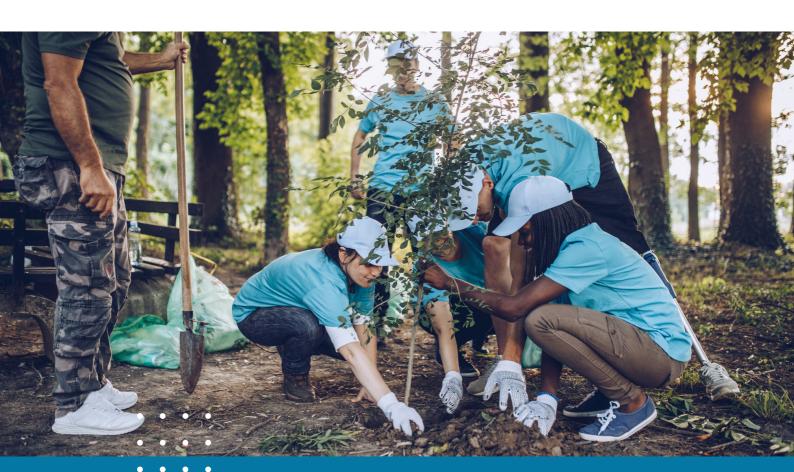




A beginners guide to Tree Planting

Designed to help you with your tree-planting endeavors



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- All you need is a sapling, a shovel, mulch, water, and garden gloves.
- Schedule your tree planting acitivity according to your local weather and climate.
- Temperature highly influences the survival of your saplings.
- Generally, the best time to plant your tree is during autumn.
- Choosing the right tree will also influence its survival and vigor. Think about
 the type of tree you want to plant according to where you are planting, what
 the tree's function is, etc.
- Plant native trees! They are better adapted to your local environment.
- There is no one way to plant your tree. It will vary greatly with your sapling.
- Usually, you will plant saplings that are either bare-rooted, containerized or balled/burlapped.
- The hole you dig should be **wider** than the tree's root ball. The height should be **the same** as your tree's root ball.
- For containerized trees, you can cut a cross at the bottom of the root ball if you see the roots are too tangled.
- For burlaped trees, remove all material covering the root ball.
- After covering the hole with soil, the ground should be firm, but not tightly packed.
- Water your newly planted sapling. After the water has been absorbed, cover with mulch.
- Do not let the mulch touch the tree trunk.
- Caring for your tree after planting is a way to increase its survival chances.
- Mulching, watering, and pruning will help your tree grow strong and healthy!

Planting a tree is fairly easy. Depending on the type and size of the tree you are planting, you might need further material.

For most tree-planting activities, however, you will simply need:

- 1. A tree sapling
- 2. A spade or a shovel
- 3. Mulch*
- 4. Water
- 5. Garden gloves (optional)

*Mulch is any material that is spread or laid over the surface of the soil as a covering. It could be bark, shredded or chipped, pine needles, grass clippings, shredded leaves, etc.

Learn more about mulching and its importance in the "After Care" section.



In order to increase your trees' chances of survival, you should schedule your planting activity for the apropriate time of the year.

Regardless of location, trees need adequate time to establish their root system. This is especially true in areas with a warm and dry climate. For this reason, in most areas, autumn is the best time of the year to plant trees.

The type of tree you are planting could also influence the most suitable time to plant. While deciduous trees should be planted while in dormancy, evergreens do not present this limitation.

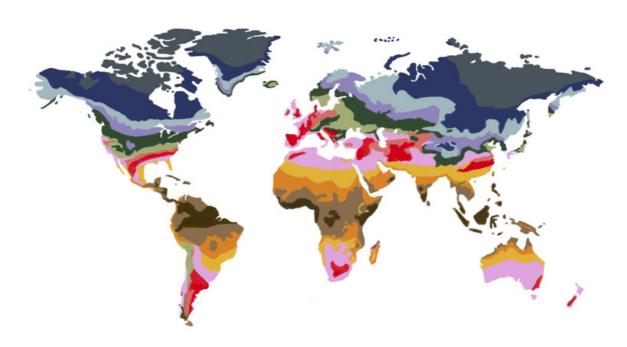
Temperature is also a relevant point to consider. Trees are fit to survive in a narrow range of temperatures. When choosing your tree, choose a species which is adapted to your local environment.

The image below is a rough representation of a global hardiness zone map. A hardiness zone is a geographic area defined as having a certain range of annual minimum temperature. In order words, you can find on the map the minimum temperatures you can expect in your area.

In conclusion: The ideal planting season will vary greatly throughout the globe, but that shouldn't keep you from putting your tree in the ground!

