DOCUMENT RESUME

ED 086 514 SE 017 104

AUTHOR Disinger, John F.; Lee, Beverly M.

TITLE State Directories in Environmental Education, Volume

IV, U.S. Office of Education Regions VI and VII.

INSTITUTION ERIC Information Analysis Center for Science,

Mathematics, and Environmental Education, Columbus,

Ohio.

SPONS AGENCY Office of Education (DHEW), Washington, D.C. Office

of Environmental Education.

PUB DATE NOV 73 NOTE 68p.

EDRS PRICE

MF-\$0.65 HC-\$3.29

DESCRIPTORS College Science; *Directories; *Educational Programs;

*Environmental Education; Human Resources; Instructional Materials; Programs; *Resource Materials; Secondary School Science; *State

Programs

ABSTRACT

This compilation is one of a series produced through the combined efforts of the United States Office of Education/Environmental Education, coordinators for environmental education in the various states, and the ERIC Center for Science, Mathematics, and Environmental Education, in an attempt to collect and detail environmental education efforts throughout the nation. The series is assembled in geographical groupings, using combinations of the U.S. Office of Education regions. This fourth volume in the series includes Arkansas, Iowa, Kansas, Louisiana, Missouri, Nebraska, New Mexico, Oklahoma, and Texas. Environmental education information from these states is provided under the following headings: State Environmental Education Contact; State Plan Activities: School Programs and Activities (or Environmental Education Programs Funded); University and College Programs and Activities; Groups and Agencies with Interest in Environmental Education; Resource Materials Available; and Possible Resource People. Related documents are SE 017 101, SE 017 102, SE 017 103, and SE 017 105. (JR)

US DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRO
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANICATION OR WIN
ATING IT POINTS OF VIEW OR OF VIONS
STATED DO NOT NECESSARILY REPRE
SENT OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY

STATE PIRECTORIES IN ENVIRONMENTAL EDUCATION

based on information supplied by

The United States Office of Environmental Education

and

State Coordinators for Environmental Education

Coordinated by

John F. Disinger and Beverly M. Lee

Volume IV - U. S. Office of Education Regions VI and VII

kansas	
wa)
nsas20-25	
uisiana	
ssouri29-37	
braska)
w Mexico.,41-45	,
lahoma	,
xas	,

ERIC Information Analysis Center for Science, Mathematics, and Environmental Education 400 Lincoln Tower The Ohio State University Columbus, Ohio 43210

November, 1973

PREFACE

This compilation is one of a series produced through the combined efforts of the United States Office of Education/Environmental Education (USOE/EE), coordinators for environmental education in the various states, and the ERIC Center for Science, Mathematics, and Environmental Education (ERIC/SMEAC), in an attempt to collect and detail environmental education efforts throughout the nation.

The compilation was begun in 1972 as part of a contract between USOE/EE and ERIC/SMEAC. Initial input was obtained from the files of the USOE/EE and assembled by Ms. Joan M. Nicholson, Ms. Catherine Barnett, and Mr. Andrew B. Rosenberg of that office, working under the direction of Mr. Paul Cromwell, USOE/EE, and Dr. John F. Disinger, ERIC/SMEAC.

Coordinators of environmental education at the state level were asked to review the information for their respective states in detail, and have made numerous additions, deletions, and other corrections. In cases where such a review was not obtained, information based on original 1972 data from USOE/EE has been utilized.

Because the field of environmental education is dynamic, many revisions have been necessary, and will continue to be so. Therefore, inaccuracies in this and other volumes in the series will generally reflect inability to keep up with change in the field, though doubtless other errors of both commission and omission will be noted. ERIC/SMEAC will appreciate any information regarding such errors, both to keep its own files updated and for future editions of these directories.

The series is assembled in geographical groupings, using combinations of the U. S. Office of Education regions, and is available only through Educational Document Reproduction Service (EDRS). Contents of each document are listed on the next page. Also noted for each entry is recentness of update information: entries not marked with asterisks have been updated since June 1, 1973; those marked by single asterisks were reviewed by state coordinators in late 1972 or early 1973; those marked by double asterisks have not been reviewed by state coordinators.

In addition to those named above, substantive assistance has been received from: George Lowe, USOE/EE; Robert W. Howe and Robert E. Roth, ERIC/SMEAC; Mrs. Robert L. Steiner and Mrs. Stanley L. Helgeson, typists; and coordinators for environmental education in the various states, as named within the individual entries.

John F. Disinger and Beverly M. Lee Coordinators

November, 1973

This publication was prepared pursuant to a contract with the National Institute of Education, United States Department of Health, Education, and Welfare. 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 National Institute of Education position or policy.



Contents of the Volumes in the "State Directories" Series

Volume I - USOE Region I

Connecticut

Maine

Massachusetts New Hampshire Rhode Island Vermont**

Volume II - USOE Regions II and III

Delaware

District of Columbia

Maryland**
New Jersey
New York
Pennsylvania
Puerto Rico**
Virginia
West Virginia

Volume III - USOE Regions IV and V

Alabama
Florida**
Georgia
Illinois
Indiana
Kentucky*
Michigan
Minnesota
Mississippi
North Carolina
Ohio**
South Carolina
Tennessee
Virgin Islands

Wisconsin

Volume IV - USOF Regions VI and VII

Arkansas Iowa Kansas Louisiana Missouri** Nebraska** New Mexico** Oklahoma Texas

Volume V - USOE Regions VIII, IX, and X

Alaska
Arizona
California
Colorado*
Hawaii
Idaho
Montana
Nevada*
North Dakota
Oregon
South Dakota**

Utah

Utah Washington Wyoming

- * Entry updated by state coordinator between September 1, 1972 and June 1, 1973.
- No update information received from state coordinator; entry based on information supplied in Spring, 1972 by USOE/EE.

All other entries have been reviewed and updated by state coordinators for environmental education since June 1, 1973.



ARKANSAS

STATE E.E. CONTACT:

Dr. Bessie B. Moore
Supervisor of E.E.
State Department of Education
Little Rock, Arkansas 72201
(501) 371-2061

The Arkansas State Department of Education was awarded a grant for FY 1973 from the Office of E.E., Washington, D.C. The grant is for materials modification and curriculum implementation.

AGENCIES & GROUPS WITH INTEREST IN E.E.:

Arkansas Department of Pollution Control and Ecology 8001 National Drive Little Rock: Arkansas 72209

To prevent, abate, and control all types of pollution and maintain the State's natural resources free from pollution.

Arkansas Council for the Social Studies Daniel F. Price, Jr. Arch Ford Education Building Little Rock, Arkansas 72201

Co-sponsored a conference "The Environmental Social Studies Teacher," March, 1972.

Ozark Society Incorporated Box 38 Fayetteville, Arkansas 72701

To promote the knowledge and enjoyment of the scenic and cientific resources of the Ozark Ouachita mountain region, and to help protect those resources for present and future generations.

Arkansas Ecology Center

316 Chester Street
Little Rock, Arknasas 72201
(501) 374-6271
Director: Pratt Remmel

Member of Ecology Center Communications Council



Society for Environmental Stabilization 118 Boles Fayetteville, Arkansas 72701 Chairman: Delberte Plante Media Coordinator: Robert Nelson

Received FY 1971 monies from the Office of E.E., Washington, D.C. for information and dissemination services. The Society undertook a variety of environmental activities aimed at raising the environmental conscience of the Arkansas citizenry, with special emphasis being placed on the mobilization of mass media.

The technical assistance and laboratory facilities for community recycling and pollution-monitoring projects were donated by the University of Arkansas.

Western Arkansas Planning & Development District, Inc. 510 North Greenwood
Fort Smith, Arkansas 72901
Executive Director: Lon J. Hardin (501) 785-2651

This District hopes to establish a Western Arkansas Environmental Education Center.

POSSIBLE RESOURCE PERSONS:

Bob Apple Executive Director Arkansas Wildlife Federation Dardanelle, Arkansas

Dr. Neil Compton Ozark Society Fayetteville, Arkansas

Billy Gresham State Forester Little Rock, Arkansas

Ladd Davies, Director Pollution Control Commission Little Rock, Arkansas

Miss Eva Evans United States Forest Service Hot Springs, Arkansas



W. J. Godbey, Director Little Rock Environmental Education Project, NDEA, Title III 2000 Aldersgate Road Little Rock, Arkansas 72205

Herbert O. Evans, Staff Conservationist Soil Conservation Service 5401 Federal Building Little Rock, Arkansas 72201

Judy Coffman Arkansas Green Thumb Project 1922 West 6th Street Little Rock, Arkansas 72201

Joe Parkhill, Director Arkansas Apiary Board 3821 West Roos evelt Road Little Rock, Erkansas 72204

Hanes Richardson United Brewers' Association 1200 Mellon Street Little Rock, Arkansas 72205

Austin Vines, Director
University of Arkansas Agricultural Extension Service
1201 McAlmont Street
Little Rock, Arkansas 72202

Art Cowley, Environmental Education Assistant Ouachita National Forest Federal Building Hot Springs, Arkansas 72901

Tommy Jenkins, Project Director Fayetteville Public Schools 1000 Stone Street Fayetteville, Arkansas 72701

Bob James, Information & Education Officer Ozark-St. Francis National Forest Russellville, Arkansas 72801



Gene Jones, Project Man and Environment, Title III, NDEA Dardanelle School District Post Office Box 298
Dardanelle, Arkansas 72834

Joe Gillespie, Director Economic Development Administration Little Rock, Arkansas

W. E. Henderson, Director Parks Recreation & Travel Commission Little Rock, Arkansas

Dr. J. A. Harrell State Health Officer Arkansas Health Department Little Rock, Arkansas

Dr. Lyle Hill Executive Secretary Quality Air & Water Users Little Rock, Arkansas

Andrew Hulsey, Director Arkansas Game & Fish Commission Little Rock, Arkansas

Keith Jackson Director, Arkansas Soil & Water Conservation Districts Little Rock, Arkansas

G. H. Lackey, Chairman Arkansas State Council on Economic Education

Elston Leonard Advisory Council for Conservation Education Little Rock, Arkansas

F. H. "Jim" Martin Specialist in E.E. and Conservation Education State Department of Education who devoted full time to the project in Arkansas funded under E.E. Act, FY 1971.



