



The Roots of Environmental Education: How the Past Supports the Future

by Edward J. McCrea

Photo provided by National EE Training Foundation



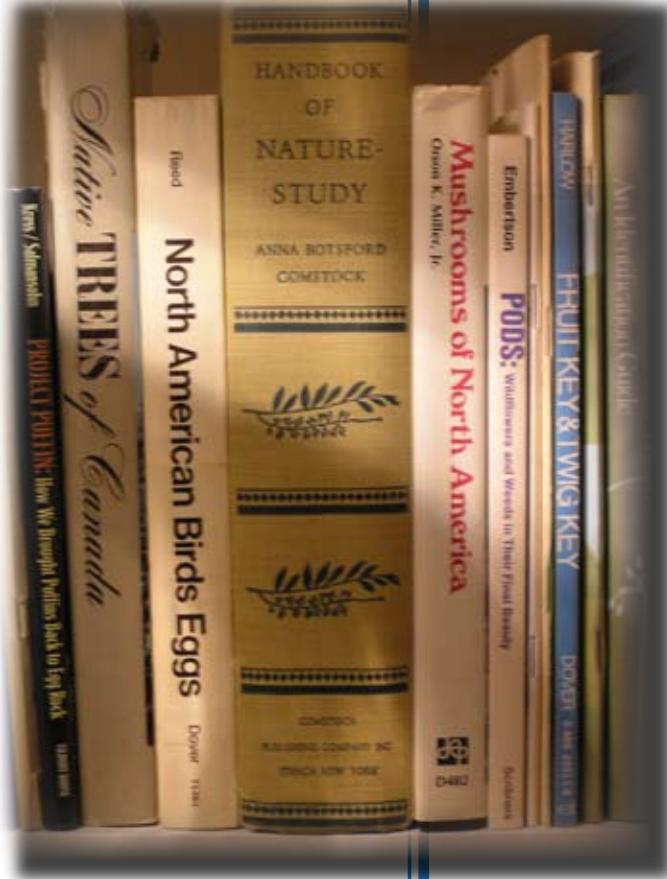
The EE activities of today have their roots in a widespread and diverse history.

The field of environmental education has sometimes been compared to a thriving, robust tree with the tree's many branches representing the diversity and variety in the field. Given the differing definitions, the many programs, the plethora of materials, and the fractal like growth of the field, perhaps the comparison with a tree is apt. But, what lies underground? What are the roots of the field?

As with a tree, the roots of environmental education are widespread and diverse. They provide support for the present field while supplying the nourishment for future growth.

Where Do We Come From?

Does environmental education owe its origins to the influence of philosophers such as Jean-Jacques Rousseau (1712-1778) who felt that education should maintain a focus on the environment, or to educators such as Louis Agassiz (1807-1873) who encouraged students to "study nature, not books"? Perhaps environmental education has its roots in the nature study movement of the early 1900s or the conservation education programs of the 1930s "Dust Bowl" era. Maybe, the public awakening to pollution and general environmental problems culminating in the first Earth Day in 1970 can be seen as the roots of modern environmental education. Certainly, environmental educators must view the Belgrade Charter written in Belgrade, Yugoslavia by the United Nations Educational, Scientific, and Cultural Organization in 1975 and important conferences such as the 1977 Intergovernmental Conference on Environmental Education in Tbilisi as part of the strong foundation of the thriving tree of environmental education.



Anna Botsford Comstock was an important author in the nature study movement.

More recently, the passage of the National Environmental Education Act of 1990 is acknowledged as an important effort by the U.S. Congress to nurture the field of environmental education. By establishing an Office of Environmental Education in the U.S. Environmental Protection Agency, the Act has contributed significantly to the field's foundation of quality programs and resources.

As indicated in the timeline in the following section, it is easy to see that all of the items cited above plus many, many more, are part of the deep roots that support the environmental education field. This multifaceted history is one reason for the diversity, resilience, and inclusive nature of environmental education today.

