

BIODIVERSITY

Annotated Bibliography of K-12 Educational Resources Wisconsin Center for Environmental Education (3/19)

The following list consists of selected resources on the general topic of Wildlife. Most of the materials are available for loan at the UWSP Library. Many more resources are available on this and other topics, and there are many resources for specific animals, such as bats, wolves, raptors, snakes, etc. There is also a separate annotated bibliography for biodiversity. 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 the UWSP Library web site at <https://www.uwsp.edu/library/Pages/default.aspx> for additional information on borrowing resources.

Teaching Activity Guides

Windows on the Wild: Wildlife for Sale by World Wildlife Fund, Acorn Naturalists, Tustin, CA. (2001).

Wildlife for Sale looks at our relationship with wildlife and how wildlife trade affects biodiversity around the world. Although habitat loss is the most serious problem facing wild plants and animals today, wildlife trade puts added stress on populations struggling to survive.

Grade levels: 4-6, 5-9, 9-12 Length: 352 pages

Borrowing: Check your local library or the UWSP Library (call number: SK591.W55 2001)

Exploring Biodiversity: A Guide for Educators Around the World by Conservation International and World Wildlife Fund, Washington, D.C. (2002).

Contains 10 fun, easy to do activities for students aged 9 and up, designed to introduce them to the concept of biodiversity. Each activity includes background information and bolded words are defined in a glossary in the back.

Grade levels: 5-9 Length: 10 activities, 84 pages

Borrowing: Check your local library or the UWSP Library (call number: QH541.15.B56 E98 2002)

Windows on the Wild: Biodiversity Basics (Teacher and Student Editions) by World Wildlife Fund, Acorn Naturalists, Tustin, CA. (1999).

Developed by the World Wildlife Fund (WWF), this may be the most comprehensive and usable biodiversity resource. Also includes numerous helpful appendices for additional information and cross-referencing. Highly recommended.

Grade levels: 5-9 Length: 34 activities, 477 pages

Borrowing: Check your local library or the UWSP Library (call number: QH541.15.B56 B569 1999)

Windows on the Wild: Oceans of Life: An Educator's Guide to Exploring Marine Biodiversity by World Wildlife Fund, Washington, D.C. (2003).

This guide provides ideas about how to integrate marine biodiversity into the middle school classroom. Activities and background information are designed for both formal and informal settings.

Grade levels: 5-9 Length: 379 pages

Borrowing: Check your local library or the UWSP Library (call number: QL91.8.B6 W67 2003)

Windows on the Wild SA: Science and Sustainability by Danie Schreuder et.al, University of Stellenbosch, Matieland, South Africa. (2005).

This activity book focuses on constructive and informative ways to raise awareness about biodiversity and act toward working with the environment instead of against it.

Grade levels: 5-9 Length: 183 pages

Borrowing: Check your local library or the UWSP Library (call number: QH195.S6 W56 2005)

Conservation Biology by Robert Blair and Heidi Ballard. Kendall/Hunt, Dubuque, IA. (1996).

Applied ecology lessons focusing on human impacts on wildlife habitat and the loss of biodiversity. Emphasis on group work. Helpful lesson subheadings.

Grade levels: 9-12 Length: 8 lessons, 265 pages

Borrowing: Check your local library or the UWSP Library (call number: QH75 .B568 1996)

Videos/DVDs

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

Two tapes, ten 10-minute segments on a variety of biodiversity topics. A good supplement to any biodiversity unit.

Grade levels: 4-9 Length: 100 minutes

Borrowing: Check your local library or online

Journey to Planet Earth: The State of the Planet's Wildlife by The Public Television Series, Screenscope Inc. (2009).

These programs explore the fragile relationship between people and the environment. The need to find a sustainable balance is highlighted.

Grade levels: 4-12 Length: 57 minutes

Available for purchase from: Amazon.com (\$7.00)

Borrowing: Check your local library or the UWSP Library (call number: GE140 .J68)

Planet Earth: As You've Never Seen It Before by BBC Worldwide. (2007).

In this amazing documentary from BBC, filmmakers travel all over the world to capture some of the most beautiful and inspiring footage of the Earth's last wilderness and the creatures that inhabit them. In their travels they've captured footage of some of the rarest animals known to man.

Grade levels: 5-Adult Length: 11 episodes, 55 minutes ea.

Available for purchase from: Amazon.com (\$26.49)

Borrowing: Check your local library or the UWSP Library (call number: QB631.2 .P53 2007)

Strange Days On Planet Earth by National Geographic. (2005).

This series asks questions and investigates strange happenings throughout Earth and how they are inter-connected and related, as well as providing knowledge about science, global environmental health, human impact, and various eco-systems. Also included with this series is an activities and curricula guide (AC EG 213).

Grade levels: 5-Adult Length: 220 minutes

Available for purchase from: Amazon.com (\$31.49)

Borrowing: Check your local library or the UWSP Library (call number: QC981.8.C5 S73 2005)

Amazing Planet by National Geographic. (2006).

A three part series from National Geographic that looks at the history of the earth and its forces, with amazing footage of today and computer reconstructions of the time during the planet's formation, eons before humans.

Grade levels: 9-Adult Length: 150 minutes

Available for purchase from: Amazon.com (\$13.97)

Borrowing: Check your local library or the UWSP Library (call number: QE501.2 .A43 2006)

Planet in Peril by CNN (2008)

This is a powerful film about wildlife trade and biodiversity issues worldwide. It gives us a broad understanding of wildlife by visiting 13 countries and investigating biodiversity.

