



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963 A

DOCUMENT RESUME

ED 168 887

SE 027 518

AUTHOR Disinger, John F., Comp.
TITLE Alliance Affiliate Activities: Non-Governmental Organizations in Environmental Education.
INSTITUTION ERIC Information Analysis Center for Science, Mathematics, and Environmental Education, Columbus, Ohio.
SPONS AGENCY National Inst. of Education (DHEW), Washington, D.C.
PUB DATE Dec 78
NOTE 162p.
AVAILABLE FROM Information Reference Center (ERIC/IRC), The Ohio State University, 1200 Chambers Rd., 3rd Floor, Columbus, Ohio 43212 (\$3.50)

EDRS PRICE MF01/PC07 Plus Postage.
DESCRIPTORS *Conservation Education; *Consortia; *Environmental Education; Natural Resources; *Organization; Organizational Communication; Pollution; Population Education; *Program Descriptions; Science Education; Social Sciences

IDENTIFIERS Information Analysis Products; Non Governmental Organizations; Public Interest Groups.

ABSTRACT

Short descriptions of organizational structure and goals and descriptions of environmental education interests, activities, and priorities are presented for 32 nongovernmental organizations affiliated with the Alliance for Environmental Education. The organizations included are listed in the table of contents. The groups included represent a variety of age groups and interests. Among the reports are those for the American Association of State Colleges and Universities, American Federation of Teachers, American Forest Institute, Boy Scouts of America, Girl Scouts, League of Women Voters, National Education Association, United Autoworkers, and Zero Population Growth. (RE)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED168887

ALLIANCE AFFILIATE ACTIVITIES: NON-GOVERNMENTAL ORGANIZATIONS IN ENVIRONMENTAL EDUCATION

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

Compiled and Edited by
John F. Disinger
in Cooperation with

The Alliance for Environmental Education
June McSwain, President

The ERIC Clearinghouse for Science, Mathematics,
and Environmental Education
College of Education and
School of Natural Resources
The Ohio State University
1200 Chambers Road, Third Floor
Columbus, Ohio 43212

December, 1978

SE 027 518

ENVIRONMENTAL EDUCATION INFORMATION REPORTS

Environmental Education Information Reports are issued to analyze and summarize information related to the teaching and learning of environmental education. It is hoped that these reviews will provide information for personnel involved in development, ideas for teachers, and indications of trends in environmental education.

Your comments and suggestions for this series are invited.

John F. Disinger
Associate Director
Environmental Education

Sponsored by the Educational Resources Information Center of the National Institute of Education and The Ohio State University.

This publication was prepared pursuant to a contract with the National Institute of Education. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their judgment in professional and technical matters. Points of view or opinions do not, therefore, necessarily represent official National Institute of Education position or policy.

CONTENTS

Introduction	3
<u>The Alliance for Environmental Education</u>	9
Board of Trustees.	14
Executive Committee.	16
<u>Affiliates of the Alliance for Environmental Education</u>	
American Association of State Colleges and Universities	19
American Federation of Teachers.	21
American Forest Institute.	23
American Gas Association	32
American Institute of Architects	38
American Nature Study Society.	45
American Society for Environmental Education	47
Association for Environmental and Outdoor Education.	49
Boy Scouts of America.	52
Conservation Education Association	60
Edison Electric Institute.	62
Foresta Institute for Ocean and Mountain Studies	65
Girl Scouts of the U.S.A.	69
Humane Society of the United States.	74
International Council on Health, Physical Education, and Recreation.	76
Izaak Walton League of America	78
League of Women Voters	80
Massachusetts Audubon Society.	86
National Association for Environmental Education	91
National Association of Conservation Districts	97
National Audubon Society	104
National Council for Geographic Education.	107
National Education Association	113
National Parks and Conservation Association.	115
National Science Teachers Association.	118
National Wildlife Federation	121
The Nature Conservancy	126

CONTENTS (Continued)

Soil Conservation Society of America	131
United Auto Workers/Conservation Department.	138
Western Regional Environmental Education Council	143
Wildlife Management Institute.	152
Zero Population Growth	155

**ALLIANCE AFFILIATE ACTIVITIES: NON-GOVERNMENTAL
ORGANIZATIONS IN ENVIRONMENTAL EDUCATION**

INTRODUCTION

One of the more intriguing aspects of environmental education is that so many organizations, agencies, institutions, and people have interest, and professional and personal stakes in it. "Environmental education" means many things to many people, is generally related in some way to their other interests and missions, and often occupies a position of some priority because the concept of "environment" cuts across nearly all disciplinary areas.

The basic mission of the Educational Resources Information Center (ERIC) of the National Institute of Education (NIE) is information flow in all areas of educational concern. Primary responsibility for environmental education has been assigned to the ERIC Clearinghouse for Science, Mathematics, and Environmental Education (SMEAC) at The Ohio State University. Thus, SMEAC has a high priority in locating, processing, and making available information related to environmental education.

To accomplish this purpose, ERIC/SMEAC has developed working relationships with organizations, agencies, institutions, and people concerned with environmental education on any and all levels, both within and outside of typical "formal" hierarchies. Many of ERIC/SMEAC's activities are directed toward facilitating communication between, among, and even within such groups, so that information useful to environmental educators of all types and stripes will be available in appropriate forms. It has been, and continues to be, gratifying that significant levels of cooperation have been developed, maintained, and strengthened.

Many of SMEAC's activities are developed, and prioritized, by requests from field practitioners; that is, as numbers of requests for specific types of information mount, higher priority is assigned to developing products designed to meet those needs. A frequent request has been for information related to the environmental education interests, activities, and priorities of non-governmental organizations, in convenient, readily accessible form.

Discussions with the Executive Committee of the Alliance for Environmental Education indicated that that group was also faced with similar requests, and was considering development of an appropriate response. It thus became apparent that the interests of the Alliance, ERIC/SMEAC, and other organizations, agencies, institutions, and people with which either group came into contact, would be well served by a cooperative effort.

Accordingly, a short outline (page 5) of what might constitute a useful report was developed and sent to member organizations of the Alliance for Environmental Education. The purpose of the outline was not to prescribe a rigid format, but merely to suggest types of information which interested parties might find of use. This volume represents the compilation of organizational responses to that request.

It is hoped that users of this volume will see it as a "first effort," not as an exhaustive compendium or as a polished product. Both the Alliance for Environmental Education and ERIC/SMEAC are aware of the incompleteness of the volume, but feel that it represents an appropriate step in the direction of making useful information available to those who have need of it.

John Disinger
ERIC/SMEAC

December, 1978

RECOMMENDED OUTLINE FOR REPORTS: ENVIRONMENTAL
EDUCATION ACTIVITIES OF AFFILIATES OF THE
ALLIANCE FOR ENVIRONMENTAL EDUCATION*

Purpose:

to prepare a convenient reference volume, useful to member organizations and other organizations, governmental agencies at all levels, school personnel, higher education faculty and students, and interested citizens, which will provide an overview of the environmental education objectives and activities of all member organizations of the Alliance for Environmental Education.

Each report to include (tentatively):

1. Overview of the general purposes of the organization, indicating the objectives of its involvement in environmental education as related to its general purposes.
2. Levels of involvement in environmental education--national, regional, local, etc.
3. Extent of involvement in environmental education--chapter and verse.
4. History of involvement in environmental education.
5. Target audiences of environmental education efforts.
6. Methods/techniques/procedures utilized in environmental education efforts.
7. Funding devoted/available to environmental education.
8. Products/publications related to environmental education.
9. Measures of success and/or lack of same.
10. Future plans related to environmental education.

Format:

1. The above is not intended to be a rigid outline, but merely a suggestion as to what the report might include. Variations are not only acceptable, but encouraged.
2. The report should be in narrative form, something on the order of 2000-3000 words.

*This outline, with cover letter, was sent to the official representative to the Alliance for Environmental Education of each of the 32 affiliated organizations.

3. Use of tables/graphs/charts, etc., is encouraged, as appropriate.
4. Without being so scholarly as to be deadly, reasonable attention to the niceties of English grammar is encouraged.
5. Objectivity is paramount--not whitewashes, not blatant PR.
6. Do not submit publicity brochures or fliers in lieu of reports; the organization and tone of such materials are rarely appropriate for a compendium of this nature. However, such already-prepared materials are likely to be of material help as the report is prepared. It is appropriate to indicate availability, prices, etc., of organizational materials and services.

THE ALLIANCE FOR ENVIRONMENTAL EDUCATION

1619 Massachusetts Avenue, NW
Washington DC 20036
(202) 797-4530

As the environmental education movement began to take form in the early 1970s, the Conservation Education Association identified a need to join with similar organizations to determine ways collectively to assist and strengthen the growing environmental education thrust. Through a series of meetings funded by the Johnson Foundation and sponsored by the University of Wisconsin-Green Bay, the Alliance for Environmental Education was born in 1973.

Building a knowledge base and positive attitude toward the environment requires educational programs—formal ones through the schools, and non-formal ones through a variety of educational media. These educational efforts must cover all aspects—scientific, technical, social, cultural, aesthetic, economic—helping citizens understand the relationships and harmonize their needs within ecosystem processes.

Basic to decisionmaking regarding environmental management or resource conservation in a democratic society is a citizenry aware of the pressures on renewable and non-renewable resources for a variety of uses, willing to explore all points of view, capable of making informed decisions, and committed to supporting those decisions with public actions.

At least three major segments of our society can be identified as informed about environmental affairs and interested in a citizenry capable of making intelligent decisions: the federal resource and education agencies; the state resource and education agencies, including institutions of higher education; and non-governmental organizations with varied interests, such as those which are members of the Alliance for Environmental Education. Each segment has expertise, information, and a perspective—or perspectives—important to an understanding of environmental problems.

In the area of water pollution, for example, concerns are voiced by many interests—the federal and state governments which are generally responsible for regulations; citizen groups, generally concerned with the quality of the environment for all living things; those users of water involved in supplying our society with products for the standard of living each of us enjoys. All of these need to be heard in relation to this environmental issue.

In addition, in a democratic society such as ours, these audiences as well as civic groups, youth group leaders, and the formal education establishment are concerned that future leaders, the youth of today, have the important skills of critical thinking and problem solving necessary to help determine future directions in environmental policy; most importantly, they must be capable of supporting decisions with public actions.

The Federal Interagency Committee on Education's (FICE) Subcommittees on Energy and the Environment and on Environmental Education serve as forums for agencies of the federal government in environmental education. At the state level, agencies are beginning to form networks similar to the Federal FICE. State environmental education coordinators in state education agencies are establishing a national organization. State associations of concerned citizens are beginning to be heard. And, at the national level, the Alliance for Environmental Education serves as a voice for many of the non-governmental groups concerned with the environment. It is all of these elements that are beginning to weave a web of information exchange and cooperation, forming a foundation for a national strategy for environmental education.

The Alliance for Environmental Education joins together 32 non-governmental organizations with the common goals of interests and programs in environmental/energy education at the regional and national levels. The purpose is to encourage development, implementation, and coordination of effective environmental education programs among members, as well as to explore cooperative ventures with other groups and segments in the environmental education field. The membership includes groups representing youth organizations, professional educators and other professionals interested in environmental education, civic, conservation/environmental, and industry/labor organizations. Each member organization is represented on the Board of Directors of the Alliance for Environmental Education by a delegate, and has one vote in decisions made. An Executive Committee serving for one year is elected by the Board of Directors; it consists of the President, a President-Elect, a Vice-President, a Treasurer, and an Immediate Past President, three Members-at-Large, and at least one Alternate-at-Large. The Executive Committee meets four times a year; the Board, at least once a year.

Activities and accomplishments of the Alliance for Environmental Education include:

1. Planning and coordinating a continuing series of national conferences designed to identify and implement a national strategy for environmental education—

July 6-9, 1975 Environmental Education Perspectives and Prospectives, at Snowmass, Colorado

October 5-8, 1976 North American Regional Seminar on Environmental Education, at St. Louis, Missouri

March 28-30, 1978 From Ought to Action in Environmental Education, at Washington, DC

Printed reports of all these conferences are available from SMEAC Information Reference Center, or through the ERIC system in microfiche. In addition, mailings have been made to many key individuals.

2. Participating in the development of the document used by the United States Delegation to the International Conference on Environmental Education, Tbilisi, Georgia, USSR, in October 1977.

A
th
me
re
na

Th
of
or
ce
ch
ad

Th
ef
Ed
on
wo
Re
Lo
be

Th
Co
fo
U.
En
co
en

Dr
of
19
Ed
th
br
fo
ta
th
el
me
th
Al
ti
fo
ag

It
la
th

3. Publishing a newsletter, Alliance Exchange, covering the latest developments in the environmental education field, for distribution to members of the Alliance for Environmental Education and other environmental education decision-makers.

simple listing of proceedings titles can in no way indicate, though, the catalytic role of an organization such as the Alliance for Environmental Education. A few examples of follow-through to conference recommendations will more adequately illustrate the Alliance's part in national leadership in environmental education.

The July 1975 (Snowmass) conference brought together representatives of federal and state resource and education agencies, conservation organizations, professional groups, and industry/labor. Discussions centered around individual group goals. Useful and productive interchanges took place among interest groups, with suggestions made for additional goals from different perspectives.

The October 1976 (St. Louis) conference was part of an international effort, initiated in 1975 at the Belgrade Conference on Environmental Education, under the guidance of Unesco. The St. Louis meeting was one of a number of regional and subregional conferences around the world which prepared input for the October 1977 Tbilisi conference. Reports from the regional and subregional conferences, including St. Louis, adapted the Belgrade recommendations to local needs, then became a part of the input to the Tbilisi Conference.

The March 1978 (Washington) conference was a follow-up to the Tbilisi conference. It was designed to begin to develop a national strategy for environmental/energy education based on the outcomes of previous U.S. national conferences and the Tbilisi meeting. The Alliance for Environmental Education has assumed a leadership role in setting the course for a number of the recommendations from the March 1978 conference.

Dr. Mary F. Berry, Assistant Secretary for Education, U.S. Department of Health, Education and Welfare, in her keynote address at the March 1978 conference suggested that a National Center for Environmental Education be established. Participants at the conference discussed the idea, endorsed it, but did not have time to develop a process for bringing the Center into being. The Alliance contacted Dr. Berry following the meeting with the suggestion that she convene a small task force of those who had worked on her recommendation related to the Center concept, and others, to explore the idea further. She elected to turn the problem over to the FICE Subcommittee on Environmental Education. That group presently has an initial proposal for the Center. This document is being shared with members of the Alliance for Environmental Education and others, seeking their suggestions and input since the Center was conceived as a gathering place for all those involved in environmental education—federal and state agencies, and non-governmental organizations.

It was also recommended that there be another survey of state legislation related to environmental education, and that legislation now on the books be evaluated as to its effectiveness. The Alliance asked

the ERIC Information Analysis Clearinghouse for Science, Mathematics, and Environmental Education (ERIC/SMEAC) to include in its 1979 program a new survey of state legislation; this survey will be conducted. When completed, it will be determined if the legislation can be effectively evaluated.

One of the major areas discussed during the March 1978 conference was state-level networking of agencies and non-governmental organizations. There are already several good examples of state agencies grouping into state "FICES," and of state-level associations and alliances. Information concerning these is being gathered and shared through the Alliance Exchange. A survey has been initiated, but not yet completed, of alliances and associations at the state level, their purposes, their membership patterns, and their programs. Members of the Western Regional Environmental Education Council, an Alliance affiliate, will be developing models for state networks of all audiences interested and involved in environmental education, to share with the environmental education community.

Several Alliance affiliates having state chapters or organizations are transmitting the report of the March 1978 conference to chapter presidents to consider what might be done by the non-governmental organizations to encourage environmental education at the state level. State education agency environmental education coordinators have received copies of the report, and have been informed of other mailings into their states so that state networks might be established through which to spread the results of not only the March 1978 conference, but the 1977 Tbilisi intergovernmental conference as well.

At the urging of participants in the March 1978 conference, the Alliance has developed a closer relationship with the FICE Subcommittee on Environmental Education. Planning has begun by an Alliance affiliate on determining a classification system for environmental education for use by small libraries and resource centers.

Finally, the Alliance for Environmental Education has, at the recommendation of conference participants, requested Dr. Berry to inventory programs of the U.S. Office of Education to identify areas of support for environmental education. These would include not only funding sources, but also divisions and departments that can in other ways establish an atmosphere of acceptance and support for environmental education.

Work is in process on a number of other recommendations from the March 1978 conference. As with all organizations, particularly ones without staff, the accomplishments of the Alliance for Environmental Education can be only as strong as the willingness of members to participate. Fortunately, members of the Board of Directors and the Executive Committee have been willing to see that the Alliance Exchange, the conferences, and the follow-up do happen, and successfully.

This collection of reports of the programs of affiliates of the Alliance for Environmental Education is designed with two purposes in mind:

--It will serve to introduce the reader to the contributions of the members of the Alliance, as non-governmental organizations,

to the environmental education field. With knowledge of each affiliate's program, it becomes easier to identify common threads and interests that serve to unite such a divergent membership to work in harmony.

--The collection also gives affiliates the opportunity to identify previously unrecognized strands of common activities and emphases so they can begin to join together even more—to strengthen their individual efforts, and those of the Alliance for Environmental Education, in making progress toward the national goal of a citizenry more environmentally aware and capable of participating in environmental decisionmaking.

As for the future, the Alliance will continue in the role of a catalyst, providing conferences and forums to refine efforts now being made to weave environmental education into a more cohesive whole, including all components—energy, population, food, water, air, etc.—and particularly to weave a stronger web for exchanging and sharing information.