Environmental Education Timeline:

Important events, publications, legislation, and conferences in the environmental education field

(The following timeline is adapted and expanded from material on EE-Link—<http://eelink.net/>)

Early Influences

1762

Jean-Jacques Rousseau publishes *Emile*, an educational philosophy written in the form of a novel. In it he maintains that education should include a focus on the environment, argues that one of the main things a teacher has to do is to facilitate opportunities for the student to learn, and discusses the stages of human development and their implications for teaching and education.

1807

Louis Agassiz is born. He grew to become a renowned scientist who used articles in the popular press to gain support for his scientific theories and urged his students to learn directly from nature.

1891

Wilbur Jackman writes *Nature Study for the Common School*, which defined the nature study movement.

1905

Liberty Hyde Bailey, noted botanist, writer, college administrator, educator, and proponent of nature study rejects the use of the term “environmental education” in his writing because he thought it was imprecise, theoretical, pompous, and would always need to be explained.



Louis Agassiz was a renowned scientist who urged his students to learn directly from nature.

1908

The American Nature Study Society is established with Liberty Hyde Bailey as its first president. Subsequent presidents include such notable authors and educators as Anna Botsford Comstock, Edwin Way Teale, and Roger Tory Peterson.

1920s

Ecology begins to develop as a scientific field. It presents a comprehensive view of the natural world and an integrated approach to its study.

The Conservation Education Era

1930s

The “Dust Bowl” in the American heartland gives rise to the conservation education movement supported by state and federal natural resource agencies as well as many non-government organizations.

The progressive education movement led by John Dewey promotes a more student-centered and holistic approach to education. The movement includes many education approaches that are important aspects of environmental education today—learning by doing, lifelong learning, integrated and interdisciplinary efforts, etc.

1935

The National Education Association assumes a leadership role for conservation education in the schools.

Wisconsin becomes the first state to enact a state statute requiring pre-service teachers to have “... adequate preparation in the conservation of natural resources.”

1946

The University of Wisconsin-Stevens Point offers a degree in conservation education.

1948

Thomas Pritchard, Deputy Director of the Nature Conservancy in Wales, uses the term “environmental education” at a meeting in Paris of the International Union for the Conservation of Nature. This is perhaps the first public professional use of the term.

1891

Wilbur Jackman writes Nature Study for the Common School, which defined the nature study movement.



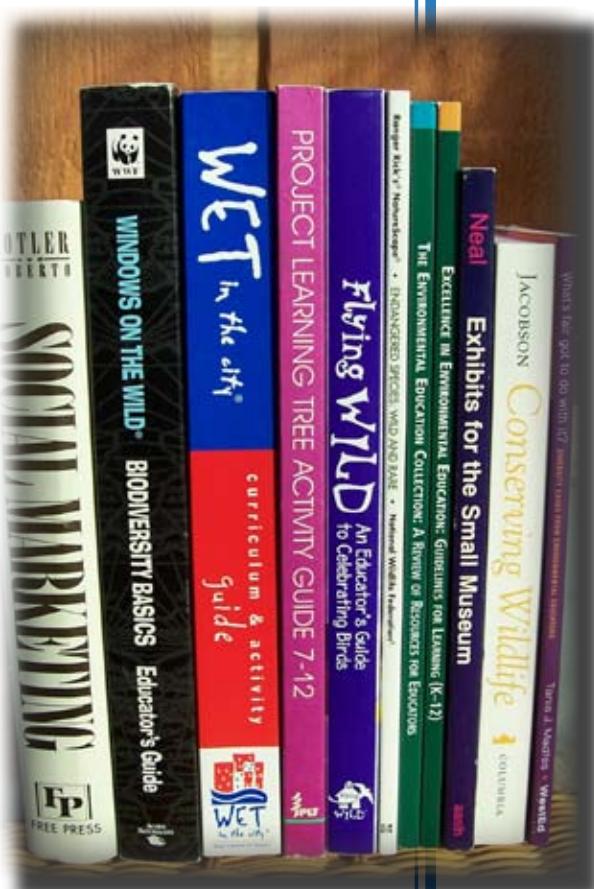
Photo provided by National Archives

The conservation education movement had its origins in response to wind erosion and other resource problems in America's heartland.

