

**OHIO ENVIRONMENTAL EDUCATION FUND
GRANTS AWARDED IN FISCAL YEAR 1999**



During the Fall 1998 and Spring 1999 grant round, the OEEF funded the following 27 projects, for a total of \$1,028,427.05

OEEF Grants Awarded November 1998

Saint Wendelin High School, Making “Sense” of Your Abiotic/Biotic Community Via Stream Monitoring, \$3,147.00, January 1999-May 2000, Hancock County, 99G-002

Ninth grade students will sample the East Branch of the Portage River biotically using ODNR’s stream quality monitoring method, and abiotically using remote sensing technology and wet chemistry. Data will be reported via the Internet to other science classes and to ODNR’s Stream Quality Assessment Database.

Miami University, Department of Zoology, Furthering Systemic Change at the Local Level: Advanced Environmental Education for Elementary Teachers, \$30,508.00, June 1999-May 2001, Butler, Clermont and Warren Counties, 99G-011

To provide 160 elementary teachers with training in the ecology and natural history of Southwestern Ohio ecosystems, to help participants implement reforms in science education in their classrooms. This program emphasizes inquiry and hands-on learning combined with fieldwork, and will serve as a model to be used in other regions of Ohio.

Jackson City School District, Mother Earth and Her Children, \$6,275.00, October 1998-April 1999, Jackson County, 99G-012

To allow 600 disadvantaged third, fourth, and fifth grade students to explore the environment by visiting “The Shire” environmental lab and Canter’s Cave 4-H Camp, where they will be introduced to careers in the environmental field.

Lucas County Local Emergency Planning Committee, Risk Management Communication, \$35,000.00, November 1998-July 1999, Lucas County, 99G-016

To educate 30,000-50,000 residents of Lucas County and local media about toxic and flammable chemicals used or manufactured in the county. Information will include preventive measures in place to minimize the potential and severity of chemical accidents, and response procedures to follow should a release occur. Project will provide workshops, a video, a speakers’ bureau, and other resources.

Columbus State Community College, Department of Biological and Physical Sciences, *Youth Experience Science (Y.E.S.) Environmental Education Program*, \$47,971.00, June 1999-December 2000, Franklin County, 99G-019

To allow 96 minority and economically disadvantaged middle school students to attend a two-week summer environmental science camp featuring field and laboratory experience, experimental design, hypothesis formulation, data collection and analysis. The project also provides these at-risk students selected by middle school science teachers with 20 weeks of mentoring, emphasizing environmental science and engineering careers.

The Winner's League Foundation, *Eco Profile Information Curriculum*, \$49,546.00, November 1998-December 1999, Franklin County, 99G-032

To allow middle school students to evaluate everyday consumption choices in households and local businesses in terms of their impacts on natural resource depletion and environmental degradation. Teacher's Guide and Eco Profile tools and learning materials will be developed, piloted, refined, and implemented in four diverse schools and at least 24 central Ohio businesses.

Ohio Department of Health, *7th and 8th Grade Indoor Air Quality Education Project*, \$49,911.00, November 1998-November 1999, Delaware, Fairfield, Franklin, Hocking, Knox, Licking, Madison, Perry, Pickaway, and Union Counties, 99G-035

To develop and distribute materials related to indoor air quality and introduce them to middle school science teachers and curriculum advisors in 10 counties through workshops led by Ohio Department of Health staff.

Seal of Ohio Girl Scout Council, *Hands-On, Minds-On Environmental Education*, \$14,418.70, May 1999-July 2000, Franklin County, 99G-036

To allow 1500 at-risk inner city fourth grade students to study the Big Darby ecosystem through a field trip to the Elam Education Center and Camp Ken-Jockey, led by trained Girl Scout naturalists. Project includes pre-and post-visit activities and testing.

Cleveland State University, *Investigating Your Environment: Schoolyard Science*, \$28,026.00, May 1999-December 1999, Cuyahoga and Lorain Counties, 99G-037

To create an understanding of the urban environment for 400 middle school students via a week-long teacher training workshop and follow-up one-day workshop to assess use in the classroom. Program will enhance scientific method skills of teachers and students through experiments and a final project.

Cleveland Public Schools/Garrett Morgan Cleveland School of Science, *The Crooked River*

Observation Patrol, \$49,049.00, November 1998-June 2001, Cuyahoga County, 99G-038

In partnership with the U.S. Coast Guard, to engage middle school students in map reading, data analysis, field sampling, and water quality testing of the upper Cuyahoga and Lake Erie. Students will study the effects and interaction of water quality, topography, and regional development on the River and Lake.