June McSwain, President
The Alliance for Environmental Education

December 1978

THE ALLIANCE FOR ENVIRONMENTAL EDUCATION

Board of Directors

American Association of State
Colleges and Universities
Dr. Vernon Galliano, President
Nicholls State University
Thibodaux LA 70301
(504) 446-8111

American Federation of Teachers
Duane Kelly
10311 East 42nd Street
Kansas City MO 64133
(816) 483-0753

American Forest Institute
June McSwain
Director of Education
1619 Massachusetts Avenue, NW
Washington DC 20036
(202) 797-4530

American Gas Association, Inc.
Dr. Wilfred C. Burton
Manager, Educational Services
1515 Wilson Boulevard
Arlington VA 22209
(703) 841-8400

American Institute of Architects
Alan R. Sandler
Director of Environmental
Education
1735 New York Avenue, NW
Washington DC 20006
(202) 785-7203

American Nature Study Society
Martha F. Sykes
Audubon Center in Greenwich
613 Riversville Road
Greenwich CT 06830
(203) 869-5272

American Society for Environ-
mental Education
Dr. William L. Mayo, President
33 Mill Road-P.O. Box R
Durham NH 03824
(603) 868-5700

Association for Environmental
and Outdoor Education
Don Bielefield
253 Johnstone Court
San Rafael CA 94903
(415) 556-4366

Boy Scouts of America
Walter Wenzel, Director
Camping and Conservation Service
North Brunswick NJ 08902
(201) 249-6000

Conservation Education Association
Dr. Robert L. Cook
Fish and Wildlife Service
U.S. Department of the Interior
Washington DC 20240
(202) 343-4545

Edison Electric Institute
Dr. Richard B. Scheetz
Coordinator of Educational Services
1111-19th Street, NW
Washington DC 20036
(202) 862-3800

Foresta Institute for Ocean and
Mountain Studies
Marla Painter
6205 Franktown Road
Carson City NV 89701
(702) 882-6361

Girl Scouts of the U.S.A.
Carolyn L. Kennedy
Wildlife Project Director
830 Third Avenue
New York NY 10022
(212) 940-7500

Humane Society of the United States
John Joseph Dommers
The Norma Terris Humane
Education Center
P.O. Box 98
East Haddam CT 06423
(203) 434-8666

**International Council on Health,
Physical Education and Recreation**
Dr. Carl A. Troester, Jr.
Secretary General
1201 Sixteenth Street, NW
Washington DC 20036
(202) 833-5499

Izaak Walton League of America
Maitland S. Sharpe
1800 N. Kent Street-Suite 806
Arlington VA 22209
(703) 528-1818

**League of Women Voters of the
United States**
Betty N. MacDonald
1155 Edgewood Avenue
Madison WI 53711
(608) 257-2938

Massachusetts Audubon Society
Charles E. Roth
Hatheway Environmental
Education Institute
Lincoln MA 01773
(617) 259-9500

**National Association of
Conservation Districts**
Malcolm P. Crooks
P.O. Box 297
Solebury PA 18963
(215) 297-5676

**National Association for
Environmental Education**
Dr. Karl E. Schwaab
Virginia Polytechnic Institute
and State University
Biology Division
Blacksburg VA 24061
(703) 961-5442

National Audubon Society
Don L. Danielson
Schlitz Audubon Center
1111 E. Brown Deer Road
Milwaukee WI 53217
(414) 352-2880

**National Council for Geographic
Education**
Dr. Robert Saveland
Dept. of Social Science Education
Dudley Hall
University of Georgia
Athens GA 30602
(404) 542-7265

National Education Association
Dr. Dave Darland, Assoc. Director
Instruction and Professional Development
1201 Sixteenth Street, NW
Washington DC 20036
(202) 833-4000

**National Parks and Conservation
Association**
Helen B. Byrd
1701 Eighteenth Street, NW
Washington DC 20036
(202) 265-2717

National Science Teachers Association
Dr. David Williams
Science Teaching Center
University of Maryland
College Park MD 20742
(301) 454-2037

National Wildlife Federation
John C. Stone, Director
Education Division
8975 Leesburg Pike
Vienna VA 22180
(703) 790-4353

The Nature Conservancy
Ray M. Cutler, Vice President
and Director of Stewardship
1800 N. Kent Street-Suite 800
Arlington VA 22209
(704) 841-5300

**Soil Conservation Society of
America**
Walter E. Jeske
3058 North Pollard Street
Arlington VA 22207
(202) 447-5063

United Auto Workers/Conservation
Department
John Yolton
8000 East Jefferson Avenue
Detroit MI 48214
(313) 926-5271

Wildlife Management Institute
Dr. Laurence Jahn
709 Wire Building
1000 Vermont Avenue, NW
Washington DC 20005
(202) 347-1774

Western Regional Environmental
Education Council
Rudolph J. H. Schafer
State Department of Education
721 Capitol Mall
Sacramento CA 95814
(916) 322-4018

Zero Population Growth, Inc.
Thomas L. Flaherty, Director
Population Education
1346 Connecticut Avenue, NW
Washington DC 20036
(202) 785-0100

Executive Committee

President	June McSwain
President-Elect	John Joseph Dommers
Vice-President	Marla Painter
Treasurer	Walter E. Jeske
Immediate Past President	Rudolph J. H. Schafer
Members-at-Large	Malcolm P. Crooks Dave Darland Duane Kelly
Alternates-at-Large	Robert L. Cook Carolyn L. Kennedy

AFFILIATED ORGANIZATIONS

AMERICAN ASSOCIATION OF STATE COLLEGES AND UNIVERSITIES

American Association of State
Colleges and Universities
1 Dupont Circle NW, Suite 200
Washington DC 20036
(202) 293-7070

The American Association of State Colleges and Universities (AASCU) is composed of 325 state colleges and universities located throughout the United States and the territories of Guam and the Virgin Islands. The member organizations have a combined enrollment of approximately two and one-half million students and award 45 percent of the baccalaureate degrees granted by public institutions and 40 percent of all baccalaureate degrees granted in the U.S.A.

State colleges and universities demonstrate a rich diversity of programs available in public higher education. The learning environments of the institutions vary greatly, thereby offering a wide selection of educational programs and learning environments to accommodate the individual needs of students who depend upon public institutions for their education.

The AASCU is committed to educational opportunity and to public service. State colleges and universities work closely with state and local governments and private industry to prepare students to meet the employment demands of the future and the challenges which accompany population growth and societal changes.

While many state colleges and universities have developed quality graduate programs with opportunities for research, the primary objective of these institutions is to provide quality undergraduate education to those who seek it and can benefit from it.

The AASCU was formed in 1961 and since its inception has expanded its operation to include the many diverse activities associated with institutions of higher learning.

AASCU provides its members with analyses of federal programs and legislation and arranges for the views of its members to be presented for consideration in legislation and policy-making.

AASCU promotes opportunities to study abroad, faculty exchanges, and cooperative assistance for developing countries. Its programs have enabled institutions of higher learning to develop new relationships between institutions of higher learning and other segments of society. AASCU is actively involved in establishing new programs that will assist its members in meeting the needs of students and the community in areas of humanities, minority education, allied health administration, or urban programs.

In addition to these programs, AASCU serves as a general information resource for its members and a forum so that its members may communicate with each other and with external groups.

The basic policies of AASCU are formulated at the annual meeting each Fall. The meeting enables presidents and chancellors of member institutions to explore current issues and problems and to respond with policy statements and resolutions adopted by the membership.

AASCU is funded primarily through membership dues. However, additional funds are received through foundation and government grants and contracts.

AASCU has established a Committee on Environment, whose primary objectives are to encourage the establishment of new programs and the expansion and improvement of existing programs in environmental education, training and services. The committee encourages its members to work closely with their respective communities in providing information on environmental issues.

—Submitted by:

John H. Green, Ph.D.
Nicholls State University
P.O. Box 2021
Thibodaux LA 70301

October 1978

AMERICAN FEDERATION OF TEACHERS

11 Dupont Circle
Washington DC 20005
(202) 797-4400

The American Federation of Teachers (AFT) is an international union representing over 500,000 teachers, paraprofessionals and other education employees. Among its many functions are the protection of its members' interests, the pursuit of democracy and quality in education, and promotion of the general social welfare.

The AFT's involvement in environmental education has focused on creating an awareness of its need, disseminating information on environmental issues, urging accrediting associations to include assessments of environmental education programs in school evaluations, providing testimony on the need for additional federal funding in this area, and offering inservice workshops in this field. Participation in the Alliance for Environmental Education also has been beneficial to the organization in sharing its concerns and obtaining the benefits of others' experiences.

While the AFT at all levels, national, state and local, has addressed the environmental education issue in various ways, it would be misleading not to point out that it is individual teachers who are most intensely involved, who provide the actual education to students, and who provide the basis for the union's supportive services.

It was teachers who brought policy resolutions before AFT conventions, thereby increasing the organization's attention to environmental issues. The primary dissemination vehicle has been union newspapers which include frequent articles and news items related to the environment and ecology. Lesson plans and suggested activities for Earth Day and Earth Week have appeared in the national monthly newspaper. In addition, since the establishment of AFT's annual education conference eight years ago, sessions on environmental education have been included in each. The effect of these efforts, coupled with the much broader activities of organizations devoting their full energies to environmental education, is a teaching force much more sensitized to environmental issues than at any time in the past. The consequence is that this information and awareness are passed on to students at all levels in the schools.

The implementation of teacher centers which will respond to the needs of teachers for inservice education and eventually become involved in curriculum development should further advance the development and spread of environmental education in the schools. Teacher center involvement in this area is expected to increase in proportion to the increase in environmental awareness. The AFT Teacher Center Resource Exchange plans to facilitate this process. Up until now, the greatest responsibility for information gathering and sharing has been on the

shoulders of individual teachers. Again, it is they who have sought out expertise among their own colleagues and others and shared this with their students and other teachers. Teacher centers should lend support to this effort and broaden its impact.

The AFT realizes the importance of environmental education to its own members and to society at large. It will continue to highlight issues as they emerge, disseminate information, and work with other groups to improve environmental conditions. A case in point is support given to the Environmental Defense Fund in the campaign to persuade the Environmental Protection Agency to identify all schools in which asbestos spray-on materials have been used and to require manufacturers and processors of such fiber to take corrective action to eliminate the emission of asbestos fibers from these materials.

AFT shall continue to offer its support, in terms of lobbying, coalition building and information dissemination, to worthwhile causes and projects.

—Submitted by:

Marilyn Rauth, Director
Educational Issues Department

December 1978

AMERICAN FOREST INSTITUTE

1619 Massachusetts Avenue NW
Washington DC 20036
(202) 797-4530

American Forest Institute (AFI) is the public education organization for the forest products industries, those landowners and companies that grow and harvest trees and manufacture wood and paper products. The general purpose of the association is to raise the level of understanding of the general public for the forest resource, its ownership, management, and uses, the environmental problems related to the cultivation of trees as a crop, and production of goods from the resource.

Structurally, AFI's program elements are designed to reach those segments of the general public usually defined as the formal education audience, professional and conservation organizations, individual private landowners, community leaders, legislators, and the press. With each, the theme of the message is usually the availability of the resource for use, whether related to fiber for product manufacture, recreation uses, or watershed and wildlife management. However, with the present level of consciousness about wilderness, air and water pollution and solid waste, specific environmental concerns as they affect the industry's capability to provide for the public needs in paper and wood products have increasingly become a focal point of information directed to audiences other than educators.

With the total program an educational effort and with the forest resource as a base for that program, it is somewhat difficult to determine the scope of the association's level of involvement in "environmental education."

Narrowed to the formal education audience, AFI's present program reaches teachers and administrators at the national, regional and local levels. Three major thrusts can be identified: 1) participation in professional and conservation/environmental organizations within the education field; 2) publication of materials for teachers for distribution through AFI and industry associations and companies in answer to requests for information on the forest resource; 3) dissemination of an environmental education supplementary curriculum for educators in grades kindergarten through twelve, Project Learning Tree, through AFI-funded, state-department-of-education-coordinated, workshops.

AFI's educational program began almost with the establishment of the organization itself in 1941. The program consisted of various publications for all grade levels directed to the student with a limited number of "how to" manuals for the teacher. Development of the materials was by the association's education and art departments. Distribution depended upon mailings to superintendents of schools. If numbers of items mailed could be used as an indication, the booklets and wall charts were well-received. No formal follow-up evaluation of actual classroom use was made, however.

During most of the association's history, items for distribution to schools were directed to students and included booklets, wall displays and film clips produced in-house, with little or no input from educators. As the student population grew and the demand for classroom items increased, AFI re-evaluated its education program and determined that it could be more effective directing efforts toward teachers and administrators. Educational consulting firms were contacted for help in developing an appropriate program and materials to reach this segment of the education audience. As a result, teaching units were produced and inserted as advertisements in the elementary Instructor Magazine and the secondary Scholastic Teacher. Filmstrips produced in cooperation with Guidance Associates were added to the collection of items for dissemination to teachers as well. All are still a part of AFI's program inventory for answering requests from educators on the forest resource.

Memberships and active participation in professional education organizations and conservation associations became more a part of AFI's education program. With this exposure to the practicing educator, it became apparent that if educational materials were to be designed to reach as specific an audience as teachers, they should be developed with the direct participation of the professional educator.

One of the organizations in which AFI has maintained membership is the Western Regional Environmental Education Council (WREEC). WREEC membership is composed of the environmental education coordinators for the state departments of education in 13 western states, and their counterparts in the appropriate state resource agencies. One project in which the organization was involved was a supplemental curriculum for grades kindergarten through twelve that dealt with energy.

After reviewing this program, AFI asked WREEC if it would undertake a similar curriculum development in environmental education, using the forest resource as a base. A contract was let to WREEC for such a product.

Education/Research Systems, Inc., an educational consulting firm in Seattle, coordinated writing workshops for teachers, supervisors, curriculum specialists and college professors. These teams produced a core curriculum framework of seven principles relating to the forest, man and the environment. Activities for teachers to use with students in grades kindergarten through twelve were created using this framework and accompanying concepts. Persons familiar with natural resources from industry, state and federal resource agencies, and conservation organizations with points of view differing from those of the forest products industry acted as reference sources for the educators.

The result was two curriculum guides of teacher-oriented classroom activities, kindergarten through grade twelve, entitled Project Learning Tree (PLT), with the curriculum framework as a basis for the activities and a bibliography of reference materials from all types of organizations, companies and resource agencies. Activities were interdisciplinary relating to science, social studies, language arts, and mathematics.

Educators had helped in developing the program for teachers; their advice was sought in appropriate ways to introduce the project as well.

A council with membership from industry and WREEC was established to guide the day-to-day progress of Project Learning Tree under the overall policy of AFI's industry education subcommittee. On the advice of the Council, the curriculum guides which were a result of the writing conferences, were introduced to educators through attendance at workshops only. These sessions were coordinated through the state department of education's environmental education consultant. A team of three educators was hired on contract to AFI to work with the departments of education in setting up workshops.

As teachers began to become familiar with the program and use it with students, the Council advised a classroom evaluation of the impact of the activities on the knowledge and attitudes of students be made. The Bureau of School Service and Research at the University of Washington, Seattle, was contracted to undertake the testing. Educators, knowing the constraints of the study in time and financing, agreed that the results demonstrated value in continuing the program. Evaluation of the program continues, however.

Comments received from teachers participating in the evaluation and in the workshops indicated that some changes in the content and format of the curriculum guides would make them more useful to educators. The PLT staff, with the help of the advisory council to the project, undertook a revision in the manuals, including that, updating of activities in facts and strategies, and a more pertinent bibliography directly referenced to lessons in the guides.

From the two years of field work in the west where the program developed, a basic plan for nationwide implementation grew, with accommodations made according to individual state differences.

Generally a planning committee is established in a state introducing the program. The committee is made up of the state department of education environmental education consultant and other key figures in the field in the state. With one of the Project Learning Tree staff members, the committee determines a strategy including workshop location, participant selection, date and budget, for implementing the program in the state. Usually the initial workshop is two days in length in order to give educators a knowledge of the program so they will feel comfortable teaching teachers in their districts about the program in one-day sessions. Funding is provided by AFI for the leadership workshop, with a much smaller sum for local sessions to help defray some costs. Materials are provided free by AFI.

As of December 1978, the program was available in 20 states. Plans are to add four more during 1979. As budget allows, additional states will be added each succeeding year. Selection of the states is made according to budget level, teacher population, and geographical size.

Participants in workshops are asked to fill in evaluation forms at the ends of sessions. Comments are useful in determining the reaction to materials and to the workshops. Names and addresses are added to a mailing list to receive a periodical newsletter related to the program. As an added check on the progress of the project, a survey is now being made of a random sampling of teachers on the mailing list, to determine actual classroom use of the curriculum guide activities.

Project Learning Tree is an attempt by industry to provide an unbiased, balanced group of activities for teachers to use in the classroom to create an awareness of, and knowledge about, the forest resource. The program also supplements the regular curriculum in providing situations for reinforcing the basic skills of critical thinking and problem solving—both important to future citizens facing the possibility of resource shortages and land allocation.

Although not as extensive in scope, AFI's elementary and secondary teaching units from The Instructor and Scholastic Teacher advertisements, career materials, wall displays showing the growth of a tree and forest regions of the United States, have enjoyed good response over the years. Information concerning these educational materials used to answer written requests from teachers is made available to educators principally through listings in free and inexpensive catalogues. Use is extended through distribution by state forestry associations and companies in local programs with educators.

AFI's policy regarding quantity availability and cost of materials for teachers has changed over the years. When materials were designed for students, these were given to teachers in classroom quantities. As production costs increased, charges were made.

As the program changed to one of distributing only materials for teachers, printed items were once again offered free of charge in single quantity with a charge for additional supplies. That policy is still in effect.

In recent years AFI has published a quarterly magazine designed for the general public, GreenAmerica. The largest audience for this publication, according to a survey of readership, however, is educators. Each issue deals with a specific topic—wilderness, water, wildlife—in a format including both text and poster. The magazine is made available free with a one-time charge of a dollar for handling.

In order to keep abreast of developments in the field of education, AFI has become a member of various professional education organizations. The participation role has included attendance at annual meetings to learn of new projects and approaches to education; attendance at special conferences dealing with environmental education to follow progress in that field; membership on association committees and executive officer responsibilities in several organizations.

Most active participation has been in the National Science Teachers Association, National Association for Industry-Education Cooperation, Conservation Education Association, National Association for Environmental Education, Western Regional Environmental Education Council, and as a charter member of the Alliance for Environmental Education.

Another major benefit to membership of AFI in professional education associations is the ability to seek and find those who are leaders in the development and implementation of education programs. Through the advice and counsel of educators, industry efforts in the field of education can be better developed in a context and form acceptable to the formal school system. And, in the field of environmental education where all points of view need to be considered in making decisions, industry's knowledge of resource management and use, environmental problems in manufacturing, and economic consequences of actions, should be a part of the mix.

Through the Alliance for Environmental Education, particularly, environmental education becomes a common ground for interaction among industry association members such as AFI, professional education organizations and numerous conservation organizations, all of whom do not necessarily agree in other arenas where they might meet. Cooperative efforts have spawned projects that, through exposure of the participants to diverse points of view, have given a new dimension to understanding and accepting problems faced by various segments of society in their spheres of operation.

AFI maintains an industry-forestry school interchange program with the faculty of forestry schools throughout the country. The direction for the industry-forestry school interchange program is provided by a committee with membership from industry and faculties of several forestry schools throughout the country, so as to make the elements of the program more responsive to the needs of the audience.

