NWF trees for wildlife™

Event Planning Guide

PLAN YOUR TREE PLANTING OR GIVEAWAY EVENT

NATIONAL WILDLIFE FEDERATION™

TREES FOR WILDLIFE™ EVENT PLANNING GUIDE

NATIONAL WILDLIFE FEDERATION LEAD AUTHORS

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IMPORTANT NOTE

During the COVID-19 pandemic, special program guidelines are in place to ensure that any planned events meet all local, state and federal laws, as well as the Centers for Disease Control guidelines. Please visit the Trees for Wildlife website at **NWF.org/Trees** for more information.

ACKNOWLEDGEMENTS

We appreciate the entire National Wildlife Federation family that is working to create healthy, sustainable, wildlife-friendly communities across the United States. This includes our National Wildlife Federation staff, our state affiliate partners and our networks of communities and schools which help make the Trees for Wildlife program possible.

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Back Cover image: (Bench on a trail at Piedmont NWR, Bill O’Brian, USFWS)

PROGRAM WEBSITE

NWF.org/Trees

Contents

PATRICK FITZGERALD

How To Use This Guide

This guide is intended for partners of the Trees for Wildlife program that have applied for and received a tree award from the National Wildlife Federation. (If you have not applied, please visit NWF.org/Trees to learn more about the program and find the guidelines and application.)

This guide will help you plan your Tree Planting or Tree Giveaway Event in partnership with the National Wildlife Federation. In the first few sections of this guide, you will learn about the National Wildlife Federation, our Trees for Wildlife program, some basics about tree biology and the importance of native trees.

The sections focusing on hosting a Tree Planting Event or Tree Giveaway Event will share key factors to consider when choosing a planting site or giveaway location, selecting a planting date (with a contingency plan), rounding up volunteers to plant the trees and preparing for a successful event. For both types of events, you will find guidance on researching appropriate native trees, incorporating educational activities and following up afterwards. Supplemental resources, information about tree shelters and a variety of extension activities complete the guide.

This guide may also be helpful to those that are considering applying for a Trees for Wildlife tree grant. You can learn more about the program at **NWF.org/Trees**.

About the National Wildlife Federation

For more than 80 years, the National Wildlife Federation has been uniting Americans to ensure wildlife thrive.

Our founder, J. N. “Ding” Darling, understood there is power in unity. In 1936, his bold vision for a nationwide constituency of conservation supporters brought together Americans from all corners of the country. Today the National Wildlife Federation is a nationwide federation with 52 state and territory affiliates and six million members and supporters.

Growing Tomorrow’s Conservation Leaders: Inspiring our children and grandchildren to witness the wonders of wildlife and the outdoors is critical to ensuring the conservation movement endures for generations to come. Research shows that children who spend regular, positive time in nature develop a deeper, lifelong affection for the natural world and more empathy for wildlife. To nurture this connection to nature both at home and in communities, the National Wildlife Federation works with families, schools and youth groups to support conservation education in K-12 classrooms and beyond and promotes safe outdoor play through the Early Childhood Health Outdoors (ECHO™) program.

Embracing Equity and Environmental Justice: Across our nation, the health and wealth of Black, Indigenous and other people of color are being impacted by fossil fuel pollution—which is also driving the climate crisis. Most of polluting facilities are disproportionately located in communities of color, in lower-income communities and on Indigenous lands. The 2.4 million miles of pipeline crisscrossing our nation travel through Indigenous and farm country, ending up on the Gulf Coast, where vulnerable Americans often have to bear the burdens of toxic exposures.

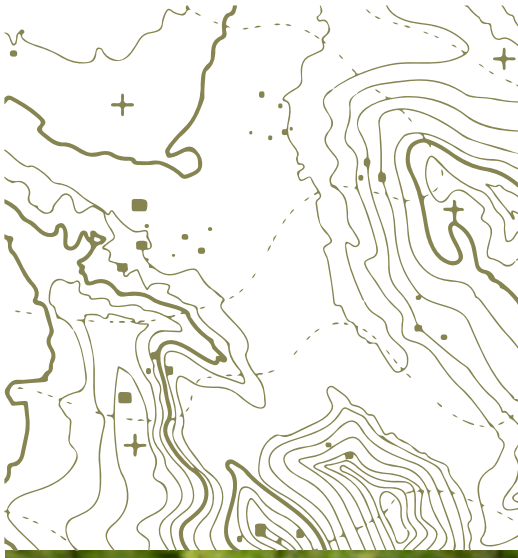
For more than 80 years, the National Wildlife Federation has been uniting Americans to ensure wildlife thrive.

Confronting the Climate Crisis: The global climate crisis is the defining challenge facing wildlife and people alike. From severe fires, floods and storms to disease and drought, the impacts of the changing climate are becoming more apparent with each passing day. The National Wildlife Federation has led the way in developing commonsense, collaborative solutions that can save lives, protect and restore crucial habitat, put Americans back to work and ensure that no community is left behind. Winning bipartisan support for these solutions has been possible through diverse coalitions to drive federal legislative change.

Protecting and Restoring America's Great Outdoors: From corner parks to wilderness, public lands are essential for people and wildlife alike. That's why the National Wildlife Federation works to keep public lands in public hands.

Securing Clean Water for People and Wildlife: Water is absolutely essential to sustaining people and wildlife. The National Wildlife Federation is leading national conversations around clean water—from the headwaters to the coasts—through its regional centers and coalitions. This approach has helped the Federation become one of the leading voices in the fight to ensure people and wildlife have access to clean water.

Through our hands-on programs, policy work, community outreach and more, we forge a conservation army of millions of people that work each day to build a better future for both people and wildlife—**because in saving wildlife, we save ourselves.**



PATRICK FITZGERALD

About the Trees for Wildlife™ Program

The National Wildlife Federation's (NWF) Trees for Wildlife program supports healthy, sustainable, wildlife-friendly communities by providing free or subsidized native tree seedlings to partners across the country who plant them through local habitat restoration projects or distribute them at community Tree Giveaway Events. Over the last decade, NWF and its partners have brought communities together to plant and care for more than 500,000 native trees which provide community benefits, connect people with nature and create wildlife habitat.

Two Types of Trees for Wildlife Events

GABRIELA LOPEZ

PLANTING EVENTS

Trees for Wildlife Planting Events result in 100 or more trees to be planted in one location, often a school, park, place of worship or other public property. Partners receive free or subsidized tree seedlings from the National Wildlife Federation and organize volunteers or staff to prepare the site, plant the trees and ensure they are cared for. They may incorporate an educational workshop or learning activities for children.

GIVEAWAY EVENTS

Trees for Wildlife Giveaway Events support local partners by distributing 100 or more native trees to be planted by individuals either at their home or another suitable location. Partners receive free or subsidized tree seedlings from the National Wildlife Federation and are required to provide an educational component at their event (such as a planting demonstration) and share "take home guidance" to ensure they are properly planted and cared for.

Benefit of Trees for Wildlife Events for Your Community

Trees for Wildlife Tree Planting and Tree Giveaway Events bring communities together! Throughout the U.S., these events encourage people to plant native trees in areas that will make a difference. These areas include school grounds, urban neighborhoods, stream corridors and home landscapes and gardens. As a coordinated effort that is set up for success, each of these events promotes community pride and care for the environment.

Benefits of Native Trees for Wildlife and People

Trees Provide Habitat For Wildlife

Three main components of wildlife habitat: food, cover, and places to raise young can all be provided by trees.

Trees Improve Health

Exposure to trees has a relaxing effect on humans, reducing stress and imparting a sense of well-being.

Trees Promote Community

Trees can enhance a community's sense of pride, and ownership. Active involvement in tree planting programs leads to a stronger sense of community, enviormental responsibility and ethics.

Trees Combat Climate Change

Through the natural process of photosynthesis, trees absorb carbon dioxide and other harmful greenhouse gases and pollutants.

Trees Cool Cities

Trees contribute to urban cooling. Cities develop "heat islands" because dark roofs and pavement absorb solar energy and radiate it back to the atmosphere.

Trees Increase Property Values

By enriching the urban enviorment with aesthetical, ecological and economic amenities, urban trees increase the value of real estate.

Trees Reduce Energy Cost

Urban tree canopy reduces the urban heat island effect and this shading from trees reduces energy demand and the need for air conditioning.

Trees Clean Air and Water

Trees remove harmful pollution from the air and forested watersheds help clean our drinking water.

Trees Can Boost Local Economies

The presence of trees in neighborhoods can aid in economic development by increasing property values.

Trees Reduce Flooding

Trees lessen the force of storms and reduce the amount of runoff into sewers, streams and rivers, improving water quality and reducing flooding.

Learn About Trees

Native plants are naturally occurring, not introduced by humans, in a given region. The scale of an area where a plant is native may be as small as a particular habitat in a portion of a state or as large as great sections of the country, depending on each plant's natural distribution. Over thousands of years, native plants have evolved together with native wildlife to form relationships that are mutually beneficial and interdependent. Wildlife such as birds, butterflies and bees, rely on sometimes very specific native plants for food and a place to raise their young--without these, wildlife species can go extinct. It is important to consider that what is native in one location is not native everywhere, and that when planting trees, you can provide the most benefit for native wildlife by selecting native tree species. Learn more about native plants at **NWF.org/NativePlants**

What Is a Tree?

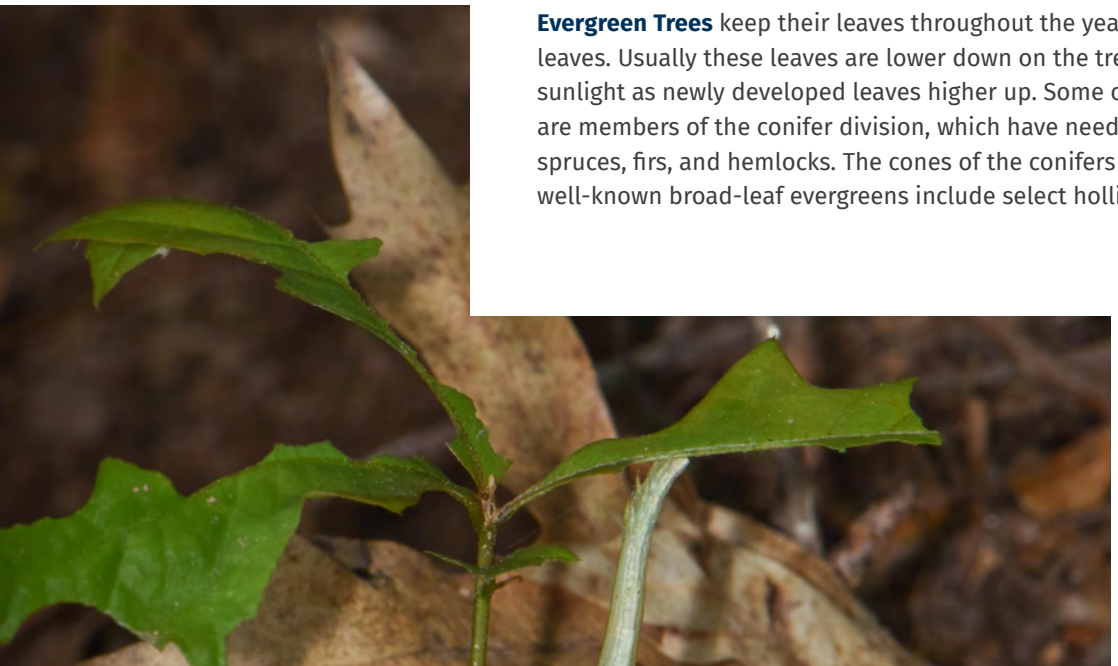
The term "tree" refers not to a botanical classification of related plants or strict scientific designation, but rather to the growth habit of a plant. Generally, a tree refers to any perennial woody plant with a single trunk that generally grows to a large size, has laterally-growing branches extending from the trunk, exhibits secondary growth (i.e. growth in the size of the trunk and branches, not just growth at the branch tips) and is long-lived. Palms, banana, cacti, tree ferns and similar plants do not meet this definition of tree, although some experts prefer a broader definition of tree and do include them. Shrubs are generally considered to be multi-stemmed perennial woody plants that do not grow to the sizes typical of most tree species.

