



## ***Conservationist for Kids***

Supplement for Classroom Teachers Spring 2009  
"Climate Change"

### **Using *Conservationist for Kids* in the Classroom**

*Conservationist for Kids* (C4K), and an accompanying teacher supplement, is distributed to public school fourth-grade classes three times each school year (fall, winter, spring). These materials are also available at [www.dec.ny.gov](http://www.dec.ny.gov) in both HTML and PDF formats. Teachers and students may e-mail questions and suggestions to us at [cforkids@gw.dec.state.ny.us](mailto:cforkids@gw.dec.state.ny.us). Printable activity sheets and links to other resources can be found on our website. Go to [www.dec.ny.gov](http://www.dec.ny.gov), and look for *Conservationist for Kids* under the "Education" heading. You will also find back issues of C4K and the activity sheets and teacher supplements associated with them.

### **Looking at Climate Change with your Students**

Climate change can be a daunting subject to address with your students. Information for young readers ranges from simple to complex, with a lot of variation in between. Some excellent resources are available to assist teachers and parents as they investigate climate change with children and youth of all ages. A short list is provided here. A longer list is available at the C4K section of DEC's website.

This issue of C4K is a simplified look at climate change. Consider it an introduction to the basic concepts, but not a stand-alone piece. We hope it will promote discussion and questions from your students. Rather than instill fear, we want to promote curiosity to learn more and an eagerness to take action and make a difference.

### **MST Curriculum Connections**

The activities in this issue of *Conservationist for Kids* correlate to the New York State Learning Standards for Math, Science and Technology for fourth grade, as shown below. Connections to other learning standards are also valid.

A World of Carbon:   MST2. *Engineering Design 1*  
                                  MST4. *The Living Environment 4-7*  
                                  MST5. *Engineering Design 2, 6, 7*

Litterless Lunch Box:   MST4. *The Living Environment 1-7*

### **Teacher Workshops**

For teachers who have participated in a Project Learning Tree, Project WET or Project WILD workshop, the activities listed below complement the spring 2009 issue of C4K. For information about workshops and about how to obtain these curriculum and activity guides, visit [www.dec.ny.gov/education/1913.html](http://www.dec.ny.gov/education/1913.html)

Project Learning Tree:   The Global Climate; Our Changing World

Project WET:             Piece it Together

Project WILD:            Flip the Switch for Wildlife

## Supplemental Activities for the Classroom

### ***Energy Mobile***

As a class, create a mobile showing some of the ways we use energy and some ways we can save energy. Guide your students through a brainstorming session to make lists of ways they use energy and how they can save energy. (Visit [www.dec.ny.gov/education/44122.html](http://www.dec.ny.gov/education/44122.html) for some ideas.) After that, students may either draw pictures or cut out magazine photos to use in the mobile. Because the sun is the source of our energy, place it at the top, and build the branches of the mobile below it. If you like, balance energy use and energy savings in the same area on the same branch (e.g., driving in a car vs. riding a bicycle; using a clothes dryer vs. hanging items to dry on the line; using a reading lamp vs. relying on sunlight). Make multiple mobiles: one for savings at school, one for savings at home, and one for savings in the community.

### **Recommended Books (additional books are listed in *Conservationist for Kids*)**

*Teaching About Climate Change: Cool Schools Tackle Global Warming* by Tim Grant and Gail Littlejohn (Green Teacher, Toronto, 2001)

*The Greenhouse Effect: Warming the Planet* by Darlene R. Stille (Compass Point Books, Minneapolis, Minnesota, 2007)

*Changes in the Wind: Earth's Shifting Climate* by Margery and Howard Facklam (Harcourt Brace Jovanovich, Publishers, New York, 1986)

*How We Know What We Know About Our Changing Climate: Scientists and Kids Explore Global Warming* by Lynn Cherry and Gary Braasch (Dawn Publications, Nevada City, CA, 2008) The teacher guide by Carol L. Malnor is a separate publication.

### **Web-based Resources for Teachers and Parents, some with sub-pages for kids**

[www.dec.ny.gov/pubs/39495.html](http://www.dec.ny.gov/pubs/39495.html) "Climate Change and New York's Future" in *New York State Conservationist*, August 2007 pp10-13.

[www.nwf.org/globalwarming/](http://www.nwf.org/globalwarming/) National Wildlife Federation - see especially "Climate Classroom" under Global Warming heading

<http://hdgc.epp.cmu.edu/teachersguide/teachersguide.htm#teachersguida> - *Teachers' Guide to High Quality Educational Materials on Climate Change and Global Warming*; Provides guidance to understanding climate change materials on the web and links to other sites

[www.need.org/EnergyInfobooks.php](http://www.need.org/EnergyInfobooks.php) National Energy Education Development Project - Classroom ideas on energy education for all grade levels

[www.GetEnergySmart.org/EnergyEducation/](http://www.GetEnergySmart.org/EnergyEducation/) NYS Energy Research and Development Authority (NYSERDA) - general information and "Energy Smart Students" curriculum workshops for educators

<http://ipcc-wg1.ucar.edu/> Intergovernmental Panel on Climate Change - "frequently asked questions"

[www.epa.gov/climatechange/index.html](http://www.epa.gov/climatechange/index.html) U.S. Environmental Protection Agency - detailed information on a wide range of climate change areas of interest; link to EPA climate change site for kids

[www.climatechoices.org/index.html](http://www.climatechoices.org/index.html) Union of Concerned Scientists - climate change in the northeast US

[www.pewclimate.org/global-warming-basics](http://www.pewclimate.org/global-warming-basics) Pew Center on Global Climate Change - general information about climate change; also see "Kids page" link

[www.dec.ny.gov/energy/43384.html](http://www.dec.ny.gov/energy/43384.html) NYS Department of Environmental Conservation (DEC) - New York State programs to combat climate change

[www.dec.ny.gov/60.html](http://www.dec.ny.gov/60.html) NYS DEC - energy and climate

<http://eo.ucar.edu/kids/index.html> National Center for Atmospheric Research and the UCAR (University Corporation for Atmospheric Research) Office of Programs - activities for children related to weather and climate; see also [www.windows.ucar.edu/earth/climate/carbon\\_cycle.html](http://www.windows.ucar.edu/earth/climate/carbon_cycle.html) for carbon cycle game from UCAR

<http://cocorahs.org/> Community Collaborative Rain Snow and Hail Network - Weather monitoring citizen-science program for children, families and groups.

<http://globalwarmingkids.net/> portal for climate change sites for kids

[www.energystar.gov/index.cfm?c=kids.kids\\_index](http://www.energystar.gov/index.cfm?c=kids.kids_index) energy and climate information and activities for teachers and students from the Energy Star Program