

# FORESTS AND FORESTRY

## Annotated Bibliography of K-12 Educational Resources

Wisconsin Center for Environmental Education (06/18)

*The following list consists of selected resources on the general topics of forests and forestry. This includes areas such as tree biology, forest ecology, and forest management. Resources on specific forest systems, such as Tropical Rain Forests, may not be included here but are available. All materials listed below are available for loan at the WCEE Resources Library. Materials are also available for purchase from a variety of book stores, Acorn Naturalist, or Amazon.com. Please call or visit the WCEE for assistance or visit our web site at <https://www.uwsp.edu/cnr-ap/wcee/Pages/default.aspx> for additional information on borrowing resources.*

### Teaching Activity Guides

**Project Learning Tree** by the Western Regional Environmental Education Council, et. al. American Forest Foundation, Washington, DC. (1993).

*One of the most-used environmental education activity guides. Comprehensive, well-developed, and usable. Can be used with a variety of environmental education units, but especially those related to forests and forestry. Highly recommended.*

*Grade levels: PK-8 Length: 96 lessons, 402 pages*

Available only through Project Learning Tree workshops: <http://www.plt.org/>

Borrowing: Check your local library

**Shelterwood Teacher's Guide: Discovering the Forest** by Judy Kellogg Markowsky, Tilbury House, Publishers, Gardiner, Maine. (1999).

*Contains over 50 activities dealing with various aspects of forests. Includes many word puzzles, a glossary, and reproducible student worksheets. See also the accompanying children's book, Shelterwood (BY FOR 16).*

*Grade levels: K-6 Length: 80 activities, 93 pages*

Available for purchase from Amazon.com (Used \$3.95)

Borrowing: Check your local library

**Wisconsin K-12 Forestry Lesson Guide** by LEAF, Stevens Point, WI. (2004).

*A multiple volume guide each designated for a certain age level. They all contain lessons, field exercises, and enhancement practices dealing with forests and forestry topics.*

*Grade levels: K-12 Length: varies*

Available from a LEAF workshop: <https://www.uwsp.edu/cnr-ap/wcee/Pages/forestry.aspx>

Borrowing: Check your local library or the UWSP library (call number: SD254.W6 W57 2004)

**The Changing of the Land: A Wisconsin Forest History Unit** by Rachel Golden. University of Wisconsin-Stevens Point, Stevens Point, WI. (2002).

*A CD-ROM developed specifically for Wisconsin's fourth grade classrooms, helps teachers meet Wisconsin history mandates by teaching about forests and forestry.*

*Grade levels: 4-6 Length: 10 activities*

Available for free download from: <http://www.uwsp.edu/cnr/leaf/Resources/change.aspx>

Borrowing: Check your local library or the UWSP library (call number: SD144.W8 C43 2002)

**A Forest Afloat: A Tree's Journey from Forest to Harbor to Tomorrow** by Kathryn Morgan. Wisconsin Environmental Education Board, Stevens Point, WI. (2000).

*A comprehensive look at forests as a basis for industry in Wisconsin. Also includes Wisconsin (forest) history. Additional resources and helpful appendices are included.*

Grade levels: 4-6 Length: Unpaged

Borrowing: Check your local library or the UWSP library (call number: SD254.W6 F67 1999)

**Wisconsin Forests Forever Teachers Guide** by Beth Mittermaier, Wisconsin Forest Resources Education Alliance, Rhinelander, WI. (2000).

*A usable activity guide that covers the ecological, economic, and management aspects of Wisconsin forests. Also includes a well-produced interactive CD-ROM. Highly recommended.*

Grade levels: 4-6 Length: 115 pages

Available for free download from: <https://www.uwsp.edu/cnr-ap/leaf/SiteAssets/Pages/Wisconsin-Forests-Forever/entireS.pdf>

Borrowing: Check your local library or the UWSP library (call number: SD254.W6 M58 2000)

**Trees: A Sourcebook for Teaching About Trees, Forests, and Pollutants** by Edward Hessler and Harriett Stubbs, Kendall/Hunt Publishing, Dubuque, IA. (1999).

