National Wildlife Federation's
TREES FOR WILDLIFE

Tree Planting and Tree Care Guide

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Planning, Planting and Caring for Trees

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CONTENTS

- Get Ready to Plant
- Tree Planting Tips
- Assessing Your Site
- Planting Trees
- Starting Your Trees Off Right
- Aftercare Tips
- Extension Activities

NATIONAL WILDLIFE FEDERATION™

Special Acknowledgement to Contributors

National Wildlife Federation would like to thank the Former staff, education advisory committee and contributors who worked to develop the Trees for 21st Century program and educational materials. Your dedication to building a lasting relationship between future generation of stewards and nature is inspiring.

National Wildlife Federation

Our Mission

National Wildlife Federation mission is to inspire Americans to protect wildlife for our children's future. For 70 years, National Wildlife Federation has been a leader in conservation and environmental education shaping the future of stewardship for the earth in the United States. Through our educational programs, publications and multi-media outreach, NWF is dedicated to three objectives; connecting people with nature, safeguarding wildlife and wild places and providing solutions to climate change.

ERNXT merger with NWF in 2010 extends our programmatic connections for adults and youth by offering an opportunity to learn about the importance of tress to our planets health, the ability to tangible experience to make a difference by planting trees and dedication to pass on an appreciation for nature to future generations.

Trees for Wildlife program provides adult leaders with fun, hands-on science-based activities to help young people learn about the importance of trees and how to plant and take care of trees for the future. This initiative aims to educate and prepare a generation of environmental stewards, expand the world inventory of trees and to protect and improve natural resources.

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We would like to continue to develop and improve our program. If you have comments or ideas, please email: trees@nwf.org

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revised 7/2011

Become a Tree Steward: Plant a Tree

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Trees are an important part of eco-systems across the plant. Trees provide vital resources, clean our air, protect as from weather and provide enjoyment. Planting a tree with a child is a great way to help children understand the role of trees in the environment and also understand how each person can make a difference in their own community. Tree planting provide "the roots" for building future appreciation and stewardship for nature.

This guide will assist you on how to plan, prepare and execute your tree planting event, whether you are plant one tree or 100s. There are three sections to this guide: planning, planting, and caring for your trees. Each section provides step-by-step procedures on how to implement each process and hints for success. It is important to remember that trees, once planted, will need continual care. It is important to build this time for caring for the trees into your planning progress.

This guide can be used in conjunction with the age appropriate (K-18) activity booklet. The activities are designed to provide you an opportunity to learn about trees from how they grow, to wildlife benefits to benefits to humans. These activities can be done before, during and after your tree planting. Visit www.nwf.org/trees to download your copy of the activity booklets.

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Introduction

What is a Tree?

Trees similar to all living things grow, reproduce and respond to their environment. Trees like all plants manufacture their food through photosynthesis. Trees are in the family of woody plants which have cambium, a special layer of cells that allow the tree to increase in girth and are self supporting with a single stem. Like some plants – trees are perennials and can live for many years.

The food for tree is produced through complex system starting with the leaves. Leaves produce sugar as a result of photosynthesis which combines carbon dioxide and sunlight. As a result of the process to create sugar the by-product that the trees produce is oxygen – vital resource for other living organisms including humans. Tha sugar that is produced runs down through the tree – under the bark down the trunk and to the roots of the tree. The sugar combines at the roots with minerals and water in the ground to move back up the tree trunk and under the bark back to the leaves to which starts the cycle of photosynthesis again. Along the way the minerals, water and sugar stimulate the growth and development of the tree or assist in its reproduction.

The roots gather minerals and water which are needed in the process of photosynthesis and for feeding the tree's growth and development. The tree has one tap root and many lateral roots which help to keep it stable in wind and snow.