The program has provided the opportunity for deans or their faculty members to participate in tours so they may become more knowledgeable about advances in industrial forest management, particularly in regions of the country with which they are not familiar—taking westerners to the south, southerners to the west, for example. An exchange program is being developed to provide short periods of employment in the industry for forestry school faculty. Several industry executives have been visiting professors on forestry school campuses.

At present, with the formal school system, AFI plans to continue to supply materials to teachers and other educators who write regarding the role of the forest resource in the environment. Items will be updated as needed; new materials will be added as indicated by changes within the education field, teaching methods and strategies. Hopefully, Project Learning Tree will continue to expand to include any states interested in carrying the program. Memberships in professional educational organizations will be maintained. The industry-forestry school interchange program will be evaluated and expanded or changed according to the results.

In an informal way, AFI's Tree Farm program reaches a special audience with information of an educational nature about the forest resource.

AFI sponsors on a national basis the American Tree Farm System. The objective is to encourage the individual private landowner to manage his/her lands with some primary purpose in mind—timber, recreation or wildlife. The individual private non-industrial landowner—farmers, doctors, policemen—own more commercial forest acreage as defined by the U.S. Forest Service than do federal-state governments or industry.

Conferences are held for landowners in urban and suburban areas to develop a greater awareness of the resources they own and their relationship to it. Professional foresters work with landowners interested in managing their lands to develop a plan suitable to the needs of the owner. As lands meet the standards set by foresters working with the American Tree Farm System, they are certified as Tree Farms.

In order to ensure the level of standard for the program, lands are reinspected on approximately a five-year basis. If not acceptable, tree farm status can be revoked.

On a regional basis, owners in the program compete annually for regional Tree Farmer awards. Winners are then qualified to compete in the National Tree Farmer of the Year Contest. Judges for the award are members of the steering committee for the industry-forestry school interchange program.

Regional and national winners in the awards program from the South have gathered recently to act as an advisory/sounding board to the future direction of the American Tree Farm System. Again, AFI's intent is to work with the audience to develop, hopefully, the most acceptable program to meet common needs.

The Tree Farm program is in the process of adding a new dimension, the Pioneer Tree Farmer. This new step toward certification will allow those who own lands but have done no management to become a part of the Tree Farm system if they agree to develop and carry out plans for managing their lands. They would be added to the tree farm records to receive information for a period of two years. At that time if the lands are not ready for certification as a Tree Farm, the landowner if interested must reapply for membership in the Pioneer program or be dropped from the rolls.

Attempts to measure the successes and failures of programs have not always been made in a formal way. AFI's program direction overall is guided by the results of an annual public opinion poll, conducted by Yankelovich, Skelly and White. A yearly review of that document to some extent is a measure of the effectiveness of AFI's and the industry's communications programs.

With the formal school systems, the effectiveness of materials sent in answer to requests from teachers is basically measured by the

AFI EDUCATION PROGRAM

<u>Audience</u>	<u>Reached By</u>	<u>Distributed By</u>	<u>Availability</u>	<u>Feedback/Evaluation</u>
K-12:				
Teachers; Curriculum specialists; State and local superintendents, principals; Colleges of Education	Teaching Aids	AFI; forest industry associations and com- panies	through listings in free and inexpensive teaching aid catalogs	only through numbers orders
	GreenAmerica	AFI; forest industry associations and com- panies	through AFI mailing list	surveys, letters
	Project Learning Tree-- -state planning committees -workshops -participation and with crediting -curriculum guides -newsletter -evaluation	AFI/WREEC; state departments of education	through workshops in selected states only	evaluations, surveys and direct contact
	Membership in pro- fessional organiza- tions			one-on-one at meet- ings, correspondence
Federal, state, local natural resource agencies; national regional, local con- servation organiza- tions	Project Learning Tree-- -state planning committees -workshops -curriculum guides -newsletter -fiscal agent	AFI/WREEC; state departments of education	through workshops in selected states only	surveys, direct contact
	Membership in professional organizations			one-on-one at meet- ings, correspondence
Forestry School Faculty	Short-term employ- ment Speakers Tours	AFI/industry companies		direct contact, correspondence

Educational publications and filmstrips available from AFI:

GreenAmerica Magazine

Quarterly; single copy subscription is available for a one-time handling charge of \$1.00. Cost: 1-10 copies, free; 11-500 copies, 10¢ each.

Learn to Love Trees

Instructor Magazine teaching unit reprint for elementary teachers.
Cost: 1-10 copies, free; 11-500 copies, 12¢ each.

Trees Want You

Scholastic Teacher Magazine teaching unit reprint for secondary teachers.
Cost: 1-10 copies, free; 11-500 copies, 10¢ each.

Growth of a Tree

Chart and teaching suggestion booklet for teachers.
Cost: single copy free; additional copies, 20¢ each.

Forests and Trees of the United States

Map and teaching suggestion booklet for teachers.
Cost: single copy free; additional copies, 20¢ each.

Colleges and Universities offering professional education programs for careers in the forest products industries.

Cost: 200 copies free; additional copies, 15¢ each.

Opportunities Unlimited in the Forest Products Industries.

Cost: 200 copies free; additional copies, 15¢ each.

Schools and Colleges offering technical and vocational education programs for careers in the Forest Products Industries.

Cost: 200 copies free; additional copies, 15¢ each.

This Unique Bit of Life filmstrip with record.

10-minute for high school science classes.

Cost: \$27.50; slide form, \$16.50.

Trees for 2001: Today's Foresters in Action filmstrip with record.

12-minute for high school social science classes and career guidance.

Cost: \$26.00; slide form, \$16.50.

Operation Salvage: Paper As A Reusable Resource filmstrip with record.

17-minute for high school social science classes.

Cost: \$26.00; slide form, \$15.00.

20/20 Vision: Forests for the 21st Century slide presentation.

20-minutes for general audience and private forest landowners stressing the need for non-industrial private forest land management.

Cost: \$30.00

number of items ordered each year. Project Learning Tree, as a more extensive endeavor, has been formally evaluated and will be classroom-tested in the future. As mentioned, a current survey is being conducted to determine the effectiveness of the workshop system used to implement the program and the extent of use of the program in the classroom by teachers after having attended a workshop.

The industry-faculty interchange program is a little young yet to be evaluated in any formal way. The tours are, however, always well-subscribed. Future acceptance will measure the success of other elements in the program. The American Tree Farm System, although nationally sponsored by AFI, is guided in each state by a Tree Farm Committee. The number of committees actively working to improve the management quality of the lands certified and to encourage other owners to join the program has increased markedly, a possible method of measurement of success. The programming suggestions to reach goals of the program have become more creative and extensive with grant monies supplied to committees by AFI.

What elements of AFI's programs will continue in the future is hard to determine. AFI must depend on a level of funding formulated year to year on industry sales of domestic products, with no given continuing base of operation, plus a review by the industry of the effectiveness of AFI's public and formal school communications programs. With this in mind and knowing the continuously changing resource and environmental picture, predicting precisely the type and extent of future programming is difficult.

—Submitted by:

June McSwain
Director of Education

December 1978

AMERICAN GAS ASSOCIATION

1515 Wilson Boulevard
Arlington VA 22209
(703) 524-2000

Since its founding in 1918, the American Gas Association (A.G.A.) has served as coordinator and spokesman for gas companies serving American consumers. A.G.A. also functions as the industry's catalyst in technical and governmental matters.

It is the purpose of A.G.A. to enhance appreciation of the essential role of gas in meeting the nation's energy needs for the foreseeable future. Natural gas has long been recognized as the least polluting of the fossil fuels (coal, oil, natural gas) which at present provide approximately 95 percent of the energy consumed in the United States. Because natural gas is not only the least polluting, but also is the largest contributor of domestically produced fuel energy among the fossil fuels to both industrial and residential markets, the question of its future role must be continuously answered.

To make national, regional, and local governing bodies and the general public aware of the effects of proposed modifications in the fuel energy mixture that supplies the nation's energy needs, now and in the future, continues, therefore, to be a major association effort. Since fuel energy production and use impinge on virtually every area of man's environment, A.G.A. has supported numerous studies and analyses to evaluate these potential impacts. In the study *Commercializing High-BTU Coal Gasification: The Rationale for Immediate Action*, it is noted that "from the environmental perspective—including physical, chemical, biological, and socio-economic impacts—the coal-gas-to-user cycle would produce significantly less environmental damage than coal electrification at every major step along the way to the consumer." This same study points out that "a recent FEA/EPA study suggests that all the coal gas plants that are proposed for inclusion in the federal load guaranty program would comply with, and even exceed, the most stringent version of the non-degradation amendments presently before the Congress." Other environmental concerns such as water resource use, land impacts, disposal of solid wastes, and socio-economic impacts are also spoken to in this same study.

Another study has been done to estimate CO₂ emissions caused by burning various fossil fuels and to compare CO₂ emissions produced from two alternative coal-based energy strategies: High-Btu coal gasification and gas combustion versus direct coal combustion for electricity generation.

These analyses and many others which evaluate economic and concomitant impacts of alternative energy sources have been presented before committees of the Congress, provided as background for writers on the subject of energy, used as material for speeches made by A.G.A. staff supplied to college students and college faculty upon request, and made known to the media through press releases.

A.G.A. ANALYSIS PROGRAM UPDATE, JUNE 1978

Analyses Completed in 1977 and 1978*

<u>Title</u>	<u>Release Date</u>
Commercializing High-Btu Coal Gasification: The Rationale for Immediate Action	4/77
"A Comparison of Coal Use for Gasification Versus Electrification"	4/77
"Impact of the President's Proposed \$1.75/Mcf New Gas Price Ceiling on Domestic Gas Production"	5/77
"A Comparison of Estimates of Additional Natural Gas Production from Deregulation of New Gas Prices"	5/77
"Economic Effects of the President's Proposed Natural Gas Users Tax"	6/77
"Effects of the House Ways and Means Committee Revisions in the President's Proposed Gas Users Tax"	7/77
"Carbon Dioxide Emissions from Fossil Fuel Combustion and from Coal Gasification"	9/77
"Evaluation of the President's Proposed Supply-Side Energy Strategy"	9/77
"Consumer Cost of the Energy Tax Measures Contained in HR 8444"	10/77
"Impacts on Consumer Prices of the House and Senate New Gas Pricing Legislation"	10/77
"An Analysis of the Constraints on Converting Large Industrial and Utility Boilers from Natural Gas to Coal"	11/77
"A Historical Comparison of Production and Consumer Costs of Natural Gas Versus Alternate Energy Forms"	12/77
LNG Fact Book	12/77
"An Evaluation of Energy Conservation in the Residential Gas Spaceheating Market"	2/78
"A Comparison of Foreign Energy Payments Resulting from Importation of LNG Versus Oil"	2/78

*Single copies available free of charge on request from A.G.A.

Analyses Completed in 1977 and 1978 (continued)

<u>Title</u>	<u>Release Date</u>
"A Forecast of Capital Requirements of the U.S. Gas Utility Industry to the Year 2000"	3/78
"Implications of the Department of Interior's August Lease Sale on Future Offshore Production"	3/78
"A Survey of the Role of LNG Peakshaving Facilities in Meeting U.S. Utility Gas Demands"	3/78
<u>The Importance of Gas Energy to Labor</u>	3/78
"An Evaluation of Trends in the Househeating Market"	4/78
"Drilling Activity and Potential Gas Resources"	4/78
"The Impacts of Increased Gas Supply on the Nation's Economy and Employment"	5/78
"A Comparison of Capital Requirements for Alternative Domestic Energy Supplies"	5/78
"Impact of the NEA Gas Pricing Compromise on Disposable Family Income"	6/78
"The Economic and Environmental Impacts of Gas Versus Coal in Large Industrial Boilers"	8/78
"Forecasted Production of Lower-48 Conventional Natural Gas Under the House/Senate Gas Pricing Compromise"	9/78
"An Economic Comparison of Gas/Solar House Heating Systems Versus Electric/Solar Systems"	9/78
"Potential Health and Safety Impacts of High-Btu Coal Gasification: Occupational"	9/78
"The Impact of Gas Curtailments on the Growth of Oil Imports Since 1973"	9/78
"An Economic, Efficiency, and Environmental Comparison of Current Alternative Household Space Conditioning Systems"	11/78
SNG Fact Book	12/78
"The Impact of Natural Gas Production on Developing Offshore Frontiers"	12/78
"Prospects for Using Natural Gas in Light Transportation Vehicles"	12/78

TEACHING AIDS ABOUT GAS*

Kits

- N00010 Natural Gas—Science Behind Your Burner (grades 6-9). Includes one 37-frame filmstrip with teacher's guide, two wall charts, two duplicating masters.
- N00100 How Your Gas Meter Works (grades 6-9). Includes one booklet, one wall chart, two duplicating masters.
- N00160 Natural Gas Serves Our Community (grades 4-5). A cutout kit.
- N00170 Natural Gas Serves Our Community (grades 2-3). Same as N00160, but written for lower grade level.
- N00500 Science Principles and Gas Appliances with Experiments (grades 7-9). One booklet, with materials for overhead projection and one duplicating master.

Booklets and Pamphlets

- N00085 Experiments: Properties of Gas and Heat Energy (grades 7-11).
- N00140 The Science of Laundering (grades 9-12)
- N00165 Natural Gas Serves Our Community (grades 4-5).
- N00175 Natural Gas Serves Our Community (grades 2-3).
- N00430 History of Natural Gas (grades 3-6).
- N00470 Gas Centered Projects for Science Fairs (grades 7-12).
- N00480 The Story of Natural Gas Energy (grades 6-12).
- N00550 What is a Gas? (grades 3-6).
- N00575 What Happens When You Turn on the Gas (grades 4-7).
- N00645 Newsletter "Energy Balances" (grades 7-10).
- N00650 Newsletter "Natural Gas Energy and the Environment" (grades 7-10).
- N00655 Newsletter "Natural Gas from Unconventional Sources" (grades 7-10).
- N00660 Newsletter "LNG" (grades 7-10).
- N00665 Newsletter "Coal Gasification" (grades 7-10).

*These items are generally furnished free of charge by local gas companies. If not available in this manner, they may be secured from AGA.

- N00670 Newsletter "Drilling for Energy--Offshore" (grades 7-10).
- N00675 Newsletter "Fuel from Biomass" (grades 7-10).
- N00680 Energy Report "Energy Conversion/Efficiency" (grades 7-10).
- N00690 Energy Report "Synthetic Natural Gas from Peat"
(grades 7-10).

Filmstrips

- N00420 Look to the Future...The Gas Company in Your Community
(grades 6-9).
- N81040 How the Jet Engine Works (grades 5-12).
- N81050 Scientists Work Together (grades 5-7).
- N81060 Fuel Cells (grades 6-12).
- N81070 Flames and Energy (grades 4-6).
- N81090 More to Come (grades 4-8).

There are many other activities participated A.G.A. that are relevant to environmental education in the broader sense. Background information on the natural gas industry is provided in a number of formats—pamphlets, booklets, filmstrips, films, reports—for the educational community. Prepared for grade levels K-12, these materials are sent to teachers free upon request. Teachers learn of the materials through advertisements in educational magazines, and exhibits at teacher educational conferences. In some instances, member companies prepare brochures listing the educational aids available to teachers and participate in numerous mutually beneficial ways with schools in their service areas. All of these services are free to teachers. Companies pay the cost for the A.G.A.-prepared materials used by teachers on the basis of use within their service areas.

An independent survey of teacher use of A.G.A. educational materials was done in 1975. This study indicated that teachers were using the materials in their classrooms as supplemental to required curricula and "82 percent of the respondents replied that they would reuse these materials again next year."

Because natural gas does play such a vital role as a source of energy and because it is the least polluting of the fossil fuels which provide the preponderance of U.S. energy needs, the vast majority of A.G.A. programs and activities are related, albeit sometimes tenuously, to environmental education. Since natural gas will remain a major contributor to the fuel energy mixture for the foreseeable future, A.G.A. will undoubtedly continue its efforts to enhance appreciation of the essential role of gas in meeting the nation's energy needs as well as helping to maintain the quality of the environment.

--Submitted by:

Dallas O. Dawson, Manager
Government Relations Coordination Programs

December 1978

AMERICAN INSTITUTE OF ARCHITECTS

1735 New York Avenue NW
Washington DC 20006
(202) 785-7300

In Troy, New York, a group of elementary students with serious math deficiencies are set to the task of measuring their classroom. Using simplified rulers, they carefully measure every piece of furniture, door, window, and wall before constructing an accurate scale model of the room. Pre- and post-testing shows that computing fractions and converting measurements are now skills rather than obstacles. Indeed, most of them have advanced one or two full grade levels in those areas, as well as having made substantial gains in problem solving, abstract reasoning, and multiplication.

In Cincinnati, Ohio, a junior high music class hears an architect lecture on the basic principles of acoustical design prior to a field trip to the Cincinnati Music Hall. For the first time, they have a clear understanding of the musical consequences of the physical organization of a symphony orchestra.

In Austin, Texas, fifth graders studying government work on "Cities of the Future." The class is divided into four groups. Each group selects a different site (underground, above ground, underwater, or outer space), writes a history of their city relating how it evolved from today's world, and then describes it using an outline derived from their previous analyses of actual cities. After drawing detailed plans, each group builds a large model and makes a formal presentation on their futuristic city to the school's administration.

In Newark, New Jersey, students from Arts High School explore well- and lesser-known sites and lifestyles of the city, recording their findings on film. The results are of such fine quality that the photographs are assembled into a sophisticated publication, Newark, which is distributed to the public by the city government.

What is happening in these classrooms? And beginning to happen all over the United States? These students—and through them their teachers, their parents, and their communities—are experiencing a conscious awareness of their surroundings. They are experiencing Built Environment Education (BEE).

The state of the environment has long been on the public mind. But until recently the focus has been almost exclusively on the natural environment. Efforts to enlighten the public about the built environment have been too few and far between, and often ignored or misunderstood.

Educators have often had a negative feeling about the built environment—viewing it as a force impinging upon and destroying the natural world. However, today educators, parents, civic leaders, decision-makers, architects, builders, are becoming more and more aware of the necessity of

molding the built environment into one which contributes to a better quality of life for those living in it.

What Is BEE?

Someone has said that the built environment is anything we cannot attribute to Mother Nature. In fact, deciding not to build anything on a tract of land is a built environment judgment. Buildings, highways, utility lines, bridges, tunnels, signs, parks, zoning laws, airports, railroad tracks, automobile traffic . . . all contribute to the built environment. The church and its cemetery; the local hospital, its parking lot, and its quiet zone; the city park, its paths, and its fountains; the hamburger stand, its signs, its smells, and its garbage . . . the built environment is everything people have imposed on the natural environment.