Tree Types: Trees can be divided into two main categories: deciduous and evergreen.

Deciduous Trees will drop their leaves when they go dormant, which happens in autumn in most climates. Most deciduous trees are also known as broadleaf trees (which produce flowers and fruits) because the leaves are generally larger and wider than those of most evergreens. The larger leaf size means a greater surface area for photosynthesis, but it also means the leaf is too fragile to withstand winter conditions. A few trees with needle-like leaves such as bald cypress are also deciduous and will lose their needles.

Evergreen 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 evergreens are members of the conifer division, which have needle-like leaves and include pines, spruces, firs, and hemlocks. The cones of the conifers are its reproductive parts. Some well-known broad-leaf evergreens include select hollies and magnolias.

DOUG TALLAMY. PIN OAK; *CROCUS GEOMETER*



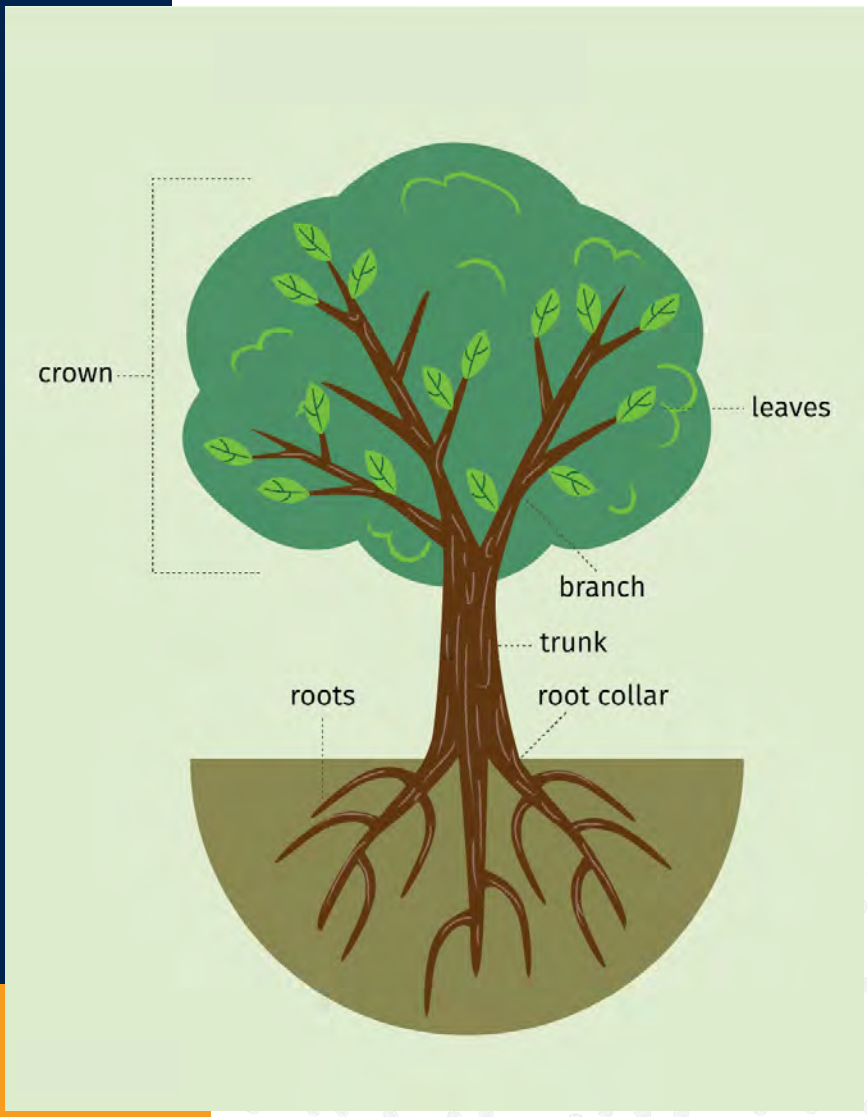
Parts of a Tree

The **crown** of the tree is made up of the leaves and branches.

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.

The **root collar** is located at the base of the trunk just above where the roots join. Also called the root flare, due to the flared shape on some tree species, the root collar must always remain above ground when planting and mulching.

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.



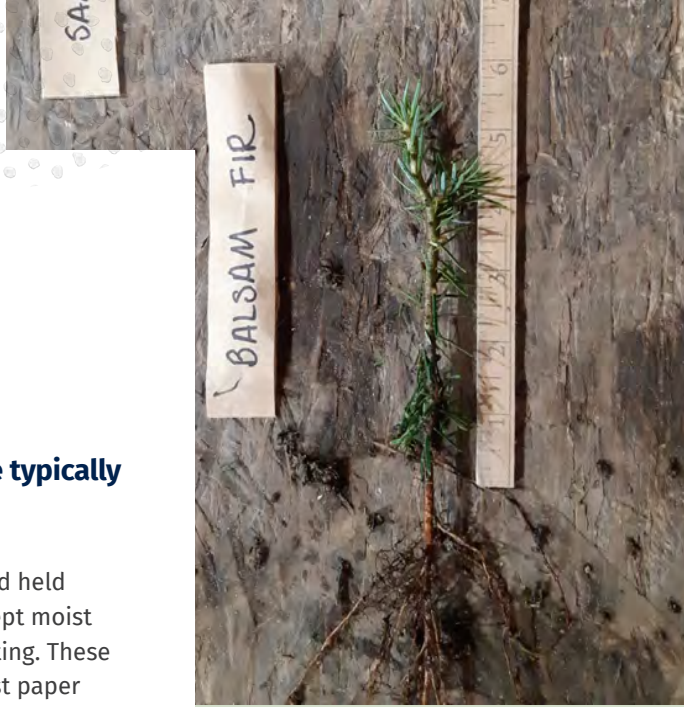
FOR MORE INFORMATION ABOUT TREE BIOLOGY: U.S. FOREST SERVICE LEARN ABOUT TREES: HTTPS://WWW.FS.USDA.GOV/LEARN/TREES/ANATOMY-OF-TREE

Different Size Trees for Your Events

The types of trees used for planting events and giveaways are typically bare root and seedling plug trees.

Bare root trees are available only while dormant in the spring and fall, and held in cold storage until shipping or pick up. They should be refrigerated or kept moist and as cool as possible in a garage or basement until distribution or planting. These plants, with no soil around the roots, arrive wrapped in bundles with moist paper or other water-holding material around the roots to keep them from drying out. Ideally, they will be planted right away or at least within seven days. If being given away individually, the bare root trees will likely need to be re-packaged individually with moist material. If being planted all at once during a Planting Event, keeping the trees in the shade and spraying water on the roots of trees throughout the day until planted will help keep them from becoming stressed by dry conditions.

Seedling plug trees are grown and shipped in individual tubes or trays containing several trees, each with roots growing in a small volume of soil. The soil helps keep the roots moist, and allows for them to be shipped and planted throughout most of the year. The ideal times for planting the seedling plugs are still spring and fall. Due to the small volume of soil, the plugs can dry out quickly and should be kept in the shade and watered daily during warm weather until they can be planted or distributed.



COLD STREAM FARM

Larger Trees

Planting projects in high-visibility locations, or for use as a dedication or memorial, may best be served by the use of larger plant material. Balled and burlapped trees have been grown in the ground, then dug individually and wrapped with burlap around the root ball. These trees are much more expensive than seedlings, and can be difficult to transport and plant due to their size and weight, but they provide the best visual impact. Containerized trees may range in size from 18” to 7’ tall, typically with pot size from 1 gallon up to 7 gallons, and have a more moderate price and ease of planting depending on size.

How to Host a Successful Tree Planting Event

This section of the guide will help you plan your Trees for Wildlife approved Tree Planting Event!

Trees for Wildlife™ Planting Events provide 100 or more trees to be planted in one location, often a school, park, place of worship or other public property. Partners receive free or subsidized tree seedlings from Trees for Wildlife™ and organize volunteers or staff to prepare the site, plant the trees and ensure they are cared for. They may incorporate an educational workshop or learning activities for children.

Getting ready to plant takes some planning, investigation and analysis. It provides a great opportunity to learn more about your community. This section will walk you through the planning stages, which may require two weeks to a month to complete, depending on the locations you are considering for the tree planting. Steps 1-4 of this Section will help you prepare to submit your Trees for Wildlife application for a tree award. There are six total steps in the planning phase:

See Extension Activities and Programs (Appendix C) for extension activities and programs that may be taught before or in conjunction with the Tree Planting Event.

1) Site Selection in your Community

Identify who owns the property where you wish to plant your trees. This may require research by visiting a local government office, making phone calls or searching on the internet through a property mapping site. You will need to approach the owner to secure permission to plant trees.

Begin by identifying your site and making sure you have approval to assess the site and move forward with an eventual event. You may wish to consider multiple locations up front, since not all locations may be appropriate for trees in the long run. Some suggested locations you can explore in your community are:

- School
- Library
- City Hall
- Senior Center
- Community Center
- House of Worship
- Streetscape (Sidewalk)
- Apartment Complex
- Park

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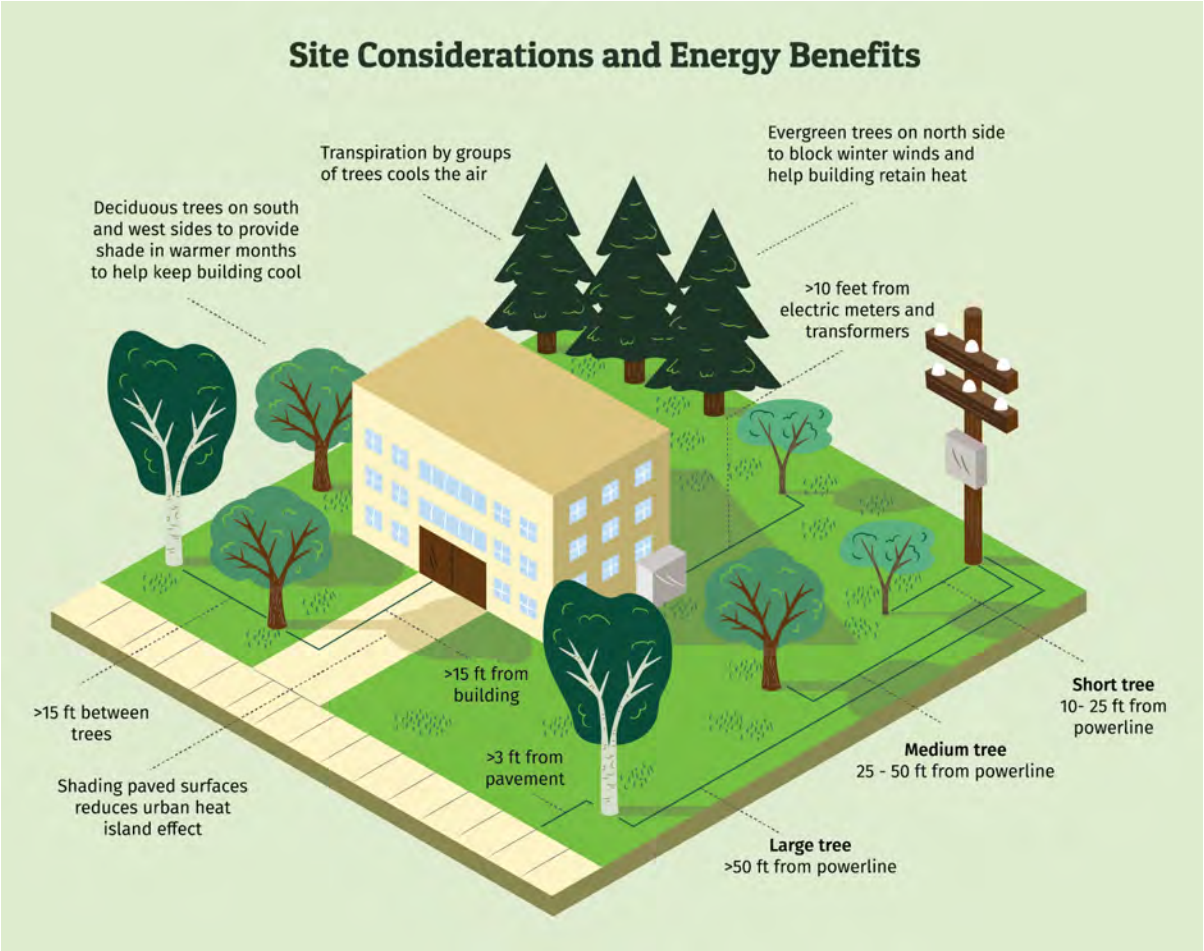
Next, assess your site. These considerations will help you to determine which of the sites is the most appropriate for the trees to be planted.



