



Fairchild Challenge Teacher Resource List

Books:

1. Bossert, Heather and Joan Heckscher. ***Learning Through Environmental Action: The Community Action Model of Environmental Service Learning: A Guide for Educators.*** Community Alliance for Youth Action, 1999.
2. Collard, S. ***Acting for Nature: What Young People Around the World Have Done to Protect the Environment.*** Heyday Books, 2000.
3. Drutman, A., and S. Zuckerman. ***Protecting our Planet: Activities to Motivate Students to a Better Understanding of our Environmental Problems.*** Good Apple, 1991.
4. Elkington, J et al. ***Going Green: A Kid's Handbook to Saving the Planet.*** Puffin Books, 1990.
5. Gates, J. ***Consider the Earth: Environmental Activities for Grades 4-8.*** Teacher Ideas Press, 1989.
6. Javna, J. ***50 Simple Things Kids Can Do to Save the Earth.*** Earthworks Group, 1990.
7. Jefferis, D. ***Green Power: Eco-Energy without Pollution.*** Crabtree Publishing, 2006.
8. Levine, S. and A. Grafton. ***Projects for a Healthy Planet: Simple Environmental Experiments for Kids.*** John Wiley and Sons, 1992.
9. Lewington, Anna. ***Plants for People.*** Eden Books, 2004.
10. Lewis, B and P. Espeland. ***The Kid's Guide to Service Projects: Over 500 Service Ideas for Young People Who Want to Make a Difference.*** Free Spirit Publishing, 1995.
11. Lewis, B and P. Espeland. ***The Kid's Guide to Social Action: How to Solve the Social Problems You Choose-And Turn Creative Thinking into Positive Action.*** Free Spirit Publishing, 1999.
12. Love, A. and J. Drake. ***Take Action: An Environmental Book for Kids. World Wildlife Fund,*** 1992.
13. Roberts, P. ***Kids Taking Action: Community Service Learning Projects K-8.*** Stenhouse Publishers, 2002.
14. ***Taking Action, An Educator's Guide to Involving Students in Environmental Projects.*** Project Wild and World Wildlife Fund. 1995.
15. The Earth Works Group. ***50 Simple Things Kids Can Do to Save the Earth.*** Andrews and McMeel. 1990.

Websites:

Energy Conservation & Alternative Energy Sources

1. **Project NEED:** <http://www.need.org/>
Project National Energy Education Development (NEED) provides lessons on different aspects of energy from sources to conservation.
2. **Alliance to Save Energy:** <http://www.ase.org/>
Contains interdisciplinary lesson plans and activities that focus on lowering energy consumption in the home and throughout the school.
3. **Dream in Green:** <http://dreamingreen.org/>
A county-wide program whose purpose is to reduce the carbon footprint of individuals, schools, and businesses. There are hands-on lessons that highlight energy conservation, efficiency, renewable energy, and the impact of greenhouse gas emissions on the ecosystem.
4. **Green Schools Initiative:** www.greenschools.net
Parent -environmentalists who work to catalyze and support "Green" actions by students, teachers and policymakers to eliminate toxics, use resources sustainably, create green spaces and buildings, serve healthy food, and teach stewardship throughout the school system. Has good Earth Day suggestions.
5. **School Energy Survey Questionnaire:**
<http://www.eia.doe.gov/kids/classactivities/SchoolBuildingSurveyIntermediate.pdf>
A thorough list of questions that students can ask about how energy efficient their school is and allow them to make recommendations based on their findings.
6. **U.S. Department of Energy:** <http://www.eere.energy.gov>
Through their lessons, students can learn how energy works, how to conserve energy, and how renewable energy helps our environment and energy security.
7. **Kilowatt Ours:** <http://www.kilowattours.org/>
Film information and educator resources for the documentary "Kilowatt Ours, a plan to re-energize America".