1930s

The “Dust Bowl” in the American heartland gives rise to the conservation education movement supported by state and federal natural resource agencies as well as many nongovernment organizations.

Photo provided by Edward McCrea



Resource materials abound for the modern environmental educator.

1953

The Conservation Education Association is formed to support the many educators working in the field of conservation education.

1954

The Association of Interpretive Naturalists (now the National Association for Interpretation) is formed.

The Foundation for Modern Environmental Education

1969

The National Environmental Policy Act of 1969 (P. L. 91-190) is passed.

“The purposes of this Act are: To declare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the Nation; and to establish a Council on Environmental Quality.”

Professor Clay Schoenfeld begins the journal, *Environmental Education*, later renamed *The Journal of Environmental Education*.

Dr. William Stapp and his students at the University of Michigan formally develop and publish a definition of “environmental education.”

1970

U.S. Congress passes the National Environmental Education Act of 1970 (P. L. 91-516). The Act authorizes the:

- Creation of an Office of Environmental Education in the U.S. Dept. of Health, Education and Welfare
- Establishment of a National Advisory Council for environmental education
- Establishment of a domestic grants program

(The Office of Environmental Education is funded through 1975 and awards grants to provide professional development for teachers and develop environmental education curricula. In 1981 Congress eliminates the Office and the programs it manages.)

1970

On April 22, 20 million people across America celebrate the first Earth Day.

The Western Regional Environmental Education Council (WREEC) (now the Council for Environmental Education) is created as a “... unique effort to create a partnership and network between education and natural resource professionals in support of environmental education.”

On April 22, 20 million people across America celebrate the first Earth Day. The event is organized in response to concerns about pollution and overall environmental quality.

1971

The National Association for Environmental Education (now the North American Association for Environmental Education (NAAEE)) is founded. NAAEE is a professional association for environmental educators.

1972

The United Nations Conference on the Human Environment in Stockholm, Sweden is held. Recommendation 96 calls for the provision of environmental education as a means to address environmental issues worldwide.

The Alliance for Environmental Education is founded. “AEE is a broad coalition advocating environmental education...made up of many diverse national, international, and regional groups—conservation and education organizations, corporations, and organized labor.” (The Alliance was disbanded in the mid-1990s.)

1975

The United Nations Educational, Scientific, and Cultural Organization sponsors a conference in Belgrade, Yugoslavia. At the conference, delegates ratify the Belgrade Charter. The charter outlines the basic structure of environmental education.

The Alliance for Environmental Education and the Western Regional Environmental Education Council hold the Snowmass Conference—Environmental Education: Perspectives and Prospectives.

The Office of Environmental Education establishes the Federal Interagency Committee on Education, Subcommittee on Environmental Education to act as the coordinator of federal environmental education efforts.

1976

WREEC and the American Forest Institute (now the American Forest Foundation) develop Project Learning Tree. “PLT helps [K-12] students gain awareness and knowledge of the natural and built environment, their place within it, as well as their responsibility for it.”

1971

The National Association for Environmental Education (now the North American Association for Environmental Education (NAAEE)) is founded.

1977

The United Nations Educational, Scientific, and Cultural Organization in cooperation with the United Nations Environment Programme holds the Intergovernmental Conference on Environmental Education in Tbilisi, Republic of Georgia.

The St. Louis International Regional Conference on Environmental Education is held and produces *A Report on the North American Regional Seminar on Environmental Education*. Among other papers, this report included John Hug's "Two Hats" essay and Gary Harvey's "A Conceptualization of Environmental Education."

1977

The United Nations Educational, Scientific, and Cultural Organization in cooperation with the United Nations Environment Programme holds the Intergovernmental Conference on Environmental Education in Tbilisi, Republic of Georgia. The conference lays out the goals, objectives, and guiding principles of environmental education that many environmental educators still use today.

1978

The National Leadership Conference on Environmental Education is held in Washington, D.C. The conference produces the report *From Ought to Action*.