Bill Fulton & Emil Mackey are two new professional staff members added to the project staff as consultants in E.E. Both are former teachers with backgrounds in E.E.

Paul Meers Advisory Council for Conservation Education Little Rock, Arkansas

A. C. Mowery, Director Rural Environmental Assistance Program Little Rock, Arkansas

Mrs. Ila Nixon Curriculum Consultant Arkansas State Council on Economic Education

Mrs. Willie Oates, President Arkansas Federation of Women's Clubs Chairman, Conservation, Pulaski County Little Rock, Arkansas

Dr. Sandra Perry State Planning Commission Little Rock, Arkansas

Helen Poe Arkansas Audubon Society Little Rock, Arkansas

Jerry Malone, Director M. H. Russell Center of Economic Education Henderson State College

Senator Lee Reaves, Director Education Television Conway, Arkansas

Einar Roget, State Conservationist Soil Conservation Service Little Rock, Arkansas



Leslie Wagenspack United States Forest Service Hot Springs, Arkansas

21 D. C.

Dr. Barton Westerlund, Director University of Arkansas Industrial Research & Extension Center Little Rock, Arkansas



IOWA

STATE E.E. CONTACT:

Duane Toomsen
Environmental Education Consultant
Department of Public Instruction
Grines State Office Building
Des Moines, Iowa 50319
(515) 281-3264

John D. McBride
Office of Vice President for Educational Development and Research
University of Iowa
Iowa City, Iowa
(318) 353-3350

Director of Environment Clearinghouse, University of Iowa.

STATE PLAN ACTIVITIES:

A Governor's committee is presently involved with the development of a State Environmental Education plan. It is not federally funded.

SCHOOL PROGRAMS AND ACTIVITIES:

Project ECO Mr. Jerry Dunn Ames County School District 6th and Clark Ames, Iowa 5001

Handicapped Children's Nature Study Center Muscatine-Scott County School System Paul Staskey, Director 1523 S. Fairmount Davenport, Iowa

A Title III, ESEA project. The Handicapped Children's Nature Study Center and Outdoor Education for Special Education Programs were originally conceived in 1968; application for federal funds was made in 1969. \$87,000 of Title III funds were granted over a three year period with approximately to be allotted the first year for development of a six acre site adjacent to Fairmount School in southwest Davenport, lease of a building, and development of educational materials. The Center serves about 1,000 handicapped (mentally, physically, socially, emotionally, learning problems) throughout the Area IX School System. The purpose is to provide actual learning experiences in, about, and



for the out-of-doors for handicapped students throughout Area IX. Curriculum has been developed - "Observing Our Environment Through Our Five Major Senses - See, Feel, Hear, Smell, and Taste." It is designed for teachers of handicapped students as well as teachers of "normal" students. The guides are designed for use in any outdoor area.

Charles Spain
Callanan Jr. High School
Des Moines, Iowa 50312

Mr. Spain teaches a 9th grade elective course called Environmental Studies.

Tom Bohen, Junior High Science LeMars Junior High School 931 Third Avenue, S.W. LeMars, Iowa 51031

Summer outdoor education program for junior high students.

Mr. Robert Hammon
Principal
Maquoketa Community High School
600 Washington
Maquoketa, lowa 52060

A Title III, ESEA project. Upper Mississippi Valley Interdisciplinary Educational and Cultural Field experience. This is a three-year program involving tenth and eleventh grade students from Jackson County. Students will be engaged in language arts, social studies and ecology projects as they travel by houseboat from Clinton, Iowa, to Lake City, Minnesota.

Lou Martino and Ross Anthony Ottumwa Community High School Second and College Ottumwa, Iowa 52501

Environmental Problems course instructors.

Mr. David Kanellis West High School 2901 Melrose Avenue Iowa City, Iowa 52240

Environmental Studies instructor.



Mr. Robert Folts Biology Teacher Kennedy High School 4545 Wenig Road, N.E. Cedar Rapids, Iowa 52402

Conducts multidisciplinary environmental education problems course.

Gene Armstrong Abraham Lincoln High School 207 Scott Street Council Bluffs, Iowa 51501

Environmental Problems instructor.

Mr. Lanny Zannata West Central Elementary School Maynard, Iowa 50655

Elementary outdoor education program.

Mr. Dick Faas College Community School District 401 76th Avenue, S.W. Cedar Rapids, Iowa 52401

Outdoor education program.

Mr. Bill Crandell Science Teacher Volga Junior High School Volga, Iowa 52077

Outdoor classroom development.

Mr. Donald Menken, Director Clayton County Outdoor Education Center Elkader, Iowa 52043

Mr. Frank Starr, Director Waterloo Outdoor Education Center 1516 Washington Street Waterloo, Iowa 50702

Title I summer education programs 1973.



Roger Peterson Mitchell County Conservation Board Osage, Iowa 50461

Outdoor classroom development.

Mr. Milbert Krohn, Instructor Spirit Lake High School 2000 Hill Avenue Spirit Lake, Iowa 51360

Director Inland Water Studies Program. This is a student program dealing with water analysis and water problems on the Little Sioux River, Floyd River and Iowa Great Lakes.

Mr. Dave Johannes Clarke Community School District 800 N. Jackson Osceola, Iowa 50213

Outdoor classroom development.

UNIVERSITY AND COLLEGE PROGRAMS AND ACTIVITIES:

Urban and Regional Planning, University of Iowa c/o Roger Bolt, Resources Manager 350 Jessup Hall University of Iowa Iowa City, Iowa 52240 (319) 353-5001

Iowa Teachers Conservation Camp Information and Education Section State Conservation Commission . 300 4th Street Des Moines, Iowa 50319

Has been in operation for 22 years. Sponsored by the State Conservation Commission, State Department of Public Instruction, University of Northern Iowa, State Soil Conservation Service.

Iowa State Water Resources Research Institute

Don Kirkham, Director Iowa State University Ames, Iowa 50010 (515) 294-4264



The Institute was established in order to plan research and recommend allotments of money from the federal government and other sources for research. This research involves the training of university students, in particular those of graduate level, in water resources and environmental pollution.

Iowa Central Community College Michael Thede 330 Avenue M Fort Dodge, Iowa 50501

Mr. Thede is project director of activities leading to the development of an E.E. Center at the Iowa Central Community College to serve the entire community (with FY 1972, E.E. Act monies.)

GROUPS AND AGENCIES WITH INTEREST IN E.E.:

Des Moines Founders Garden Club

Members have been distributing conservation packets to school children in the Des Moines area for many years. They have published a phosphate content report for consumers use, and have been active in the campaign against persistent pesticides.

Des Meines Pollution Control Committee

In April, 1971 this committee was appointed by the City Council and is active in the study of metropolitan pollution problems. It consists of a 13-member commission representing environmental groups and industry working together to solve Des Moines' pollution problems. They have conducted public hearings on bottles and cans and on severe pollution in a local lake.

Des Moines Environmental Coordinating Council

This group was formed to coordinate activities of the many separate organizations that have expressed interest in environmental concerns in the Des Moines area. A monthly newsletter is published toward this goal, as well as open informative meetings for the general public. The group has served as coordinator for paper and glass recycling projects and for adult education courses, and is currently working toward establishing an E.E. Center. The group has been instrumental in bringing about the acquisition and preservation of a county wilderness area.



Environmental Teach-In Committee Iowa State University Ames, Iowa

They instituted a series of environmental symposiums for the 1969-70 school year at Iowa State University topped off by Earth Week, April 20-25, including addresses by Senator Harold E. Hughes and Dr. Paul Ehrlich.

Environtology Council Iowa State University Ames, Iowa

The Environtology Council's goal is to define, study, and resolve environmental problems by bringing together scientists and educators and developing an informational and educational program.

Health Planning Council of Central Iowa

The long-range goal of the committee should be to determine all factors that affect "environmental protection goals and programs."

Iowa Committee for Environmental Information

The ICEI is currently developing a speaker's bureau made up of members of the organization who have expertise in the various subjects combined under the term ecology.

Iowa Confederation of Environmental Organizations

David Trauger, Chairman Box 1147 University Station Ames, Iowa 50010

The ICEO represents 54 affiliated organizations representing 38,800 individuals concerned with environmental quality and conservation. The organization disseminates information, coordinates various activities, and provides legal, political, and scientific advice to members.

Iowa State Education Association

The ISEA sponsored a Conference on Pollution and E.E. May 2, 1970 at Drake University. A coupon appearing in the August issue of their monthly newsletter advertised free environmental material for which they received 495 requests. Material sent was "Environmental Health and Pollution Control" and "The Politics of Pollution." The Des Moines



Register and Tribune was instrumental in supplying support both in promoting the conference and in supplying material for the conference. The ISEA has requested teachers from all state schools to send descriptions of successful environmental programs in their local schools. These reports will be compiled and published in the quarterly "Midland Schools" magazine.

Committee Opposed to Highway 30 Relocation c/c Paul J. Haerther, Treasurer Atkins, Iowa 52206 (319) 446-5232

Junior League of Des Moines, Inc.