*A higher-level look at tree biology and forest-human relationships. Special focus is placed on the effects of air pollutants on trees. Includes many experiments and reproducible student pages.*

Grade levels: 5-9 Length: 140 pages

Out of Print

Borrowing: Check your local library

**Wisconsin Forestree: Bridging the Gap Between Environment and Economy** by Sterling Strathe, et. al. Central Wisconsin Environmental Station, Amherst Junction, WI (2000).

*A comprehensive Wisconsin-focused unit that covers history, biology, utility, careers, management, etc. Includes additional resource lists as well as link to a website that provides interactive supplements.*

Grade levels: 5-9 Length: 10 lessons, 192 pages

Available for download from: <https://www.uwsp.edu/cnr-ap/leaf/Pages/Wisconsin-Forestree.aspx>

Borrowing: Check your local library or the UWSP library (call number: QH541.5.F6 W684 2001)

**Exploring Environmental Issues: Focus on Forests** by Project Learning Tree (1995).

*Students learn to investigate and define an environmental issue, identify key players and points of view, generate alternative solutions, and learn group work skills. Activities are hands-on and designed to generate discussion on pertinent issues such as the inherent value of forests.*

Grade levels: 9-12 Length: 72 pages

Available from a Project Learning Tree Workshop: [www.plt.org](http://www.plt.org)

Borrowing: Check your local library or the UWSP library (call number: QH541.5.F6 E97 2011)

**The Changing Forest: Forest Ecology** by Project Learning Tree (1996)

*This activity guide encourages students to explore and learn about forest ecosystems. Students also learn about forest management and the importance of forests.*

Grade levels: 9-12 Length: 136 pages

Available from a Project Learning Tree Workshop: [www.plt.org](http://www.plt.org)

Borrowing: Check your local library or the UWSP library (call number: QH541.5.F6 P762 1996)

## Videos/DVDs

**Into the Outdoors: Trees are Tree-mendous and Sweet Tree of Mine** by Discover Mediaworks, Milwaukee, WI. (2006).

*Great television series with forestry topics. These episodes include forestry topics such as tree nurseries, seedlings, reforestation, river restoration, tree identification, and careers in forestry. Then students learn about the forestry field, how trees are marked, cut, and used for flooring.*

*Grade levels: K-4, 4-6, 5-9 Length: 30 minutes*

Borrowing: Check your local library or the UWSP library (call number: GE80 .I58 v. 312)

**Arbor Day: The Holiday that Makes a Difference** by GPN, Lincoln, NE. (2001).

*Produced by the National Arbor Day Foundation, discusses the history, environmental concerns, and benefits associated with Arbor Day. Includes kid commentary. A good supplement to units associated with the holiday.*

*Grade levels: 4-9 Length: 19 minutes*

Available for purchase from Amazon.com (VHS Tape \$8.00)

Borrowing: Check your local library

**Bill Nye the Science Guy: Plants and Forests** by Disney Educational Productions, Elk Grove Village, IL. (1996).

*Plant- and forest-themed specials from the popular and fast-paced children's show. Topics include ecology, biology, decomposition, others. Many experiments are demonstrated.*

*Grade levels: 4-9 Length: 45 minutes*

Available for purchase from Amazon.com (\$1.99 an episode)

Borrowing: Check your local library

**The Forest Where We Live (Series)** by GPN, Lincoln, NE. (1999).

*A six-part series focusing on urban forestry. As such, it helps provide a local application for many forest concepts. Includes a discussion on science and history of (urban) forestry, and addresses economic and environmental balances. It includes a teacher's guide with activities.*

*Grade levels: 5-12 Length: 15 min. each*

On-line resources are available from: lpb.org (\$25.00)

Borrowing: Check your local library

**Emerald Ash Borer: The Green Menace** Detroit Public Television (2004).

*This video walks us through Detroit neighborhoods that have been taken over by the Emerald Ash Borer (EAB). It is a great video that explains the problem firsthand.*

*Grade Levels: 9-Adult Length: 26 minutes*

Available for free by calling 1-866-EAB-4512 (It can be found online through a google search)