Tree Height: The site should be able to host trees that are 20 feet or taller, depending on species, *when fully-grown*. What appears to be adequate space for a seedling may not support a fully-grown tree. If power or telephone lines cross overhead or nearby, then their height plays an important role in what, if anything, may be planted.

Roots and Pavement: If roads, sidewalks or curbs are nearby, tree placement is an important consideration. Adequate space for roots is needed for a tree to thrive and continue to grow over the long term. Roads and sidewalks can limit the amount of soil available to tree roots as well as the amount of water and nutrients that can infiltrate. In a small planting area, tree roots may also lift the sidewalk or cause other damage over time, so it is extremely important to allow a large enough planting area.

Energy Savings: If a house or other permanent structure is nearby, then strategically planted trees can be beneficial. Deciduous trees can help provide shade to cool the structure in warm months, while evergreen trees can serve as a wind screen in cooler months, both of which help to reduce energy costs. However, planting the right distance from the structure is necessary to allow adequate space for both limbs and roots. The table on the next page will help you choose whether a short, medium or tall tree will be appropriate for the space available.

TREE SIZE CATEGORY	SHORT	MEDIUM	TALL
Mature Height	(less than 25')	(25'-40')	(40' or greater)
Overhead Restrictions	powerline (unless too low to plant beneath)	clear overhead	clear overhead
Planting Area (to receive water and nutrients)	min. 3'x3' (or 9 sq.ft.)	min. 4'x4' (or 16 sq.ft.)	greater than 4'x4' (or over 16 sq.ft.)
Distance from Building (to allow room to spread)	10' (or 8' from corner)	15' (or 12' from corner)	20' (or 15' from corner)

IT IS IMPORTANT TO CONSIDER ALL POSSIBLE SITE LIMITATIONS AND SELECT APPROPRIATE TREE SPECIES AS GUIDED BY THE SHORTEST "TREE SIZE CATEGORY" NECESSARY.

Danger Below: In addition to the more obvious physical restrictions on site, it is critical to know if there are any underground restrictions such as pipes or wires. 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 doing any digging, and preferably before selecting the site, **call 811 or go to www.call811.com/ to have utilities marked for free (in the U.S.).** 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. This will also help ensure that tree roots have some distance from underground utilities to help prevent damage as the trees roots grow.

Available Sunlight: Observation throughout the course of a day can help determine how much sunlight is available and also guide tree selection. For horticultural purposes, sunlight conditions are typically described as one of the following:

- Full sun: 6 or more hours per day
- Partial sun: 4 to 6 hours per day
- Full shade: fewer than 4 hours per day

Shade and Nearby Trees: The presence of other trees nearby can limit the amount of sunlight available to new plantings and eventually limit the canopy and root growth of the new trees. Mature trees can also compete for water, which is especially critical during establishment. However, selecting a shade-tolerant tree with a short to medium mature height that is well-suited to soil moisture available could work out well at this type of planting site.

Soil and Drainage: The soil type, and consequently soil drainage at a planting site can influence the success of the planting. To help determine the drainage at the potential site, you may wish to try this experiment:

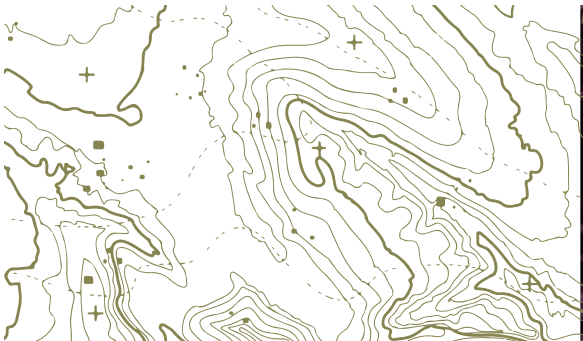
> ***Dig a hole about 18 inches deep and 12 inches wide and then fill the hole with water. Now carefully time the water draining from the hole. If the water drains away within an hour, the soil has good drainage. If it takes a few hours to a whole day to drain, the soil has slow or "fair" drainage. If the water takes more than a day to drain, the soil has poor drainage.***

A soil with very fine particles will drain slowly, which means that there is less air moving through the soil and less oxygen available to the roots. In this case, choosing a tree adapted to wet conditions would help ensure its survival. A coarse soil will drain quickly, indicating that a drought-tolerant tree would be a good choice.

Compacted Soils

Established urban areas have typically been altered by a variety of uses over the years, resulting in compacted soil that can be difficult to plant into and inhospitable for the trees. The compacted soils do not have large pore spaces for air, which affects the ability of tree roots to grow and the ability of rainwater to soak in slowly. It may be necessary to pre-dig the holes with an auger, that otherwise would be too difficult for volunteers to dig by hand with shovels. The soil removed from the hole should be broken up into fine clumps so that it can be used effectively to fill in around the newly planted tree, and the hole itself should have uneven edges to prevent tree roots from circling. Soil that is overly-compacted may be amended to improve quality. (See "Site Preparation" on page 21 for more information about amending soil.) Selecting trees well-suited for tough urban conditions should also be considered by consulting Cornell University's guide **"Recommended Urban Trees: Site Assessment and Tree Selection for Stress Tolerance."**

Irrigation Source: The convenience of a nearby water source such as a faucet to water the trees can influence the desirability of a site for planting. If there is no water available on site, it is necessary to have access for a vehicle carrying a tank of water instead. Trees need water to grow, especially for the first two years after planting. The easier it is to provide water to the trees, the more likely they will be adequately watered throughout the establishment period and have a healthy start.



2) Determine Planting Date

In most areas, the optimal planting windows for bare root trees are during the early spring and the fall. This allows for trees to begin establishing without the heavy heat of summer or the freezing temperatures of winter, both of which should be avoided. Special considerations for timing exist in regions where the climate is arid or subject to a rainy season.

Select a planting date and backup planting date (about one week apart) during an optimal time for tree planting, allowing adequate time for obtaining the plant material and securing volunteers to help with the planting. A contingency plan is mandatory in the event of inclement weather or other unforeseen complications. This is especially important to think through because if an event is cancelled, you will likely have to care for hundreds of trees until they can be planted on another date. You will need to provide both a date and contingency plan when you apply for trees at **NWF.org/Trees**.

When selecting the dates and planning your event, also bear in mind the availability of volunteers. Many volunteers, including families, will prefer a weekend date that does not conflict with work or school. However, oftentimes retirees are interested in this type of volunteer opportunity, with availability and preference for planting on weekdays. Additionally, if tools or other planting equipment will be borrowed for the planting, ensure availability for the planting dates.

Most volunteers will be comfortable volunteering for half a day, so consider scheduling volunteer participation at the event for approximately 3 hours on site. Typically, 2-3 volunteers can be teamed up for planting. At sites that have been well-prepared, teams may be able to plant a tree in ten minutes. Heavy clay or compacted soils will take longer for digging and preparing the planting hole, which may result in teams planting one tree per hour. The quantity and size of trees obtained for the event should match the number and ability of volunteers available to help plant. See page 18 for more information about determining the quantity of trees.

3) Determine Who Will Plant the Trees

When putting out a call for volunteers, social media has become a popular and effective way to reach people with little or no cost. Even so, phone calls and in-person conversations are a great way to connect one on one. Additional means to reach volunteers include through email, flyers, community calendars and neighborhood list serves. It is helpful to target an audience that lives relatively close to where the planting will take place so that travel is not a deterrent.

Provide key details to volunteers in advance so that they can be well-prepared for the planting day. Directions to the site and a reminder will help ensure a good turnout of those committed. Volunteers also need to know what they are responsible for bringing. They should be asked to bring work gloves (if they have them) and wear comfortable clothing matched to the weather. For safety, volunteers should wear sturdy closed-toe shoes or boots. Volunteers need to know that Planting Events involve digging, handling woody mulch, and sometimes, removing invasive species, so they should dress to be comfortable with these activities. Volunteers may wish to bring their own sunblock and insect repellent. Water and snacks are typically provided by the organization hosting the event.