1980

NAAEE President Clay Schoenfeld creates the National Commission on Environmental Education Research (renamed in 1987 to The North American Commission on Environmental Education Research and in 1999 to NAAEE's Research Commission).

The *Journal of Environmental Education* publishes "Goals for Curriculum Development in Environmental Education" by H. Hungerford, R. Peyton, and R. Wilke.

1981

NAAEE's National Commission on Environmental Education Research publishes *Research in Environmental Education, 1971-1980*.

1983

Policies and Practices, the First National Congress for Environmental Education Futures is held August 12-17 in Burlington, VT.

WREEC and the Western Association of Fish and Wildlife Agencies develop Project WILD. Project WILD sponsors conservation and environmental education programs with a focus on wildlife for grades K-12.

1984

NAAEE's National Commission on Environmental Education Research publishes *A Summary of Research in Environmental Education, 1971-1982*.

1987

The World Commission on Environment and Development publishes the Brundtland Report. Also known as *Our Common Future*, this report introduced the idea of sustainable development in which environmental protection and economic growth are viewed as interdependent concepts.

The United Church of Christ's Commission for Racial Justice issues the report *Toxic Wastes and Race in the United States: A National Report on the Racial and Socioeconomic Characteristics of Communities with Hazardous Waste Sites*.

1989

NAAEE initiates a cooperative program of affiliation with state and provincial environmental education associations.

Present Programs and Building for the Future

1990

U.S. Congress passes the National Environmental Education Act of 1990 (P. L. 101-619). The act authorizes the following:

- An Office of Environmental Education in the U.S. Environmental Protection Agency
- An environmental education and training program
- Environmental education grants
- Student fellowships
- The President's Environmental Youth Awards
- The Federal Task Force and National Advisory Council
- The National Environmental Education and Training Foundation (NEETF)

The Council for Environmental Education and The Watercourse initiate Project WET (Water Education for Teachers). Project WET facilitates and promotes awareness, appreciation, knowledge, and stewardship of water resources in students K-12.

1991

The University of Wisconsin Stevens Point founds the National Environmental Education Advancement Project.

The First National People of Color Environmental Leadership Summit is held in Washington, DC. Summit participants adopt the Principles of Environmental Justice.

1992

The United States Environmental Protection Agency awards its first Environmental Education Training Program to the National Consortium for Environmental Education and Training, a cooperative partnership led by the University of Michigan.

1990

U.S. Congress passes the National Environmental Education Act of 1990 (P.L. 101-619).

1993

The North American Association for Environmental Education initiates the National Project for Excellence in Environmental Education. The Project works to create guidelines for environmental education.

The Council of State Governments, Environmental Education Subcommittee, National Environmental Task Force, produces a Model Environmental Education Act with the recommendation that state legislatures adopt it.

The United Nations conducts the Conference on Environment and Development in Rio de Janeiro, Brazil. Chapter 36 of Agenda 21 focuses on “reorienting education towards sustainable development; increasing public awareness; and promoting training.”

The U. S. Environmental Protection Agency establishes the Office of Environmental Justice.

The Federal Interagency Committee on Education, Subcommittee on Environmental Education, is disbanded after the 1990 Environmental Education Act creates the Office of Environmental Education and a new Federal Task Force on Environmental Education is established.

Times Mirror Magazines in collaboration with Roper Starch launches the National Report Card on Environmental Attitudes, Knowledge and Behaviors. The National Environmental Education and Training Foundation takes over the project in 1995 and publishes a report each subsequent year.

The United Nations Educational, Scientific and Cultural Organization, The International Chamber of Commerce, in cooperation with the United Nations Environment Programme sponsor A World Congress for Education & Communication on Environment and Development (ECO-ED). “ECO-ED’s purpose is to stimulate informed action by improving the accuracy, quality and delivery of education and communication relating to the environment and sustainable development. A practical and action-oriented initiative, ECO-ED fosters the cooperative exchange of relevant knowledge among educators, scientists, businesses, government, voluntary organizations and the media.”

1993

The North American Association for Environmental Education initiates the National Project for Excellence in Environmental Education. The Project works to create guidelines for environmental education.