Water Quality & Conservation

1. **Be Water Wise!:** http://www.eeweek.org/water_wise
Engages students in analyzing water use at home and at school through a series of interdisciplinary activities and lessons. Provides resources on teaching about water, helpful websites, and web activities for students. Also has information on Be Water Wise! Mini-Grants.
2. **National Environmental Education Week's Water Curricula:**
Curricula and web resources: www.eeweek.org/resources/water_curricula
3. **Team Wet Schools:** <http://www.wetcity.org/resources.htm>
Water education resources for urban educators.
4. **USGS Water Science for Schools:** <http://ga.water.usgs.gov/edu/>
Offers information on many aspects of water, along with pictures, data, and maps.
5. **Miami-Dade County Water and Sewer:** www.miamidade.gov/wasd
Provides local information on water resources, such as how to read your water bill, water restrictions and water conservation.
6. **Miami-Dade County We Use Less:** <http://weuseless.miamidade.gov/home.html>
Water conservation tips and resources. Includes information on Rain Barrels.
7. **Water Calculator:** www.miamidade.gov/conservation/water_calculator.asp

Plants and Wildlife Conservation

1. **Fairchild Tropical Botanic Garden:** www.fairchildgarden.org
Links to education programs, plant collections, events, the Center for Tropical Plant Conservation, the Virtual Herbarium, the Guide to Palms, and other information.

2. **Plants in Peril:** www.centerforplantconservation.org/peril/perilmnu.html
A guide to exploring biodiversity and rare native plant conservation for middle school educators.
3. **The Eden Project Education Pages:** www.edenproject.com/education/index.html
Look at the biome sections under the horticulture tab to find how plants from all different biomes are used to produce economic goods.
4. **Project Wild:** <http://www.projectwild.org/>
Wildlife focused conservation education program for K-12 educators and students. Information available about Project WILD workshops and supplementary materials.
Project BudBurst: www.budburst.org
Students and teachers participate in gathering valuable environmental and climate change information from across the country. Project BudBurst engages the public in making careful observations of the *phenophases* such as first leafing, first flower, and first fruit ripening of a diversity of trees, shrubs, flowers, and grasses in their local area.
5. **Citizen Science Central:** <http://www.birds.cornell.edu/citscitoolkit>
A clearinghouse for ideas, news, and resources in support of citizen science-- partnerships between volunteers and scientists that answer real-world questions.
6. **Citizen Science Projects:** <http://citizensci.com/>
7. **Audubon:** <http://www.audubon.org/bird/cbc/index.html>
Citizen Science webpage has information on the annual Christmas Bird Count.
8. **Journey North:** <http://www.learner.org/jnorth/>
A free, Internet-based program that explores the interrelated aspects of seasonal change. Through interrelated investigations, students discover that sunlight drives all living systems and they learn about the dynamic ecosystem that surrounds and connects them. Also has a Kid's Page.
9. **Garden Mosaics Program:** <http://www.gardenmosaics.cornell.edu/pgs/data/weed/weedmenu.htm>
Garden Mosaics is a youth and community education program that combines science learning with intergenerational mentoring, multicultural understanding, and community action. Also includes the "Weed Watch" Program.
10. **ICUN - World Conservation Union:** www.iucn.org
The world's oldest and largest global environmental network which works together with government, non-government, UN agencies, companies and local communities to develop and implement policy, laws and best practices.

General Environmental Information & Conservation Issues

1. **Conservation International:** www.conservation.org
Explore the interactive maps, action tips, carbon calculator and more.
2. **Action for Nature:** www.actionfornature.org
Designed for kids. Check out the stories of other eco-heroes.
3. **National Environmental Education Week:** <http://www.eeweek.org/>
Provides information about EE Week—includes environmentally-themed lessons and activities for K-12 classrooms. Also has grant opportunities and other environmental resources.
4. **National Environmental Trust:** www.net.org/
Includes green editorials and opinion articles and updates on environmental policy for issues including clean air, global warming, energy, forests, oceans and marine life, environmental health, and fuel economy. There is also an extensive list of additional resources and podcasts.
5. **Global Green:** www.globalgreen.org/
Learn more about the green building initiative, including a 'Green School Initiative.' Also has extensive information about political initiatives to conserve water, recycle, and provide clean transportation.
6. **Global Response YEA Kids:** www.globalresponse.org/kidsactions.php
Campaigns and actions for kids.