How can the relationships, values, esthetic judgments, skills, and knowledge inherent to this complex system be taught effectively? When and where does it fit into our lives?

Environmental education can begin at any age—the earlier the better—and continues throughout life. It seeks to prepare people for their present and future role as users and shapers of the built environment. Education about the built environment stresses, to quote the definition put forth by the Architects-in-Schools program of the National Endowment for the Arts, ". . . the development, first, of an awareness of the surroundings, senses, feelings, and needs; then of an understanding of the functions and the impact of the environment; and finally, of the ability to use the environment and change it to best satisfy the needs that have been defined."

For adults, BEE can be aimed at esthetic appreciation and community participation, while for children its message can be intergrated into existing courses such as social studies, math, science, the arts, and music. Unlike math or social studies, BEE has never been considered a basic of education. Nor has it rated even the nominal time allotted to music or art appreciation. This should not be the case much longer, for today, many groups and individuals are active in bringing BEE to the public and especially to young people.

Architects and BEE

Architecture is only one of the many forces affecting the built environment, but it is one of the most important. Today's architects are concerned with BEE because they are concerned with achieving and preserving quality in the built environment. For this to happen on a meaningful scale in the United States there must be a widespread public expectation and demand for quality in the built environment.

Aware citizens can make better choices. They require buildings designed to a human scale, streets designed for safety, furniture designed to fit the human body, classrooms designed for learning, parks that are restful, and public buildings that express the values of the community.

The built environment is the architect's particular domain. What is built, why it is built, and where it is built are all a part of their responsibility. If as a profession, architects are to make contributions to environmental quality, they must become politically articulate to affect those processes of government that control environmental design.

The architect, in collaboration with the owner, strives to achieve an architecture of consequence. Architecture has a personal, and often dramatic effect on everyone. The architect relies on the public's participation and interest in the design process, for it is that interest which stimulates the architect to achieve work of significance. The public should be an educated participant.

No other art form so completely pervades our daily lives. We live, work, study, and play in and around our buildings. Our surroundings affect our moods and temperaments. Certain buildings, parks, plazas, and streets lift our spirits, while other diminish them. We must all share in influencing our architecture for it will have a lasting effect on us all. Only through a strong and pervasive BEE effort will this happen.

Role of The American Institute of Architects

The American Institute of Architects (AIA) is the national organization of the architectural profession, established in 1857. The AIA fulfills the basic goal of maintaining the ethics, standards, and competence of architects. The following statement from its Bylaws gives clear expression of the ideals of the profession

"The objects of The American Institute of Architects shall be to organize and unite in fellowship the architects of the United States of America; to combine their efforts so as to promote the esthetic, scientific, and practical efficiency of the profession and building industry by advancing the standards of architectural education, training, and practice; to coordinate the building industry and the profession of architecture to insure the advancement of the living standards of our people through their improved environment; and to make the profession of ever-increasing service to society."

Membership in the AIA is open to every architect licensed to practice in the United States. Every prospective AIA member has to satisfy a local chapter with his professional qualifications and willingness to abide by the AIA's Standards of Professional Practice. Currently, the membership of AIA is comprised of approximately 30,000 licensed architects in over 200 local Chapters. The Institute is headquartered in Washington, DC.

Since 1966, the AIA has been involved with BEE—working on the national level to help clarify issues and develop methods and materials for raising the public consciousness on this vital issue. The AIA's BEE program, is aimed at providing the general public—and especially school-age children who will become decision-makers as adults—with a better

understanding of the factors which influence the nature of their physical surroundings. The objective of this important program is a thoughtful citizenry, equipped with skills and values; taking reasoned action necessary to shape cities, towns, and countrysides into better places to live; and remaining active in efforts to ensure that they will continue to be better places in the future.

To develop an understanding of our architectural heritage, and to have an influence on its future, we must nurture progressively deeper, more personal involvement with the built environment.

That is why architects, both individually and collectively, have supported BEE and have become deeply involved in BEE as activists. Participation has taken many forms: legislative activists, theorists, consultants, architect/educators, community workshop organizers, and civic speakers.

AIA's commitment to built environment education started with the formation of a Task Force on primary and secondary education. While known variously as the Elementary and Secondary Education Committee, the Public Education Committee and now as the Environmental Education Committee, the principal charge has not changed—"to create an awareness of and concern for the built environment as it relates to the total environment among all students in Elementary and Secondary schools." During the early years, the committee accomplished a good deal:

Creating and Publishing Three Different Guides to Environmental Education Resources and Activities for the use of AIA state and local components and members in influencing individual teachers and school administrators, and in becoming involved in actual classroom activities. The last of these was the highly respected 1970 COPE Guidebook (COPE=Committee on Public Education) which is still sought by architects, teachers and school administrators—even though it is badly out of date.

Influencing the Federal Government. In 1971 and 1972, AIA lobbied actively and testified in support of legislation creating and funding the new Office of Environmental Education in the Department of H.E.W. All of this was an attempt to reinforce the importance of the built environment and to ensure that the staff priorities and funded grants would demonstrate a balanced emphasis on the built environment and the natural environment.

Funded the Development of Important Teaching Resources— including a teacher training and curriculum program created by architect James Pratt of Dallas and the well known "Our Man-Made Environment Book Seven," the excellent hands-on workbook for seventh grade students created by architects Alan Levy and Ricky Wurman of Philadelphia's GEE (Group for Environmental Education!).

In 1972, even with increasing pressure for AIA to develop additional teaching resources, it became apparent that the AIA could not afford to continue to fund the creation of these resources. The next year, the AIA National Convention supported a resolution "to explore the development of learning package programs on environmental awareness for use in educational systems from elementary through college levels and in schools of architecture." In response, a new Committee on Environmental Education, under architect Stephen A. Kliment, researched the "state of the art" in order to "develop an action plan so AIA could become more effective in BEE."

The overall objectives of the committee and the AIA were clearly articulated:

- To create, in students and those who influence students, an awareness of and concern for the built environment as it relates to the total environment.
- To inform them of their eventual role in demanding responsible planning and design in their communities.
- To provide them with the knowledge of alternative approaches as well as the tools, skills and confidence to work actively toward improving the quality of the built environment.

Although these objectives had not changed much over the years, the AIA's efforts followed a new course. The committee shifted its emphasis to that of a catalyst—to work among special national and regional target groups and decision-makers, who in turn would multiply the AIA's effort which eventually will result in a significant increase in the level of awareness and concern among a greater number of teachers, curriculum specialists, and school administrators on the local level.

A seven-point action program for AIA was drawn up by the committee:

A Teacher Introduction to BEE—not just another teaching resource, this recently developed guide is intended to introduce teachers and curriculum specialists to the need to integrate built environment concerns and interests in normal teaching, and to lead these individuals to more information and resources. The National Council for the Social Studies assisted in promoting and disseminating the guide.

Promotion—a general effort within and outside of the profession, principally through environmental education articles in teacher and general audience periodicals.

An Inventory of Activists—members of the profession involved in environmental education. The inventory was published and disseminated throughout the profession.

Participation—in national environmental education, and in the activities and programs of federal government agencies such as the U.S. Forest Service and, of course, the U.S. Office of Education. The committee is attempting to influence the balance between the built and natural environment emphases that such organizations and their activities demonstrate.

Support Effective State Legislation—cooperate with state components and related groups, seeking legislation establishing official state environmental education divisions, programs and commissions which have a balanced focus on the natural and built environments. Legislative guidelines were recently published and distributed to members of the profession and AIA, state components.

A Conference for Deans of Education—who influence teaching of future teachers.

An AIA Awards Program—to recognize outstanding achievements in built environmental education, among individuals inside and outside of the profession, school systems, and other organizations.

Today the 65 member AIA committee, with general staff support from the Institute's Department of Education and Professional Development, has completed several of these goals. In addition, the committee has been credited with these accomplishments:

Environmental Education Teaching Tools—a bibliography of teaching resources with a built environment emphasis, published as an element of the Institute's BEE publication series.

Architects-in-Schools Programs (AIS)—full support for and participation in the National Endowment for the Arts' new program aimed at introducing BEE into the schools by means of placing architects and other selected environmental design professionals in school residencies. The Institute's support for this program extends to the organization selected by the Endowment to administer the AIS—the Philadelphia-based Built Environment Education Center (BEEC), under the direction of Dr. Aase Eriksen. The AIA, together with other organizations, agencies and foundations, has supported the creation and continued existence of BEEC, which shares common environmental education objectives with the AIA.

Workshop Guidebook—how to conduct environmental education workshops involving architects and teachers. This recent publication, funded in part by a grant from the Office of Education of the U.S. Department of H.E.W., outlines ideas for workshops designed to 1) train architects to function as resource people for teachers and students in a school setting, 2) expose teachers to BEE, and 3) provide opportunities for teachers and architects to discover ways of working together in the classroom.

Environmental Education Newsletter—published three times each year, to keep interested members of the profession and other BEE activists abreast of the activities and plans of the AIA Environmental Education Committee.

Future Plans

In 1979, with leadership from Ehrman B. Mitchell Jr., FAIA, the AIA's president for the year, architects throughout the country will participate in "A Celebration of Architecture" to encourage greater public understanding of what architecture is, how it can be enjoyed, and how it comes to be.

As a function of this yearlong commitment to public education, the Institute's environmental education program will grow and expand. For the first time, the AIA Environmental Education Committee enjoys the support of a full-time staff director of environmental education, within the AIA Department of Education and Professional Development. The committee has set these goals for 1979 and beyond:

Active Participation in the Celebration of Architecture--including workshops and activities involving school teachers and young students at the Institute's national convention and other "celebration" events.

Curriculum Guidelines Project--the development of a framework of BEE learning units for use in grades K through 12, organized into progressive sequences in which advanced units expand upon knowledge and skills gained from elementary units. The framework will include suggestions for the comprehensive use of learning units in the full breadth of subject areas usually associated with K through 12 curricula.

Environmental Education National Symposium--to occur in 1980-81, to bring together people already active in environmental education with those in a position to influence educational policy. Participants will be educators and education administrators, deans of schools of education, representatives of environmental groups, and representatives of federal and state agencies and departments which have been or might become involved in environmental education.

Environmental Education in the Community--an expanded AIA focus on the BEE role and responsibility of museums, libraries, community design centers and other entities and organizations in touch with the needs and interests of citizen groups or the general public.

For further information about AIA Environmental Education programs contact: Alan R. Sandler, Director, Environmental Education, The American Institute of Architects.

--Submitted by:

James E. Ellison, AIA Administrator
Department of Education and
Professional Development

December 1978

AMERICAN NATURE STUDY SOCIETY

c/o Dr. John Gustafson
R.D. 1
Homer NY 13077
(607) 749-3655

In 1905 Maurice Bigelow of Teachers College, Columbia University, founded the Nature Study Review, a magazine directed at providing material and a medium of exchange for persons interested in developing a strong program of elementary science in the schools with emphasis on nature study rather than watered-down technical science.

The definition of nature study was broad. Today it would be called either environmental science or ecology. Articles dealt with topics like soils, gardening, chemistry, geology, the sun, astronomy, forestry, in addition to plants and animals and their interrelationships. They emphasized "critical investigation," experiments and observations—process—rather than facts.

Soon subscribers and contributors began to talk about getting together to share ideas, and in 1908 the American Nature Study Society (ANSS) held its first meeting. Liberty Hyde Bailey, the great Cornell botanist and educator, was president. Through the years a list of the presidents sounds like a "Who's Who in Natural History and Outdoor Education," and includes Anna Botsford Comstock, E. L. Palmer, Charles E. Mohr, Eva L. Gordon, Richard Westwood, Richard Weaver, Edwin Way Teale, and Roger Tory Peterson.

Membership includes authors, college professors, grade and high school teachers and anyone else interested in learning about, enjoying, educating about, and protecting the environment. Nature Study Review has been replaced by a variety of magazines. The present one is a quarterly journal entitled Nature Study.

From its inception, the American Nature Study Society has been affiliated with the American Association for the Advancement of Science, and until 1976 held its annual meeting concurrently with AAAS. Since the change in AAAS meeting date presents real problems to ANSS membership, we now meet with regional or other national groups with shared interests and concerns. In 1978 ANSS is meeting with the New England Council of Environmental Education; in 1979 with the Conservation Education Association. ANSS is also a member of the Alliance for Environmental Education, the AAAS Cooperative Committee on the Teaching of Science and Mathematics, and the International Union for the Conservation of Nature and Natural Resources.

In addition to publishing the journal and holding meetings, ANSS conducts summer workshops using streets, school grounds, and park areas as laboratories to provide urban teachers with information, understanding and skills for teaching the environment. ANSS also has a list of members who will serve as lecturers or consultants in their areas.

Information on this is available from Ruth Melvin, Ohio Academy of Science, Columbus, Ohio.

ANSS has published and sells City Critters, a book on a sixth grade and up reading level which provides information on the successful urban animals. This book has an international distribution. ANSS also maintains a traveling exhibit of books written by members which is available to museums, schools, and workshops for the cost of transportation.

ANSS annually recognizes one author of books on children's science literature with the Eva L. Gordon award. Books are judged not only on their accuracy and readability but also on their sense of wonder, their ability to inspire the reader to further participation, and to advance the concept of the interrelatedness of all things on planet Earth.

--Submitted by:

Helen R. Russell
44 College Drive
Jersey City NJ 07305

October 1978

AMERICAN SOCIETY FOR ENVIRONMENTAL EDUCATION

33 Mill Road
P.O. Box R
Durham NH 03824
(603) 868-5700

The American Society for Environmental Education (ASEE) was founded in 1971 at the University of Michigan, to answer the need for a national professional organization for environmental educators at all education levels from primary school to graduate university studies. The ASEE is also committed to out-of-school and adult environmental education programs, and to work actively with the American business community to ensure environmental literacy for all citizens, young and old, and for the nation's working force, both blue and white collar. It is not an advocacy group, but an educational organization presenting all points of view.

A target audience of ASEE efforts has been in-service teachers, elementary and secondary. During the past five years, ASEE has successfully concluded some dozen graduate level environmental education workshops in cooperation with: Governors State University, Illinois; Rutgers University-Cook College, New Jersey; University of Massachusetts, Nantucket Field Station; Colorado Mountain College; Kankakee, Illinois, Public Schools; Danville, Illinois, Public Schools; Aurora, Illinois, Public Schools.

ASEE workshops utilize interdisciplinary instruction, with college faculties plus speakers from the business-industrial community, government, and environmental organizations. Independent evaluations of the workshops, as well as testimonial letters from teachers, have rated each workshop as a great success.

Annual budget for ASEE is approximately \$100,000.

ASEE publishes a quarterly Newsletter, plus special publications. Examples include two editions of People, Planet, Progress, a teachers manual in environmental education, and a series of curriculum guides.

Expansion of programs in 1979 will include:

- The Rutgers program, to be repeated, Summer 1979;
- The Nantucket program, to be repeated, Summer 1979;
- The University of New Hampshire, Summer 1979;
- A new Michigan State University program, similar to Rutgers, to be offered Summer 1979;
- A special "Business and the Environment" symposium, to be held at University of New Hampshire, March 1979;

The establishment, in cooperation with Florida Atlantic University at Boca Raton, of an ASEE field station in the Turks and Caicos Islands, British West Indies. This field station will be located on a gift of 108 acres of crown land and will engage in environmental research, particularly the growing of food in the sea.

--Submitted by:

Dr. William L. Mayo
President and Executive
Director

October 1978

ASSOCIATION FOR ENVIRONMENTAL AND OUTDOOR EDUCATION

Don Bielefield
253 Johnstone Court
San Rafael CA 94903
(415) 556-4366

The Association for Environmental and Outdoor Education (AEOE) is dedicated to the education of children in the ethic of conservation. This organization believes in the potential of education to help children perceive and understand environmental principles and problems.

We encourage carefully-planned and sustained programs of formal and non-formal education. By exploring personal values and providing involvement based on student perceptions, interests, and competence, we seek the development of a personal ethic appropriate to the enhancement of environmental quality.

To this end, we continuously support educators in their quest for the skills, attitudes and materials so essential to help learners know and care about their environment.

The Association for Environmental and Outdoor Education is composed of three separate and distinct incorporated organizations. These are located in Northern California, Southern California and the State of Washington. The names, respectively, are Northern California AEOE, Southern California AEOE and Washington AEOE.

In order to retain mutuality of interests, purpose and common goals among the three groups, an unincorporated national coordinating council of selected members meets to discuss policy and handle public relations and communication on a national level. The principal office for handling correspondence and informational service detailing the environmental education interests and activities of AEOE is located at the address of the coordinating secretary of the coordinating council.

The original organization of AEOE began in Southern California in 1954. At that time it was called the Association for Outdoor Education (AOE). Sections were later established in Northern California, Washington and Alaska. National meetings were held annually to fulfill the purposes of the organization. To assure members that the group did not just represent the outdoor school and camping, the name was changed to include environmental education. The Association for Environmental and Outdoor Education became one of the few organizations specifically designed to broaden the scope of outdoor education to include a multitude of environmental concerns.

More recently, the size of the executive board and the expenses of sending representatives to national meetings became a burden on the budget. The Articles and By-laws were revised to gear down the size

of the national organization, but to continue to maintain the same effectiveness. To give autonomy to the sections and increase their liabilities because of distance and communication problems, it was decided that each organization incorporate separately. The Articles and By-laws would contain the continuity required for the organization, but also the diversity required by each state where filed. If Members-at-Large from another state wish to start a separate group in that state, subject to the approval of the National Coordinating Council, they would only have to adopt and revise the presently used articles and by-laws and incorporate in that state.

