



sloshing through **puddles** after a rainstorm

watching **ants carry crumbs** across the sidewalk

catching **fireflies** in your hand

did you have a
“special outdoor place” ...
a nearby park
a big open field
behind your neighborhood
an abandoned lot
that was left to grow wild

Exploring and learning in the natural world when we're children lays the foundation for us to protect the environment in later years.¹ But to do so, we need knowledge and skills to understand and deal with environmental problems. Unfortunately, many Americans may not have these important skills and knowledge. The *1999 National Report Card on Environmental Knowledge, Attitudes, and Behaviors*² gave Americans an “F” on their understanding of causes of basic environmental problems in the 21st century. Only one person in nine scored 60% or above on a knowledge test of issues that are likely to be a major problem in the next 15-25 years. One person in 25 scored 70% or above on an environmental knowledge quiz.

Nowadays American kids watch three to four hours of television each day.³ One fourth grader, asked about whether he liked to play indoors or outdoors better, said “I like to play indoors better ‘cause that’s where the electrical outlets are.”⁴ Today’s children are becoming cut off from the natural world, from their neighborhoods and their own back yards.

Environmental education helps children discover the world around them. At the same time, it helps them understand and learn about themselves.⁵ That’s just one reason why environmental education is *good* education for Ohio.

Research shows that Ohio adults may be lacking knowledge that is important for decision making on community issues, such as land use planning and waste management.⁶ Environmental education provides Ohioans with the knowledge and critical thinking skills they need.

Americans understand the need for environmental education. The same *National Report Card* that gives poor environmental “grades” to Americans also shows that 95% of American adults support environmental education in our schools. Over 80% feel that adults need environmental education, too. A majority of Americans also believe that environmental quality and a strong economy can go hand in hand.⁷



What Makes Environmental Education Environmental?

There are a few common features that make education *environmental*.¹⁰

Environmental education:

- ☛ focuses on *environmental topics or issues*, such as “the creatures in a stream,” “improving our air quality,” “how satellites help us gather information about the environment,” or “safely applying pesticides to your lawn.”
- ☛ helps people gain an understanding of *scientific concepts and principles* related to the environment.
- ☛ promotes understanding of how *people and society* relate to the environment.
- ☛ provides scientifically sound, research-based information that *people can trust to be true*.
- ☛ focuses on the places where we live, something that is *important to all of us*.
- ☛ offers opportunities for learning at *all stages of life*.
- ☛ lets people *learn outdoors* as much as possible.
- ☛ builds an *appreciation* of the environment and of our need to protect it.
- ☛ helps people skillfully use reliable information to *make up their own minds* about environmental problems and their solutions.



Environmental education does *not* try to make people – children or adults – think any certain way about environmental issues or how environmental problems should be solved. The motto of environmental education is “teaching people *how* to think, not *what* to think”.

“I live in California now, but I just had to bring my daughter to the place that meant so much to me when I was growing up.

I spent my summers here, taking special classes, learning about the out-of-doors and exploring the farm... I wish there were more places like Aullwood.

I miss it!”

- Visitor at Aullwood Audubon Center and Farm





Education for the Environment, And for People

Environmental education is education *in, about, and for* the environment.⁸

Education *in* the environment helps people become sensitive to their surroundings and the natural world.

Education *about* the environment helps people understand the world around them, and their part in it.

Education *for* the environment helps people to care for and improve the environment.⁹

Environmental education is also education for *people*. It enriches the lives of people at all ages in all kinds of places. It happens in classrooms from preschool through college levels; in urban and rural settings; in schoolyards and backyards; in parks, zoos, nature centers, museums, camps, parks, preserves and recreation areas; in community centers and organizations; in religious organizations; and in business and industry.



Environmental education:

- introduces young children to the wonders of nature,
- excites youth to learn through hands-on experiences,
- brings families together in their leisure time,
- informs citizens on important issues, and
- helps people work together in ways that are good for the environment *and* the economy.