The Junior League is a service organization aimed at training its members in voluntary service and educational programs. One project has been a nationwide study of the environment based on surveys made in each of 217 representative cities by members of local chapters.

Zero Population Growth - Newton c/o Dennis Rutledge 2 South Hampton Court Newton, Iowa 50208 (515) 792-4948

Polk County Environmental Action - Zero Population Growth

Plymouth Ecology Club

Projects of Plymouth Ecology Club include a study of phosphates and enzymes in detergents, a comprehensive study of LP gas versus gasoline for use in fleet vehicles, and public transportation problems. Sponsored city wide recycling project throughout the school system and was instrumental in the development of a recycling center for central lowa.

Environmental Engineering Service Iowa State Department of Health Lucas State Office Building Des Moines, Iowa 50319

Furnishes technical advisors to the Air and Water Pollution Control Commissions.



The Junior Chamber of Commerce

The Jaycees created a Subcommittee on Environmental Quality Control to their Standing Committee on Governmental Action, with the purpose of studying the problems of and approaches to environmental quality control in Iowa and making recommendations or taking public stands thereon, acting as a community interest group.

The Des Moines Public Schools

The Department of Adult Education sponsors night classes entitled "Environmental Ecology." These classes cover many different aspects of man and his effect on his environment.

Science Education Center
University of Iowa
Iowa City, Iowa 52240
Coordinator of Science Education: Robert Yager
(319) 353-3600

Iowa Conservation Commission 300 4th Street Des Moines, Iowa 50319 Director: Fred Priewert

He has developed a Conservation Education Center (Box 139, Guthrie Center, Curtis Powell, Director, (515) 747-8380). The Center "is designed to facilitate the training of teachers conservation personnel, community leaders and other individuals and groups in the principles of conservation and natural resource use."

Environmental Coordinating Council 512 Ninth Street
Des Moines, Iowa 50309
Chairman: Dennis O'Brien

American Association of University Women

The Des Moines Branch of the AAUW was initially responsible for the creation of the Environmental Coordinating Council.

Projects have included training and utilization of lobbyists in the Iowa State Legislature on such topics as abortion reform and water pollution. This group has designed and are distributing, via volunteers, an educational unit for grades K-3.



Environmental and Pollution Control Council Inc. 1901 Orchard Street Burlington, Iowa 52601

Council of Churches Ecology Task Force Des Moines, Iowa

Zero Population Growth - Cedar Rapids B-505 Coe College Cedar Rapids, Iowa 52402 (319) 363-6005

Iowa Chapter of the Wildlife Society c/o Richard Bishop State Fish Hatchery Clear Lake, Iowa 50428 (515) 357-5046 or 357-3517

Cooperative efforts of many groups have been instrumental in the opening and operation of a recycling center by the Coca Cola Bottling Company in Des Moines.

١

Waverly Sierra Club c/o Elaine Lajko, Chairman 215 7th Avenue, N.W. Waverly, Iowa 50677 (319) 352-2645



Woodbury County Museum Project Sioux City, Iowa

Story Co. Citizens for a Better Environment - ZPG c/o David Trauger, Chairman P. O. Box 1135, University Station Ames, Iowa 50010 (515) 232-6394 or 294-7252

State Conservation Commission 300 4th Street Des Moines, Iowa 50319

Information and Education Section has information on Iowa Teachers Conservation Camp.

Iowa Conservation Education Council, Inc.
Bernard L. Clausen
Midwest Coordinator
Department of Biology
University of Northern Iowa
Cedar Falls, Iowa 50613
(319) 273-2276

The Council endeavors to encourage and lead the development and practice of a widespread and effective conservation program of education in Iowa. Members consist of official representatives from federal, state, and private organizations as well as individuals who express concern with conservation in Iowa.

Highlight of each year's program is a workshop held each fall for Iowa teachers at which time presentations of material and techniques are available to assist educators in developing a better program of teaching conservation education.

For membership information:
Dr. Frank W. Schaller
Secretary-Treasurer, Iowa Conservation Education Council Inc.
117 Agronomy Building
Iowa State University
Ames, Iowa 50010

Soil Conservation Society of America H. Wayne Pritchard, Director 7515 N.E. Ankeny Road Ankeny, Iowa 50021 (515) 266-1321



The Society is "dedicated to the promotion and advancement of renewable natural resources conservation to the end that water, soil, grass, forests, and wildlife in abundance may be used and enjoyed by mankind forever. The objectives of the Society are the development and advancement of the science and art of good land use and management and the promotion of soil, water, and related renewable natural resources."

Members seek to educate the people to these ends in order to secure the preservation and enjoyment of these resources forever.

Conservation Educational Center

Adjoins Springbrook State Park. Iowa Teachers Conservation Camps have been conducted here.

Interinstitutional Committee on Environmental Studies

The Committee was established in 1970/Membership 1971-72: B.L. Clausen, University of Northern Iowa; J.D. McBride, University of Iowa; J. J. O'Toole, Iowa State University (Chairman). The responsibility of the Committee is to develop a plan for coordinating programs at the three state universities to make optimal use of educational resources and to avoid duplication of curricular developments; it requests responsibility for coordinating development of a comprehensive plan (state) for E.E. in Iowa.

RESOURCE MATERIALS AVAILABLE:

Listing of University of Iowa men and women with research interests in E.E.; 1971 Environmental Inventory of the University of Iowa.

Newsletter: <u>Iowa Conservation Education Council, Inc.</u> Newsletter (of the 10 Conservation Education Councils whose chairman is Dr. Paul H. Joslin, 312 Memorial Hall, Drake University, Des Moines, Iowa 50311). Ben Clausen is editor, and he welcomes reports of activities and programs in E.E. He invites readers to make suggestions or volunteer to write features. His address: Biology Department, University of N. Iowa, Cedar Falls, Iowa 50613.

Conservation and You, An Ecological and Experimental Approach and Conservation II

Ecology courses outlines by H. G. Lincoln, instructor, Maquoketa Valley Community School, Delhi, Iowa. Cover: biological conservation, water conservation, soil, air pollution, mineral conservation, forest, grassland, wildlife conservation, recreational resource values, chemical pollution, role of nuclear science in conservation, population dynamics, home and yard conservation, agriculture conservation, etc.



POSSIBLE RESOURCE PEOPLE:

Robert Goss Professor of Biology University of Northern Iowa Cedar Falls, Iowa 50613

Bernard Clausen
Director Iowa Teachers Conservation Camp
Biology Department
University of Northern Iowa
Cedar Falls, Iowa 50613

Dennis Harken, Superintendent Room 302, Courthouse Sioux City, Iowa 51101

H. G. Lincoln, Instructor Maquoketa Valley Community School Delhi, Iowa 52223

He has written and taught environmental courses.

Chalmer Roy, Dean College of Sciences and Humanities Iowa State University of Science and Technology

Member of Science Advisory Committee, Earth Science Education Program.

Mr. Dale E. Strotman Superintendent of Schools Bettendorf Community School District Bettendorf, Iowa 52722

Gordon A. Willard
Fort Dodge Community Schools
5 North 16th Street
Fort Dodge, Iowa 50501



Mrs. Phyllis Singer Women's Editor, Waterloo Daily Courier Waterloo, Iowa 50701 (319) 234-3551 or (319) 233-5659

She is a member of the National Advisory Council on E.E. She reports on health, food, and protection of consumers. She also serves of Waterloo's Chamber of Commerce Public Relations and Convention Committees.

Duane Toomsen
E.E. Consultant
Department of Public Instruction
Des Moines, Iowa 50318

Dr. William Sharp Science Education Department University of Iowa Iowa City, Iowa 52240

Mr. Larry Benne, Director Woodbury Science Program Sioux City School District 1221 Pierce Street Sioux City, Iowa 51105

Donald Jurgs, Director Bettendorf Outdoor Education 635 21st Street Bettendorf, Iowa 52722



KANSAS

STATE E.E. CONTACT:

Clayton Stultz
Program Specialist, Economic Education
State Department of Public Instruction
120 E. 100th Street
Topeka, Kansas 66612
(913) 296-3918

SCHOOL PROGRAMS AND ACTIVITIES:

Nature Trail and Outdoor Laboratory C. Dabney Lawhorn Turner Unified School District 1800 South 55th Street Kansas City, Kansas 66106

Seaman Outdoor Education Mr. Phillip Thomas, ESEA Title III Coordinator Topeka, Kansas (913) 296-3128

Environmental Education Demonstration Project Donald French, Coordinator Instructional Resource Center 1601 Van Buren Street Topeka, Kansas 66612

Outdoor Education Larry L. Bowser 1124 West Lyman Topeka, Kansas 66608

'Cooperative Learning Through Environmental Activities in Nature' Arzell Ball, Director Shawnee Mission Unified District No. 512 7235 Antioch Street Shawnee Mission, Kansas, 66204

Received FY 1971 Title III Funds allocated to E.E. An environmental education program was to have been established which would eventually serve the entire school district. The program included cross-curricular involvement, interaction among children at all grade levels, indoor-outdoor ecological study, urban-suburban-rural-underdeveloped area field studies, and cooperative use of existing county park facilities and non-profit outdoor education foundation facilities, and an environmental education laboratory cooperatively developed.



"Environmental Education Demonstration Project Merle R. Bolton, Director Unified School District No. 501 Topeka, Kansas 66603

Received \$117,354 in FY 1971 Title III funds allocated to E.E. An interdisciplinary environmental educational program was to have been established. The program included field trips where students would have made on-site investigations of various aspects of the environment. When they return to the classroom, the students develop solutions to environmental problems encountered on their trips. Handicapped children participate in the program. Inservice training is provided for teachers.