From the very beginning of this organization, emphasis has always been placed on showing teachers how to get their children to interpret the environment around them. The levels of involvement, whether national, regional, or local, have always been kindergarten through adult, using the resources of elementary, junior high, high school and colleges, as well as the Forest Service, Park Service and a multitude of other agencies involved in the same endeavor. A list of topic titles found on conference brochures over the years shows the depth of involvement:

Griffith Planetarium and Lazarium
Audubon Bird Walk of Orange County Water District
Oceanography aboard the Fury II
Backpack on Catalina
Recycling Units
Indian Games, Lore, Crafts for the Classroom
Classroom Gardening
Near Shore Marine Life
Techniques for Interpreting "The Out-Of-Doors"
Project Learning Tree
Energy Debate
Energy Hunt
Energy Activities: tracing sources, flow, costs (Idea "Swap Meet")
National and State Issues and Trends in Outdoor Environmental
Education
What Outdoor Education Means to Me
The Role of the California State Department of Parks and
Recreation in Outdoor Environmental Education
Cold Blooded Creatures, Outward Bound Adventures
Natural Dye and Hand Spinning
Animal Investigation
Pond and Plant Study
Beaver and Animal Pelts, Art work and Wildlife Exhibits
Camp Fire Programming
Blue Heron Marsh Workshop, co-sponsored with Audubon Society
Sun Day Activities
Energy and Man's Environment
Camp Cispus Un-Conference
Edmonds Environmental Education Curriculum Guide
Environmental Problems and Their Modifications
Food Chains and Webs
Living Life's Emergencies
Study of Local Environment through Past History

Human Communications
Project Ecology, Highline Schools
The Classroom as an Environment
"Implementation of Energy Curriculum" (small-group activities
by Project USE Team)
Introduction to the Case Study Approach
Showdown on the Salmon River Range
Field Trip to Botanic Gardens at UCR
Nature Study Trip to the Hidden Valley Area of the Santa
Ana River
Dana Point Marine Science Laboratory Outing
Environment, Economics and Values for the Future
Futures Game: Energy, Food and You
Forest Service Investigations
Fire Ecology
Bee Keeping
Intertidal Ecology and the Abalone
Using Scuba Diving as an Interpretive Tool
Ecology of the Coast Redwood
Coastal Bluff Ecology and Botany
Pygmy Staircase Ecology Walk
Astronomy at Mt. Palomar

--Submitted by:

Roger D. Morrow
Coordinating Secretary
9616 Vernhardson Street
Gig Harbor WA 98335
(206) 858-7298

June 1978

BOY SCOUTS OF AMERICA

National Office
North Brunswick NJ 08902
(201) 249-6000

Purpose

Founded in 1910, the Boy Scouts of America (BSA) has influenced the lives of more than 60 million youth and adult leaders since its inception. In striving toward its objectives of character building, citizenship training and fitness, both mental and physical, Scouting has emphasized conservation and outdoor activities from the start. Today 3½ million youth and 1¼ million adult Scouters continue to recognize the importance of conservation in nearly every aspect of our lives.

The Boy Scouts of America has three basic programs designed to meet the needs and desires of youth. Cub Scouting is for boys aged 8 to 10 who participate in family and home-centered activities. Boy Scouts are boys aged 11 to 17 who engage in a rigorous outdoor program, advancement, and peer-group leadership. Explorers are young men and women ages 15 to 20, who have realistic opportunities in a contemporary program to explore adultlike roles and vocational opportunities. A Conservation ethic and activities are incorporated into all three segments of the program.

Scouting strives to educate its youth and adult members through three fundamental conservation objectives. All members are encouraged to recognize the importance of our natural resources, to be aware of man's interdependence with the environment, and to develop an attitude of improving conditions.

History

In Scouting's early years, conservation was inculcated into the program by Ernest Thompson Seton and Daniel Carter Beard, who combined their own youth groups with Scouting. Seton wrote the first Scout handbook for the Boy Scouts of America using material from Baden Powell's book, Scouting for Boys, and his own Birchbark Rolls. While there was no concentrated conservation effort in the first several years, individual Scout units did collect litter, plant trees, and engage in insect control. Among the merit badges offered in 1911 were Forestry, Conservation, Ornithology and Stalking.

A growing emphasis on conservation was reflected in the changing requirements for advancement. By 1913, to become a First Class Scout young men were required to identify ten species of trees. In the same year, 51 Scouts earned the Forestry merit badge and 31 earned the Conservation merit badge.

In 1919 the practice of planting and care of Roosevelt Memorial Trees at Oyster Bay was initiated. Victory Gardens in 1918 and 1945 are other examples.

More recently, activities with national impact have been undertaken. The National Conservation Good Turn program began in 1954 at the request of President Eisenhower, combined Scouting's philosophy of "doing a good turn daily" with conservation-related activities. The purpose was to "arouse public recognition of the need for adequate protection and wise management of our soil, water, mineral, forest, grassland and wildlife resources." This call aroused into action more than 3½ million boy and adult members of the BSA. The story of the 1954 National Conservation Good Turn is indeed a highlight of conservation within the Boy Scout Movement.

Scouting's "Outdoor Code" was developed in conjunction with this program:

As an American, I will do my best to --

Be Clean in My Outdoor Manners—I will treat the outdoors as a heritage to be improved for our greater enjoyment. I will keep my trash and garbage out of America's waters, fields, woods and roadways.

Be Careful With Fire—I will prevent wildfire. I will build my fire in a safe place and be sure it is out before I leave.

Be Considerate in the Outdoors—I will treat public and private property with respect. I will remember that use of the outdoors is a privilege I can lose by abuse.

Be Conservation-Minded—I will learn how to practice good conservation of soil, waters, forests, minerals, grasslands, and wildlife; and I will urge others to do the same. I will use sportsmanlike methods in all my outdoor activities.

Project SOAR (Save Our American Resources) was developed by the Boy Scouts of America in response to a suggestion from the President to undertake a major conservation service in 1971. The objective was to encourage each American citizen to understand and accept a personal responsibility for improving the environment.

More than 57,000 Cub Scout packs and Scout troops and 4300 Explorer Posts participated in a broad program of conservation-oriented activities. More than 1.3 million individuals participated in activities with learning experiences and positive results.

Scouting Keep America Beautiful Day on June 5, 1971 was a highlight of Project SOAR. The overwhelming success of this program led to continuing Project SOAR efforts in succeeding years.

Awards

The Boy Scouts of America offer three major conservation awards.

The William T. Hornaday Award

This conservation-awards program was initiated in 1914 by Dr. William Temple Hornaday, then director of the New York Zoological Park, in an effort to inspire the Boy Scouts of America to work constructively for conservation. It was funded for 20 years through his Permanent Wildlife Protection Fund. Upon his death, the award was sponsored for 35 years by the New York Zoological Society and named, in his honor, the William T. Hornaday Award for Distinguished Service to Conservation, thus appropriately paying tribute to the nation's outstanding pioneer wildlife conservationist. In 1974 the Natural Science for Youth Foundation took over sponsorship of this program.

Since its inception in 1914, this award has been highly prized by those fortunate enough to receive it in recognition of exceptional and unusual service to a very important area of Scouting. For many years it has inspired large numbers of Scouts and their leaders to work constructively for conservation.

The Hornaday award has five forms:

1. Unit Certificate to a pack, patrol, troop, post, or a group of five or more Scouts or Explorers for a unique conservation or environmental quality project.
2. Badge to a Scout or Explorer for outstanding service to conservation or environmental quality within a council.
3. Bronze Medal to a Scout or Explorer for exceptional service to conservation or environmental quality, within a council.
4. Silver Medal to a Scout or Explorer for unusual and distinguished service to conservation or environmental quality on a state or regional basis; not more than six Silver Medals are awarded each year.
5. A Gold Medallion to an adult Scouter or Explorer leader for unusual and distinguished service to conservation or environmental quality on a state, BSA region, or national basis; national impact is emphasized.

The Unit Certificate and the Badge are awarded by the local council. Application is made through the local council. The Bronze Medal is awarded by the national office of the BSA upon the recommendation of the council and the Awards Committee of the Natural Science for Youth Foundation following a review of recommendations and application submitted by a council. This award can only be considered when a qualified Scout or Explorer is nominated by his or her council, and no Scout or Explorer may personally apply. Final selection is made by the Natural Science for Youth Foundation and presentation is made by the council.

The Silver Medal is handled in the same way as the Bronze in regard to recommendation and application. The award is the highest possible attainment for a Scout or Explorer in conservation.

The Gold Medallion may be considered when a qualified Scouter is recommended by his or her council, an established conservation organization, or by any responsible recognized conservationist. This nomination is to be made by the Awards Committee of the Natural Science for Youth Foundation. Upon selection, the nomination must be approved by the national BSA Conservation Committee. The Gold Medallion is the highest possible attainment for a Scouter in conservation. Presentation of the award is limited to one a year.

U.S. Department of Agriculture Council Conservation Awards

The U.S. Department of Agriculture Council Conservation Awards Program was developed in 1960. The basic objective of the program is to stimulate greater general interest in natural resource conservation and application of conservation principles and practices in natural resource use. As stated by the BSA National Conservation Committee, the program provides an incentive to more than 400 councils of the Boy Scouts of America to achieve the following major objectives—that each council have:

1. A professional conservationist in a key volunteer position to serve as adviser to the council on conservation programming and promotion.
2. A long-range conservation plan for each acre of land it owns (councils own more than 400,000 acres of land) and a written schedule for carrying out that plan.
3. A carefully planned program of conservation activities and training for boys in camp.
4. At least one conservation-trained man on camp staff.
5. A year-round program of conservation activities for all boys to work on in their home communities, with adequate trained leadership to guide these activities.

To achieve fully these five major conservation objectives, each council must make effective use of local resource agencies and conservation specialists in planning, programming, applying, and maintaining conservation measures on the land. In addition, sound training of boys in resource conservation must be a continuing program. Such training in conservation values and attitudes is a significant part of Scouting's citizenship training efforts.

In 1962, two years after the USDA Council Conservation Awards Program was initiated, the Secretary of Agriculture proposed to the Chief Scout Executive that the program be expanded to include a national award in

addition to 12 regional awards. As a result, there are now two types of USDA Council Conservation Awards: Green Seal and Gold Seal.

In 1972 the Boy Scouts of America restructured its administrative organization, reducing the number of regions from 12 to 6 and establishing a new organizational level called "Service Area" between regions and councils. To adjust the USDA Council Conservation Awards to the new BSA organizational structure, the Secretary of Agriculture and the Chief Scout Executive agreed that a Green Seal Award would be offered to the winning council in each of the 28 BSA Service Areas and that a Gold Seal Award would continue to be offered each year as top national honor to the one Scout Council that surpassed all others in environmental conservation achievements.

Green Seal Award:

The council award that may be made each year in the 28 Service Areas of the Boy Scouts of America is known as the USDA Green Seal Council Conservation Award. The formal presentation of the Awards is made by a representative of the Secretary of Agriculture, usually a Soil Conservation Service state conservationist or a U.S. Forest Service regional forester, at a time and place designated by the winning Scout Councils.

Selection of Green Seal Award winners is made by BSA officials at the national headquarters. If the conservation accomplishments of councils within a Service Area do not meet the criteria and standards set by the judging committee, no Green Seal Award is given in the Service Area that year.

Gold Seal Award:

Initiated to provide an additional incentive to councils, the Gold Seal Award is given to the one council each year which excels all councils that have won the Green Seal Award. To be eligible for a Gold Seal Council Conservation Award, a council must first win a Green Seal Award.

Presentation of the Gold Seal Award is made by the U.S. Secretary of Agriculture or his representative.

Selection of the national winner of the Gold Seal Award is made by the group of BSA officials who select the Green Seal Award winners.

The first Gold Seal Award was presented to the Philadelphia Council on July 18, 1963. Under-Secretary Charles S. Murphy made the presentation at a ceremony commemorating the 50th anniversary of Scouting on Treasure Island, the oldest Scout Camp in continuous use in the United States.

The record of these awards over the years is certainly evidence of how the conservation efforts of the entire BSA movement is paying off at the level where it is readily apparent to the boys themselves and hence represents an inspiration for better efforts on the part of the individual Scouts.

World Conservation Award

In 1975 the World Conservation Award was developed in cooperation with the World Wildlife Fund and the World Scouting Bureau. The World Conservation Award patch is awarded to Scouts after the Scout council office receives the proper World Conservation Award application. The award is limited to Scouts under 18. The requirements are to:

- Earn the Environment and Conservation skill awards.
- Earn the Environmental Science merit badge.
- Earn either the Soil and Water Conservation or Fish and Wildlife Management merit badges.
- Earn the Citizenship in the World merit badge.

More than 2500 Scouts in the United States earned the World Conservation Award in 1977. An even greater number is expected to earn this award in 1978.

In addition to these awards, advancement recognition is available to both Cub Scouts and Boy Scouts who fulfill specific conservation requirements. In 1977 nearly 53,000 Scouts earned Environmental merit badges. Thousands of others earned Soil and Water Conservation, Fish and Wildlife Management, and Forestry merit badges. A new Energy merit badge pamphlet has just been developed so that Scouts can become acquainted with these conservation needs and recent developments. A dozen more merit badges are indirectly related to conservation. Conservation is woven into many other Cub Scout and Boy Scout advancement opportunities as well.

Training

For many years, the National Council of the Boy Scouts of America has operated conservation training schools at Philmont Scout Ranch, near Cimarron, New Mexico, and at Schiff Scout Reservation, near Mendham, New Jersey, for older Scouts.

Many local councils have followed this lead. The type of learning experiences afforded the quality of the professional educators and the number of boys reached a milestone in the history of conservation.

Conservation education is also offered at national Jamborees, at merit badge clinics and at special events such as the State of Wisconsin Eagle Scout Forestry Camp. The Fifty Miler Award for Scouts who travel 50 miles by foot, on horseback or canoe requires ten hours of conservation along the trail.

Recently, Scout councils have acquainted people with the latest environmental developments by sponsoring Scouting Environmental Country Fairs. Using a country fair format, local and state organizations and agencies are urged to develop exhibits, demonstrations, and audience participation activities covering an array of environmental subjects such as solar energy, ways to save home energy, recycling, pollution control, improving wildlife habitat, bird banding, tree planting, etc.

The Environmental Education Center at the National Headquarters in North Brunswick, New Jersey was established in 1960. A self-guided trail takes visitors by 24 stations that point out various environmental features along a half-mile trail. Since its inception, hundreds of thousands of Scout units, school classes and youth groups have hiked the trail.

Future Thrusts

The Boy Scouts of America are currently developing a new national conservation emphasis to be initiated in the fall of 1981. It is being designed to expose Cub Scouts, Boy Scouts and Explorers to a holistic approach, considering all aspects of conservation and the environment. It will focus on making all of us aware of our responsibility for the future.

References

Boy Scout Handbook
Boys' Life Magazine
Scouting Magazine
BSA Annual Reports
Scout Executive's Monthly
Local Council Exchange
Eagle Scouting Projects
William T. Hornaday Award files
Department of Agriculture Council Conservation Award files
Project SOAR files
Public Relations files
Information Bulletins
Special publications by BSA, such as:

Ecology Signs	Guide to Nature Projects
Ecology Workshop	Conservation Teaching Charts
Fieldbook	

Philmont files (Ernest Thompson Seton files)
Conservation merit badge pamphlets—Forestry, Fish and Wildlife Management, Soil and Water Conservation, Energy and Environmental Science, as well as Bird Study, Citizenship in the Community, Citizenship in the Nation, Fishing, Geology, Insect Life, Mammals, Nature, Oceanography, Reptile Study and Weather

Energy Conservation—Understanding and Activities for Young
People

Soil and Water Conservation Activities for Scouts

Our Outdoor Heritage (a filmstrip/record set; available on
loan)

Schiff Scout Reservation Conservation Plan (available on loan)

Conservation Idea Sheets:

Adult Scouter Conservation Clinic

Conservation Planning for Scout Camp Properties

Cub Scout Conservation Activities for Summer

Energy Gardens

Energy Merit Badge Clinic

Environmental Science Merit Badge Clinic

Fish Derby

A Guide for Cub Leaders—Conservation Advancement

The Troop Campsite...Development...Maintenance...

Beautification

Wildlife Habitat Improvement and Other Projects

--Submitted by:

David R. Bates, Associate Director
Camping and Conservation Service

December 1978

CONSERVATION EDUCATION ASSOCIATION

Richard W. Presnell
Secretary-Treasurer, Conservation Education Association
University of Wisconsin-Green Bay
Green Bay WI 54302
(414) 465-2391

Overview

The Conservation Education Association (CEA) was founded in 1953. Its formation grew out of a number of meetings in the late 1940s of the National Committee on Policies in Conservation Education, sponsored by the Izaak Walton League of America.

Purpose

The major purpose of the CEA is to promote conservation/environmental education at all levels, encompassing all aspects of the natural and man-made world upon which people rely for the development and maintenance of a desirable social, economic, scientific, cultural and political climate. Such learning and teaching are intended to cause understanding and manipulation of environmental factors that will strengthen and maintain a high quality environment.

Interrelationships

CEA has continually sought and successfully achieved common support and cooperation with other national organizations seeking to improve and advance conservation/environmental education opportunities for all people. This has been accomplished by scheduling sessions for and with other national and state organizations at CEA Annual Meetings. Its most significant achievement was the initiation of, and leadership in forming, the Alliance for Environmental Education, Inc. in 1970. The Alliance for Environmental Education membership totals 32 national organizations representing over 15 million individual members.

CEA also joined many other organizations in sponsoring the North American Regional Environmental Education Conference in St. Louis, Fall 1977.

Activities

The CEA sponsors an annual conference in various regions of the United States. The purpose of these meetings is threefold:

1. to learn more about environmental problems and issues of the region and ways they are being addressed;

2. to share successes in addressing such problems through educational means, and
3. to conduct the business of the organization.

Further, the CEA provides its members with services such as: a regular newsletter; packet services (consisting of bibliographies, teaching materials, etc.); audio-visual materials; white papers addressing current environmental problems; and an annual report including digests of papers given at the annual conference.

Leadership

The CEA worked energetically in accomplishing the passage of the National Environmental Education Act (P.L. 91-516). Members have served the U.S. Office of Environmental Education as advisors and as reviewers of general programs and grants programs. Several states have benefitted in establishing conservation/environmental education programs by utilizing CEA member expertise and materials published by it. As mentioned earlier, CEA leadership led to the formation of the Alliance for Environmental Education, Inc.

Future

CEA intends to remain practical and applied in its orientation in order to best serve its members. However, it is always open and sensitive to the needs of people to learn and know about their environment in order to make the best resource utilization decisions possible.

--Submitted by:

Richard J. Myshak
President

July 1978

EDISON ELECTRIC INSTITUTE

Educational Services

1111 19th Street, NW

Washington DC 20036 (address as of July 1, 1979)

(202) 862-3800

Edison Electric Institute (EEI) is the principal association of America's investor-owned electric companies. Its purposes are to help electric companies generate and distribute electric energy at the lowest prices possible consistent with safe and reliable service and the interests of consumers, employers, and shareholders; advance the art of producing, transmitting, and distributing electricity, including promoting scientific research to meet people's needs and to help the nation achieve employment, economic and environmental goals; and gather and make available factual information, data, and statistics of importance to consumers and the electric industry.