Check with your local authorities, tree-planting organizations or nurseries.

A GLOBAL MAP OF HARDINESS ZONES



Temperature (°F)	Zone	Temperature (°C)
-60 to -50	1	-51.1 to -45.6
-50 to -40	2	-45.6 to -40
-40 to -30	3	-40 to -34.4
-30 to -20	4	-34.4 to -28.9
-20 to -10	5	-28.9 to -23.3
-10 to 0	6	-23.3 to -17.8
0 to 10	7	-17.8 to -12.2
10 to 20	8	-12.2 to -6.7
20 to 30	9	-6.7 to -1.1
30 to 40	1 0	-1.1 to 4.4
40 to 50	11	4.4 to 10
50 to 60	1 2	10 to 15.6
60 to 70	1 3	15.6 to 21.1

You want trees that grow well in the soil, moisture, and temperature of your neighborhood.

To get the best results, consider each tree individually against your situation and needs.

Here are some points you could consider:

- Height. You do not want your tree bumping into anything when it is fully grown.
- Canopy. You need to be able to accommodate how wide the tree will grow.
- **Deciduous or evergreen?** If you are considering a tree that loses its leaves, are you prepared for the cleanup and the barrenness?
- Form or shape. Do you want a columnar tree that will grow in less space or do you want a round or v-shaped species which provides the most shade?
- **Growth rate.** How long will it take for your tree to reach maturity? What is your hurry? Slow-growing species typically live longer than fast-growing species.
- Soil type, sun exposure, and moisture requirements. Each tree species requires specific characteristics. What can you offer?
- **Fruit.** Not only are unclaimed droppings messy, but they will also attract rodents and could be a slip and fall on busy sidewalks.
- **Hardiness zone.** What are the temperature extremes in which your tree can be expected to grow (read the previous section to know more about hardiness zones)?
- **Function.** What would you like to receive from this tree? Shade, fruit, aesthetics?







Olive tree Pine tree

Orange tree

Choose a healthy tree. This would be one that has a good number of roots in proportion to the top. Check for signs of leaf injury from pests or diseases, or trunk damage from mishandling.

Trees sold in large national chain stores. Commonly, these have been grown in distant areas. Possibly, they may not be acclimated to your area. Do your due diligence.

Consider native versus exotic trees. A native tree is a tree that has not been introduced by man. It occurs naturally.

Why should you choose natives over exotic?

- Native species are usually better adapted to local conditions.
- Native species provide a number of functions important to the local ecosystem.
 These are the species that are best suited to live and thrive in a local area.
- Exotic species might disrupt the balance of your local planting spot. It can also occur that exotics become invasive species and contribute to the destruction of local fauna and flora.





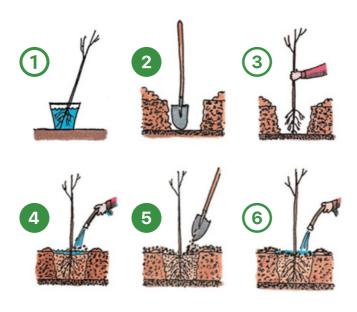


PLANTING THE RIGHT WAY

There is no one way to plant your tree. It will depend on your tree. Start by looking at your trees' roots to acess the best planting method.

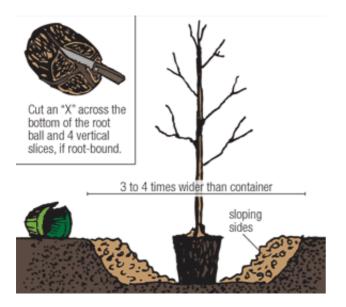
Bare Root:

- 1. Remover all the packaging and carefully untangle the roots. Soak the roots in water for 3 to 6 hours. Do not allow the roots to dry out.
- 2. Dig a hole, wider than seems necessary. Remove any grass within a 3-foot circular area. To aid root growth, turn soil in an area up to 3 feet in diameter.
- 3. Place the tree roots inside the hole and partially fill the it, firming up the soil around the lower roots. Do not add soil amendments such as peat or bark. Do not use fertilizer, potting soil, or chemicals on your new trees.
- 4. Shovel in the remaining soil. It should be firmly but not tightly packed. Construct a water-holding basin around the tree. Give the tree plenty of water.
- 5. After the water has soaked in, spread protective mulch 2 inches (5 centimeters) deep in a 3-foot (1 m) diameter area around the base of the tree, but not touching the trunk.
- 6. The soil and mulch around your trees should be kept moist but not soggy. During dry weather, generously water the tree every 7 to 10 days during the first year.