Learn more about trees at www.arboretum.harvard.edu/programs/tree_basics

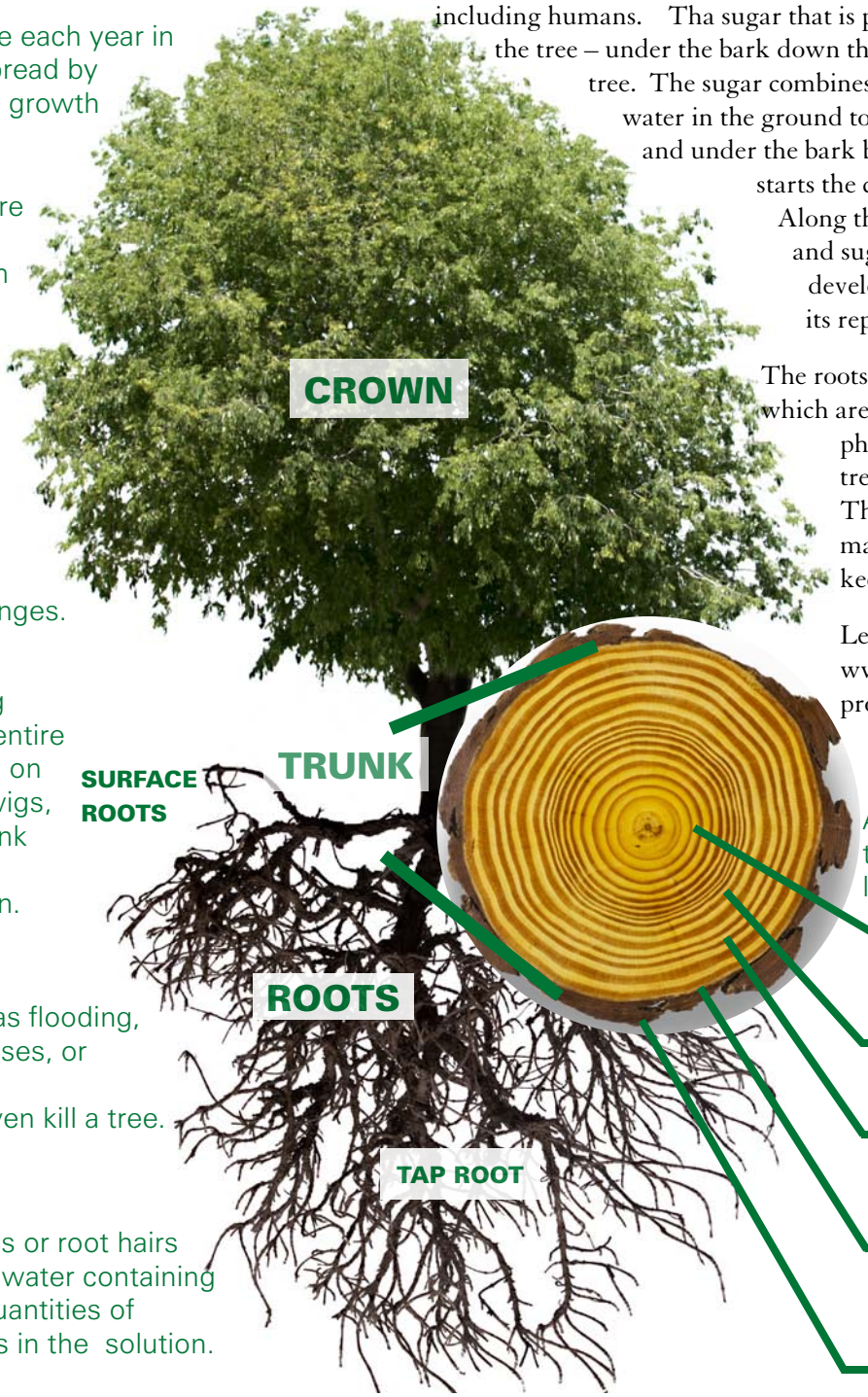
Trees increase each year in height and spread by adding a new growth of twigs.

Leaves prepare the food obtained from the air and soil and give off moisture by transpiration. Light and heat are necessary for these chemical changes.

The breathing pores of the entire tree—located on the leaves, twigs, branches, trunk and roots—take in oxygen.

Events such as flooding, poisonous gases, or smoke may damage or even kill a tree.

Root tips or root hairs take up water containing small quantities of minerals in the solution.



Air supplies carbon to the tree, through the under- surfaces of leaves.

HEARTWOOD (INACTIVE) GIVES STRENGTH

SAPWOOD CARRIES SAP FROM ROOTS TO LEAVES

CAMBIUM (MICROSCOPIC) BUILDS THE CELLS

INNER BARK CARRIES PREPARED FOOD FROM LEAVES TO CAMBIUM LAYER

OUTER BARK PROTECTS TREE FROM INJURIES

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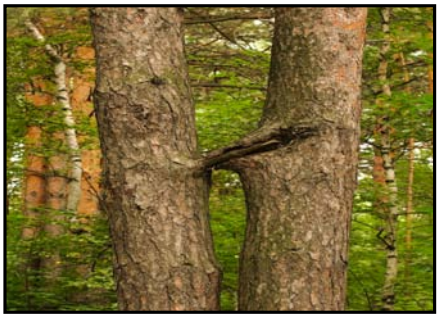
Parts of the Tree

THE CROWN of the tree is made up of the leaves and branches.

©Surkov Vladimir

THE TRUNK of the tree supports the crown and serves as a highway for food made in the leaves to travel to the roots and for water and nutrients from the roots to travel to the leaves.



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THE HEARTWOOD of the tree develops as the tree gets older. It is old sapwood that no longer carries sap, and gives the trunk support and stiffness. In many kinds of trees, the heartwood is a darker color than the sapwood, since its water carrying tubes get clogged up.

THE CAMBIUM is a layer or zone of cells, one cell thick, inside the inner bark. The cambium produces both the xylem and phloem cells. This is where diameter growth occurs, and where rings and inner bark are formed. In the *Xylem* (sapwood) layer, tree sap (water plus nitrogen and mineral nutrients) is carried back up from the roots to the leaves. In the *Phloem* (inner bark) layer, sugar that is made in the leaves or needles, is carried down to the branches, trunks, and roots, where it is converted into the food (starch) the tree needs for growth.

THE BARK Bark layer protects the tree from insects and disease, excessive heat and cold, and other injuries.

©Tom Grundy

THE ROOTS of the tree support the trunk and crown, and also anchor the tree in the soil.

They serve as a storage facility during the winter for the food produced by the leaves during the growing season. The roots also absorb water and nutrients from the soil for use by the tree.

©Reha Mark

©Jan Martin Will

Types of Trees

Trees can divided into either deciduous and coniferous categories.

DECIDUOUS TREES are also known as broadleaf trees because the leaves are generally larger and wider than those of conifers. The larger leaf size means a greater surface area for photosynthesis, but it also mean the leaf is too fragile to withstand winter conditions. Therefore, most deciduous trees drop their leaves in autumn.

CONIFEROUS TREES keep their leaves throughout the year, shedding only the oldest leaves. Usually these leaves are lower down on the tree and do not receive as much sunlight as newly developed leaves higher up. Some of the best-known members of the conifer family are pines, spruces, firs, and hemlocks. The cones of the conifers are its flowers

©Anteromite

Planning to plant your trees

Getting ready to plant takes some planning, investigation and analysis. This is a great opportunity to learn more about your community. This section will walk you through the planning stages. Anticipate spending about 2 weeks – month in your planning stages depending on the location you wish to plant your trees in.

