

# Yard Trees - DRAFT -

#### 2024

# **Overview**

Yard trees offer a variety of benefits to homeowners. These benefits include reduced energy costs and increased home value, among others.

# **Findings**

## What is a Yard Tree?

• For the purposes of this document, a "yard tree" is referring to a tree or similar woody plant grown on small-scale residential lots.

# **Getting Started with Yard Trees**

- Step 1: Check your local codes.
  - Before doing anything, check local codes to see what rules are in place regarding planting trees. Although a permit is not usually required, some cities use stricter regulations or zoning rules that need an application before planting (Plant Native).
- Step 2: Selecting a tree.
  - Native trees offer a wide variety of benefits over non-native or invasive species (see Native Trees sheet for more information).
  - Native trees also have the potential to require less maintenance over time while promoting other native wildlife in the area (Tree of Life Nursery).
  - There are many resources available to find out what plants are native to an area, as well as how to care for them. These resources include the Native Plant Finder from the National Wildlife Foundation and the Native Plants Database from the National Audubon Society.
  - The Arbor Day Foundation also provides a tool to select trees that will be resilient within a certain climate zone.
- Step 3: Planting.
  - Location is important when planting a yard tree, with location requirements varying from species to species. Important elements to consider are:
    - Sunlight: Most trees that produce fruit and nuts need between 6-8 hours of direct sunlight each day, while non-flowering trees can tolerate reduced light exposure (Grow Organic).
    - Soil Quality: Well-draining soil is usually preferable when planting a tree, with trees in waterlogged areas being less likely to survive. Plant health can also be affected by soil pH, which can be tested with at-home kits (Grow Organic).
    - Air Circulation: Trees generally grow better when they have room away from solid masses like walls or fences that obstruct air flow (Grow Organic).

- Spacing: Similar to air circulation, if the tree is too close to other objects or plants, it's growth can be obstructed (Grow Organic).
- If the tree has already developed a root system, it is important that it is planted into a hole that is around twice as wide as the spread-out roots. The depth of the hole should place the base of the trunk level with the top of the soil (Grow Organic).
  - While digging, surrounding soil should be loosened to make it easier for the tree's roots to expand.
- Step 4: Continued Care.
  - Trees had a wide variety of needs regarding continued care. While some can be left to survive off of rain and sunlight, others may require further maintenance with pruning, fertilizing, and so on. The Tree Guide from the Arbor Day Foundation can provide a breakdown of what a tree species needs in both planting and maintenance.

## **Benefits of Yard Trees**

- Trees can have a substantial impact on property value. It is estimated that trees produce around \$31.5 billion a year on home value across the United States (University of Nebraska-Lincoln).
- Trees near homes can reduce air conditioning needs by %30 and save up to %50 in energy costs used for heating (Arbor Day Foundation).
- Roadside trees can reduce indoor pollution of nearby homes by up to %50 (Arbor Day Foundation).

# **Case Studies**

# <u>The Economic Footprint and Quality-of-Life Benefits of Urban Forestry in the United States: United States</u>

Urban trees contributed to an estimated \$31.5 billion of home value nationwide. These trees
provided an estimated \$73 billion in environmental benefits such as reduced air pollution and
reduced stormwater runoff.

# **Urban Forest Case Studies: Sacramento, California**

• The Sacramento Municipal Utility District found that three large trees, positioned with two on the west and one on the east of a home, can reduce energy costs by around %30 percent in the summer. These same trees can also reduce heating by an estimated two to %2-8 in the winter.

# Resources

# Websites

- Native Plant Finder (National Wildlife Foundation): https://nativeplantfinder.nwf.org/Plants
- Native Plant Database (National Audubon Society): <a href="https://www.audubon.org/native-plants/search?zipcode=32210&tab=best-results">https://www.audubon.org/native-plants/search?zipcode=32210&tab=best-results</a>
- Choosing the Right Tree (Arbor Day Foundation): <a href="https://www.arborday.org/trees/index-choosing.cfm">https://www.arborday.org/trees/index-choosing.cfm</a>
- Tree Facts (Arbor Day Foundation): https://www.arborday.org/trees/treefacts/

#### How To's

Planting Bare Root Trees for Beginners (Grow Organic):
 <a href="https://www.groworganic.com/blogs/articles/planting-bare-root-trees-for-beginners-a-comprehensive-guide">https://www.groworganic.com/blogs/articles/planting-bare-root-trees-for-beginners-a-comprehensive-guide</a>



The Tree Guide (Arbor Day Foundation): https://www.arborday.org/trees/treeguide/

## References

Arbor Day Foundation (n.d.). *Choosing the Right Tree*. <a href="https://www.arborday.org/trees/index-choosing.cfm">https://www.arborday.org/trees/index-choosing.cfm</a>

Arbor Day Foundation (n.d.). The Tree Guide. https://www.arborday.org/trees/treeguide/

Arbor Day Foundation (n.d.). Tree Facts. https://www.arborday.org/trees/treefacts/

Grow Organic (n.d.). *Planting Bare Root Trees for Beginners: A Comprehensive Guide*. <a href="https://www.groworganic.com/blogs/articles/planting-bare-root-trees-for-beginners-a-comprehensive-guide">https://www.groworganic.com/blogs/articles/planting-bare-root-trees-for-beginners-a-comprehensive-guide</a>

National Audubon Society (n.d.). *Native Plants Database*. Audubon. <a href="https://www.audubon.org/native-plants/search?zipcode=32210&tab=best-results">https://www.audubon.org/native-plants/search?zipcode=32210&tab=best-results</a>

National Wildlife Federation (n.d.). *Native Plant Finder*. Native Plant Finder. https://nativeplantfinder.nwf.org/Plants

Plant Native (n.d.). *Do You Need A Permit To Plant Privacy Trees?* <a href="https://plantnative.org/do-you-need-a-permit-to-plant-privacy-trees.htm">https://plantnative.org/do-you-need-a-permit-to-plant-privacy-trees.htm</a>

Tree of Life Nursery (2008, March 14). *Case Study: Altamira Project*. California Native Plants. <a href="https://californianative-plants.com/blog/california-native-plants/case-study-altamira/">https://californianative-plants.com/blog/california-native-plants/case-study-altamira/</a>

University of Nebraska-Lincoln (2021, October 8). *Study: Trees have \$31.5 billion impact on home values each year*. Nebraska Today. <a href="https://news.unl.edu/newsrooms/today/article/study-trees-have-315-billion-impact-on-home-values-each-year/">https://news.unl.edu/newsrooms/today/article/study-trees-have-315-billion-impact-on-home-values-each-year/</a>

University of Nebraska-Lincoln, United States Department of Agriculture, United States Forestry Service (2021, October 8). *The Economic Footprint and Quality-of-Life Benefits of Urban Forestry in the United States*. Arbor Day. https://www.arborday.org/urban-forestry-economic/downloads/key-findings.pdf

Werts, M. (2013, May 2). *The Energy Savings of Trees*. <a href="https://www.americanforests.org/article/the-energy-savings-of-">https://www.americanforests.org/article/the-energy-savings-of-</a>

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