UNIVERSITY AND COLLEGE PROGRAMS AND ACTIVITIES:

Institute for Environmental Research Dr. Frederick H. Rohles, Jr. Associate Director Kansas State University Manhattan, Kansas 66502 (913) 532-6456

The Institute was created in order to determine human responses to thermal environments that affect health, comfort, learning, and productivity. It conducts air pollution and fine particle research relating to health and comfort as well as biomedical engineering research. It collects and disseminated data covering all aspects of environmental engineering. The Institute also offers graduate degrees in environmental engineering and provides research and service for the air-conditioning industry.

Kansas Academy of Science Dr. Robert J. Robel, Secretary Division of Biological Sciences Kansas State University Manhattan, Kansas 66502 (913) 532-6251

The Academy functions to stimulate communication among scientists in promoting science and technology, publishing scientific information, and improving science education. It also attempts to interest the youth of Kansas in science, and it fosters the interaction of science and technology with other sectors of society in an effort to solve major social and environmental problems.



Dwight R. Platt Bethel College North Newton, Kansas

Mr. Platt is project director of activities leading to the development of a process curriculum for family education, with FY 1972 monies under the E.E. Act.

Mr. Douglas K. Nelson c/o Dr. Walter Bernhart Department of Aeronautical Engineering Wichita State University Wichita, Kansas 67208

He did a study "Determination of Levels and Distribution of Noise in Wichita, Kansas" and reported on it at the December, 1971 meeting of the American Association for the Advancement of Science.

Mr. Edwin J. Spicka c/o Dr. Ronald W. Turner Department of Biology St. Benedict's College Atchison, Kansas 66002

He did a study "Air and Water Pollution in the Atchison, Kansas, Area" and reported on it at the December, 1971 meeting of the American Association for the Advancement of Science.

South Central Kansas Environmental Education Center

North Newton, Kansas 67117

In the fall of 1971 the Center established an Environmental Library for the purpose of collecting, organizing, and disseminating information to the residents and particularly the students and teachers of south central Kansas. Since the spring of 1970 a groups of students, teachers, administrators, and industrial representatives have been meeting to discuss how the need for environmental education programs in south central Kansas can best be met. For further information contact: Dwight Platt, Professor of Biology, Bethel College, North Newton, Kansas 67117, (316) 283-2500 Ext 27.

Environmentalists
Eugene Fairchild, Sponsor
Kansas State College, Biology Department
Pittsburg, Kansas 66762
(316) 231-7000 Ext 329 or 253



Department of Human Ecology Edward DeFoe, Chairman University of Kansas Medical School 39th and Rainbow Kansas City, Kansas 66103 (913) 236-5252 Ext 851

GROUPS AND AGENCIES WITH INTEREST IN E.E.

Kansas Advisory Council on Environmental Education (KACEE)

KACEE is a very large group made up of people from all the state agencies which are related to environmental education, along with many people from each school district, and other concerned citizens. It meets annually. Directors of the Council are:

Mr. Charles Gray Soil Conservation Committee 12th Floor - State Office Building Topeka, Kansas 66612 (913) 296-3600

Dr. Paul Hilpmen State Geological Survey University of Kansas Lawrence, Kansas 66044 (913) 864-4014

State Department of Health State Office Building, 5th Floor Topeka, Kansas 66612

State water pollution control agency.

Water Resources Board 1134-S, State Office Building Topeka, Kansas 66612

Turner Nature Trail Lloyd Fugate 724 S. 53rd Street Kansas City, Kansas 66106



POSSIBLE RESOURCE PEOPLE:

D. Garlovsky
Environmental Education Teacher
District 14 Education Council
5014 South Lake Park Avenue
Kansas 60615
(312) 288-6021 Ext 22

Mr. Neil Miller Coordinator of Science Wichita Public Schools 640 N. Emporia Wichita, Kansas 67714

Mr. Lynn Myers Perry Project Officer Corps of Engineers Route 1, Box 62 Perry, Kansas 66073

Dr. Neil Walker Ft. Hays Kansas State Teachers College Hays, Kansas 67601

Dr. Maurice H. Witten Ft. Hays Kansas State Teachers College Hays, Kansas 67601

Mr. Phillip Thomas ESEA Title III Coordinator Topeka, Kansas (913) 296-3128

Virginia Lockhart Director of Health and Education State Board of Education Topeka, Kansas (913) 296-3571

Mel Gray Director of Human Environment Topeka, Kansas (913) 296-3821



Mr. Robert King Secondary Science Specialist 1601 VanBuren Topeka, Kansas 66603

Mr. U. H. Budd Federal Projects Officer State Department of Education 120 E. 10th Street Topeka, Kansas 66612

Dr. Samuel Keys
Dean, School of Education
Kansas State University
Manhattan, Kansas 66802

Mr. Thad Whiteaker Topeka Public Schools The Administration Building 415 West 8th Street Topeka, Kansas 66603

Larry Bowser Seaman Outdoor Laboratory USD #345 Topeka, Kansas 66612

Burton Dudding Department of Human Ecology University of Kansas Medical Center Kansas City, Kansas 66103

Dr. Garry Church Director of Education Services Division Kansas State College Pittsburg, Kansas 66762

Dr. Harold Durst Professor of Biology Kansas State Teachers College Emporia, Kansas 66801



LOUISIANA

STATE E.E. CONTACT:

Dr. Edward W. Dayton, Jr. Supervisor, Environmental Education Louisiana State Department of Education P. O. Box 44064 Baton Rouge, Louisiana 70804 (504) 389-5627

SCHOOL PROGRAMS AND ACTIVITIES:

Outdoor Education and Natural Sciences Areas Dr. E. W. Dayton, Jr. P. O. Box 44064 Baton Rouge, Louisiana 70804

Teacher inservice workshops are being conducted throughout the State using the natural resources materials developed by the U.S. Forestry Service.

Environmental Education Curriculum Development Program for Children & Adults Mr. Isadore Inman, Jr., Director St. Martin Parish School Board Rene Calais, Superintendent 305 Washington Street St. Martinville, Louisiana 70582

A program designed to develop methods of introducing environmental studies into the parish school system.

UNIVERSITY AND COLLEGE PROGRAMS AND ACTIVITIES:

Water Resource Center
Dr. Bobby E. Price, Director
Louisiana Polytechnic Institute
Ruston, Louisiana 71270
(318) 257-3546

The Center provides a nucleus for the interdisciplinary study of developments in the area of water resources and also serves to expand the areas of education, research, and service. In addition, it offers a liaison between the University and governmental agencies, municipalities and industry, as well as with the general public.



Institute for the Environmental Sciences Dr. Philip W. West, Director Louisiana State University Baton Rouge, Louisiana 70803 (504) 388-2270

The Institute was created for the Louisiana State University System to encourage and support various efforts in environmental studies. The Institute encompasses the University System and urges cooperative efforts within the various branches of the University.

Environmental and Resource Education Dr. William Knipmeyer Northwestern University Natchitoches, Louisiana 71457

Environmental and Resource Education Irvin Mansil, Professor Southeastern State University Hammond, Louisiana 70402

Center for Environmental Sciences Dr. Frank W. McDonald, Chairman Environmental Health Department Tulane University New Orleans, Louisiana 70112 (504) 865-7711

The Center conducts research and education programs in all areas of environmental health including water and waste treatment, air pollution, radiological health, stream pollution, occupational health, industrial waste treatment, food sanitation, insect control, etc.

GROUPS AND AGENCIES WITH INTEREST IN E.E.:

New Orleans Area Health Planning Council 802 Masonic Temple Building 333 St. Charles Avenue New Orleans, Louisiana 70130 Executive Director: Robert T. Jones (504) 525-6237

E.E. - Natural History Museum Mrs. Beverly Latimer 637 Girard Park Drive Lafayette, Louisiana 70501



Bureau of Outdoor Recreation State Parks and Recreation Commission Baton Rouge, Louisiana 70821

The Commission is a member of the Louisiana chapter of the Conservation Education Association.

Ecology Center of Louisiana Box 15149 New Orleans, Louisiana 70115 (504) 895-5784

Member of Ecology Center Communications Council

Raymond Mesler Louisiana Council for Music and Performing Arts, Inc. 611 Gravier Street New Orleans, Louisiana 70130 (504) 347-8505

Mr. Mesler is project director of activities leading to the development of curriculum materials for training inservice teachers to use art as an approach to environmental education, with FY 1972, E.E. Act monies.

Bureau of Environmental Health Louisiana State Department of Health P. O. Box 60630 New Orleans, Louisiana 70160

State Department of Conservation P. 0. Box 44275 Capitol Station Baton Rouge, Louisiana 70804

BREC Md. Park Commission Eugene Young 855 Florida Street Baton Rouge, Louisiana 70814



MISSOURI

STATE E.E. CONTACT:

Mr, Jack Roy
Director of Curriculum Implementation
State Department of Education
Box 400
Jefferson City, Missouri
(314) 635-8125

Mr. Clarence Billings
President, Conservation Education Association
Superintendent of Education
Missouri Department of Conservation
P. 0. Box 180
Jefferson City, Missouri 65101
(314) 893-2626 Ext. 250

Mike Milonski, Chief Missouri Game Division Department of Conservation

Environmental Education Staff: Mr. Roy assumed his duties in Environmental education as of December 1, 1973. He is the only staff member of the Department officially concerned with E.E. Mr. Billings is also concerned with E.E. but through the Department of Conservation. He has a full-time staff of twelve.

STATE PLAN ACTIVITIES:

The State Department of Education submitted a state plan proposal for E.E. funding in 1972. The plan was rejected. The Department, however, will initiate the plan as far as state funds permit.