7. **National Environmental Education Foundation:** <http://www.neefusa.org/>
Provides various environmental education resources—volunteer and grant opportunities, environmental events, publications, and professional development tools.
8. **The EcoTipping Points Project:** <http://www.ecotippingpoints.org/>
Teachers contribute online curriculum materials they have developed. The materials show how teachers are using EcoTipping Point success stories as models for positive change – teaching skills, spreading hope, and inspiring proactive reaction to the environmental crisis.
9. **Scholastic Act Green!:** <http://www.scholastic.com/actgreen/>
Kid's page with interactive games and activities, links to other websites, etc. Also includes a link to resources for teachers and families.
10. **NRDC's Simple Steps:** <http://www.simplesteps.org/>
Simple Steps is a new initiative by the Natural Resources Defense Council (NRDC) for people who are looking for easy, everyday actions they can do to protect our health, our homes -- and our planet.
11. **Sustainable Table:** <http://www.sustainabletable.org/>
Sustainable Table celebrates local sustainable food, educates consumers on food-related issues and works to build community through food. Daily "Table Blog" has great information.
12. **Environmental Protection Agency Document:** <http://www.epa.gov/osw/education/pdfs/mad-guide.pdf>
A how-to guide for engaging students in resource conservation and waste reduction.
13. **Environmental Protection Agency Document:** <http://www.epa.gov/osw/education/pdfs/svcllearn.pdf>
Service-Learning: Education beyond the classroom.
14. **Earth Force:** <http://www.earthforce.org/>
Engages young people as active citizens who improve the environment and their communities. Includes news items and teacher resources—videos, evaluations, websites, etc.
15. **Sierra Student Coalition:** <http://www.ssc.org/>
16. **Taking it Global: Inspire, Inform, Involve:** <http://takingitglobal.org/>
Online community of youth interested in global issues and creating positive change. Also includes resources for educators.
17. **Youth Service America:** <http://www.ysa.org/nysd/>
18. **Environmental Protection Agency Student Center:** <http://www.epa.gov/students/>
Teacher resources including websites, lesson-plans, and background information to help teachers with their environmental topics.
19. **Do Something:** <http://dosomething.org/>.
20. **Kids for Saving Earth:** http://www.kidsforsavingearth.org/index_low.html
21. **National Service Learning Clearinghouse:** <http://www.servicelearning.org/resources-kids-and-teens>
Resources to help kids and teens get involved in service learning.
22. **NRDC Green Squad:** <http://www.nrdc.org/greensquad/default.htm>
Interactive program to teach kids about their school's environmental quality.
23. **One World Youth Project:** <http://www.oneworldyouthproject.org/>
24. **Teens for Planet Earth:** <http://www.teensforplanetearth.org/>
Social networking site for teens who want to help planet earth. It also has sections for adult advisors, grants and awards.
25. **The Food Project:** <http://thefoodproject.org/food-project-toolbox>
The toolbox on this site has good resources about local food and connecting students with where their food comes from.
26. **The Globe Project:** www.globe.gov
Has a great teachers' guide.
27. **Project Learning Tree GreenWorks!:** <http://www.plt.org/>
A guide to help teachers partner with local organizations. Curriculum guides including forest ecology and issues such as municipal waste and biodiversity.
28. **Union of Concerned Scientists:** www.ucsusa.org

Carbon Footprint Calculators

1. www.thegreenguide.com/doc/119/calculator - National Geographic's guide on how to reduce your carbon footprint in every room of your house. Also includes ideas for green shopping.
2. <http://epa.gov/climatechange/kids/calc/index.html>
3. <http://zerofootprint.net/youth/neew>
4. http://www.greenstudentu.com/encyclopedia/carbon_footprint
5. <http://www.nature.org/initiatives/climatechange/calculator/>

