



Tree Trekkers

A reading and science adventure for kids



Explore, read, play, create, and learn—
all about trees and forests



Brought to you by Start with a Book and Reading Rockets, with support from the Park Foundation



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Welcome to Tree Trekkers

Introduction

Where would we be without trees? We need trees—and we need kids to see the trees in their communities as more than just something pretty to look at that offers shade or a challenge to climb. Kids may know trees clean our air and give us food, but what about their role in the water cycle, the habitat they provide for wildlife, the ways they connect communities, the products they provide, and how they keep us cool and stop erosion?

Understanding more about the practical benefits of trees and the awesome impact that trees—and the forests and parks they are found in—have on the environment is not just for kids interested in environmental stewardship. Kids are aware of threats to our planet and need to learn about and appreciate the critical role of trees in our lives and in nature. We cannot survive in a treeless world.

The best way to get kids learning is to build on their curiosity and interests. Tree Trekkers is kid-centered with an emphasis on inquiry and creativity and provides opportunities to ground children in science learning and action and the natural world around them. Activities have the overarching goals of raising awareness about and making connections to local trees.

We've designed the program to be user-friendly and adaptable. Choose from the topics and activities in any way you like to add hands-on learning to your summer, afterschool, classroom, or library programming.





How to Use this Toolkit

Getting yourself ready

- **Each topic features books and activities related to trees and forests.** Review all topics in advance and decide which books and activities you want to use. You'll find an introduction to the concepts covered and recommended books, as well as a list of questions to guide explorations and activities.
- **Start by gathering books from your library** using the booklists in this toolkit.
- **Choose both fiction and nonfiction books** from the lists provided.
- **Read the books you choose before you read them to kids.** That way you'll know what happens and can spot any unfamiliar words or concepts you'll need to explain. Also, look for places to ask questions while you're reading aloud to engage listeners.
- **Think about what you'd like to do after reading the books.** Select from the different activities or do them all, keeping in mind that **going outdoors is critical** in helping children connect ideas with their everyday environment, as well as providing them with opportunities for observation and reflection. You may also want to include opportunities for your Tree Trekkers to write, journal, and explore related websites, videos, and apps.
- **Familiarize yourself with places nearby to find trees.** These resources may be helpful:



- American Public Gardens Association: publicgardens.org/garden-finder
- Morton Register of Arboreta: arbnet.org/morton-register/state
- Discover the Forest: discovertheforest.org
- Locate a Park: stateparks.org/locate-a-park
- Your local nature center, community park, or your local Sierra Club chapter: sierraclub.org/chapters



How to Use this Toolkit

- **Get connected to arborists, foresters, and others in your area:**
 - Find an arborist: treesaregood.org/findanarborist/findanarborist
 - Society of American Foresters by state: eforester.org/Main/Community/Find_a_State_Society/Main/Community/StateSocieties.aspx
 - Cooperative Extension agencies: landgrantimpacts.org/extension
- **Check too with your local college or university** to see if they have an arboretum or find out what tree- or forest- related exhibits a local science, natural history, or children's museum might have.

Learning with kids

- **Introduce topics and activate background knowledge** by asking kids what they know about trees, what trees they are familiar with, what experiences they have had with trees and forests, etc.
- **Review and teach new words.** Take time to talk about words kids might not know and tell them what they mean. Use images, video, and real objects to help them build an understanding of unfamiliar words before or while you read or do an activity. Tree Vocabulary on page 75 can help you define terms for kids.
- **Start with a book.** By reading aloud and asking questions, you'll get kids thinking about the topic and what they want to learn. You'll also increase their understanding and excitement. Read another book and repeat.
- **Choose a hands-on activity** to let kids explore a theme. By doing an activity, kids get to use the concepts and new words they have learned.
- **Look for a local connection.** How can you connect the ideas in the books or the activities with kids' personal experience? Think about walks outdoors, visiting a park or forested area, or checking on animal habitats in local trees or woodlands.
- **Keep asking questions** and listening carefully to children's answers.
- **Encourage kids to write** about what they are learning or are curious about by using one of the writing prompts in this toolkit, and by keeping a Tree Trekker Journal for observations, drawings, questions, and creative writing activities.
- **Provide access to books** about the topic for kids to look at on their own.
- **Share websites and videos** with kids that they can use to learn more. (See "Tree-sources" for each topic).



How to Use this Toolkit

- **Step outside or take a field trip** to further explore your topic or related theme. Activities for each day will note an opportunity to **Branch Out!** on an outdoor adventure with special attention to connecting with nature and getting hands-on with trees.
- You can choose any of the activities in this toolkit, all of them, or just one or two, but we recommend that you **always Start with a Book.**

Branch Out!

When you see the **Branch Out!** symbol included in an activity, make a plan to head outdoors with your Tree Trekkers. You can visit a wide variety of locations and habitat types or visit the same spot each day. There are benefits to each approach. One will give kids the chance to observe and learn more about a specific habitat, which helps them to better be able to notice when something unusual comes along. Visiting a variety of green spaces opens more opportunities to see different species of trees and note their impact on a location.