E.E. PROGRAMS FUNDED FOR 1972:

Committee for Environmental Information Environment Magazine 438 N. Skinker Blvd.
St. Louis, Missouri 63130 Contact: Dorothy Cottrell

The Committee is developing written supplemental curriculum materials for the secondary schools.



Committee for Environmental Information Environment Magazine 438 N. Skinker Blvd.
St. Louis, Missouri 63130 Contact: Penelope Royse

The Committee plans to develop written supplemental curriculum materials for industrial workers.

SCHOOL PROGRAMS AND ACTIVITIES:

Verlin M. Abbot Director, E.E. Projects Parkway School District 455 N. Woods Mill Road Chesterfield, Missouri 63017

Developing curriculum for K-12.

UNIVERSITY AND COLLEGE PROGRAMS AND ACTIVITIES:

Mid-Continent Regional Educational Lab (McRe1) 104 E. Independence Avenue Kansas City, Missouri 64106 (816) 221-8686

The Lab is involved in developing "inquiry training for teachers." They have an Inner City Teacher Education Program which helps colleges and public schools prepare teachers for urban schools.

Center for the Biology of Natural Systems Washington University

A research and training center in the environmental health sciences. It has 100 personnel working on various phases of environmental problems and they are committed to developing E.E. programs at the graduate level. The Center has a great deal of experience in problem solving education. In cooperation with other programs CBNS has sponsored environmental programs in the summer of 70 and 71 involving high school students and teachers and has included high school students as part of some of its task forces.

Central Midwestern Regional Education Lab, Inc. (CmRe1) 10646 St Charles Rock Road St. Ann, Missouri 63074 (314) 429-7862



Included in the program of the Central Midwestern Regional Education Lab is an Environmental Studies Curriculum.

GROUPS AND AGENCIES WITH INTEREST IN E.E.:

Missouri Youth for Environmental Quality P. O. Box 11671 Clayton, Missouri 63105 (314) 725-0297

A cooperative effort of 11 major youth-serving agencies which has been in existence since 1971. It issues bulletins periodically detailing activities.

Arboretum and Nature Reserve Missouri Botanical Gardens P. O. Box 93 Gray Summit 63039 (314) 742-4411 (314) 865-0440 Station 33

The Missouri Botanical Garden is developing the property as a center for E.E.

Citizens Environmental Council Kansas City, Missouri

Environmental Response P. O. Box 1124 Washington University St. Louis, Missouri 63130

Red Bud Chapter Junior Ecologists of America Lisa Mynatt, Treasurer 712 S. Peachtree Avenue Springfield, Missouri 65802

Citizens for Environmental Action Bille L. Mynatt, Chairman 712 S. Peachtree Avenue Springfield, Missouri 05802



Committee for Environmental Information 438 N. Skinker Blvd. St. Louis, Missouri 63130

One of SIPI's affiliated science information centers. Edits and publishes Environment magazine.

Coalition for the Environment 319 N. Fourth Street St. Louis, Missouri (314) 421-6773

•

Environmental Research and Development Foundation 4948 Cherry Street Kansas City, Missouri (816) 931-2436

An inter-disciplinary organization established in 1965 as a non-profit corporation. Formerly "Environmental Research Foundation."

Conservation Federation of Missouri Ed Stegner, Executive Secretary 312 East Capitol Avenue Jefferson City, Missouri 65101 (314) 635-7188

The purpose of the Federation is to encourage the intelligent management of the life sustaining resources of the earth - productive soil, water resources, protective forests, plant life, wild life - and to promote the knowledge and appreciation of these resources, their interrelationships, and wise use without which there can be little hope for continuing abundant life.

Environmental Research and Development Fund 301 E. Armour Blvd.
Kansas City, Missouri (816) 931-2437

Conservation Education Association Clarence Billings Superintendent of Education Missouri Department of Conservation P. O. Box 180 Jefferson City, Missouri 65101



A national, educational, non-profit citizen's organization "committed to helping the children of the nation to acquire a basic understanding of their total environment so that as adults they will recognize their interdependencies with all life." With financial assistance from the Conservation Foundation, CEA has published KEYS TO CONSERVATION EDUCATION, a series of seven pamphlets dealing with characteristics of a good local conservation education program, suggested structure for state programs, suggestions for evaluating a conservation program, pointers on preparing conservation education materials for school use, and a bibliography of films and filmstrips, and others. CEA has been involved in development of programs, conferences and workshops with national, regional, and state organizations like the National Association of Soil and Water Conservation Districts, the Pinchot Institute for Conservation Studies, and Natural Resources Council of America. Membership includes public school and college teachers, school administrators, individuals involved in conservation education work with state and federal agencies, industrialists and agriculturalists, and members of educational committees of several national organizationa. Services to members include a bimonthly CEA newsletter, reports of annual work conferences, a packet of conservation education publications from many sources, distribution of all new CEA publications, and special reports of conferences in which CEA has participated.

The Association for Environmental Improvement 319 North 4th Street St. Louis, Missouri 63102

POSSIBLE RESOURCE PEOPLE:

David E. Bedan
Director, Institute of Environmental Studies
St. Louis University
St. Louis, Missouri

Dr. Harold Blackburn U.S. Office of Education 601 E. 12th Street Kansas City, Missouri 64106

Dr. Jack Carmichael Central Missouri State College Warrensburg, Missouri 64093

Dr. Walter Heidlage University of Missouri 410 Clark Hall Columbia, Missouri 65201



Mr. William Schwarting Assistant Director Museum of History and Science 3218 Gladstone Boulevard Kansas City, Missouri 64123

Mr. William Young University of Missouri Collumbia, Missouri 65201

Dr. John Belshe Central Missouri State College Biology Department Warrensburg, Missouri 64093

Bruce Boggs U.S. Government, Office of Education 601 E. 12th Street Kansas City, Missouri 64106

Dr. Dennis Carrille Education Project Office Kansas City Model Cities Agencies 414 E. 12th Street Kansas City, Missouri 66212

Dr. Dean Rosebery Head of Division of Science Northeast Missouri State College Kirksville, Missouri 63501

Mr. J. Dick Youse National Park Service 11 North 4th Street St. Louis, Missouri 63102

Mr. Michael Millenson P. O. Box 3351 6515 Wydown Boulevard Clayton, Missouri 63105

Member of National Advisory Council in the Office of E.E./Office of Education, H.E.W.



Mr. Carleton B. Fulbright
State Director of NDEA, Title III

Alan McGowan Scientific Administrator Center for the Biology of Natural Systems Washington University St. Louis, Missouri 63130

Sam G. Landfather, Director The Summen Foundation St. Louis, Missouri 63143

Wrote on the world population crisis for a National Association of Biology Teachers publication

Clarence T. Lange Clayton High School Clayton, Missouri 63105

Professor Barry Commoner Washington University Lindell and Skinker Blvd. St. Louis, Missouri 63130

Bill Rosen EEO Reading Room 101 Lefevre Hall University of Missouri Columbia, Missouri 65201

Member of Ecology Center Communications Council.

Stuart Leiderman
Environmental Response
P. O. Box 1124
Washington University
St. Louis, Missouri 63130



Member of Ecology Center Communications Council.

Stanley Spector Washington University St. Louis, Missouri

Curriculum Specialist

Verlin Abbott
President, Science Teachers of Missouri
Director, Title III, ESEA
Chesterfield, Missouri

John Belshe, Instructor Biology Department Central Missouri State College

John Fichter
Resource Conservationist
U.S. Department of Agriculture
Soil Conservation Service

James Freeman Head, Department of Agriculture Lincoln University

Harry Gregory
Educational Director
Kansas City Zoo
Educational Chairman, Citizens Environment Council

Neil Jenkins Conservation Education Consultant Department of Conservation

Roger Kirkman Biologist, U.S. Forest Service

Donald Mandell
Instructor, Webster College
Representative, Committee for Environmental Information
St. Louis, Missouri



Clara Mutshnick, President Missouri Council of Social Studies

Dean Rosebery, Chairman Science Department Northeast Missouri State College Kirksville, Missouri

Harvey Shell, Executive Secretary Air Conservation Commission

Jack Smith, Executive Director Missouri Water Pollution Board

Clifford Summers, Executive Director Missouri Water Resource Board



NEBRASKA

STATE E.E. CONTACT:

Fred Curtis
Consultant, Science and Mathematics
State Department of Education
233 South Lent Street
Lincoln, Nebraska
(402) 471-2477

Dr. Larry Holcolmb Quality Environment Council Bellvue, Nebraska (402) 291-3438

STATE PLAN ACTIVITIES:

The state has no state plan for environmental education.

E.E. PROGRAMS FUNDED FOR 1972:

Fontenelle Forest Nature Center
A Regional Nature Center
1111 Bellevue Blvd.
Bellevue, Nebraska 68005
(402) 731-3140
Executive Director: James M. Malkowski

SCHOOL PROGRAMS AND ACTIVITIES:

Sixth Grade Outdoor Education Program Mr. Stan Anderson Millard High School 14905 Que Street Millard, Nebraska 68137 (402) 333-2800

Sixth Grade School Camping Mack Peyton Chadron State College Chadron, Nebraska 69337

Sixth Grade Outdoor Education Program Mr. Robert Telick
Prairie Lane Elementary School
114th and Hascall
Omaha, Nebraska 68144
(402) 333-4639



Environmental Field Studies Larry Hardt Valley View Junior High School 3534 South 108th Omaha, Nebraska 68144 (402) 393-4600

GROUPS AND AGENCIES WITH INTEREST IN E.E.:

State Department of Environmental Control 411 S. 13th Street Lincoln, Nebraska 68508

State Department of Health State House Station P. O. Box 94757 Lincoln, Nebraska 68509

OSACS Science Center
316 S. County Road
Gretna, Nebraska 68028
J. Bruce Holmquist, Project Director
332-3375

Quality Environment Council of Nebraska and Western Iowa Harry Holcomb, Chairman P. O. Box 7025 Omaha, Nebraska 68107

Member of the Consortium of E.E. Councils of the AAAS Commission on Science Education. It has as its purpose the "conservation and improvement of the environment of the areas it serves by informing industry, government and the public of natural and environmental problems affecting human survival. Leaders in the scientific, academic, and professional communities were instrumental in organizing the Council. Its policy-making Board of Directors includes naturalists, biologists, chemists, physicians, attorneys, engineers, agriculturists, homemakers, and businessmen."