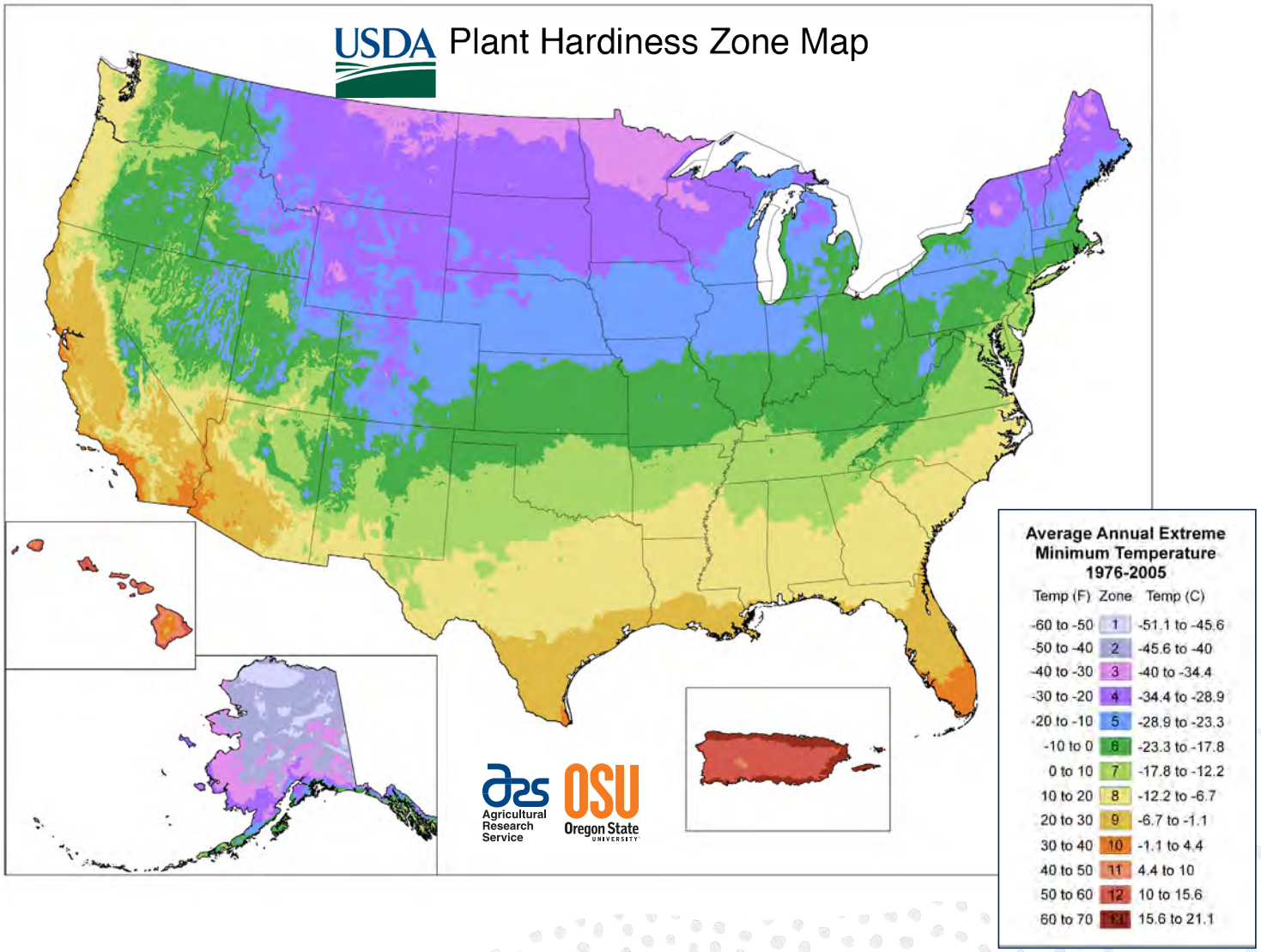
Providing educational details such as why the location has been chosen and specific details about benefits to the community and wildlife will help provide a sense of purpose. Volunteers can be included in the planning process as well as the Planting Event. Key volunteers who show great interest may help recruit others or lead planting teams.

There are also other approaches for Tree Planting Events that can help bring volunteers to your event. For example, school events can engage students and teachers in the planting during or after the school day. Some non-profit organizations or places of worship may have staff or a team ready to go. Many companies or municipalities will organize a corporate work day or leverage their existing volunteer networks. In each of these scenarios, the partner may assume some or all of the responsibilities related to recruiting, communicating with and helping to manage the volunteers.

4) Research Native Tree Species for the Site

Resources in Appendix A: Supplemental Information and Recommended Reading will help to find native tree species suitable for your area and beneficial to wildlife. Refer to the site characteristics determined through your site assessment to help narrow down your choices, particularly with regard to mature tree size.

A tree field guide or the **USDA Plant Database** are both great places to look up information about trees and their characteristics such mature height, amount of sun or shade needed, preferred native habitat and tolerance for different kinds of soil and drainage conditions. These factors will also play into whether a plant is suitable for sites that are urban, rural or somewhere in between. Determine your Plant Hardiness Zone (see map below) to check that your plant choices will survive the temperature extremes. If selecting plants native to your area, this should not be an issue. You may also wish to talk with a nursery professional or local arborist for suggestions about what would work best and is available locally. **To ensure long term survival, it is important to select the "right tree for the right place."**



In addition to being attractive, the flowers of some trees are particularly beneficial to pollinators and trees with fruits or nuts will provide food for birds and small mammals. Trees that are host plants to butterfly and moth species, as identified in NWF's Native Plant Finder which can be found at **NWF.org/NativePlants**, will support these amazing insects as caterpillars and in turn provide food to help birds raise their young. Selecting keystone tree species, ones that host the greatest numbers of butterflies and moths, is a strategic way to greatly enhance the wildlife value of a planting. Whenever possible, opt for trees that provide the most wildlife benefits. In this manner, the trees planted will go above and beyond providing oxygen, shade and a pleasing site–their added benefits of supporting wildlife will in turn help to create an even healthier ecosystem.

The quantity of trees you need must fit within the total size of your planting area. Distance for planting trees apart from one another depends on the type of tree and final height of a grown tree. It is recommended that trees are planted no closer than six to eight feet apart. Remember to follow the instructions for each variety of tree on how far apart to plant. The size of your expected volunteer workforce may also influence the size of the area that may be planted.

5) Plan Educational Activities

Consider whether or not you wish to incorporate an educational activity for children or youth into your event by reviewing the extension activities recommended in Appendix C.

6) Apply for Trees

Review the Trees for Wildlife guidelines and application at **NWF.org/Trees.** If you meet the application requirements you should apply and only begin planning your event if your application has been approved.

Trees planted will go above and beyond providing oxygen, shade, and a pleasing site – their added benefits of supporting wildlife will in turn help to create an even healthier ecosystem.

JULIANA CAPRETTE

JANET TOWNSEND

Getting Ready and Hosting Your Tree Planting Event

1) Select and Purchase Trees in Partnership with NWF

Once your application has been approved, it is time to contact your local native plant nursery or native tree provider and find out what species are available in your price range and size. NWF has a list of recommended nurseries by ecoregion if you need help identifying a supplier (See Appendix A). DO NOT place your order yet. First you must get in touch with NWF at **trees@nwf.org** to review your tree seedling purchasing plan and make sure your tree species are approved. Your purchase must be approved by NWF in order to be reimbursed even after NWF has approved your application. NWF will NOT reimburse for any non-native trees or any plant classified as a 'shrub only' by the USDA Plants database. Please contact NWF with any questions about selecting trees for your event at **trees@nwf.org**.

2) Gather Tools and Supplies

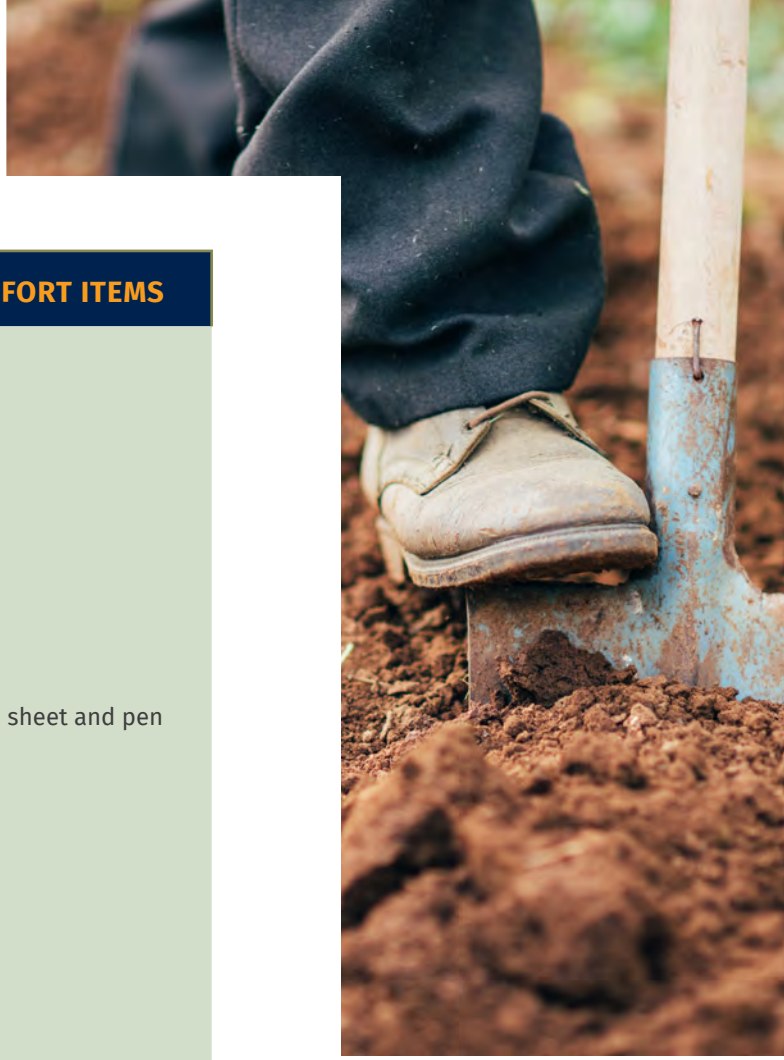
Planting trees requires specific tools and resources. Use the checklist on the next page to be sure you have all supplies needed in advance. If you need help to secure supplies, contact your local park authority, state arborist, state Department of Natural Resources or nature center, to see if you can borrow items needed. You can also purchase or rent some of the items or contact your local volunteer center, such as the United Way, to see if there is a community tool chest from which to borrow.

You may also ask your volunteers, or those supporting the planting, to bring tools from home if they have them. If you do make this request, please make it clear that this is optional.

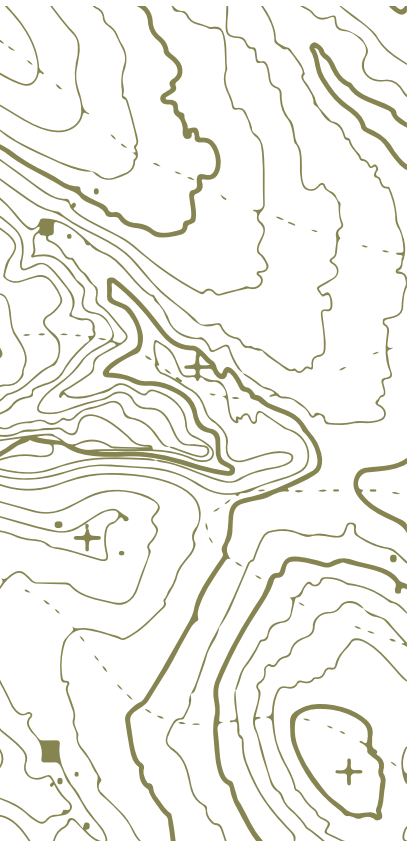
If you need help to secure supplies, contact your local park authority, state arborist, state Department of Natural Resources, or nature center, to see if you can borrow items needed.

Using Tree Shelters

Using tree shelters to protect newly-planted trees is both recommended and encouraged since they increase the odds of successful establishment. Tree shelters are translucent plastic or mesh tubes ranging in size from 3-5' tall that are installed as protection around tree seedlings at the time of planting. Lawn mowers, weeds, wind, drought, trampling and hungry deer or other animals, are the main pressures alleviated by the shelters. An added benefit is the greenhouse effect the shelters can provide around the seedlings, which in turn improves growth rate. Tree shelters are not recommended for use with evergreen trees or in shady areas. Please see Appendix B for more details about different types of tree shelters.



PLANTING SUPPLIES	SAFETY AND COMFORT ITEMS
Round-head shovels (1 per team)	First aid supplies
Hand trowels (1 per team)	Sunscreen
Gloves (pair for each person)	Bug / tick repellent
Scissors to remove any tags (1)	Hand wipes
Utility knife to cut away container (if needed)	Drinking water
Wood chip mulch (1 bag (2 cubic feet) per small tree)	Snacks
Wheelbarrow (for mulch)	Clipboard with sign-in sheet and pen
Water source, hose or bucket (for trees)	Camera
Tree shelter tubes (if needed)	
Wooden stakes (if needed)	
Hammer or mallet (if needed)	



3) Prepare the Planting Site

A planting site with thick brush or grass will need to be prepared prior to the planting day. When undesirable vegetation is removed, not just the stems but also the roots should be fully removed to prevent regrowth. It is not necessary to clear the entire area, which can result in bare soil and a fresh crop of weeds, but rather just the spots within a 3 foot diameter where each tree will be planted. A weed-free zone around each new tree prevents weeds from out-competing and reduces the possibility of voles or other small rodents causing damage to the seeding.

