



## Ohio's Initiative to Reach Under-served Audiences for K-12 Environmental Education

- Identified **five target audiences** through survey of non-formal EE providers: Urban/Minority/Multi-Cultural, Social Studies, Language Arts, Early Childhood, and High School
- Build on **organizational structure** already in place through EECO-Ohio EPA eight-year partnership: 1 FTE split between EECO and Ohio EPA; a part-time regional director in each of the state's **12 education regions**; tradition of **collaboration with other regional EE providers** to offer workshops for teacher professional development; and a network of 1800 participating school contacts. Each region chose one audience for focus.
- Attended EETAP's Nebraska leadership clinic in 2002; planning "**Rising Stars**" **Leadership Clinic** in Ohio for June, 2004, to target five audiences (five-pointed star) in 12 regions (zodiac constellations). EECO statewide and regional conferences, newsletter and other activities are structured to increase under-served audience content and participation. OEEF is showcasing outstanding grant projects of particular relevance to these 5 audiences, for benchmarking.

### Urban/Minority/Multicultural Activities

"Project DUE (Discovering our Urban Environment)" two-year intensive effort to focus local EE provider resources on Clifton Elementary in Cincinnati. Collaboration with Greater Cincinnati Environmental Educators and Cincinnati Public Schools.

Region 1's "Urban Environmental Learning Collaborative of Greater Columbus" produced a booklet of favorite environmental activities to be used with after-school youth programs. Offering workshops for after-school care providers within the collaborating network of social service agencies.

Collaboration with the Ohio Alliance of Black School Educators, Nature Center at Shaker Lakes, and Cuyahoga Valley Environmental Education Center, to offer professional development for teachers, and identify successful models from their programs.

## Language Arts Activities

“The Language of Nature: Using the Environment to Teach Imaginative Writing” and “The Language of Nature II: Using Writing to Explore Sense of Place, Sense of Time,” week-long summer retreat and writing institute for K-12 teachers statewide in 2002 and 2003, team-taught by a fiction writer, non-fiction-writer, poet, and naturalists with strong interest in journaling. Third retreat planned for 2004.

“Green Links: Integrating EE with Language Arts” two-day workshop for teachers in Region 6, June, 2003, featuring Amish author David Kline

## Social Studies and High School Activities

“Beyond Brockovich: Using Drinking Water Contamination Case Studies to Meet Ohio’s New Academic Content Standards for High School Science and Social Studies” presented at 3 social studies teacher conferences, 1 science teacher conference, and 3 environmental educator conferences; beginning to work with teacher teams in Columbus, Cincinnati, Lima, Logan and Marietta.

Taking advantage of three high-profile historical celebrations in Ohio in 2003: the **Ohio Bicentennial**, the **Lewis and Clark Eastern Legacy Bicentennial** along the Ohio River, and the **Centennial of Flight Celebration** in Dayton marking the Wright Brothers’ first flight, to showcase related environmental education curriculum and activities.

“Using EE to Teach Social Studies” workshops offered at four teacher conferences. Joint summer workshops on EE resources for high school teachers offered in regions 9-10-11.

Showcasing OEEF-Funded grant projects with history, geography, civics and ethics components, e.g.,

- “Decisions, Decisions” mock city council meeting on local environmental issue proposals, at Lima Alternative High School;
- Clermont County high school students are digitizing archival photos documenting historical decline and improvement in Ohio River Water Quality, and entering longitudinal student-collected water quality monitoring data into county GIS database to document water quality decline as development proceeds in western portions of county, to inform local planning process.
- Jonathan Alder Local Schools studied bitter local controversy over proposed Little Darby National Wildlife Refuge, analyzing water quality and the content of speeches and materials published by opponents and proponents of the Refuge.

- “Birds, Flight and the Wrights” project and trail at Aullwood Audubon Center in Dayton, allow students and visitors to compare the flight of seeds, squirrels, dragonflies, butterflies, bats, birds and airplanes.
- “Pioneer Boxes” traveling trunks enable 3<sup>rd</sup> and 4<sup>th</sup> graders to explore how Ohio land and natural resources have been treated and mistreated since the pioneer days.

Aligning Ohio EPA’s *Protecting Your Environment* CD ROM with Ohio Dept of Education’s new academic content standards for high school science, social studies, and technology education

### Early Childhood Activities

Several regions collaborated to host two two-day workshops for teachers and nonformal educators, with noted early childhood educator Joseph Cornell, author of *Sharing Nature With Children*, using the Naturalist Intelligence as a focus.

Akron-Summit County Head Start Fatherhood Initiative

OEEF received permission from Ohio author Dr. Ruth Wilson to post *Fostering A Sense of Wonder During the Early Childhood Years* on the Web as a downloadable file, to make it more widely available. [www.epa.state.oh.us/oeeef/](http://www.epa.state.oh.us/oeeef/)

### Some Lessons Learned

- Much harder than we thought to get the attention of these audiences: e.g., language arts and social studies teachers hear “environmental education” and think “oh, that’s for science teachers”. The urban audience may think its all about going out in the woods. It’s very important to go to THEIR professional events, use THEIR professional terminology, and KEEP GOING BACK.
- Current revisions of Ohio’s academic content standards and model curriculum have provided both a hindrance and an opportunity. Teachers are distracted, and workshop attendance everywhere is down. We have worked hard to weave EE into the state’s new standards, and a lot of effort is underway to align our programs with the new standards.
- Cross-pollination. We found that the Brockovich program developed for Social Studies also works for the High School audience. Head Start is a good ally for both early childhood and urban/minority/multi-cultural initiatives. The urban/multicultural initiative is finding audiences we did not at first anticipate, such as the Hispanic community in the Youngstown area, and a growing Somali/Muslim community in Columbus. We learned that we must accommodate those people who are interested in a different under-served audience than the one their region is targeting.

- Unexpected Benefits – e.g., the Region 1 team found unexpected opportunities to contribute EE to programs for homeless youth in Columbus, and for high school students to present the information to younger students in the after-care setting. The Region 5 collaborators are working closely with the Archdiocese of Cincinnati to extend programming opportunities in parochial schools.

# Ohio EPA-Environmental Education Council of Ohio Partnership Regional Priorities