POSSIBLE RESOURCE PEOPLE:

Neil Peterson Lincoln District Ranger U.S. Forest Service



J. Bruce Holmquist, Ed.D. Project Director
OSACS Science Center
316 South County Road
Gretna, Nebraska 68028
332-3375



NEW MEXICO

STATE DEPARTMENT OF EDUCATION CONTACT:

Mr. B. J. Graham Science and Conservation Specialist New Mexico State Department of Education Capitol Building Sante Fe, New Mexico 87501 (505) 827-2575

STATE PLAN PROGRESS:

There is no state plan. An Environmental Education Manual for Teachers was developed and has been distributed to teachers in the state. Mr. Graham's staff is very small and they have a small amount of funds.

ENVIRONMENTAL EDUCATION FUNDED PROGRAMS FOR 1972:

Abe Plummer
Ramah Navajo High School
Box 248
Ramah, New Mexico 85321
This program will develop a curriculum for use in secondary
Indian Schools.

SCHOOL ACTIVITIES:

Roswell Public Schools: This program includes a geology museum, teacher training, field trips and science courses.

Albuquerque Public School Outdoor Education Center John Cox, Director Box 1927
Albuquerque, New Mexico 87103
(505) 842-3662

Mike White, Director of Instruction
This school system has a three phase teacher training program
(in-service, pre-site, on-site training) which is geared at
sensitizing fifth and sixth grade students towards the environment.
The center, located on 38 acres in the mountain region, concentrates its
efforts in four main areas of man and his environment: (1) change,
(2) adaptation, (3) interaction and interdependence and (4) varieties and
similarities.



GROUPS AND AGENCIES INTERESTED IN ENVIRONMENTAL EDUCATION:

Department of Parks and Recreation P.O. Box 760

Las Cruces, New Mexico 88001

During the past year this department has been attempting to establish an environmental study area for school children and interested citizens of the Las Cruces area. Due to lack of funds in both the Parks and Recreation Department and the Las Cruces Public School System, a program of this type has not been officially funded. The Parks and Recreation Department, feeling a need for this service and having a staff member who has experience in the field of nature study, has pursued the establishment of a program of this type to a limited degree. Cooperation has been received from the International Water and Boundary Commission by allowing the use of a piece of property located on the Rio Grande which is under their jurisdiction for an environmental study program.

Central Clearinghouse 107 Cierega Street Santa Fe, New Mexico 87501 (505) 982-4340 Contact: Joe Becker

A non-profit volunteer organization that provides material and literature of an environmental nature.

New Mexico Conservation Coordinating Council, Incorporated Clifford S. Crawford, President P.O. Box 142

Albuquerque, New Mexico 87103 (505) 277-3134, 277-2614

The Council provides a forum where diverse conservation-oriented organizations may find their common concerns and act upon them in a coordinated and efficient manner. Projects include influencing legislation and disseminating information to the public on issues and events affecting New Mexico's environment.

New Mexico Citizens for Clean Air and Water P.O. Box 38 Corrales, New Mexico 87048

Environmental Education Laboratory Mr. John B. Cox P.O. Box 1927
Albuquerque, New Mexico 87103



Regional Environmental Education Research and Improvement Organization (REERIO)

Coordinator: Patricia Carver New Mexico State University Las Cruces, New Mexico 88001

New Mexico Conservation Coordinating Council 433 Maple Street, Northeast Albuquerque, New Mexico 87106

New Mexico Vocational Agricultural Education Department

Institute for Social Research and Development, University of New Mexico

State Department of Agriculture

Kennecott Copper Corporation

State 4-H Clubs

New Mexico State Planning Agency

New Mexico Farm Bureau

New Mexico Association for Supervision and Curriculum Development

New Mexico Environmental Improvement Agency PERA Building College and W. Manhattan Santa Fe, New Mexico 87501

RESOURCE MATERIAL AVAILABLE:

"Western Water, Challenges-and-Choices" contains a table listing all significant water quality data for each of the eleven western states. Published by the League of Women Voters Education Fund. To obtain this informative newsletter contact:

Mrs. William R. Prince 30 Barranca Road Los Alamos, New Mexico 87544

Department of Education - <u>Environmental Education Handbook for</u> New Mexico Teachers.



POSSIBLE RESOURCE PERSONS:

Mr. Robert L. Chrisholm Superintendent of Schools Albuquerque Public Schools 724 Maple, Southeast P.O. Box 1719 Albuquerque, New Mexico

Mrs. Evelyn McNeill Member of NEA Task Force on Environmental Education First grade teacher Blue Water, New Mexico

Ms. Norma Ames
Game Management Division
Villagra Building
Santa Fe, New Mexico 87501

Bev K. Graham
Science and Conservation Specialist
Department of Education
Capitol Building
Santa Fe, New Mexico 87501

Patricia Carver Coordinator of REERIO, has journalism background and lives in Las Cruces.

John Carver Head of New Mexico Water Resources Research Institute, a resident of Las Cruces.

Hubert Cocklin
Manager of New Mexico operations of the Arizona Public Service Company,
a resident of Farmington, New Mexico.

Lowery Davis
Dean of Continuing Education, New Mexico State University, is from
Las Cruces.



Peter Hanagan

Executive Director of the Oil and Gas Association of New Mexico, resident of Santa Fe, New Mexico.

B. C. Hernandez

Chairman of the Board of the Department of Health and Social Services of New Mexico, from Albuquerque.

John Hernandez

Professor of civil engineering and director of the Environmental Institute at New Mexico State University, a resident of Las Cruces.

Robert Huber

Executive Director of the Taxpayers Association of New Mexico, from Santa Fe.

Robert Lewis

Governor of the Zuni Indian Pueblo, from Zuni.

Grady Mayfield

President of the New Mexico State Board of Education, a resident of Las Cruces.

B. B. Smith

General Manager of Chinos Mines Division, Kennecott Copper Corporation, from Hurley.

William Stephens

State Director of Agriculture, from Las Cruces.

Alvin Stockton

First Vice President of the New Mexico Cattlegrowers Association and member of Interstate Streams Commission, from Raton.

Gerald W. Thomas

President of REERIO and New Mexico State University, from Las Cruces.

Jack Campbell

Ex-governor and former head of Institute of Social Research and Development, University of New Mexico, from Santa Fe.



OKLAHOMA

STATE E.E. CONTACT:

Howard Potts
State Department of Education
Instruction Division
4545 N. Lincoln Blvd
Suite 164
Oklahoma City, Oklahoma 73105
(405) 521-3361

There is an Environmental Education Staff, created under Title V, located at the State Department of Education and reporting to the Commissioner.

STATE PLAN ACTIVITIES:

There is no official state plan for Environmental Education.

ENVIRONMENTAL EDUCATION
Howard Potts
Environmental Education Specialist
Instructional Division
State Department of Education
July, 1971

This article is an attempt to briefly describe an aspect of education that many teachers may thus far be unfamiliar with. I refer to what I prefer to label "Environmental Education."

"Pollution" and "ecology" are much in the news today. Unfortunately, the two terms have synonomous meaning to many people, including far too many educators and other professionally trained individuals. It is not uncommon to find "litter" also equated to these two terms.

Technically speaking, "ecology" is the science discipline which deals with the inter-relationships between organisms and the total environment; environment (one's surroundings) in this sense includes both other organisms (biological environment) and the non-living or physical factors such as water, minerals, and air (physical environment).

Perhaps the concept of "pollution" can be clarified. In general, "pollution" is the presence of undesirable materials, substances, or energies in a given medium. Descriptive, qualitative, and quantitative terms may be used to define a particular type of pollution. Usually, the quantitative aspect becomes a determining factor in our labeling a given medium "polluted" or "un-polluted" ("clean"). For example, the presence of some solid particles in the air is natural and desirable (essential for water vapor



condensation to occur). However, if the number and/or kind of particles are sufficiently increased, then the air is termed "polluted." Also, to consider the qualitative aspect, there are numerous solids and other liquids present in small amounts in the water of streams, lakes, and oceans which cause little concern. In contrast, the presence of mercury, is considered "polluted."

Hopefully, the reader will not be bored by this attempt to clarify the meaning of terminology.

I have chosen to use the title "Environmental Education" for the educational program or approach which I"m working with because this program can and should include concepts of and information about ecology, conservation, conservation management, pollution - including abatement and control, litter, solid wastes, sewage treatment, water treatment, wildlife management and preservation, resource wastes, resource depletion, population studies, outdoor education, appreciation of nature and beauty, and the role of the individual in improvement and preservation of an environment suitable - preferably optimal - for future generations of man to live in.

