF TREES

- A single tree can transpire up to 200 gallons of water a day during hot summer months.
- Areas with trees have less crime and domestic violence than areas without trees.
- In photosynthesis, each tree stores about 13 pounds of carbon annually.
- Studies show that people recover quicker after illness when they have trees around.
- Trees are natural air filters, removing dust and some toxic pollutants.
- Trees can reduce air-conditioning requirements of a building by 10-50%.
- Trees increase property values by up to 25%.
- The total value of the Perrysburg urban forest is estimated at over \$8 million.



# STREET TREE PLANTING, WATERING, MULCHING AND PRUNING

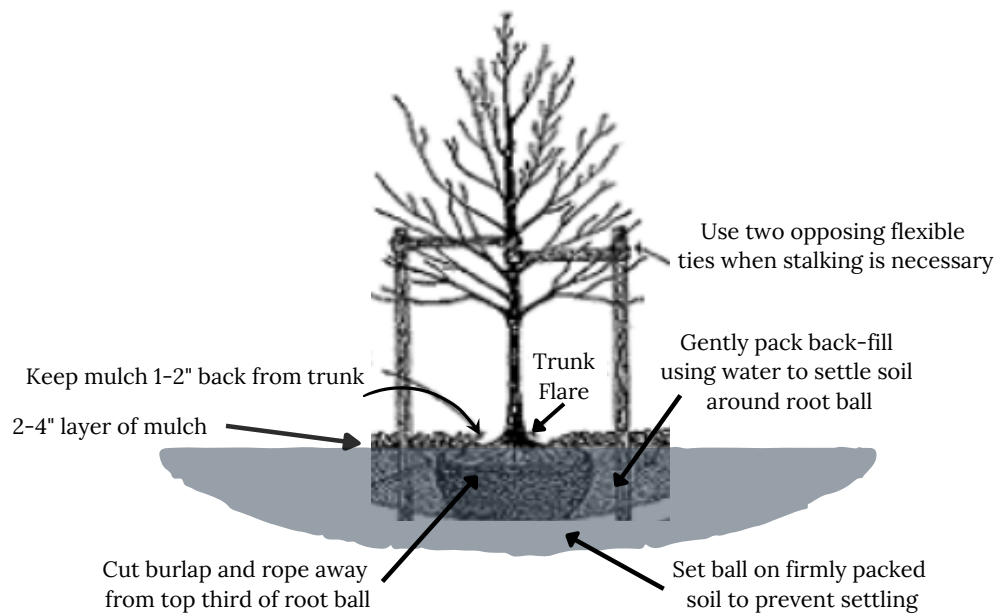


The City of Perrysburg is responsible for the trees that are planted in the street lawn. That is the area between the sidewalk and street. The Street Tree Commission approves the design of the street tree planting in all new residential and commercial projects within the city.

The residents have a shared interest and responsibility in the maintenance and care of their street tree in terms of watering and proper mulching. If the street tree is not watered or volcano mulched and dies, it will not be replaced by the City. The City has the responsibility of planting, pruning, trimming and removal of street trees when necessary.



## PLANTING AND CARE OF NEW TREES



The proper planting of trees helps to ensure survival. Our heavy clay requires extra precautions to provide adequate drainage. Planting at the proper time is also important. In general, fall planting is best (October–November), followed by late winter/early spring (March–April). Contrary to popular belief, most of a tree's roots grow within the top 12" to 18" of soil. That is where the available oxygen and water are located. Because of our heavy clay, it is critical that the trees be planted in wide holes and at the proper depth. To determine how deeply to plant the tree, always locate the trunk flare – where the large, primary roots begin to grow out from the trunk. It may take some digging in the root ball or container. Remove any excess soil and dig the planting hole so that the trunk flare will be at or within 1" above the surrounding grounds soil line. Firmly tamp the bottom of the planting hole to reduce settling and begin filling with the original soil.

When the planting pit is 2/3 full, tamp the soil and add 3–5 gallons of water to settle the soil. Be certain that the tree is straight, then finish filling the hole with soil, making sure to stop adding soil when you reach the trunk flare. You should have leftover soil as you have displaced it with the root ball.

Cover the planting pit with 3" of shredded bark mulch, keeping mulch 2" away from the tree trunk. Mulch is very useful in conserving moisture, reducing weed growth, maintaining soil temperature and also prevents lawn mowers from getting too close and damaging the trunk.

If staking the tree is necessary, allow 3" to 4" flexibility for swaying in the wind. After the first growing season, the supports must be removed.