The goal of the Institute's Educational Services is to provide programs and services to aid member companies in improving their communications with educators and students about the role of electric energy in our society. The programs and services are developed on the assumption that, among other things, today's students and adults need to know about the conservation of energy resources, the environmental impact of energy conversions, and the need for energy in achieving environmental improvement.

The major portion of the work in educational services and relations is carried out by EEI member companies at local and regional levels. The Institute's Coordinator of Educational Services addresses national educational issues and the Institute provides support and promotion of national educational conferences and institutes dealing with energy, economics, and the environment.

Edison Electric Institute has been involved in some aspects of environment education since 1973 when it sponsored the development of The Energy-Environment Game, an instructional simulation designed for use in grades seven through twelve.

The educational materials are developed for various grade levels from kindergarten through the university level. EEI's developmental process begins with determining teachers' needs, followed by treatment of the concept by an independent agency, development of a prototype unit, classroom testing, refinement of the materials, reproduction of units in quantity, and an evaluation of teacher opinions of the materials following classroom use.

A list of current educational services materials is below. Some electric companies provide these materials free to educators in their service areas on request. Where this is not the case, the

materials may be purchased from EEI by educational institutions for the prices indicated.

	<u>Recommended Grade Level</u>	<u>Price Per Unit Educational Institutions</u>
1. <u>Electricity Serves Our Community</u> <u>EEI Publication No. 74-56</u> A cardboard model of an electric power system for bulletin board display. Contains: 17 cardboard cutouts in full color and suggestions to the teacher.	4-6	\$ 3.00*
2. <u>Our Energy-Based Economy</u> <u>EEI Publication No. 74-54</u> A multimedia kit which explains the basic principles of economics and the relationship of energy supply to the free-market system. Contains: Teacher Guide, four filmstrips with records, activity sheets and outgrowth activities.	5-8	\$30.00*
3. <u>Electrical Safety In and Around The Home</u> <u>EEI Publication No. 76-18</u> A multimedia kit on electrical safety practices. Contains: Two filmstrips, two cassettes, five activity sheets, game poster, 60 stickers and Teacher Guide	5-7	\$25.00*
4. <u>Energy-Now and in the Future</u> <u>EEI Publication No. 77-4</u> A multimedia kit which explores alternate energy sources and provides a realistic appraisal of their chances of significantly supplying our energy needs. Contains: Teacher Guide, six filmstrips, six cassettes and 12 activity sheets.	6-9	\$30.00*
5. <u>Food And Energy</u> <u>EEI Publication No. 78-39</u> A multimedia kit. The subject matter and treatment cover a number of areas related to language arts, social studies and science. Contains: Teacher Guide, two filmstrips, two cassettes, six activity sheets and a wall poster.	4-6	\$20.00*

*Quantity discount prices available on request. Prices include shipping by EEI's choice of the most economical method.

Recommended
Grade Level

Price Per Unit
Educational
Institutions

Recommended by EEI and available from: Spartan Graphics, 228 South State Street, Sparta, Michigan 49345:

6. A Powerful Friend

A multimedia kit which explains power, energy, environmental quality and the wise use of electricity. Contains: Teacher Guide, four filmstrips, cassette, activity sheets

K-3

\$20.00

7. Electricity and Me-And Energy Conservation

A multimedia kit on the generation, transmission, distribution, end use, costs and wise use of electricity. Contains: Teacher Guide, 11 filmstrips with cassettes or records and activity sheets

6-9

\$40.00

--Submitted by:

Richard B. Scheetz, Coordinator
Educational Services

December 1978

FORESTA INSTITUTE FOR OCEAN AND MOUNTAIN STUDIES

8205 Franktown Road
Carson City NV 89701
(702) 882-6361

Foresta Institute is located in rural Washoe Valley, Nevada. The institute has operated since 1958 as an education and research center focusing on land use and wildlife research as well as environmental education. Foresta's current priority is understanding the cultural and ecological system of our globe and sharing that understanding through our education programs. Foresta Institute's involvement with environmental education is an expression of the Institute's basic working philosophy of bringing people to recognize and live within the resources and tolerances of their environment while promoting a quality existence for all life. The education program, working in partnership with the institute's research, facilitates our purpose of educating an environmentally literate citizenry that shares a vision of a global community of individuals living in harmony with the earth's ecosystems and with one another.

Foresta's environmental education involvement includes working with the community, the public school system, professionals in the field of education, and university and college students. On a local and regional level, we work with public schools and the adult community. Nationally, we participate in dissemination of information, theoretical refinement of the field of environmental education, and some environmental advocacy. Foresta's environmental education internship draws students from all over the nation and of all ages for field training at the Institute, as well as teachers from Nevada and California schools. Internationally, Foresta is a registered non-governmental organization of the United Nations. Foresta has participated in the United Nations Environmental Programme, UNESCO, and IUCN (International Union for the Conservation of Nature and Natural Resources). Another international activity is the Latin American Natural Areas Program (LANAP).

Foresta's education program goal is to educate people to understand how biological and cultural systems and the interaction between these systems function, and to develop people's understanding of the potential outcome of human manipulation of natural systems. Inherent in this goal is to develop adults who possess a holistic view of the world. The Institute's major objective is to infuse an approach into the present formal education system which interrelates all academic disciplines and which incorporates system concepts as links between the working principles of an interrelated universe. The system concepts we utilize are diversity, interdependence and interaction, adaptation and change.

Included in Foresta's educational objectives are a number of working goals. These are the individual development of problem-solving skills,

a consistent dynamic values system, a strong sense of self and self-competence, and an expanded reality base. Ideally, people who understand the ways in which biological/cultural systems operate can perceive and understand dysfunction in the system. With this understanding, people are more likely to make decisions, as citizens, that will perpetuate healthy functioning of the systems which make up all of the global environments.

Foresta's working philosophy is that environmental education serves as a process occurring throughout all academic disciplines, integrating and linking. Metaphorically, we view environmental education as a web upon which subject-oriented information can be hung. We base our educational practice upon experience, utilizing basic academic skills as tools of learning. The "web" of which we speak is constructed of the basic system concepts generic to the processes occurring in natural and cultural systems and interaction therein. Consequently, a primary objective of the Foresta program is to refocus the education process so that the environmental education conceptual scheme is infused into all curriculum.

Foresta's past reflects a variety of changes and priorities within this common theme of people learning how to live in harmony with the earth. Foresta has viewed this education program as an ongoing, ever-changing process, taking the energies of the staff where the greatest needs exist and also letting go of projects when the endeavor has been adopted by other societal institutions.

In its earlier years, Foresta's activity centered primarily around wildlife research, ecological land appraisal and professional seminars. The Institute then began work in environmental advocacy as well as ethnological research focusing on local native tribes. In 1970, Foresta conducted a seminar entitled The International Working Meeting on Environmental Education in the School Curriculum. From that meeting, Foresta began to work intensely in the field of education on an international level, as well as regional and local. Work with endangered wildlife, particularly animals and further Paiute ethnological studies also continued.

In the past ten years, Foresta's purview has matured into a united scope of diverse activity rooted in educational reform and advocacy for planetary care. Currently, the Institute is involved in a number of programs. These include The Public Schools Program which trains college level students to work within Foresta's environmental education scheme with Nevada and California public school students. We also do in-service environmental education workshops for teachers. The "Tinker Truck" is a mobile program which carries an interdisciplinary program in environmental education to the isolated rural schools of Nevada. It serves students, teachers, and community groups. Foresta sponsors community education seminars, one or two-day workshops addressing local issues for community leaders and the general public. We also offer consulting services to public schools, youth groups, and adult groups. This includes the Girl Scouts, school districts, etc.

As a result of our interest in the interrelationship between people and the land as manifested in cultural systems, Foresta is involved in the Nevada Community Folklife Project. Foresta is sponsoring the project

with the Smithsonian Institution to survey Nevada folklife—the ethnic traditions, vocational and material culture, music and dance, oral tradition, art forms and the special flavor of Nevada's heritage. Presentation festivals will be given in four Nevada communities and will be documented. Education packets are being developed from this work in community folklife.

Among other educational activities are:

Washoe Pines Camp--a five-week summer program for youth which serves as our seedbed for educational ideas. It is a total Western experience. The program includes a scholarship project for low-income students;

Western Studies Trek--a traveling four-week interdisciplinary study of Northern Nevada and California for teens;

Pacific Northwest Expedition--a four-week interdisciplinary study of the northwestern United States.

Foresta's Environmental Studies Library includes 5500 volumes dealing with sciences, western history, environmental issues and ethnology; an environmental education resource center; a herbarium, mammal and bird specimens, and a large pamphlet and periodical section. The library is open to use by the public at large, and to groups and organizations.

We are currently preparing for publication an ever-growing set of activity cards which share environmental education activities developed by Foresta staff for a wide range of age groups with which we have worked. We produce intermittent newsletters. We have a Foresta Institute publication list available which accounts for 20 years of publications ranging from technical papers to bibliographies on our library's special interest holdings, such as whales, desert ecology, etc.

Some of our future plans, contingent upon funding, are to produce learning units on whales, possibly all Cetaceans, for the formal and informal education setting and another on wild horses and burros. We are also planning to work on folklife studies as a vehicle for involving people in understanding their relationship to their land. We anticipate adapting the acclaimed Foresta program to this region as well. Additionally, after working with a Title IV-C program in the Huntington Beach Union High School District in California, Foresta would like to disseminate the community educational laboratory idea to more schools. The community educational laboratory is an environmental education program which utilizes the community as a learning laboratory for secondary students.

Foresta Institute has always been intended as an agent of change, on the forefront of promoting new views. Consequently, the Institute is in constant, healthy struggle for funding. Although in earlier years support came from founding sources, Foresta must now seek support from a wide variety of sources. Because Foresta's staff and board equate success with risks taken while still remaining afloat as an institution, the Institute experiences success and failure equally intensely. The successes of which we are most proud and which are most consistent are

in training pre-professionals and professionals in the environmental education process, and the opportunities we have provided to third world students who participate in Foresta programs.

--Submitted by:

Marla Painter

June 1978

GIRL SCOUTS OF THE U.S.A.

830 Third Avenue
New York NY 10022
(212) 940-7500

Girl Scouts of the U.S.A. (GSUSA) is a corporation chartered by the United States Congress. It provides Girl Scouting to 2.5 million girls served by the 347 chartered Girl Scout Councils, ranging in area from part of one metropolitan city to an entire state. Councils organize troops and operate camps where girls enjoy the fun and learning of the Girl Scout program, and recruit adult volunteers, encouraging them to work together and to use community resources for the benefit of youth. Thus, Girl Scouting is one of the nation's most extensive programs of adult education as well as its largest organization for girls. Girl Scouts of the U.S.A. belongs to the World Association of Girl Guides and Girl Scouts, which has member associations in 99 nations. This worldwide sisterhood broadens Girl Scout opportunities for understanding and friendship with girls of other countries.

The organization is dedicated to the purpose of inspiring girls with the highest ideals of character, conduct, patriotism and service that they may become happy and resourceful citizens. The Girl Scout movement is open to all girls and adults who accept the Girl Scout Promise and Law.

THE GIRL SCOUT PROMISE

On my honor, I will try:

To serve God,
My country and mankind,
And to live by the Girl Scout Law.

THE GIRL SCOUT LAW

I will do my best:

to be honest
to be fair
to help where I am needed
to be cheerful
to be friendly and considerate
to be a sister to every Girl Scout
to respect authority
to use resources wisely
to protect and improve the world around me
to show respect for myself and others through
my words and actions.

Gloria Scott, Past President of Girl Scouts of the U.S.A., has said, "Girl Scouting from its inception has made it possible for girls to experience the freedom and joy of being in the out-of-doors. As we move toward the 21st century, and acknowledge the environmental crisis, we have a new sense of responsibility. It is imperative that Girl Scouting renews its commitment to girls and affirms that: Inherent in the Girl Scout program is every girl's right to know, enjoy, appreciate, and preserve the natural environment. Inherent in the purpose of Girl Scouting is our obligation to help each girl understand environmental relationships and her responsibility to develop appropriate attitudes and lifestyles to support them."

The National Youth Conference on Natural Beauty and Conservation was held in Washington, DC in 1970 at the suggestion of the Girl Scout National Board Member attending the White House Conference on Natural Beauty. Over 500 young people representing the U.S.A. and Canada attended; over 57 of these were Senior Girl Scouts, including the co-chairman of the event. The purpose was to discuss the role of youth as change agents and to develop guidelines for youth actions for conservation and beautification. Participants committed themselves to designing and carrying out projects in their own communities. An evaluation of the conference and a report, Youth Power (out of print), describing these grass roots actions produced as the result of the event, were distributed by GSUSA.

In July, 1966 Senior Girl Scouts from 25 states took part in the Rockwood Trails Conference held at Rockwood Girl Scout National Center near Washington, DC. Working closely with consultants from government and the private sector, girls assessed the program possibilities of the Rockwood site and initiated projects to be carried out by visiting troops. Linked with this focus was extensive training in trail construction, trail development and management, plus skills in planning and organizing community action.

Although Girl Scouts have always been taught to be observant of nature and been involved in conservation efforts, Earth Day in 1970 reawakened a large-scale involvement in community environmental action.

The Girl Scout call to action is called Eco-Action. One month brought 1700 entries to a patch design contest. Suggested for troops were activities that would build a stronger awareness of the interrelationships and interdependence in the environment and projects that would enable girls to gain facts and understandings needed to make responsible decisions. But projects are those decided upon by girls—those they wish to undertake.

Through girl action:

- a gully used as a dump was transformed into an arboretum;
- trees planted in a mining camp provided a windbreak and psychological "roots" for the new community;
- girls have developed canoe and hiking trails, playgrounds, trails for the blind and multi-handicapped;
- girls cleaned up a 27-mile stretch of a Michigan river;

- a Cadette troop in New Jersey made headlines in Life magazine by organizing a cleanup of the Hackensack River which removed 60 truckloads of debris from seven miles of river;
- girls have established recycling centers, boardwalks through bogs, helped to reforest a new state park; and
- girls have developed a nature area and marina for teaching safe boating and bird watching.

In 1944 the Girl Scouts of the U.S.A. established Lou Henry Hoover Memorials in recognition of Mrs. Herbert Hoover's love of living things and her lifetime work toward the conservation of natural resources. The establishment of a Memorial requires that young people have a major responsibility for the analysis, planning, development and management of a piece of land set aside as an outdoor environmental learning place. Forty-five of these sanctuaries have now been established across the country. An award-winning filmstrip, A Place Apart, describing the process used by one council in setting up a Memorial, is available.

In the summer of 1972, a group of 80—boys, girls and adults—from Girl Scout Councils in 18 states participated in a conference on "Quality Living Through Ecological Understanding." Held at the University of Wisconsin—Green Bay Campus, each team came to learn about the major problems facing man in his environment, and went home with an action plan to improve conditions in their own communities. Entitled Blueprints for Action, the results of the conference were published under a grant from the Office of Environmental Education of HEW.

A second grant brought the production of the filmstrip series, It's All Yours, designed to move the energy and enthusiasm of youth and adults to involvement in community environmental action projects. The filmstrips show how, joined together, people can build a trail that walks away from congestion and into serenity. They can plan a community playground to make an isolated neighborhood literally swing with spirit. They can renovate an old building and rub elbows with their past. They can plant a flower garden to add color to the grayness of a city. The hows and whys of planning, action and problem-solving are highlighted.

In 1974-75, the Girl Scouts of the U.S.A. sponsored three Wildlife Values Workshops in New York, Kansas and Texas, which taught:

- girls and adults about wildlife in their communities, camps and nearby wildlife refuges;
- how to set up wildlife programs for troops and camps;
- the necessity of protecting endangered species.

Local councils throughout the country have developed their own Eco-Action programs.

The Girl Scouts of Greater Philadelphia started a program called Earthcare to help girls understand that they are an inseparable part of the system and interaction of our culture and natural environment. Topics of concern included individual and society's needs for survival, and the quality of life for the whole earth.

In the summer of 1975, 112 high school-aged girls gathered in Philadelphia to study the problems of pollution control, city planning, interactions of political factions, and the workings of government, through a computer-simulated city planning game. They found that critical thinking was the skill most needing development for their involvement in environmental decision-making.

In the Bicentennial Summer of 1976, an Intercontinental Congress of Girl Scouts gathered in Philadelphia. Three hundred girl delegates elected from U.S. councils joined 200 girls from countries abroad. Topics of discussion included the food crisis, pollution, energy problems, and the interactions of decisions.

The San Francisco Bay Girl Scout Council has been involved with the Lawrence Hall of Science of the University of California in the development of Outdoor Biology Instructional Strategies (OBIS).

A Tennessee council, in cooperation with the U.S. Forest Service, has trained Girl Scout leaders and teachers in local schools.

The Girl Scouts of Bergen County, New Jersey, have an environmental awareness program called Eco-Alert, emphasizing sensory awareness, interrelationships, and man as the cause of environmental degradation.

The Flint River Council in Georgia has held "Eco Days" at camp, where thousands of girls have attended sessions on soil conservation, wildlife management, and conservation of resources at home. They have planted trees, shrubs, and grasses on the campsite with dramatic impact on bird and wildlife populations.

Since 1964, the Reader's Digest Foundation has provided grants of up to \$500 to older Girl Scout groups which wish to embark on worthwhile community service projects. Many of these projects have involved creation of trails, beautification, and parks improvement projects. These service projects give young people a chance to show what they can do—from initial planning, to financing, to implementation, to serving their communities.

In 1977 the new Girl Scout Handbook was introduced with an increased stress on environmental awareness. Through a federal grant, From Dreams to Reality career exploration materials are being introduced to help girls explore the variety of opportunities available to them, including those with environmental concerns. Three Girl Scout magazines provide a continuing flow of program ideas to leaders and girls for involvement with wildlife, outdoor and environmental projects.

In 1977 the organization also launched the Elliott Wildlife Values Project with the purpose of developing a national program to increase members' understanding of the need to preserve the diminishing stock of wildlife. Financed by a trust fund established by the late Herford N. Elliott, the project seeks to help girls become more aware of the interdependence of all forms of life, to assist them in discovering how human lifestyles, values, and actions affect wildlife, and to guide them in developing appropriate attitudes and lifestyles

to support wildlife. The project funds have supported the development of new materials incorporated in the Outdoor Education Packet, 1977, training experiences for more than 300 adults and girls, participation in a whale symposium and environmental education conferences, preparation of the television show Girl Scouting and the Wild Kingdom, and design of an exhibit room dedicated to wildlife understanding at Girl Scout National Center West in Wyoming.