The major goals of environmental education are having students become (1) knowledgeable of the interrelated biological, physical, social, cultural and governmental aspects of the environment; (2) aware of the various environmental problems, their causes, available alternatives for solution, and likely consequences of alternatives selected, developed, and implemented as solutions; and (3) motivated, determined, and dedicated enough to keep himself well-informed, initiate action where and when needed, intelligently exercise his voting rights and responsibilities, and engage individually in the work, activities, and practices necessary to achieve a more favorable, lasting environment.

Traditionally, our nation has looked to the schools in times of need. In the late fifties and throughout the sixties, much emphasis was placed upon the sciences and mathematics relative to the space programs. Now we are beginning to realize that unless we implement some changes in our way of life and our technologies we are going to experience some very serious and monumental environmental problems. The very base of the environmental problems facing us is a rapidly increasing population (calculated to double in thirty-five years at the present rate) on the closed-system "Spaceship Earth" with a finite resource supply. In view of this reality, the challenge becomes one of changing the attitudes of many individuals while hopefully initially establishing proper attitudes with the very young.



It is hoped that with the development and implementation of environmental education programs into our schools the proper attitudes can be developed and the goals discussed earlier in this article accomplished.

A multi-disciplinary approach seems most logical for teaching environmental/ecological concepts and understandings in the elementary grades. Thus, State Department of Education efforts are being directed toward this means. At the secondary level, our efforts are directed toward incorporating and integrating appropriate environmental/ecological concepts into existing natural sciences and social studies courses. This approach should reach every student whereas separate courses of an elective, highly-specialized nature would probably reach only a select few. However, a few high schools in the state are planning "Ecology," "Environmental Education," or "Conservation of Natural Resources" course offerings for the 1971-72 school year as enrichment. While emphasis is placed on the sciences and social studies at the secondary level, it is our intent not to discourage any instructor in any discipline area from developing and using environmentally-related instruction and activities in his classes. It is the opinion of the writer that the reading teacher has many opportunities to participate in this endeavor through use of environmental information materials in the reading program. The English teacher seemingly has numerous opportunities through compositions, discussion, speech, drama, debate, and research activities. Teachers of art can do much through poster design and contests; stress theme of poster and art ability separately.

Information and comments throughout the remainder of this article will hopefully familiarize the reader with environmental education endeavors thus far, future plans, and services available to the teacher.

The writer was employed in July, 1970 as Specialist in Environmental Education (a new position) in the Instructional Division of the State Department of Education. Since that time, consultant services have been available to teachers, throughout the state, who expressed interest in including environmental instruction in their classes taught. The teacher or school system must take the intitative and extend the invitation for the consultant to come to his school, however.

Eleven workshops have been conducted in which aims, goals, and activities relative to environmental education have been considered. Most of these have been professional-day workshops on a school, school district, or county-wide basis. Specialists in other subject areas also participate in the workshops so



teachers can usually choose to attend three of four fortyfive minute to one-hour sessions which interest them.

There are presently some good environmental education programs in operation in the state.

The Ada and Moore Schools utilize the facilities of the Goddard Youth Camp near Sulphur for week-long programs. Ada involves sixth and eighth-grade students (separately); Moore offers the program to fifth-graders. Both schools use a modification of the "strands" approach of the NEED (National Environmental Education Development) program developed by the Educational Consulting Service for the National Park Service.

Guthrie has a program in operation which has primarily been developed locally. All sixth-grade students participate in a rather varied program conducted at a local church campgrounds.

The fifth-grade students in Pawnee are involved through the art classes. Local Soil Conservation Services personnel help coordinate the program. A "Conservation Fair" and daylong "Conservation Tour" conclude the program.

University High School in Norman has a program for some of the eighth-graders and sophomores in which the week is spent at the University of Oklahoma Biological Station on Lake Texoma. A few seniors are included in a somewhat-sought-after or privileged leadership role.

As mentioned earlier, at least six high schools have plans for adding either an "Ecology," "Environmental Education," or "Conservation of Natural Resources" course, elective in nature, to their curriculum beginning with the opening of the 1971-72 school year.

Also, some schools are attempting to develop an environmental approach to their general science course offering.

If you as a teacher are interested in bringing environmental education into your educational program, contact the writer in the Instructional Division of the State Department of Education, 110 State Capitol, Telephone (405) 521-3333, Oklahoma City, Oklahoma 73105. Again, consultant services, lists of information and materials, and workshops are available to you upon your request. The "Curriculum Guide and Instructional Activities for Environmental Education" booklet will be ready sometime this fall.



LEGISLATION:

The State Legislature has passed recently the Oklahoma Solid Waste Management Act which requires all cities, towns, and organized communities to provide an approved facility for disposing of their solid wastes. The State Department of Health has the primary enforcement responsibility. More recently additional regulations have been adopted to protect against excessive atmospheric pollution.

JCR-102 - That East Central State College be designated as the official Environmental Information and Media Center for the State of Oklahoma. (Regents for higher education subsequently made the designation, officially creating the Center in February, 1971.)

E.E. PROGRAMS_FUNDED FOR 1972:

Daniel Blanchard The American Institute of Discussion P.O. Box 103 Oklahoma City, Oklahoma 73101

Development of television discussion programs and follow-up kits for dissemination to the general public.

Gary McNaught
U.S. Jaycees Foundation
Box 7
Tulsa, Oklahoma 74102

For the training of members of a national organization to serve as volunteer community E.E. instructors.

SCHOOL PROGRAMS AND ACTIVITIES:

Ada City Schools - Environmental Education. sixth and eighth grades

Director - Outdoor School Ada City Schools Box 1359 Ada, Oklahoma 74820 (405) 332-6800

Guthrie Schools (Logan County) Outdoor Education

Mrs. Linda Tontz Banner School Guthrie, Oklahoma 73044 (405) 282-3799



Conservation of Natural Resources

Jerry Brown, Teacher Edmond High School Edmond, Oklahoma 73034 (405) 341-1833

Richard Hix, Teacher Wagoner High School Wagoner, Oklahoma 74467 (918) 485-3023

Conservation Education - fifth grade

Coyle Smith, Elementary Principal Pawnee Elementary School Pawnee, Oklahoma 74058 (918) 762-2124

Ecology

Vince Miller, Teacher College High School Bartlesville, Oklahoma 74003 (918) 336-3311

Oklahoma Environmental Information and Media Center East Central State College Ada, Oklahoma 74820 Dr. Robert Garner, Director (405) 332-8000 ext. 2307

Environmental Science (at high school)
Mr. Jim Pigg
Biology Department
Moore High School
Moore, Oklahoma 73160
(405) 794-1531

Ecology

Mrs. Mary Guess Bethany High School Bethany, Oklahoma



Ecology

Clarence Shay Lawton Eisenhower High School 52nd and Gore Lawton, Oklahoma 73501 (405) 355-9144

Ecology

John Field, Science Teacher Memorial High School Tulsa, Oklahoma 74145 (918) 627-0090

Moore Public schools - E.E. The professional staff of the Moore Schools is currently making some commendable efforts relative to E.E. Moore fifth graders participate in the NEED (National E.E. Development) program at the Goddard Youth Camp near Sulphur, Oklahoma. This year experimental class sections of environmental science courses are being taught (team approach) at the high school. The team consists of one science teacher and one social studies teacher.

UNIVERSITY AND COLLEGE PROGRAMS AND ACTIVITIES:

Environmental Research Center Edward S. McKay, Director University of Tulsa Tulsa, Oklahoma 74104 (918) 939-6351, Ext. 246

The Center was created to develop programs of research which will best contribute toward the solution of local and state environmental problems. These problems are investigated by the teams of faculty researchers in the areas of pollution, water resources, waste disposal, environmental biology, and science systems.

Oklahoma Academy of Science J.Teague Self, Secretary 730 VanVleet Oval University of Oklahoma Norman, Oklahoma 73069 (405) 325-3001

The Academy endeavors to stimulate scientific research and to promote a fraternal relationship among those engaged in scientific research in Oklahoma. It disseminates to citizens of the state knowledge of the various departments of science as well as investigates and publishes material regarding scientific education and natural resources of the state.



School of Environmental Science East Central State College Ada, Oklahoma 74820

Oklahoma State University Extension Service Stillwater, Oklahoma 74074

Oklahoma Environmental Information and Media Center Director: Dr. Robert Garner East Central State College Ada, Oklahoma 74820 (405) 332-8000 Ext. 3088

GROUPS AND AGENCIES WITH INTEREST IN E.E.:

Oklahoma State Regents for Higher Education Room 118, State Capitol Oklahoma City, Oklahoma 73105 Chancellor: E. T. Dunlap (405) 521-2444

Submitted a proposal for funds for developing a state plan for FY72 funding (which was not funded).

Southwest Oklahoma Community Action Group, Inc. (serving Greer, Harmon, and Jackson counties)

President: Monroe Chadwick

Director: Fred Beihl

P.O. Box 811

Altus, Oklahoma 73521

(405) 482-5040

Oklahoma Department of Wildlife Conservation Dean Graham, Chief, Information-Education Division 1801 North Lincoln Oklahoma City, Oklahoma 73105 (405) 521-3855

Environmental Health Services State Department of Health 10th and Stonewall Oklahoma City, Oklahoma 73105



POSSIBLE RESOURCE PEOPLE:

John Bradley Committee for Oklahoma 618 N.E. 15th Street Oklahoma City, Oklahoma 73104



TEXAS

STATE E.E. CONTACT:

C. S. Story
Program Director
Science Department
Texas Education Agency
201 East 11th Street
Austin, Texas 78711
(512) 475-3653

STATE PLAN ACTIVITIES:

The Texas State plan was funded from the Office of Environmental Education for 1972. The plan will: 1) completely review present E.E. programs in Texas and evaluate the need for programs; 2) produce an E.E. checklist for use by local and regional agencies, organizations, public school districts and higher education institutions; 3) establish a state clearinghouse with consulting assistance and interregional information; 4) implement a public multi-media information dissemination program; 5) create local community involvement through an E.E. Week.

