

Partly in response to publication of Richard Louv's *Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder*, many schools may be considering how to make better use of outdoor learning areas. A lot of great resources are easily accessible in Ohio and nationwide, so no need to reinvent the wheel! Here are some how-to suggestions, Web links, and funding sources, compiled by the Ohio EPA Office of Environmental Education.

Recipe for a School Land Lab

Ingredients:

1 great idea

1 underutilized area on the school grounds, or in a nearby park.

1 enthusiastic teacher, parent, or student, to get the project rolling.

1 support committee of enthusiastic teachers, parents, students, neighbors and administrators

1 copy, *Habitats for Learning: A planning guide for using and developing school land labs*, downloadable from www.epa.state.oh.us/oeef/oeef_publications.html.

1 copy, *Twenty/Twenty Activities and Projects for WILD School Sites*, available in WILD school site workshops sponsored by the Ohio Department of Natural Resources, Division of Wildlife.

1 list of Web-based resources (attached)

1 list of potential funding sources (attached)

Directions:

Use the existing site to meet some of your current educational objectives. Identify potential learning opportunities.

Involve your students in conducting an **inventory** of soil and topographic features, plant, animal, and habitat resources on the site. Involve students in researching what laws, ordinances and school regulations apply to the site. Project WILD's *Science and Civics: Sustaining Wildlife* is an excellent resource on how to do this.

Recruit a support committee of neighbors, parents, students, teachers and administrators. Don't forget the grounds crew, so they know not to mow down the butterfly garden! Don't forget the neighbors, who may be using the site and who can help protect against vandalism after hours and during school vacations. Request a copy of the *Habitats for Learning* video from oeef@epa.state.oh.us,

it's a good tool for explaining to the PTO and others just how valuable outside learning can be.

Enhance the existing site as needs arise: e.g., attend to poison ivy, pick up litter, mulch muddy areas, hang a bird feeder.

Check out what they did over there, on the attached list of Web-based resources. The Michigan State University's 4-H children's garden is a wonderful source of inspiration and ideas, and some existing school land labs around Ohio have developed great Web sites. If there's no room on the school grounds, contact your local parks. The City of Toledo Department of Parks, Recreation and Forestry developed school land labs in city parks, and a terrific "Park It!" curriculum. Contact Dennis Garvin at 419/936-2876 for advice.

Develop a long-range plan for that matches site development with the overall curriculum. Check out the integrated and subject-specific activities for science, math, social studies, language arts, art and music, health and physical education in *Habitats for Learning*. Keep notes on how and why you did what you did, for a Land Lab User's Manual.

Seek donations of materials and labor from parents, students, local businesses, and even eagle scouts. **Apply for grants** if needed, from some of the sources on the attached list of funding sources.

Measure, dig, plant, observe. Season with changing weather, wildlife and vegetation. Complete the User's Manual for new teachers and students coming to the school.

Enjoy!

Web Resources on Outdoor Classrooms and Wildlife Gardens

4-H Garden at Michigan State University

<http://4hgarden.msu.edu/tour/overview.html>

Chester Elementary land lab near Wooster, Ohio

www.northwestern-wayne.k12.oh.us/Chester/Landlab/main2.html

Classroom Feeder Watch at Cornell <http://birds.cornell.edu/cfw/>

Granny's Garden School <http://www.grannysgardenschool.com/>

Identifying Ohio trees, from Ohio Public Library Information Network and Ohio Historical Society, <http://www.oplin.org/tree/>

Journey North <http://www.learner.org/jnorth/index.html>

Monarch Watch at University of Kansas www.monarchwatch.org

National Audubon Society – education resources for bird watching and habitat

www.audubon.org/educate/

National Gardening Association, (includes grants), www.kidsgardening.com

National Wildlife Federation Schoolyard Habitats

www.nwf.org/schoolyardhabitats/

National Wildlife Federation Backyard Habitats

www.nwf.org/backyardwildlifehabitat/

North Carolina's Environmental Education Garden

www.ee.enr.state.nc.us/garden/gardenbackground.htm

Ohio Division of Wildlife, wildlife diversity resources

www.ohiodnr.gov/wildlife/resources/default.htm

Project WILD grants and resources for Wild School Sites

<http://www.projectwild.org/WILDSchoolSites.htm>

and www.dnr.ohio.gov/wildlife/Resources/wildschools/default.htm

Raptors in the City (includes Cleveland peregrines)

