

FORESTS AND FORESTRY

Annotated Bibliography of K-12 Educational Resources

Wisconsin Center for Environmental Education (07/08)

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. Please call or visit the WCEE for assistance or visit our web site at www.uwsp.edu/wcee/library 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 WCEE call number: AC EG 158

Shelterwood Teacher's Guide 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, 85 pages WCEE call number: AC FOR 14

Berlin Community School Forest Hands-On Learning Project by Patrick Arndt, Berlin Area School District, WI (2003).

A collection of materials related to a WEEB grant that funded restoration, improvements, maintenance, and development of classroom activities for the Berlin Community School Forest. Contains video, CD Rom, LEAF conceptual framework.

Grade levels: K-12 Length: 24 sections WCEE call number: AC FOR 32

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 WCEE call number: AC FOR 9 v.1-6

Forests of Fun: Forestry Series by National 4-H Cooperative Curriculum. (2004).

A series of materials and activities on forestry that includes: The Forestry Project Helper's Guide, plus 3 youth activity guides: Level 1 (grades 3-5)-Follow the Path, Level 2 (grades 6-8)-Reach for the Canopy, and Level 3 (grades 8-12)-Explore the Deep Woods.

Grade levels: 3-5, 6-8, 8-12 Length: 36 pages each WCEE call number: AC FOR 21

Changing of the Land: A Wisconsin Forest History Unit, The 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 WCEE call number: COM FOR 1

Forest Afloat: A Tree's Journey from Forest to Harbor to Tomorrow, A 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: Unpagged WCEE call number: AC FOR 28

Paper Makes Wisconsin Great! by the Wisconsin Paper Council, Wisconsin Paper Council, Neenah, WI. (1998).

An activity guide focusing on the importance the paper industry has in Wisconsin and the United States. Includes interesting resources such as a videocassette and even samples of papers and woodchips.

Grade levels: 4-6 Length: Unpagged WCEE call number: AC FOR 22

Wisconsin Forests Forever 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 WCEE call number: AC FOR 27

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 WCEE call number: AC FOR 25

Wisconsin Forestree 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 WCEE call number: AC FOR 26

Videos

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 WCEE call number: AV DVD FOR 2, 4

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 WCEE call number: AV FOR 11

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 WCEE call number: AV PL 2

Exploring the Diversity of Life (Series) by Environmental Media Corporation, Beaufort, SC. (1996).

Two tapes, ten 10-minute segments on a variety of topics, of which at least four are forest related. Titles include "Life in Layers" and "Forest School."

Grade levels: 4-9 Length: 100 minutes WCEE call number: AV BD 8

Forest Where We Live (Series), The 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 discussion on science and history of (urban) forestry, and fairly evenly addresses economic and environmental balances. Includes a teachers guide with activities.

Grade levels: 5-12 Length: 15 min. each WCEE call number: AV FOR 21 progs. 1-6

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 WCEE call number: AV DVD FOR 3

Greatest Good, The: 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 WCEE call number: AV DVD FOR 1

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 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 (listed above).

Grade levels: PK-4 Length: 25 pages WCEE call number: BY PL 3

Giving Tree, The 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 WCEE call number: BY PH 19

Tree Farmer, The 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 WCEE call number: BY FOR 26

Tree in the Ancient Forest, The by Carol Reed-Jones, Dawn, Nevada City, CA. (1995).

Fiction. Utilizing repeated sentences, builds a story about the variety of life dependent upon a single tree. The “characters” include roots, fungus, voles, cones, owlets, a marten, and more.

Grade levels: K-4 Length: 29 pages WCEE call number: BY FOR 3

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 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 WCEE call number: BY FOR 4

Temperate Forest, The: 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 WCEE call number: BY BC TEF 14

Woods Walk 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 WCEE call number: BY BC TEF 16

Life of the Forest, The 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 WCEE call number: BY FOR 24

Forests: Identifying Propaganda Techniques by Robert Anderson, Greenhaven Press, San Diego, CA. (1992).

Non-fiction. An installment in the “Opposing Viewpoints” series. A good resource for working with the upper-level EE goals, such as values clarification and citizen action skill building.

Presents, in each section, one article each from opposing sides of a forest-related issue.

Grade levels: 5-9 Length: 36 pages WCEE call number: BY FOR 1

Reference/Background Books

Forest Service and the Greatest Good, The: 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.

Grade levels: 9-12, Adult Length: 286 pages WCEE call number: BA FOR 16

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 WCEE call number: BA FA 10

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 WCEE call number: BA FOR 7

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 WCEE call number: BA FOR 11

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 WCEE call number: BA FOR 12

Websites

Dr. Arbor Talks Trees – University of Illinois Extension - Urban Programs Resource Network
<http://www.urbanext.uiuc.edu/trees3/01.html>

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

Grade levels: K-6

SmokeyBear.com – USDA Forest Service www.smokeybear.com/

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

Grade levels: K-6

Treetures www.treetures.com/

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. Activity guides, lesson plans, and materials for parents available.

Grade levels: K-6

National Arbor Day Foundation www.arborday.org/kids/

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

Grade levels K-12

A Walk in the Woods – University of Illinois Extension - Urban Programs Resource Network
www.urbanext.uiuc.edu/woods/01.html

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

The Living Forest <http://schoolcentral.com/Willoughby4/Forest/ForestHome.html>

A variety of forest-related educational games for elementary students.

Grade levels: 3-6

Virginia Cooperative Extension 4-H Virtual Forest

<http://www.ext.vt.edu/resources/4h/virtualforest/>

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

Grade Levels: 3-8

If Trees Could Talk–Forest History Society <http://www.foresthistory.org/Education/Curriculum/>

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

Emerald Ash Borer Educational Packet <http://www.emeraldashborer.info/edpacket.cfm>
Information and resources to incorporate the invasive emerald ash borer into your curriculum.
Grade levels: 6-12

LEAF – University of Wisconsin-Stevens Point www.uwsp.edu/cnr/leaf
Professional development opportunities, an online dichotomous tree id guide, suggested web links, and more.
Grade Levels: 6-Adult

Temperate Forest Foundation www.forestinfo.org
The Temperate Forest Foundation provides leadership by articulating the current realities, and a positive inspiring vision of the future. Through public education, the Foundation helps people move toward the positive vision of living sustainably, with the successful integration of economic, ecological, and social needs. Visit the Teacher section for a variety of educational resources.
Grade levels: 9-12

Forestry Images – USDA Forest Service www.forestryimages.org/
Images of forest pests, trees, plants, stand types, silviculture practices, wildlife, people, places, and scenes.
Grade Levels: 10-Adult