Containerized Trees:

- 1. Dig a hole 3 to 4 times wider than the container. The hole should have sloping sides like a saucer to allow for proper root growth.
- 2. Carefully remove the tree from the container keeping the soil around the roots intact. It helps to tap the outside of the container to loosen the edge. Don't yank the tree out of the container as this can separate the roots from the tree.
- 3. If your tree's roots are tangled, cut an X across the bottom of the root ball and four vertical slices along the sides of the root ball with a sharp knife.



- 4. Using some soil, secure the tree in a straight position, then fill and firmly pack the hole with the original soil. Keep backfilling until the soil is just below the root collar.
- 5. Create a water-holding basin around the hole and give the tree a good watering. After the water has soaked in, spread protective mulch 2-4 inches (5-10 centimeters) deep in a 3-foot (1-meter) diameter area around the base of the tree, but not touching the trunk.
- 6. The soil and mulch around your trees should be kept moist but not soggy. During dry weather, generously water the tree every 7 to 10 days during the first year.

Balled and Burlapped Trees:

- 1. Dig a hole 2 or 3 times as wide and as deep as the root ball. The hole should have sloping sides. Don't disturb the soil at the bottom of the hole.
- 2. Set the tree in the center of the hole. When moving the tree, handle it by the root ball. Don't move or lift the tree by the trunk.





- 3. Once the tree is in position, use wire cutters to cut vertically up the side of the wire basket and peel it away. Remove all the rope and twine from the ball and all the nails that hold the burlap together. Pull the burlap back and cut away any loose material. Don't worry about regular burlap under the root ball. It can stay put. But vinyl or treated burlap should be removed completely.
- 4. Make sure your tree is straight and then firmly pack the original soil around the root. Keep backfilling until the soil is just below the root collar.
- 5. Create a water-holding basin around the hole and give the tree a good watering. After the water has soaked in, spread protective mulch 2-4 inches (5-10 centimeters) deep in a 3-foot (1-meter) diameter area around the base of the tree, but not touching the trunk.
- 6. The soil and mulch around your trees should be kept moist but not soggy. During dry weather, generously water the tree every 7 to 10 days during the first year.

Mulching

Mulching can be of great help to young trees for various reasons:

- It insulates the soil, helping to provide a buffer from both heat and cold.
- It retains moisture.
- It keeps weeds out to avoid root competition.
- It prevents soil compaction.
- It lowers the chance of lawn mower damage.

Steps to Adding Mulch Around Your Tree:

- 1. Remove any grass or weeds within a 3-foot (1-meter) area (up to 10 feet/3 meters for a larger tree).
- 2. Pour natural mulch such as wood chips or bark pieces 2 to 4 inches (5 to 10 centimeters) deep within the circle.
- 3. Keep the mulch from touching the trunk of the tree.



Watering

Tree watering is a key part of tree care. It is not possible to recommend a specific amount of water, due to varying climates. Not enough water is harmful for the tree, but too much water is bad as well. Over-watering is a common tree care mistake.

Here are a few guidelines:

Newly Planted Saplings: usually 30 seconds with a steady stream of water is sufficient.

Up to 2 Years After Planting: During the first couple of growing seasons, your newly planted tree is expending a lot of energy trying to get its roots established in the soil. Deep watering and covering the soil with wood-chip mulch can help speed the root establishment. Deep water consists of keeping the soil moist to a depth that includes all the roots.

When to Water: Touch the soil at a depth of approximately 2 inches (5 centimeters). If it is moist to the touch, then they do not need water.



Pruning

Ligh pruning and the removal of dead wood can be done at any time. It may boost growth or prevent the development of defective limbs.

Pruning is more commonly practiced during dormancy (winter). It can preceed a vigurous burst of new growth in the following spring.

It can also be done during the summer, to direct the growth of a tree or branch. It should be done soon after seasonal growth is complete.

To prevent your tree from getting infected, avoid pruning during autumn, which is when funghi spread their spores.



Resources

<u>Arbour Day Foundation:</u> https://www.arborday.org/trees/planting/ <u>The Tree Council:</u> https://treecouncil.org.uk/wpcontent/uploads/2019/12/Tree-planting-guide.pdf

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Developed byGlobal Tree Initiative



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Dedicate your trees at https://plantgrowsave.org/report

And join our Global Community.

If you have questions related to tree-planting, visit the <u>Global Tree Initiative</u> <u>Community Forum</u>, on Facebook, and post your question there.

You can also get in touch with us at hello@plantgrowsave.org