Step 1: Identifying your site

Select between one to three different locations where you would like to plant trees. You will need multiple locations to consider since not all locations are appropriate in the long run to have trees. Some suggested locations you can explore in your community are:

- School
- Library
- City Hall
- Senior Center
- Community center
- Church
- Street (sidewalk)
- Your own backyard
- An apartment complex

The site should be able to host fully grown trees between 9 ft to 40 ft of higher when fully grown.

Step 2: Assessing Your Site

After selecting a few potential sites, you need to determine which of the sites is appropriate place to plant your trees.

WHO OWNS THE LAND?

Check to see who owns the land that you are thinking about planting the trees on. Ensure you have all the permissions to plant trees and know how many trees may be planted in the area. Make sure to get written permission.

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Look Up

DO YOU SEE POWER LINES OVER YOUR HEAD?

If you do, the tree you plant should be a low-growing tree *(see table below)*. If you want to plant a tall tree, look for another site without power lines overhead.

Use this table to figure out if you want to plant a short, medium, or tall tree.

Tree Size	Height Of Tree At Maturity
Short	Less than 25 feet
Medium	25 to 40 feet
Tall	More than 40 feet

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Look Around

DO YOU SEE A ROAD, SIDEWALK, OR CURB NEARBY?

Tree roots can grow outward underground beyond the distance of their crowns. Trees need enough soil to grow and survive for a long time. Roads or sidewalks can keep water and nutrients from getting down to the roots and limit the amount of available soil. Tree roots may lift a sidewalk over time if the area is too small. If you know your tree will grow to be tall and will have an extensive rooting system, be sure your planting area is large enough.

Planting Area	Size Of Tree (at maturity) You Can Plant
Minimum size 3 ft. x 3 ft. or 9 sq. ft.	**Short: Less than 25 feet**
Minimum size 4 ft. x 4 ft. or 16 sq. ft.	**Medium: 25 to 40 feet**
Greater than 4 ft. x 4 ft.	**Tall: More than 40 feet**

IS THERE A HOUSE OR OTHER PERMANENT STRUCTURE NEARBY?

The shade from deciduous trees planted on the east or west sides of a house can help to keep it cooler and conserve energy in the summer. Because deciduous trees lose their leaves, they will let in the sun to warm your home in the winter. Conifers can provide a wind screen in the winter. It is important not only to pick the right kind of tree, but also to plant it the right distance from the house.

Size Of Tree At Maturity	Distance From Wall Of Building	Distance From Corner Of Building
Short (25 feet or less)	10 feet	8 feet
Medium (25 to 40 feet)	15 feet	12 feet
Large (40 feet +)	20 feet	15 feet

ARE OTHER TREES NEARBY?

There are several reasons not to plant trees too close to each other. Some trees need lots of light from the sun to grow while shorter forest understory trees need less. If a tree that requires full sun is planted in the shade of a larger tree, it will not grow as well.

HOW MUCH SUNLIGHT DOES THIS SPOT GET?

Go to your site in the morning and then again in the afternoon on a sunny day to properly categorize it. These are the categories you can choose from to describe your site:

- Full sun: 6 hours or more a day
- Partial sun: 4 to 6 hours a day
- Shady: Fewer than 4 hours a day

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IS A WATER SOURCE, LIKE A FAUCET, NEARBY TO WATER THE YOUNG TREE?

Trees need water to grow, especially for the first two years after planting. The easier it is to bring water to the site, the more likely you are to give it a sufficient amount of water.

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Look Down

MIGHT THERE BE PIPES OR WIRES UNDERGROUND?

It can be dangerous to dig a hole if there are buried electric wires, cable wires, telephone wires, water pipes, natural gas lines, or septic tanks.

Before you do any digging in the U.S., call 811 or go to www.811.com to have utilities marked for free. Typically, the soil depth needed to plant trees by hand does not impact utilities, but this step is recommended in any urban or developed settings.

HOW FAST DOES WATER DRAIN FROM THE SOIL?

Different types of trees need different types of soils. If water does not drain from the soil quickly, air cannot move in and through the soil because small places are filled with water. The roots of some trees need less air and can live in soil that drains slowly, like those trees native to wetland areas. The roots of other kinds of trees can live in soil that drains water very fast and may be drought-tolerant. To know the right kind of tree to choose, you should know what kind of soil you have.

Conduct a soil experiment. To test your tree planting site, dig a hole about 18 inches deep and 12 inches wide. Fill the hole with water. Now carefully time the water draining from the hole. If the water drains away within an hour, the soil has good drainage. If it takes a few hours to a whole day to drain, the soil has slow or "fair" drainage. If the water takes more than a day to drain, the soil has poor drainage.

Your local Cooperative Extension service (listed in the yellow pages or search for your county directory) an assist with telling you what type of soil is present.

Once you have identified three locations, complete the chart with the Street Address (including name of site), owner of site (if known, or continue with next step), pros of planting at this location and cons of planting at this location.

© Barbara Tripp

Step 3: Determine Your Final Location

Use the chart below to help you weigh the benefits for planting in each location you selected. When you finish your inventory, determine if one of the three locations has more benefits or even "less hoops" for planting. Get permits or permission in writing. Getting permission may take a selecting a public site like a park may be easier.