When dealing with compacted urban soils or soils that are otherwise hard to dig, it may be necessary to dig the holes prior to the planting date. Otherwise, it will be necessary to provide appropriate tools such as a pick, digging bar or auger and proper instruction at the planting event.

Amending Soil

Soil that is overly-compacted or is lacking in organic matter may be amended by mixing with compost to improve quality. The additional organic matter will help with pore space and moisture retention, as well as provide a small boost of nutrients. Soils with acidity concerns can be adjusted with materials such as limestone and sulfur, depending on whether pH needs to decrease or increase to an ideal range. Whenever possible, it is best to plant with only the native soil so that tree roots do not encounter different conditions within the planting hole versus outside of it where they need to continue growing.

To prepare for "watering in" the trees as soon as they have been planted and to care for them throughout the establishment period, determine how water will be provided in advance and purchase any supplies needed such as hoses, sprinklers, and hose-end timers. This will ensure a quick and efficient setup at the event.

4) Engage Your Volunteers and the Community

Enthusiastic volunteers are the most important component of all Tree Planting Events! Being organized and well-prepared will ensure a good, fun experience for the volunteers and will lead to the event being a success. Here are a few tips for preparing for the Tree Planting Event:

FOUR WEEKS PRIOR TO THE EVENT:

- Recruit volunteers through the use of social media and local news outlets
- Put together a committee of experienced volunteers who can assist with the planting
- If applicable, plan the program for your tree planting ceremony with your local partners
- Assign specific tasks to committee members to help spread the workload
- Confirm the tree order and delivery date with the tree nursery
- Confirm tree planting supplies availability
- Check with local utility to make sure the site is safe for planting (see pages 13 and 14 which discuss tree height and danger below)

TWO WEEKS PRIOR TO THE EVENT:

- Gather supplies for the volunteers (water, gloves, snacks, first aid, sunscreen) and tools needed for the tree planting
- Schedule a committee meeting to confirm day of planting schedule and that assigned tasks and responsibilities have been completed
- Send confirmation emails with event logistics to volunteers
- Publicize the event! Prepare a press release for local media and reach out to community social media groups through Facebook, Twitter, Instagram, etc. Coordinate your press and social media outreach with NWF by emailing us at **trees@nwf.org**.

5) Planting Your Trees

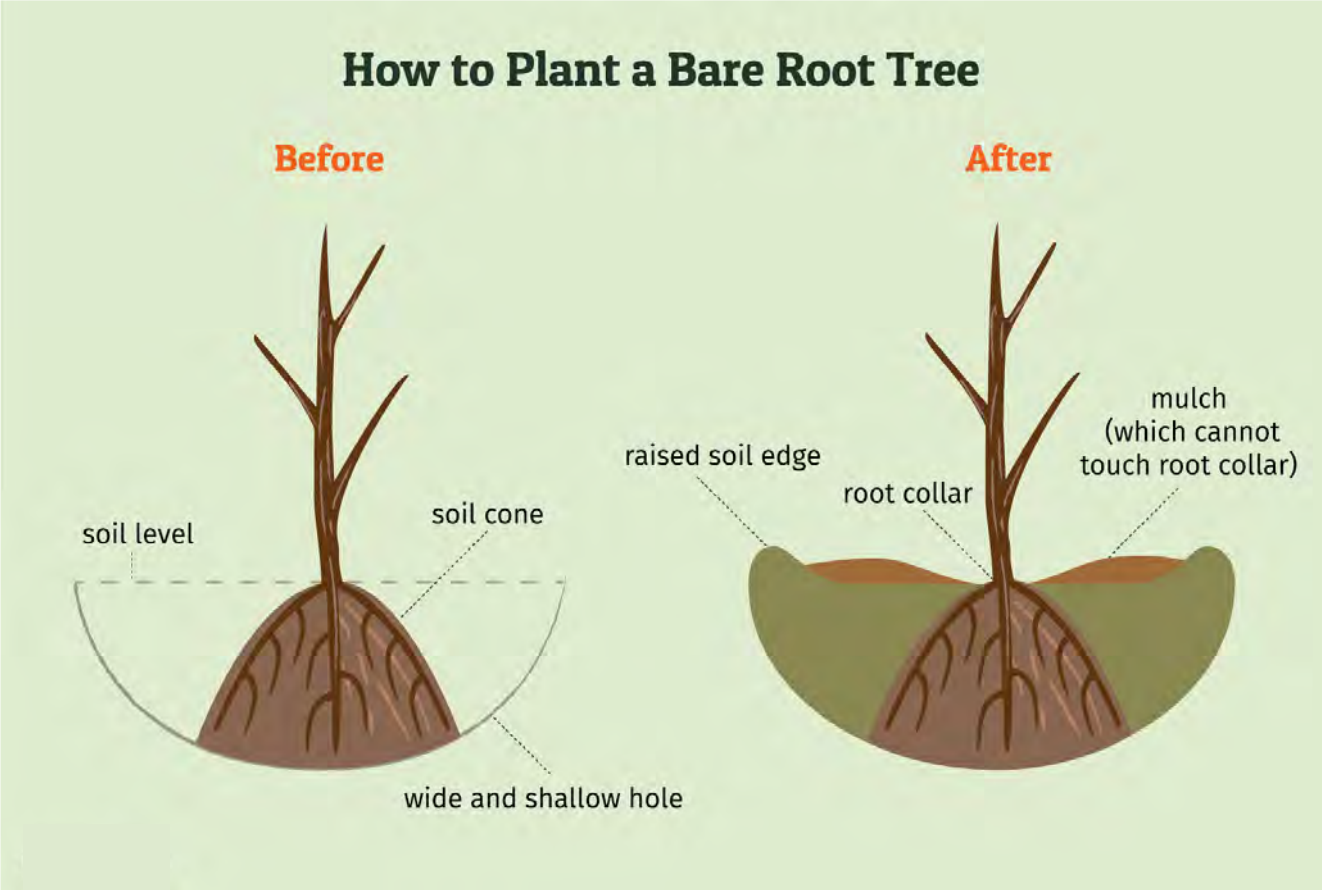
You've done a lot of work to get to this point. Now it is time to plant some trees!

At the start of your event, be sure to address your group of volunteers and fellow tree planters. First of all, thank everyone for joining you and let them know how their actions will have a direct benefit to wildlife, to people and to the environment. Tell participants about the species of trees you're planting to help them visualize what the trees will look like as they mature and what types of wildlife are likely to benefit. Acknowledge the National Wildlife Federation's contribution of the tree seedlings and any other funders, sponsors or key partners. Provide relevant safety tips and go over the planting instructions. Consider demonstrating how to plant a tree before others get started, since visual instruction is frequently much more accurately absorbed than verbal instruction. If you are working with local volunteers that you have recruited, make sure you follow your organization's or school's policy for volunteer liability and ask volunteers to sign a waiver if applicable.

Remember to take photos of the participants receiving the native trees and share them with the National Wildlife Federation.

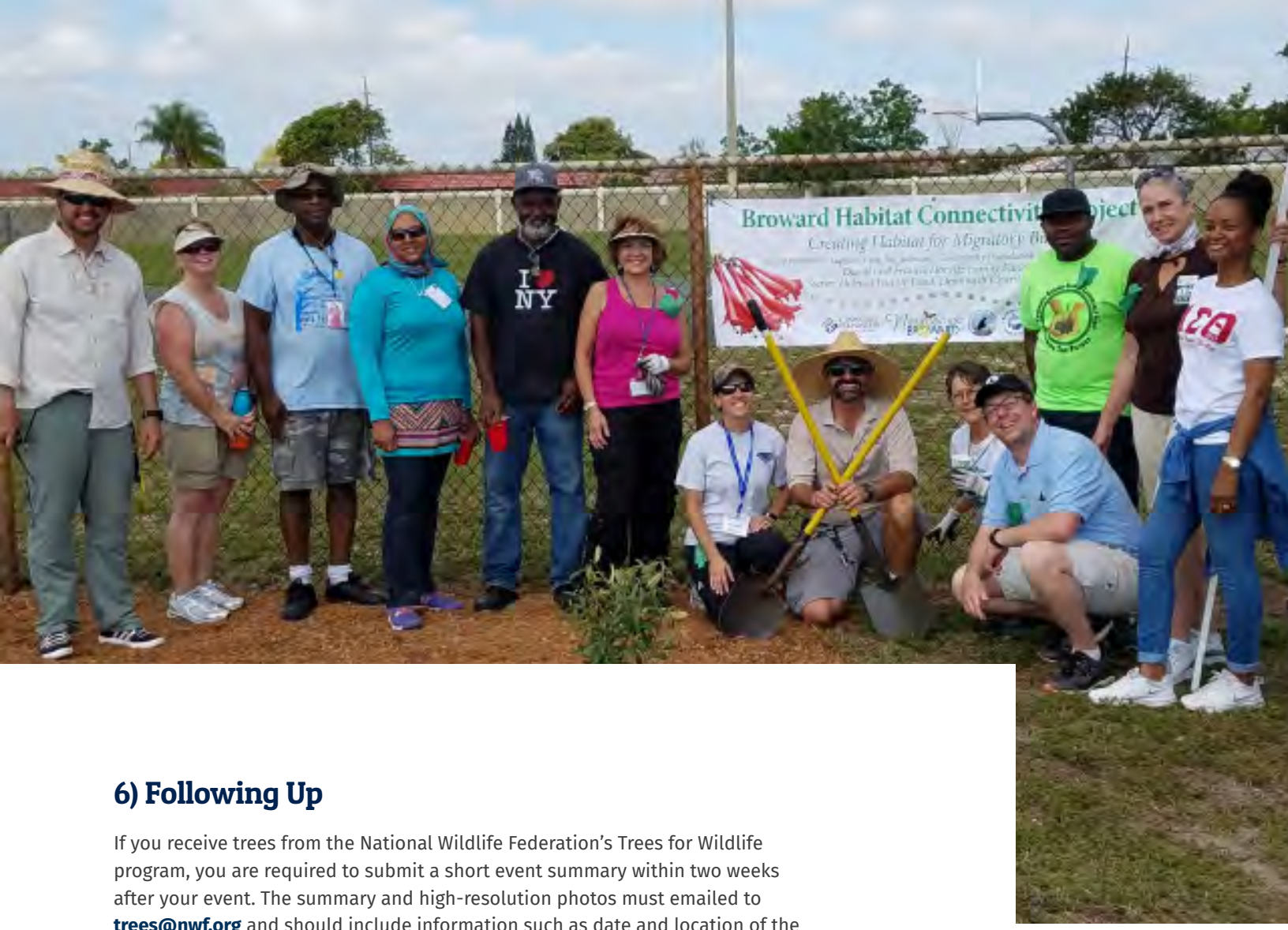
How to Plant: Follow these planting instructions based on the type of plant material to be planted. Whether planting with bare root or seedling plug trees, it is important to store seedlings in a cool, dry place and keep the roots moist until planting day. Starting with a healthy tree is key to success.

Please check out our Trees for Wildlife videos at **NWF.org/Trees** before reviewing these written instructions.