# WATERING STREET TREES

If you do not water your tree during the summer when it does not rain, the tree will die. The City installs a watering bag on newly planted trees in the first year. It is the responsibility of the resident to fill the bag when watering is needed. The cost for city water to fill the 20-gallon water bag is 83 cents. If a new street tree dies because it was not watered, it will not be replaced by the City.



## WATERING WITH A TREE BAG

The tree bag has a wide fill opening located under the colored tag. The tree bag is designed to let the water seep out of the small holes in the bottom of the bag. The tree bag holds approximately 20 gallons of water. The bag should drain in five to nine hours. If you notice it is not draining, check the bottom to see that the holes are free of debris. The bag is designed to allow a slow, even release of water to the tree. After a deep watering with the bag, allow the soil to begin to dry out, this will help encourage deep root growth. Keeping the soil too moist for too long, or poor drainage at the planting site can remove the oxygen available to the tree roots within the soil and kill the tree.



## WATERING WITH A GARDEN HOSE

You may also do a deep slow soak of your tree weekly. Set a garden hose by the trunk. Turn the water to a slow stream that does not make a puddle of water but allows the water to slowly seep into the ground. An hour a week of this type of watering is helpful to the health of the tree rather than frequent short bouts of watering. The water should seep into the ground and not leave a puddle at the base of the tree.

## WATERING SCHEDULE

If there is no rain during the week (less than one inch of rain) the tree needs to be watered. The water requirements for a 2 ½ inch caliper (size) street tree are:

- First year.....20 gallons of water per week
- Second year.....12 gallons of water per week
- Third year.....8 gallons of water per week
- Fourth year.....3 gallons of water per week



## TREE STAKING

The tree stakes will remain for one year. The staking should be loose to allow the tree to have some movement which results in the growth of a good root system. City crews will remove the stakes after the first year. Staking of trees after that time is not necessary. Also, tree wraps are not needed after the tree is planted. Tree wraps protect the bark during the transportation and installation period. If left on the tree, it keeps the bark wet and encourages insect activity which damages the bark.

QUESTIONS? CONTACT THE DEPARTMENT OF PUBLIC SERVICE AT 419.872.8020 or email [publicservice@ci.perrysburg.oh.us](mailto:publicservice@ci.perrysburg.oh.us)

# PROPER TREE MULCHING

Mulch is the material placed on the soil to conserve moisture and improve growing conditions. Common mulches include wood chips, bark, pine needles and compost. Organic mulches are preferred because they improve soil structure, add organic materials and provide nutrients. Applying a 2-4 inch layer of organic mulch can mimic a more natural environment and improve tree health. However, if mulch is applied too deep or the wrong material is used, it can actually harm trees. The beginning of the root flare, the place where the trunk widens out to form roots, must remain visible. Avoid volcano mulching.

## BENEFITS OF PROPER MULCHING

- Helps reduce soil moisture loss, control weed and grass competition.
- Protects the trunk from lawnmower and weed eaters.
- Insulates soil, protecting roots from extreme summer and winter temperatures.
- Gives a well-cared for look in the landscape plantings.
- Apply 2 to 4 inches of mulch over well-drained soils.
- Use a thinner layer on poorly drained soils.
- Do not pile mulch against the tree trunk. Pull mulch back several inches from the trunk so the base of the trunk and root crowns is exposed.
- The mulch ring should not resemble a volcano.
- If mulch is already present, check the depth. Do not add more if a sufficient layer is already in place. Rake old mulch to break up matted layers and improve its appearance.
- Most organic mulches work well.
- Composted wood chips make good mulch, especially when it contains a mixture of leaves, bark and wood. Fresh wood chips may be used around established trees and shrubs. Avoid using fresh wood chips that have piled without exposure to oxygen. Sawdust and straw are not recommended.

Volcano mulching is an improper mulching technique where mulch is piled high against the tree trunk. Mulch should not touch the trunk of the tree. The trunk was simply not meant to be covered. Volcano mulching causes harmful effects on the tree's health and will eventually kill the tree.

## HAZARDS OF VOLCANO MULCHING

- Promotes excessive soil moisture and root rot.
- Causes inner bark tissue to die.
- Leads to insect and disease problems.
- Creates habitat for rodents that chew the bark and girdles the stem.
- Results in anaerobic conditions that produce alcohols and toxic organic acids.
- Causes imbalances in soil chemistry.
- Becomes a matted barrier that prevents the penetration of water and air.
- Trees in the forest usually have bare ground around their trunks.
- The bark on the trunk of the tree is not intended to be covered by soil or mulch which causes damage and eventually kills the tree.
- Placing an elevated planting bed around the perimeter of your trees has the same effects as volcano mulching.
- The tree will develop stem girdling roots and develop problems with insect and other diseases.