The National Association for Interpretation creates an Environmental Education Section.

1994

The President’s Council on Sustainable Development holds the National Forum on Partnerships Supporting Education about the Environment, at the Presidio, San Francisco, California. The report, *Education for Sustainability: An Agenda for Action*, is produced as a result of this meeting.

President Clinton issues Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority and Low-Income Populations.” Topics addressed include: Agency Responsibilities; Research, Data Collection, and Analysis; Subsistence Consumption of Fish and Wildlife; and Public Participation and Access to Information.

1995

The U.S. Environmental Protection Agency awards the second Environmental Education Training Program to the North American Association for Environmental Education and NAAEE establishes the Environmental Education and Training Partnership (EETAP).

EETAP assumes support and programmatic guidance for NAAEE’s National Project for Excellence in Environmental Education. With EETAP funding, NAAEE joins with Northern Illinois University to continue production of guidelines for the environmental education field.

1996

The George C. Marshall Institute’s Independent Commission on Environmental Education (now the Environmental Literacy Council) produces *Are We Building Environmental Literacy?*

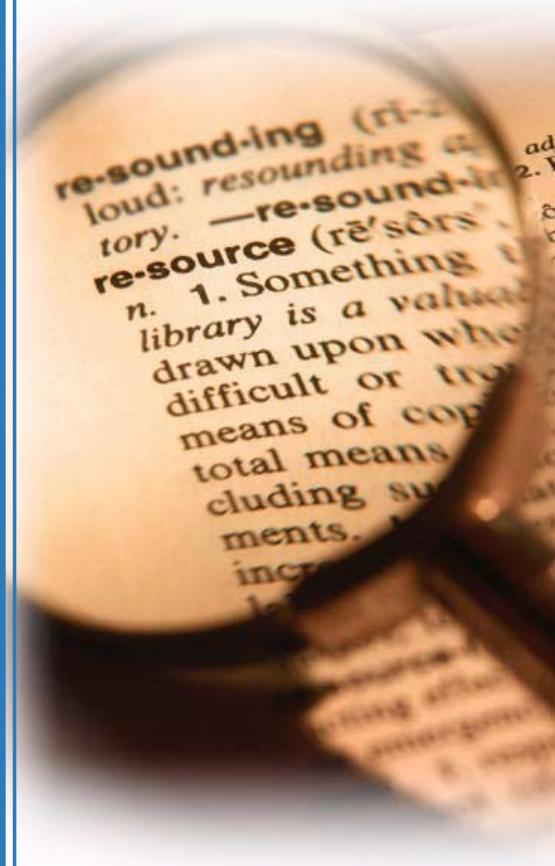
The United States Environmental Protection Agency’s National Environmental Education Advisory Council releases the report *Assessing Environmental Education in the United States and the Implementation of the National Environmental Education Act of 1990.*

NAAEE’s National Project for Excellence in Environmental Education produces *Environmental Education Materials: Guidelines for Excellence* with support from EETAP. “The guidelines are a set of recommendations for developing and selecting environmental education materials.”

The North American Commission on Environmental Education Research publishes *Research in Environmental Education, 1981-1990.*

The North American Association for Environmental Education coordinates and conducts the National Environmental Education Summit in Burlingame, California. The conference is a gathering of more than 50 organizations to focus attention on critical issues in the field of environmental education in the United States and to build networks and collaboration across the country. The conference proceedings contain comprehensive papers in ten important areas of environmental education.

The National Environmental Education Advancement Project holds its first Leadership Clinic. The clinic...“was the first of its kind to provide a week-long intensive forum addressing the needs of state-level EE organizers.” Leadership Clinics have been held on an ongoing basis since their inception.



1997

The Public Linkage, Dialogue, and Education Task Force of the President's Council on Sustainable Development publishes the report *From Classroom to Community and Beyond: Educating for a Sustainable Future*.

The United Nations Educational, Scientific, and Cultural Organization conducts the International Conference on Environment and Society: Education and Public Awareness for Sustainability, in Thessaloniki, Greece. Nearly 1,200 experts from 84 countries attend the conference, which results in the Declaration of Thessaloniki.