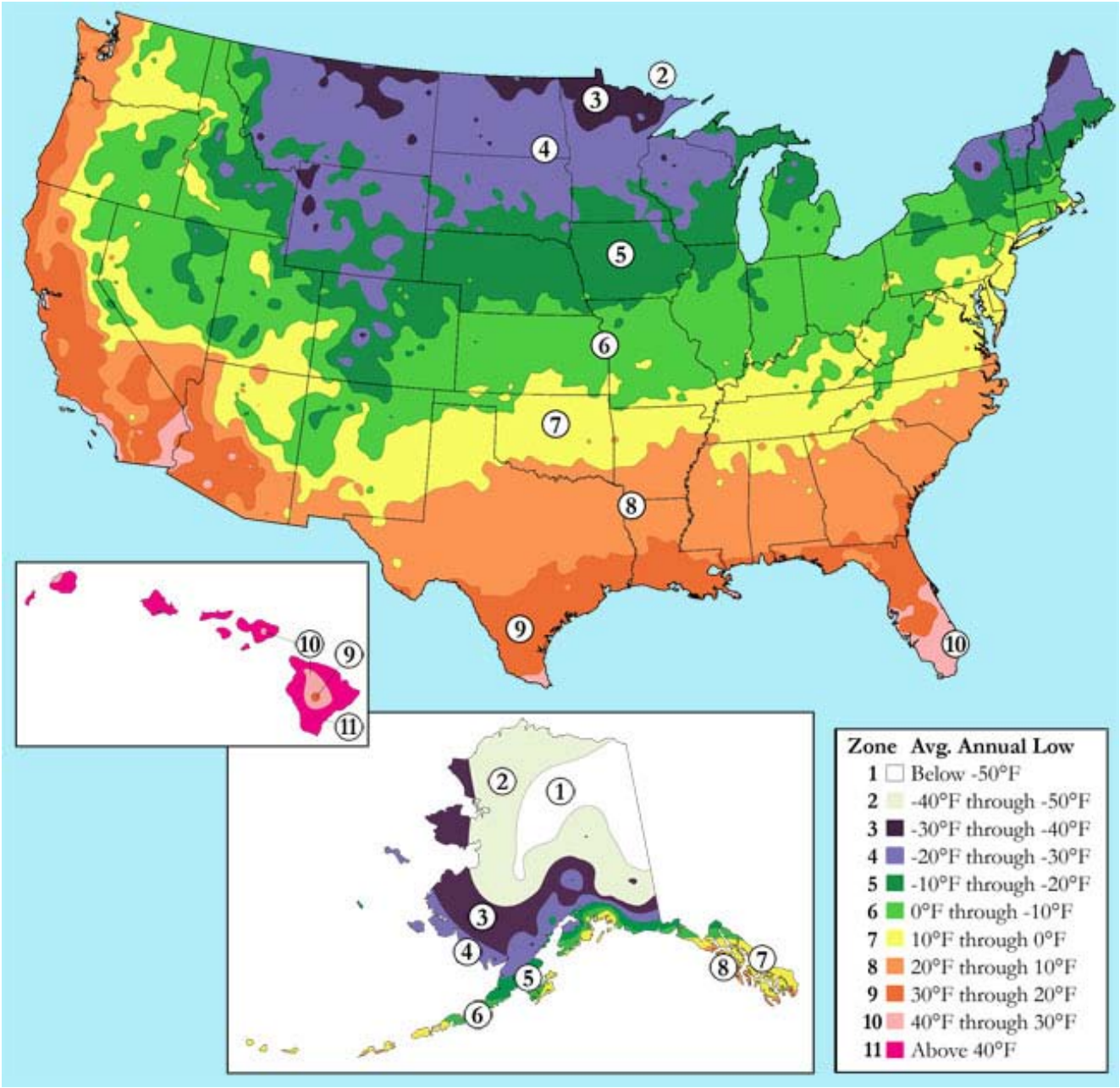
Write down the sites name, location and owner, then jot down notes from your investigation about what you discover. Select three site options for planting, and list the pros and cons of each. These will help you make a final decision.

ADDRESS	OWNER	UP	AROUND	DOWN
1.				
2.				
3.				

Step 4: Determine two planting dates for when you will plant your tree

- Trees should be planted either in the Spring or Fall to ensure the tree will have a good chance to grow strong for many years. You should identify when you want to plant trees by reviewing the Hardiness Zone and Planting map
- Select two days (about 1 week apart) when you can plant trees. You will need to provide these dates when you order your trees at www.nwf.org/trees.
- Trees are send to you a few days prior to your planting date and will not be sent if it not the right time to plant trees for your area.

USDA Hardiness Zone Map



©USDA

Select Two Possible Planting Dates

PLANTING DATE	DATE TO ORDER TREES
1.	
2.	

Step 5: Secure permission to plant.

- Identify who owns the property where you wish to plant your trees. Many of the locations you may select may be owned by someone else, such as, the local city or other authority. You will need to approach the owner to secure permission to plant the trees.

SUGGESTED TALKING POINTS FOR YOUR CONVERSATION

- Introduce yourself and identify the organization you are volunteering with.
- Explain your project
  - Working with children to understand the importance of trees for the environment, the community and how to care for a living object.
  - Trees will be cared for at least a year to help them get established by
  - You will working with the students to learn about trees through a series of activities before you plant
  - You will provide all the materials and will ensure the area is left in the same way it was found or better

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SECURE WRITTEN PERMISSION FROM THE SITE OWNER

Using the sample language below, print out and have you and the site owner agree to grant you permission to plant trees at the site.

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Trees for Wildlife Tree Planting Agreement

I _____ am a volunteer with _____. As
(insert name) *(insert organization name)*
part of our program, our group will are participating in the Trees for Wildlife program with National Wildlife Federation to plant trees and help youth become stewards of their local community by caring for trees they plant.