Tree Planting Guidelines

	BARE ROOT TREE	SEEDLING PLUG TREE
1) PREPARE THE HOLE	Mark an area that is wide enough for the roots to spread, remove sod and dig the hole. The depth of the hole should be about equal to the longest root.	Mark an area at least 2-3 times the width of the roots, remove sod and dig the hole. The depth of the hole should equal the height of the root ball (not the container).
	Loosen soil along the edges of the hole to make it easier for tree roots to spread and pile all soil next to the planting hole to refill quickly.	
2) PLACE THE TREE	Form some of the loose soil into a cone-shaped mound at the bottom of the planting hole to help encourage roots to spread. Handling the roots gently, hold the tree above the mound and spread roots outward.	Remove the tree from its plug or container carefully, applying pressure around each of the sides if tight. Loosen any roots that seem to be tight, tangled, or circling and gently arrange the loose roots outward.
	Set the tree straight up and down at the center of the hole and check to be sure that all of the roots will be covered but none of the root collar/flare of the tree where the trunk begins.	
3) BACK-FILL THE HOLE	Return some of the loose soil to the hole around the root ball and tamp gently in place by hand. Ensure the tree remains upright and any loose roots continue to spread outward. Continue filling and gently tamping the remaining soil into the planting hole until level with the ground. Test settling by adding some water, then add more soil if necessary. Excess soil can be used to create a small berm or raised edge around the planting hole to form a shallow basin that will help encourage water to soak in rather than run off.	
4) WATER	Generously water the newly-planted tree using a hose, sprinkler or water poured slowly from a bucket.	
5) APPLY MULCH	Add a 2-3” layer of mulch in a 1-3’ circle around the tree, taking care that mulch does not contact the trunk.	
6) CLEAN UP	Remove any tags, wires, stakes or other trash so that they do not hinder future tree growth or litter the site.	



PATRICK FITZGERALD

6) Following Up

If you receive trees from the National Wildlife Federation's Trees for Wildlife program, you are required to submit a short event summary within two weeks after your event. The summary and high-resolution photos must emailed to **trees@nwf.org** and should include information such as date and location of the event, number of volunteers, number and species of trees planted and why the tree planting was important.

After your event, it is also important to:

- Return all borrowed tools
- Show your appreciation to volunteers and partners by sending a thank you email or note
- Schedule a follow-up meeting with the tree committee to discuss what worked/what didn't work

Caring for Trees after Your Planting Event

Designate a person or team willing to help ensure the long-term success of the planting project. It helps to set a schedule for weekly watering, as well as monthly weeding and monitoring for good health, and evaluation at the end of the first growing season. Encourage the team to provide feedback.

Watering: Watering in the trees immediately after planting and weekly throughout the first growing season, pending rainfall, is necessary to ensure tree health, growth, and survival. In areas with fast-draining soils, check as frequently as every other day the first growing season to see if water is needed. Watering should be done with particular vigilance during a drought unless there are water restrictions in place.

If planting in the fall while trees are still dormant, watering will likely be needed less frequently after the initial planting. However, occasional watering may be necessary over the winter if it is a particularly dry year.

The watering should be skipped when there is adequate rainfall to avoid overwatering, which can be another form of stress to the tree. If unsure about amount of water needed, dig a three-inch test hole after watering to see how deeply the water has soaked. Supplemental water should continue on a less frequent basis throughout the second and third growing seasons if possible.

When returning to maintain the tree planting site, especially throughout the first year, check to ensure that tree shelters are still upright and stable, and remove any encroaching weeds.

Mulching: After watering, install mulch around the trees right away to prevent weed seeds from germinating. Weeds compete with the newly-planted tree for water and nutrients, in addition to being unsightly. Not only will the mulch aid with weeds, but it will also help hold moisture in the soil for a longer period of time than bare ground and moderate soil temperature during especially hot or cold weather, both of which will contribute to healthy root growth. An additional benefit of mulch is providing a buffer area around the tree which will prevent potentially non-reversible damage from a weed-trimmer or lawnmower.

Mulch should be applied in a 1-3' diameter circle around the tree at a depth of 2-3", never touching the tree trunk itself, which could otherwise lead to decay at the root collar. At the start of the next growing season and yearly afterwards, evaluate the mulch to see if it appears sparse. If more mulch is needed, remove any weeds and loosen the existing mulch before applying another 2-3" layer of mulch. Choose a material such as pine bark or hardwood bark free of weed seed that will break down slowly over time. Fresh materials such as grass, saw dust, or wood chips should be avoided since their processes of breaking down cause them to compete for nitrogen in the soil with the newly-planted trees. Check to make sure that the root collar is not covered by mulch.

Shelters: Once trees have been watered in and mulched, tree shelters can be installed. See Appendix B. The installation will vary some between brands, but typically entails placing the tube over the seedling, placing a wooden stake through loops along one side of the tube and hammering the stake firmly into the ground to prevent it from being blown over. Many tubes are supplied with a plastic mesh cap, which can be installed over the top to help prevent birds or insects from building a nest inside the tube. Remove this cap as the tree's growth is reaching the top of the shelter to avoid damage to the central leader.

When returning to maintain the tree planting site, especially throughout the first year, check to ensure that tree shelters are still upright and stable and remove any encroaching weeds. After one year, if trees are growing well and nearing the top of the shelter, or after two to three years at the most, tree shelters should be removed. This will ensure that the trees limbs are not crowded by the shelter and that the tree can develop more strength in the trunk. Prune lightly after the second or third year as needed.

GABRIELA LOPEZ

How to Host a Successful Tree Giveaway Event

This section of the guide will help you plan your Trees for Wildlife approved Tree Giveaway Event!

Tree Giveaway Events help distribute 100 or more native trees to be planted by individuals either at their home or another suitable location. Partners receive free or subsidized tree seedlings from NWF and are required to provide an educational component at their event (such as a planting demonstration) and share "take home guidance" to ensure they are properly planted and cared for.

Getting ready to for a Tree Giveaway takes some planning, investigation and analysis, that is similar to a Tree Planting Event, but has some different components and opportunities. This section will walk you through the planning stages, which may require two weeks to a month to complete, depending on the location you are considering for the Tree Giveaway Event.

Steps 1-4 of this Section will help you prepare to submit your Trees for Wildlife application for a tree award.

1) Identify Your Potential Location & Date

Most Tree Giveaway Events are built into existing community events such as Earth Day or Arbor Day celebrations, farmer's markets, garden shows, Garden for Wildlife workshops and school events. Combining purposes adds value to the community event and helps ensure participation in the Tree Giveaway. You can also plan your own standalone Tree Giveaway Event.

Please also read through the "Determine Planting Date" section on page 16 of this guide, as you will want to make sure you have a contingency plan and consider your need for volunteers.

2) Research Native Tree Species for the Giveaway

Please review the "Research Native Tree Species for the Site" section on page 17 of this guide for helpful considerations on what species of native trees you might want to include in your Tree Giveaway Event. In addition to the factors included in this section (including hardiness zone, community benefit, wildlife benefit, etc.), there are some special considerations to consider for a Tree Giveaway Event.

For Tree Giveaway Events, many residents may prefer a smaller, blooming tree than a larger one. Native dogwoods, redbuds and fringe trees are often a popular choice. Those with smaller yards or spaces to plant a tree will likely desire a smaller tree species. In rural or suburban areas with larger lot sizes, residents may prefer larger trees like oaks and maples.

There are many resources in Appendix A: Supplemental Information and Recommended Reading, that will help you find native tree species suitable for your community that are beneficial to wildlife.

3) Apply for Trees

Review the Trees for Wildlife guidelines and application at **NWF.org/Trees**. If you meet the application requirements you should apply and only begin planning your event if your application has been approved.

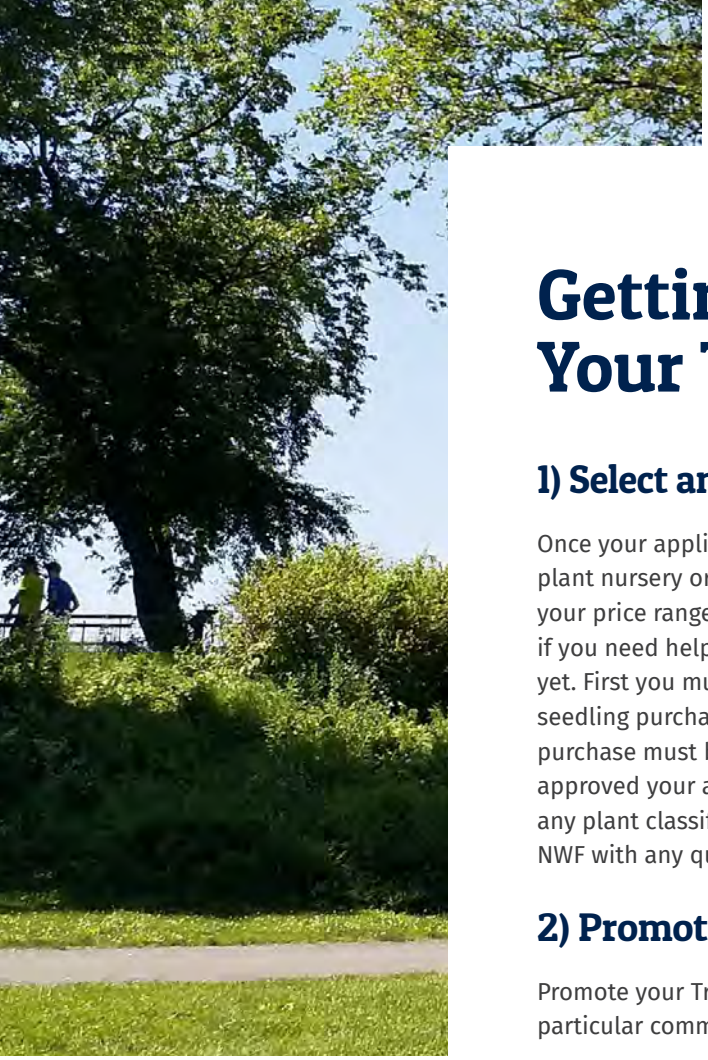
4) Plan Your Educational Component

Plan an Educational Demonstration that includes information in the form of a poster, video to play on a laptop or monitor or display items for the table. You can find examples at **NWF.org/Trees**.

Prepare information available to take home. This could include instructions on **how to plant and care for a tree**, along with information about the selected tree species.

DAVID SLOAS

There are many resources in Appendix A: Supplemental Information and Recommended Reading, that will help you find native tree species suitable for your community that are beneficial to wildlife.



Getting Ready and Hosting Your Tree Giveaway Event

1) Select and Purchase Trees in Partnership with NWF

Once your application has been approved, it is time to contact your local native plant nursery or native tree provider and find out what species are available in your price range and size. NWF has a list of recommended nurseries by ecoregion if you need help identifying a supplier (See Appendix A). DO NOT place your order yet. First you must get in touch with NWF at **trees@nwf.org** to review your tree seedling purchasing plan and make sure your tree species are approved. Your purchase must be approved by NWF in order to be reimbursed even after NWF has approved your application. NWF will NOT reimburse for any non-native trees or any plant classified as a 'shrub only' by the USDA Plants database. Please contact NWF with any questions about selecting trees for your event at **trees@nwf.org**.

2) Promote Your Event

Promote your Tree Giveaway Event by letting people know that you will be at a particular community event (or that you are hosting your own event).

If you are joining an existing event like an Earth Day at your school or a Pollinator Festival run by your city, be sure to coordinate with the event organizer and make sure the tree giveaway is highlighted as part of the larger event.

If you are hosting your own event, be sure to prepare a press release for local distribution and coordinate your press and social media outreach with NWF by emailing us at **trees@nwf.org**.

Be sure to leverage social media (including an organization's page or a neighborhood's group), listservs, local newspapers or an email contact list. You might even consider hanging flyers in local community meetings places that offer bulletin boards.