For additional information and catalog of available publications contact:

Program Department
Girl Scouts of the U.S.A.
830 Third Avenue
New York NY 10022

--Submitted by:

Carolyn L. Kennedy
Wildlife Project Director

September 1978

HUMANE SOCIETY OF THE UNITED STATES

2100 L Street, NW
Washington DC 20037
(202) 452-1100

The Humane Society of the United States (HSUS) is a charitable, tax exempt national animal welfare organization with headquarters in Washington, DC, regional field offices, a state branch in New Jersey, and an education center in Connecticut.

The Society was incorporated on November 22, 1954 for the prevention of cruelty to animals. From its inception the Society has carried forward animal welfare programs designed to stop the pain and suffering many animals endure in a wide variety of circumstances.

The HSUS is active in virtually every area of animal protection, fostering the humane ethic and philosophy through educational, legislative, investigative, and legal channels. HSUS major goals include:

- Reducing the overbreeding of cats and dogs;
- Opposing sports hunting and trapping;
- Educating people to respect all living things;
- Eliminating animal abuse in entertainment;
- Correcting inhumane conditions in zoos and other exhibitions;
- Stopping cruelty in handling and transporting food animals;
- Providing technical assistance to local animal welfare groups;
- Ending cruelty in biomedical research and testing;
- Strengthening anti-cruelty laws and their enforcement;
- Extending animal protection into areas where there is none;
- Monitoring federal laws to protect animals.

Through its educational division, The National Association for the Advancement of Humane Education (NAAHE), headquartered at the Norma Terris Humane Education Center in East Haddam, CT, HSUS develops and conducts environmental education workshops and materials for educators as part of its overall programming. The programs are conducted at local, state and national levels.

The workshops are "tailored" to meet the needs of educators. Examples of workshop topics include "Helping Children's Senses Make Sense Outdoors" (four-season, multi-sensory nature investigation activities), "Debunking Myths About Various Beasties," "Producing Nature-Related Slide Sound Programs," "Animal-Related Careers," "Methods and Materials for Environmental Education," and "Attracting Wildlife to School Grounds or Back Yards."

Participants generally include elementary and secondary teachers, animal welfare organization educators, college students, nature center educators, and school administrators.

Materials produced and distributed through NAAHE include filmstrip programs, slide-sound programs, posters, flannel board kits, and cassette tapes. Materials are developed using an interdisciplinary approach.

Humane Education, a quarterly teachers' magazine published by NAAHE, offers a variety of articles and features in each issue which provide background and information for environmental studies. Examples include: "Cry Wolf—an Ecology Values Study," "The Quality of Mercy Can Be Strained" (caring for injured or orphaned wildlife), "MacDonald's Farm Revisited," "You Can Drown A Frog" (a play), and "The Ecology of Stray Dogs and Cats." Many environmental films, filmstrips, and other media materials useful for environmental education are reviewed as part of each issue.

During the last few years, NAAHE has expanded its programs to cooperate with nature centers, zoos, and school environmental education projects on workshop activities.

Although it does not have a separate budget specifically earmarked for environmental education, approximately 30 percent of the total programming focuses directly on environmental education.

NAAHE maintains a 30-acre nature trail model at its headquarters in East Haddam. The trail is used as part of workshop programming. In the summer, school and community groups are led on interpretive tours by college student interns.

The NAAHE staff recognizes that humane education is an integral facet of environmental education, as it brings the areas of values education and values clarification into classroom and outdoor studies.

Future plans call for additional programs and materials to be developed for use in environmental education programs. Because the principles of ecology apply equally to stray animals in urban or suburban situations, emphasis on domestic animals as an environmental concern will be emphasized. A humane education curriculum guide which focuses on wild, domestic, and farm animals as well as people/animal relationships is being produced. Environmental studies "tie-ins" will be included.

Educators may request sample publications by contacting NAAHE headquarters.

--Submitted by:

John Joseph Dommers, Director
The National Association for the
Advancement of Humane Education
The Norma Terris Humane Education
Center
P.O. Box 98
East Haddam CT 06423
(203) 434-8666

December 1978

INTERNATIONAL COUNCIL ON HEALTH, PHYSICAL EDUCATION, AND RECREATION

1201 Sixteenth Street, NW
Washington DC 20036
(202) 833-5499

The International Council on Health, Physical Education, and Recreation (ICHPER) is an international organization with members in 107 countries. Its international character is reflected by the nationalities of its officers, who are currently from Belgium, England, United Arab Republic, Japan, Australia, United States, Brazil, and the Netherlands. International headquarters is in Washington, DC.

ICHPER serves to bring together teachers, administrators, leaders, national departments of physical education, and related professional associations concerned with health, physical education, sports and recreation into one organization, and represents their concerns at the international level. Through the strengthening of professional ties among colleagues and departments, as well as associations, from all continents, ICHPER fosters international understanding and goodwill, and encourages the development and expansion of educationally sound programs in these fields in all countries.

ICHPER collaborates at an international level with national and international organizations for health, physical education, sports, recreation, and education; with national departments of physical education and sports; with schools, institutes, and universities; with related international agencies such as FAO, WHO, UNESCO and UNICEF, and with interested colleagues and individuals throughout the world.

ICHPER was organized at the 1958 meeting of the World Confederation of Organizations of the Teaching Profession in Rome, Italy, and sponsors annual international meetings each year. For example, the 22nd annual Congress is scheduled for Kiel, Federal Republic of Germany, July 23-28, 1979, with the general theme, "Movement, Health, and Recreation Through Physical Activity."

ICHPER produces the following publications:

The ICHPER International Journal of Physical Education (formerly Gymnasium), a quarterly journal presenting topical articles by noted authors and experts in the field;

The ICHPER Bulletin, an occasional newsletter reporting meetings, projects, official business and special events; and

ICHPER Congress Proceedings, featuring speeches and highlights of international meetings.

ICHPER has not been particularly active in environmental education, but does plan to continue its interests and support as environmental education relates to health, physical education, and recreation. In its 1975 Congress, held in Rotterdam, The Netherlands, ICHPER included a program devoted to environmental education. Since that time, ICHPER has emphasized environmental education as part of its specialized interest area, Outdoor Education.

ICHPER maintains an interest in environmental education, and has followed with interest the UNESCO Intergovernmental Conference (October 1977, in Tbilisi, USSR), but has not been able to devote specific effort to environmental education. Future work is anticipated in this field of interest.

--Submitted by:

Carl A. Troester, Jr.
Secretary General

October 1978

IZAAK WALTON LEAGUE OF AMERICA

Suite 806
1800 N. Kent Street
Arlington VA 22209
(703) 528-1818

The Izaak Walton League of America (IWLA), founded in 1922 by 54 fishermen and named after the famous English author and outdoor philosopher, is a national citizen-conservation organization composed of community chapters, state divisions, and members-at-large working for the wise use and conservation of America's natural resources and for the restoration and maintenance of a high quality environment. This League is incorporated as a non-profit, nonpartisan organization. Its membership is approximately 53,000.

IWLA identifies a broad agenda:

1. Preservation of the American landscape;
2. Campaigning for clean air and water;
3. Improvement of hunting and fishing;
4. Protection of endangered species;
5. Promotion of environmental education;
6. Enforcement of environmental laws;
7. Expansion of outdoor recreation opportunities.

Among its several activities, IWLA publishes Outdoor America, a bi-monthly magazine of particular interest to sportsmen and conservationists. It "is published to report what is being said and done in the environmental field and to provide a forum for intelligent exchange among its readers."

In addition, IWLA sponsors an annual convention. The 56th National Convention, held in July 1978 at French Lick, Indiana, had as its theme "Conservation—A United Effort," and included conservation displays by resource management agencies, an exhibit of the photography of Gene Stratton Porter, and a panel discussion featuring officers of IWLA, the Sierra Club, the Nature Conservancy, the Environmental Policy Center, and the National Audubon Society which was organized to better inform conference attendees of the cooperation—and the continued need for it—among the country's prominent and environmental organizations.

Among target areas of IWLA activity are:

Pollution Control: IWLA has spearheaded America's fight against dirty water. The IWLA is closely identified with national and state clean air and water laws, waste treatment construction financing, and the "Save Our Streams" program.

Water Policy: Currently a leader in the drive toward an intelligent national water policy, IWLA has long spoken out against environmentally destructive projects such as the Cross Florida Barge Canal, Garrison Diversion, Cache River Channelization, Salem Church Dam, and others.

Land Preservation: IWLA has won protection for critical forest and recreation areas, national parks, wilderness regions, and wild rivers across the nation. The list includes: Redwood National Park, Cumberland Island, Boundary Waters Canoe Area, Jackson Hole Elk Refuge, Mount Rogers, Canyonlands, New River, and the Indiana Dunes National Lakeshore.

Outdoor Recreation: A League idea of the 1950s led to today's national outdoor recreation program, including the Bureau of Outdoor Recreation (now the Heritage Conservation and Recreation Service) and Land and Water Conservation Fund financial support.

Resource Conservation: IWLA has been involved in efforts to control the abuses of strip mining, protect national forests from damaging clear-cutting, assume stewardship over public lands, and promote energy conservation and reuse and recycling of society's products.

Wildlife: League work to enhance fish and wildlife habitat has included strong support for the National Wildlife Refuge System, conserving dwindling runs of salmon and steelhead, and protection for endangered species.

Of particular interest currently are two IWLA efforts:

"Save Our Streams—Adopt One," a national educational and citizen participation program which encourages local groups to work actively in the preservation, maintenance, and/or restoration of local streams, then provides support in terms of "how to" materials, including a special quarterly SOS publication, Splash. Thousands of miles of streams are currently enrolled in the program, often with substantive results.

Increasing public awareness of sewage sludge as an environmental problem, sponsored by IWLA with funding by U.S. EPA's Office of Solid Waste, which "attempts to correct public misconceptions about the characteristics of municipal sludge and stimulate public involvement in local sludge management decisions." The one-year program permits the League to sponsor a series of public workshops in several states facing critical sludge disposal problems.

Coordinator of both of the above programs is Bob Axelrad.

--Submitted by:

Kathy Barton
Environmental Affairs Specialist

July 1978

79

LEAGUE OF WOMEN VOTERS OF THE UNITED STATES

Education Fund
1730 M Street, NW
Washington DC 20036
(202) 296-1770

The League of Women Voters Education Fund (LWVEF), a 501(c)(3) organization, was established in 1957 by the League of Women Voters of the United States as a public foundation dedicated to strengthening citizen knowledge of and involvement in representative government.

Through its timely, objective and carefully researched publications on a wide variety of subjects, the League of Women Voters Education Fund offers the general public and the 131,000 League members in 50 state and 1350 local leagues across the country the solid, factual data they need for decision making.

The LWVEF brings community leaders together, in formal and informal sessions, to discuss and share points of view on important national issues. Through both publications and training sessions, the LWVEF helps these leaders to develop the skills they need to be more effective partners in the democratic process.

Through its litigation project, the LWVEF helps to clarify the law in the public interest. (The litigation project, however, does not litigate in the area of environmental issues.)

In addition, the Education Fund aids state and local leagues in conducting educational meetings and other educational activities for legislators and the general public. Some of the areas related to natural resources education where the LWVEF is working include clean air and water, solid waste and toxic substances management, land use planning and energy. (The LWVEF also works in non-environmental public policy areas including equal opportunity in employment, housing and education, the urban crisis, international relations and government.)

Education Fund publications are even-handed, comprehensive and diverse. They run the gamut from guides on how to get things done to basic information pamphlets on national issues.

The League of Women Voters Education Fund is headed by a chairman and board of trustees—all volunteers selected from the ranks of League members. The Chair of the LWVEF, Ruth J. Hinerfeld, is also President of the League of Women Voters of the U.S. The LWVEF is served by a professional and support staff of 35 persons. It shares Washington offices with the League of Women Voters of the U.S.

Funding for the LWVEF comes from a variety of sources—contributions, restricted grants, and sale of its publications.

LWVEF Grant Assisted Projects

Although the LWVEF reaches and serves the general public directly through a variety of programs, publications and projects, active League members willing to participate in LWVEF educational projects are an important resource. The presence in all states of workers well organized and experienced at the state level—women and men acquainted with state-wide organizations, state agencies, and state legislatures—is one of the LWVEF's most substantial assets. The 1350 local leagues supply local leaders, acquainted with the needs, resources, and power structure of their communities. Coordinated by the LWVEF and utilizing information and techniques acquired through the LWVEF, these state and local leaders extend the outreach and enlarge the ripple effect of LWVEF projects.

Throughout the last ten years the LWVEF has been engaged almost continuously in supervising environmental projects funded through federal grants, or contracts, or through corporate grants. For example, from 1965 to 1974 the LWVEF conducted a successful series of water seminars built around river and lake basin problems and financed by the U.S. Public Health Service, the Department of Interior's water pollution control agency (FWPA and FWQA), and the U.S. EPA. From 1969 to 1972 the Environmental Quality Department of the LWVEF and its Committee on Environmental Programs and Projects also carried on two air pollution education projects: the first funded by HEW's National Air Pollution Control Administration (NAPCA), the second by a contract begun with NAPCA and concluded with EPA.

During 1976-77 the EPA Office of Water Supply funded a LWVEF Safe Drinking Water Project. Since 1976 the LWVEF has been educating citizens on the impact of Section 208 of the Clean Water Act with grants from EPA. Other grants from EPA's Office of Solid Waste Management Programs have funded LWVEF projects on solid waste issues since 1972.

A grant from the U.S. Department of Commerce's Office of Coastal Zone Management in 1977 and 1978 funded educational activities in 30 states, Puerto Rico and the Virgin Islands about their coastal resources.

Corporate contributions have facilitated LWVEF environmental education activities not specifically funded by the restricted grants, such as local and state league participation in regional environmental conferences and publications on the interrelationship of various environmental issues. Foundation grants have a similar benefit. A grant from the Rockefeller Brothers Foundation for example permitted the LWVEF to publish a series of pamphlets on the environmental impact of growth.

These grants not only permit the LWVEF to research and develop issue publications for Leagues and the public but also to fund local and state League education projects tailored to their communities. The LWVEF differs from most environmental education groups in this ability to assure that its educational activities have their greatest impact where it is needed most—at the grassroots level.

Recent Water Quality Planning Projects

In June 1976, the League of Women Voters Education Fund received a grant from EPA to work with Leagues in 15 areas and five states to inform citizens, public officials, and a variety of organizations about the quality of their water and the potential impacts of Section 208 of the FWPCA of 1972. In most cases, the League task forces found that they were providing information not generally available to these groups. In those cases where the information was available, people often did not know where to locate it or found the information too technical for their needs.

The first grant from EPA funding this project made it possible for League-sponsored task forces to successfully increase public awareness of water quality planning through presentations to local selectmen and planning commissions, major conferences on agricultural runoff, local newspaper articles on 208 planning and water quality, and radio and television editorials and programs covering the water situation in several areas and states.

The success of the first grant led to a second grant from EPA in 1977-78 in which Leagues in Arizona, Arkansas, Colorado, Indiana, Kansas, Maine, Missouri, New Mexico, Ohio, Vermont and Wyoming worked with their state 208 planning agencies to encourage different sectors of the public to learn about and take part in ongoing water quality planning. Techniques ranged from holding workshops and conferences to publicizing state-sponsored public meetings by radio and TV public service announcements. Several leagues ran bus tours to draw the attention of citizens and officials to existing pollution problems, and develop their ideas about controlling various pollution sources.

Solid Waste Management Projects

The LWVEF is currently engaged in its fifth training grant from EPA's Office of Solid Waste Management Programs. These grants have permitted the LWVEF to fund Leagues in six states and five cities in citizen education on solid waste management problems and options. Under the most recent grant, six state Leagues conducted state-wide education projects on the impact and options under the 1976 Resource Conservation Recovery Act. State League projects ranged from bus tours of various waste management facilities to intra-state conferences on hazardous waste problems. For example, the Texas League distributed information packets to county commissioners and other public officials, and Georgia League members published a newsletter on the law's effects in their state.

Local League projects covered two areas within the overall subject of solid waste management. Leagues worked to develop community awareness about the benefits and problems of landfill siting and to increase residents' participation in curbside collection of recyclables. Their methods included slide shows, luncheons for public officials, and a "trash bash" designed to raise public awareness about recycling.

Earlier local League projects also addressed the steps individuals can take to reduce waste.

Land Use Projects

Within the topic of land use, the LWVEF has focused much of its attention on Coastal Zone Management and on the implications of energy development on the western states—the site of most of the nation's untapped energy resources.

Two successive grants from the Office of Coastal Zone Management have funded LWVEF work in familiarizing the public in coastal states with the issues in coastal area planning.

An initial national conference was held on the requirements of the Coastal Zone Management program and subsequently Leagues carried out a variety of educational activities in the 30 coastal states, the Virgin Islands and Puerto Rico. Boat tours, simulation games for civic leaders, TV shows, travelling exhibits and area conferences were among the methods Leagues used to reach the public on this issue.

Conferences have also been held for leaders in the affected states on the Impacts of Western Coal Development. Covering the many issues implicit in change for the area, the conferences were held in New Mexico (for the four state corner states of Utah, New Mexico, Arizona and Colorado) and in Montana (for the northern states of North Dakota, South Dakota, Wyoming and Montana).

Energy Education Projects

As energy became a dominant national issue and also of particular interest to League members, the LWVEF became involved in energy education. Along with the publication of basic energy education materials, a national conference and seven regional conferences on conservation of energy, the League became involved in a variety of locally oriented public education projects.

Energy Conservation Technology Education Pilot Program. In the spring of 1977 the LWVEF received funding from the Department of Energy (DOE) to undertake nine-month long pilot projects in four communities across the country, representing a mix of geographic, climatic and demographic conditions. Begun in September 1977, the projects, aimed at demonstrating how to use energy more efficiently in the home, ran through May 1978. The projects included a variety of approaches to public education.

For example:

West Hartford, CT—co-sponsored a New England-style Town Energy Meeting in October '77. It followed up with a series of "hands-on" workshops, in which participants learned how to retrofit their individual homes.

Northfield, MN—with 37 League members and a city population of 10,000—worked at the neighborhood level, holding block meetings in individual homes that featured "walk-through" energy audits of those homes.

Tucson, AZ—designed and constructed six demonstration models for its presentations before community groups that show do-it-yourself conservation methods on weather-stripping, window-shielding, insulation, cooking, water conservation and energy-efficient appliances. It also produced several five-minute videotape segments on energy-efficient techniques, for TV and other public outlets.