We have identify _____
(insert location address)
as an appropriate planting location and have worked with _____
(insert owner name or approval giver)
to secure permission to plant _____ on _____
(insert number of trees) *(day option 1)*
or on _____. I agree to ensure the planting site is as neat or neater when done
(insert option day 2/rain date)
planting.

We _____ agree to commitment to care for the tree for one year by watering and
(insert first name only)
tending to the tree.

If there are questions about the planting or the program, please contact Eliza Russell, Director of Education at National Wildlife Federation, trees@nwf.org or (703) 438-6439.

_____	_____	_____
(Print Name)	*(Signature)*	*(Date)*
_____	_____	_____
(Print Name of owner of location)	*(Signature)*	*(Date)*

Get Ready to Plant

Once you have identified and secured your location to plant your trees. You will need to complete a few additional task before you are ready to plant the trees on your selected dates.

Step 1: Time Allotment

Planning and Preparing for Your Planting Day

- 2-4 hours preparation time (requirement before planting)—gathering material and supplies
- 2-4 hours to plant

Step 2: Gathering your materials

Planting trees requires specific tools and resources. Use the checklist below to be sure you have all your supplies. If you need help to secure supplies, contact your local park authority, State Aborist, Department of Natural Resources center or nature center to see if you can borrow items needed. You can also purchase or rent some of the items. You can contact your local volunteer center to see if there is a community tool chest to borrow from.

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What you need for planting

☐ Round-head shovels (1 per pair)
☐ Hand trowels (1 per pair)
☐ Gloves (pair fro each person)
☐ Scissors to remove any tags (one)
☐ Utility knife to cut away container (if needed)
☐ Wood chip mulch (1 bag per small tree)
☐ Soil* (one bag per small tree)
☐ Wheelbarrow (for mulch)
☐ Water source, hose or bucket (for trees)
☐ Tree shelter tubes* (if needed)
☐ Wooden stakes* (if needed)
☐ Hammer or Mallet* (if needed)
** Note: See Using Tree Shelters on page 11 for more information*

You Will Need Safety Items

☐ First aid supplies	☐ Hand wipes
☐ Sunscreen	☐ Drinking Water
☐ Bug/Tick Repellent	☐ Snacks

Step 3: Preparing Your Site and Selecting Your Tree(s)

- Total planting area required will depend on the number of trees you are going to plant and how close together the trees are planted. Remember to follow the instruction for each variety of tree on how far apart to plant. Distance for planting depends on the type of tree and final height of a grown tree. If trees are planted 6 to 8 feet apart then no transplanting will be necessary. Seedlings may be planted closer together if future transplanting is possible.
- The planting spots should be cleared of heavy brush and grass. Brush should be cleared and all roots removed to ensure the plant does not grow back and grass should be removed (roots and all) from the spots where you are planting the trees. You do not need to clear-cut the whole area to turn the soil for the entire site, just where the tree will be planted.
- If the soil is compacted or hard to dig, you may need to pre-dig the holes or have a digging bar, pick, augur, or other equipment available.
- Determine how to provide water to the trees for both the planting event and for ongoing care. Trees require ongoing watering during the first year. Step 4: Plant Your Tree (s)

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Step 4: Selecting and Purchasing Your Trees.

What Type of Tree Should You Plant?

Talk to a nursery professional or local arborist for suggestions and to find out what might be available locally. You can also order your trees through www.nwf.org/trees to ensure you get trees appropriate for your location.

Using a tree field guide, you can look up information about trees and their characteristics such as size at maturity, preferred native to the habitat, tolerance for different kinds of soil, amount of sun and drainage needed, etc. Determine what plant hardiness zone you are in so you don't plant a tropical tree where it will freeze.

You might want to make a list of the site characteristics determined through your site assessment to help narrow down your choices. Once you have identified possible trees best-suited to your site, find out if those trees have spring flowers, berries, nuts, or fall leaf color that you might like. Native trees that can provide food for wildlife are a wonderful choice, and the larger the tree, the more benefits it will provide to the Earth over its life span.

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What Type of Package Will Your Tree Be In?

Tree nurseries provide trees in different packages.

BARE-ROOT

You can actually see the roots on these trees! They are planted so that the soil can be removed from around the roots before planting. It is very important to keep the roots of bare-root trees moist at all times and to plant them as soon as you can (within 10 days). Bare-root trees are available only part of the year. They must be planted when they are dormant, but otherwise are very easy to plant.

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CONTAINER-GROWN OR PLUGGED SEEDLINGS

This type of tree is grown in soil above ground in pots or shipped as soil "plugged" seedlings. You can plant these trees any time, but the fall and early spring are ideal for most climates.

Storing Your Tree at Home

If you are not going to plant your tree as soon as you get it home or when it arrives at your house, keep it in a shady place and pay close attention to your tree until it is planted.

BARE-ROOT

A bare-root tree should be planted as soon as you get it. If that is impossible, keep the tree in the shade with its roots wrapped with moistened paper or in a plastic bag, but only for a day or two at most. Spray water on the roots to keep them moist. Don't let the roots dry out!

CONTAINER-GROWN OR PLUGGED

A container-grown or plugged tree dries out very quickly so keep the soil moist (but not soaking wet) until you plant it. Water the tree slowly just until water runs from the bottom of the container. Check it every day; many need water every day in the summer.

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Planting Trees

Now that you have selected your site, gathered your materials, identified when to plant your trees and selected your tree,, it is time to understand how to plant your trees in the ground. Your trees will come in one of two forms; 1) container or plug(with dirt); or 2) bare-root (without dirt).

The next section will describe how to plant each type. Remember to follow the directions for the trees your have, if you need help, email tree@nwf.org.