Automotive Service Association of Ohio, Inc., *Project for a Self-Help Guide to Environmentally Sound Automotive Service Operations*, \$50,000.00, November 1998-May 2001, statewide, 99G-045

To provide a self-help manual and local workshops to assist automotive service, collision and transmission repair businesses in compliance with regulations pertaining to hazardous and solid waste management, air and water pollution control. Program will award shops with a certificate indicating compliance with sound environmental practices.

Athens County Educational Service Center, *Environmental Education Center for Problem Solving*, \$49,579.00, October 1998-May 2000, Athens and Perry Counties, 99G-052

To construct an Environmental Education Center in existing buildings at natural sites located at or near the school districts, with a library, lab equipment, web page, and facilities to display student projects and make presentations. Project includes in-service training for teachers to develop student teams to solve local environmental problems.

Ohio Energy Project, *Power Partners Program*, \$49,995, May 1999-April 2000, statewide, 99G-060

Builds on two previous OEEF grants (96G-160 and 97G-120) and ongoing efforts by American Electric Power, the Ohio Department of Development Office of Energy Efficiency and other partners, to educate students and teachers about energy efficiency and consumption. Provides workshops and materials to enable 15 more school districts to use an Energy Cycle in their classrooms to educate 510 teachers and 8,500 students about ten different kinds of energy, lighting, electrical safety, energy transformations and efficiency.

Wright State University, *Southern Ohio GLOBE Environmental Science Education Initiative*, \$38,487, May 1999-June 2000, southwest Ohio, 99G-064

Provides equipment and training for 30 K-12 teachers to utilize the Global Learning and Observations to Benefit the Environment (GLOBE) program. Students use scientific protocols to monitor local atmospheric, climate, land cover, hydrology and soil conditions, and post data into a global database via linked internet web sites. (See also OEEF Grant 99G-108.)

Mahoning Valley/Northeast Ohio Camp Fire Council, *Kaleidoscope of Environmental*

Experiences, \$27,823.70, May 1999-April 2000, Mahoning County, 99G-067

Provides twice-weekly life sciences programs for 30 at-risk inner city Youngstown 5-10 year olds for one year, accompanied by bimonthly environmental service projects, field trips, and use of a land lab at the McGuffey Historical Site. Project will equip an interactive environmental learning center for ongoing use, and student progress will be evaluated by the Youngstown State University Center for Human Services Development.

Walnut Hills High School Alumni Foundation, *Walnut Hills High School Arts and Science Center*, \$48,779, June 1999-June 2000, Hamilton County, 99G-069

A new Outdoor Learning Center will include a flowing stream system with intermittent ponds and wetlands, bordered by sloping land surfaces with selected terrestrial landscapes. This facility will be used by general and advanced placement science classes in grades 7-12. Project provides supplies and equipment to include environmental applications in earth sciences, geology and geomorphology, biology and ecology, chemistry and physics. A new Environmental Science Advanced Placement course will be added to the curriculum.

Trumbull County Health Department, *Trumbull County Stream Quality Monitoring Program*, \$48,653.53, May 1999-November 2001, Trumbull County, 99G-073

Develops and trains a volunteer stream quality monitoring program involving four organizations and 335 students from eight schools. Students and volunteers will participate in workshops, survey macroinvertebrate populations, conduct stream-walk appraisals, and share the results via a county database and internet web site.

ParkWorks (formerly Clean-Land, Ohio), *Changing Lands*, \$45,225.00, July 1999-August 2000, Cuyahoga County, 99G-076

Provides a series of Saturday workshops for a group of students, parents and teachers from the Garrett Morgan School of Science, an inner-city magnet middle school in Cleveland. Workshops will include lecture/discussion, field trips and role-playing exercises that focus on various ecosystems, urban sprawl, land use planning, and trade-offs between environmental protection and economic development. Workshop materials will be developed into a program guide for broader distribution among area teachers and organizations.

The Why Not Corporation, *Renewable Energy Multimedia Curriculum*, \$48,500, June 1999-January 2001, Greene, Hamilton, Miami and Montgomery Counties, 99G-079

Builds on an existing NASA grant that established photovoltaic (solar cell) and wind generator arrays at Wilberforce University and the Glen Helen Nature Center's Trailside Museum, to demonstrate renewable energy generation and use by the buildings. This project will develop a multimedia curriculum for 5th and 7th graders allowing students to utilize real-time data from these projects. Components include a video, CD-ROM with Internet links, curriculum guide for teachers, and a classroom model wind-solar generating system. Curriculum includes units on technology, site selection, aesthetics, environmental factors, utility regulations, energy consumption and efficiency. Master teachers in public and Montessori schools in the four counties will assist in developing and testing the curriculum, which will eventually be widely marketed.

