

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 [http://www.epa.ohio.gov/oeef/oeef\\_publications.aspx](http://www.epa.ohio.gov/oeef/oeef_publications.aspx)

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 mistakenly think your prairie plants are just weeds, and who might 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](mailto: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](http://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/>

Habitats for Learning: A Planning Guide for Using and Developing School Land Labs, <http://www.epa.state.oh.us/oeef/habitat1.pdf>

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](http://www.monarchwatch.org)

National Audubon Society – education resources for bird watching and habitat [www.audubon.org/educate/](http://www.audubon.org/educate/)

National Gardening Association, (includes grants), [www.kidsgardening.com](http://www.kidsgardening.com)

National Wildlife Federation Schoolyard Habitats

[www.nwf.org/schoolyardhabitats/](http://www.nwf.org/schoolyardhabitats/)

National Wildlife Federation Backyard Habitats

[www.nwf.org/backyardwildlifehabitat/](http://www.nwf.org/backyardwildlifehabitat/)

North Carolina's Environmental Education Garden

[www.ee.enr.state.nc.us/garden/gardenbackground.htm](http://www.ee.enr.state.nc.us/garden/gardenbackground.htm)

Ohio Division of Wildlife, wildlife diversity resources

[www.ohiodnr.gov/wildlife/resources/default.htm](http://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](http://www.dnr.ohio.gov/wildlife/Resources/wildschools/default.htm)

Raptors in the City (includes Cleveland peregrines)

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

## **Funding Sources for School Gardens and Outdoor Learning Areas** (updated 4/14)

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. Someone trained in Project Learning Tree activities should be involved. [www.plt.org](http://www.plt.org) Tip: Request a letter of support from Sue Wintering in the Ohio PLT office, 614-265-6657 or [plt@dnr.state.oh.us](mailto:plt@dnr.state.oh.us)

WILD School Sites grants of up to \$500 are available from the Ohio Department of Natural Resources, Division of Wildlife, with applications accepted between January 1 and May 31, [www.wildohio.com](http://www.wildohio.com), click on Wild Resources and then Educator Resources. At least one member of the project committee must have completed either Project WILD, Growing Up WILD or Science and Civics training. Tip: Submit early, only twenty are available.

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 mid-February each year. Tip: work with partner organizations. <http://www.epa.gov/wetlands/restore/5star/>

Lowe's Outdoor Classroom Grant Program was created to provide outdoor, hands-on science education to students in grades K-12 and assist schools in enhancing their core curriculum in all subjects. This grant program was created to provide schools with additional resources to improve their science curriculum by engaging students in hands-on experiences outside the traditional classroom. All U.S. K-12 public schools are welcome to apply.  
<http://www.toolboxforeducation.com/>

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/pd/tapestry/?lid=tnav>

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

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 15 and July 15 every year.  
<http://epa.ohio.gov/oe/EnvironmentalEducation.aspx> Projects must show how education activities will align with Ohio's Academic Content Standards. Construction activities are not eligible. Larger grants up to \$50,000 are also

available, but much more competitive. Tip: Contact the OEEF staff for a pre-review. (614) 644-2873.

Ohio EPA 319 grants (named for Section 319 of the Clean Water Act) pass federal funds through to local watershed organizations to improve water quality. These sometimes include funding for education components.  
<http://www.epa.ohio.gov/dsw/nps/index.aspx> Contact your local watershed coordinator. via the Ohio Watershed Network, <http://ohiowatersheds.osu.edu/>

US EPA Environmental Education grants are awarded through both the national Office of Environmental Education [www.epa.gov/enviroed/grants.html](http://www.epa.gov/enviroed/grants.html) and smaller grants (but less competition) through the Region 5 office in Chicago. Application is usually announced in the Federal Register in September, with deadlines in November.

Tip: Pay attention, this program's funding is perennially in jeopardy in the federal budget process.

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

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 perform construction or maintenance in parks and other outdoor learning sites.