How to Plant a Container-Grown or Plugged Seedling Tree

- First you need to dig a hole for the tree using a shovel or hand trowel.
- Locate the tree's root flare. A tree's root flare is just above the top most roots. It is important to plant the tree at this height and no deeper.

  Notice that the height of the root ball is not the same as the height of the container. The height of the root ball is shorter than the height of the container because the nursery allows space at the top of the container for water and fertilizer.
- Dig a hole 2 to 3 times wider than the diameter of the root ball. Carefully remove the tree from its container and loosen the roots so they are not encircling the tree. Take your time to loosen the soil and untangle the roots that may have become pot bound. Set the tree in the center of the hole. Before you add any soil, make sure that the tree is straight and it is not too deep.
- The soil you dug out of the hole is called backfill. You will use it to fill the hole back up. First, put some backfill in the hole around the root ball. Use your hands to press the soil down gently. Then add more soil to fill up the rest of the hole. Add water to settle the soil. Let the water drain, then check to make sure that the top-most root on the tree is still just below the top of

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the hole. If it settled deeper in the soil, pull the tree up slightly and rework the soil around the roots.

- When you are finished, some backfill will likely be left over from the hole. Use your hands to make a 3-inch-high donut-shaped mound (berm) around the edge of the root ball with the remaining backfill. When you water the tree, the berm will help make sure the water doesn't run off.

How to Plant a Bare-Root Tree

Bare-root trees are planted differently from the other kinds of trees. You must keep the roots of a bare-root tree moist and in the shade before you plant the tree.

- Dig a hole that is wide enough for the roots to spread out without crowding each other. The hole should be about 6 to 12 inches wider than the roots are when they spread out. Don't dig the hole too deep. Use a shovel or hand trowel.
- Make a cone-shaped mound of soil in the bottom of the hole. Set your tree on this mound and spread the roots around it. Since the roots are not covered by soil, they are very fragile. Be careful when you are handling the tree.
- Make sure that the topmost root on the tree is just below the top of the hole. The topmost root is the first root you come to from the top down. Look carefully because if you plant the tree too deep, it may die.
- Hold the tree upright and add soil to the hole in layers. As you add each layer of soil, gently press it down with your hands. When the hole is half full, add water to settle the soil. Let the water drain, then check to make sure that the topmost root on the tree is still just below the top soil level. If it settled deeper in the soil, pull the tree up slightly and rework the soil around the roots. Now you can finish filling up the rest of the hole. Add the soil in layers again, pressing down each layer with your hands.
- Use your hands to make a 3-inch-high donut-shaped mound around the edge of the roots with soil. When you water your tree, this "berm" will make sure all of the water goes right to the roots.

©Christina Richards

Caring for Trees After Planting

©Unlisted Images, Inc.

You found your tree a good home, now you need to care for it and help it grow properly.

Water

The most important thing you can do fThe most important thing you can do for your new tree is to water it, often enough to keep the soil moist, about **once a week.** If it doesn't rain you will need to use a hose, buckets, or gallon jugs.

At each watering, your tree should get about **5 gallons of water** for every inch of trunk diameter. Hold up a ruler to the tree trunk to figure out the diameter. For example, if you have a tree with a half-inch trunk diameter, it should get at least 2 1/2 gallons of water.

Occasionally dig at least 3 inches into the soil to check the moisture level. If you think you are keeping the soil too soggy, don't water the tree as often. Be careful not to wash the soil away from the roots with the stream of water. After a few years, you can water the tree less often, but be sure to check the soil moisture from time to time.

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Mulch

If your tree is larger than a seedling, the next most important thing to do is to put mulch around the base. Mulch is a tree's best friend and can be made of bark, wood chips, straw, etc.

WHY MULCH IS GOOD AROUND TREES

- Mulch can help the soil hold moisture longer. Without mulch, water evaporates much faster.
- Mulch can keep weeds and grass from growing around your tree. Weeds and grass compete with the tree for water and nutrients.
- Mulch helps keep the soil cooler in warm weather and warmer in cold weather. This helps roots grow.

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©National Wildlife Federation

- Mulch keeps the lawnmower and weed trimmer away from your tree. Accidental contact from these tools can kill your tree.

Put down the mulch in a circle one to three feet out from the trunk of the tree and two to three inches deep around the tree. Then pull the mulch two to three inches away from the tree trunk. If mulch sits right on or next to the bark, it can cause the trunk to decay. Take a couple of steps away from your tree and admire your work.

You can get mulch donated by most cities or from your local home improvement or garden center.

Using Tree Shelters

Tree shelters are 2 to 5 feet tall tubes or wire cages to enclose seedlings to protect them from lawn mowers, weeds, wind, animals, drought, and trampling.

THE HOW AND WHY OF TREE SHELTERS

- Using tree shelters creates a greenhouse effect around seedlings that can significantly improve growth rates and establishment success.
- Tree shelters do not work as well in shaded conditions and are recommended for deciduous trees only.
- Installation of the tree shelter will vary depending on the brand. In general, place the tube or cage over the planted tree and then place the wooden stake through the side loops on the tube. Pound the wooden stake into the ground to firmly anchor the shelter, deep enough into the ground to keep strong winds from blowing down the shelter.
- A plastic mesh cap will keep birds and wasps from nesting in the tubes.
- Tree shelters should typically be removed two to three years after installation and must be maintained to ensure that they are stable and kept free of shading weeds and grasses.
- Order tree shelters online or check with your local department of natural resources for supplies or tips on ordering.

Aftercare Tips

Trees are living things and while they are extremely resilient, you can make it easier for a tree to survive and thrive.