“Environmental education helps all of us see the strands that weave everyone together. From business to education to the natural world, all our actions have effects on many others.”

– Tami Longaberger,
President & CEO, The Longaberger Company
and an avid birdwatcher



Cheri Brown,
Audubon Volunteer
A.K.A. "The Bird Lady"

Cheri Brown, 4th grade teacher at Robert Louis Stevenson Elementary in Grandview, Ohio, is a long-time environmental educator. "Environmental education makes it easier for me to teach what I already need to teach," says Cheri. "I can tie everything back to something in the students' schoolyard - something that is real and meaningful to them. Our whole purpose is to open their eyes to the world that surrounds them in their own backyard."

"I see a new realization on the parts of students and teachers alike that learning can be exciting and meaningful at the same time as it is profitable and proficiency-related."

- Dr. Susan E. Piper,
teacher Forest Hill Parkway Elementary School on the program at Cuyahoga Valley Environmental Education Center

Good Education

We all strive to provide a good education for our children. Environmental education is just that, *good* education. It uses teaching methods that draw upon the best of what we know about how people learn.

Environmental education:¹¹

- is *hands-on and minds-on*, including skills for problem solving, decision-making, reasoning, and creative thinking through active learning.
- uses *cooperative and collaborative learning*.
- makes use of many different *learning settings*, such as the outdoors, laboratories, classrooms, and places in the community.
- appeals to many different *learning styles*.

Academic Achievement Through Environmental Learning

Educators are starting to ask the question, "How does using the environment in education affect learning in general?"¹² Several recent studies examined the impact of using the environment as a tool for learning in a variety of subject areas.¹³ These studies provide evidence of

- increased academic performance in many different subject areas,
- reduced disciplinary problems,
- increased enthusiasm for learning.



Environmental education can be a powerful vehicle for academic achievement. The principles and methods of environmental education support many of Ohio's new academic content standards. Environmental educators often design their programs to help students achieve these standards.

Environmental education is *good* education for Ohio.

wildlife...
 health and safety...
 clear skies...
 productive topsoil...
 clean water...
 strong economy...
 the beauty of our
 surroundings.



The Need – Now, More Than Ever

The quality of our environment is important to everyone. Now, more than ever, Ohio needs environmental education – *good* education for all Ohioans.

Make a Difference for Education.

Environmental education is good for Ohio. You can make a difference by supporting environmental education in your schools and community. To learn more, contact:

- 1 David Sobel, "Beyond Ecophobia: Reclaiming the Heart in Nature Education," 1995.
- 2 National Environmental Education and Training Foundation (NEETF) and Roper Starch Worldwide, *The Eighth Annual Survey of Adult Americans*, 1999.
- 3 American Academy of Child and Adolescent Psychiatry.
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- 5 Ruth Wilson, *Fostering a Sense of Wonder During the Early Childhood Years*, 1993.
- 6 Karen Mancl, Kathleen Carr, and Michele Morrone, "Environmental Literacy of Ohio Adults," 1999.
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- 8 A. Lucas, *Environment and Environmental Education: Conceptual Issues and Curriculum Implications*, 1972.
- 9 Robert E. Roth, Diane Cantrell and W. Bousquet, "Impact on Environmental Education," 1980.
- 10 Joyce Meredith, Diane Cantrell, Michael Conner, Bruce Evener, Diana Hunn, and Paul Spector, *Best Practices for Environmental Education: Guidelines for Success*, 2000.
- 11 Environmental Education Council of Ohio (EECO), "Guidelines for Environmental Education Activities," 1996.
- 12 Herbert W. Broda, "The Environment as an Integrating Context for Learning," 2001.
- 13 Gerald A. Lieberman and Linda L. Hoody, *Closing the Achievement Gap: Using the Environment as an Integrating Context for Learning*, 1998; J. L. Glenn, *Environment-Based Education: Creating High Performance Schools and Students*, 2000; State Education and Environment Roundtable, *California Student Assessment Project: The Effects of Environment-Based Education on Student Achievement*, 2000.



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