You don't need to go far. Trees can be as close as your own backyard! You can find them on city and suburban streets as well as in parks, yards, forests, nature preserves, and arboretums.

What Tree Trekkers Need to Branch Out!:

- A place to safely walk and appropriate footwear
- Tree Trekker Journal or notebook and pencil
- Field guide to trees (optional)
- Water, sunscreen, and first-aid items (optional)

Before You Branch Out!

Set expectations. Talk about what an observation is and how to make them. Kids have sharp observation skills and natural abilities to use their senses. Model the behavior you expect to see as you encourage them to focus attention on their surroundings, slow down, and use their senses to be curious about what they see and hear.

Discuss etiquette. Kids get excited when they see something unusual. Recognizing a tree or flower or observing birds and animals is exciting and Tree Trekkers will want others to share in their excitement. Sharing their sightings quietly will increase the chance that others get to make observations too. Let kids know that loud noises are stressful to wildlife.



How to Use this Toolkit

Leave no trace. If you **Branch Out!** to a wildlife area, kids also need to know that it's important to stay on trails to avoid causing damage to the land, plants, and trees. Kids also need to leave rocks, plants, flowers, feathers, and other objects of interest as they find them to give others the chance to make the same exciting discoveries. Have kids make use of the Tree Trekker Journal or take a photograph to enjoy their finds. An adult can take the photographs if kids don't have access.

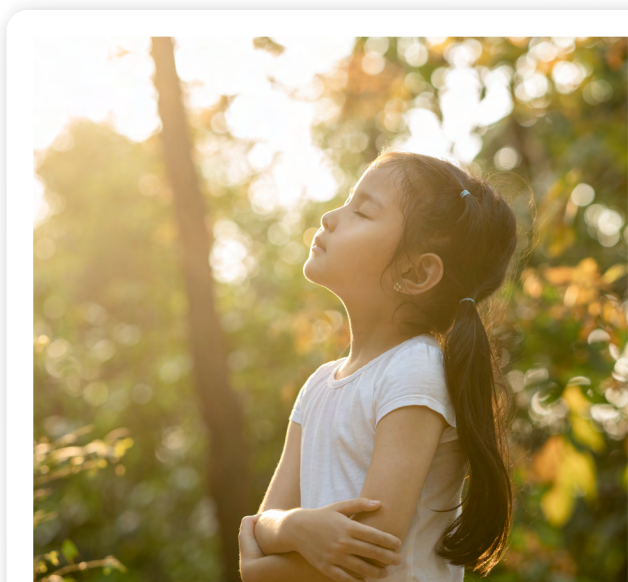
Prepare for all weather. We often avoid going outside when the weather isn't what we'd like it to be. Maybe it's raining, snowing, hot, or windy. Except for extreme situations, like heat advisories, lightning storms, or severe wind chill, most weather conditions, while maybe wet or messy, are safe. Make an effort to get kids outside in all kinds of weather. Experiencing the elements in person is a powerful experience, makes for interesting observations, and can dispel misconceptions about the great outdoors. The right clothing and gear make a big difference, so check to make sure Tree Trekkers have shoes and gear appropriate for the conditions before going out.

Forest Bathing

While you are outside, you can also invite your Tree Trekkers to take a **forest bath**. Find a place where everyone can sit or lie down quietly. Invite kids to close their eyes and listen to the sounds around them: What do they hear? Animals? Insects? Water or wind? Do they notice how the air feels on their skin? Is it warm or cold? Humid? Is there any wind? What do they feel when they touch the ground? What do they smell? Then have them open their eyes and look around carefully, including above them. What do they see?

Forest bathing is about slowing down and experiencing the outdoors with all your senses. It has been shown to reduce stress and help people feel better. The idea, known as *shinrin yoku*, comes from Japan.

Read more about the benefits of engaging with nature slowly and deliberately:
natgeokids.com/uk/parents/forest-bathing-destresses-kids



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Dr. John R. Seiler (expert reviewer)

Dr. Seiler, Professor of Forestry in the [College of Natural Resources and Environment](#) at Virginia Tech, has been studying trees for more than 40 years. He is an expert in tree ecophysiology, focusing on the physiological processes that allow trees to manage environmental factors and stressors such as water and pollutants, and has authored more than 115 refereed research articles. In addition to his research activities, Dr. Seiler has taught a wide variety of undergraduate and graduate courses and also serves as a frequent mentor and advisor for graduate students. Known to students and to the public as "Dr. Dendro" (dendrology is the scientific study of trees), he personally answers hundreds of tree related questions submitted through [vTree](#), the free tree identification app ([iOS](#) and [Android](#)).

Melina Cienski (expert reviewer)

Melina Cienski is the Urban & Community Forester for Prince William and Stafford counties at the Virginia Department of Forestry. She attended William & Mary, graduating with a degree in biology concentrating in botany. After working in the W&M Herbarium, her environmental career began with Virginia's State Parks as an interpretive ranger teaching all ages the value of natural resources. She continues to advise the public as a forester, wildland firefighter, forest warden, and Virginia master naturalist.