



Wisconsin Center for Environmental Education

www.uwsp.edu/cnr/wcee

Suggested Web Sites

TEACHER RESOURCES

Arkive Education

www.arkiveeducation.org

This site, developed by Wildscreen Trust, was designed to help educators and interested adults to create learning resources around the subject of natural history and wildlife. Wildscreen has also created www.planetarkive.org, a site for children ages 7-11, and www.arkive.org for children 11 and older.

Base Camp Earth

<http://basecampearth.org/>

Base Camp Earth offers virtual expeditions of emerging science issues, such as life in extreme environments, ecological footprints, and infectious disease. Each expedition acquaints students with both a contemporary science topic and inquiry-based learning, all performed by fellow students. Appropriate for middle and high school students.

Center for Improved Engineering and Science Education Classroom Projects

www.stevens.edu/ciese

CIESE sponsors and designs interdisciplinary projects that K-12 teachers throughout the world can use to enhance their curriculum through compelling use of the Internet. They focus on projects that utilize realtime data and collaborative projects that utilize the Internet's potential to reach peers and experts around the world. Project topics include air pollution, water use, and biodiversity.

Classroom Earth

www.classroomearth.org/

This website will help educators, after-school providers and home-schooling parents to get started or improve their skills in environmental education. It provides up-to-date information on the most successful, well-tested and effective national environmental education programs available today. The pages on each program contain a clear description, audience/grade level, overview of content and topics, materials, educator feedback, awards and recognition, and fast steps for obtaining and implementing the program. The site also has an Additional Resources section that includes a Best-of-the-Web listing of portal sites for environmental education and a special list of free environmental education programs offered by the national environmental resource agencies.

Community Science Action Guides

www.fi.edu/guide/

This site consists of curriculum supplements that support student investigations of local science issues in the U.S. and the U.K. Each guide, or module, is focused on a different issue relating to water, energy, and life science. Topics range from water conservation and pollution to nuclear energy and global hunger. Each guide begins with some introductory text about the topic at hand. Teacher resources include ideas for activities and lessons, printable transparencies, and case studies of how other teachers have used these resources in their classrooms. Most guides also feature student resources such as animations and text sections giving more detail on particular aspects of the main topic.

The COOL Classroom

www.coolclassroom.org/

This site offers a series of Internet-based instructional modules that link middle and high school classrooms with active research investigations at the Rutgers Marine & Coastal Sciences (RMCS) COOLroom, a collaboration of oceanographers studying the coastal ocean off the coast of New Jersey. Easily navigable, the site offers “cool” facts, tutorials, student projects, and a teacher’s guide.

Earth&Sky

www.earthsky.org/shows/earthcare

Warm up your classes - or cool them down! Earth &Sky radio shows are great classroom starters for grabbing students' attention. From the web site, choose any [radio show](#) and click on the RealAudio® or MP3 button in the upper right hand corner to hear the audio of the program. If you don't have access to the web in your classroom, find out when [your local radio affiliate](#) plays the show and play the show live or record it for future use. The site also contains student activities, articles, and contests.

Earth Exploration Toolbook

<http://serc.carleton.edu/eet/index.html>

This web site, developed for grades 5-12, provides lessons and activities that use computers in order to analyze Earth system data. The site contains 11 activities that investigate satellite image analysis, explore GIS mapping of earthquake events, and discuss the prediction of ocean phytoplankton blooms. Each activity contains a description of the lesson, national science standards that are met, and appropriate grade levels for the activity, along with the procedure for the activity, conclusions that can be drawn from the lesson, and extension questions/information for further study. The web site references a cookbook-style approach to providing lesson guides that may be manipulated for other uses.

EcoHealth

www.ecohealth101.org/

EcoHealth grew out of a graduate course at Johns Hopkins University into a resource for students and teachers. A team of scientists work to keep the site updated and provide photos, diagrams, maps, and video clips to enhance their coverage of complex topics. Site sections include lesson plans, news pages, and glossary.

Eco'tude

www.powerhousemuseum.com/ecotude/

Eco'tude is an online resource that allows Australian students to consider their school's environmental impact, empowers them to take action and change their schools attitude. Students can determine the size of their school's ecological footprint.

Education for A Sustainable Future

<http://www.concord.org/>

Education for a Sustainable Future aims to provide technology-based educational resources that prepare students to create the environmental, economic, and social cooperation society needs. Their website offers K-12 curriculum materials on the following topics: Designing Sustainable Communities, Global Issues, Stewardship of Resources, Sustainable Economics, and Thinking About and Affecting the Future.