Borrowing: Check your local library or the UWSP library (call number: SB945.W68 G74 2005)

**LEAF 9-12 Unit DVD Resources: Forest Story & The Forest Marketplace** by LEAF. (2005).

*This two part series provides an introduction to and a history of forestry in Wisconsin, including the different uses for forest land.*

*Grade levels: 9-12 Length: 47 minutes*

Available from a LEAF workshop: <https://www.uwsp.edu/cnr-ap/leaf/Pages/default.aspx>

Borrowing: Check your local library or the UWSP library (call number: SD144.W8 L43 2005)

**The Greatest Good: A Forest Service Centennial Film** by Forest History Society, Durham, NC. (2007).

*4-part DVD documentary about The Forest Service, covering its history and evolution, influences from various sources, conservation, firefighting, war, Smoky the Bear, and more.*

*Grade levels: 9-12, adult Length: 425 minutes*

Available for purchase: Amazon.com (Public television version only \$40.47)

Borrowing: Check your local library or the UWSP Library (call number: SD143 .G73)

## **Books for Youth**

**Look Inside a Tree** by Gina Ingoglia, Gosset & Dunlap, New York, NY. (1987).

*Non-fiction. A fact book about many aspects of trees, including their growth, utility, and ecology.*

*The “cutout” format helps make it appealing to younger students.*

*Grade levels: PK-4 Length: 13 pages*

Borrowing: Check your local library or the WCEE (call number: BY FOR 7)

**Once There Was a Tree** by Natalia Romanova, Dial, New York, NY. (1983).

*Fiction. A simple look at the variety of life forms that utilize a tree stump. At the same time, this book provides an exploration of “ownership” of natural resources. Gorgeous illustrations. See also AV PL 3, the Reading Rainbow video that highlights this book.*

*Grade levels: PK-4 Length: 25 pages*

Available for purchase from: Amazon.com (Used \$5.23)

Borrowing: Check your local library or the UWSP library (call number: QK475.8 .S6513 1985)

**The Giving Tree** by Shel Silverstei, Harper Collins Inc, USA. (1964).

*This is a book for adults clothed in a children's book exterior. The theme is respecting nature, however, children might only get that we should not cut down trees and that all trees have a conscious. Those might not be messages that you want to send.*

*Grade levels: PK-adult Length: 55 pages*

Available for purchase from: Amazon.com or Barnes & Noble (\$12.29)

Borrowing: Check your local library or the WCEE (call number: BY PH 19)

**The Tree Farmer** by Chuck Leavell and Nicholas Cravotta, VSP Books, Lorton, VA. (2005).

*Fiction. This book gives a glimpse into tree farms and their purposes, and the cycle of planting, cutting, and replanting. The story is based on that of a historic tree farm in Georgia.*

*Grade levels: K-4 Length: 29 pages*

Available for purchase from: Amazon.com (Used \$5.99)

Borrowing: Check your local library

**Old Elm Speaks: Tree Poems** by Kristine O’Connell George, Clarion, New York, NY. (1998).

*Fiction. A great collection of poems about all things tree: buds, ecology, utility, beauty, diversity, and more.*

*Grade levels: K-6 Length: 48 pages*

Available for purchase from: Amazon.com (\$7.99)

Borrowing: Check your local library or the WCEE (call number: BY FOR 14)

**Forest Life** by Barbara Taylor, Dorling Kindersley, New York, NY. (1993).

*Non-fiction. Excellent up-close photographs of the plant, mammal, bird, amphibian, and fungal life in a forest. Each is accompanied by a variety of facts and life history information.*

*Grade levels: K-9 Length: 29 pages*

Available for purchase from: Amazon.com (Used \$8.99)

Borrowing: Check your local library

**The Temperate Forest: A Web of Life** by Philip Johansson, Enslow, Berkeley Heights, NJ. (2004).  
*Non-fiction. Information about the temperate forest, including why they are good for bears, what a biome is, the biomes of the world, and specifics about temperate forests & its communities.*  
*Grade levels: 4-6, 5-9 Length: 48 pages*  
Available for purchase from: Amazon.com (\$11.51)  
Borrowing: Check your local library

