



**Outstanding Projects for the Pre-school to University Audience
Selected December, 2011**

Dublin City Schools, Wyandot Elementary School, P.O.N.D. (People, Water, Nature, Diversity), \$44,388, Age Range: Elementary School, Franklin County, Grant #06G-016

Involved 587 students and 52 staff members in restoring and monitoring riparian habitat around a half-acre pond owned by the City of Dublin located behind the school ground, working in collaboration with a series of artists-in residence to trace the impact of water quality in the pond, through the stream into which it feeds, and on to the Scioto River, Ohio River and Gulf of Mexico. Students and teachers worked with children's author and biologist Ron Hirschi to explore the biodiversity of the pond, Indian Run Stream and the Scioto River through hands on seining of these waters to investigate, evaluate and put into action a plan to help improve these natural habits. Students worked with play write Tom Anderson to write and present scenes about the local community while also working with muralist Amy Yaich to create murals about the local environment. After using the murals in the play they were installed in a public pedestrian tunnel located behind the school. With additional residencies involving Amy Yaich and stained glass artist Jane Albretch additional murals were installed inside the school that demonstrate students understanding of the journey of the water from their pond and student created large stained glass windows that have been installed in their library show the biodiversity discovered through their water explorations. Student investigations and authentic problem solving also led to installing a path for handicap access to the pond, creating bird feeders that were distributed to 18 schools throughout the city and local parks, recognition of business in the community who demonstrate environmentally friendly business practices, DVD's and Journey Tins that document their study and inspire others to participate in water studies have been distributed nationally and are a result of hours of artistic expression calling others to action.

Action for Children, Nurturing Nature in the Wonder Years, \$48,769, Age Range: Early Childhood, Franklin County, Grant #08G-005

Provided professional development tools to help twenty-five (25) early childhood directors, teachers and family child care providers incorporate environmental education content and activities into their curricula. In addition, thirty (30) instructors from the resource and referral system throughout Ohio participated in a 2-day train-the-trainer program. Through these instructors the *Nurturing Nature in the Wonder Years* curriculum training is available across the state. *A Resource*

Guide for Nature Explorations that includes activity ideas from Metro Parks and website lists was created and distributed to all participants. As part of the program, early childhood education expert Dr. Ruth Wilson led a seminar open to the public and the local early childhood education community at Sharon Woods Metro Park, attended by sixty-two (62) parents and educators. Wilson is a previous OEEF Outstanding Project awardee for her book *Fostering a Sense of Wonder During the Early Childhood Years*, available online at www.epa.ohio.gov/oeef. Collaborators include Franklin Soil and Water Conservation District, Ohio Resource Center for Mathematics, Science and Reading, Ohio Child Care Resource and Referral Association, and the Early Childhood Quality Network at The Ohio State University.

Black Swamp Bird Observatory, *Ohio Young Birders Club (OYBC) Field Training Program*, \$25,355, Age Range: Middle and High School, Clark, Delaware, Erie, Franklin, Holmes, Huron, Lorain, Lucas, Ottawa, Sandusky, Union, and Wayne Counties, Grant #08G-056

Provided field trips for youth ages 12-18 for outdoor laboratory experiences with naturalists and researchers, to increase their field observation and data collection skills, and their understanding of how changes to the environment affect the health and survival of plants and wildlife. Collaborators included the Black River Audubon Society, Greater Mohican Audubon Society, Kirtland Bird Club, Lake Erie Science and Nature Center, Ohio Ornithological Society, Ottawa National Wildlife Refuge, Time & Optics Limited, Toledo Naturalists Association, Wild Ohio Magazine, and Woodmore Schools.

Clermont Soil and Water Conservation District, *Partnering to Protect Water Resources: A Rain Garden Demonstration and Education Project*, \$50,000, Age Range: Elementary, Middle and High School, Clermont County, Grant #09G-018

Provided demonstration rain gardens on the campuses of each of the nine local school districts within Clermont County, plus the Grant Career Center in Bethel. An accompanying classroom and field study curriculum helped teachers explain the installations and environmental benefits of rain gardens and rain barrels. A rain garden workshop for the general public was held in conjunction with the installation of one of the rain gardens, and was filmed by the Clermont County Today cable television program. A printed guide and local Web page instructed residents on how to create and register their own rain garden to help with storm water management. Collaborators included the Clermont County Stormwater Management Department, Office of Environmental Quality and Office of Public Information, East Fork Watershed Collaborative, Greenacres Foundation, and Marvin's Organic Gardens.

Springfield Schools Foundation, *Taking a New Look at the Grove, an Endangered Oak Openings Ecosystem*, \$14,328, Age Range: Elementary and High School, Lucas County, Grant #09G-037

Honors biology students and gifted elementary students collaborated on a project documenting the condition of the Oak Openings ecosystem in The Grove, a 12-acre property owned by the Springfield Local School District. Students conducted a 12-month baseline survey of the site by sampling water and soil and preparing an inventory of native and invasive plant and animal species. They shared their findings with other students, community residents and leaders, and organizations with online environmental databases. The data gathered in this project is the basis for a multi-use restoration plan for The Grove that will include an outdoor classroom where students can study the unique characteristics of the Oak Openings ecosystem.