EduGreen

edugreen.teri.res.in

This site for elementary students covers life on Earth, energy, water, air pollution, climate, change, biotechnology, and solid waste. After reading about the topics, students can do a crossword puzzle or word search, play memory games, and take a quiz about the environment.

Electronic Naturalist

www.enaturalist.org/

This is a new on-line education program providing weekly environmental education units. Each unit has artwork, text, activities, additional web sites, plus online access to a professional naturalist. Two reading levels

are available for grades K-3 (Quick Read) and 4-8 (Full Read). The Electronic Naturalist offers a variety of material for students and each week for 30 consecutive weeks during the school year, a new environmental unit will be available. Units cover "creepy crawlies", insects, fish, amphibians, reptiles, birds, mammals, plants, and environmental issues.

Environmental Inquiry

<http://ei.cornell.edu/>

Environmental Inquiry is a website and curriculum series developed at Cornell University to help students conduct environmental science research and participate in communities of fellow student scientists. Even though the site is designed to accompany the curriculum series, it provides a host of independently useful resources that give high school students a chance to conduct meaningful environmental science research. Topics include toxicology, ecology, biodegradation, and watersheds. In each topic section are background information, links to additional online resources, and research challenges. The site also encourages student interaction through online peer review of bioassay reports and discussion boards.

Environmental Literacy Council Labs

www.enviroliteracy.org (click on "Environmental Science Labs")

With funding from the Department of Education's Fund for the Improvement for Postsecondary Education, and in collaboration with the College Board, a collection of labs have been developed by an experienced team of environmental science educators. Each lab has been the subject of an extensive peer review. The content of the initial collection is varied, and teachers and students in different areas around the country should be able to complete each of the labs. These initial labs are not typical cookbook variety. They each contain an inquiry-based component. Additional labs and tools for new and experienced teachers will be added to the collection.

Enviroliteracy Site

<http://www.enviroliteracy.org/>

Sponsored by the Environmental Literacy Council, a non-profit organization dedicated to helping people make informed environmental decisions. Offers articles, lesson plans, student pages, and a teacher exchange. Topics include Air and Climate, Land, Water, Ecosystems, Energy, Food, and Environment and Society.

EPA High School Site

www.epa.gov/highschool/

Designed by a team of EPA environmental educators, this site helps high school students find good environmental information on the Internet. The team used guidelines developed by the North American Association for Environmental Education to ensure that only truly educational materials were included. There is information about air and water issues, waste and recycling, conservation, health and safety, ecosystems, and community environmental conditions. There are also links for students interested in internship and scholarship opportunities, environmental careers and community involvement projects.

ESA EcoEdNet

www.ecoed.net/

The goal of this library is to provide educators a forum to contribute and locate peer reviewed, scientifically and pedagogically sound ecology education content. EcoEdNet will strive to foster a community of ecology education users and contributors. Ecoed.net is a partner in the Bioscience Education Network (BEN) a collaborative of more than 10 professional societies and coalitions of biology education partners, funded by the National Science Foundation and coordinated by the American Association for the Advancement of Science (AAAS). Its purpose is to coordinate the ongoing development of digital library collections for the teaching and learning of undergraduate biology, with users at the center of the development.

Exploring the Environment

www.cet.edu/products/ete/overview.html

The 25 online modules and activities in Exploring the Environment put students in problem-based learning

scenarios based on actual situations. The award-winning modules, which are free, cover topics such as weather, population growth, biodiversity, land use patterns, volcanoes, water pollution, and global warming. Students use remote sensing and other techniques to formulate problem statements, collect and analyze data, prepare and present their findings, and recommend solutions.

FieldMap.org

<http://fieldmap.org/>

This site contains guides for five projects that engage students in biology, chemistry, physics, geology, and meteorology. While completing the projects, students gather data on the type of rocks, species of trees, and direction of the prevailing winds in their area. The data are then entered onto the web site along with data from students from around the United States. Once students submit their results, key codes give access to the map room and the challenge area. These codes unlock video hints and field notes. Students view panoramas of real locations around the U.S. and use the compiled data to make an educated guess as to where each picture was taken. If students answer correctly, they will be entered into a monthly drawing for a small prize.

Galeschools Environment Site

www.galeschools.com/environment/

This resource offers explanations of environmental science terms and showcases 12 experiments of varying degrees of difficulty, for use in the classroom or at home. In addition, it features readings on biomes, ecology, environmental ethics, endangered species, and food webs. A glossary and timeline are provided.

Geotechnical, Rock and Water (GROW) Digital Library

www.grow.arizona.edu

GROW offers interactive, multimedia, K-12 educational resources that are “storybooked” to emphasize active learning. The digital library includes three areas of civil engineering: Geotechnical (soil), Rock, and Water Resources.