- Tree seedlings may be affected by the competition of weeds and grasses, so regular weeding is beneficial.
- Refresh any mulch annually.
- The smaller root systems of seedlings will dry out faster than those of larger trees so water seedlings more frequent taking care not to over-water.
- During dry weather, water the tree generously every week or 10 days during the first year.
- If the trees are initially planted close together, you will need to consider transplanting once they mature.

Use the Tree Care Calendar on the next page to build your after care project for each month.

Make the Commitment to be a Steward for Your Tree

Using the calendar, plan on each month spending time to care and check on your tree(s). Trees in the first year and up to three years need to be tended to just as you tend to your flowers or other garden plants. Please follow the calendar and the steps to help your tree become bigger and stronger so you can continue to visit it for years to come. Remember the life span of a tree, depending on variety, can be 20-100 or more years.

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January

- ☐ Inspect trees for disease, insects or vandalism*
- ☐ Pick up free mulch from local county landfill

February

- ☐ Inspect trees for disease, insects or vandalism
- ☐ Call 311 for dead street tree or park tree removal

March

- ☐ Remove winter mulch soaked with salt or dog waste
- ☐ Apply three to four inches of mulch around base of the tree to form a ring
- ☐ Celebrate National Wildlife Week

April

- ☐ If planted near the street or sidewalk, wash salt off trees while the ground is still frozen
- ☐ Celebrate Arbor Day and Earth Day

May

- ☐ Water weekly if the soil around the trees is dry *(Water each tree with 15 to 20 gallons of water)*
- ☐ Using a hand trowel, loosen the top two to three inches of soil around tree roots
- ☐ Plant small flowers or bulbs around the base of your trees

June

- ☐ Inspect depth of mulch. Mulch should be three to four inches thick
- ☐ Water weekly
- ☐ Inspect trees for disease, insects or vandalism
- ☐ Pull weeds

July

- ☐ Water weekly
- ☐ Pull weeds
- ☐ Inspect for insects and diseases

August

- ☐ Water weekly
- ☐ Pull weeds
- ☐ Inspect for insects and diseases

September

- ☐ Water weekly
- ☐ Remove stakes and ties from trees that have been in the ground for more than two years

October

- ☐ Water young evergreen trees before the ground freezes
- ☐ Plant bulbs around the base of your trees
- ☐ Refresh mulch ring around the base of your trees
- ☐ Take a "Little" to an urban forest

November

- ☐ Water young evergreen trees before the ground freezes
- ☐ Inspect trees for disease, insects or vandalism

December

- ☐ Place Christmas tree branches around trees to absorb salt and dog waste

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Extension Activities

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- Adopt a tree—give your tree a name, list the date it was planted, what type of tree it is, and make a tag to tie onto a low tree branch that tells who adopted this tree. Laminate the tag to make it last longer outdoors. Be sure to tie it loosely or else the branch might become "girdled," which can invite pests and affect growth. Include check boxes that indicate when care was given – use a permanent marker to keep track every time you visit your tree.

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- Predict tree growth, i.e. if trees grow 6 inches per year, how tall will your tree be in 5 years? Make a chart of your predictions and fill in as you check your tree's progress.
- Make a photo journal of one or more of the trees that you planted. You can take a "before" photo, planting day shots, and an "after" photo. Add new photos of you standing next to your tree every year and watch it grow.
- Press a leaf from your tree and add to your journal. Press leaves from the spring, summer, and fall to see the difference in color, structure, and texture. Add fruit, seeds, or flowers if your tree produces any.
- Keep a log about your tree, including species, date of planting, description of soil, size of tree, etc. In addition to regular care for your tree, set specific dates to visit and monitor your tree. Use a graph or chart to make keeping track easy and systematic. Examples of things to monitor:
  - Are there spots or discoloration on the leaves of your tree?
  - Are there insects on your tree?
  - Has any damage to the trunk, bark, or branches occurred to your tree?
- Create a wildlife habitat as a companion project. Design, plan and install a wildlife garden near your tree planting to support other wildlife species. Or you can plan and install a wildlife garden at your meeting place, school or other community site. Download the how to guide for creating a wildlife habitat garden and outdoor learning lab at www.nwf.org/schoolyardhabitat.