Be sure to leverage social media (including an organization's page or a neighborhood's group), listservs, local newspapers, or an e-mail contact list.

3) Engage Your Volunteers and the Community

While you will not need dozens of volunteers (which are typically needed for Tree Planting Events), having a small committee of enthusiastic volunteers or partners is an important component of Tree Giveaway Events. Being organized and well-prepared will ensure a good, fun experience for the volunteers and will lead to the event being a success. Here are a few tips:

FOUR WEEKS PRIOR TO THE EVENT:

- Recruit volunteers through your partner organizations or the use of social media and local news outlets
- Put together a committee of experienced volunteers who can assist with the event
- Assign specific tasks to committee members to help spread the workload
- Confirm the tree order and delivery date with the tree nursery
- Confirm event details and logistics with the event organizer (if you are part of a larger event)

TWO WEEKS PRIOR TO THE EVENT:

- Gather supplies (see section below)
- Schedule a committee meeting to confirm day of event schedule and that assigned tasks and responsibilities have been completed
- Send confirmation emails with event logistics to volunteers
- Continue to publicize the event through your press release and social media outreach through Facebook, Twitter, Instagram, etc.

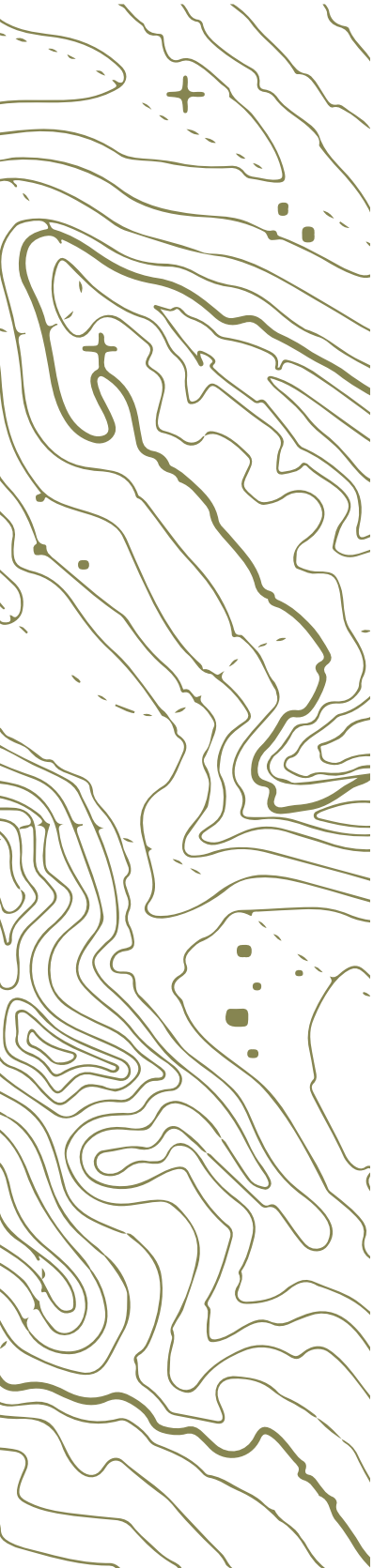
4) Gather Supplies

You will need different supplies for a Tree Giveaway Event than a Tree Planting Event. Your main goals are to give away trees to those who will plant them at home or in their community and provide information that will help ensure success in planting and caring for each tree.

Your most important supplies are your trees. Be sure you store seedlings in a cool dry place and keep roots moist until the Tree Giveaway Event. You can bring along a large tub, box or cooler to help shade the trees and keep them upright. Keeping the trees in the shade will also help keep them cool and moist.

Determine how the trees will be distributed in order to package individually and maintain moisture around the roots. They may be wrapped in wet newspaper, a plastic bag with a wet paper towel inside or a paper cup (works well for seedling plugs with a bit of soil).

In order to demonstrate the proper tree planting technique, you can show the "How to Plant Video" available at **NWF.org/Trees** on a loop and provide a hand-out with instructions about how to plant and care for a tree. Hand-outs with information that is specific to the tree species being offered will help the participant select the species that will work best for them and help them choose a good spot to plant the tree.



GIVEAWAY SUPPLIES	SAFETY AND EVENT SUPPLIES
Bare root or plug trees	First aid supplies
Newspaper or shredded paper to cover roots	Hand wipes
Small bags or paper cups to hold trees	Drinking water
Spray bottle filled with water	Table, chairs, table cover
Large tub, box or cooler to hold trees upright	Pop-up tent
Instructions on how to plant and care for a tree available at NWF.org/Trees	Laptop or monitor to display "How to Plant" video available at NWF.org/Trees
Information about tree species being offered	Large binder clips or rocks to secure papers
Other educational hand-outs (optional)	Sign-in sheet
	Clipboard
	Pens
	Camera

5) Implement Your Giveaway Event

You've done a lot of work to get to this point. Now it is time to give away some trees!

At the start of your event, be sure to address your group of volunteers and anyone helping out with the event. First of all, thank everyone for joining you, and let them know how their actions will have a direct benefit to wildlife, to people and to the environment. Tell participants about the species of trees you're giving away to help them visualize what the trees will look like as they mature and what types of wildlife are likely to benefit. Acknowledge the National Wildlife Federation's contribution of the tree seedlings and any other funders, sponsors or key partners.

During the event, engage the people coming to get a free tree in conversation–tell them about the species available, ask where they will be planting the trees, direct them to the resources you may have available at your table or booth. Once they have selected a tree, be sure to capture their contact information on your sign-in sheet (templates are available at **NWF.org/Trees**). Double check that it is legible before handing over their tree! Everyone receiving a free tree seedling will receive a follow up email from the National Wildlife Federation to check-in on their planting and encourage proper tree care!

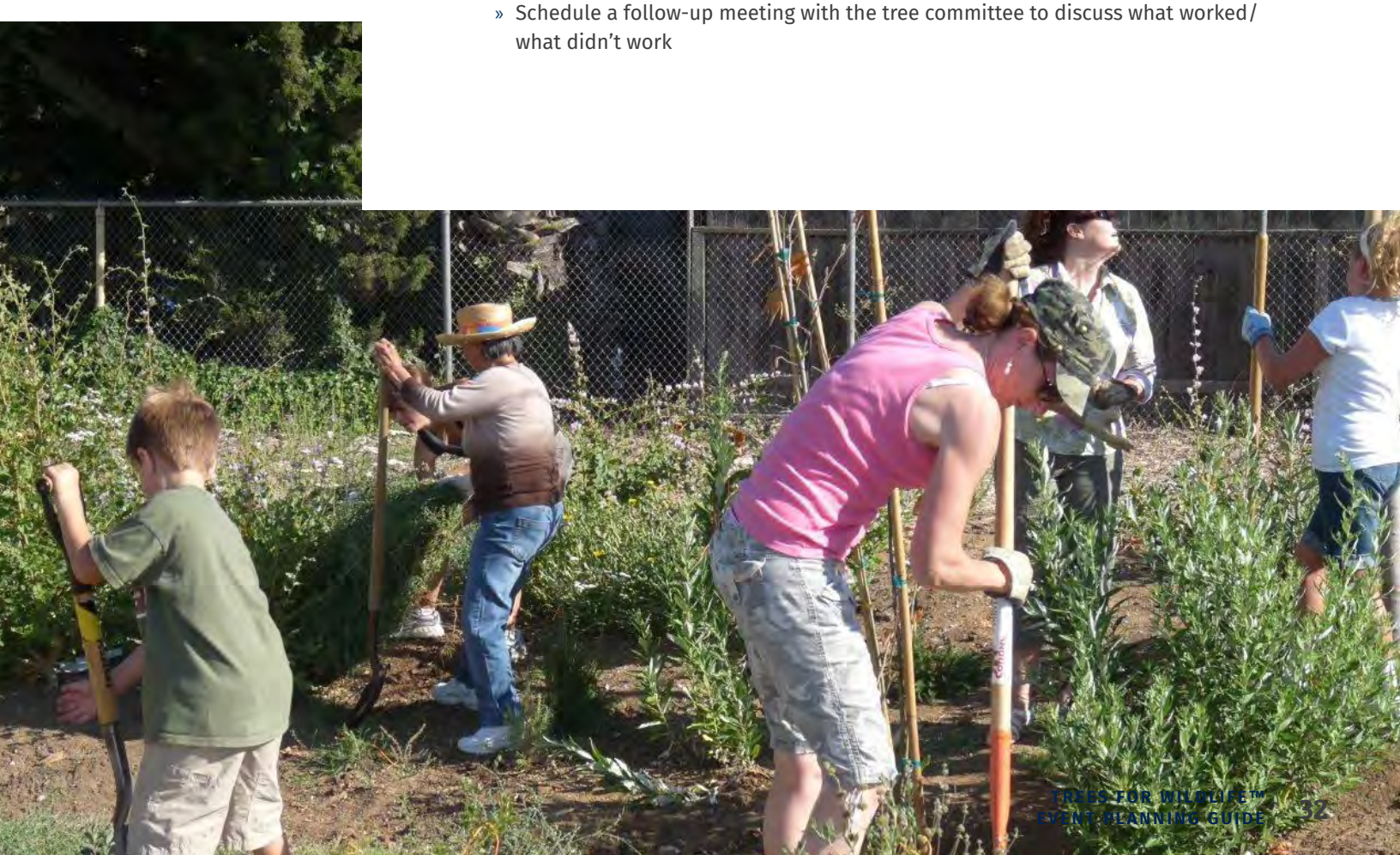
Remember to take photos of the participants receiving the native trees and share them with the National Wildlife Federation.

6) Following Up

If you receive trees from the National Wildlife Federation's Trees for Wildlife program, you are required to submit a short event summary within two weeks after your event. This summary, copies of your sign-in sheets and high-resolution photos must be emailed to **trees@nwf.org** and should include information such as date and location of the event, number of volunteers, number and species of trees given away and why the event was important.

After your event, it is also important to:

- Return all borrowed tools or supplies
- Show your appreciation to volunteers and partners by sending a thank you email or note
- Schedule a follow-up meeting with the tree committee to discuss what worked/ what didn't work

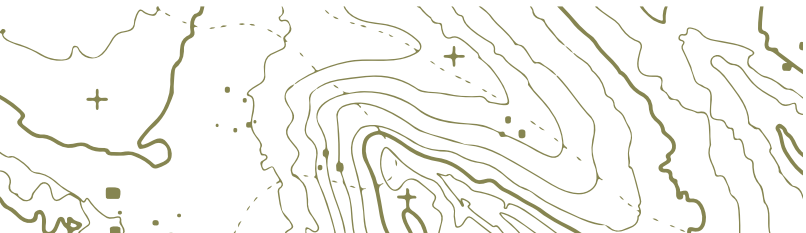


Appendix A

Supplemental Information and Recommended Reading

You can find the latest information about Trees for Wildlife and our resources online at **NWF.org/Trees**. The following resources may be helpful to you when planning your event, planting trees, caring for them or learning more about native trees, wildlife gardening and other topics.