Environmental Education guidelines for grades K-12 are being written with publication scheduled for the spring of 1974.

E.E. PROGRAMS FUNDED FOR 1972:

Margaret Warren
Dallas Public Library
2954 Commerce Street
Dallas, Texas 75201

This program developed a list of environmental resources and resource personnel.

Harold Box University of Texas FAIA, Department of Architecture Arlington, Texas 76010

The program developed a process for inservice training of university personnel in environmental education.

SCHOOL PROGRAMS AND ACTIVITIES:

"The Child and His Community Environment"
M. T. McLean, Director
Austin Public Schools, 6100 North Guadalupe
Austin, Texas 78752



Outdoor Education
Jim Dudley, Director
Tyler Public Schools, Box 237
Tyler, Texas 75701

Tyler Public Schools operate Camp Tyler, a five day camping experience for 5th and 6th grades.

"Outdoor Education and Human Development"
E. J. Wranosky, Director
Flour Bluff Public School
2505 Waldron Road
Corpus Christi, Texas 78418

Billy M. Hollifield Plano Public Schools 1717 17th Street Plano, Texas 75704

Environmental Education Robert Vines, Director Spring Branch Public Schools 955 Campbell Road Houston, Texas 77024

Coastal Bend's Living Library John P. Sprinkle, Director Corpus Christi Public Schools P. O. Drawer 110 Corpus Christi, Texas 78403

Center for Research in Water Resources Earnest F. Gloyna, Director University of Texas Austin, Texas 78712 (512) 471-3434

The Center, along with its Applied Water Resources Research Facility, provides a regional center of expertise and a repository of knowledge for use in research and education, as well as practical projects, planning, and regulatory bodies. The Center offers a stimulus for attracting graduate students and faculty into disciplines related to water resources in presenting a unique interdisciplinary program for water resources research in law, engineering, and the biological, physical, and social sciences.



Ft. Worth Independent School District 3210 West Lancaster Ft. Worth, Texas 76107

This district has acquired 228 acres of land to be utilized as an Outdoor Learning Center. A preliminary curriculum is being developed for fifth grade teachers. At the secondary level, environmental education is a part of the science and health educational programs.

GROUPS AND AGENCIES WITH INTEREST IN E.E.:

Environmental Coalition of North Central Texas Box 1974 University Station Arlington, Texas 76010

University Committee on Environmental Studies
University of Texas at Arlington
Arlington, Texas 76010
Chairman: James Caffey, Professor of Civil Engineering

Resources of the Committee are rooted in all schools of the University: Engineering, Science, Liberal Arts, Business, Social Work and Urban Studies.

Dallas-Fort Worth Section of the American Society of Landscape Architects Environmental Liaison Officer: Richard Myrick

Institute for Advance Environmental Studies Kirby Hall 306 West 29th Street Austin, Texas 78705

An independent graduate level educational institution for conducting pioneering kinds of programs focused on regional environmental problems.

El Paso Environmental Conservation Education Council El Paso, Texas President, Dr. James Milson University of Texas at El Paso



Institute of Urban Studies Sydney C. Reagan, Director Southern Methodist University Dallas, Texas 75222 (214) 363-5611, Ext. 2291

The Institute conducts interdisciplinary studies and research in urban and regional fields and coordinates these results with those of other universities and organizations. It also obtains financing for research projects and programs and promotes interaction between the University and community through seminars, publications, periodicals, and conferences.

Welder Wildlife Foundation Clarence Cottam, Director P.O. Box 1400 Stinton, Texas 78387 (512) 364- 2643

The Welder Wildlife Foundation is dedicated to the cause of conservation through research and education in wildlife preservation and other related areas. The Foundation has a small staff and sponsors research and fellowships to promising students of the environment.

Texas Committee on Natural Resources Edward C. Fritz, Chairman 4144 Cochran Chapel Road Dallas, Texas 75201

The Committee endeavors to assist in coordinating efforts of conservation organizations in Texas by functioning as a meeting-group of leaders from such groups in seeking to conserve the state's natural resources.

Museums

Natural Science Center Austin, Texas

Heard Natural Science Museum McKinney

Ft. Worth Children's Museum Ft. Worth, Texas



Earth Awareness Foundation 1275 Space Park Drive Houston, Texas 77058

"Earth, I Care" is the motto of the Foundation, a non-profit organization. Professionals in motivation, communication and human relations, who conceived and implemented the Manned Flight Awareness Program for the U.S. Space Agency, are the architects of the Earth Awareness Foundation and continue to work with this activity and guide its efforts. The foundation assists local and national organizations, both public and private, and provides the necessary media for exchanging, on a wide geographic basis, information and views of general interest and concern.

POSSIBLE RESOURCE PEOPLE:

Nevenna Travis
Texas System of Natural Laboratories
P.O. Box 7141
University Station
Austin, Texas 78717
(512) 478-5486 or 478-2938

Addison Lee University of Texas Austin, Texas

Wiming Lu Assistant Director Department of Planning and Urban Development Dallas, Texas

Expert in planning; an urban design critic

Joseph Malina, Director Environmental Health Engineering Civil Engineering Department University of Texas Austin, Texas

Clarence Cottam Wilder Wildlife Foundation Sinton, Texas



Exalton Delco Dean of the College Huston-Tillotson Austin, Texas

Life scientist and currently co-director, Resources and Environment Seminar

Corwin Johnson Charles I. Francis Professor of Law Law School University of Texas Austin, Texas

Land and water use and environmental law are among his areas of specialization

Keith Young Professor of Geological Sciences University of Texas Austin, Texas

Widely respected earth scientist and contributor to a variety of environmental courses offered by the University of Texas.

Sinclair Black Member of Faculty of School of Architecture University of Texas Austin, Texas

Faculty sponsor of student organization known as "The Round Earth Society"

Guy Louis Bush
Professor of Zoology
University of Texas
Austin, Texas

Faculty Sponsor of the University of Texas student Ecology Action group.



Peter Oakley Coltman Professor of Community and Regional Planning and Architecture University of Texas Austin, Texas

Presently in England for a year of teaching and study of such developments as the latest generation of English New Towns.

John W. Arm
State Resource Conservationist
Soil Conservation Service
P. O. Box 748
Temple, Texas 76501

Joseph Strehle Region IV Education Service Center 202 North Loop West Houston, Texas 77018

Delmar Janke 1221 Berkley College Station, Texas 77840

Dr. D. A. Anderson Texas Forest Service College Station, Texas 77843

John H. Courtenay Forest Supervisor Federal Building P. O. Box 969 Lufkin, Texas 75901

Audean Allman Texas Southern University Houston, Texas

John Falkenburg Ft. Worth I.S.D 3200 W. Lancaster Ft. Worth, Texas 76107



James Milson College of Education University of Texas at El Paso El Paso, Texas 79900

Tom Wolfe Institute for Advanced Environmental Studies Kirby Hall 306 W. 29th Street Austin, Texas 78705

Charles K. Sigler
District Ranger
U.S. Forest Service
P. O. Box 393
New Waverly, Texas 77358

Eugene E. Horton
Earth Awareness Foundation
1730 NASA Boulevard
Houston, Texas 77058

Harold Jobes
Texas Water Quality Board
314 W. 11th Street
Austin, Texas 78701

Dr. Art Atkisson, President Environmental Coalition of Texas Houston, Texas

The Texas Advisory Council on Environmental Education (TACEE):

Joe B. Harris
TACEE Chairman
Office of the Governor
Austin, Texas 78701

Terry Leifeste, Environmental Consultant Office of the Governor Division of Planning Coordination Austin, Texas 78701

Mike Naeve Office of the Governor Division of Planning Coordination Austin, Texas 78701



Rudolfode la Garza Southwest Educational Development Laboratory Austin, Texas

Reynell Parkins The University of Texas at Austin Austin, Texas 78712

Calvin Hibler, Secretary Coordinator for Environmental Education Texas Education Agency 201 East 11th Street Austin, Texas 78701 (512) 475-3327

Phillip L. Wilson Texas Highway Department Austin, Texas

Charles W. Nix, Interim Chairman Associate Commissioner for Planning Texas Education Agency 201 East 11th Street Austin, Texas (512) 475-2066

Earl Grabhorn

Educational Representative

Mid-Continent Oil and Gas Association
2920 Southland Center

Dallas, Texas 75201
(214) 748-8861

C. B. Alexander State Director U. S. Brewers Association 905 International Life Building Austin, Texas 78701 (512) 478-6574

W. D. Colegrove Manager of Community Services Dow Chemical Company B1201 Building Freeport, Texas 77541 (713) 238-1227



J. W. Edgar Commissioner of Education Texas Education Agency 201 East 11th Street Austin, Texas (512) 475-3271

Irene St. Clair Coordinator for Program Development Texas Education Agency 201 East 11th Street Austin, Texas (512) 475-3653

Bevington Reed Commissioner of Higher Education Coordinating Board, Texas College and University System 1113 State Finance Building Austin, Texas (512) 475-4361

Gordon Flack
Assistant Commissioner for Federal Programs and Facilities
Coordinating Board, Texas College and University System
1113 State Finance Building
Austin, Texas
(512) 475-2091

Wilbur Hurt
Director of Cummunity and Technical Services
Coordinating Board, Texas College and University System
1113 State Finance Building
Austin, Texas
(512) 475-3413



Calvin Hibler, Secretary
Coordinator for Environmental Education
Texas Education Agency
201 East 11th Street
Austin, Texas
(512) 475-3327