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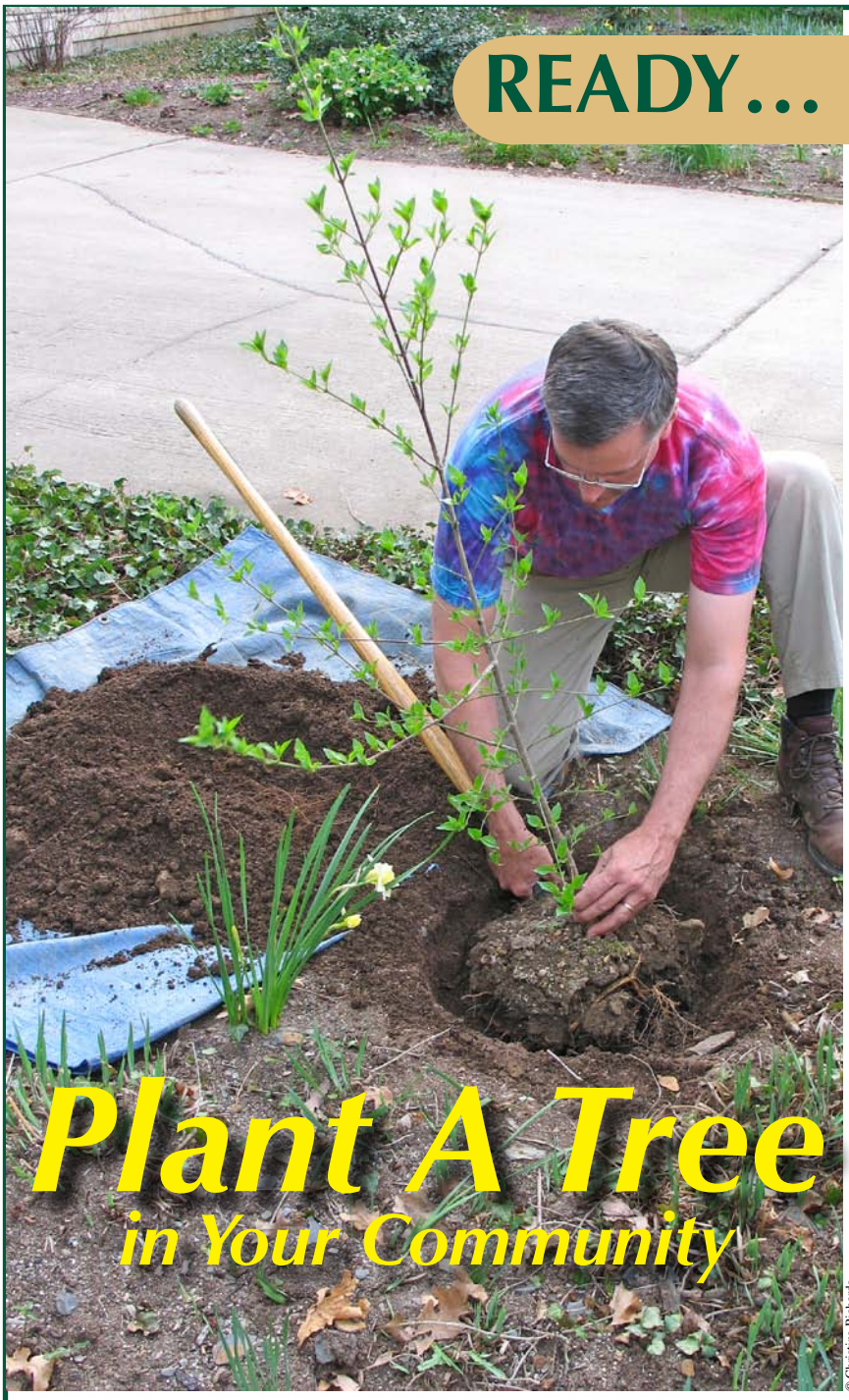
References

USDA Forest Service. 2007. Northeast Community Tree Guide: Benefits, Costs, and Strategic Planting. Pacific Southwest Research Station. PSW-GTR-202.

USDA Forest Service. 2004. Urban and Community Forestry Appreciation Tool Kit. Mid-Atlantic Center for Urban and Community Forestry. NA-IN-02-04.

READY... TAKE THE NEXT STEP



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Order your trees (minimum order of three trees) and download your planting and care guide by visiting www.nwf.org/trees.

Planting trees is a great activity for youth groups, families and individuals to do.. Organize a community tree planting day with other your friends, neighbors, co-workers or youth groups.

Tree Kits Details

All trees are shipped in bare root form. Shipping and handling costs are included. You will receive an email with a link to download your age appropriate activity guide within one week of placing your order.

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Notes for Tree Shipments:

- Tree seedlings are sourced from variety of tree nurseries.
- Tree species are pre-selected based on your zip code and hardiness zone.
- Conifers are limited to zones 2, 9 and 10. All others receive deciduous.
- Please note: we recommend all locations within northern U.S. (hardiness zones 1–4) plant trees ONLY during Spring.
- Trees are shipped 4-5 days prior to your specified planting day.

Order your Trees at www.nwf.org/trees

- ***Spring Planting***—Place your tree orders between February through May.
- ***Fall planting***—Place orders between September through November.
- Trees should **not** be planted in winter or summer months to ensure tree survival.

Continue Your Exploration of Nature

Plan a weekly or monthly activity outdoor by getting activity ideas for a Green Hour. NWF's Green Hour activity database has over 300 activity ideas for you to find fun ways to get outside, get active and learn about nature. Activities are added monthly and you can sign up to receive an email about new activities by visiting www.beoutthere.org

Green your local school by organizing an Eco-Action team and register to be an ECO-SCHOOL USA. Learn how to improve your carbon footprint, organize better recycling and composting at your school, help students learn about energy and water in their schools and create an No Idling zone to improve the health of students and the environment. Register your school at www.eco-schoolsusa.org

Read about nature and wildlife through NWF children's nature magazines. NWF publishes a series of popular, award-winning magazines that introduce children, ages 2 to 12, to wildlife and nature. These magazines are a great opportunity to teach reading as well. Order a subscription at www.nwf.org/magazines/ or copies may also be available in many local libraries.

Create a home for wildlife in your own backyard NWF has certified the yards of some 120,000 U.S. homeowners as "backyard wildlife habitats" – these micro habitats provide adults and children a place to observe wildlife and enjoy the outdoors in a safe setting. You can create a habitat by offering food, water and shelter for local birds and wildlife. www.nwf.org/gardenforwildlife/

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Join your family, friends or neighbors by participating in one of NWF's signature outdoor events – starting with the **Great American Backyard Campout** (an annual outdoor camping experience – 4th Saturday in June) or join in a Fall "Hike and Seek" to hit a local trail and seek for wildlife around you. . www.nwf.org/BackyardCampout/ or nwf.org.

Need supplies for your outdoor adventures? NWF's nature catalog offers a variety of suggestions and materials for you to use in your adventures. Log on to www.nwf.org/shop

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Take a walk outdoors and help us by watching and recording the wildlife in your community. Start today by downloading your own wildlife watch list. Be sure to get one for each season. Just log on to www.nwf.org/watch.

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