Ohio State University Extension, *Community Garden*, \$31,899, May 1999-October 2000, Licking County, 99G-081

Involves 50 youth ages 14-17 assigned to community service by the Licking County Juvenile Court in a community garden over the course of two growing seasons. Students receive training in garden design; traditional, organic and Native American farming methods; composting; erosion control; and ground water protection. Students from local 4-H programs participate as student mentors. Garden produce is provided to underprivileged households.

Clean Air Conservancy, *Teaching Cleaner Air Workshop*, \$44,015.92, May-December 1999, statewide, 99G-083

Provides training for 300 middle school science teachers to use a new curriculum demonstrating the relationship between electricity usage and pollution emissions. Teachers will learn to conduct classroom experiments that include identifying pollutants such as sulfur dioxide, nitrogen oxides and carbon dioxide in the immediate environment, and building a small-scale wet scrubber to replicate the air pollution control technology available to utilities.

Ohio University Southern Campus, *OUSC/Wayne National Forest Nature's Classroom Program*, \$47,133, May 1999-April 2001, Lawrence County, 99G-091

Equips a Nature's Classroom environmental and conservation study center at the Wayne National Forest Vesuvius Lake recreational area for use by OUSC students, pre-service and in-service classroom teachers, K-12 students, and visitors to the Forest. Project includes training programs targeting each of these user groups.

The Nature Center at Shaker Lakes, *Pre-School Environmental Education*, \$15,230, June 1999-August 2000, Cuyahoga County, 99G-094

An Early Childhood Education Specialist will provide bi-weekly nature study programs

for Cleveland-area inner city Head Start classes. Project includes indoor and outdoor components, participation by parents and siblings at seasonal activities, and training workshops for Head Start teachers.

Ohio EPA, Southwest District Office/Small Business Assistance Office/Office of Pollution Prevention, *Waste Reduction Ideas for the Transportation Industry: Case Study Success Stories*, \$19,500, May 1999-April 2000, statewide, 99G-096

Develops a 15-minute video demonstrating success stories of pollution prevention and waste reduction in businesses doing motor vehicle and equipment maintenance and repair. Product will be distributed via trade organizations such as the Automotive Service Association of Ohio, the Association of Equipment Dealers, and the Ohio Chapter of the National Auto Dealers Association, as well as high school and adult education vehicle repair programs. Project supplements an ongoing OEEF grant project developing a compliance manual and workshops for automotive service businesses (99G-045).

Rural Action, Inc., *Rural Action Environmental Learning Project*, \$49,871, September 1999-May 2001, Athens and Vinton Counties, 99G-105

Provides half-day and full-day outdoor environmental programs for 2500 students in grades 1-8 in three school districts, using episodes from Project WET, Project WILD, Project Learning Tree, and other recognized curricula. Project includes training for intern and volunteer high school students, a one-day in-service workshop for 40 area teachers, and a *SchoolLinks* environmental web site linking schools with local environmental projects and programs. Project builds on a previous OEEF grant to the Athens County Educational Service Center, Hocking College and other local school districts (99G-052).

Case Western Reserve University Office of Student Community Services, *Aquatic Quality Urban Action Corps: Expansion of Urban Watershed Education*, \$50,000, May 1999-August 2000, Cuyahoga County, 99G-107

Trains a corps of CWRU student environmental educators to assist Cleveland area science teachers and staff from Ohio State University Extension 4-H and the Nature Center at Shaker Lakes in providing weekly after-school watershed stewardship programs for at least 300 8-12 year olds during the school year and summer, and in-school environmental programs at an inner-city elementary, middle and high school. Involves the youth served in community presentations, and provides watershed stewardship information and volunteer opportunities to at least 100 adults in the surrounding neighborhoods. Expands on a previous OEEF grant (96G-156).

Stark County Educational Service Center, *Stark County Environmental Literacy Initiative*, \$49,984, May 1999-May 2001, Stark County, 99G-108

Provides equipment and training for 100 K-12 teachers in 17 school districts to utilize the Global Learning and Observations to Benefit the Environment (GLOBE) program. Students use scientific protocols to monitor local atmospheric, climate, land cover, hydrology and soil conditions, and post data into a global database via linked internet web sites. (See also OEEF Grant 99G-064.)