**Woods Walk: Peepers, Porcupine, and Exploding Puff Balls** by Henry W. Art and Michael W. Robbins, Storey Kids, North Adams, MA. (2003).  
*Non-fiction. Describes the different animals and plants one can see on a walk through the woods during the four seasons. The book is filled with vibrant photos and useful diagrams.*  
*Grade levels: 4-6, 5-9 Length: 122 pages*  
Available for purchase from: Amazon.com (\$4.95)  
Borrowing: Check your local library

**The Life of the Forest** by International Paper, Nashville, TN. (2005).  
*Non-fiction. This short book uses simple terminology and colorful illustrations to explain how trees eat, drink and breathe, examples of animals that live in forests, and more.*  
*Grade levels: 4-6, 5-9, 9-12 Length: 16 pages*  
Available for purchase from: Amazon.com (\$9.95)  
Borrowing: Check your local library

## Reference/Background Books

**The Forest Service and the Greatest Good: A Centennial History** by James G. Lewis, Forest History Society, Durham, NC. (2005).  
*Explores and discusses the origins, history, impacts to and of, and reflection on the Forest Service. This book compliments the DVD.*  
*Grade levels: 9-12, Adult Length: 286 pages*  
Available for purchase from: Amazon.com (\$6.18)  
Borrowing: Check your local library or the UWSP library (call number: SD565 .L49 2005)

**National Report on Sustainable Forests-2003** by USDA Forest Service. (2004).  
*A report from the US Department of Agriculture on the condition of forests in the United States based on available data.*  
*Grade levels: Adult Length: 139 pages*  
Download the most recent version online: <https://www.fs.fed.us/research/sustain/>  
Borrowing: Check your local library

**Sweet Maple: Life, Lore, and Recipes from the Sugarbush** by James Lawrence and Rux Martin, Chapters Publishing/Vermont Life, Shelburne and Montpelier, VT. (1993).  
*As the title indicates, this resource covers the history, uses, and folk culture surrounding the Sugar Maple, including recipes. Good for supplementing forest units with information about this interesting and locally-relevant topic.*  
*Grade levels: Adult Length: 223 pages*  
Available for purchase from: Amazon.com (\$33.00)  
Borrowing: Check your local library

**Understanding Forests** by John Berger, Sierra Club Books, San Francisco, CA. (1998).  
*Focuses on forest management practices. May be rather one-sided, but as a resource it provides a good study of sustainable forestry practices and concepts.*  
*Grade levels: Adult Length: 188 pages*

Available for purchase: Barnes & Noble (15.10)  
Borrowing: Check your local library

**Wisconsin Forest Management Guidelines** by James Fazio, WI DNR, Madison, WI. (2003)

*Establishes basic concepts that outline responsible resource management at the site-level. Contains general information about Wisconsin forests, including a brief history. Gives guidelines on managing for wildlife habitat and explains the economic, visual, and cultural benefits of forests.*

Grade levels: Adult Length: 306 pages

Download for free: <https://dnr.wi.gov/topic/ForestManagement/guidelines.html>

Borrowing: Check your local library or the UWSP library (call number: SD144.W8 W572 2003)

## Demonstration Materials

**Tree Wood Identity Blocks** by Science Kit and Boreal Laboratories, Heritage Woods, Grand Rapids, MI (1995).

*Set of 24 blocks of various types of wood. Each block is identified by the common and scientific name and has an imprint showing the tree in summer and winter as well as an outline of the leaf.*

Grade Levels: K-Adult

Borrowing: Check your local library or the WCEE (Request online: <https://www.uwsp.edu/cnr-ap/wcee/library/Pages/Wood-Identification-Blocks.aspx> )

**Emerald Ash Borer Identification Kit** by Michigan State University.

*These kit include 2 pieces of ash wood that shows destructive signs of the Emerald Ash Borer, on class vial with an EAB adult, a class vial with a larvae of the EAB, and more information about the EAB.*