- Find the most important native plants for your location to support caterpillars of butterflies and moths using our **Native Plant Finder**, based on the research of Dr. Douglas Tallamy and his team at the University of Delaware and in partnership with the United States Forest Service. Plant these host plants which will in turn support birds and other fauna.
- Learn about plants found throughout the country using the **USDA Plant Database**. Search by name, filter by state, view the vast photo collection and link to abundant resources.
- Search, discover and learn all about trees with our **Trees App Nature Guide**! The easy-to-use guide, available on iOS devices, features 708 types of trees found in North America—with nearly 4,000 photographs, text descriptions to help identify tree species and robust search functions to aid in species identification. Visit the App Store and search **NWF Guide to Trees**, where you can download the app for $9.99.
- Create your own wildlife habitat garden with step-by-step instructions and lists of the best native plants to support wildlife in ***Attracting Birds, Butterflies and Other Backyard Wildlife, Expanded Second Edition*** by NWF Naturalist and TV host David Mizejewski. Purchase options available **here**.
- Read ***Nature's Best Hope: A New Approach to Conservation that Starts in Your Yard*** by Douglas Tallamy to learn how you can be a part of a grassroots approach to conservation by creating wildlife habitat on your own property. More info about this resource and related titles ***Bringing Nature Home*** and ***The Living Landscape***, including where to purchase, can be found on **Tallamy's website**.
- Check out this list of recommended nurseries by ecoregion and other **resources**.
- Cornell University's guide **Recommended Urban Trees: Site Assessment and Tree Selection for Stress Tolerance**.
- USDA Forest Service's **website**.
- USDA Forest Service. 2010. **Tree Owner's Manual**. NA–FR–01–10.
- **Urban Watershed Forestry Manual. Part 3: Urban Tree Planting Guide.**
- International Society of Arboriculture' **Trees are Good website**.



Appendix B

Types of Tree Shelters

LEONARD RIGID PLASTIC MESH TREE GUARDS BY A.M. LEONARD

RIGID PLASTIC MESH

Protecting trees from bark damage by equipment or wildlife, the open mesh design helps prevent insects and small mammals from taking up residence inside the tree shelter and eliminates moisture buildup which can cause mold or mildew. The flexible material is easier to install than some others and blends in well with surroundings, however is the costliest. A stake must be driven into the ground and attached to the tube for stability. Ex: **Leonard Plastic Mesh Tree Guard**

TUBEX TREE SHELTERS BY TUBEX USA

CORRUGATED PLASTIC TUBE

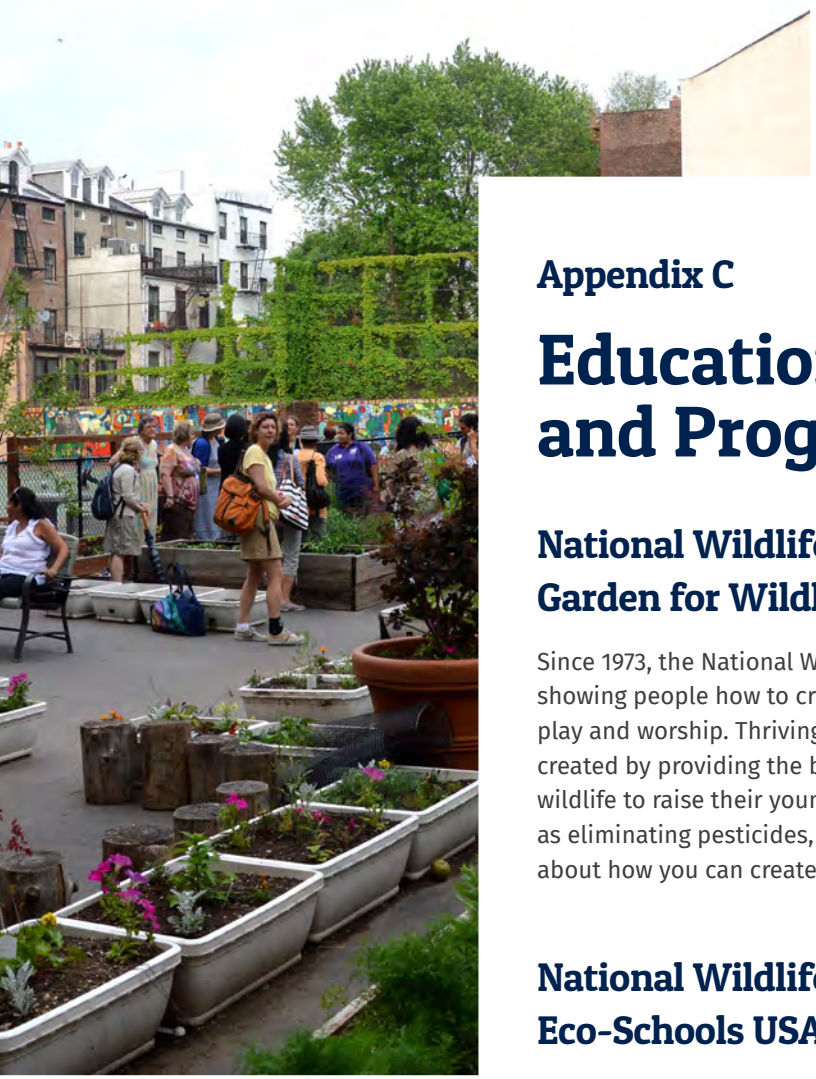
In addition to protection from equipment or wildlife, the solid design protects trees from herbicide damage and wind, while providing a miniature greenhouse environment. Features specific to this product include a flared rim at the top to help prevent damage from rubbing and a perforated vertical line that can be split by the tree if the shelter is impeding its growth prior to removal. The use of wooden stakes is a necessity. Ex: **Tubex Tree Shelters**

BLUE-X® GROW TUBES BY BLUE-X ENTERPRISES, INC.

BLUE-X® TREE SHELTERS

This tree shelter provides benefits similar to the corrugated plastic tube, since it also has a solid construction. The difference is that the Blue-X is made up of a clear poly sleeve and an interior translucent blue film which is said to "increase beneficial photosynthetically active radiation and boost tree diameter growth." While some people find them difficult to assemble and attach to stakes, they are one of the most economical shelters available. Ex: **Blue-X® Tree Shelters**

**PLEASE SEE THE SECTION ABOUT CARING FOR TREES AFTER PLANTING ON PAGE 25 FOR DETAILS ABOUT INSTALLING TREE SHELTERS.*



Appendix C

Educational activities and Programs

National Wildlife Federation's Garden for Wildlife™ Program

Since 1973, the National Wildlife Federation's **Garden for Wildlife**™ program has been showing people how to create and restore wildlife habitat where they live, work, learn, play and worship. Thriving habitats for birds, butterflies and other wildlife can be created by providing the basic elements of habitat—food, water, cover and places for wildlife to raise their young and also by following sustainable gardening practices, such as eliminating pesticides, conserving water and planting native plant species. Find out about how you can create wildlife friendly habitats in your community **here**.

National Wildlife Federation's Eco-Schools USA Program

Eco-Schools USA is the National Wildlife Federation's program that uses school-based action teams of students, administrators, educators and community volunteers to drive environmental stewardship and education in schools. Eco-Schools USA combines effective "green" management of the school grounds, the facilities, and the curriculum to provide students with a unique, place-based and application-based learning experience. Working together, students and the school community can explore twelve different pathways to green their school and community. Find the **'Learning About Forests' Pathway** and tree related activities **here**.

You may decide to incorporate an educational activity for children or youth during your event or you may encourage an activity at home. In this appendix you will find a variety of creative and scientific activities that can be adapted for different ages.

Activities

WHY ARE TREES IMPORTANT TO YOU?

Write a paragraph or poem about your favorite tree.

Why it is important to you that people care about trees and protect forests?

ADOPT A TREE

Find and select a special tree in your backyard or a nearby park or forest.

- Make a tree adoption tag for your tree by printing and completing **this adoption card**. To help the card last longer, place the tag in a reusable bag or folder. Then poke a hole through a corner of card and loop a piece of string through the hole and loosely tie it onto a branch or around the trunk of your adopted tree.
- **Sit below your tree, close your eyes and listen.** How many sounds can you hear? Is the wind blowing? Do you hear birds?
- **Photograph or sketch your tree** through the seasons.
- Lie beneath your tree and look up through its branches. **What do you observe from this angle?**
- **Visit your tree often** and at different times of the day.
- **Write the date and an observation on the back or your adoption card** or in a notebook each time you visit or provide care for your tree. Has your tree changed since your last visit? Do you see any signs of animals? What's happening around your tree?
- You can even **keep a Tree Diary** (See Keep a Tree Diary or Blog below).

KEEP A TREE DIARY OR BLOG

Choose a special tree that's growing in your yard, school grounds or that you can easy walk to on a regular basis. It could be your "Adopted Tree." Any kind of tree will do--large or small, tall or short, evergreen or deciduous (that means the tree loses its leaves in winter).

- Use a tree guide or app to find out **what kind of tree it is**. (You can also ask an adult and look it up together to learn as much about your tree as possible.)
- **For a Whole Year** keep an eye on your tree and write a diary or blog about everything that you observe.
- **Use an existing notebook.** You can also keep a blog and upload photos of your tree with each visit.

KEEP A TREE DIARY OR BLOG (CONTINUED)

- Start your diary/blog by writing down **the date and a complete description of your tree.**
- **Draw or sketch** your tree.
- **Describe the bark pattern.**
- Measure the **size of its trunk.**
- Count **the number of branches.**
- **Look for wildlife.** If you don't see any animals, can you find signs of wildlife such as nests, woodpecker holes or partially eaten leaves or nuts?
- **Collect fallen leaves, flowers, nuts and/or seeds** to put it in your diary. You can trace their shapes or make a rubbing of the leaves. (See Go on a Leaf Patrol.)
- **Try to visit your special tree at least once a week** over the next year and make notes and drawings about it during each visit. (If you don't know what kind of tree it is, ask an adult and look it up together to learn as much about your tree as possible.)
- Long before the year is out you'll realize **just how busy the life of a tree** can be.
- Bonus: **Your tree diary/blog will make a tree-rific classroom presentation**, special project for extra credit or a science report.

GO ON A LEAF PATROL

Collect fallen leaves from every kind of tree you see. You can do this by looking for leaves at home, at school in a park or anywhere you find them as long as it is safe. You will be amazed to see how many different kinds of leaves you find and how many types of trees there are.

If you want to know the names of the trees your leaves fell from, look online or use a tree guide to help you identify your leaves.

You can make your leaf collection permanent by pressing the leaves flat between two pieces of paper and placing a book or anything heavy on top. Once the leaves are flat and dry, use glue or tape to put them on paper in a notebook. You can also take photos of your leaves to put in your notebook or post online. Try this at different times of the year.

You can draw or trace your leaf or make leaf rubbings by simply placing the leaf under a piece of paper and rubbing it with a crayon or pencil.

EXPLORE A TREE

- **Stand in a group of trees** with a partner (family member, sibling or friend).
- **One person wears a blindfold** and spins around a few times before being led to a tree by the other. (Make sure the tree doesn't have thorns or poison ivy growing on it!)
- **The blindfolded player touches the tree,** feeling the shape, size, and texture of the trunk, branches, and leaves or needles.
- Then your partner leads you back to where started from and **removes the blindfold.**
- **Which tree was it?**
- **Players switch roles and play the game again** using a different tree.

BE A TREE! (TREE CHARADES)

With your family or some friends find a group of trees.

- **Take turns trying to look like one of the trees**, without telling the others which tree. Use arms and fingers like branches.
- **Legs can stick together, twist, or stretch apart to mimic a trunk.**
- Players could even **make faces** to show the tree's "personality."
- The player being the tree **can't talk** while the others guess which tree.

SNAP A PHOTO JOURNAL

Choose one or more of the trees that you planted to feature in a photo journal.

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.

TREE CARE LOG

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?

PREDICT TREE GROWTH

Measure or estimate the height of your tree.

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.

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 **NWF.org/SchoolyardHabitat** and get other resources at **NWF.org/Garden**.

ACTIVITY 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.

Playing with Fire

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For More Information,
Visit NWF.ORG/TREES