<http://raptorsinthecity.homestead.com/index.html>

Sandusky Plains Environmental Education Center at Elgin High School (Marion County) www.intelligent-web-design.com/SPEEC/index.htm

Funding Sources

Greenworks Grants of \$200 - \$2,000 are available from Project Learning Tree at the national level, for projects involving youth, adults in communities, with positive environmental effects. www.plt.org or www.ohiodnr.gov/forestry/education/plt.htm

WILD School Sites grants of \$500 are available from the Ohio Department of Natural Resources, Division of Wildlife, with applications accepted between January 1 and May 31, www.dnr.ohio.gov/wildlife/Resources/wildschools/default.htm

National Fish and Wildlife Foundation, Five-Star Restoration Matching Grants Program award grants between \$5,000 and \$20,000 for wetland, riparian, or coastal habitat restoration projects that include education and community stewardship components. Deadline March 1. <http://www.nfwf.org/programs/5star-rfp.htm>

Toyota Tapestry grants up to \$50,000 and mini grants up to \$2,500 are available to science teachers and administered by the National Science Teachers Association, <http://www.nsta.org/programs/tapestry/program.htm>

American Electric Power Teacher Vision Grants of \$100-\$500 are available to pre-K-12 educators in the AEP service area. www.aep.com/go/teachergrants

FirstEnergy Mathematics, Science and Technology Education Grants up to \$500 are available to educators at schools and youth groups in communities served by Ohio Edison, The Illuminating Company, and Toledo Edison, applications due September 30. See www.firstenergycorp.com and click on "community involvement" then "education" and "educational grants"

American Honda Foundation Grants to K-12 and higher education programs in the fields of youth education (up to 21) and scientific education. Deadline: May 1. Download brochure: http://corporate.honda.com/images/banners/america/AHF_brochure.pdf
<http://corporate.honda.com/america/philanthropy.aspx?id=ahf>

Learn and Serve Ohio grants are available through the Ohio Department of Education for schools to develop service learning programs to help students and communities address education, public safety, human and environmental needs. www.ohiok-16service.org

Ohio Environmental Education Fund mini grants of \$500 - \$5,000 are offered by the Ohio EPA Office of Environmental Education, with application deadlines around January 9 and July 9 each year. www.epa.state.oh.us/oeef

US EPA Environmental Education grants are awarded through both the national Office of Environmental Education www.epa.gov/enviroed/grants.html and smaller grants (but less competition) through the Region 5 office in Chicago (contact Megan Gavin at gavin.megan@epa.gov). Application is usually announced in the Federal Register in September, with deadlines in November.

NiSource Environmental Challenge Fund grants are available for ecological restoration projects, in the service area of Columbia Gas of Ohio. Application deadline is usually in February, www.nisource.com/enviro/ecf.asp. Largest grant awards are \$10,000, most under \$5,000.

Youth Garden Grant Program of the National Gardening Association offers \$500 gift cards from The Home Depot to schools and community organizations with child-centered outdoor garden programs.
www.kidsgardening.com/grants.asp

Build an Outdoor Classroom at Your School Grants

Lowe's Charitable and Educational Foundation, International Paper and National Geographic Explorer! classroom magazine offer outdoor classroom grants up to \$2000 to K-12 public schools. Grants up to \$20,000 may be awarded to schools or school districts with major outdoor classroom projects. Proposals are reviewed three times a year.
<http://www.Lowes.com/outdoorclassroom>

Captain Planet Foundation Grants

Between \$500 and \$2,500 for schools and nonprofit organizations that develop innovative environmental projects for youth that promote cooperation, planning, and problem-solving skills. Deadlines four times a year.
<http://eelink.net/cgi-bin/ee-link/newclick/256624>

Your local **community foundation** is a clearinghouse for local donors. Most large cities and many rural counties in Ohio have them. To Find other Funders: see if your public library reference section has the **Guide to Ohio Grantmakers**, also available for \$125 from the Foundation Center, www.fdncenter.org in print or a searchable CD ROM.

Other Sources of funding at the local level:

Wal-Mart stores, Target, BP stations, Kraft Foods. Wendy's restaurants and grocery stores may not offer cash but may provide food or other supplies.

Boy Scouts: Eagle Scouts have to complete a community service project, and often may be enlisted to perform construction or maintenance in parks and other outdoor learning sites.