Grade Levels: 4-Adult

Borrowing: Check your local library or the WCEE (Request online: <https://www.uwsp.edu/cnr-ap/wcee/library/Pages/Emerald-Ash-Borer-Kit-Request-Page.aspx> )

## Websites

**Dr. Arbor Talks Trees** by University of Illinois Extension - Urban Programs Resource Network (2009).

*An interactive site which covers tree id, leaf collections, parts of a tree and their functions, and many more subjects.*

Grade levels: K-6

Web link: <http://www.urbanext.uiuc.edu/trees3/01.html>

**SmokeyBear.com** by USDA Forest Service (2009).

*Kids' games and activities, educational information, and historical Smokey information related to fire prevention.*

Grade levels: K-6

Web link: [www.smokeybear.com/](http://www.smokeybear.com/)

**Treetures** by Judith Hope Blau and The Treetures Environmental Education Program (2009).

*Treetures are whimsical characters that are dedicated to carrying the message of tree planting and care. By learning the names and jobs of the Treeture characters through games and activities, elementary children learn how a tree functions. Lesson plans and materials for parents available.*

Grade levels: K-6

Web link: [www.treetures.com/](http://www.treetures.com/)

**National Arbor Day Foundation** by the National Arbor Day Foundation (2009).

*Games, activities, and information about trees for elementary students. Lesson plans for educators.*

Grade levels: K-12

Web link: [www.arborday.org/kids/](http://www.arborday.org/kids/)

**A Walk in the Woods** by University of Illinois Extension - Urban Programs Resource Network (2009).  
*Designed for third through fifth grade students in urban areas. Includes an overview of forests, teacher's guide, photos, and fun activities.*

Grade Levels: 3-5

Web link: [www.urbanext.uiuc.edu/woods/01.html](http://www.urbanext.uiuc.edu/woods/01.html)

**4-H Virtual Forest** by Virginia Cooperative Extension (2009).

*Interactive learning modules with subjects including photosynthesis, trees as renewable resources, succession, and sprawl.*

Grade Levels: 3-8

Web link: <https://www.sites.ext.vt.edu/virtualforest/>

**If Trees Could Talk** by Forest History Society (2009).

*This 8-module, middle school curriculum gives teachers the opportunity to download social studies activities that are based upon archival materials. The centerpiece of each module is a compilation of primary resources-- documents, maps, newspaper articles, oral histories or photographs--from which students are asked to gather, examine, and analyze information, and synthesize insights.*

Grade levels: 4-8

Web link: <https://foresthistor.org/education/trees-talk-curriculum/>

**Emerald Ash Borer Educational Packet** by USDA Forest Service (2009).

*Information and resources to incorporate the invasive emerald ash borer into your curriculum. There are short videos available and other information from parent site ([www.emeraldashborer.info](http://www.emeraldashborer.info))*

Grade levels: 6-12

Web link: <http://www.emeraldashborer.info/resources.php>

**LEAF** by University of Wisconsin-Stevens Point (2009).

*This site includes professional development opportunities, an online dichotomous tree id guide, suggested web links, and more.*

Grade Levels: 6-Adult

Web link: [www.uwsp.edu/cnr/leaf](http://www.uwsp.edu/cnr/leaf)

**Careers in Forestry and Natural Resources** by The National Science Foundation (2009).

*This web site contains good career information in forestry and natural resources for students. There are profiles of people in these fields. It has a list of universities throughout the USA that offers degree programs in this field.*

Grade levels: 9-16

Web link: <http://forestrycareers.org/careers.html>

**Temperate Forest Foundation** by the Temperate Forest Foundation (2008).

*The Temperate Forest Foundation provides leadership by articulating the current realities while inspiring a positive vision of the future. Visit the "Teacher Section" for educational resources.*

Grade levels: 9-12

Web link: [www.forestinfo.org](http://www.forestinfo.org)

**Forestry Images** by USDA Forest Service (2008).

*Images of forest pests, trees, plants, stand types, silviculture practices, wildlife, people, and places.*

Grade Levels: 10-Adult

Web link: [www.forestryimages.org/](http://www.forestryimages.org/)