1998

The North American Association for Environmental Education produces, with support from EETAP, *Environmental Literacy in the United States: What Should Be...What Is... Getting from Here to There*.

The National Environmental Education Advancement Project produces *Definitions of Components of State-level Comprehensive EE Programs*. “Comprehensive EE programs are a combination of structure, funding, and program components which serve to incorporate EE into educational institutions at the state and local level.” The report is based on the “1998 Survey of the Status of Environmental Education in the United States.”

The State Education and Environment Roundtable releases its report *Closing the Achievement Gap: Using the Environment as an Integrating Context for Learning*.

1999

The National Environmental Education Advancement Project produces a “Survey of Environmental Education in the United States.” *The Journal of Environmental Education* later publishes the survey.

NAAEE’s National Project for Excellence in Environmental Education produces *Excellence in Environmental Education: Guidelines for Learning (K-12)* with support from EETAP. “The guidelines provide students, parents, educators, home schoolers, policy makers, and the public a set of common, voluntary guidelines for environmental education.”

2000

NAAEE and the Environmental Literacy Council publish *Environmental Studies in the K-12 Classroom: A Teacher’s View*.

The University of Wisconsin-Stevens Point offers the first *Fundamentals of Environmental Education* on-line course developed with EETAP funding.

NAAEE's National Project for Excellence in Environmental Education produces, with support from EETAP, the *Guidelines for the Initial Preparation of Environmental Educators*, a set of recommended guidelines for the preparation of environmental educators. (The guidelines were later renamed the *Guidelines for Preparation and Professional Development of Environmental Educators*.)

The U.S. Environmental Protection Agency awards the third Environmental Education Training Program to the University of Wisconsin Stevens Point and the University continues and expands the work of the Environmental Education and Training Partnership (EETAP).

2002

The United Nations Commission on Sustainable Development holds the Johannesburg Summit in Johannesburg, South Africa. "The summit brought together tens of thousands of participants to focus the world's attention and direct action toward ... conserving our natural resources in a world that is growing in population, with ever-increasing demands for food, water, shelter, sanitation, energy, health services and economic security."

The United Nations General Assembly passes a resolution declaring 2005–2014 as the Decade of Education for Sustainable Development. The United Nations Educational, Scientific, and Cultural Organization is designated as lead agency for the promotion of the Decade.

2004

The University of Wisconsin-Stevens Point, with support from EETAP, offers the first Applied Environmental Education Program Evaluation on-line course for nonformal environmental educators.

NAAEE's National Project for Excellence in Environmental Education produces *Nonformal Environmental Education Programs: Guidelines for Excellence* with support from EETAP. "The Guidelines are a set of recommendations for developing and administering high quality nonformal environmental education programs."

WestED, NAAEE, and EETAP produce *What's Fair Got To Do With It: Diversity Cases from Environmental Educators*. The publication uses a case-based approach that helps practitioners develop "a process for problem solving and a process to help better relate to diverse audiences."

The National Project for Environmental Education Excellence, with support from EETAP, launches the Guidelines Training Bureau to further the use of the environmental education guidelines.

2005

The National Environmental Education and Training Foundation holds the first National Environmental Education Week (April 10-16, 2005).

The Centre for Environment Education holds the Education for a Sustainable Future Conference in Ahmedabad, India. More than 800 learners, thinkers, and practitioners from over 40 countries attend the conference. Conference participants produce the Ahmedabad Declaration on education for sustainable development.

The U.S. Environmental Protection Agency extends its agreement with the University of Wisconsin Stevens Point for the fourth Environmental Education Training Program.

The U. S. Environmental Protection Agency's National Environmental Education Advisory Council releases the report *Setting the Standard, Measuring Results, Celebrating Successes—A Report to Congress on the Status of Environmental Education in the United States*.

The National Environmental Education Advancement Project at the University of Wisconsin Stevens Point, with EETAP support, produces the Third National Survey of Environmental Education at the State Level.