Miami University, Center for Environmental Education, Natural History and Conservation, *GREEN Teachers Institute: InteGreat Science*, \$14,133, Age Range: Elementary and Middle School, 15 Southwest Ohio Counties, Grant #09G-075

Supported a week-long summer workshop and fall semester online course for 40 K-8 teachers, using inquiry-based, hands-on science activities and web-based instructional technologies to teach about ecological issues. After fulfilling all requirements, participants received four graduate credits from Miami University. InteGreatScience.org and the InteGreat Science course are created by and under the direction of master teacher John Farmer, adjunct instructor at Miami University and fifth grade teacher in the Forest Hills School District.

North Central Ohio Educational Service Center, *Dynamic Watershed Environmental Research Project*, \$5,000, Age Range: Elementary, Middle and High School, Adams, Columbiana, Marion, Muskingum, Seneca, Wyandot, and Scioto Counties, Grant #08M-013

Provided field trip transportation, monitoring equipment and handheld GPS units to help students in grades 3-12 at seven schools study the boundaries of their local watershed and assess local water quality. Students presented research findings to peers, environmental agencies, and community members. Collaborators included the Columbiana County and Muskingum Valley Educational Service Centers, Adams County/Ohio Valley Schools, Seneca East Local Schools, and the South Central Ohio Computer Association.

Delaware City Schools, David Smith Elementary School Arts Council, *Impact of Waste on the Olentangy River Through Arts Learning*, \$4,899, Age Range: Elementary School, Delaware County, Grant #08M-027

Provided funding for guest artists, bus transportation, water quality monitoring and paper-making supplies for a program at an arts-integration school on how recycling and waste handling practices impact the Olentangy River Watershed. Over 400 K-4th grade students participated. Collaborators included the Delaware General Health District, Delaware Soil and Water Conservation District, and the Wexner Center for the Arts.

Elgin Local Schools, Elgin South Elementary School, *All about Energy*, \$4,966, Age Range: Elementary School, Marion County, Grant #09M-005

Provided supplies and a field trip to help 44 fourth and 52 fifth grade students learn about different forms of energy, how energy consumption affects the environment, alternative energy sources, and how to calculate and reduce their personal carbon footprint as well as the schools. Collaborators included Mid-Ohio Energy, the Prospect Park Commission, the Sandusky Plains Environmental Education Center, and Veggie U, a gardening curriculum of the Culinary Vegetable Institute.

Bethany School, *Environmental Education and Decision Making Overnight Camp*, \$2,824, Age Range: Middle School, Hamilton County, Grant #09M-041

Provided a two-night field experience at the Wilds in Cumberland, OH for seventh grade students as a culminating event for a unit on environment, ecology and economic decision making. Student activities included using a decision making model on restoration of a wetland for an endangered frog species; interpretive hikes on land use, biodiversity, invasive species, and ecosystems; and a genetics workshop on species survival plans focused on rhinos. Collaborators on the yearlong educational project included the Cincinnati Metropolitan Sewer District, Cincinnati Zoo, Grailville constructed wetland wastewater treatment system, Green Acres Foundation, and Procter and Gamble.

Indianola Children's Center, *Rain Garden for Young Children*, \$4,783, Age Range: Early Childhood, Franklin County, Grant #10M-039

This project created and maintains areas of the outdoor classroom of Indianola Children's Center (ICC) as rain garden spaces. The rain garden, which borders an area with high walking traffic from OSU students, allowed the ICC teachers to utilize the Ohio Academic Content Standards for preschoolers, while creating a cooperative project, as well as reducing the amount of rain water into the storm sewers. This rain garden project used native plants to attract birds into the area.

Miami County Park District, *The Quest for Science Knowledge through Nature Immersion*, \$4,997, Age Range: Elementary and Middle School, Miami County, Grant #10M-048

Quest is an innovative multi-faceted family and school based environmental education program that will address the growing need for children to connect with the natural environment thus improving academic performance, environmental stewardship and health. This project involved students with their families in outdoor science and nature education that connect with student classroom studies and result in academic credit or incentives at school in correlation with the state academic content standards. Quest is a creative response to recent studies indicating that students with increased outdoor engagement improved their science testing scores by 27% and focus abilities which directly correlates to performance on the state Academic Content Standard based tests.

Pre-School to University Projects Selected for Honorable Mention

Columbus State Community College, *Introducing Urban Youth to Environmental Careers*, Franklin County, Grant #08G-003

Ohio University Environmental Studies Program, *The Kanawha Education Project*, Athens, Belmont, Fairfield, Lawrence, Muskingum, Pike, and Ross Counties, Grant 08G-029

Mill Creek Restoration Project, *Mill Creek Green Schools Infrastructure Program*, Hamilton County, Grant #08G-050

Keep Akron Beautiful, *Energy Education for Sixth Graders after School*, Summit County, Grant #09G-004

Sunday Creek Associates, *Shadowing in the Forest*, Athens, Hocking, Morgan, and Perry Counties, Grant #10G-013

Cleveland Metropolitan Schools, Collinwood High School, *Euclid Creek Education Project*, Cuyahoga County, Grant #08M-009

Tolles Career and Technical Center, *Tolles Bird Discovery Project*, Franklin, Madison, and Union Counties, Grant #09M-022

The Wilds, *Youth-Managed Pollinators Plots*, Statewide, Grant # 09M-048

Mansfield City Schools Outdoor Education Explorations Program, *Monarchs—Awareness Takes Flight*, Statewide, Grant 09M-054

Central Christian Middle School, *GPS Mapping*, Wayne County, Grant #10M-008

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