Wake County, NC—likewise turned to the visual media, televising home energy audits and producing a slide show on energy conservation. It also sponsored workshops for volunteers from other community organizations on how to present energy conservation programs to their memberships.

The success of these and other local League projects in the Energy Conservation Program showed the need for a practical "how to" guide on how to organize a community-wide energy conservation education project. Production of such a guide is planned by the LWVEF.

Energy Education Program. In May 1974, the LWVEF Energy Task Force initiated a program to increase citizen awareness of the energy dilemmas facing the United States and the world. The postulate was that increased awareness would make individuals more efficient users of energy, further their understanding of energy problems and proposed solutions, and lead to informed participation in the making of energy policy. During the period 1974-76, the LWVEF concentrated on developing, through publications and conferences, citizen understanding of the complexities of the energy problem and the urgent need to conserve energy.

In order to provide a broader public education program, the LWVEF, in 1976, developed the following three-part energy education project which was financed by a consortium of energy companies and electric utilities across the United States:

1. The writing, publication, and distribution of two major LWVEF booklets, Energy Dilemmas and Energy Options, which together examine key issues, sources and options, and the government's role in meeting future needs;
2. A National League energy training conference, held on June 1-3, 1977 in Washington, DC to help prepare two League leaders from each state, Puerto Rico, the Virgin Islands and the District of Columbia to undertake an energy education project in their state or area; and
3. "Seed money" for 53 Leagues to carry out their energy projects.

The former Office of Public Affairs of the Energy Research and Development Administration (ERDA) awarded a grant to the Education Fund in June 1977 to enable the 53 Leagues to expand their energy education efforts.

Within the broad guidelines established by the LWVEF for this effort, the 53 Leagues have carried out the kind of projects they felt best met the needs of their states. The Department of Energy has provided the LWVEF with a grant to continue this broad education effort for a second year in a selected number of states enabling the selected Leagues to take advantage of the momentum developed during the first year's effort, including the materials already prepared and the expertise gained, to reach a greater number of people. In addition, it will provide them with an opportunity to explore new techniques and projects.

LWVEF Environmental Publications

Within the areas on which the LWVEF focuses, numerous citizen education publications have been developed. Frequently these publications complement local and state League grassroots grant-assisted projects with a national overview of an issue. For example, several publications on 208 water quality planning have been produced by the LWVEF. These include one-sheet Updates on Section 208 called: Doing Something About Polluted Water, Putting the Pieces Together, and Grime in the Streets: The Problems of Urban Runoff. A Community Guide, Getting in the Swim: How Citizens Can Influence Water Quality Planning, outlines techniques for increasing citizen participation.

On the subject of Solid Waste, similar publications are available; for example, Curbing Trash, an outline of the factors in deciding to establish separate collections, and Is There Enough Trash for Everybody? an analysis of the issues in balancing the often conflicting approaches for dealing with solid waste.

Land Use publications closely related to the CZM project include Energy and Oil: Impacts of the 1976 CZM Amendments and The Onshore Impacts of Offshore Oil. A grant from HEW's Office of Environmental Education allowed us to produce six Land Use Letters, a series covering a variety of public lands issues. A publication was also produced on the Impacts of Western Coal Development.

On Energy, in addition to the publications Energy Dilemmas and Energy Options, a series of Energy Factsheets keep the public and project leaders up to date on new approaches to energy.

Besides these publications which complement projects, the LWVEF produces general interest publications in the natural resources field. These publications give an overview of a public issue, summarize laws, or show the interrelationships among several natural resources issues. Federal Environmental Laws and You, Cleaning Up the Nation's Cities, Coal Use and Clean Air: Goals in Collision?, Are Jobs Really the Price of a Clean Environment?, are examples of these publications. These publications are of particular benefit in orienting citizens and public officials to an issue and for students studying the environment and public policy. LWVEF publications are nominally priced to reach these audiences.

--Submitted by:

Isabelle P. Weber, Coordinator
Energy Department

October 1978

MASSACHUSETTS AUDUBON SOCIETY

Lincoln MA 01773

(617) 259-9500

Founded in 1896 for the purpose of protecting wild birds and mammals, the Massachusetts Audubon Society (MAS) has evolved into a broad-based environmental organization clearly recognizing that the future of wild-life will be determined by the consequences of a wide range of other interfaces between people and the environment.

By the 1920s, the Society was sending lectures to school assemblies and public forums and in 1939 embarked on a program of contracting with schools to present nature and conservation classes on a biweekly basis directly with the children. This program grew and modified itself over the ensuing years into a variety of direct contacts through contract approaches to the public schools.

Major expansion of the Society occurred in the late 1950s and new departments have been added, many of which have one or more environmental education functions. Today there are seven program departments, each of which has some environmental education responsibility:

I. The Hatheway Environmental Education Institute

This is the Society's educational lead department with primary responsibility for formal workings with schools and inservice training of teachers and other formal and non-formal educational personnel. The Institute also does inservice training on environmental education for other MAS staff. The Institute supervises the seven environmental day camps; Wildwood, the resident environmental camp; and Expeditions, the travel camps for teenagers. Massachusetts Audubon Society pioneered the idea of camps whose primary focus was natural history and the environment.

The Institute created an Environmental Education Resource Center in 1966 to serve the New England area. It has fostered a number of others since then, but remains the most extensive, with over 5,000 volumes of books, more than 130 periodicals, 34 file drawers of curriculum materials, environmental reports and similar resources, a large collection of films, filmstrips, posters, recordings, teaching games and other instructional resources. This is a use-oriented special library that services several thousand people a year.

In conjunction with this resource center since 1975, the Society has sponsored an Environmental Teacher's Center with its own teacher governing board.

The Institute staff is also responsible for the Society's role in leadership in environmental education at state, regional and local levels. It received and coordinated the 1971 grant that underwrote

development of the Massachusetts State Plan for Environmental Education and initiated, and for twelve years coordinated, the annual New England Environmental Education Conference. It continues to work in a variety of ways to foster mutualism in environmental education.

The Institute is responsible for the Earth Corps program, an out-of-school program under development to provide a comprehensive environmental education program basically outside the framework of schooling. Designed to mesh with existing youth programs or stand alone as a club, the Earth Corps is co-sponsored by MAS and a local sponsor. The Society provides leadership training and activity suggestions; the local sponsor handles local arrangements and youth recruitment. Begun in 1976, the program is in expanded pilot phase and will be headed into full implementation by early 1980.

II. Sanctuary Operations Department

Massachusetts Audubon Society owns some 10,000 acres of land in the Commonwealth. They are a mix of open spaces and staffed sanctuaries. The 13 staffed sanctuaries are multi-functional but education is one of the major functions. In addition, the Society operates two educational centers under management contract with the state.

The staffed sanctuaries are the sites of the environmental camps. They are also the sites for adult courses, informal educational activities, after-school youth programs, and self-guiding interpretive programs. The various sanctuaries vary in intensity of their programming. Two of the sanctuaries have education as a primary focus—Laughing Brook and Drumlin Farm. Drumlin Farm is a registered National Environmental Education Landmark.

Space does not permit adequate elaboration of the environmental education activities, sanctuary by sanctuary. Sufficient to say that they serve as local activity sites for a variety of the Society's educational efforts and generally have an educational special focus of their own. One has focused on educating local government personnel, another on educating about riverine systems at all levels, another is an amateur research station focused on educating about the role of farming and solar energy in an urban society, and so it goes.

III. The Natural History Services Department

The Natural History Services Department is involved in a variety of efforts. It handles the bulk of the phone calls from the public on natural history and environmental matters. It also runs an extensive, world-wide tour business which brings adults into contact not only with wildlife around the world, but with the variety of human activity that is disrupting the environment. The people who participate in such tours are frequently people in leadership positions who can, and do, use such experiential education to shape policies in their sphere of influence to deal with these broader issues.

IV. The Environmental Affairs Department

The Environmental Affairs Department is primarily engaged in dealing with the current environmental issues. It is the newest department. Lobbying is an important function, but education a major function. The education work of this department is largely focused on the data base needed to understand issues and determine action positions. It stresses education through involvement. It also features instruction on the processes of initiating change.

V. The Environmental Intern Program

This program has grown from a northeast regional effort to a nationwide program with centers in Cleveland and San Francisco as well as Lincoln. By its very nature it is primarily an education program with a focus on experiential learning through direct involvement, primarily for undergraduate and graduate level college students. Opportunities in environmental law, management, research, and education in corporate, governmental, and non-profit arenas are generally available. The program also runs special seminars for the interns on a variety of environmental topics.

VI. The Publications Department

This department is responsible for preparing most of the MAS publications that bring environmental issues and information to both members and the public at large. Regular publications are the Massachusetts Audubon Society Newsletter, the annual Yearbook publication, and the Curious Naturalist, a publication for beginning naturalists. The editorial and writing staff also work with others of the Society staff to prepare information papers on a wide variety of environmental issues for dissemination to the general public. In addition, two columns, "Nature's Ways" and "Backyard Frontiers," are prepared weekly for publication in newspapers around the state.

This department also has the facilities for producing commercial-quality radio tapes for use by commercial stations, and for the production of slide tapes and filmstrips.

VII. The Scientific Staff

Last but not least of the departments is the Scientific Staff whose primary role is to assemble the data to keep our action positions as sound as possible and to continually assess the future to foresee the critical environmental issues the Society should address. Their educational function continues to be providing the data to the general staff for the preparation of articles, curricula, etc. They also organize conferences on critical environmental issues for appropriate public leaders to help educate such leadership about the most relevant data and concerns.

Environmental Education permeates all the work of the Massachusetts Audubon Society. The Society believes that such education is a lifelong process and must be part of the total educational system—

that includes home, community, church, school, media, workplace, and interest groups. Only through the articulation of messages from several segments of the educational system will the normative changes emerge that will result in improved human and environmental quality.

The Society believes that environmental literacy emerges developmentally from environmental awareness, expanding environmental understanding, to environmental concern, commitment, and action. Environmental quality is seen as the net sum of consequences of individual and corporate actions and lifestyles.

From such beliefs have emerged the comprehensive environmental education involvements of the Society reaching out as broadly as resources permit. Future plans involve regionalization of the Society's major educational efforts to bring critical human and material resources closer to the users and to enlarge the responsiveness to local issues and concerns and permit increased use of the local communities themselves as the basic instructional resource.

Although the Society has been actively involved with four of the state's major cities for 20 years or more, it looks forward to even more intensive involvement. It also looks forward to more extensive ties with higher education institutions although, even currently, several of the staff are involved as adjunct faculty.

The Massachusetts Audubon Society has more than 27,000 members and a permanent staff of about 150. About 50 of these staff people have education as a very significant if not major part of their job. In addition there are literally scores of temporary staff and volunteers whose primary tasks are in educational programming. Of the Society's roughly \$3 million budget, about 25 percent is allocated directly to education activity.

The Society's formally stated goals (revised 1973) indicate the rationale for the continued emphasis on environmental education:

The goal of Massachusetts Audubon Society is to preserve, maintain and improve a viable environment for humans and other living things.

In order to achieve this goal, Massachusetts Audubon Society has set for itself the following objectives:

To assist in the preservation of wildlife and natural areas;

To educate people to recognize the environmental consequences of their actions and to encourage them to make intelligent and informed decisions;

To disseminate accurate, informed, objective and timely analyses of current and potential environmental issues;

To assist government, industry and other elements of society in finding socially, scientifically and economically realistic solutions to environmental problems.

To provide active assistance to conservation and environmental groups, both public and private..

The Massachusetts Audubon Society remains committed to adult education based on involvement for working on immediate concerns and youth education for the long run in order to develop a citizenry with adequate knowledge and concern not to continue to blunder into ecological disasters and able to restructure the current environment to sustain the broadest diversity of life.

—Submitted by:

Charles E. Roth
Director of Education
Hatheway Environmental
Education Institute

June 1978

NATIONAL ASSOCIATION FOR ENVIRONMENTAL EDUCATION

P.O. Box 400

Troy OH 45373 (as of May 1, 1979)

Purposes and Structure

The National Association for Environmental Education (NAEE) is a professional society for environmental education. Its mission is the improvement of environmental education in all educational institutions, both formal and non-formal. The following statement of purposes has been extracted from the 1971 Constitution of the National Association for Environmental Education:

- A. To promote environmental education programs within all educational institutions.
- B. To coordinate environmental education activities among all educational institutions.
- C. To disseminate information about environmental education programs for educational institutions.
- D. To assist in beginning or developing programs of this kind and to serve as a resource to them.
- E. To foster sharing of information about environmental education programs among institutional and individual members of the Association; to promote communication about environmental education; and to promote the pooling of information, resources, and activities in connection with such programs.
- F. To foster research and evaluation in connection with environmental education.

A more recent statement of goals and objectives for the National Association for Environmental Education is being developed. The primary goal of the Association, according to a draft of this statement, is to develop, promote, and encourage vigorous support for educational programs that will produce an environmentally literate citizenry which lives in harmony with the ecosystem and possesses the skills, attitudes, and knowledge necessary to identify and solve environmental problems.

In its philosophy, the National Association for Environmental Education is eclectic. It strives toward balance among the diversity of points of view about environment and environmental education. The Association emphasizes the need for multidisciplinary approaches in

helping people develop a mature and functional understanding of the environment and people's interaction with it. To be environmentally literate, people must understand the basic principles of ecology and the impact people have had on the environment; they must also comprehend the economic, political, social, and technologic factors which influence the environment, people, and their interaction. In addition, they must recognize that this total range of factors influences the quality of our lives and that our decisions and actions reflect both knowledge and values. In short, environmental issues are complex and require broad, powerful educational treatments.

As a professional society for environmental educators, NAEF's membership comprises a broad range of people involved in environmental education, including teachers and administrators from elementary schools, secondary schools, community colleges, and universities, along with people employed by museums, nature centers, governmental agencies, industries, and private organizations with responsibilities for environmental education. Currently, 46 states and Canada are represented on the membership roster, and the Association welcomes members from all North American countries. Thus, the involvements of the Association are both national and international in scope.

Institutional memberships are available to all educational institutions and the designated representative from each is eligible to vote, as are all individual members. Companies, foundations, institutions, associations, or individuals may apply for sustaining membership or contributing membership. However, these are non-voting memberships.

The National Association for Environmental Education is governed by a 24-member Board of Directors which is the legal policymaking body of the Association. Six Board members are elected each year to four-year terms. The Constitution requires that the Board of Directors maintain a balance among the constituencies it serves, in that at least five of the Board members must be associated with each of the following types of institutions: precollege schools or state or provincial offices of environmental education; community colleges; and universities. Also, no more than half of the membership of the Board of Directors may be associated with any one of the types of educational institutions.

The National Association for Environmental Education also has an Executive Committee which includes the President, the President-Elect, the Past-President and two additional members appointed by the President. The Executive Committee is responsible for the daily affairs of the Association.

The headquarters of the National Association for Environmental Education will be located at the Brukner Nature Center, Troy, Ohio, as of May 1979.

Activities

National Association for Environmental Education has seen steady growth since its inception in 1971. At the end of 1977, its paid membership was approximately 600. An increase of 75-125 members has been registered each year since 1974.

The activities of the Association are many and varied; however, four stand out:

1. The Annual Conference. Each spring since 1972 the National Association for Environmental Education has conducted an Annual Conference at which environmental educators convene to deliver and discuss papers on a wide range of substantive, pedagogical, philosophical, and research issues related to environmental education. Workshops, field trips, media exhibits, book exhibits, and an Idea Mart have been formal parts of this program.

Typically, about two-thirds of the membership has attended the conferences which have been held in the following locations in either late April or early May:

First	1972 Hot Springs, Arkansas
Second	1973 St. Louis, Missouri
Third	1974 San Francisco, California
Fourth	1975 New Orleans, Louisiana
Fifth	1976 Atlanta, Georgia
Sixth	1977 Estes Park, Colorado
Seventh	1978 Chicago, Illinois
Eighth	1979 Blacksburg, Virginia

The Annual Conference is gaining a reputation, both nationally and internationally, as being a major vehicle for communication of ideas relating to environmental education. The conference provides environmental educators with a forum that is an essential part of any profession's healthy maintenance.

2. Publications. National Association for Environmental Education has developed a small, but important, array of publications in the field of environmental education. Beginning with the 1975 Conference, and each year since then, an annual volume entitled Current Issues in Environmental Education has been compiled from selected papers given at the Annual Conference. These volumes have been published jointly by NAEE and the ERIC/SMEAC Clearinghouse for Science, Mathematics and Environmental Education. Each volume represents a collection of important research and ideas in environmental education and stands as a valuable document in the field.

The NAEE has prepared other useful publications, including:

Man and Environment--A college-level curriculum guide in environmental studies.

Man and Environment for Secondary Schools--A curriculum guide for high schools in environmental studies.

Man and Environment for Intermediate Grades--A curriculum guide for middle schools.

Selected Environmental Education Programs in North American Higher Education—A report on environmental studies programs at 13 colleges and universities in the U.S. and Canada.

Recent Masters Thesis Work in Environmental Education and Communication—A survey of masters level theses at 78 graduate departments in environmental education, prepared by David Hanselman and Chris Yuen.

3. Newsletter—A Newsletter is published and distributed free to members six times a year. The Newsletter contains information about the operation of the Association and its Annual Conference, along with other announcements of interest to members. Typically, the Newsletter will contain information on meetings of other professional organizations, announcements of new educational materials and programs, and reports on activities of the Association. In this way, the Newsletter serves as a useful vehicle for frequent communication to members on topics of general interest to environmental educators.
4. Awards—The National Association for Environmental Education has a continuing program of awards that spotlight persons and groups which have made significant contributions to environmental education. NAEE Awards have typically, though not always, been given on an annual basis in conjunction with the Annual Conferences. Past recipients have included public leaders, businesses, educators, and educational organizations with significant records of performance in environmental education. Nominations for recipients are solicited from the membership, screened by the Awards Committee, and approved by the Executive Committee.

Funding

The National Association for Environmental Education is largely supported by membership fees and conference registration fees. A small amount of money is realized from grants, gifts, and sale of publications. The revenue is utilized for meeting expenses related to the Annual Conference, the Newsletter, other publications, and general expenses such as secretarial assistance, postage, and telephone.

The budgeting of National Association for Environmental Education is quite similar to that of other professional societies of similar size. As membership and conference attendance have grown, the budget and services which the Association can provide have also increased.

Measures of Success

A very significant measure of success of National Association of Environmental Education is its consistent pattern of growth in a