**Proper mulching technique**



**Improper mulching technique (volcano mulching)**





# TREE INSECTS AND PESTS

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## ASIAN LONGHORNED BEETLE (ALB)

In June 2011, the Asian Longhorned Beetle (ALB) was discovered in Tate Township in Clermont County. This beetle is native to eastern China, Japan, and Korea. This species has now been accidentally introduced into the United States, where it was first discovered in 1996. The beetle is believed to have been spread from Asia in solid wood packaging material.

Ohio is the fifth state to find the Asian Longhorned Beetle, also known as the starry sky. The pest was successfully eradicated in Illinois and parts of New Jersey, and it is being controlled in New York and Massachusetts. With the help of local citizens reporting known infestation, ALB can be controlled in Ohio as well.

This invasive beetle has no known natural predators and poses a threat to Ohio's hardwood forests. To keep this tree-killing pest from spreading across Ohio, areas of Clermont County are considered to be restricted areas. This means the transport of trees, wood or debris (firewood, stumps, roots, branches, debris and other material living, dead, cut, or fallen from all hardwood species, green lumber, nursery stock, or logs) out of these areas is illegal.

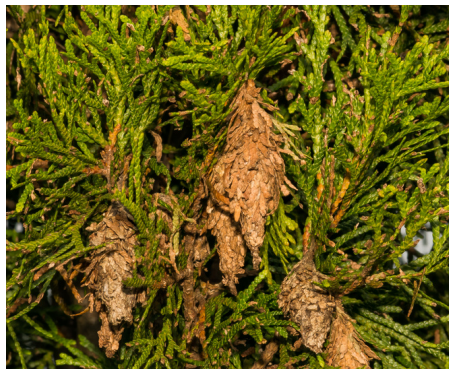
This beetle attacks all hardwood trees and destroys them. The ODNR Forestry Division is asking for the public's help in detecting the spread of the invasive species. With the help of local citizens reporting known infestation, it can be controlled in Ohio as well. Potential infestation should be reported to 855.252.6450.

Consult [www.AsianLonghornedBeetle.com](http://www.AsianLonghornedBeetle.com) for detailed information about this beetle.

## BAG WORMS

Most bag worms are inoffensive to humans and not conspicuous. A few species can cause serious damage to trees. Bag worms feed on evergreen trees and look like small pine cones. If detected in the pupa stage, an effective management method is to manually pick off all the cases, crush each one and dispose of in a sealed bag in the refuse. Other treatments are insecticides, usually applied in the spring.

Bag worms will eventually defoliate and kill the tree. Further information is available [online here](#).



# TREE INSECTS AND PESTS

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## EMERALD ASH BORER (EAB)

The entire State of Ohio is in an Emerald Ash Borer (EAB) quarantine. This means that no Ash trees can be transported from the state. The City started treating all city street Ash trees in 2007 and continues this yearly treatment plan. The treatments are not a cure but a method of prolonging the life of Ash trees to reduce the immediate impact of the EAB on the city's urban forest.

To date, the city has received three separate grants for Ash tree removal/replanting of street trees. As of 2013, grants for removal assistance for private trees are no longer available and removal of private dead Ash trees are the responsibility of the individual homeowner.



A street tree inventory is updated annually and the results of the survey are utilized to monitor the health of city Ash tree population. City crews are systematically removing dead and hazardous Ash trees in city parks and on city right-of-way. Ash trees that are over 50% defoliated or damaged are removed. Replacement trees are planted as funds are available.

To help avoid this species devastation in the future, the City is expanding the species diversity of the urban forest. Currently there is a preponderance of Maple, Honeylocust, Crabapple and Pear trees in the street tree population. The Street Tree Commission reviews all street tree plans for all new subdivisions and commercial construction site to promote diversity.

## GYPSY MOTH

The gypsy moth is a non-native, invasive species that has been advancing into Ohio from Pennsylvania and Michigan over the past three decades. In its caterpillar stage, it feeds on the leaves of over 300 different tree and shrub species and is especially fond of Oak. A healthy tree can usually withstand only two years of defoliation before it is permanently damaged or dies. In 2013, 51 of Ohio's 88 counties had established gypsy moth populations (ODNR Division of Forestry).