Global, Environmental, and Outdoor Education Council

www.geoec.org/lessons/

A part of the Alberta Teachers’ Association, the Global, Environmental and Outdoor Education Council has created this site with downloadable, free unit and lesson plans (Grades 1-9) designed to help teachers integrate environmental themes into their curriculum.

The Green Squad

www.nrdc.org/greensquad

Maintained by the Natural Resources Defense Council, The Green Squad teaches kids about the relationship between their schools and environmental and health issues. The site is designed primarily for students in fifth through eighth grade, but also offers information for younger and older students as well as parents and teachers.

Hands on the Land

www.handsontheland.org

Hands on the Land (HOL) is a network of field classrooms stretching across America from Alaska to Florida and is sponsored by Partners in Resource Education, a collaboration of five Federal agencies, a non-profit foundation, schools, and other private sector partners. HOL provides a national network of field classrooms to enhance kindergarten through high school student-learning. Site provides teaching materials, resources for students, educational program information, teacher bulletins, and more.

Hot Science, Cool Talks

www.esi.utexas.edu/outreach/lectures.html

Presented by the Environmental Science Institute at University of Texas at Austin, this site gives leading researchers a channel for communicating their research to K-12 educators. There are pre-lecture activities, audience participation opportunities, internet broadcasts, a CD-ROM of the lecture series, and more.

Schools Online

www.urbanext.uiuc.edu/SchoolsOnline/index.html

A website for K-12 educators that features brief text or animated presentations on such topics as planting and tending gardens; incorporating 4-H projects in the classroom; and helping students become more aware of how plants, animals, and humans interact with ecosystems. Some activities are available on CD-ROM and in Spanish.

Student Data Mapper

kangis.org/mapping/sdm

If you want to get involved in GIS but do not want to spend the time teaching your students how to use the software, here's a site for you. The Student Data Mapper is a web-based program that lets teachers build a project, collect student data, and map it. It is the fastest and easiest way to start using GIS in the classroom. It's absolutely free and doesn't require any kind of download. Your class project, your information, your map.

The Sun-Earth Connection Education Forum

<http://sunearth.gsfc.nasa.gov/>

This is a great web site for new classroom resources about the Sun and Earth system. There is an extensive--and growing--Resource Directory, containing hundreds of "ready-to-go" classroom activities and products that have been extensively field tested and evaluated. You will find the web sites of all NASA missions that study the Sun and Earth's space environment, active "Ask a Scientist" sites from participating NASA missions, as well as collections of images, movies and artwork that will enhance and update your classroom learning environment.

Sustainability Education Handbook

www.urbanoptions.org/SustainEdHandbook/index.htm

This resource was created to help K-12 teachers understand sustainability concepts and incorporate them into their classroom. It is aligned with Michigan state standards, but should still be useful for Wisconsin educators.

Sustainable Footprint

www.sustainablefootprint.org

The Sustainable Footprint project is a Netherlands-based initiative aimed at making students aware of the consequences of their lifestyle. It offers a series of thematic lessons, guidelines, and relevant links. The site also includes a footprint quiz for students ages 12-15 and a "design for the future" assignment.

Teaching Issues and Experiments in Ecology

www.tiee.ecoed.net/

This online publication funded by the National Science Foundation and supported by the Ecological Society of America is intended to help ecology faculty teach better. The sections on experiments, issues, and teachings could be useful for high school science teachers.

Thematic Guides on the Human Dimensions of Global Environmental Change

<http://ciesin.columbia.edu/TG/thematic-home.html>

Thematic Guides are experimental information resources designed to be useful to a diverse audience. The primary objective is to provide a tool that allows researchers, policy makers, educators, and the public to quickly access selected background materials on key global change issues. Most guides include a brief overview that offers a general introduction to the topics and issues covered. Topics include agriculture, human health, land use, ozone depletion, political institutions, population projections, climate change, remote sensing, and more.

Windows into Wonderland

www.windowsintowonderland.org/

You and your students can experience Yellowstone National Park through this site developed by the National Park Service. Every five or six months, the Service organizes virtual field trips in the park, featuring streaming

video and online communication with experts. Each field trip is designed with a corresponding curriculum, written to meet National Science Education Standards for middle school students. Both the field trips and curriculum are available for free.

Youth Exchange

<http://www.youthxchange.net/>

This website and the related downloadable guidebook are intended as a tool kit to assist youth groups, non profit organizations and teachers to help raise awareness on sustainable consumption and empower youth to put the theory on sustainable lifestyle choices into practice. Using accessible information, concrete examples and everyday language, the kit provides many facts and figures on issues related to how people live and their impact on the environment, economy and society.