Grade levels: 9-Adult Length: 150 minutes

Available for purchase from: Amazon.com (\$6.28)

Borrowing: Check your local library or the UWSP Library (call number: GE149 .P53 2008)

Books for Youth

Why Are Animals Endangered by Isaac Asimov, Gareth Stevens Publishing, Milwaukee, WI. (1992).

Non-fiction. A very basic overview of some of the reasons many animals face possible extinction.

Written by the famous science fiction author Isaac Asimov. Also includes appendices of additional resources.

Grade levels: K-6 Length: 24 pages

Borrowing: Check your local library or the UWSP Library (call number: QL83 .A75 1992)

Tree of Life: The Incredible Biodiversity of Life on Earth by Rochelle Strauss, Kids Can Press, Toronto, ON. (2004).

This children's book is beautifully illustrated and a great introduction to biodiversity. The book shows how living things are classified into five kingdoms and how each has much to tell us about all aspects of life on our planet.

Grade levels: 4-6 Length: 40 pages

Available for purchase from: Amazon.com (\$12.75)

Borrowing: Check your local library or the UWSP Library (call number: QH541.15.B56 S77 2004)

Reference/Background Books

Biodiversity edited by E.O. Wilson, National Academy Press, Washington, DC. (1988). Edward O Wilson; Frances M Peter; National Academy of Sciences (U.S.); Smithsonian Institution. Washington, D.C.: National Academy Press 1988

Possibly the most famous book on the subject. Chapters on a variety of topics are written by many of the most prominent names in biology and ecology. Highly recommended.

Grade levels: 9-12, adult Length: 521 pages

Available for purchase from: Amazon.com (\$19.95)

Borrowing: Check your local library or the UWSP Library (call number: QH75.A1 N32 1986)

Biodiversity Debate: Exploring the Issue, The North American Association for Environmental Education, Washington, DC. (1997).

Published in the Environmental Issues Forums series by the NAAEE. A very complete resource covering the basic components of biodiversity controversy as well as discussions in sustainability and stewardship.

Grade levels: 9-12, adult Length: 42 pages

Available for purchase from: Amazon (\$22.00)

Borrowing: Check your local library or the UWSP Library (call number: QH541.15.B56 B5737 1997)

The Forgotten Pollinators by Stephen Buchmann and Gary Nabhan, Island Press, Washington, DC. (1997).

With a forward by E.O. Wilson, this book focuses on the specific relationships that exist between plants and their pollinators. As such, it can be used as a springboard to discussions on interrelationships and the importance of maintaining biodiversity.

Grade levels: 9-12, adult Length: 292 pages

Available for purchase from: Amazon.com (\$18.72)

Borrowing: Check your local library or the UWSP Library (call number: QK926 .B835 1996)

Planet Earth: As You've Never Seen It Before by Alastair Fothergill, University of California Press, Berkeley, CA. (2006).

In this book, the world's best nature photographers capture animals that have rarely been seen, either because of the inaccessibility of their habitat or their own elusive behavior. Each major biotic community is represented and described in lavish detail, from frozen poles to the rainforest.

Grade levels: 9-12, adult Length: 309 pages

Available for purchase from: Amazon.com (\$26.37)

Borrowing: Check your local library or the UWSP Library (call number: QB631.2 .P52 2006)

Websites

Web Rangers by the National Park Service

Students can create their own Ranger Station, visit web cams across the U.S, take part in interactive games and modules about natural history and wildlife/nature conservation.

Grade Levels: K-9

Web link: www.webrangers.us

The Hidden Beauty of Pollination by Louie Schwartzberg on TED.com

This beautiful video clip shows images of hummingbirds, bees, bats, and butterflies spreading the seeds of nature. 7minutes 40 seconds.

Grade Levels: 4-adult/university

Web link:

http://www.ted.com/talks/lang/en/louie_schwartzberg_the_hidden_beauty_of_pollination.html

Pennies for the Planet by the National Audubon Society

A great site for parents, educators, and students to learn about conservation issues in the United States. Provides downloadable activities for students and gets them involved in collecting pennies in their communities to help these conservation projects.

Grade Levels: 4-adult

Web link: <http://www.audubon.org/content/step-step-guide>

World Wildlife Fund

Similar to Conservation International, this site gives information on current projects through WWF and background information on conservation issues. Includes a section specifically for teachers to give project ideas, discussion materials, and background information on a variety of topics.

Grade Levels: 4-adult/university

Web link: <http://www.panda.org/>

Wild World by National Geographic

Site features mapping activities for students as well as a “Sights and Sound” section where students can explore the animals and plants found within different ecosystems. Includes an educator’s guide, glossary, and numerous links to related resources.

Grade Levels: 6 - adult

Web link: <https://www.worldwildlife.org/pages/wildfinder-database>

US Fish and Wildlife Service

Educators and students can find links to many different sites on birds, habitats, fish, endangered species, wildlife, plants, and refuges.

Grade Levels: 6-adult

Web link: <https://www.fws.gov/>

United Nations Decade on Biodiversity by United Nations Environment Programme

Shows how countries around the world are celebrating biodiversity through interactive maps. Highlights a new species everyday to learn about its habitat and current status. Also gives links to associated resources and ways you can participate in the year’s activities.

Grade Levels: 9-adult/university

Web link: <https://www.cbd.int/2011-2020/>

Conservation International

This site offers great information on current projects and initiatives by CI involving global conservation. Provides background information on various topics and would work well for student research projects.

Grade Levels: 12-adult/university

Web link: www.conservation.org