Local Conservation Agencies

1. **A Better South Florida:** <http://www.abettersouthflorida.org/>
A Better South Florida provides community outreach resources to help teachers and students with their school gardening project. Through links in this website, students can gain access to information and scientific data regarding the Everglades Restoration Project, the current and future state of Biscayne Bay, and other environmental issues related to South Florida.
2. **Florida-Friendly Landscaping:** <http://www.floridayards.org/landscape/index.php>
Florida Friendly Landscaping provides downloadable resources to help you create a Florida-friendly school garden.
3. **Miami-Dade County – Environmentally Endangered Lands (EEL)**
http://www.miamidade.gov/derm/program_EEL.asp
Information about the EEL in Miami-Dade County including a calendar with dates for volunteer opportunities and nature activities. Links for information about Florida ecosystems, landscaping, native plants and animals, and prohibited plant species. Information for pine rocklands, tropical hardwood hammocks, and much more!
4. **Miami-Dade County Department of Environmental Resources Management** www.co.miami-dade.fl.us/derm
Provides links with information about South Florida ecosystems, environment and natural resources.
5. **South Florida Water Management District:** www.sfwmd.gov
Educational resources, public information, recreation information, and water conservation.

Climate Change

1. **Sierra Club:** <http://www.sierraclub.org/globalwarming/>
Fact sheets, reports and other information about clean energy sources.
2. **Project Tomorrow:** <http://www.tomorrow.org/>
3. **Climate Counts:** <http://www.climatecounts.org/index.php>
Increases consumer awareness by providing “climate scores” and other information about large companies and their impact on the world’s climate.
4. **Carbonrally:** <http://www.carbonrally.com/>
Carbonrally offers individuals and groups a fun, simple and social way to have an impact on energy consumption and climate change. “Featured Challenges” are posted every few weeks on the site, and participants are notified by email. Student groups and individuals can create or join a Carbonrally team among friends, classmates, and colleagues to compete with other “Rally-ers.”
5. **Environmental Protection Agency:** <http://www.epa.gov/climatechange/wyacd/ORWKit.html>
A toolkit for teachers and interpreters.
6. **Focus the Nation:** <http://www.focusthenation.org/>
National climate change program.
7. **Planet Connect:** <http://www.planet-connect.org/>
Online social network where high school students can learn about current environmental issues, funding opportunities, green colleges and environmental careers. Students can also share and exchange ideas about how they are playing a critical role in solving today’s environmental issues.

8. **Stopglobalwarming.org:** http://www.stopglobalwarming.org/sgw_classroom.asp
Tips for taking action against climate change in your home and school.
9. **The National Teach-In:** <http://www.nationalteachin.org/>
Global climate change movement provides teachers with resources/models for teaching about the facts of climate science.

Local Resources:

Tacolcy Center
Adopt-A-Tree/TreeMendous
Surfrider Foundation
ECOMB
Hands On Miami
Sea Grant
Miami Dade Parks
Sweetvine, Inc.
Operation Green Leaves
MARS
SE Florida Coral Reef Initiative
Citizens for a Better South Florida
Friends of the Everglades
Biscayne Nature Center
Department of Environmental Resource Management
UM/RSMAS

Events:

Baynanza
Little Haiti Earth Day
National and Global Youth Service Day

Ideas for activities:

Native habitat restoration
Miami-Dade Parks workdays
Sea Grant Monofilament Fishing Line Recovery
Beach/river/park cleanup
Grow produce for local food bank
Raise money for charity
Recycling drive
Carpooling campaign
Water testing in Biscayne Bay, local beaches
Song, video, PSA, performance, flyer, brochure, poster
Letter writing campaign
Donate old electronic equipment to needy schools/organizations
Create ecology/environmental club at your school